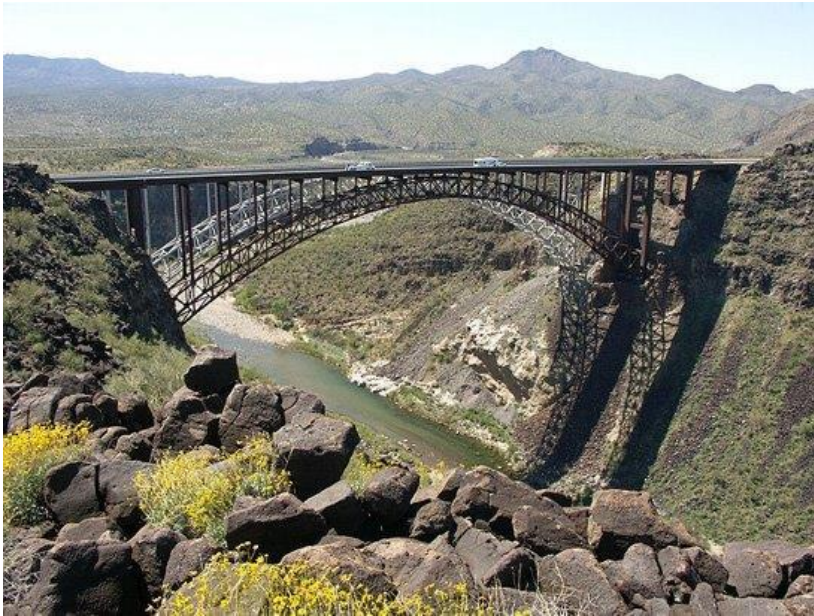




*Market research · Policy analysis  
Business strategy · Implementation*

100 Fillmore Street, 5th Floor  
Denver CO 80206  
303-385-8515

[www.keenindependent.com](http://www.keenindependent.com)



## **ARIZONA DEPARTMENT OF TRANSPORTATION DISPARITY STUDY REPORT**

**July 28, 2015**

### **Prepared for:**

Arizona Department of Transportation  
1739 W. Jackson Street, Suite A, MD 100P  
Phoenix AZ 85007

### **Prepared by:**

Keen Independent Research LLC  
172 N. Washington Street  
Wickenburg AZ 85390

100 Fillmore Street, 5<sup>th</sup> Floor  
Denver CO 80206

# TABLE OF CONTENTS

## EXECUTIVE SUMMARY

A. Background .....	ES-1
B. Summary of the Disparity Study research .....	ES-2
C. Summary of Information concerning overall DBE goals .....	ES-11
D. Other key results .....	ES-13

## CHAPTER 1. INTRODUCTION

A. Study team.....	2
B. Federal DBE Program.....	2
C. Analyses performed in the Disparity Study and location of results.....	6
D. Public comment process for the 2015 Disparity Study report .....	10

## CHAPTER 2. LEGAL FRAMEWORK

A. The Federal DBE Program .....	3
B. State and local minority and women business programs in the United States.....	5
C. Legal standards that race- and gender-conscious programs must satisfy.....	5

## CHAPTER 3. ADOT TRANSPORTATION CONTRACTS

A. Overview of ADOT transportation contracts .....	1
B. Collection and analysis of contract data.....	3
C. Types of work Involved in ADOT contracts.....	5
D. Location of businesses performing ADOT work.....	9

## CHAPTER 4. MARKETPLACE CONDITIONS

A. Entry and advancement.....	2
B. Business ownership .....	4
C. Access to capital, bonding and insurance.....	5
D. Success of businesses .....	11
Summary.....	16

## **CHAPTER 5. AVAILABILITY ANALYSIS**

A. Purpose of the availability analysis.....	1
B. Definitions of MBEs, WBEs, certified DBEs, potential DBEs and majority-owned businesses .....	2
C. Information collected about potentially available businesses .....	5
D. Businesses included in the availability database .....	8
E. MBE/WBE availability calculations on a contract-by-contract basis .....	9
F. Availability results.....	12
G. Base figure for ADOT’s overall DBE goal for FHWA-, FAA- and FTA-funded contracts.....	13

## **CHAPTER 6. UTILIZATION AND DISPARITY ANALYSIS**

A. Overview of the utilization analysis.....	1
B. Overall MBE/WBE and DBE utilization on ADOT contracts .....	3
C. Utilization by racial, ethnic and gender group.....	4
D. Disparity analysis for ADOT contracts .....	9
E. Statistical Significance of disparity analysis results .....	14

## **CHAPTER 7. FURTHER EXPLORATION OF MBE/WBE AND DBE UTILIZATION ON FHWA- AND STATE-FUNDED CONTRACTS**

A. Utilization with and without DBE contract goals .....	2
B. Construction and engineering contracts .....	2
C. Utilization in ADOT contracts and local public agency contracts .....	3
D. Utilization in July 2007-June 2011 and July 2011-June2013 time periods .....	4
E. Utilization in Northern, Central and Southern regions.....	4
F. Utilization in prime contracts and subcontracts.....	5
G. Analysis of potential barriers to MBE/WBE/DBE participation in ADOT construction contracts.....	5
H. Analysis of potential barriers to MBE/WBE/DBE participation in ADOT engineering-related prime contracts .....	9
I. ADOT operation of the Federal DBE Program, including overconcentration analysis .....	13
J. Summary from the further exploration of MBE/WBE and DBE utilization .....	28

## **CHAPTER 8. OVERALL ANNUAL DBE GOAL AND PROJECTIONS FOR FHWA-FUNDED CONTRACTS**

A. Establishing base figure .....	2
B. Consideration of step 2 adjustment .....	2
C. Portion of DBE goal for FHWA-funded contracts to be met through neutral means.....	9
Summary.....	15

<b>CHAPTER 9. OVERALL ANNUAL DBE GOAL AND PROJECTIONS FOR FAA-FUNDED CONTRACTS</b>	
A. Establishing a base figure .....	1
B. Consideration of a step 2 adjustment .....	2
C. Portion of DBE goal for FAA-funded contracts to be met through neutral means.....	5
Summary.....	7
 <b>CHAPTER 10. OVERALL ANNUAL DBE GOAL AND PROJECTIONS FOR FTA-FUNDED CONTRACTS</b>	
A. Establishing a base figure .....	1
B. Consideration of a step 2 adjustment .....	1
C. Portion of DBE goal for FTA-funded contracts to be met through neutral means .....	5
Summary.....	8
 <b>APPENDIX A. DEFINITION OF TERMS .....</b>	
	A-1
 <b>APPENDIX B. LEGAL FRAMEWORK AND ANALYSIS</b>	
A. Introduction.....	B-1
B. U.S. Supreme Court cases.....	B-4
C. The legal framework applied to the Federal DBE Program and state and local government MBE/WBE programs .....	B-5
D. Recent decisions involving the Federal DBE Program and state and local government MBE/WBE programs in the Ninth Circuit.....	B-25
E. Recent decisions involving the Federal DBE Program and its implementation in other jurisdictions .....	B-56
F. Recent decisions involving state or local government MBE/WBE programs in other jurisdictions .....	B-106
G. Recent decisions and authorities involving federal procurement that may impact DBE and MBE/WBE programs .....	B-172
 <b>APPENDIX C. CONTRACT DATA COLLECTION</b>	
A. ADOT contract and agreement data.....	C-1
B. Local public agency (LPA) contract data .....	C-3
C. ADOT bid and proposal data.....	C-4
D. Characteristics of utilized firms and bidders .....	C-4
E. ADOT review .....	C-5
F. Data limitations .....	C-5
 <b>APPENDIX D. AVAILABILITY ANALYSIS</b>	
A. General approach to collecting availability information .....	D-1
B. Development of the interview instruments .....	D-5
C. Execution of interviews .....	D-6
D. Additional considerations related to measuring availability .....	D-9
ADOT Disparity Study — Availability Interview Instrument .....	D-12



**APPENDIX E. ENTRY AND ADVANCEMENT IN THE ARIZONA CONSTRUCTION AND ENGINEERING INDUSTRIES**

Introduction .....	E-1
Construction industry .....	E-4
Engineering industry .....	E-16
Summary .....	E-21

**APPENDIX F. BUSINESS OWNERSHIP IN THE ARIZONA CONSTRUCTION AND ENGINEERING INDUSTRIES**

Business ownership rates .....	F-1
Business ownership regression analysis .....	F-5
Summary of business ownership in the construction and engineering industries .....	F-12

**APPENDIX G. ACCESS TO CAPITAL FOR BUSINESS FORMATION AND SUCCESS**

Homeownership and mortgage lending .....	G-2
Access to business capital .....	G-14
Bonding and insurance .....	G-30
Summary .....	G-32

**APPENDIX H. SUCCESS OF BUSINESSES IN THE ARIZONA CONSTRUCTION AND ENGINEERING INDUSTRIES**

Participation in public and private sector markets .....	H-2
Relative bid capacity .....	H-6
Business closures, expansions, and contractions .....	H-9
Business receipts and earnings .....	H-15
Availability interview results concerning potential barriers .....	H-26

**APPENDIX I. DESCRIPTION OF DATA SOURCES FOR MARKETPLACE ANALYSES**

IPUMS data .....	I-1
Survey of Small Business Finances (SSBF) .....	I-9
Survey of Business Owners (SBO) .....	I-11
Home Mortgage Disclosure Act (HMDA) data .....	I-12

**APPENDIX J. QUALITATIVE INFORMATION FROM IN-DEPTH PERSONAL INTERVIEWS AND AVAILABILITY INTERVIEWS**

A. Introduction and background .....	J-2
B. Background on the transportation contracting industry in Arizona .....	J-5
C. Doing business as a prime contractor or as a subcontractor .....	J-25
D. Keys to business success .....	J-32
E. Other barriers to doing business with public agencies .....	J-50
F. Other allegations of unfair treatment .....	J-60
G. Insights regarding business assistance programs, changes in contracting processes and any other neutral measures .....	J-71

H. Insights regarding DBE Program or any other race-/ethnicity- or gender-based measures .....	J-81
I. DBE certification .....	J-92
J. Overall comments about the preliminary proposed overall DBE goal for FHWA-funded contracts and the 2014 Availability Study .....	J-97
K. Summary of 2015 Public Meeting comments and other input .....	J-99

## EXECUTIVE SUMMARY

The Arizona Department of Transportation operates the Federal Disadvantaged Business Enterprise (DBE) Program to assist disadvantaged business enterprises on contracts that use U.S. Department of Transportation (USDOT) funds. Every three years, ADOT must set an overall annual goal for participation of DBEs in those contracts. ADOT engaged a team led by Keen Independent Research (Keen Independent) to complete a 2014 Availability Study and this 2015 Disparity Study to provide information to set overall DBE goals and operate the Federal DBE Program.

### A. Background

ADOT must set a separate goal for each of three types of USDOT funds it receives. The goal is expressed as the percentage of contract dollars that will go to firms certified as DBEs.<sup>1</sup>

- **FHWA-funded contracts.** For federal fiscal years 2012 through 2014, ADOT had an overall DBE goal of 7.76 percent for contracts using Federal Highway Administration (FHWA) funds. ADOT used information from the 2014 Availability Study to set a preliminary three-year goal of 9.38 percent starting October 1, 2014. ADOT projected that it would meet some of its DBE goal through race-neutral means such as small business assistance and the remaining portion through race-conscious measures such as DBE contract goals. The Federal DBE Program applies to FHWA-funded contracts awarded by ADOT and by local agencies that receive FHWA funds through ADOT.

The information in the 2015 Disparity Study provides ADOT more complete information to refine its three-year goal for DBE participation in FHWA-funded contracts and its projection of how much of this goal it can meet through race-neutral means.

- **FTA-funded contracts.** ADOT receives funding through the Federal Transit Administration (FTA). (Most large transit agencies in Arizona directly receive FTA funding and are responsible for their own operation of the Federal DBE Program.) For the three years ending September 30, 2015, ADOT has a 3.82 percent overall DBE goal for FTA-funded contracts. It does not currently use DBE contract goals for these contracts. ADOT must set a new overall DBE goal for FTA-funded contracts for the three years beginning October 1, 2015.

---

<sup>1</sup> Most firms certified as DBEs are minority- or women-owned firms. White male-owned firms and other ethnicities not listed above can also meet the federal certification requirements and be certified as DBEs if they demonstrate they are both socially and economically disadvantaged, as described in 49 CFR Part 26.67(d).

- **FAA-funded contracts.** ADOT also receives some funds from the Federal Aviation Administration (FAA) for projects at Grand Canyon National Park Airport. Its current overall DBE goal for FAA-funded contracts is 3.30 percent. This goal will continue through September 30, 2016, at which time ADOT will need to establish a new goal. ADOT does not use DBE contract goals for FAA-funded contracts. This Disparity Study provides ADOT information to set its overall DBE goals for FTA- and FAA-funded contracts.

Federal regulations in Title 49 Code of Federal Regulations (CFR) Part 26 and other USDOT guidance direct how an agency such as ADOT (a) sets its overall DBE goals for USDOT-funded contracts, (b) projects how much of its goal it will meet through race-neutral means, and (c) projects the portion of the goal (if any) it will meet through programs such as DBE contract goals.

The 2005 Ninth Circuit Court of Appeals decision in *Western States Paving Co. v. Washington State DOT* is also important for this study. The Court upheld the constitutionality of the Federal DBE Program, but it found that the Washington State DOT failed to show its implementation of the Federal DBE Program to be narrowly tailored (see Chapter 2 of the full report). The Disparity Study provides information for ADOT to ensure that its program meets these legal requirements.

## **B. Summary of the Disparity Study Research**

The Disparity Study began in February 2014. Keen Independent fine-tuned the study process to focus on information most critical to ADOT's operation of the Federal DBE Program.

- Throughout the study, Keen Independent consulted with an Internal Stakeholder Group that included staff across ADOT departments and an External Stakeholder Group composed of business and trade association representatives. ADOT and Keen Independent also met with FHWA officials and local agency representatives. A study website, dedicated email address and a telephone hotline were established for the study.
- The study team was able to examine contracts awarded from July 2007 through June 2013. As ADOT did not resume setting DBE contract goals on FHWA-funded contracts until 2011, this study period included many years in which ADOT operated the Federal DBE Program solely using race-neutral means.
- Keen Independent collected data on ADOT's transportation contracts from multiple sources. The study team also compiled information on local public agency (LPA) contracts that used money administered by ADOT. Keen Independent analyzed more than 2,100 prime contracts (including 466 contracts for local agencies) and 11,000 subcontracts that together totaled \$5 billion.
- Keen Independent included ADOT's state-funded transportation contracts in the study because of their dollar volume and similarity to FHWA-funded highway contracts, and the fact that there are no DBE contract goals on these contracts (by state law).

- Because 95 percent of ADOT contract dollars go to firms with Arizona offices, Keen Independent examined data about the Arizona transportation contracting industry. The study team conducted in-depth interviews with 66 companies and trade associations throughout the state to learn more about marketplace conditions in Arizona.
- Most of ADOT's transportation contract dollars are related to highway construction and engineering, but the study also includes vertical construction, planning studies, transit services and other types of transportation-related work. Keen Independent classified ADOT work into 40 different subindustries.
- The study team completed telephone interviews with 5,185 Arizona businesses in these subindustries to determine the availability of different types of businesses for individual prime contracts and subcontracts. The availability analysis also examined the size and location of prime contracts and subcontracts when determining firms available for specific ADOT contracts. The final availability database included information for 1,429 companies expressing qualifications and interest in ADOT or local agency work.
- Keen Independent identified the race, ethnicity and gender ownership of companies receiving ADOT prime contracts and subcontracts through a combination of sources, including telephone interviews with those firms. The utilization and availability analysis examined minority-owned firms (by race and ethnicity), white women-owned firms and majority-owned firms (firms that are not minority- or women-owned). ADOT reviewed these data before Keen Independent completed the disparity analysis.
- After completing the availability analysis for FHWA-funded contracts, Keen Independent published a draft 2014 Availability Study for public comment and input. Keen Independent also attended each of the four public meetings in Yuma, Tucson, Flagstaff and Phoenix in August 2014 concerning ADOT's proposed preliminary overall DBE goal for FHWA-funded contracts. Input at the public meetings as well as written comments were analyzed in final Availability Study report issued in September 2014 and included in this 2015 Disparity Study report.
- Keen Independent published a draft 2015 Disparity Study for public comment and input at the end of May 2015. ADOT held public meetings in July 2015 in Flagstaff, Yuma, Tucson and Phoenix. Keen Independent attended each of the four public meetings. Court reporters transcribed the public comment portion of each public meeting. ADOT received other public comments via email, fax or mail. Results are summarized and analyzed in this study.

The full Disparity Study report is more than 550 pages in length. Please see the full study for a complete discussion of methodology and results. The following presents a brief summary of study findings.

### Availability of minority- and women-owned firms and other businesses for ADOT

**transportation contracts.** Figure ES-1 presents the composition of the 1,429 firms indicating qualifications and interest in ADOT or local agency transportation contracts in the telephone interviews conducted as part of this study. Minority-owned firms (MBEs) comprise about 20 percent of businesses in Arizona available for ADOT transportation contracts. White women-owned firms (WBEs) account for about 15 percent of the companies available for ADOT work. Only a portion of the MBE/WBEs were firms certified as DBEs.

Figure ES-1.  
Number of businesses included in  
the availability database

Note:

Numbers rounded to nearest tenth of  
1 percent. Percentages may not add to  
totals due to rounding.

Source:

Keen Independent availability analysis.

Race/ethnicity and gender	Number of firms	Percent of firms
African American-owned	26	1.8 %
Asian-Pacific American-owned	19	1.3
Subcontinent Asian American-owned	18	1.3
Hispanic American-owned	189	13.2
Native American-owned	37	2.6
Total MBE	289	20.2 %
WBE (white women-owned)	211	14.8
Total MBE/WBE	500	35.0 %
Total majority-owned firms	929	65.0
Total firms	1,429	100.0 %

The study team identified the specific characteristics of each of the 13,667 ADOT and local agency prime contracts and subcontracts included in the study and then counted the number of minority-, women- and majority-owned businesses available for each of those prime contracts and subcontracts. After dollar-weighting the results of this contract-by-contract availability analysis, Keen Independent aggregated results for each set of contracts. Even though MBE/WBEs accounted for 35 percent of available firms, availability of MBE/WBEs was less on a dollar-weighted basis. Overall MBE/WBE availability on a dollar weighted basis was:

- 14.53 percent for FHWA-funded contracts;
- 13.39 percent for state-funded contracts;
- 24.78 percent for FAA-funded contracts; and
- 33.74 percent for FTA-funded contracts.

Dollar-weighted MBE/WBE availability was higher for FAA-funded contracts and FTA-funded contracts primarily because of the differing types of work involved in those contracts.

**Utilization of minority- and women-owned firms on ADOT contracts.** Figure ES-2 on the following page presents overall MBE/WBE utilization (as a percentage of total dollars) on ADOT transportation-related contracts awarded during the study period. Results are for the 13,667 prime contracts and subcontracts for FHWA-, state-, FAA- and FTA-funded contracts. The darker portion of the bar presents the utilization of MBE/WBEs that were DBE-certified.

Focusing on results for the \$3.7 billion in FHWA-funded contracts from July 2007 through June 2013, minority- and women-owned firms obtained 10.2 percent of these contract dollars. About 5.8 percent of the FHWA-funded contract dollars went to firms certified as DBEs during the study period and the difference, 4.4 percent, went to non-certified minority- and women-owned firms.

Compared with FHWA-funded contracts, utilization of DBEs was lower on state-funded contracts (5.2% of contract dollars), but overall participation of minority- and women-owned firms was higher (14.8%). MBE/WBE participation was in the same range for FAA-funded contracts, and on FTA-funded contracts, minority- and women-owned firms obtained nearly one-half of the contract dollars (however, the total dollars for FAA- and FTA-funded contracts was small).

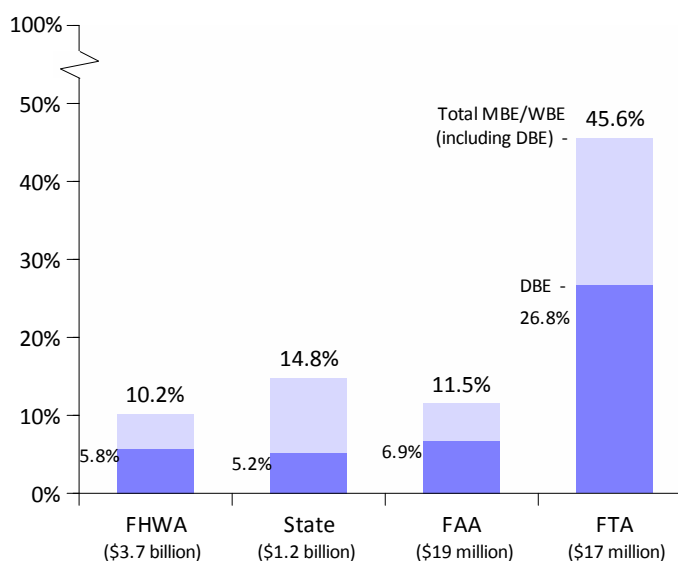
**Figure ES-2.**  
MBE/WBE and DBE share of prime contract/subcontract dollars for ADOT/LPA FHWA-, state-, FAA- and FTA-funded transportation contracts, July 2007-June 2013

**Note:**

Dark portion of bar is certified DBE utilization.  
Number of contracts/subcontracts analyzed is 13,667.

**Source:**

Keen Independent from data on ADOT and LPA contracts July 2007-June 2013.



Many of the analyses in the Disparity Study combined ADOT's FHWA- and state-funded contracts because of their similarity. The top portion of Figure ES-3, on the following page, presents overall utilization of minority-owned firms (by group) and white women-owned firms on combined FHWA- and state-funded contracts. As shown, Hispanic American-owned firms accounted for much of the utilization of minority-owned firms during the study period.

The bottom portion of Figure ES-3 shows participation of firms certified as DBEs during the study period. DBEs owned by Hispanic Americans, white women and Native Americans accounted for nearly all of the DBE utilization on these contracts.

Figure ES-3.

MBE/WBE and DBE share of ADOT/LPA prime contracts and subcontracts for combined FHWA- and state-funded contracts, July 2007-June 2013

	Total FHWA and State		
	Number of contracts*	\$1,000s	Percent of dollars
<b>MBE/WBEs</b>			
African American-owned	74	\$ 19,933	0.4 %
Asian-Pacific American-owned	41	5,644	0.1
Subcontinent Asian American-owned	158	18,844	0.4
Hispanic American-owned	1,184	161,322	3.3
Native American-owned	175	58,452	1.2
WBE (white women-owned)	2,144	292,672	6.0
<b>Total MBE/WBE</b>	<b>3,776</b>	<b>\$ 373,071</b>	<b>11.3 %</b>
Majority-owned	9,730	4,537,600	88.7
<b>Total</b>	<b>13,506</b>	<b>\$ 4,910,671</b>	<b>100.0 %</b>
<b>DBEs</b>			
African American-owned	33	\$ 1,522	0.0 %
Asian-Pacific American-owned	10	4,714	0.1
Subcontinent Asian American-owned	138	18,503	0.4
Hispanic American-owned	721	102,855	2.1
Native American-owned	141	54,595	1.1
WBE (white women-owned)	828	93,693	1.9
White male-owned DBE	0	0	0.0
<b>Total DBE</b>	<b>1,871</b>	<b>\$ 275,881</b>	<b>5.6 %</b>
Non-DBE	9,477	4,634,790	94.4
<b>Total</b>	<b>11,348</b>	<b>\$ 4,910,671</b>	<b>100.0 %</b>

Note: \*Number of prime contracts and subcontracts.

Numbers rounded to nearest tenth of 1 percent. Numbers may not add to totals due to rounding.

Includes \$74 million for Coffman Specialties.

Source: Keen Independent from data on ADOT and LPA contracts July 2007-June 2013.

Much of the participation of white women-owned firms on both FHWA- and state-funded contracts was one company — Coffman Specialties, a large San Diego general contractor. This company received more ADOT work than any other MBE/WBE: \$74 million during the study period.

Coffman Specialties appears to have once been WBE-certified in California in the 1990s, but according to FHWA staff, was denied DBE certification in Arizona within the past 15 years due to issues concerning ownership and control of the firm. Therefore, it might be appropriate to examine utilization without this company included as a WBE. Without Coffman Specialties, WBE utilization would be 4.5 percent of total FHWA- and state-funded contract dollars.



#### Disparity analysis results for minority-owned firms on FHWA- and state-funded contracts.

Minority-owned firms received 5.4 percent of combined FHWA- and state-funded contracts, a result that was below what might be expected from the availability analysis — 9.6 percent. The disparity occurred even with application of DBE contract goals on some FHWA-funded contracts in recent years. Figure ES-4 shows these results.

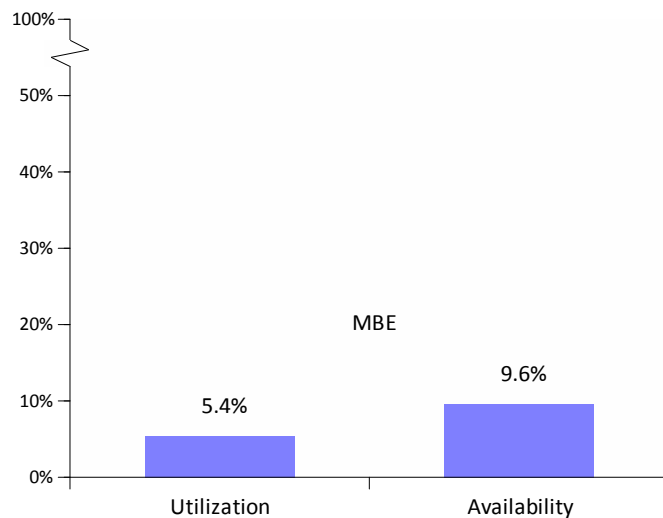
Figure ES-4.  
MBE utilization and  
availability for FHWA-  
and state-funded  
contracts,  
July 2007-June 2013

**Note:**

Number of  
contracts/subcontracts  
analyzed is 13,506.

**Source:**

Keen Independent disparity  
analysis.



#### Disparity analysis results for white women-owned firms on FHWA- and state-funded

**contracts.** WBEs received 6.0 percent of combined FHWA- and state-funded contracts when Coffman Specialties is included. This level of utilization exceeds the 4.7 percent utilization that might be expected based on the availability analysis for white women-owned firms in Arizona.

Without Coffman Specialties included as a WBE, white women-owned firms received 4.5 percent of combined FHWA- and state-funded contracts, somewhat below what might be expected from the availability analysis. (Coffman Specialties is not reflected in the availability analysis in either graph.)

Figure ES-5 shows utilization and availability results for white women-owned firms. The portion on the left side of the graph examines results including Coffman Specialties as a WBE and the portion on the right side shows results without including this firm as a WBE. As with the disparity analysis for MBEs, the results in Figure ES-5 are affected by past and current application of race- and gender-conscious programs.

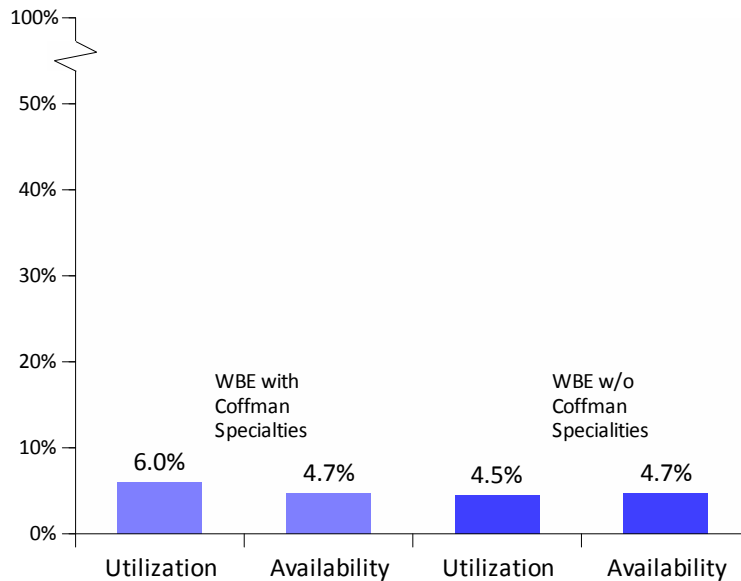
Figure ES-5.  
MBE utilization and  
availability for FHWA-  
and state-funded  
contracts,  
July 2007-June 2013

**Note:**

Number of  
contracts/subcontracts  
analyzed is 13,506.

**Source:**

Keen Independent disparity  
analysis.



**Disparity analysis results by group.** Keen Independent compared utilization and availability by calculating “disparity indices,” with a value of “100” indicating parity between utilization and availability. For example, the disparity index for minority-owned firms was 56 (5.4% divided by 9.6% times 100), which is a substantial disparity on FHWA- and state-funded contracts combined. Figure ES-6 shows disparity analysis results for each group. Disparity indices were the range of 34 to 66 for each MBE group, which means that there were substantial disparities for each group based on the utilization that might be expected from the availability analysis.

The results in Figure ES-6 are without inclusion of Coffman Specialties in results for WBEs. The disparity index is 95 (and would be 128 with inclusion of Coffman Specialties).

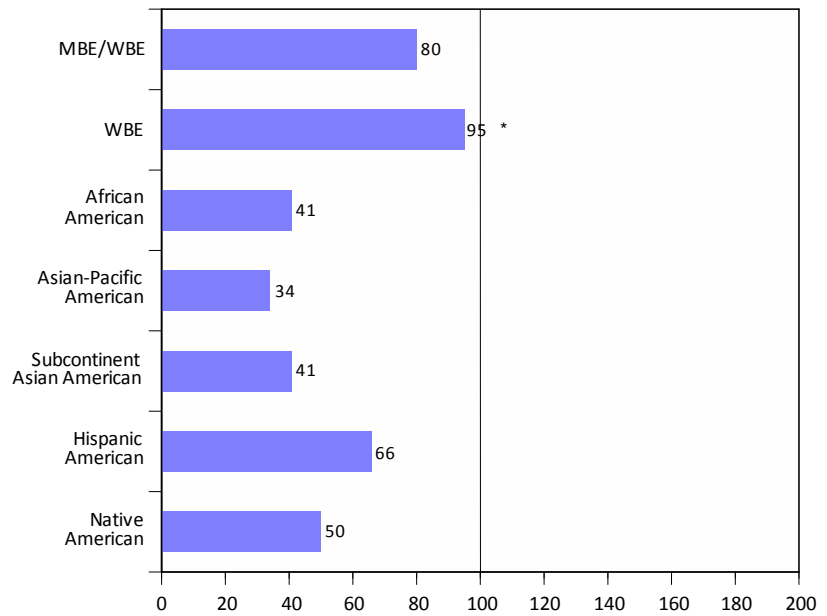
Figure ES-6.  
Disparity indices for  
minority-owned firms,  
by group, for FHWA-  
and state-funded  
contracts,  
July 2007-June 2013

Note:

Number of  
contracts/subcontracts  
analyzed is 13,506.

Source:

Keen Independent disparity  
analysis.



\* If exclude Coffman Specialties from the analysis

These disparities may be due, in part, to disadvantages MBE/WBEs face in the marketplace that put them at a disadvantage when pursuing ADOT work. However, ADOT contracting processes, especially related to prime contractors and prime consultants, may also contribute to these disparities.

MBE/WBEs obtained only 7 percent of prime contract dollars on ADOT FHWA- and state-funded contracts. Keen Independent's analyses of ADOT contracting processes, including case studies of past construction and engineering-related contracts, indicate the potential for ADOT procedures, such as contractor prequalification, contract bundling and consultant selection process to negatively affect small businesses, including minority- and women-owned firms, and favor established companies that have already had past success obtaining ADOT prime contracts.

**Quantitative and qualitative information about the local marketplace.** Federal courts have found that Congress “spent decades compiling evidence of race discrimination in government highway contracting, barriers to the formation of minority-owned construction businesses, and barriers to entry.”<sup>2</sup> Congress found that discrimination has impeded the formation and expansion of qualified MBE/WBEs.

As part of the 2014 Availability Study, Keen Independent conducted quantitative and qualitative analyses of conditions in the Arizona marketplace to examine whether barriers that Congress found on a national level also appear in Arizona. The study team analyzed whether barriers exist in the Arizona construction and engineering industries for minorities, women, and for MBE/WBEs, and whether such barriers might affect opportunities on ADOT and local agency transportation contracts.

<sup>2</sup> *Sherbrooke Turf, Inc. v. Minnesota DOT*, 345 F.3d, 970 (8<sup>th</sup> Cir. 2003) (citing *Adarand Constructors, Inc.*, 228 F.3d at 1167 – 76); *Western States Paving Co. v. Washington State DOT*, 407 F.3d 983, 992 (9<sup>th</sup> Cir. 2005).

Keen Independent examined conditions in the Arizona marketplace in four primary areas:

1. Entry and advancement;
2. Business ownership;
3. Access to capital, bonding and insurance; and
4. Success of businesses.

**1. Entry and advancement.** Keen Independent identified barriers for minorities and women entering and advancing within the Arizona construction and engineering industries, which negatively affected the number of minority- and women-owned construction and engineering-related companies in business today. In addition, underrepresentation of certain minority groups and women in the Arizona construction and engineering industries — particularly in supervisory and managerial roles — may perpetuate any beliefs or stereotypical attitudes that MBE/WBEs may not be as qualified as majority-owned businesses. Any such beliefs may make it more difficult for MBE/WBEs to win work in Arizona, including work with ADOT and local agencies.

**2. Business ownership rates for minorities and women in the transportation contracting industry.** Keen Independent identified disparities in business ownership rates for minorities and women that depress the relative number of minority- and women-owned firms available for ADOT construction and engineering work.

**3. Access to capital, bonding and insurance on the transportation contracting industry.** Bonding and insurance are required on most ADOT contracts, and firms must have access to capital to obtain bonding, to acquire equipment and expand operations, and to survive sometimes slow payment on public sector contracts. Potential barriers associated with access to capital, bonding and insurance may affect business outcomes for MBE/WBEs.

- There is some quantitative evidence that minorities do not have the same personal access to capital as non-minorities, which affects personal financial resources. Personal net worth and financial history can affect access to business loans, bonding and prequalification for public sector work in Arizona.
- Keen Independent identified disparities in personal and business lending for minorities and for minority- and women-owned firms. There was evidence of disparities in loan approval rates, failure to apply for loans due to fear of loan denial, lower values of approved loans and higher interest rates for minority- and women-owned firms.
- State law requires bonding to bid on ADOT and other public sector construction prime contracts. Interviewees report that bonding requirements sometimes affect subcontractors as well. Minority- and women-owned firms in Arizona were more likely to report bonding as a barrier than were majority-owned firms.

**4. Success of businesses in the transportation contracting industry.** Across time periods and data sources, Keen Independent's analyses indicated that minority- and women-owned construction and engineering firms in Arizona had lower revenue than majority-owned firms. This may indicate discrimination and it also demonstrates that any disadvantages for small businesses disproportionately affect MBEs and WBEs.

For example, one of the data sets the study team examined included personal characteristics of the business owner. Regression analyses using these data indicated that female business owners had lower earnings than male owners after controlling for other factors.

Success in the transportation contracting industry depends on relationships with prime contractors and customers. Some minority and female business owners interviewed in this study reported that they were disadvantaged by their size and lack of relationships within the industry. Some of the minority and female interviewees also reported negative stereotypes and other forms of discrimination against minority- and women-owned businesses in Arizona. Many minority, female and white male interviewees reported the presence of a "good ol' boy" network in Arizona that affects the construction and engineering industries, and some said that this negatively affects minority- and women-owned firms.

In sum, quantitative and qualitative information about the Arizona transportation contracting marketplace suggests that there is not a level playing for minority-owned firms or for women-owned firms.

### **C. Summary of Information Concerning Overall DBE Goals**

As described earlier in this Executive Summary, Keen Independent compiled availability data through telephone interviews with businesses in Arizona. Only businesses reporting their qualifications and interest in ADOT and local agency transportation-related prime contracts and subcontracts were included in the final analyses. Keen Independent also collected detailed information for ADOT and local agency prime contracts and subcontracts from July 2007 through June 2013. To calculate availability of DBEs for a prime contract or subcontract, Keen Independent calculated:

- (a) Number of DBEs available for that type, size and location of work;
- (b) Total number of firms available for that work; and
- (c) Percentage DBE availability for that prime contract or subcontract, calculated by dividing (a) by (b).

Keen Independent then dollar-weighted the percentage DBE availability results for each prime contract and subcontract to develop overall availability figures for FHWA-, FTA- FAA- and state-funded contracts. Small prime contracts or subcontracts received the lowest weights and the largest contracts received the highest weights.

For FHWA-funded contracts, the overall DBE goal incorporates availability of currently-certified DBEs and non-certified minority- and women-owned firms that appear that they could be DBE-certified. Because of more limited information about potential DBEs, the goals for FTA- and

FAA-funded contracts are based on currently certified DBEs. (The full Disparity Study contains detailed information about these data, analytical methods and potential adjustment factors.)

**Summary of results concerning overall DBE goals.** Figure ES-7 summarizes potential goals and projections that ADOT might consider. As shown, information in the Disparity Study indicates an overall goal of 8.90 percent DBE participation in FHWA-funded contracts. Projections of neutral and race-conscious attainment are similar to what ADOT adopted on a preliminary basis on October 1, 2014. In this example ADOT would continue to use a DBE contract goals program for FHWA-funded contracts if it adopted this DBE goal and these projections.

Overall DBE goals would be higher for FTA- and FAA-funded contracts than ADOT's current goals, and ADOT might continue to rely on neutral measures to meet those overall goals.

Figure ES-7.

Information for ADOT consideration concerning potential overall DBE goals and projections of race-neutral for FHWA-, FTA- and FAA- funded contracts

Component of overall DBE goals	FHWA	FTA	FAA
Overall goal	8.90 %	4.87 %	7.25 %
Neutral projection	5.00	4.87	7.25
Race-conscious projection	3.90	0.00	0.00

**Summary of information concerning projections.** As part of developing an overall DBE goal, agencies such as ADOT must project the portion of their overall DBE goal that they expect to meet through race- and gender-neutral means, and race- and gender-conscious programs (if any). Race- and gender-neutral measures are initiatives that encourage the participation of all businesses, or all small businesses, and are not specifically limited to minority- or women-owned firms or DBEs. Agencies must determine whether they can meet their overall DBE goal solely through neutral means or whether race- and gender-conscious measures — such as DBE contract goals — are also needed.

The second and third rows of Figure ES-7 present the components of ADOT's overall DBE goals that might be met through neutral and through race-conscious programs based on information in this Disparity Study. The magnitude of the projections is less important than whether ADOT projects any amount to be met through race-conscious programs such as DBE contract goals.

Analysis of ADOT's recent race-neutral experience provides one way to make this projection. Key results behind each projection include:

- From July 2007 through June 2013, ADOT achieved 5 percent DBE participation on its FHWA- and state-funded contracts that did not have DBE contract goals.
- Based on data Keen Independent compiled for July 2007 through June 2013, ADOT's DBE participation for FTA-funded contracts (26.9%) and FAA-funded contracts (6.9%) exceeded the overall DBE goals for those contracts shown in Figure ES-7. Therefore, ADOT might reasonably expect to continue to meet its goals for these contracts solely through neutral means.

To narrowly tailor its operation of the Federal DBE Program, ADOT will need to consider Disparity Study results and other information when determining whether it will use DBE contract goals for FHWA-funded contracts. If ADOT does continue to use DBE contract goals, it will need to consider whether all DBE groups will be eligible to be counted toward meeting a contract goal or whether the contract goals program would be restricted to certain DBE groups. ADOT should consider the disparity analysis and the research on the Arizona marketplace provided in the full report when making these decisions.

#### **D. Other Key Results**

ADOT operates the Federal DBE Program in line with federal regulations, and has adopted innovative practices in areas including technical assistance, contract goal setting and prompt payment policies. The Disparity Study includes the following suggestions as ADOT and local public agencies continue to operate the Federal DBE Program on USDOT-funded contracts.

- ADOT has a strong supportive services program and should consider ways to further expand its efforts to provide technical assistance to DBEs and other small businesses. There are substantial disadvantages for these firms when competing in the Arizona transportation contracting marketplace.
- ADOT and local public agencies should consider the effect of some of their own contracting processes, such as contractor prequalification, contract bundling and consultant selection process and seek ways to remedy any negative effects on minority- and women-owned firms pursuing prime contracts.
- Many interviewees identified prompt payment as an issue in ADOT and other public agency contracting. Although ADOT has strong prompt payment policies, it and local agencies need to strengthen agency-wide processes to better ensure compliance. This will require increased educational efforts with prime contractors and subcontractors.
- Keen Independent reviewed whether there was overconcentration of DBEs in FHWA- and state-funded contracts. Although there was no overconcentration during the study period, ADOT should continue to monitor whether DBE contract goals place an undue burden on any non-DBE firms to participate in ADOT work.
- Some types of federally-funded contracts, especially Procurement, FAA-funded and LPA contracts, are not fully incorporated into ADOT's operation of the Federal DBE Program. ADOT should improve how it identifies and track these contracts for possible DBE contract goals, and captures information about DBE participation to ensure more accurate reporting of data to U.S. DOT. ADOT should also expand its collection and tracking of utilization information to encompass all minority- and women-owned firms, including on state-funded contracts.

- ADOT should continue to monitor participation of white women-owned firms in its FHWA- and state-funded contracts, and reexamine whether there are disparities for WBEs using more recent data.
- Further, ADOT should continue to monitor legal developments concerning the Federal DBE Program to ensure its program conforms to the findings of recent court cases.



## CHAPTER 1.

### Introduction

The federal government requires state and local governments to operate the Federal Disadvantaged Business Enterprise (DBE) Program if they receive U.S. Department of Transportation (USDOT) funds for transportation projects. The Arizona Department of Transportation (ADOT) has been operating some version of the Federal DBE Program since the 1980s.

ADOT must set a separate overall goal for participation of DBEs in USDOT-funded contracts for each of three types of USDOT funds it receives: (a) Federal Highway Administration (FHWA) funds, (b) Federal Transit Administration (FTA) monies and (c) Federal Aviation Administration (FAA) funds. Each overall goal is expressed as the percentage of contract dollars that will go to firms certified as DBEs. Each overall goal is for three years, and every year ADOT must set a new overall annual goal for one of these different operating administrations within USDOT. The new three-year goal for FTA-funded contracts must be in place starting October 1, 2015 and the new goal for FAA-funded contracts will start October 1, 2016.

The USDOT recommends that agencies such as ADOT conduct disparity studies to develop the information needed to effectively implement the Program. ADOT last completed a full disparity study in 2009. ADOT retained Keen Independent Research LLC (Keen Independent) to conduct the 2014 DBE Availability Study and the 2015 Disparity Study.

In summer 2014 Keen Independent released the Availability Study with preliminary research results that ADOT used to make certain decisions about the operation of the Federal DBE Program for its FHWA-funded contracts beginning October 2014. Based in part on the 2014 Availability Study, ADOT submitted a preliminary overall DBE goal of 9.38 percent for FHWA-funded contracts for FFY 2015 through FFY 2017, which was approved by FHWA. The 2015 Disparity Study contains more information, which ADOT can use to refine this preliminary overall goal and review its operation of the Federal DBE Program.

ADOT can also use information from the 2015 Disparity Study to set its future overall DBE goals for FTA- and FAA-funded contracts. The website [www.adotdbestudy.com](http://www.adotdbestudy.com) provides ADOT's proposed overall goals, information about public meetings and how to submit written comments, and other information about the disparity study.

The balance of Chapter 1:

- A. Introduces the study team;
- B. Provides background on the Federal DBE Program;
- C. Outlines the analyses and describes where results appear in the report; and
- D. Provides information about public meetings held in July 2015 and the public comment process.

## A. Study Team

David Keen, Principal of Keen Independent, directed this study. He has conducted similar studies for about 80 public agencies throughout the country, including a number of state transportation departments. Keith Wiener from Holland & Knight provided the legal framework for this study. Mr. Wiener has extensive experience with disparity studies as well, and has worked with Mr. Keen in this field since the early 1990s. Mr. Keen and Mr. Wiener have helped public agencies successfully defend DBE and minority business enterprise programs in court.

The Keen Independent study team includes the seven companies listed below. Five of the team members are minority- and/or women-owned firms.

Figure 1-1.  
2015 Disparity Study team

Firm	Location	Team Leader	Responsibilities
Keen Independent Research LLC, prime consultant	Wickenburg, AZ Denver, CO	David Keen Principal	All study phases
Holland & Knight LLP (H&K)	Atlanta, GA	Keith Wiener Partner	Legal framework
Customer Research International (CRI)	San Marcos, TX	Sanjay Vrudhula President	Availability telephone interviews
Así Marketing Group	Phoenix, AZ	Letty Alvarez Principal	In-depth interviews, public outreach
Don Logan & Associates	Chandler, AZ	Don Logan Principal	In-depth interviews
The Genesis Consulting Group	Phoenix, AZ	Mary Ortega-Itsell President	In-depth interviews for aviation
Gordley Group	Tucson, AZ	Jan Gordley President	In-depth interviews, public outreach

## B. Federal DBE Program

ADOT has been operating some version of a Federal DBE Program since the 1980s. After enactment of the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) in 1998, USDOT established a new Federal DBE Program to be operated by state and local agencies receiving USDOT funds. USDOT recently revised the Federal DBE Program in 2011 and again in 2014.

Federal regulations in 49 CFR Part 26 direct how state and local governments must operate the Federal DBE Program.<sup>1</sup> If necessary, under the federal regulations, the Program allows state and local agencies to use DBE contract goals, which ADOT currently sets on certain FHWA-funded contracts. When awarding those contracts, ADOT considers whether or not a bidder or proposer meets the DBE goal set for the contract or shows good faith efforts to do so.

The Federal DBE Program also applies to cities, towns, counties, transportation authorities, tribal governments and other jurisdictions that receive USDOT funds as a subrecipient of ADOT.

**Key Program elements.** Components of the Federal DBE Program include the following elements.

**Setting an overall goal for DBE participation.** ADOT must develop an overall three-year goal for DBE participation in its USDOT-funded contracts. The Federal DBE Program sets forth the steps an agency must follow in establishing its goal, including development of a “base figure” and consideration of possible “step 2” adjustments to the goal.<sup>2</sup>

ADOT’s overall goal for DBE participation is aspirational. Failure to meet an annual DBE goal does not automatically cause any USDOT penalties unless an agency fails to administer the DBE Program in good faith. However, if ADOT does not meet its overall DBE goal, federal regulations require it to analyze the reasons for any shortfall and develop a corrective action plan to meet the goal in the next fiscal year.<sup>3</sup>

ADOT’s preliminary goal for the three-year period beginning October 2014 is 9.38 percent, an increase from its 7.76 percent DBE goal for the FFY 2012 through FFY 2014 period. The 2015 Disparity Study includes additional results for ADOT review as it considers whether to refine its current three-year DBE goal.

The Disparity Study also provides information for ADOT as it sets overall three-year DBE goals for FTA- and FAA-funded contracts. ADOT’s current overall goals are 3.82 percent for FTA-funded contracts and 3.30 percent for FAA-funded contracts.

**Establishing the portion of the overall DBE goal to be met through neutral means.** Regulations governing operation of the Federal DBE Program allow for state and local governments to operate the program without the use or with limited use of race- or gender-based measures such as DBE contract goals. According to program regulations 49 CFR Section 26.51, a state or local agency must meet the maximum feasible portion of its overall goal for DBE participation through “race-neutral means.” Race-neutral program measures include removing barriers to participation of firms in general or promoting use of small or emerging businesses (see 49 CFR Section 26.51(b) for more examples of race-neutral program measures). If an agency can meet its goal solely through race-neutral means, it must not use race-conscious program elements. For example, a state DOT operating a 100 percent race- and gender-neutral program would not apply DBE contract goals.

The Federal DBE Program requires that an agency project the portion of its overall DBE goal that it will meet through neutral measures and the portion, if any, to be met through race-conscious

---

<sup>1</sup> 49 CFR Part 26 [http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title49/49cfr26\\_main\\_02.tpl](http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title49/49cfr26_main_02.tpl).

<sup>2</sup> 49 CFR Section 26.45.

<sup>3</sup> 49 CFR Section 26.47.

measures such as DBE contract goals. USDOT has outlined a number of factors for an agency to consider when making that determination.<sup>4</sup>

Many state DOTs project that they will meet their overall DBE goal through a combination of race-neutral and race-conscious measures. Some DOTs have operated the Federal DBE Program solely through neutral measures and without the use of DBE contract goals (state DOTs in Florida, Idaho, Maine, New Hampshire and Vermont are examples). These agencies projected that 100 percent of their overall DBE goal will be met through neutral means.

The 2014 Availability Study provided ADOT preliminary information to consider when making this projection for its FHWA-funded contracts. In its September 2014 goal submission, ADOT projected that it would meet 5.44 percentage points of its 9.38 percent overall DBE goal through neutral means. That left a balance of 3.94 percentage points of the overall goal to be met through DBE contract goals.

The 2015 Disparity Study provides additional results for ADOT to refine its projection.

**Determining whether all racial/ethnic/gender groups will be eligible for race or gender-conscious elements of the Federal DBE Program.** Under the Federal DBE Program, the following race/ethnic/gender groups can be presumed to be socially disadvantaged:

- Black Americans (or “African Americans” in this study);
- Hispanic Americans;
- Native Americans;
- Asian-Pacific Americans;
- Subcontinent Asian Americans; and
- Women of any race or ethnicity.

To be economically disadvantaged, a company must be below an overall revenue limit and an industry-specific limit, and its firm owner(s) must be below net worth limits.<sup>5</sup> White male-owned firms and other ethnicities not listed above can also meet the federal certification requirements and be certified as DBEs if they demonstrate that they are both socially and economically disadvantaged, as described in 49 CFR Part 26.67 (d). (This has occurred in Arizona.)

ADOT’s current operation of the Program, similar to most states, includes DBEs owned by each of the above minority groups and women as eligible for race- and gender-conscious measures including meeting DBE contract goals. However, USDOT provides a waiver provision if an agency determines that it does not need to include certain racial, ethnic or gender groups in the race- or gender-

---

<sup>4</sup> See Chapter 7 of this report for an in-depth discussion of these factors.

<sup>5</sup> 49 CFR 26 Subpart D provides certification requirements. There is a gross receipts limit (currently not more than \$22,410,000 annual three-year average revenue, and lower limits for certain lines of business) and a personal net worth limit (currently \$1.32 million excluding equity in the business and primary personal residence) that firms and firm owners must fall below to be able to be certified as a DBE. <http://www.ecfr.gov/cgi-bin/text-idx?SID=5423bdfc26c2255aef5fb43c3f450a13&node=49:1.0.1.1.20.4&rgn=div6>. Under 49 CFR Section 26.67(b), a certifying agency may consider other factors to determine if an individual is able to accumulate substantial wealth, in which certification is denied (annual gross income of the owner and whether the fair market value of the owner’s assets exceed \$6 million are two such factors that may be considered).

conscious portions of the Federal DBE Program. Some state DOTs have operated contract goals programs for “Underutilized DBEs” (UDBEs), which do not include all DBE groups. Those states determined the DBE groups that were UDBEs in part by examining results of disparity analyses for each racial, ethnic and gender group.

Agencies that operate UDBE contract goals programs:

- Only count UDBEs toward meeting the goal set on an individual contract. For example, Oregon DOT only counts African American- and Subcontinent Asian American-owned DBEs toward meeting a DBE goal it sets on an FHWA-funded construction contract (as of May 2015).
- Include utilization of other DBEs as neutral participation and count it toward the agency’s overall DBE goal. For example, ODOT counts any participation of DBEs other than African American- or Subcontinent Asian-owned firms toward its overall DBE goal for FHWA-funded contracts.

There is no difference in how agencies with UDBE contract goals programs certify firms as DBEs. Any DBE can participate in all aspects of the DBE Program except for DBE contract goals for that agency.

The Keen Independent 2015 Disparity Study includes additional information for ADOT as it considers whether all groups or only some of the groups listed above should be eligible for the DBE contract goals element of the Program.

**Promoting DBE participation as prime contractors.** The Federal DBE Program calls for agencies to remove any barriers to DBE participation as prime contractors and consultants, but does not require agencies to operate programs that give preference to DBE primes. Quotas are prohibited.

The Federal DBE Program requires agencies such as ADOT to develop programs to assist all small businesses.<sup>6</sup> For example, small business preference programs, including reserving contracts on which only small businesses can bid, are allowable under the Federal DBE Program.

**Promoting DBE participation as subcontractors.** In accordance with federal regulations and subject to USDOT approval, an agency can decide that it will use DBE contract goals as part of its operation of the Federal DBE Program. ADOT currently uses DBE contract goals for certain FHWA-funded contracts. (ADOT did not set DBE contract goals from January 2006 through fall 2010 as explained in Chapter 2.)

---

<sup>6</sup> 49 CFR Section 26.39.

**Past court challenges to the Federal DBE Program and to state and local agency implementation of the Program.**

Although agencies are required to operate the Federal DBE Program in order to receive USDOT funds, different groups have challenged program operation in court.

- A number of courts have held the Federal DBE Program to be constitutional, as discussed in Chapter 2 and Appendix B of this report.
- State transportation departments in California, Illinois, Minnesota, Montana and Nebraska successfully defended their operation of the Federal DBE Program, as have several cities and other local government agencies. The Washington State Department of Transportation was not able to successfully defend its operation of the Federal DBE Program. (See Chapter 2 and Appendix B.)

In *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation*, the Ninth Circuit Court of Appeals examined the methodology and results of the disparity study David Keen directed for the California Department of Transportation (Caltrans). (Mr. Keen also provided expert testimony in this case.) As discussed in more detail in Appendix B, the Ninth Circuit favorably reviewed the methodology and the quantitative and qualitative information provided in the disparity study and determined that the information justified Caltrans' operation of the Federal DBE Program. Keen Independent is applying a methodology in ADOT's 2015 Disparity Study that is very similar to what the court favorably reviewed in the Caltrans case.

As discussed in Chapter 2 of this Disparity Study, ADOT also succeeded when facing a legal challenge to its implementation of the Federal DBE Program.

**C. Analyses Performed in the Disparity Study and Location of Results**

Figure 1-2 on the following page provides a side-by-side comparison of chapters in the 2014 Availability Study and chapters in the 2015 Disparity Study.

- The first five chapters of the Availability Study are updated and included in the Disparity Study report.
- Chapter 6 of the Availability Study, which examined the overall goal for FHWA-funded contracts, is consolidated with Chapter 7 of the Availability Study (neutral projections) in a new chapter in the Disparity Study (new Chapter 8).
- Not shown in Figure 1-2 are the ten appendices that appeared in the 2014 Availability Study, which are also included in the 2015 Disparity Study report. Appendix B has been updated with new court decisions and Appendix J, which now includes comments from in-depth interviews, availability interviews, 2015 public meetings and other communications, is substantially expanded from what appeared in the Availability Study.

Figure 1-2. Chapters in the 2014 Availability Study and 2015 Disparity Study reports

Chapter	Description of 2014 Availability Study report chapter	Changes or additions in 2015 Disparity Study report chapter
ES. Executive Summary	Brief summary of study results	Updated with Disparity Study results
1. Introduction	Study purpose, study team and overview of analyses	Updated to discuss Disparity Study
2. Legal Framework	Summary of Federal DBE Program regulations and relevant court decisions	Updated with latest legal decisions and any USDOT guidance
3. ADOT Transportation Contracts	How the study team collected contract data and defined the geographic area and transportation contracting industry	Updated to include additional data collected, plus information about FTA-and FAA-funded contracts
4. Marketplace Conditions	Summary of quantitative and qualitative information about the Arizona transportation contracting marketplace	Updated to include additional in-depth interviews conducted since 2014
5. Availability Analysis	Methodology and results regarding availability of minority- and women-owned firms and other businesses for ADOT contracts and subcontracts	Updated to include information about FTA-, FAA- and state-funded contracts, plus new refined data about potential DBEs for FHWA-funded contracts
6. Utilization and Disparity Analysis	Not in 2014 Availability Study	Comparison of utilization and availability of minority- and women-owned firms (disparity analysis)
7. Exploration of Neutral Explanations for any Disparities	Not in 2014 Availability Study	Further examination of disparity results to determine if any can be explained by neutral factors
8. Overall DBE Goal for FHWA-funded Contracts	Information to review when setting a three-year overall DBE goal, consideration of a “step 2 adjustment” (was Chapter 6), and neutral projection (was Chapter 7)	Updates the Availability Study analysis based on additional information, and combines it into one chapter.
9. Overall DBE Goal for FAA-funded Contracts	Not in 2014 Availability Study	Information for DBE Program for FAA-funded contracts
10. Overall DBE Goal for FTA-funded Contracts	Not in 2014 Availability Study	Information for goal and Program operation for FTA-funded contracts

The following briefly describes where to find specific information in the 2015 Disparity Study report.

**Legal framework.** Chapter 2 summarizes the legal framework for the study. Appendix B presents detailed analyses of relevant cases.

**Collection of prime contract and subcontract information for past USDOT- and state-funded-contracts.** The study team collected information about past FHWA-, FTA-, FAA- and state-funded contracts awarded by ADOT or by local public agencies from July 2007 through June 2013. Chapter 3 outlines the data collection process and describes these contract data. It expands upon a similar chapter in the 2014 Availability Study. Appendix C provides additional documentation.

**Analysis of local marketplace conditions.** The study team examined quantitative and qualitative information relevant to the Arizona transportation contracting industry. Chapter 4 synthesizes quantitative information about local marketplace conditions. In accordance with USDOT guidance, Keen Independent analyzed:

- Any evidence of barriers for minorities and women to enter and advance in their careers in the construction and engineering industries in Arizona (detailed results in Appendix E);
- Any differences in rates of business ownership in Arizona (discussed in detail in Appendix F);
- Access to business credit, insurance and bonding (detailed results in Appendix G);
- Any differences in measures of business success and access to prime contract and subcontract opportunities (examined in detail in Appendix H); and
- Certain other issues potentially affecting minorities and women in the local marketplace.

The quantitative information in Chapter 4 and Appendices E through H is the same as what was included in the 2014 Availability Study published in fall 2014.

Chapter 4 also summarizes analysis of qualitative information, including results of 66 in-depth personal interviews with business owners and trade associations, and public input as part of the public comment process for the 2014 Availability Study and 2015 Disparity Study. Appendix J of this report provides detailed analysis of this qualitative information.

This combined quantitative and qualitative information about the marketplace is relevant to ADOT's development of an overall DBE goal and its projection of how much of the goal will be met through neutral means.

**Availability analysis, including calculation of base figure for overall DBE goals.** Keen

Independent's availability analysis generates benchmarks to use when assessing ADOT's utilization of minority- and women-owned firms. The availability results also provide information for ADOT to consider when setting its three-year goal for DBE participation on FHWA-, FTA- and FAA-funded contracts.



Discussion of results is organized as follows:

- The methods used to collect and analyze availability of minority-, women- and majority-owned firms;
- Availability benchmarks used in the disparity analysis; and
- Information relevant to ADOT's "base figure" for its overall DBE goals for FHWA-, FTA and FAA-funded contracts.

**MBE/WBE utilization and disparity analysis.** Chapter 6 presents Keen Independent's analysis of the utilization of minority- and women-owned businesses in ADOT's FHWA-, state-, FTA- and FAA-funded contracts during the study period. The disparity analysis in Chapter 6 compares utilization to availability to determine whether there is underutilization of minority- or women-owned firms in ADOT transportation contracts.

Chapter 7 further explores this information, including results for different types of ADOT contracts. It also contains analysis of DBE participation on FHWA- and state-funded contracts, and explores whether there is any evidence of overconcentration of DBEs.

**Information for overall DBE goal and DBE Program operation for FHWA-funded contracts.**

Chapter 8 refines the analysis of overall DBE goal, projection of neutral attainment and other program issues regarding FHWA-funded contracts presented in the 2014 Availability Study.

**Information for overall DBE goal and DBE Program operation for FTA-funded contracts.**

Chapter 9 provides similar information related to the overall DBE goal and program operation for FAA-funded contracts.

**Information for overall DBE goal and DBE Program operation for FTA-funded contracts.**

Keen Independent presents information related to the overall DBE goal, neutral projection and program operations for FTA-funded contracts in Chapter 10.

In addition to the chapters described above, ten report appendices provide supporting information concerning 2015 Disparity Study methodology and results.

#### **D. Public Comment Process for the 2015 Disparity Study Report**

As it did with the 2014 Availability Study, ADOT published the Disparity Study report for public comment before Keen Independent finalized the report. The public comment period for the report and proposed overall DBE goal remained open through July 23, 2015.

ADOT held four public meetings concerning the Disparity Study and ADOT's proposed DBE goals:

- Flagstaff on July 8;
- Yuma on July 13;
- Tucson on July 14; and
- Phoenix on July 16.

The public was able to give feedback at those meetings and provide written comments (a) in person at the hearings, (b) online at [www.adotdbestudy.com](http://www.adotdbestudy.com), (c) via email at [info@adotDBEstudy.com](mailto:info@adotDBEstudy.com) and (d) through regular mail.

Keen Independent reviewed information from the public meetings and each of the written comments submitted before preparing a final Disparity Study report. This process closely follows the approach for the 2014 Availability Study.

## CHAPTER 2.

### Legal Framework

The legal framework for the disparity study is based on applicable regulations for the Federal DBE Program and other sources, including the Official USDOT Guidance, court decisions related to the Federal DBE Program and relevant court decisions concerning challenges to minority- and women-owned business programs. The applicable federal regulations are located at Title 49 Code of Federal Regulations (CFR) Part 26. (Chapter 2 updates the legal framework found in Chapter 2 of the 2014 ADOT Availability Study.)

Since the 1980s, there have been lawsuits challenging the constitutionality of the Federal DBE Program and individual state and local agencies' implementation of the Program. Figure 2-1 on the following page summarizes some of the recent legal challenges. To summarize:

- The Federal DBE Program has been upheld as valid and constitutional.
- For the most part, state DOTs have been successful in defending against the legal challenge, including ADOT.<sup>1</sup>
- Western States Paving Company, however, was successful in challenging the Washington State Department of Transportation's implementation of the Federal DBE Program.
- Many state and local agencies, especially those in the West (i.e., states within the Ninth Circuit), made adjustments in their implementation of the Federal DBE Program to comply with the United States Ninth Circuit Court of Appeals decision in the *Western States Paving* case, and in accordance with the Official USDOT Guidance issued after the decision.
- Most recently, the Ninth Circuit Court of Appeals held California Department of Transportation's implementation of the Federal DBE Program was valid and complied with the decision in *Western States Paving*.

Each of the lawsuits identified in Figure 2-1 pertains to state DOT operation of the Federal DBE Program for USDOT-funded contracts. Two of those court decisions — *Mountain West* and *Midwest Fence* — were issued since publication of the 2014 ADOT Availability Study. Court decisions regarding local government implementation of the Federal DBE Program are important as well.

Groups have also challenged state departments of transportation and other agencies that implement similar programs for their state- or locally-funded contracts (including California, North Carolina and Florida). Appendix B of this report provides detailed analysis of relevant legal decisions and federal regulations.

---

<sup>1</sup> *Braunstein v. Arizona DOT*, 683 F.3d 1177 (9th Cir. 2012).

Figure 2-1. Legal challenges to state DOT implementation of the Federal DBE Program

State	Successfully defended implementation of Federal DBE Program	Unsuccessfully defended implementation of Federal DBE Program	Ongoing litigation at time of report
California	<i>Associated General Contractors of America, San Diego Chapter v. California DOT</i> <sup>1</sup> (see Appendix B, page 25)		
Illinois	<i>Northern Contracting, Inc. v. State of Illinois</i> <sup>2</sup> (see Appendix B, page 56)  <i>Midwest Fence Corp. v. United States DOT, Illinois DOT, et al.</i> <sup>9</sup> (see Appendix B, page 80)  <i>Dunnet Bay Construction Company v. Gary Hannig</i> <sup>3</sup> (see Appendix B, page 90)		<i>Midwest Fence Corp. v. United States DOT, Illinois DOT, et al.</i> <sup>9</sup> appeal pending  <i>Dunnet Bay</i> appeal pending <sup>3</sup>
Minnesota	<i>Sherbrooke Turf, Inc. v. Minnesota Department of Transportation</i> <sup>4</sup> (see Appendix B, page 66)  <i>Geyer Signal, Inc. v. Minnesota DOT, U.S. DOT, Federal Highway Administration, et al.</i> <sup>5</sup> (see Appendix B, page 73)		
Montana	<i>Mountain West Holding Co., Inc. v. The State of Montana, Montana DOT, et al.</i> appeal pending in the U.S. Court of Appeals, Ninth Circuit, <sup>10</sup> (see Appendix B, page 42).  <i>M.K. Weeden Construction v. State of Montana, Montana Department of Transportation, et al.</i> <sup>6</sup> (see Appendix B, page 46)		<i>Mountain West Holding Co., Inc. v. The State of Montana, Montana DOT, et al.</i> appeal pending. <sup>10</sup>
Nebraska	<i>Gross Seed Company v. Nebraska Department of Roads</i> <sup>7</sup> (see Appendix B, page 71)		
Washington		<i>Western States Paving Co., v. Washington State DOT</i> <sup>8</sup> (see Appendix B, page 36)	

<sup>1</sup> *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.*, 713 F. 3d 1187, 2013 WL 1607239 (9<sup>th</sup> Cir. April 16, 2013).

<sup>2</sup> *Northern Contracting, Inc. v. Illinois*, 473 F.3d 715 (7<sup>th</sup> Cir. 2007).

<sup>3</sup> *Dunnet Bay Construction Company v. Gary Hannig, in its official capacity as Secretary of Transportation for the Illinois DOT and the Illinois DOT*, 2014 WL 552213 (C.D. Ill. Feb. 12, 2014), *appeal pending* in the U.S. Court of Appeals, Seventh Circuit.

<sup>4</sup> *Sherbrooke Turf, Inc. v. Minnesota Department of Transportation*, 345 F.3d 964 (8<sup>th</sup> Cir. 2003), *cert. denied*, 541 U.S. 1041.

<sup>5</sup> *Geyer Signal, Inc., et al. v. Minnesota DOT, U.S. DOT, Federal Highway Administration, et al.*, 2014 WL 1309092 (D. Minn. March 31, 2014).

<sup>6</sup> *M.K. Weeden Construction v. State of Montana, Montana Dept. of Transportation, et al.*, 2013 WL 4774517 (D. Mont.) (September 4, 2013).

<sup>7</sup> *Gross Seed Company v. Nebraska Department of Roads*, 345 F.3d 964 (8<sup>th</sup> Cir. 2003), *cert. denied*, 541 U.S. 1041.

<sup>8</sup> *Western States Paving Co. v. Washington State DOT*, 407 F.3d 983 (9<sup>th</sup> Cir. 2005), *cert. denied*, 546 U.S. 1170 (2006).

<sup>9</sup> *Midwest Fence Corp. v. United States DOT, Illinois DOT, et al.*, 2015 WL 1396376 (N.D. Ill, March 24, 2015) *appeal pending* in the U.S. Court of Appeals, Seventh Circuit, Docket Number 15-1827.

<sup>10</sup> *Mountain West Holding Company, Inc. v. State of Montana; Montana DOT, et al.* U.S. District Court, District of Montana (Billings), 2014 WL 6686734 (D. Mont. Nov. 26, 2014). *appeal pending* in the U.S. Court of Appeals, Ninth Circuit, Docket Numbers 14-36097 and 15-35003.

The legal challenges have focused on implementation of race- and gender-conscious program components such as DBE contract goals. This is important background for the Disparity Study.

To understand the legal context for the availability analysis and disparity study, it is useful to review:

- A. The Federal DBE Program;
- B. Similar state and local programs across the country; and
- C. Legal standards that race- and gender-conscious programs must satisfy.

## **A. The Federal DBE Program**

The Federal DBE Program includes a number of requirements for state and local governments implementing the program. Three important requirements are:

- **Setting overall goals for DBE participation in USDOT-funded contracts.** (49 CFR Section 26.45)
- **Meeting the maximum feasible portion of the overall DBE goal through race- and gender-neutral means.** (49 CFR Section 26.51)
  - Race- and gender-neutral measures include removing barriers to the participation of businesses in general or promoting the participation of small or emerging businesses.<sup>2</sup>
  - If an agency can meet its overall DBE goal solely through race- and gender-neutral means, it must not use race- and gender-conscious measures as part of its implementation of the Federal DBE Program.
- **Appropriate use of race-and gender-conscious measures, such as contract-specific DBE goals.** (49 CFR Section 26.51)
  - Because these measures are based on the race or gender of business owners, use of these measures must satisfy stringent legal and regulatory standards in order to be legally valid.
  - Measures such as DBE quotas are prohibited; DBE set-asides may only be used in limited and extreme circumstances. (49 CFR Section 26.43)
  - Some state DOTs have restricted eligibility to participate in DBE contract goals programs to certain racial/ethnic/gender groups based on the evidence of discrimination in the state's transportation contracting industry.

---

<sup>2</sup> Note that all use of the term “race- and gender-neutral” refers to “race-, ethnic- and gender-neutral” in this report.

Figure 2-2 summarizes approaches that state DOTs use to implement the Federal DBE Program:

- All state DOTs set an overall goal for DBE participation.
- All state DOTs use certain neutral measures to encourage DBE participation.
- Many state DOTs use race- and gender-conscious measures such as DBE contract goals to help meet their overall DBE goal.
- Some state DOTs limit participation in race- and gender-conscious programs such as DBE contract goals to those DBE groups for which there is sufficient evidence of discrimination in the state transportation contracting industry (sometimes called “underutilized DBE” or “UDBE” contract goals programs).
- A few states such as the Florida Department of Transportation report that they implement the Federal DBE Program solely using neutral measures. ADOT operated a solely neutral program from 2006 to 2010.

Because an individual state DOT sometimes adjusts how it implements the Program, the examples discussed in this Chapter might change after release of this report.

Figure 2-2. Examples of state DOT implementation of the Federal DBE Program

	Set overall DBE goal	Neutral measures*	Race- and gender-conscious measures		Eligible DBEs	Examples
			DBE contract goals	DBE set-asides		
1. Combination of neutral and race- and gender-conscious measures	Yes	Yes	Yes	No	All firms that are certified as DBEs	Most state DOTs ADOT since 2010
2. DBE set-asides	Yes	Yes	Yes	Yes	All firms that are certified as DBEs	No state DOTs at time of report
3. Underutilized DBE (UDBE) contract goals	Yes	Yes	Yes Only UDBEs count toward meeting contract goals	No	Only underutilized DBE groups eligible to meet contract goals	California DOT until mid-2012 Oregon DOT Colorado DOT in past
4. Entirely race- and gender-neutral program	Yes	Yes	No	No	All firms that are certified as DBEs eligible for neutral programs	Florida DOT ADOT 2006-2010 for FHWA and through 2014 for FTA and FAA
*Examples: outreach, technical assistance, removing barriers to bidding, implementation of small business enterprise programs.						

## B. State and Local Minority and Women Business Programs in the United States

In addition to USDOT-funded projects, ADOT and other agencies award transportation contracts that are solely funded through state sources. The Federal DBE Program does not apply to those projects.

Some state DOTs and other agencies throughout the country operate minority- and women-owned business programs for their non-federally-funded contracts. The cities of Phoenix and Tucson operated such programs in the past.

However, in 2010 the State of Arizona approved Proposition 107, which was an Amendment to the State Constitution known as the “Arizona Civil Rights Amendment.” The Arizona Civil Rights Amendment is codified as Article II, Section 36 of the Arizona State Constitution. Section 36 prohibits any preferential treatment by the State or local governments based on race, sex, color, ethnicity or national origin.

Section 36 does not prohibit action that must be taken to establish or maintain eligibility for any federal program, if ineligibility would result in a loss of federal monies to Arizona. Therefore, ADOT still implements the Federal DBE Program since implementation of the program is required to obtain certain USDOT funds.

## C. Legal Standards that Race- and Gender-Conscious Programs Must Satisfy

The U.S. Supreme Court has established that government contracting programs with race-conscious measures must satisfy the “strict scrutiny” standard of constitutional review.<sup>3</sup> The two key U.S. Supreme Court cases are:

- The 1989 decision in *City of Richmond v. J.A. Croson Company*, which established the strict scrutiny standard of review for race-conscious programs adopted by state and local governments<sup>4</sup>; and
- The 2005 decision in *Adarand Constructors, Inc. v. Peña*, which established the same standard of review for federal race-conscious programs.<sup>5</sup>

As described in detail in Appendix B, the strict scrutiny standard is very difficult for a government entity to meet. The strict scrutiny standard establishes a stringent threshold for evaluating the legality of race-conscious programs. Under the strict scrutiny standard, a governmental entity must have a strong basis in evidence that:

- There is a *compelling governmental interest* in remedying specific past identified discrimination or its present effects; and
- Any program adopted is *narrowly tailored* to remedy the identified discrimination. There are a number of factors a court considers when determining whether a program is narrowly tailored (see Appendix B).

---

<sup>3</sup> Certain Federal Courts of Appeal, including the Ninth Circuit Court of Appeals, apply the “intermediate scrutiny” standard to gender-conscious programs. Appendix B describes the intermediate scrutiny standard in detail (starting on page 23 of Appendix B).

<sup>4</sup> *City of Richmond v. J.A. Croson Company*, 488 U.S. 469 (1989).

<sup>5</sup> *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200 (1995).

A government agency must satisfy both components of the strict scrutiny standard. A race-conscious program that fails to meet either one is unconstitutional.

**Constitutionality of the Federal DBE Program.** The Federal DBE Program has been held to be constitutional “on its face” in legal challenges to date, although individual agencies implementing the program might still fail to meet this legal standard in their implementation of the Program. Appendix B discusses a number of important legal decisions in detail, including *AGC, San Diego Chapter v. California DOT*, *Northern Contracting, Inc. v. Illinois DOT*, *Sherbrooke Turf, Inc. v. Minn DOT*, *Gross Seed v. Nebraska Department of Roads*, *Western States Paving Co. v. Washington State DOT*, and *Adarand Constructors, Inc. v. Slater*.<sup>6, 7, 8 9</sup>

The 2005 Ninth Circuit Court of Appeals decision in *Western States Paving Co. v. Washington State DOT* is important for this disparity study, as Arizona is within the jurisdiction of the Ninth Circuit.

- The Court upheld the constitutionality of the Federal DBE Program.
- However, the Ninth Circuit found that the Washington State DOT failed to show its implementation of the Federal DBE Program to be narrowly tailored.

After that ruling, state departments of transportation within the Ninth Circuit operated entirely race- and gender-neutral programs until studies could be completed to provide information that would allow them to implement the Federal DBE Program in a narrowly tailored manner.<sup>10</sup>

The first court review of an agency’s implementation of the Federal DBE Program in the Ninth Circuit after the *Western States Paving* decision was in *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.* The Ninth Circuit held Caltrans’ implementation of the Federal DBE Program to be constitutional, which is of particular significance to this study (see Appendix B).<sup>11</sup>

---

<sup>6</sup> 713 F. 3d 1187 (9<sup>th</sup> Cir. 2013).

<sup>7</sup> 473 F.3d 715 (7<sup>th</sup> Cir. 2007).

<sup>8</sup> 345 F.3d 964 (8<sup>th</sup> Cir. 2003), *cert. denied*, 541 U.S. 1041 (2004).

<sup>9</sup> *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147 (10<sup>th</sup> Cir. 2000) *cert. granted then dismissed as improvidently granted sub nom. Adarand Constructors, Inc. v. Mineta*, 532 U.S. 941, 534 U.S. 103 (2001).

<sup>10</sup> Disparity studies have been conducted for state DOTs in each Ninth Circuit state — Alaska, Hawaii, Washington, Idaho, Montana, Oregon, California, Nevada and Arizona — as well as many local transit agencies and some airports in those states.

<sup>11</sup> *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.*, 713 F. 3d 1187 (9<sup>th</sup> Cir. 2013).



**Constitutionality of state and local race-conscious programs.** In addition to the Federal DBE Program, some state and local government minority business programs have been found to meet the strict scrutiny standard. Appendix B examines the successful defense of state and local race-conscious programs, including *Concrete Works of Colorado v. City and County of Denver* and *H.B. Rowe Company, Inc. v. W. Lyndo Tippet, North Carolina Department of Transportation, et al.* (upheld in part).<sup>12, 13</sup>

As discussed in Appendix B, many local and state race-conscious programs have been challenged in court and have been found to be unconstitutional. Appendix B discusses the *Western States Paving* decision as well as examples where courts found that operation of a state or local MBE/WBE program did not meet the strict scrutiny standard.

---

<sup>12</sup> *Concrete Works of Colorado v. City and County of Denver*, 321 F.3d 950 (10<sup>th</sup> Cir. 2003), *cert. denied*, 540 U.S. 1027 (2003).

<sup>13</sup> Program upheld with regard to African American- and Native American-owned subcontractors but held invalid for inclusion of other groups. *H.B. Rowe Company, Inc. v. W. Lyndo Tippet, North Carolina Department of Transportation, et al.*, 615 F.3d 233 (4<sup>th</sup> Cir. 2010).

## **CHAPTER 3.**

### **ADOT Transportation Contracts**

Many components of the 2015 Disparity Study require ADOT contract and subcontract data as building blocks for the analysis. When designing the availability research, for example, it is important to understand the geographic area from which ADOT draws contractors and consultants and the types of work involved in ADOT transportation contracts. The utilization and disparity analyses in the 2015 Disparity Study are based on information from ADOT prime contracts and subcontracts.

Before conducting other analyses, Keen Independent collected information for ADOT and local agency transportation contracts for the July 2007 through June 2013 study period. Chapter 3 describes the study team's process for compiling and merging these data. Chapter 3 consists of four parts:

- A. Overview of ADOT transportation contracts;
- B. Collection and analysis of ADOT contract data;
- C. Types of work involved in ADOT contracts; and
- D. Location of businesses performing ADOT work.

Appendix C provides additional detail concerning collection and analysis of contract data. Keen Independent updated the Chapter 3 and Appendix C from the 2014 Availability Study to include FTA- and FAA -funded contracts as well as refinements to FHWA- and state-funded contract data.

#### **A. Overview of ADOT Transportation Contracts**

ADOT uses FHWA, FTA, FAA and state funds to build and maintain transportation projects. The 2014 Availability Study focused on FHWA-funded contracts. Both the Availability Study and the Disparity Study included contracts awarded by cities, counties, other local agencies and tribal entities using money passed through ADOT.

- FHWA- and state-funded construction projects include building new highway segments and interchanges, widening and resurfacing roads, and improving bridges. Its FAA-funded construction contracts include runway-related work at Grand Canyon National Park Airport. FTA-funded contracts included some road-related work as well.
- There were some vertical construction contracts among the FHWA-, state, FTA-, and FAA-funded contracts.
- Engineering-related work includes design and management of projects, planning and environmental studies, surveying and other transportation-related consulting services (includes FHWA-, state-, FTA- and FAA-funded contracts).
- ADOT has design-build contracts that combine engineering and construction project activities (both FHWA- and state-funded contracts).
- ADOT's FTA-funded contracts also include vehicle purchases and transit services (and there is one small FHWA-funded transit services contract).

A single ADOT project can involve many types of businesses, as described below.

**Prime contracts, subcontracts, trucking and materials supply.** A typical construction project includes a prime contractor and a number of subcontractors. Trucking companies and materials suppliers are often involved in construction projects as well. Some subcontractors on ADOT construction projects further contract out work to what is known as a “second-tier” or “lower-tier” subcontractor. Keen Independent examined ADOT contract information for each level of participants.

Many ADOT projects have an engineering phase prior to construction that requires work performed by engineering companies and related firms. The engineering prime consultant retains the specialized subconsultants needed to complete these contracts. ADOT sometimes contracts with engineering companies through on-call agreements. When specific work is needed, ADOT issues task orders to those firms. Keen Independent included engineering task orders in this analysis.

For both construction and engineering contracts, Keen Independent separated the contract dollars going to subcontractors (and truckers and suppliers) from the dollars retained by the prime contractor. Keen Independent calculated the total dollars going to the prime contractor by subtracting subcontractor, trucker and supplier dollars from the total contract value. This step was important for both the availability analyses and the utilization analyses performed in the 2015 Disparity Study.

**ADOT contracts and Local Public Agency Program contracts.** The 2015 Disparity Study includes ADOT contracts and those for local agencies that use ADOT-administered funds. Through ADOT’s Local Public Agency (LPA) Program, USDOT funds for transportation projects go to cities, counties, regional transportation commissions, other local agencies and tribal entities.

**Transportation-related contracts.** The study focused on transportation construction and engineering contracts and does not include acquisition of real property. The study team excluded any contracts to not-for-profit entities or government agencies.

**Regions.** Based on ADOT and industry input, Keen Independent divided the Arizona contracting market into the three regions shown in Figure 3-1. “Location” refers to physical location of the project, not the ADOT office managing the work or the address of the contractor. Keen Independent coded statewide assignments and work not in a single physical location as “statewide.”

Figure 3-1.  
Study regions

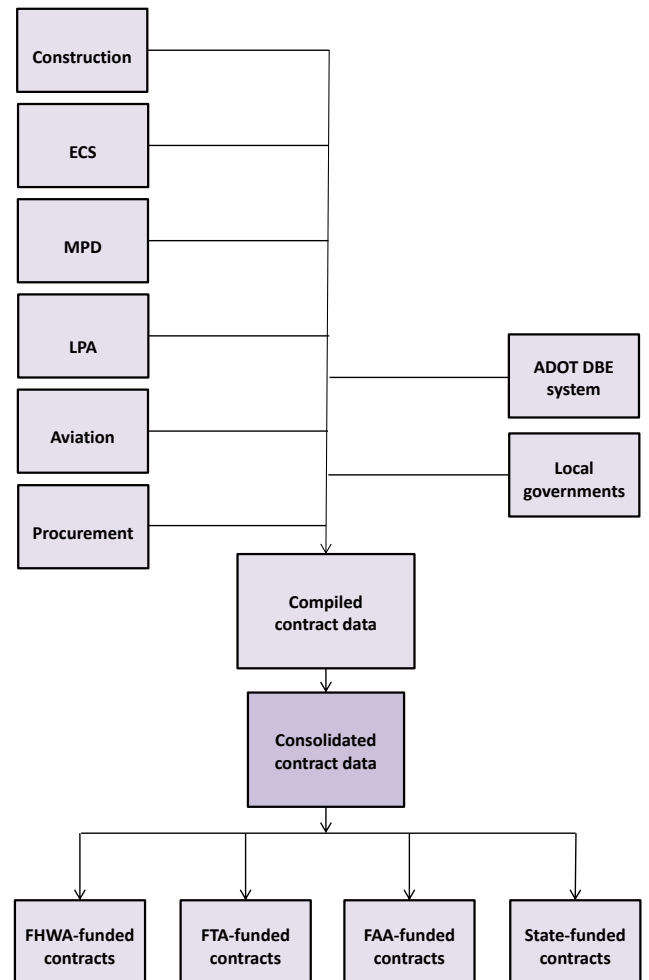


## B. Collection and Analysis of Contract Data

As shown in Figure 3-2, Keen Independent collected data on ADOT's contracts from multiple sources. Data for most ADOT construction contracts administered by C&S came from ADOT's FAST system. The Engineering Consultant Section (ECS) provided information about many ADOT engineering contracts. ADOT's Procurement, Multi-modal Planning (MPD) and Aviation departments provided contract data maintained by their groups as well. Certain data on firms receiving ADOT work were also collected from the ADOT DBE System. Contracts for local agencies awarded with funds administered through the Local Public Agency (LPA) Section were obtained from three sources including individual local government agencies, LPA Contract Management System and ADOT's LPA Section.

Keen Independent merged contracts from different sources into one database, which was reviewed to exclude duplicate records, and then sorted by funding source (FHWA-, FTA-, FAA-, and state-funded contracts).

Figure 3-2.  
Collection of contract data



**Study period.** Keen Independent examined contracts awarded from July 1, 2007 through June 30, 2013.

- **Study period start date.** The previous disparity study conducted for ADOT in 2009 examined contracts through June 30, 2007. To avoid a gap in the analysis of ADOT contracts, the study period for the Keen Independent research began with contracts awarded in July 2007.<sup>1</sup>
- **Study period end date.** Because Keen Independent began compiling contract data in early 2014, it was appropriate to choose the close of the previous state fiscal year (June 30, 2013) as the study period end date.

<sup>1</sup> The study team also collected data for task orders executed from July 2007 through June 2013 on engineering-related contracts awarded before 2007.

**Data sources for ADOT contracts.** Keen Independent obtained data on prime contracts, subcontracts, trucking services and materials suppliers from ADOT records. To the extent possible, the dollar amounts used correspond to the total dollars paid or expected to be paid to the firm for services on that contract or subcontract.<sup>2</sup>

ADOT contract records provided information about award date, location (county), a general description of the work, whether or not the contract was FTA-, FAA- or FHWA-funded, and whether the DBE contract goals applied. Keen Independent used consistent methods to collect information on FHWA, FTA-, FAA- and state-funded contracts.

When there was any amount of USDOT-funding expected for a contract, ADOT typically treated that contract as USDOT-funded. “State-funded” contracts are those with no USDOT funding.

Some overlapping of contract data existed between department records. Keen Independent examined and removed any duplicate contracts.

**Data sources for local agency contracts.** ADOT maintains some information about local agency projects funded through the LPA Program, but does not obtain complete data about the prime contractors and subcontractors working on those projects. Therefore, Keen Independent collected construction and engineering contract data directly from local agencies that awarded contracts using LPA Program funds. ADOT’s LPA Contract Management System database also includes information for some local agency contracts.

Some multiple data sources provided information for a single contract. Keen Independent merged data from multiple sources into a unique record for each contract.

**Limitations concerning contract data.** As discussed in Appendix C, ADOT has not maintained comprehensive data concerning every subcontractor, trucker and supplier involved in ADOT or LPA contracts during the July 2007 through June 2013 study period. It has progressively improved its data collection in recent years. For some of this time period, ADOT accounting of second-tier contracts also appeared to be deficient.

These limitations concerning data for past contracts would not appear to have a meaningful effect on overall study results.

---

<sup>2</sup> For example, Keen Independent examined the *total* value of the awarded contract and related subcontracts for a May 2012 contract, not what was paid on that contract before the June 30, 2013 study period end date. For certain completed contracts and task orders, payment amounts were used to determine contract value.

### C. Types of Work Involved in ADOT Contracts

Keen Independent included 2,125 transportation-related contracts and task orders totaling \$4.95 billion over the July 2007 through June 2013 study period. Figure 3-3 presents the number and dollar value of contracts in FHWA-, FTA-, FAA- and state-funded contracts.

Figure 3-3.  
Number and dollars of ADOT and LPA transportation contracts,  
July 2007-June 2013

	ADOT	Local Agency	Total
Number of contracts			
FHWA-funded	987	380	1,367
FAA-funded	18	0	18
FTA-funded	13	80	93
State-funded	<u>637</u>	<u>6</u>	<u>643</u>
Total	1,655	466	2,121
Dollars (by millions)			
FHWA-funded	\$ 3,278	\$ 395	\$ 3,672
FAA-funded	19	0	19
FTA-funded	8	10	18
State-funded	<u>1,224</u>	<u>14</u>	<u>1,238</u>
Total	\$ 4,529	\$ 419	\$ 4,948

Note: Numbers may not add due to rounding

Source: Keen Independent from ADOT and local agency contract data.

The study team coded types of work involved in each prime contract and subcontract based upon data in ADOT contract records and, as a supplement, information about the primary line of business of the firm performing the work. Keen Independent developed the work types based in part on the work type descriptions used by ADOT as well as Dun & Bradstreet's 8-digit classification codes.

**Contract dollars by type of work for FHWA- and state-funded contracts.** Just considering FHWA- and state-funded contracts, Figure 3-4 on the following page presents information about dollars for 40 different types of prime contract and subcontract work. Dollars for prime contracts are based on the contract dollars retained (i.e., not subcontracted out) by the prime contractor or prime consultant.

Figure 3-4.  
Dollars of ADOT and LPA FHWA- and state-funded prime contracts and subcontracts  
by type of work, July 2007-June 2013

Type of work	FHWA-funded		State-funded		Combined	
	Dollars (1000s)	Percent	Dollars (1000s)	Percent	Dollars (1000s)	Percent
General road construction and widening	\$ 1,797,112	48.9 %	\$ 475,920	38.4 %	\$ 2,273,032	46.3 %
Design engineering	164,732	4.5	188,876	15.3	353,608	7.2
Asphalt paving	165,729	4.5	15,198	1.2	180,927	3.7
Landscaping and related work	58,446	1.6	111,868	9.0	170,314	3.5
Pavement surface treatment	156,710	4.3	3,606	0.3	160,316	3.3
Bridge work	146,016	4.0	12,884	1.0	158,901	3.2
Guardrail, signs or fencing	124,113	3.4	29,229	2.4	153,342	3.1
Structural concrete work	83,921	2.3	42,933	3.5	126,853	2.6
Electrical work including lighting and signals	77,776	2.1	39,112	3.2	116,888	2.4
Steel work	94,107	2.6	20,875	1.7	114,982	2.3
Trucking or hauling	95,899	2.6	14,334	1.2	110,233	2.2
Temporary traffic control	74,463	2.0	17,001	1.4	91,464	1.9
Concrete flatwork (sidewalk, curb and gutter)	74,862	2.0	1,063	0.1	75,925	1.5
Striping or pavement markings	21,646	0.6	43,384	3.5	65,031	1.3
Excavation, grading and drainage	57,288	1.6	6,804	0.5	64,093	1.3
Drilling and foundations	41,747	1.1	20,728	1.7	62,475	1.3
Portland cement concrete paving	44,386	1.2	11,947	1.0	56,332	1.1
Soils and materials testing	39,487	1.1	8,211	0.7	47,698	1.0
Concrete cutting	34,086	0.9	6,115	0.5	40,201	0.8
Milling	18,982	0.5	17,868	1.4	36,850	0.8
Surveying and mapping	21,757	0.6	8,200	0.7	29,957	0.6
Transportation planning	17,534	0.5	11,690	0.9	29,224	0.6
Construction management	19,171	0.5	9,387	0.8	28,557	0.6
Environmental consulting	22,473	0.6	5,573	0.4	28,045	0.6
Underground utilities	21,553	0.6	1,259	0.1	22,812	0.5
Wrecking and demolition	5,360	0.1	7,420	0.6	12,780	0.3
Vertical construction	8,340	0.2	3,737	0.3	12,077	0.2
Erosion control	9,921	0.3	1,552	0.1	11,473	0.2
Painting for road or bridge projects	5,797	0.2	5,159	0.4	10,955	0.2
Concrete pumping	4,468	0.1	1,497	0.1	5,965	0.1
Asphalt , concrete or other paving materials	2,571	0.1	0	0.0	2,571	0.1
Transit services	719	0.0	0	0.0	719	0.0
Fence, guardrail materials	132	0.0	0	0.0	132	0.0
Petroleum	41	0.0	0	0.0	41	0.0
Other construction-related	118,564	3.2	25,327	2.0	143,890	2.9
Other engineering-related	19,049	0.5	581	0.0	19,630	0.4
Other materials	3,720	0.1	0	0.0	3,720	0.1
Other services	19,584	0.5	69,075	5.6	88,659	1.8
Total	\$ 3,672,259	100.0 %	\$ 1,238,412	100.0 %	\$ 4,910,671	100.0 %

Source: Keen Independent from ADOT and local agency contract data.

When prime contracts and subcontracts pertain to multiple types of work, Keen Independent coded the entire work element based on what appeared to be the predominant type of work in the contract or subcontract. For example, if a subcontract included fencing and landscaping, and it appeared that the work was predominantly fencing, the entire subcontract was coded as fencing.<sup>3</sup>

Similarly, an individual prime contract or subcontract was sometimes for a broad range of road construction activities. When a more specialized activity could not be identified as the primary area of work, these contracts were classified as road construction and widening.

As shown in Figure 3-4, the top four general types of work account for almost 60 percent of ADOT FHWA- and state-funded transportation contract dollars.

- Prime contracts and subcontracts for general road construction and widening accounted for about \$2.3 billion of the FHWA- and state-funded contract dollars examined, including prime contracts and subcontracts. This work area accounted for 46 percent of the contract dollars examined.
- Design engineering accounted for \$354 million or 7 percent of FHWA- and state-funded prime contracts and subcontracts. (Note that when contracts for design engineering included subcontracts for other types of work such as surveying or testing, these subcontracts were subtracted from the total for design engineering.)
- Asphalt paving accounted for \$181 million of FHWA- and state-funded prime contracts and subcontracts, or about 4 percent of the total. (Note that a prime contract or subcontract coded as general road construction and widening work could include asphalt paving, but was entirely coded as road construction because it appeared to include a broad set of work types, or the description of the work was not specific to asphalt paving.)
- Landscaping and related work accounted for the fourth largest dollar volume of FHWA- and state-funded work (\$170 million or 3 percent of the total).

Types of work that did not fit into the categories listed in Figure 3-4 were included in “other construction,” “other engineering-related services,” “other materials” or “other services” as appropriate. Together, these four “other” categories comprised 5 percent of FHWA- and state-funded contract dollars, as shown in Figure 3-4.

---

<sup>3</sup> Data concerning subcontract awards or payments were for the entire subcontract, not individual work elements.



**Contract dollars by type of work for FTA-funded contracts.** FTA-funded contracts not only include some construction (vertical) and engineering, but substantial dollars going to vehicle purchases and private transit services providers. For example, transportation planning and transit services combined accounted for 68 percent of contract dollars. Figure 3-5 presents dollars by type of construction, goods or services for FTA-funded contracts.

Figure 3-5.  
Dollars of ADOT and LPA FTA-funded prime contracts and subcontracts  
by type of work, July 2007-June 2013

Type of work	FTA-funded	
	Dollars (1000s)	Percent
Transportation planning	\$ 5,903	34.4 %
Transit services	5,763	33.6
Vertical construction	1,106	6.4
General road construction and widening	654	3.8
Petroleum	433	2.5
Trucking or hauling	284	1.7
Design engineering	271	1.6
Steel work	218	1.3
Asphalt paving	144	0.8
Environmental consulting	128	0.7
Structural concrete work	71	0.4
Electrical work including lighting and signals	59	0.3
Concrete flatwork	56	0.3
Guardrail, signs or fencing	20	0.1
Underground utilities	19	0.1
Vehicle purchases	17	0.1
Landscaping and related work	16	0.1
Soils and materials testing	10	0.1
Asphalt , concrete or other paving materials	7	0.0
Striping or pavement markings	6	0.0
Painting for road or bridge projects	4	0.0
Surveying and mapping	2	0.0
Concrete cutting	1	0.0
Temporary traffic control	0	0.0
Other construction-related	7	0.0
Other materials	93	0.5
Other services	<u>1,873</u>	<u>10.9</u>
Total	\$ 17,164	100.0 %

Source: Keen Independent from ADOT and local agency contract data.

**Contract dollars by type of work for FAA-funded contracts.** Figure 3-6 presents information about dollars of prime contracts and subcontracts for ADOT’s FAA-funded contracts. As shown, much of the work is related to vertical construction and asphalt paving.

Figure 3-6.  
Dollars of ADOT FAA-funded prime contracts and subcontracts  
by type of work, July 2007-June 2013

Type of work	FAA-funded	
	Dollars (1000s)	Percent
Vertical construction	\$7,615	39.5 %
Asphalt paving	4,830	25.1
Design engineering	2,764	14.3
Transportation planning	1,612	8.4
Vehicle purchases	1,440	7.5
Construction management	798	4.1
Wrecking and demolition	105	0.5
Environmental consulting	90	0.5
Other engineering-related	<u>16</u>	<u>0.1</u>
Total	\$19,270	100.0 %

Source: Keen Independent from ADOT and local agency contract data.

#### D. Location of Businesses Performing ADOT Work

In this study, analyses of local marketplace conditions and the availability of firms to perform contracts and subcontracts focus on the “relevant geographic market area” for ADOT contracting. The relevant geographic market area was determined through the following steps:

- For each prime contractor and subcontractor, Keen Independent determined whether the company had a business establishment in Arizona based upon ADOT vendor records and additional research.
- Keen Independent then added the dollars for firms with Arizona locations and compared the total with that for companies with no establishments within the state.

Based upon analysis of combined ADOT and local agency contract dollars from July 2007 through June 2013, firms with locations in Arizona obtained:

- 97 percent of FHWA-funded contract dollars;
- 89 percent of state-funded contract dollars;
- 94 percent of FAA-funded contract dollars; and
- 87 percent of FTA-funded contract dollars.

Figure 3-7.  
Dollars of ADOT and LPA prime contracts and subcontracts by location of firm, July 2007-June 2013

	Arizona	Out of State	Total
Dollars (millions)			
FHWA-funded	\$ 3,579	\$ 93	\$ 3,672
FAA-funded	17	2	19
FTA-funded	16	1	17
State-funded	<u>1,081</u>	<u>157</u>	<u>1,238</u>
Total	\$ 4,693	\$ 243	\$ 4,947
Percent			
FHWA-funded	97 %	3 %	100 %
FAA-funded	89	11	100
FTA-funded	94	6	100
State-funded	87	13	100
Total	95 %	5 %	100 %

Source: Keen Independent from ADOT and local agency contract data.

Based on this information and similar data for all contracts regardless of funding source, Keen Independent determined that Arizona should be selected as the relevant geographic market area for the study for FHWA-, FAA- and FTA-funded contracts as well as state-funded contracts. Therefore, Keen Independent's availability analysis examined firms with locations in Arizona. The quantitative analyses of marketplace conditions in Chapter 4 also focus on Arizona.

## CHAPTER 4.

### Marketplace Conditions

Federal courts have found that Congress “spent decades compiling evidence of race discrimination in government highway contracting, barriers to the formation of minority-owned construction businesses, and barriers to entry.”<sup>1</sup> Congress found that discrimination has impeded the formation and expansion of qualified MBE/WBEs.

As part of the 2014 Availability Study and the 2015 Disparity Study, Keen Independent conducted quantitative and qualitative analyses of conditions in the Arizona marketplace to examine whether barriers that Congress found on a national level also appear in Arizona. The study team analyzed whether barriers exist in the Arizona construction and engineering industries for minorities, women, and for MBE/WBEs, and whether such barriers might affect opportunities on ADOT and local agency transportation contracts.

Understanding marketplace conditions is important as ADOT examines its overall goals for DBE participation in FHWA-, FTA- and FAA-funded contracts and projects the portion of these overall goals to be met through neutral means.

Keen Independent examined conditions in the Arizona marketplace in four primary areas:

- A. Entry and advancement;
- B. Business ownership;
- C. Access to capital, bonding and insurance; and
- D. Success of businesses.

Appendices E through H present detailed quantitative information concerning conditions in the Arizona marketplace. Appendix I discusses data sources. Keen Independent prepared these analyses as part of the 2014 Availability Study.

Chapter 4 also summarizes the analysis of input from more than 400 businesses and trade associations throughout the state. The qualitative information substantially expands on what was analyzed in the 2014 Availability Study. The Keen Independent study team conducted in-depth personal interviews and availability interviews from May 2014 through April 2015. The study team held a listening session involving seven representatives of minority-, women- and majority-owned firms in Tucson in May 2014. ADOT held public meetings in Flagstaff, Yuma, Tucson and Phoenix in August 2014 and also asked for written comments concerning the 2014 Availability Study and its proposed overall DBE goal for FHWA-funded contracts. ADOT repeated this process in 2015.

---

<sup>1</sup> *Sherbrooke Turf, Inc. v. Minnesota DOT*, 345 F.3d, 970 (8<sup>th</sup> Cir. 2003) (citing *Adarand Constructors, Inc.*, 228 F.3d at 1167 – 76); *Western States Paving Co. v. Washington State DOT*, 407 F.3d 983, 992 (9<sup>th</sup> Cir. 2005).

ADOT and study team members held meetings with trade groups as well as an External Stakeholder Group formed for the study. Input from these meetings is also incorporated into this report. ADOT and the study team developed a website for the study that asked any interested individuals to provide comments. Input received through these and other efforts is included as well.

The balance of Chapter 4 summarizes the quantitative information collected and analyzed in the Availability Study in 2014. Appendices E through I provide supporting information concerning the quantitative analyses. Chapter 4 also summarizes qualitative information collected through July 23, 2015. Appendix J provides a summary of the qualitative information collected as part of the Availability Study and Disparity Study process.

## **A. Entry and Advancement**

Several business owners and managers that the study team interviewed commented that individuals who form construction and engineering businesses tend to work in those industries before starting their own businesses. Any barriers related to entry or advancement in the construction and engineering industries may prevent some minorities and women from starting construction and engineering businesses. Several studies throughout the United States have indicated that race and gender discrimination has affected the employment and advancement of certain groups in the construction and engineering industries. The study team examined the representation of minorities and women among all workers in the Arizona construction and engineering industries. In addition, for the construction industry, the study team examined the advancement of minorities and women into supervisory and managerial roles. Appendix E presents those results in more detail.

Quantitative analyses of the Arizona marketplace — based primarily on data from the 2000 U.S. Census and the 2008-2012 American Community Survey (ACS) — showed that, in general, certain minority groups and women appear to be underrepresented among all workers in the Arizona construction and engineering industries. In addition, minorities and women appeared to face barriers regarding advancement to supervisory or managerial positions.

**Quantitative information concerning entry into construction and engineering industries in Arizona.** Keen Independent's analyses suggest that there are barriers to entry for certain minority groups and for women in the construction and engineering industries in Arizona.

- Fewer African Americans worked in the Arizona construction industry than what might be expected based on representation in the overall workforce and analysis of educational requirements in the industry.
- Fewer African Americans, Hispanic Americans and Native Americans worked in the Arizona engineering industry than what might be expected based on analyses of workers 25 and older with a college degree.
- Women accounted for particularly few workers in the Arizona construction and engineering industries. For the construction industry as a whole, women were 11 percent of workers. Women accounted for just 1 to 4 percent of all workers in certain construction trades.

Any barriers to entry in construction and engineering might affect the relative number of minority and female business owners in these industries in Arizona.

**Quantitative information concerning advancement in the Arizona construction industry.** The study team also examined advancement in the Arizona construction industry.

- Representation of minorities and women was much lower in certain construction trades (including first-line supervisors).
- Compared to non-Hispanic whites working in the construction industry, African Americans, Asian Americans, Hispanic Americans and Native Americans were less likely to be managers.

Any barriers to advancement in the Arizona construction industry may also affect the number of business owners among those groups.

**Qualitative information about entry and advancement.** Keen Independent collected qualitative information about entry and advancement in the Arizona construction and engineering industries through the avenues described at the beginning of Chapter 4.

Many business owners reported that they worked in the construction or engineering industry before starting their businesses. Interviewees indicated that construction and engineering companies are typically started (or sometimes purchased) by individuals with connections to the construction or engineering industries. Therefore, business ownership could be affected by any barriers to becoming employed in the construction or engineering industry that might exist.

**Effects of entry and advancement on the transportation contracting industry.** If there are barriers for minorities and women entering and advancing within the Arizona construction and engineering industries, there would be substantial effects on the number of minority- and women-owned construction and engineering-related businesses.

- Typically, employment and advancement are preconditions to business ownership in the construction and engineering industries. Because certain minority groups and women appear to be underrepresented in the Arizona construction and engineering industries — both in general and as supervisors and managers — it follows that such underrepresentation may reduce the number of minorities and women starting businesses, reducing overall MBE/WBE availability in the local transportation contracting industry.
- Underrepresentation of certain minority groups and women in the Arizona construction and engineering industries — particularly in supervisory and managerial roles — may perpetuate any beliefs or stereotypical attitudes that MBE/WBEs may not be as qualified as majority-owned businesses. Any such beliefs may make it more difficult for MBE/WBEs to win work in Arizona, including work with ADOT and local agencies.

## B. Business Ownership

National research and studies in other states have found that race, ethnicity and gender also affect opportunities for business ownership, even after accounting for race- and gender-neutral factors. Figure 4-1 summarizes how courts have used information from such studies — particularly from regression analyses — when considering the validity of an agency's implementation of the Federal DBE Program.

### **Quantitative information about business ownership.**

Keen Independent used regression analyses and data sources that were similar to those used in other studies to analyze business ownership in the Arizona transportation contracting industry. The study team used U.S. Bureau of the Census data from 2000 and 2008-2012 to examine whether there are differences in business ownership rates between minorities and non-minorities and between women and men in the Arizona construction and engineering industries.

The regression models that the study team developed showed that African Americans, Hispanic Americans, Native Americans and women working in the Arizona construction industry are less likely to own businesses than non-Hispanic whites and males, even after accounting for various personal characteristics including education, age and the ability to speak English.

African Americans and Hispanic Americans working in the Arizona engineering industry are less likely to own businesses after accounting for certain personal characteristics.

Appendix F presents detailed results from the quantitative analyses of business ownership rates.

**Qualitative information about business ownership.** Keen Independent collected qualitative information about business ownership in the Arizona construction and engineering industries through in-depth interviews, availability interviews, public hearings and other means.

Interviewees indicated that the Great Recession that began in 2007 made it extremely difficult for any owner of a construction or engineering firm to stay in business in Arizona, let alone start a new firm. Companies that were primarily working in the private sector had to quickly turn to compete for public sector work or go out of business. The result was extreme price pressure in the industry, with many companies choosing to bid work below cost in order to stay in the market. Many companies did not survive. Larger and better-capitalized firms fared better during the downturn. Some prime contractors had the ability to retain more work at the expense of subcontractors.

Figure 4-1.

### **Use of regression analyses of business ownership in defense of the Federal DBE Program**

State and federal courts have considered differences in business ownership rates between minorities and women and non-Hispanic whites and males when reviewing the implementation of the Federal DBE Program, particularly when considering DBE goals. For example, disparity studies in California, Illinois and Minnesota used regression analyses to examine the impact of race, ethnicity and gender on business ownership in the construction and engineering industries. Results from those analyses helped determine whether differences in business ownership exist between minorities and women and non-Hispanic white males after statistically controlling for race- and gender-neutral characteristics. Those analyses, which were based on Census data, were included in materials submitted to the courts in subsequent litigation concerning the implementation of the Federal DBE Program.

Minority, women and white male owners of small businesses in the industry reported many of the same challenges. Many faced financial barriers at start-up and beyond. As examined later in Chapter 4 (and in Appendix H), minority- and women-owned firms in the Arizona marketplace are disproportionately small.

**Effects of disparities in business ownership rates for minorities and women on the transportation contracting industry.** In sum, the disparities in business ownership rates for minorities and women lower the relative number of minority- and women-owned firms available for ADOT construction and engineering work. This might result in a lower availability benchmark for minority- and women-owned firms and a lower base figure for the overall DBE goal.

### **C. Access to Capital, Bonding and Insurance**

Access to capital represents one of the key factors that researchers have examined when studying business formation and success. If race- or gender-based discrimination exists in capital markets, minorities and women may have difficulty acquiring the capital necessary to start or expand a business.

Keen Independent examined whether minority and female business owners (and potential business owners) have access to capital — both for their homes and for their businesses — that is comparable to that of non-minorities and men. In addition, the study team examined information about whether minority- and women-owned firms face any barriers in obtaining bonding and insurance. Appendix G provides details about the study team’s quantitative analyses of access to capital, bonding and insurance.

There is evidence that minorities and women face certain disadvantages in accessing capital that is necessary to start, operate and expand businesses. Capital is required to start companies, so barriers accessing capital can affect the number of minorities and women who are able to start businesses. In addition, minorities and women start business with less capital (based on national data). A number of studies have demonstrated that lower start-up capital adversely affects prospects for those businesses.

**Quantitative information about homeownership and mortgage lending.** Wealth created through homeownership can be an important source of funds to start or expand a business. Barriers to homeownership or home equity can affect business opportunities by limiting the availability of funds for new or expanding businesses.

Keen Independent analyzed 2008-2012 American Community Survey (ACS) data to determine if there were any differences in homeownership in Arizona by racial and ethnic groups. The study team examined the potential impact of race and ethnicity on mortgage lending in Arizona based on Home Mortgage Disclosure Act (HMDA) data for 2007 and 2012. (See Appendix G for more detail.)

- **Homeownership rates.** Relatively fewer African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Hispanic Americans and Native Americans in Arizona own homes compared with non-Hispanic whites. These differences in homeownership rates were present prior to the Great Recession and persisted in 2008 through 2012.



- **Home values.** Native Americans, African Americans and Hispanic Americans in Arizona who do own homes tend to have lower home values than non-Hispanic whites. These differences were evident before and after the Great Recession. There is some evidence from Arizona State University research that discriminatory practices have led to lower housing values in certain minority communities (see Appendix G).
- **Mortgage lending.** Minorities may be denied opportunities to own homes, to purchase more expensive homes or to access equity in their homes if they are discriminated against when applying for home mortgages.

In 2007, high-income African Americans, Hispanic Americans, Native Americans, Asian Americans, and Native Hawaiian and other Pacific Islanders applying for home mortgages in Arizona were more likely than high-income non-Hispanic whites to have their applications denied. Except for Asian Americans, these disparities were also evident in 2012.

Mortgage lending discrimination can also occur through higher fees and interest rates. Subprime lending is one example of such types of discrimination through fees associated with various loan types. Because of higher interest rates and additional costs, subprime loans affected homeowners' ability to grow home equity and increased their risks of foreclosure. There is national evidence that predatory lenders disproportionately targeted minorities with subprime loans, even when applicants could qualify for prime loans. Analysis of available data for Arizona indicates that high-income African Americans, Hispanic Americans, Native Americans, Asian Americans, and Native Hawaiian and other Pacific Islanders applying for home mortgages in 2007 were more likely than high-income non-Hispanic whites to have their applications denied. Except for Asian Americans, these disparities were also evident in 2012. Racial and ethnic disparities in the use of subprime loans for conventional home refinance were also evident in Arizona.

In conclusion, there is substantial quantitative evidence of disparities in homeownership, home values and home mortgage lending for minorities in Arizona. Any past discrimination against minorities that affected the ability to purchase and stay in homes could have long-term impacts on the home equity available to start and expand businesses, and the ability of minority business owners to access business credit.

**Quantitative information about business credit.** Business credit is also an important source of funds for small businesses. Any race- or gender-based barriers in the application or approval processes of business loans could affect the formation and success of MBE/WBEs.

To examine the role of race/ethnicity and gender in capital markets, the study team analyzed data from the Federal Reserve Board's Survey of Small Business Finances (SSBF) — the most comprehensive national source of credit characteristics of small businesses (those with fewer than 500 employees). The survey contains information on loan denial and interest rates as well as anecdotal information from businesses. The Mountain region is the level of geographic detail of SSBF data most specific to Arizona and 2003 is the most recent information available from the SSBF.

**Business loan approval rates.** Keen Independent examined business loan approval rates in the Mountain region in 2003. Results included the following:

- More minority- and women-owned small businesses were denied loans than non-Hispanic male-owned small businesses.
- There are statistically significant disparities in loan approval rates for African American-owned small businesses compared with similarly-situated non-Hispanic white-owned firms.

**Applying for loans.** Fear of loan denial can be a barrier to business credit in the same way that actual loan denial presents a barrier. The SSBF includes a question that gauges whether a business owner did not apply for a loan due to fear of loan denial.

- Among small business owners who reported needing business loans, minority and female business owners in the Mountain region were nearly twice as likely as non-Hispanic white men to report that they did not apply due to fear of denial.
- Compared with similarly-situated non-minorities and men, the study team identified statistically significant disparities in that rate at which African Americans and women reported not applying for loans due to fear of denial.

**Loan values and interest rates.** Based on Keen Independent's examination of 2003 SSBF data for the average business loan values and interest rates paid by small businesses that received loans:

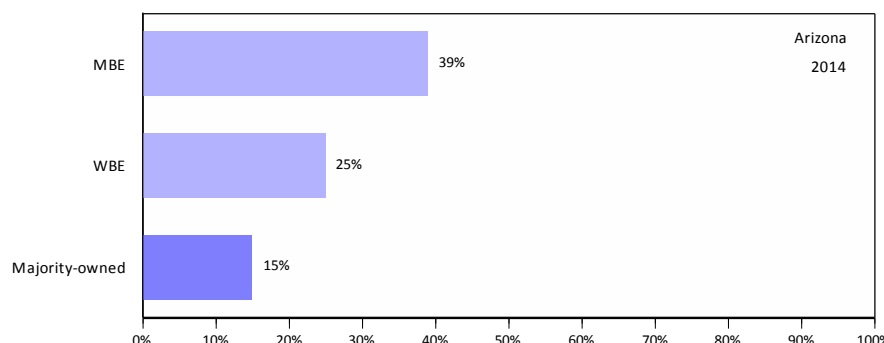
- The mean value of approved loans for minority- and female-owned businesses in the Mountain region was less than one-half that for non-Hispanic white male-owned firms.
- There is evidence that minority- and women-owned small businesses in the Mountain region paid higher interest rates on their business loans than non-minority male-owned small businesses.

**Experiences of MBEs, WBEs and majority-owned businesses in the Arizona transportation construction and engineering industries.** As part of availability interviews that the study team conducted in spring 2014, Keen Independent asked several questions related to potential barriers or difficulties in the local marketplace. The interviewer introduced these questions with the following: "Finally, we're interested in whether your company has experienced barriers or difficulties associated with starting or expanding a business in your industry or with obtaining work. Think about your experiences within the past seven years as you answer these questions."

The first question was, "Has your company experienced any difficulties in obtaining lines of credit or loans?" Minority-owned firms were more than twice as likely as majority-owned firms to report that they had such difficulties. About 39 percent of MBEs reported difficulties obtaining lines of credit or loans, compared with 15 majority-owned firms.

About 25 percent of WBEs reported that they had experienced difficulties obtaining lines of credit or loans. These results appear to be consistent with the other data summarized in Chapter 4 concerning greater difficulties concerning access to financing for minority- and women-owned firms.

**Figure 4-2.**  
Percent responding  
“yes” to, “Has your  
company  
experienced any  
difficulties in  
obtaining lines of  
credit or loans?” for  
MBEs, WBEs and  
majority-owned  
firms



Source:

Keen Independent  
Research from 2014  
Availability Interviews.

**Quantitative information about bonding and insurance.** Keen Independent also examined whether businesses face difficulties obtaining bonding and insurance as part of the availability interviews.

Keen Independent asked firms completing availability interviews the following two questions:

- Has your company obtained or tried to obtain a bond for a project?
- [If so] Has your company had any difficulties obtaining bonds needed for a project?

Among firms that had obtained or tried to obtain a bond for a project, 31 percent of MBEs and 23 percent of WBEs indicated difficulties obtaining bonds needed for a project compared with 9 percent of majority-owned firms.

The study team also asked, “Have any insurance requirements on projects presented a barrier to bidding?” Again, insurance requirements appear to present a barrier to relatively more minority- and women-owned firms than majority-owned firms. Approximately 20 percent of MBEs and 18 percent of WBEs that the study team interviewed reported such difficulties compared with 11 percent of majority-owned firms.

**Qualitative information about access to capital, bonding and insurance.** Keen Independent collected qualitative information about access to capital, bonding and insurance for businesses in the Arizona transportation contracting industry through in-depth interviews, availability interviews and public hearings and other means.

**Business financing.** Many firm owners reported that obtaining financing was important in establishing and growing their businesses (including financing for working capital and for equipment), and surviving poor market conditions.

- Small business owners indicated that access to financing was a barrier in general and more specifically when starting and first growing. Many used personal resources to finance their businesses. They also report more difficulty obtaining financing with the recent recession.
- Some interviewees, including MBEs, WBEs and majority-owned firms, reported that receiving timely payment on contracts and subcontracts could often be difficult which led to an increased need for business capital and financing.
- Some interviewees reported that it was more difficult for women and minorities to obtain financing. Some interviewees reported that they had good collateral but could not get a loan. “The banks won’t touch me” was a comment from a Hispanic female construction business owner who was able to get loans up until the recession. Another interviewee said, “There is not a level playing field” concerning the ability of minority- and women-owned firms to access needed financing. Others reported that financing was a problem for all small businesses whether or not they are minority- or women-owned.
- Also, if business size and personal equity are affected by race or gender discrimination, that discrimination could also impact the ability to obtain business financing. This can have a self-reinforcing effect, as many interviewees noted the importance of business capital and credit to pursue larger construction and engineering contracts.

**Bonding.** For ADOT and local agency construction contracts, surety bonds are typically required to bid on projects. Sometimes prime contractors require subcontractors on a project to have bonds.

In order to obtain a bond, businesses must provide company history and evidence of financial strength to a bonding company. The bonding company uses this information to determine whether to issue a bond of a particular size. Consequently, any effects on access to capital may impact the ability to obtain a bond.

According to business owners and other individuals interviewed:

- Many MBEs, WBEs and other small construction companies cannot obtain the necessary bonding to bid on ADOT and other public contracts.
- Interviewees explained the link between business capital and bonding as well as between personal finances and bonding. For example, one minority business owner said, “The bonding companies basically own your life. They make you sign your life away, your wife’s life away, and they make you put cash in. It was difficult getting started.”

The in-depth interviews indicate that any difficulties building capital affect the ability to obtain a surety bond.

**Access to insurance.** Construction and professional services firms bidding or proposing on ADOT and local government contracts must meet those agencies' insurance requirements. Provisions often apply to subcontractors and subconsultants.

The study team asked business owners and managers whether insurance requirements and obtaining insurance presented barriers to doing business. In general, interviewees reported that obtaining insurance is relatively easy. The barrier presented by insurance requirements is due to the cost, especially at high levels of coverage.

If a small business owner decides that the premiums for a certain level of insurance are cost-prohibitive, it may preclude the firm from bidding on certain contracts, especially public sector contracts.

**Effects of access to capital, bonding and insurance on the transportation contracting industry.**

Potential barriers associated with access to capital, bonding and insurance may affect business outcomes for MBE/WBEs.

- Well-capitalized businesses are, in general, more successful than other businesses.
- Bonding and insurance are required to bid on ADOT and other public sector prime contracts. Interviewees report that these requirements affect subcontractors as well.
- A company must also have considerable working capital to complete an ADOT contract or subcontract, especially if there are delays in payment on that contract (which some businesses experience).
- Compared with majority-owned firms, MBE/WBEs in the Arizona transportation contracting industry are disproportionately small. Obtaining business financing, bonding and insurance is more of a barrier to small businesses than large businesses. The effect of such barriers is to make it less likely that a small firm can expand or successfully pursue public sector work.
- To obtain bonding, a company must have financial strength. Any barriers to accessing capital can affect a company's ability to obtain a bond of a certain size. There is evidence that minority- and women-owned firms do not have the same access to capital as majority-owned firms.
- There is some quantitative evidence that minorities do not have the same personal access to capital as non-minorities, which affects personal financial resources. Personal net worth and financial history can affect access to business loans, bonding and prequalification for public sector work in Arizona.

## **D. Success of Businesses**

Keen Independent completed quantitative and qualitative analyses that assessed whether the success of MBE/WBEs differs from that of majority-owned businesses in the Arizona transportation contracting industry. The study team examined business success in terms of participation in the public and private sector; relative bid capacity; business closure, expansion, and contraction; and business receipts and earnings. Appendix H provides details about these quantitative analyses of success of businesses. Keen Independent also collected and analyzed information from interviews with business owners and managers and others knowledgeable about the local contracting industry.

### **Quantitative analysis of participation in the public sector, contracting roles and bid capacity.**

Keen Independent drew on information from availability interviews to examine any patterns of MBE/WBE and majority-owned business participation in the industry. Results suggest the following:

- Most firms in the transportation contracting industry pursue both public and private sector work.
- Compared with majority-owned companies, relatively few MBEs or WBEs have been awarded contracts or subcontracts of \$1 million or more in size.
- The largest contracts or subcontracts MBEs and WBEs have bid on or been awarded were lower than majority-owned firms in the same subindustries. In part, this is because MBEs and WBEs as a whole are newer firms.

**Quantitative analysis of business closure, expansion and contraction.** Based on U.S. Small Business Administration analyses for 2002 to 2006 for Arizona:

- African American-owned businesses were more likely than white-owned businesses to close. African American-owned businesses were also less likely to expand than white-owned businesses.
- Asian American-owned businesses were more likely to close, less likely to expand and more likely to contract than white-owned businesses.
- Closure, expansion and contraction rates for Hispanic American-owned businesses were similar to white-owned firms for those years.

The U.S. Small Business Administration analyses did not report results for women-owned firms.

**Quantitative analysis of business receipts and earnings.** Keen Independent examined business earnings data for Arizona construction and engineering-related industries from the U.S. Census Bureau and the 2014 availability interviews with Arizona businesses. The data for annual revenue pertained to 1999, 2007 through 2009 and the three years before 2014.

- Across time periods and data sources, minority- and women-owned firms had lower revenue than majority-owned firms.

- One of the data sets the study team examined included personal characteristics of the business owner. Regression analyses using these data indicated that female business owners had lower earnings than male owners after controlling for other factors.

**Quantitative analysis of telephone interview results concerning potential barriers.** Keen Independent's availability interviews with Arizona businesses included questions about whether firms had experienced barriers or difficulties associated with starting or expanding a business. Questions included whether (a) the size of projects had presented a barrier to bidding; (b) the firm had experienced difficulties learning about bid opportunities with ADOT, local governments or private companies; and (c) the firm had experienced difficulties learning about subcontracting opportunities in Arizona. Results include the following:

- A greater percentage of minority- and women-owned firms indicated difficulties learning about bid opportunities, including ADOT opportunities, compared with majority-owned businesses. For example, the percentage of minority-owned businesses reporting that they experienced difficulties learning about ADOT bid opportunities (29%) was substantially higher than that for majority-owned firms (17%). About 23 percent of white women-owned firms indicated that they experienced difficulty learning about ADOT bid opportunities.
- Similar differences were evident when firms were asked about learning about local government and private sector bid opportunities.
- MBEs and WBEs were also more likely than majority-owned firms to report difficulties learning about subcontracting opportunities. Twenty-six percent of minority-owned firms indicated such difficulties compared with 17 percent of majority-owned firms. Thirty-two percent of white women-owned firms reported difficulties learning about subcontracting opportunities.

**Qualitative information about success of businesses in the Arizona marketplace.** Keen Independent also collected qualitative information about success of businesses in the Arizona transportation contracting industry through in-depth personal interviews, availability interviews, public hearings and other avenues. Some of the comments, especially related to the Great Recession, were noted earlier in Chapter 4.

**Fluid employment size and types of work.** Interviewees explained that firms in the transportation contracting industry must continuously adapt their operations in response to marketplace conditions. This flexibility includes the size of a company's permanent and temporary workforce, owned and leased equipment, and the types of work they pursue and licenses they hold.

- In Arizona, some firms indicated they have changed lines of work depending on market opportunities. Many businesses reported bidding as both a prime and subcontractor, and pursuing both public and private sector work.
- A number of companies reported that their employment size expands and contracts depending on work opportunities, season or market conditions. One contractor interviewed had to cut his workforce in half. He went from almost 40 employees in 2010 to 20 by 2014.

- Some firm owners reported flexibility in the locations and sizes of contracts that their firms perform. Some businesses reported they prefer to perform projects close to home. Conversely, many firms reported that they might seek work throughout the state.
- Market conditions and backlog of work also affected prime contractors' decisions to subcontract work out. Interviewees explained that primes are reluctant to subcontract work if they are slow and have the capabilities to perform that work with their own employees.
- Interviewees reported that it may be easy for a construction contractor to perform smaller contracts than he or she typically bids, increasing competition for small projects in lean times.
- Some interviewees reported that small businesses may be at a disadvantage because the acquisition of equipment and supplies is affected by the financial health of the company and its ability to obtain financing.

**Importance of business relationships.** Existing relationships are an important factor in finding opportunities to bid on work according to many prime and subcontractors. Interviewees frequently reported the following.

- Prime contractors take price into consideration when selecting a subcontractor, but the previous relationships they have play a large role in the selection process. Confidence that a subcontractor will perform well on a job is important to a prime contractor.
- Business owners reported that it is difficult to cultivate new relationships with prime contractors. One said, "The prime would send out a generic email with two thousand subcontractors and trying to get your foot in the door is difficult." Some reported that a new subcontractor's bid may be "shopped" so that the incumbent subcontractor or supplier can match or beat their price.
- Opportunities for a prime contractor or consultant to win work with a customer may also be based on prior relationships. One DBE business owner said, "If you [have] a selection committee and they know your firm, they know you, versus another guy who is going through the same selection committee, they are not that familiar with them ... they are [almost always] going to go with you. When you are trying to develop these relationships, particularly with ADOT, they have a requirement. If you have previous ADOT experience, then you get a preference."

Many minority, female and white male interviewees reported the presence of a "good ol' boy" network in Arizona that affects the construction and engineering industries.

- Some interviewees said that the "good ol' boy" network was pervasive in this industry in Arizona and some reported that the "good ol' boy" network added barriers for women- and minority-owned firms in the transportation contracting industry.
- Some interviewees acknowledged the "good ol' boy" network, but suggested that its influence is not as strong today as in the past. Representatives of one organization said that there were firms involved in the network, but that those businesses started out small and worked hard to get where they are.



**Disadvantages for small businesses.** Many interviewees indicated that small businesses are at a disadvantage when competing in the transportation contracting industry.

- For many of the reasons discussed above, many small businesses including MBE/WBEs said that it was difficult to establish relationships with prime contractors and customers.
- Access to financing can be affected by business size according to some interviewees.

In addition, owners and managers of small businesses reported that public agency contracting processes and requirements often put small businesses at a disadvantage when competing for public sector work. There was qualitative evidence that:

- It is more difficult for smaller firms to market and identify contract opportunities.
- Small construction businesses seeking prime contracting and subcontracting work face barriers due to public sector bonding requirements.
- Excessive paperwork that often comes with public sector work is an extra burden to small businesses.
- Large size and scope of public sector contracts and subcontracts present a barrier to bidding.
- Public sector insurance requirements are a barrier to construction and engineering-related businesses seeking public sector prime contracts and subcontracts. One interviewee said, “The insurance requirements are extraordinarily large for a small contractor. It is the single largest business expense I have and I must have, whether I am a prime or a sub.”
- Interviewees indicated that public agencies favor bidders and proposers they already know, limiting opportunities for other businesses.
- Some interviewees reported that public agencies favor larger companies.
- Public agency screening of potential contractors and engineering firms through prequalification can be a barrier to bidding based on the interviews. According to one DBE firm owner, “ADOT prequalification is almost impossible. You go through it, you have to do ‘X’ amount of paperwork and then they give you the littlest amount as possible. They don’t trust you to do the job even though I am doing larger jobs out-of-state. I have proven references and history. They require a level of financial statements that my bonding company doesn’t even require.”
- Slow payment by public agencies or by prime contractors can be especially damaging to small businesses and represent a barrier to performing that work. (Some interviewees reported that they do not have sufficient capital to wait to be paid when working on large contracts.) One interviewee said, “There are prime contractors that sit on your money for over a year.”

MBE/WBEs in the Arizona transportation contracting industry are more likely than majority-owned businesses to be low-revenue businesses. Therefore, any barriers for small businesses may have a disproportionate effect on MBEs and WBEs. Some minority and female business owners indicated that the size of their businesses and lack of relationships in the industry create significant barriers.

**Stereotyping and other race and gender discrimination.** In the in-depth interviews, availability interviews and other information the study team analyzed as part of the study, some interviewees indicated difficulties for minorities and women other than those associated with being a small business.

- There was some evidence that some prime contractors or customers held negative stereotypes concerning minority- and women-owned firms. One firm owner said, “White female-owned businesses are going to be treated different, that is just the human nature of the business. A black man’s business will probably get treated a whole lot different and it isn’t going to be to his advantage.”
- Some interviewees reported that MBEs and WBEs face other discrimination from prime contractors, customers or others based on race, ethnicity or gender. One interviewee said, “When it comes to dealing with people who are hesitant, until you prove yourself, you have to open up your book, license and personal financial statement. I think there is a lot more scrutiny to a person of color than anybody else.”
- There were many comments indicating presence of on the basis of race or ethnicity and many comments pertaining to presence of gender discrimination affecting business owners in the Arizona transportation contracting industry.

A few minorities and women interviewed in the study and providing comments at public hearings indicated that their businesses were not affected by any race or gender discrimination.

Appendix J provides views from a large number of business owners and managers, trade association representatives and others who are knowledgeable about the Arizona transportation contracting industry.

**Effects of success of businesses on the transportation contracting industry.** Minority- and women-owned construction and engineering businesses in Arizona tend to have lower revenue than majority-owned businesses. Therefore, any disadvantages for small businesses disproportionately affect MBEs and WBEs.

Success in the transportation contracting industry depends on relationships with prime contractors and customers. Some minority and female business owners reported that they were disadvantaged by their size and lack of relationships within the industry. Some of the minority and female interviewees also reported negative stereotypes and other forms of discrimination against minority- and women-owned businesses in Arizona.

## **Summary**

As discussed in this Chapter and supporting appendices, there is some quantitative and qualitative information suggesting that there is not a level playing field for minority- and women-owned businesses in the Arizona transportation contracting industry.

Such information should be considered when interpreting the results of the disparity analysis (Chapter 6) and considering ADOT's future operation of the Federal DBE Program for FHWA-funded contracts (see Chapter 8), FTA-funded contracts (Chapter 9) and FAA-funded contracts (Chapter 10).

In July 2015, ADOT held additional public meetings and solicited other comments concerning the results contained in the draft 2015 Disparity Study. Keen Independent reviewed this input prior to completing the analyses in the report. The Final Report presents analysis of this additional input.

## CHAPTER 5.

### Availability Analysis

Keen Independent analyzed the availability of minority- and women-owned business enterprises (MBE/WBEs) that are ready, willing and able to perform ADOT and local agency prime contracts and subcontracts. ADOT can use availability results and other information from the study as it makes decisions about its future operation of the Federal DBE Program.

Chapter 5 describes the study team's availability analysis in seven parts:

- A. Purpose of the availability analysis;
- B. Definitions of MBEs, WBEs, certified DBEs, potential DBEs and majority-owned businesses;
- C. Information collected about potentially available businesses;
- D. Businesses included in the availability database;
- E. MBE/WBE availability calculations on a contract-by-contract basis;
- F. Availability results; and
- G. Base figure for ADOT's overall DBE goal for FHWA-, FAA and FTA-funded contracts.

Appendix D provides supporting information.

#### **A. Purpose of the Availability Analysis**

Keen Independent examined the availability of MBE/WBEs for transportation contracts to develop:

- 1. A benchmark used in the disparity analysis; and
- 2. The base figure for ADOT's overall DBE goals for FHWA-, FAA- and FTA-funded contracts.

**1. Benchmark in the disparity analysis.** Chapter 6 of this Disparity Study compares ADOT's utilization of MBE/WBEs against availability benchmarks.

- The disparity analysis compares the percentage of ADOT contract dollars that went to minority- and women-owned firms (MBE/WBE "utilization") to the percentage of dollars that might be expected to go to those businesses based on their availability for specific types and sizes of ADOT contracts (MBE/WBE "availability").
- Comparisons between utilization and availability identify whether any MBE/WBE groups were underutilized based on their availability for ADOT work.

**2. Base figure for ADOT's overall DBE goals.** Part of ADOT's operation of the Federal DBE Program is establishing an overall goal for DBE participation in its FHWA-, FTA- and FAA-funded contracts. The 2014 Availability Study focused on the three-year goal for FHWA-funded contracts. The 2015 Disparity Study examines refined information for the goal for FHWA-funded contracts as well as overall goals for FTA- and FAA-funded contracts.

- The process for calculating DBE availability for an overall DBE goal is the same as for determining MBE/WBE availability in a disparity analysis.<sup>1</sup>
- However, the base figure calculation only includes current DBEs and those MBE/WBEs that appear that they would be eligible for DBE certification ("potential DBEs"). Therefore, businesses that have been denied certification, have been decertified, have graduated from the DBE Program, or otherwise indicated that they would not qualify for or were not interested in DBE certification should not be counted in the base figure.

This process follows guidance in the Final Rule effective November 3, 2014 and the United States Department of Transportation's (USDOT's) "Tips for Goal-Setting" that explains that minority- and women-owned firms that are not currently certified as DBEs but that could be DBE-certified should be counted as DBEs in the base figure calculation.

The balance of Chapter 5 explains each step in determining the availability benchmarks and the base figure for ADOT's overall DBE goal, beginning with definitions of terms.

## **B. Definitions of MBEs, WBEs, Certified DBEs, Potential DBEs and Majority-owned Businesses**

The following definitions of terms based on ownership and certification status are useful background to the availability analysis.

**MBE/WBEs.** The availability benchmark and the base figure analyses use the same definitions of minority- and women-owned firms (MBE/WBEs) as do other components of the 2014 Availability Study and the 2015 Disparity Study.

**Race, ethnic and gender groups.** As specified in 49 Code of Federal Regulations (CFR) Part 26, the study team separately examined utilization, availability and disparity results for businesses owned by:

- African Americans;
- Asian-Pacific Americans;
- Subcontinent Asian Americans;
- Hispanic Americans;
- Native Americans; and
- Non-Hispanic white women.

---

<sup>1</sup> 49 CFR Section 26.45 (c).

Note that “majority-owned businesses” refer to businesses that are not minority- or women-owned.

**Firms owned by minority women.** Businesses owned by minority women are included with the results for each minority group. “WBEs” in this report refers to non-Hispanic white women-owned businesses. This definition of WBEs gives ADOT information to answer questions that may arise pertaining to the utilization of non-Hispanic white women-owned businesses, such as whether the work that goes to MBE/WBEs disproportionately goes to businesses owned by non-Hispanic white women. Keen Independent’s approach is consistent with court decisions that have considered this issue.

**All MBE/WBEs, not only certified DBEs.** When availability results are used as a benchmark in the disparity analysis, all minority- and women-owned firms are counted as such whether or not they are certified as DBEs or as MBEs or WBEs. For the following reasons, researching whether race- or gender-based discrimination has affected the participation of MBE/WBEs in contracting is properly analyzed based on the race, ethnicity and gender of business ownership and not on DBE certification status.

- Analyzing the availability and utilization of minority- and women-owned firms regardless of DBE/MBE/WBE certification status allows one to assess whether there are disparities affecting *all* MBE/WBEs and not just certified DBEs. Businesses may be discriminated against because of the race or gender of their owners regardless of whether they have successfully applied for DBE certification.
- Moreover, the study team’s analyses of whether MBE/WBEs face disadvantages include the most successful, highest-revenue MBE/WBEs. A disparity study that focuses only on MBE/WBEs that are, or could be, DBE-certified would improperly compare outcomes for “economically disadvantaged” businesses with all other businesses, including both non-Hispanic white male-owned businesses and relatively successful MBE/WBEs.<sup>2</sup> Limiting the analyses to a group of businesses that only includes low-revenue companies would have inappropriately made it more likely for the study team to observe disparities for MBE/WBE groups.<sup>3</sup>

The courts that have reviewed disparity studies have accepted analyses based on the race, ethnicity and gender of business ownership rather than on DBE certification status.

---

<sup>2</sup> In addition, 49 CFR Part 26 allows certification of white male-owned businesses as DBEs. Thus, disparity analyses based on certified DBEs might not purely be an analysis of disparities based on race/ethnicity and gender.

<sup>3</sup> An analogous situation concerns analysis of possible wage discrimination. A disparity analysis that would compare wages of minority employees to wages of all employees should include both low- and high-wage minorities in the statistics for minority employees. If the analysis removed high-wage minorities from the analyses, any comparison of wages between minorities and non-minorities would more likely show disparities in wage levels.

**Certified DBEs.** Certified DBEs are businesses that are certified as such through ADOT, the City of Phoenix or the City of Tucson (the three certifying agencies in Arizona), which means that they are businesses that:

- Are owned and controlled by one or more individuals who are presumed to be both socially and economically disadvantaged according to 49 CFR Part 26;<sup>4</sup> and
- Have met the gross revenue and personal net worth requirements described in 49 CFR Part 26.

**Potential DBEs.** Potential DBEs are MBE/WBEs that are DBE-certified or appear that they could be DBE-certified based on revenue requirements described in 49 CFR Section 26.65 (regardless of actual certification). Potential DBEs do not include businesses that have been decertified or had graduated from the DBE Program. The study team examined the availability of potential DBEs as part of helping ADOT calculate the base figure of its overall DBE goal for FHWA-funded contracts. Figure 5-1 provides further explanation of Keen Independent's definition of potential DBEs.

Keen Independent obtained information from three certifying agencies — ADOT, the City of Tucson and the City of Phoenix — to identify firms that, in recent years, had graduated from the DBE Program or had been denied DBE certification (and had not been recertified). The study team also used information collected by Donato Consulting about whether firms were not currently pursuing DBE certification because they had been denied certification in the past.

**Figure 5-1.**  
**Definition of potential DBEs**

Keen Independent did not include the following types of MBE/WBEs in its definition of potential DBEs:

- MBE/WBEs that had graduated from the DBE Program and not been recertified, or were de-certified;
- MBE/WBEs that are not currently DBE-certified that had applied for certification and had been denied;
- MBE/WBEs not currently DBE-certified that appear to have exceeded the three-year average annual revenue limits for DBE certification;
- Firms indicating in follow-up interviews performed by Donato Consulting that they were over the revenue or personal net worth limits or otherwise would not meet certification requirements; and
- Firms indicating in Donato Consulting interviews that they were not interested in DBE certification.

At the time of this study, the overall revenue limit for DBE certification was \$22,410,000 three-year average of annual gross receipts. Lower revenue limits applied for subindustries according to the U.S. Small Business Administration small business standards. Some MBE/WBEs exceeded either the \$22,410,000 or the subindustry revenue limits based on information that they provided in the availability interviews.

Business owners must also meet USDOT personal net worth limits for their businesses to qualify for DBE certification. Personal net worth was only a factor in the base figure calculations when a firm had graduated or been denied certification based on personal net worth that exceeded certification limits or indicated in follow-up interviews that they exceeded the personal net worth limits.

---

<sup>4</sup> The Federal DBE Program specifies that African Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans, Subcontinent Asian Americans, women of any race or ethnicity, and any additional groups whose members are designated as socially and economically disadvantaged by the Small Business Administration are presumed to be disadvantaged.

**Majority-owned businesses.** Majority-owned businesses are businesses that are not owned by minorities or women (i.e., businesses owned by non-Hispanic white males).

- In the utilization and availability analyses, the study team coded each business as minority-, women-, or majority-owned.
- Majority-owned businesses included any non-Hispanic white male-owned businesses that were certified as DBEs.<sup>5</sup>

### **C. Information Collected about Potentially Available Businesses**

Keen Independent’s availability analysis focused on firms with Arizona locations that work in subindustries related to ADOT transportation-related construction and engineering contracts.

Based on review of ADOT and LPA prime contracts and subcontracts during the study period, the study team identified specific subindustries for inclusion in the availability analysis. Keen Independent contacted businesses within those subindustries by telephone to collect information about their availability for specific types, sizes and locations of ADOT and local agency prime contracts and subcontracts.

Keen Independent’s method of examining availability is sometimes referred to as a “custom census” and has been accepted in federal court. Figure 5-2 summarizes characteristics of Keen Independent’s custom census approach to examining availability.

Figure 5-2.  
Summary of the strengths of  
Keen Independent’s “custom census”  
approach

Federal courts have reviewed and upheld “custom census” approaches to examining availability. Compared with some other previous court-reviewed custom census approaches, Keen Independent added several layers of screening to determine which businesses are potentially available for work in the transportation contracting industry in Arizona.

For example, the Keen Independent analysis included discussions with businesses about interest in ADOT and local government work, contract role and geographic locations of their work — items not included in some of the previous court-reviewed custom census approaches. Keen Independent also analyzed the sizes of contracts and subcontracts that businesses have bid on or performed in the past (referred to as “bid capacity” in this analysis).

---

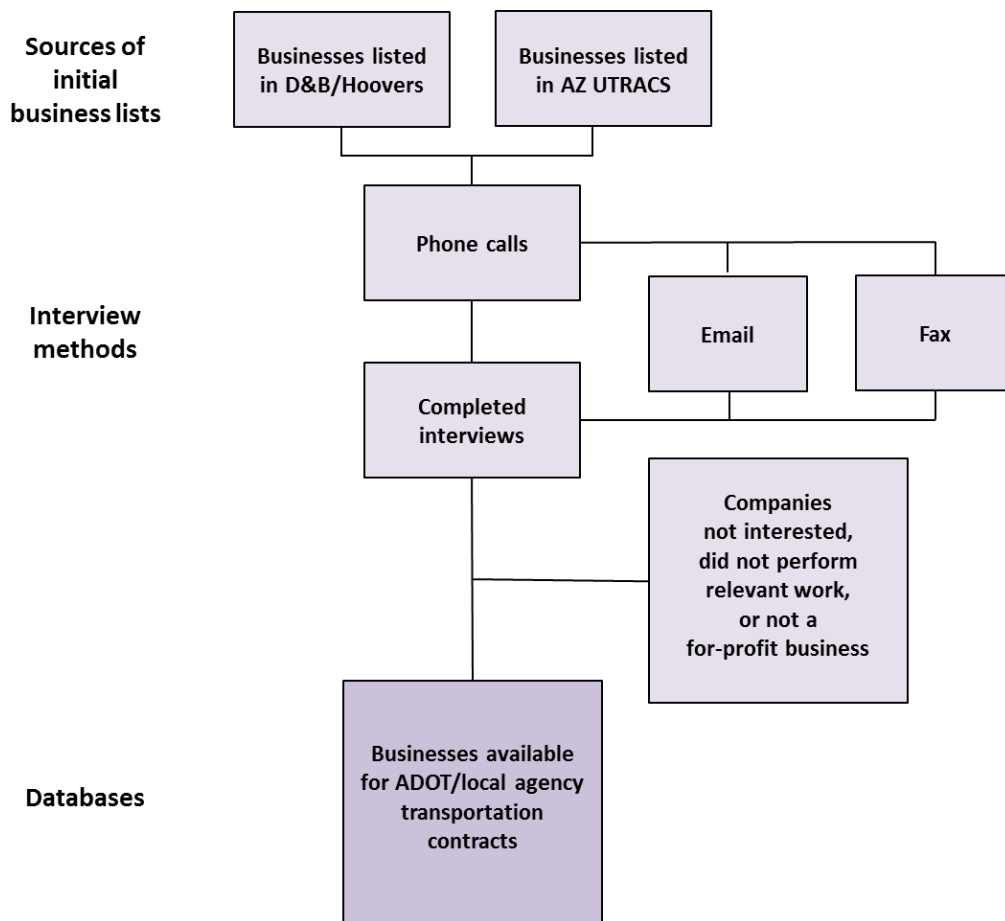
<sup>5</sup> Keen Independent identified one DBE-certified white male-owned firm in Arizona in the availability interviews.



**Overview of availability interviews.** The study team conducted telephone interviews with business owners and managers to identify businesses that are potentially available for ADOT and local agency transportation prime contracts and subcontracts.<sup>6</sup> Figure 5-3 summarizes the process for identifying businesses, contacting them and completing the interviews.

Keen Independent began by compiling lists of business establishments that: (a) previously identified themselves to ADOT as interested in learning about future work (by listing themselves on AZ UTRACS); or (b) Dun & Bradstreet/Hoovers identified in certain transportation contracting-related subindustries in Arizona.<sup>7</sup>

Figure 5-3.  
Availability interview process



<sup>6</sup> The study team offered business representatives the option of completing interviews via fax or email if they preferred not to complete interviews via telephone.

<sup>7</sup> D&B's Hoover's database is accepted as the most comprehensive and complete source of business listings in the nation. Keen Independent collected information about all business establishments listed under 8-digit work specialization codes (as developed by D&B) that were most related to the transportation contracts that ADOT awarded during the study period.

**Telephone interviews.** Figure 5-3 outlines the process Keen Independent used to complete interviews with businesses possibly available for ADOT and local agency transportation-related work.

- The study team contacted firms by telephone to ask them to participate in the interviews (identifying ADOT as the organization requesting the information). Firms indicating over the phone that they were not interested or not involved in transportation contracting work were not asked to complete the other interview questions. Interviews for the 2014 Availability Study began in April 2014 and were completed in June 2014. Keen Independent performed additional availability interviews in early 2015 for vertical construction, vehicle sales and transit services, which were important for FAA- and FTA-funded contracts.
- Some firms completed interviews when first contacted. For firms not immediately responding, the study team executed intensive follow-up over many weeks.
- When a business was unable to conduct the interview in English, the study team called back with a bilingual interviewer (English/Spanish) to collect basic information about the company and offer alternative means of completing the interview.
- Businesses could also learn about the availability interviews or complete the interviews via other methods such as:
  - Fax or email; and
  - Through the disparity study website that was maintained throughout the project. (Interested companies that learned about the interviews through the website or other means could contact the team to schedule a telephone interview.)

**Information collected in availability interviews.** Interview questions covered many topics about each organization, including:

- Status as a private business (as opposed to a public agency or not-for-profit organization);
- Status as a subsidiary or branch of another company;
- Types of transportation contract work performed, from asphalt paving to temporary traffic control for construction and from design engineering to surveying for engineering-related work (Figure 3-4 in Chapter 3 provides a list of work categories included in the interviews);
- Qualifications and interest in performing transportation-related work for ADOT and local agencies in Arizona;
- Qualifications and interest in performing transportation-related work as a prime contractor or as a subcontractor (or trucking company or materials supplier);
- Past work in Arizona as a prime contractor or as a subcontractor, trucker or supplier (note that “prime consultant” and “subconsultant” were the terms used in the interviews of professional services companies);

- Ability to work in specific geographic regions (Southern Arizona, Central Arizona and/or Northern Arizona);
- Largest prime contract or subcontract bid on or performed in Arizona in the previous seven years;
- Year of establishment; and
- Race/ethnicity and gender of ownership.

Appendix D provides an availability interview instrument.

**Screening of firms for the availability database.** The study team asked business owners and managers several questions concerning the types of work that their companies performed; their past bidding history; and their qualifications and interest in working on contracts for ADOT and local government agencies, among other topics. Keen Independent considered businesses to be potentially available for ADOT transportation prime contracts or subcontracts if they reported possessing *all* of the following characteristics:

- a. Being a private business (as opposed to a public agency or not-for-profit organization);
- b. Performing work relevant to transportation contracting;
- c. Having bid on or performed transportation-related prime contracts or subcontracts in Arizona in the previous seven years; and
- d. Reporting qualifications for and interest in work for ADOT and/or for local governments.<sup>8</sup>

## **D. Businesses Included in the Availability Database**

After completing interviews with 5,185 Arizona businesses, the study team developed a database of information about businesses that are potentially available for ADOT transportation contracting work. The study team used the availability database to produce availability benchmarks to:

- Determine whether there were any disparities in ADOT and local agency utilization of MBE/WBEs during the study period; and
- Help calculate a base figure for ADOT's overall DBE goals for FHWA, FTA and FAA contracts.

Data from the availability interviews allowed Keen Independent to develop a representative depiction of businesses that are qualified and interested in the highest dollar volume areas of ADOT and local agency transportation-related work, but it should not be considered an exhaustive list of every business that could potentially participate in ADOT and local agency contracts. Appendix D provides a detailed discussion about why the database should not be considered an exhaustive list of potentially available businesses.

---

<sup>8</sup> For both ADOT and for local agency work, separate interview questions were asked about prime contract work and subcontract work.

Figure 5-4 presents the number of businesses that the study team included in the availability database for each racial/ethnic and gender group. The study team’s research identified 1,429 businesses reporting that they were available for specific transportation contracts that ADOT and local agencies awarded during the study period. Of those businesses 500 (35%) were MBEs or WBEs.

Because results are based on a simple count of firms with no analysis of availability for specific ADOT contracts, they only reflect the first step in the availability analysis.

**Figure 5-4.**  
Number of businesses included in the availability database

Note:

Numbers rounded to nearest tenth of 1 percent. Percentages may not add to totals due to rounding.

Source:

Keen Independent availability analysis.

Race/ethnicity and gender	Number of firms	Percent of firms
African American-owned	26	1.8 %
Asian-Pacific American-owned	19	1.3
Subcontinent Asian American-owned	18	1.3
Hispanic American-owned	189	13.2
Native American-owned	37	2.6
Total MBE	289	20.2 %
WBE (white women-owned)	211	14.8
Total MBE/WBE	500	35.0 %
Total majority-owned firms	929	65.0
Total firms	1,429	100.0 %

## E. MBE/WBE Availability Calculations on a Contract-by-Contract Basis

Keen Independent analyzed information from the availability database to develop dollar-weighted availability estimates for use as a benchmark in the disparity analysis and in helping ADOT set its overall DBE goals for FHWA-, FTA- and FAA-funded contracts.

- Dollar-weighted availability estimates represent the percentage of ADOT transportation contracting dollars that MBE/WBEs might be expected to receive based on their availability for specific types and sizes of ADOT transportation-related construction and engineering prime contracts and subcontracts.
- Keen Independent’s approach to calculating availability was a bottom up, contract-by-contract process of “matching” available firms to specific prime contracts and subcontracts.

**Steps to calculating availability.** Only a portion of the businesses in the availability database were considered potentially available for any given ADOT construction or engineering prime contract or subcontract (referred to collectively as “contract elements”). The study team first examined the characteristics of each specific contract element, including type of work, location of work, contract size and contract date. The study team then identified businesses in the availability database that perform work of that type, in that location, of that size, in that role (i.e., prime contractor or subcontractor), and that were in business in the year that the contract element was awarded.

**Steps to the availability calculations.** The study team identified the specific characteristics of each of the 13,671 ADOT and local agency prime contracts and subcontracts included in the utilization analysis and then took the following steps to calculate availability for each contract element:

1. For each contract element, the study team identified businesses in the availability database that reported that they:
  - Are qualified and interested in performing transportation-related work in that particular role, for that specific type of work, for that particular type of agency (ADOT or local agencies) or had actually performed work in that role based on contract data for the study period;
  - Indicated in the interview that they had performed work in the particular role (prime or sub) in Arizona within the past seven years (or had done so based on contract data for the study period);
  - Are able to do work in that geographic location (or had done so based on contract data for the study period);
  - Had bid on or performed work of that size in Arizona in the past seven years (or had done so based on contract data for the study period); and
  - Were in business in the year that the contract or task order was awarded.
2. For the specific contract element, the study team then counted the number of MBEs (by race/ethnicity), WBEs and majority-owned businesses among all businesses in the availability database that met the criteria specified in step 1 above.
3. The study team translated the numeric availability of businesses for the contract element into percentage availability (as described in Figure 5-5).

The study team repeated those steps for each contract element examined in the Disparity Study. The study team multiplied the percentage availability for each contract element by the dollars associated with the contract element, added results across all contract elements, and divided by the total dollars for all contract elements. The result was a dollar-weighted estimate of overall availability of MBE/WBEs and estimates of availability for each MBE/WBE group. Figure 5-5 provides an example of how the study team calculated availability for a specific subcontract in the study period.

**Figure 5-5.**  
**Example of an availability calculation**

One of the subcontracts examined was for landscaping (\$10,500) on a 2013 Federal Highway Administration-funded contract for a local agency in Central Arizona. To determine the number of MBE/WBEs and majority-owned firms available for that subcontract, the study team identified businesses in the availability database that:

- a. Were in business in 2013;
- b. Indicated that they performed landscaping on transportation-related projects;
- c. Reported working or bidding on subcontracts in Arizona in the past seven years;
- d. Reported bidding on work of similar or greater size in the past seven years;
- e. Reported ability to perform work in Central Arizona; and
- f. Reported qualifications and interest in working as a subcontractor on local government transportation projects.

There were 144 businesses in the availability database that met those criteria. Of those businesses, 62 were MBEs or WBEs. Therefore, MBE/WBE availability for the subcontract was 43 percent (i.e.,  $62/144 = 43\%$ ).

The weight applied to this contract was  $\$10,500 \div \$3.6 \text{ million} = 0.0003\%$  (equal to its share of total FHWA-funded contract dollars). Keen Independent repeated this process for each prime contract and subcontract.

**Special considerations for supply contracts.** When calculating availability for a particular type of materials supplies, Keen Independent counted as available all firms supplying those materials that reported qualifications and interest in that work for ADOT (or for local agencies when it was a local agency contract) and indicated that they could provide supplies in the pertinent region of the state. Bid capacity was not considered in these calculations.

**Improvements on a simple “head count” of businesses.** Keen Independent used a “custom census” approach to calculating MBE/WBE availability for ADOT and local agency work rather than using a simple “head count” of MBE/WBEs (i.e., simply calculating the percentage of all Arizona transportation contracting businesses that are minority- or women-owned). Using a custom census approach typically results in lower availability estimates for MBEs and WBEs than a headcount approach due in large part to Keen Independent’s consideration of “bid capacity” in measuring availability and because of dollar-weighting availability results for each contract element (a large prime contract has a greater weight in calculating overall availability than a small subcontract). The largest contracts that MBE/WBEs have bid on or performed in Arizona tend to be smaller than those of other businesses, as discussed in Appendix H. Therefore, MBE/WBEs are less likely to be identified as available for the largest prime contracts and subcontracts.

There are several important ways in which Keen Independent’s custom census approach to measuring availability is more precise than completing a simple head count approach.

**Keen Independent’s approach accounts for type of work.** USDOT suggests calculating availability based on businesses’ abilities to perform specific types of work. USDOT gives the following example in Part II F of “Tips for Goal-Setting in the Disadvantaged Business Enterprise (DBE) Program”:

*For instance, if 90 percent of your contract dollars will be spent on heavy construction and 10 percent on trucking, you should weight your calculation of the relative availability of firms by the same percentages.<sup>9</sup>*

The study team took type of work into account by examining 40 different subindustries related to transportation construction, engineering and related purchases as part of estimating availability for ADOT and local agency work.

**Keen Independent’s approach accounts for qualifications and interest in transportation-related prime contract and subcontract work.** The study team collected information on whether businesses are qualified and interested in working as prime contractors, subcontractors, or both on ADOT and local agency transportation work, in addition to the consideration of several other factors related to prime contracts and subcontracts (e.g., contract types, sizes and locations):

- Only businesses that reported being qualified for and interested in working as prime contractors were counted as available for prime contracts (or included because contract data for ADOT or local agencies indicated that they had prime contracts in the past seven years).

---

<sup>9</sup> USDOT. Tips for Goal-Setting in the Federal Disadvantaged Enterprise (DBE) Program as updated June 25, 2013 <http://www.dot.gov/osdbu/disadvantaged-business-enterprise/tips-goal-setting-disadvantaged-business-enterprise>.

- Only businesses that reported being qualified for and interested in working as subcontractors were counted as available for subcontracts (or included because contract data for ADOT or local agencies indicated that they had subcontracts in the past seven years).
- Businesses that reported being qualified for and interested in working as both prime contractors and subcontractors were counted as available for both prime contracts and subcontracts.

**Keen Independent’s approach accounts for the size of prime contracts and subcontracts.** The study team considered the size — in terms of dollar value — of the prime contracts and subcontracts that a business bid on or received in the previous seven years (i.e., bid capacity) when determining whether to count that business as available for a particular contract element. When counting available businesses for a particular prime contract or subcontract, the study team considered whether businesses had previously bid on or received at least one contract of an equivalent or greater dollar value in Arizona in the previous seven years, based on the most inclusive information from survey results and analysis of past ADOT and local agency prime contracts and subcontracts.

Keen Independent’s approach is consistent with many recent, key court decisions that have found relative capacity measures to be important to measuring availability (e.g., *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.*; *Western States Paving Company v. Washington State DOT*; *Rothe Development Corp. v. U.S. Department of Defense*<sup>10</sup> and *Engineering Contractors Association of S. Fla. Inc. vs. Metro Dade County*<sup>11</sup>).

**Keen Independent’s approach accounts for the geographic location of the work.** The study team determined the location where work was performed for ADOT and local agency contracts (Southern, Central or Northern Arizona).

**Keen Independent’s approach generates dollar-weighted results.** Keen Independent examined availability on a contract-by-contract basis and then dollar-weighted the results for different sets of contract elements. Thus, the results of relatively large contract elements contributed more to overall availability estimates than those of relatively small contract elements. This approach is consistent with USDOT’s “Tips for Goal-Setting in the Disadvantaged Business Enterprise (DBE) Program,” which suggests a dollar-weighted approach to calculating availability.

## F. Availability Results

Keen Independent used the custom census approach described above to estimate the availability of MBE/WBEs and majority-owned businesses for FHWA-, state-, FAA- and FTA-funded prime contracts and subcontracts that ADOT and local agencies awarded during the study period.

Figure 5-6 presents overall dollar-weighted availability estimates by MBE/WBE group for those contracts. Overall, MBE/WBE availability for FHWA-funded contracts is 14.53 percent (about 2 percentage points less than reported in the 2014 Availability Study because of refinement of contract information and data on available firms). This result is lower than the percentage of availability firms that are MBE/WBE (35%) in Figure 5-4. Dollar-weighted availability was highest

---

<sup>10</sup> *Rothe Development Corp. v. U.S. Department of Defense*, 545 F.3d 1023 (Fed. Cir. 2008).

<sup>11</sup> *Engineering Contractors Association of S. Fla. Inc. vs. Metro Dade County*, 943 F. Supp. 1546 (S.D. Fla. 1996).

for Hispanic American-owned businesses (5.24%), white women-owned firms (4.95%) and Native American-owned companies (1.98%). Availability was 1.04 percent for African American-owned businesses and less than 1 percent for Subcontinent Asian American-owned firms (0.97%) and Asian-Pacific American-owned companies (0.36%).

Note that dollar-weighted availability estimates for state-funded contracts during the study period (13.39% for MBE/WBEs combined) are within about one percentage point of overall results for FHWA-funded contracts(14.53%) due to similarities in the types, sizes locations and amount of subcontracting for these contracts. MBE/WBE availability is higher for FAA-funded contracts (24.78%) and FTA-funded contracts (33.74%), primarily reflecting the differing types of work involved in those contracts.

Figure 5-6.  
Overall dollar-weighted availability estimates for MBE/WBEs for ADOT FHWA-, state-, FAA- and FTA-funded contracts, July 2007-June 2013

Race/ethnicity and gender	FHWA	State	FAA	FTA
African American-owned	1.04 %	0.82 %	0.90 %	1.14 %
Asian-Pacific American-owned	0.36	0.30	1.25	0.95
Subcontinent Asian American-owned	0.97	0.80	1.79	1.47
Hispanic American-owned	5.24	4.11	9.33	18.84
Native American-owned	<u>1.98</u>	<u>3.55</u>	<u>3.55</u>	<u>2.25</u>
Total MBE	9.59 %	9.56 %	16.82 %	24.65 %
WBE (white women-owned)	<u>4.95</u>	<u>3.83</u>	<u>7.96</u>	<u>9.09</u>
Total MBE/WBE	14.53 %	13.39 %	24.78 %	33.74 %

Note: Numbers may not add to totals due to rounding.

Source: Keen Independent availability analysis.

## G. Base Figure for ADOT's Overall DBE Goal for FHWA-, FAA- and FTA-funded Contracts

Establishing a base figure is the first step in calculating an overall goal for DBE participation in ADOT's FHWA-, FAA and FTA- funded contracts. Keen Independent calculated the base figure for each set of contracts using the same availability database and approach described above.

For the base figure for FHWA-funded contracts, calculations focus on potential DBEs (including currently certified DBEs). Because of more limited information about potential DBEs for FAA- and FTA-funded contracts (explained later in this chapter), Keen Independent calculated the base figure for those contracts only counting currently-certified DBEs.



Keen Independent's approach to calculating ADOT's base figure is consistent with:

- Court-reviewed methodologies in several states, including Washington, California, Illinois, and Minnesota;
- Instructions in The Final Rule effective February 28, 2011 that outline revisions to the Federal DBE Program; and
- USDOT's "Tips for Goal-Setting in the Disadvantaged Business Enterprise (DBE) Program."

**Base figure for FHWA-funded contracts.** Keen Independent's availability analysis indicates that the availability of current and potential DBEs for ADOT's FHWA-funded transportation contracts is 14.53 percent based on current availability information and analysis of FHWA-funded ADOT and local agency contracts awarded from July 2007 through June 2013. This is 2 percentage points lower than reported in the 2014 Availability Study due to refinement of contract and availability data as well as collection of availability data for three additional subindustries in the 2015 Disparity Study.

**Calculations to convert MBE/WBE availability to availability of current and potential DBEs.**

Figure 5-7 provides the calculations to derive current/potential DBE availability when starting from MBE/WBE availability figures.

For FHWA-funded contracts, there were three groups of MBE/WBEs that Keen Independent did not count as potential DBEs when calculating the base figure, and one DBE group that added to the base figure:

- MBE/WBEs that in recent years graduated from the DBE Program or had applied for DBE certification in Arizona and had been denied (based on information supplied by ADOT, City of Phoenix and City of Tucson);
- MBE/WBEs in the availability interviews reported having annual revenue over the most recent three years that exceeded the three-year average annual revenue limits for DBE certification for their subindustry; and
- MBE/WBEs that upon telephone and email follow-up by ADOT indicated that they would not qualify for DBE certification or were not interested in certification.<sup>12</sup>

Together, removing these three categories of MBE/WBEs reduced the base figure for FHWA-funded contracts by 6.73 percentage points.

Keen Independent identified one white male-owned firm certified as a DBE in the availability analysis. Inclusion of this firm added 1.10 percentage points to the total availability for current and potential DBEs.

---

<sup>12</sup> Research conducted by Donato Consulting for ADOT from a Keen Independent list of potential DBE identified in the 2014 Availability Study (Donato results as of March 31, 2015).

After subtracting 6.73 percentage points for the first refinement and adding 1.10 percentage points for the second refinement, dollar-weighted availability for current and potential DBEs was 8.90 percent (5.63 percentage points lower than MBE/WBE availability). Figure 5-7 shows these calculations to determine the base figure for FHWA-funded contracts.

**Figure 5-7.**  
Overall dollar-weighted availability estimates for current and potential DBEs  
for FHWA-funded contracts, July 2007-June 2013

Calculation of base figure	FHWA
Total MBE/WBE	14.53 %
Less firms that graduated from the DBE Program or denied DBE certification in recent years or exceed revenue thresholds or report that do not qualify/not interested	<u>6.73</u>
Subtotal	7.80 %
Plus white male-owned DBEs	<u>1.10</u>
Current and potential DBEs	8.90 %

Source: Keen Independent availability analysis.

**Consideration of planned projects for FY 2015 through FY 2017.** Keen Independent reviewed ADOT's 2015-2019 Five Year Construction Facilities Construction Program as part of the 2014 Availability Study. The Plan indicates that ADOT highway spending will include a mix of expansion, modernization and preservation projects in FY 2016. By FY 2017, funding of all types of projects is expected to fall, but particularly for expansion and modernization projects. However, ADOT will be starting the South Mountain Freeway during this time period.

Keen Independent's analysis of future projects in the 2014 Availability Study identified somewhat offsetting effects on the base figure. No additional calculations were indicated at that time, and none are indicated in the 2015 Disparity Study.

**Base figure for FAA- and FTA-funded contracts.** Keen Independent's base figure analysis for FAA- and FTA-funded contracts uses data on currently-certified DBEs.

- Unlike the FHWA-funded contracts, a major portion of the availability interviews for the FAA- and FTA-funded contracts was completed in early 2015. As such, ADOT's follow-up research with potential DBEs (through Donato Consulting) did not include these firms.
- The Donato Consulting follow-up interviews for potential DBEs identified in the 2014 Availability Study found that many would not qualify or were not interested in DBE certification with ADOT. Therefore, it might not be appropriate to use a figure for potential DBEs for FAA- and FTA-funded contracts that had not been similarly refined.

- Keen Independent recommends that ADOT use currently-certified DBEs in the base figure analysis for FAA- and FTA-funded contracts.

Keen Independent's analysis indicates that the availability of current DBEs is 4.87 percent for ADOT's FAA-funded transportation contracts and 7.25 percent for ADOT's FTA-funded contracts based on current availability information and analysis of FAA- and FTA-funded contracts awarded from July 2007 through June 2013. Figure 5-8 provides these figures.

**Figure 5-8.**  
Overall dollar-weighted availability estimates  
for current DBEs for FAA-and FTA-funded  
contracts, July 2007-June 2013

Base figure	FAA	FTA
Current DBEs	4.87 %	7.25 %

Source: Keen Independent availability analysis.

**Additional steps before ADOT determines its overall DBE goals for FHWA-, FAA- and FTA-funded contracts.** ADOT must consider whether to make a “step-2” adjustment to the base figure as part of determining its overall DBE goal for FHWA-, FAA- and FTA-funded contracts. Step-2 adjustments can be upward or downward, but there is no requirement for ADOT to make a step-2 adjustment as long as the agency can explain the factors considered and why no adjustment was warranted.

Chapters 8, 9 and 10 discuss factors that ADOT might consider in deciding whether to make a step-2 adjustment to the base figures for FHWA-, FAA- and FTA-funded contracts.

## CHAPTER 6.

### Utilization and Disparity Analysis

Keen Independent's utilization analysis reports the percentage of ADOT transportation contract dollars going to minority- and women-owned firms. The disparity analysis compares that utilization with the participation of minority- and women-owned firms that might be expected based on the availability analysis. (Chapter 5 and Appendix D explain the availability analysis.)

Chapter 6 presents results of the utilization and disparity analysis in four parts:

- A. Overview of the utilization analysis;
- B. Overall MBE/WBE and DBE utilization on ADOT contracts;
- C. Utilization by racial, ethnic and gender group;
- D. Disparity analysis for ADOT contracts; and
- E. Statistical significance of disparity analysis results.

#### A. Overview of the Utilization Analysis

Keen Independent examined the participation of minority- and women-owned firms on ADOT transportation contracts from July 2007 through June 2013. In total, Keen Independent's utilization analysis included 2,121 contracts and totaling \$4.9 billion over this time period, including FHWA-, state-, FTA- and FAA-funded contracts. Keen Independent's analysis of these contracts included more than 11,500 subcontracts.

The study team collected information about ADOT projects as well as work awarded for local agency projects that use funds administered through ADOT ("LPA" contracts). Chapter 3 and Appendix C explain the methods used to collect these data and determine the racial, ethnic and gender ownership characteristics of individual firms.

Note that ADOT awards work through a variety of contract agreements; to simplify, the utilization analysis refers to all such work as "contracts."<sup>1</sup>

#### Figure 6-1. Defining and measuring "utilization"

"Utilization" of MBE/WBEs refers to the share of prime contract and subcontract dollars that an agency awarded to MBE/WBEs during a particular time period. Keen Independent measures the utilization of all MBE/WBEs, regardless of certification. The study team reports utilization for firms owned by different racial, ethnic and gender groups.

Keen Independent measures MBE/WBE utilization as percentage of total prime contract and subcontract dollars. For example, if 5 percent of prime contract and subcontract dollars went to WBEs during the study period, WBE utilization would be 5 percent.

Information about MBE/WBE utilization is instructive on its own, but it is even more useful when it is compared with the utilization that might be expected based on the availability of MBE/WBEs for ADOT work. The study team presents such comparisons as part of the "disparity analysis" later in Chapter 6.

---

<sup>1</sup> Also, prime contractors, not ADOT or local agencies, "award" subcontracts to subcontractors. To streamline the discussion, ADOT and local agency "award" of contract elements is used here and throughout the report.

**Calculation of “utilization.”** The study team measured MBE/WBE “utilization” as the percentage of prime contract and subcontract dollars awarded to MBE/WBEs during the study period (see Figure 6-1). Keen Independent calculated MBE/WBE utilization for a group of contracts by dividing the contract dollars going to MBE/WBEs by the contract dollars for all firms.

To avoid double-counting contract dollars and better gauging utilization of different types of firms, Keen Independent based the utilization of prime contractors in the amount of the contract retained by the prime after deducting subcontract amounts. In other words, a \$1 million contract that involved \$400,000 in subcontracting only counts as \$600,000 to the prime contractor in the utilization analysis.

**Different results than in ADOT Uniform Reports of DBE Commitments/Awards and Payments.**

USDOT requires agencies such as ADOT to submit reports about its DBE utilization on its FHWA-funded transportation contracts twice each year (typically in April and October).

Keen Independent’s analysis of MBE/WBE utilization goes beyond what ADOT currently reports to the FHWA, FTA and FAA as explained below.

- **All MBE/WBEs, not just certified DBEs.** Per USDOT regulations, ADOT’s Uniform Reports focus exclusively on certified DBEs.

Keen Independent’s utilization analyses examines the utilization of minority- and women-owned firms — not just the utilization of certified DBEs. The study team’s analysis includes the utilization of MBE/WBEs that may have once been DBE-certified and graduated (or let their certifications lapse) and the utilization of MBE/WBEs that have never been DBE-certified. (Keen Independent separately reports utilization of MBE/WBEs that were DBE-certified during the study period.<sup>2</sup>)

- **All transportation contracts, not just USDOT-funded contracts.** Because USDOT requires ADOT to prepare DBE utilization reports on its USDOT-funded transportation contracts, ADOT’s Uniform Reports do not include state-funded contracts.
- **More complete contract information.** Through ADOT’s assistance during the disparity study, and as part of ADOT’s ongoing improvements to its contract data collection and reporting, the study team was able to analyze more complete data than ADOT had in its Uniform Reports, especially in earlier part of the study period.

As a result, Keen Independent’s estimates of DBE participation on FHWA-, FTA and FAA-funded contracts during the study period differ from the overall DBE participation ADOT reported to FHWA, FTA and FAA over a similar time period. (Keen Independent’s estimate of percentage DBE participation is usually higher than what ADOT had reported.)

---

<sup>2</sup> Although businesses that are owned and operated by socially- and economically-disadvantaged white men can become certified as DBEs, Keen Independent identified no DBE-certified white male-owned businesses that ADOT utilized during the study period. In other words, all DBEs that ADOT utilized during the study period were MBE/WBEs. Thus, utilization results for certified DBEs are a subset of the utilization results for all MBE/WBEs.

## B. Overall MBE/WBE and DBE Utilization on ADOT Contracts

Figure 6-2 presents overall MBE/WBE utilization (as a percentage of total dollars) on ADOT transportation-related contracts awarded during the study period. Results are for the 13,667 prime contracts and subcontracts for FHWA-, state-, FAA- and FTA-funded contracts. The darker portion of the bar presents the utilization of MBE/WBEs that were DBE-certified.

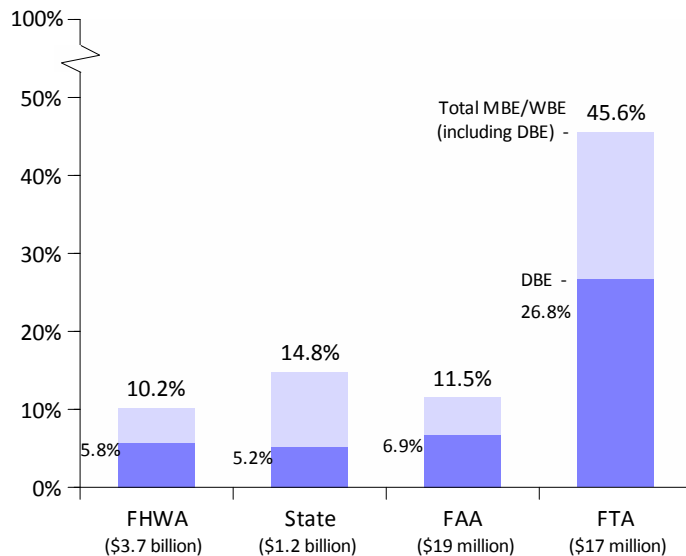
**Figure 6-2.**  
MBE/WBE and DBE share of prime contract/subcontract dollars for ADOT/LPA FHWA-, state-, FAA- and FTA-funded transportation contracts, July 2007-June 2013

**Note:**

Dark portion of bar is certified DBE utilization.  
Number of contracts/subcontracts analyzed is 13,667.

**Source:**

Keen Independent from data on ADOT and LPA contracts July 2007-June 2013.



**FHWA-funded contracts.** Keen Independent examined 11,348 FHWA-funded prime contracts and subcontracts from July 2007 through June 2013. In total, there was \$3.7 billion in contract dollars for these contracts.<sup>3</sup> FHWA-funded contracts were the largest segment of ADOT contracts included in the study.

MBE/WBEs received \$373 million, or 10.2 percent of ADOT FHWA-funded contract dollars during study period. About \$212 million (5.8%) of contract dollars went to MBE/WBEs that were DBE-certified during that time period.<sup>4</sup> Minority- and women-owned firms not certified as DBEs accounted for \$161 million or 4.4 percentage points of the total 10.2 percent MBE/WBE participation. Note that ADOT set DBE contract goals on some FHWA-funded projects during the last three years of the study period.

Keen Independent was able to capture information about more FHWA-funded contracts, subcontracts and contract dollars than ADOT included in its Uniform Reports of DBE Commitments/Awards and Payments for this time period. ADOT reported \$2.5 billion in FHWA-funded contracts from October 2007 through September 2013, of which \$100 million went to DBEs.

<sup>3</sup> Note that because ADOT and USDOT treat each contract with any FHWA dollars as “FHWA-funded,” the study team did so as well (some of the funding on these contracts was state dollars).

<sup>4</sup> DBE certified for at least some portion of the study period. Does not include firms first certified as DBEs after June 2013.

(These results are for contract and subcontract awards.) Based on ADOT reports, DBEs received 3.9 percent of total FHWA-funded contract dollars.

**State-funded contracts.** The study team obtained data on 2,158 state-funded transportation construction and engineering-related prime contracts and subcontracts for July 2007 through June 2013. These contracts totaled \$1.2 billion, about one quarter of the total dollars examined in the utilization analysis.

Minority- and women-owned firms received 14.8 percent of the contract dollars for state-funded transportation contracts during the study period. Compared with FHWA-funded contracts, less of this utilization (5.2%) was DBE participation (see Figure 6-2).

ADOT does not prepare DBE utilization reports for state-funded contracts.

**FAA-funded contracts.** The study team identified 18 FAA-funded contracts during the study period totaling \$19 million. MBE/WBEs obtained 11.5 percent of these contract dollars, of which 6.9 percentage points went to DBEs.

The contract data the study team collected appears more comprehensive than what ADOT may have had for previous reports to FAA. The study team examined hard copy contract records at Grand Canyon National Park Airport, and performed the utilization analysis based on this primary data collection. ADOT also provided the study team Uniform Reports for FAA-funded contracts for FFY 2011 through FFY 2013. These Uniform Reports indicated \$1.7 million in total FAA-funded contracts in these years and no participation of certified DBEs (no awards and no payments).

**FTA-funded contracts.** Keen Independent identified \$17 million in FTA-funded contracts for the study period (139 prime contracts and subcontracts). These include \$5.8 million in transit services contracts and \$5.9 million in transportation planning contracts. MBE/WBE and DBE participation on these contracts was considerably higher than other contracts examined in this study. Almost one-half of the contract dollars went to minority- and women-owned firms. DBE participation was 26.9 percent (but not because of DBE contract goals as ADOT operated a neutral program for its FTA-funded contracts).

ADOT provided the study team FFY 2009 through FFY 2013 Uniform Reports for FTA-funded contracts that indicated about \$13 million in contracts and 11.5 percent DBE participation (based on awards).

### **C. Utilization by Racial, Ethnic and Gender Group**

Figure 6-3 presents detailed information for minority- and women-owned firms (top portion of the table) and certified DBEs (bottom portion of the table) for FHWA- and for state-funded contracts. For each of these two sets of contracts, Figure 6-3 shows:

- Total number of prime contracts and subcontracts awarded to the group (e.g. 67 FHWA-funded prime contracts and subcontracts to African American-owned firms);
- Combined dollars of prime contracts going to the group (e.g., \$10,749,000 to African American-owned firms); and

- The percentage of combined contract dollars for the group (e.g., African American-owned firms received 0.3 percent of total FHWA-funded contract dollars).

**FHWA-funded contracts.** As shown in the top portion of Figure 6-3 for FHWA-funded contracts, white women-owned firms (WBEs) received the largest number of prime contracts and subcontracts (1,832), the most dollars (\$190,868,000) and the highest share of dollars (5.2%) out of all MBE/WBE groups. Among minority-owned firms, Hispanic American-owned firms received the most prime contracts and subcontracts and the most dollars of FHWA-funded contracts.

The bottom portion of Figure 6-3 indicates that DBEs owned by white women, Hispanic Americans and Native Americans accounted for nearly all of the DBE participation on FHWA-funded contracts. In total, DBEs received 1,625 prime contracts and subcontracts and \$212 million of FHWA-funded contracts during the study period. This accounted for 5.8 percent of FHWA-funded contract dollars.

Figure 6-3.

MBE/WBE and DBE share of ADOT/LPA prime contracts and subcontracts for FHWA- and state-funded contracts, July 2007-June 2013

	FHWA			State		
	Number of contracts*	\$1,000s	Percent of dollars	Number of contracts*	\$1,000s	Percent of dollars
<b>MBE/WBEs</b>						
African American-owned	67	\$ 10,749	0.3 %	7	\$ 9,185	0.7 %
Asian-Pacific American-owned	36	4,449	0.1	5	1,194	0.1
Subcontinent Asian American-owned	137	13,471	0.4	21	5,373	0.4
Hispanic American-owned	1,039	103,440	2.8	145	57,882	4.7
Native American-owned	152	50,093	1.4	23	8,358	0.7
WBE (white women-owned)	1,832	190,868	5.2	312	101,803	8.2
<b>Total MBE/WBE</b>	<b>3,263</b>	<b>\$ 373,071</b>	<b>10.2 %</b>	<b>513</b>	<b>\$ 183,796</b>	<b>14.8 %</b>
Majority-owned	8,085	3,299,188	89.8	1,645	1,054,616	85.2
<b>Total</b>	<b>11,348</b>	<b>\$ 3,672,259</b>	<b>100.0 %</b>	<b>2,158</b>	<b>\$ 1,238,412</b>	<b>100.0 %</b>
<b>DBEs</b>						
African American-owned	31	\$ 1,333	0.0 %	2	\$ 189	0.0 %
Asian-Pacific American-owned	9	3,617	0.1	1	1,096	0.1
Subcontinent Asian American-owned	118	13,160	0.4	20	5,343	0.4
Hispanic American-owned	626	70,360	1.9	95	32,495	2.6
Native American-owned	125	49,722	1.4	16	4,873	0.4
WBE (white women-owned)	716	73,853	2.0	112	19,840	1.6
White male-owned DBE	0	0	0.0	0	0	0.0
<b>Total DBE</b>	<b>1,625</b>	<b>\$ 212,044</b>	<b>5.8 %</b>	<b>246</b>	<b>\$ 63,837</b>	<b>5.2 %</b>
Non-DBE	9,723	3,460,215	94.2	1,912	1,174,575	94.8
<b>Total</b>	<b>11,348</b>	<b>\$ 3,672,259</b>	<b>100.0 %</b>	<b>2,158</b>	<b>\$ 1,238,412</b>	<b>100.0 %</b>

Note: \*Number of prime contracts and subcontracts.

Numbers rounded to nearest tenth of 1 percent. Numbers may not add to totals due to rounding.

Includes \$74 million for Coffman Specialties.

Source: Keen Independent from data on ADOT and LPA contracts July 2007-June 2013.



**State-funded contracts.** Figure 6-3 also shows participation of MBE/WBEs on state-funded contracts. As with FHWA-funded contracts, white women-owned firms (8.2%) and Hispanic American-owned firms (4.7%) accounted for most of the total participation of MBE/WBEs on state-funded contracts. Even though DBE contract goals were not applied, DBEs did participate in state-funded contracts, receiving about 5.2 percent of total contract dollars (see the bottom portion of Figure 6-3).

**FHWA- and state-funded contracts combined.** Because of the similarities of FHWA- and state-funded contracts, Keen Independent also examined MBE/WBE and DBE participation on these contracts combined. Figure 6-4 presents these results.

As with the separate utilization results for FHWA- and state-funded contracts, white women-owned firms represented the largest share of contract dollars going to MBE/WBEs for FHWA- and state-funded contracts combined (6.0%). White women-owned firms certified as DBEs received 1.9 percent of combined contract dollars with the balance going to white women-owned firms not DBE-certified in the study period.

Much of this non-DBE participation of white women-owned firms on both FHWA- and state-funded contracts was one company — Coffman Specialties, a large general contractor based in San Diego. This company received more ADOT work than any other MBE/WBE: \$74 million during the study period. Coffman Specialties appears to have once been WBE-certified in California in the 1990s, but according to ADOT and FHWA staff, was denied DBE certification in Arizona within the past 15 years due to issues concerning ownership and control of the firm. Therefore, it might be appropriate to examine utilization without this company included as a WBE.

Without Coffman Specialties, WBE utilization would be 4.5 percent of total FHWA- and state-funded contract dollars. (Throughout the utilization and disparity analysis, Keen Independent examines overall results for WBEs with and without Coffman Specialties counted as a WBE.)

Figure 6-4.

MBE/WBE and DBE share of ADOT/LPA prime contracts and subcontracts for combined FHWA- and state-funded contracts, July 2007-June 2013

	Total FHWA and State		
	Number of contracts*	\$1,000s	Percent of dollars
<b>MBE/WBEs</b>			
African American-owned	74	\$ 19,933	0.4 %
Asian-Pacific American-owned	41	5,644	0.1
Subcontinent Asian American-owned	158	18,844	0.4
Hispanic American-owned	1184	161,322	3.3
Native American-owned	175	58,452	1.2
WBE (white women-owned)	2,144	292,672	6.0
<b>Total MBE/WBE</b>	<b>3,776</b>	<b>\$ 556,867</b>	<b>11.3 %</b>
Majority-owned	9,730	4,353,804	88.7
<b>Total</b>	<b>13,506</b>	<b>\$ 4,910,671</b>	<b>100.0 %</b>
<b>DBEs</b>			
African American-owned	33	\$ 1,522	0.0 %
Asian-Pacific American-owned	10	4,714	0.1
Subcontinent Asian American-owned	138	18,503	0.4
Hispanic American-owned	721	102,855	2.1
Native American-owned	141	54,595	1.1
WBE (white women-owned)	828	93,693	1.9
White male-owned DBE	0	0	0.0
<b>Total DBE</b>	<b>1,871</b>	<b>\$ 275,881</b>	<b>5.6 %</b>
Non-DBE	9,477	4,634,790	94.4
<b>Total</b>	<b>11,348</b>	<b>\$ 4,910,671</b>	<b>100.0 %</b>

Note: \*Number of prime contracts and subcontracts.

Numbers rounded to nearest tenth of 1 percent. Numbers may not add to totals due to rounding.

Includes \$74 million for Coffman Specialties.

Source: Keen Independent from data on ADOT and LPA contracts July 2007-June 2013.

**FAA-funded contracts.** Keen Independent examined 18 FAA-funded contracts at Grand Canyon National Park Airport. Figure 6-5 includes results for those FAA-funded contracts. Two contracts to white women-owned firms and one contract to a Hispanic American-owned business accounted for all of the MBE/WBE participation for FAA-funded contracts. MBE utilization was 4.6 percent and WBE utilization was 6.9 percent of FAA-funded contract dollars during the study period.

**FTA-funded contracts.** MBE/WBEs were awarded 41 of the 139 FTA-funded prime contracts and subcontracts. White women-owned firms obtained 30 percent of total FTA-funded contract dollars, and MBEs received about 15 percent.

Figure 6-5.

MBE/WBE and DBE share of ADOT/LPA prime contract and subcontract dollars for FAA- and FTA-funded contracts, July 2007-June 2013

	FAA			FTA		
	Number of contracts*	\$1,000s	Percent of dollars	Number of contracts*	\$1,000s	Percent of dollars
<b>MBE/WBEs</b>						
African American-owned	0	\$ 0	0.0 %	4	\$ 612	3.6 %
Asian-Pacific American-owned	0	0	0.0	4	1,018	6.0
Subcontinent Asian American-owned	0	0	0.0	3	48	0.3
Hispanic American-owned	1	887	4.6	6	83	0.5
Native American-owned	0	0	0.0	4	840	4.9
WBE (white women-owned)	2	1,327	6.9	20	5,215	30.4
<b>Total MBE/WBE</b>	<b>3</b>	<b>\$ 2,214</b>	<b>11.5 %</b>	<b>41</b>	<b>\$ 7,816</b>	<b>45.7 %</b>
Majority-owned	12	17,056	88.5	98	9,244	54.3
<b>Total</b>	<b>18</b>	<b>\$ 19,270</b>	<b>100.0 %</b>	<b>139</b>	<b>\$ 17,060</b>	<b>100.0 %</b>
<b>DBEs</b>						
African American-owned	0	\$ 0	0.0 %	1	\$ \$19	0.1 %
Asian-Pacific American-owned	0	0	0.0	0	0	0.0
Subcontinent Asian American-owned	0	0	0.0	3	48	0.3
Hispanic American-owned	0	0	0.0	4	59	0.3
Native American-owned	0	0	0.0	2	20	0.1
WBE (white women-owned)	2	1,327	6.9	14	4,449	26.1
White male-owned DBE	0	0	0.0	0	0	0.0
<b>Total DBE</b>	<b>2</b>	<b>\$ 1,327</b>	<b>6.9 %</b>	<b>24</b>	<b>\$ 4,595</b>	<b>26.9 %</b>
Non-DBE	16	17,943	93.1	139	12,465	73.1
<b>Total</b>	<b>18</b>	<b>\$ 19,270</b>	<b>100.0 %</b>	<b>163</b>	<b>\$ 17,060</b>	<b>100.0 %</b>

Note: \*Number of prime contracts and subcontracts.

Numbers rounded to nearest tenth of 1 percent. Numbers may not add to totals due to rounding.

Source: Keen Independent from data on ADOT and LPA contracts July 2007-June 2013.

## D. Disparity Analysis for ADOT Contracts

To conduct the disparity analysis, Keen Independent compared the actual utilization of MBE/WBEs on ADOT transportation prime contracts and subcontracts with the percentage of contract dollars that MBE/WBEs might be expected to receive based on their availability for that work. (Availability is also referred to as the “utilization benchmark.”) Keen Independent made those comparisons for individual MBE/WBE groups. Chapter 5 explains how the study team developed benchmarks from the availability data.

Keen Independent expressed both utilization and availability as percentages of the total dollars associated with a particular set of contracts, making them directly comparable (e.g., 5% utilization compared with 4% availability). Keen Independent then calculated a “disparity index” to help compare utilization and availability results among MBE/WBE groups and across different sets of contracts. Figure 6-6 describes how Keen Independent calculated disparity indices.

- A disparity index of 100 indicates an exact match between actual utilization and what might be expected based on MBE/WBE availability for a specific set of contracts (often referred to as “parity”).
- A disparity index of less than 100 may indicate a disparity between utilization and availability, and disparities of less than 80 in this report are described as “substantial.”<sup>5</sup>

**Figure 6-6.**  
**Calculation of disparity indices**

The disparity index provides a straightforward way of assessing how closely actual utilization of an MBE/WBE group matches what might be expected based on its availability for a specific set of contracts. With the disparity index, one can directly compare results for one group to that of another group, and across different sets of contracts. Disparity indices are calculated using the following formula:

$$\frac{\% \text{ actual utilization} \times 100}{\% \text{ availability}}$$

For example, if actual utilization of MBEs on a set of ADOT contracts was 2 percent and the availability of MBEs for those contracts was 4 percent, then the disparity index would be 2 percent divided by 4 percent, which would then be multiplied by 100 to equal 50. In this example, MBEs would have actually received 50 cents of every dollar that they might be expected to receive based on their availability for the work.

**Results for minority-owned firms on FHWA- and state-funded contracts.** Minority-owned firms received 5.4 percent of combined FHWA- and state-funded contracts, a result that was below what might be expected from the availability analysis — 9.6 percent. Figure 6-7 shows these results.

---

<sup>5</sup> Some courts deem a disparity index below 80 as being “substantial” and have accepted it as evidence of adverse impacts against MBE/WBEs. For example, see *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.*, \_\_\_ F.3d \_\_\_, 2013 WL 1607239 (9th Cir. April 16, 2013).; *Rothe Development Corp v. U.S. Dept of Defense*, 545 F.3d 1023, 1041; *Eng’g Contractors Ass’n of South Florida, Inc. v. Metropolitan Dade County*, 122 F.3d at 914, 923 (11th Circuit 1997); *Concrete Works of Colo., Inc. v. City and County of Denver*, 36 F.3d 1513, 1524 (10th Cir. 1994). Also see Appendix B for additional discussion.

The resulting disparity index is 56 (5.4% divided by 9.6% times 100), which is a substantial disparity. The disparity occurred even with application of DBE contract goals on some FHWA-funded contracts in recent years.

**Figure 6-7.**  
MBE utilization and availability for FHWA- and state-funded contracts, July 2007-June 2013

Note:

Number of contracts/subcontracts analyzed is 13,506.

Source:

Keen Independent disparity analysis.

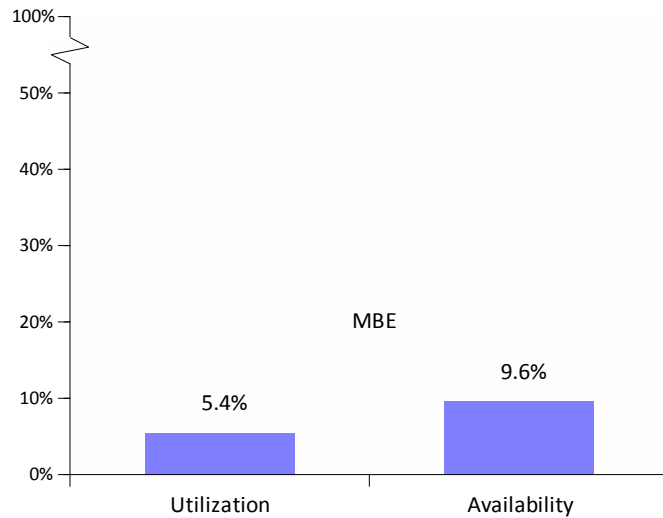


Figure 6-8 shows disparity indices in the range of 34 to 66 for African American-, Asian-Pacific American-, Subcontinent Asian American-, Hispanic American- and Native American-owned firms on FHWA- and state-funded contracts combined. There was no MBE group for which utilization was on par with what might be expected from the availability analysis.

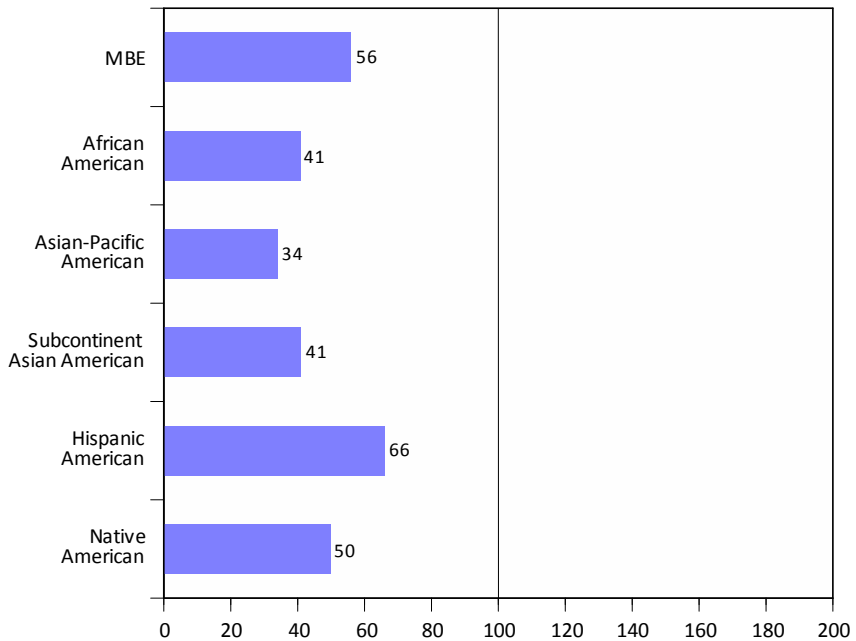
**Figure 6-8.**  
Disparity indices for minority-owned firms, by group, for FHWA- and state-funded contracts, July 2007-June 2013

Note:

Number of contracts/subcontracts analyzed is 13,506.

Source:

Keen Independent disparity analysis.



**Results for white women-owned firms on FHWA- and state-funded contracts.** WBEs received 6.0 percent of combined FHWA- and state-funded contracts when Coffman Specialties is included. This level of utilization exceeds the 4.7 percent utilization that might be expected based on the availability analysis for white women-owned firms in Arizona.

Without Coffman Specialties included as a WBE, white women-owned firms received 4.5 percent of combined FHWA- and state-funded contracts, somewhat below what might be expected from the availability analysis.

The disparity index for white women-owned firms is:

- 128 if Coffman Specialties is included as a WBE; and
- 95 if Coffman Specialties is not included.

Figure 6-9 shows utilization and availability results for white women-owned firms. The portion on the left side of the graph examines results including Coffman Specialties as a WBE and the portion on the right side shows results without including this firm as a WBE. As with the disparity analysis for MBEs, the results in Figure 6-9 are affected by past and current application of race- and gender-conscious programs.

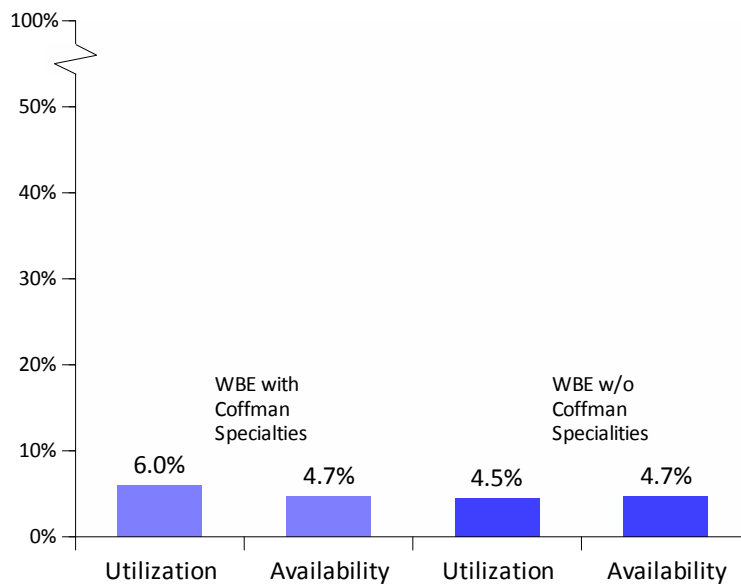
**Figure 6-9.**  
MBE utilization and  
availability for FHWA-  
and state-funded  
contracts,  
July 2007-June 2013

Note:

Number of  
contracts/subcontracts  
analyzed is 13,506.

Source:

Keen Independent disparity  
analysis.



**Results for MBE/WBEs on FAA-funded contracts.** MBEs received 4.6 percent of FAA-funded contracts, less than the 16.8 percent that might be expected based on the availability analysis for these contracts. The disparity index was 27 for MBEs overall. There were substantial disparities for each minority group (disparity index of 49 for Hispanic American-owned firms and 0 for other groups).

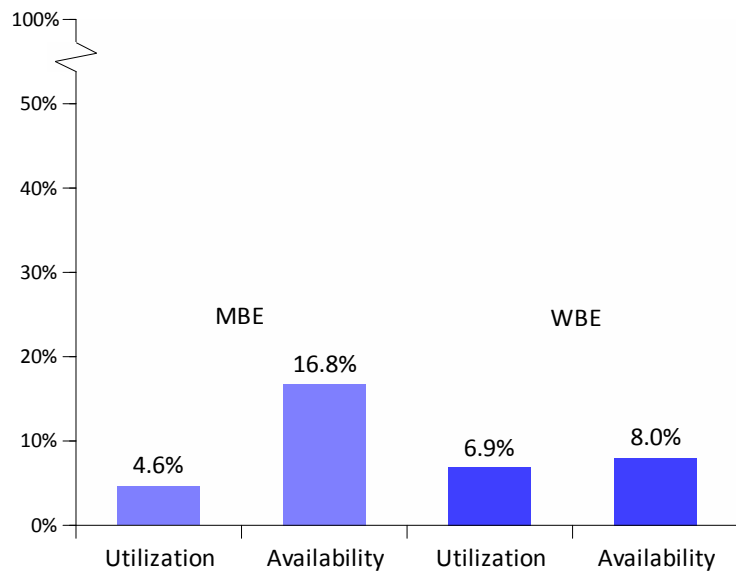
As shown in Figure 6-10, 6.9 percent of FAA-funded contract dollars went to WBEs, less than the 8.0 percent indicated from the availability analysis. This disparity index for WBEs was less than 86.

However, the utilization, availability and disparity analysis for FAA-funded contracts must be viewed with caution as there were only 18 contracts identified during the study period.

**Figure 6-10.**  
MBE and WBE  
utilization and  
availability for FAA-  
funded contracts,  
July 2007-June 2013

Note:  
Number of  
contracts/subcontracts  
analyzed is 18.

Source:  
Keen Independent disparity  
analysis.



**Results for MBE/WBEs on FTA-funded contracts.** Although MBEs received 15.2 percent of FTA-funded contracts, this level of utilization was less than what might be expected based on the availability analysis for MBEs for these contracts (24.7%). The disparity index for MBEs was 62. Utilization exceeded availability for African American-, Asian-Pacific American- and Native American-owned firms. There were disparities for Subcontinent Asian American- and Hispanic American-owned firms.

White women-owned firms received 30.6 percent of contract dollars, higher than the 9.1 percent that might be expected based on the availability analysis for FTA-funded contracts. Figure 6-11 presents overall utilization and availability results for MBEs and WBEs in FTA-funded contracts.

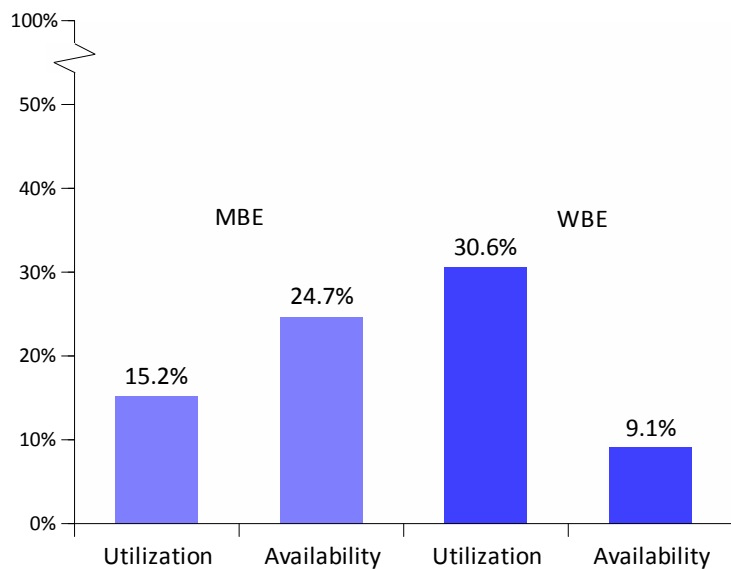
**Figure 6-11.**  
MBE and WBE  
utilization and  
availability for FTA-  
funded contracts,  
July 2007-June 2013

Note:

Number of  
contracts/subcontracts  
analyzed is 139.

Source:

Keen Independent disparity  
analysis.





## E. Statistical Significance of Disparity Analysis Results

Testing for statistical significance relates to testing the degree to which a researcher can reject “random chance” as an explanation for any observed differences. Random chance in data sampling is the factor that researchers consider most in determining the statistical significance of results. However, the study team attempted to contact every firm in the relevant geographic market area identified as possibly doing business within relevant subindustries (as described in Chapter 5), mitigating many of the concerns associated with random chance in data sampling as they may relate to Keen Independent’s availability analysis. The utilization analysis also approaches a “population” of contracts. Therefore, one might consider any disparity identified when comparing overall utilization with availability to be “statistically significant.”

Figure 6-12 explains the high level of statistical confidence in the utilization and availability results. As outlined on the next page, the study team also used a sophisticated statistical simulation tool to further examine statistical significance of disparity results.

**Figure 6-12.**  
Confidence intervals for availability and utilization measures

Keen Independent conducted telephone interviews with more than 5,188 business establishments — a number of completed interviews that is generally considered large enough to be treated as a “population,” not a sample. However, if the results are treated as a sample, the reported 20.2 percent representation of MBEs among all available firms is accurate within about  $\pm 0.8$  percentage points. The level of accuracy for WBEs is similar ( $\pm 0.7$  of the overall figure of 14.8 percent). By comparison, many survey results for proportions reported in the popular press are accurate within  $\pm 5$  percentage points. (Keen Independent applied a 95 percent confidence level and the finite population correction factor when determining these confidence intervals.)

Keen Independent attempted to collect data for all relevant ADOT and LPA Program transportation construction and engineering-related contracts during the study period and no confidence interval calculation applies for the utilization results.

**Monte Carlo analysis.** There were many opportunities in the sets of prime contracts and subcontracts for MBE/WBEs to be awarded work. Some contract elements involved large dollar amounts and others involved only a few thousand dollars.

Monte Carlo analysis was a useful tool for the study team to use for statistical significance testing in the disparity study, because there were many individual chances at winning ADOT and local agency transportation prime contracts and subcontracts during the study period, each with a different payoff. Figure 6-13 describes Keen Independent's use of Monte Carlo analysis.

**Results.** Keen Independent identified a substantial disparity between MBE utilization and availability across FHWA- and state-funded contracts for the July 2007 through June 2013 study period. Therefore, the Monte Carlo simulation focused on these results.

Figure 6-14 presents the results from the Monte Carlo analysis as they relate to the statistical significance of disparity analysis results for MBEs for FHWA- and state-funded contracts combined.

#### Figure 6-13. Monte Carlo analysis

The study team began the Monte Carlo analysis by examining individual contract elements. For each contract element, Keen Independent's availability database provided information on individual businesses that were available for that contract element, based on type of work, contractor role, contract size and location of the work.

The study team assumed that each available firm had an equal chance of "receiving" that contract element. For example, the odds of an MBE receiving that contract element were equal to the number of MBEs available for the contract element divided by the total number of firms available for the work. The Monte Carlo simulation then randomly chose a business from the pool of available businesses to "receive" that contract element.

The Monte Carlo simulation repeated the above process for all other elements in a particular set of contracts. The output of a single Monte Carlo simulation for all contract elements in the set represented simulated utilization of MBEs for that set of contract elements.

The entire Monte Carlo simulation was then repeated 20,000 times. The combined output from all 20,000 simulations represented a probability distribution of the overall utilization of MBEs if contracts were awarded randomly based on the availability of businesses working in the Arizona transportation contracting industry.

The Monte Carlo simulations did not replicate the disparities for MBEs in any of the 20,000 simulation runs. Therefore, one can be confident that chance in contract and subcontract award can be rejected as an explanation for the observed disparity for minority-owned businesses in FHWA- and state-funded contracts.

**Figure 6-14.**  
**Monte Carlo results for MBEs for**  
**FHWA- and state-funded**  
**contracts July 2007-June 2013**

Source:  
 Keen Independent from data on FHWA- and  
 state-funded contracts, July 2007-June  
 2013.

	MBE
Disparity index	56
Number of simulation runs out of 20,000 that replicated observed utilization	0
Probability of observed disparity occurring due to "chance"	<0.1 %
Reject chance in awards of contracts as a cause of disparity for MBEs?	Yes

It is important to note that this test may not be necessary to establish statistical significance of results (see discussion in Figure 6-12 and elsewhere in this Chapter), and it may not be appropriate for very small populations of firms.<sup>6</sup>

---

<sup>6</sup> Even if there were zero utilization of a particular group, Monte Carlo simulation might not reject chance in contract awards as an explanation for that result if there were a small number of firms in that group or a small number of contract elements included in the analysis. Results can also be affected by the size distribution of contract elements.

## **CHAPTER 7.**

### **Further Exploration of MBE/WBE and DBE Utilization on FHWA- and State-funded Contracts**

Building upon the analysis presented in Chapter 6, Keen Independent further examined the utilization of minority- and women-owned firms for different types and locations of ADOT contracts. Chapter 7 also reports participation of DBEs.<sup>1</sup> Results focus on FHWA- and state-funded contracts as the work involved in these two sets of contracts are similar and together they account for 99 percent of the dollars in the disparity study. Unless otherwise specified, results combine ADOT and LPA contracts.

Chapter 7 examines MBE/WBE and DBE utilization on FHWA- and state-funded contracts for different subsets of contracts:

- A. With and without DBE contract goals;
- B. Construction and engineering contracts;
- C. ADOT contracts and LPA contracts;
- D. July 2007-June 2011 and July 2011-June 2013 time periods;
- E. Northern, Central and Southern regions; and
- F. Prime contracts and subcontracts.

Part G builds on the analysis of MBE/WBE and DBE participation on prime contracts to assess whether there are barriers to MBE/WBE participation on ADOT construction contracts. Keen Independent presents analyses of case studies of MBE/WBE bidding on a random sample of contracts.

Part H provides similar information for ADOT engineering-related contracts.

Part I of Chapter 7 analyzes ADOT's operation of the Federal DBE Program for FHWA-funded contracts, including examination of any overconcentration of DBE participation by type of work. The study team also identifies the DBEs during the study period that obtained the most work.

Part J summarizes results, including whether any results from the disparity analysis presented in Chapter 6 vary across the subsets of contracts considered in Chapter 7.

---

<sup>1</sup> Keen Independent calculated DBE participation on ADOT contracts using a somewhat different method than ADOT did in its Uniform Reports. DBE participation reported in this disparity study pertains to utilization of firms certified by DBEs at any point during the study period. ADOT calculates DBE participation for firms certified as DBEs at the time of specific contracts. That is one reason Keen Independent calculations of DBE participation are slightly higher than what is reported for commitments/awards in ADOT's Uniform Reports.

## A. Utilization With and Without DBE Contract Goals

ADOT set DBE contract goals during the last two years of the study period on some FHWA-funded contracts. Other FHWA-funded contracts did not have DBE contract goals.

**DBE participation.** Keen Independent's analysis shows higher DBE utilization on contracts with DBE contract goals than those without contract goals. As shown in Figure 7-1, 8.1 percent of contract dollars went to DBEs when ADOT set a DBE contract goal. Without DBE contract goals, DBE participation was 5.0 percent. ADOT might consider this 5.0 percent participation when projecting the amount of DBE participation it can achieve through neutral means (see Chapter 8).

**MBE/WBE participation.** MBE/WBE participation was about 11 percent on contracts with DBE contract goals and contracts without contract goals.

The primary difference in participation between these two sets of contracts was the amount of MBE/WBE participation that went to firms that were DBE certified and those that were not. About 3 percent of contract dollars went to non-DBE-certified MBE/WBEs on contracts with goals (the difference between the 11.3 participation overall MBE/WBE participation and the 8.1 percent DBE participation). Without DBE contract goals, 6.4 percent of contract dollars went to non-DBE-certified minority- and women-owned firms.

**Figure 7-1.**  
MBE/WBE and DBE share of dollars for  
contracts with and without DBE  
contract goals, July 2007-June 2013

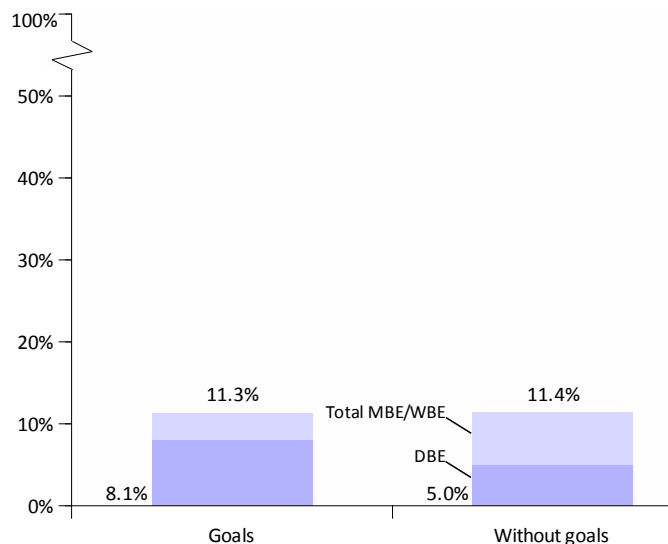
Note:

Dark portion of bar is certified DBE utilization.

Number of contracts/subcontracts analyzed is  
3,763 with DBE contract goals and 9,743 without  
contract goals.

Source:

Keen Independent from data on ADOT and LPA  
FHWA- and state-funded prime contracts and  
subcontracts, July 2007-June 2013.



## B. Construction and Engineering Contracts

Figure 7-2 on the following page presents MBE/WBE participation for construction contracts and engineering contracts. Overall MBE/WBE participation was higher on engineering-related contracts (about 24%) than construction contracts (9.8%). Participation of DBEs was also higher on engineering-related contracts (14%).

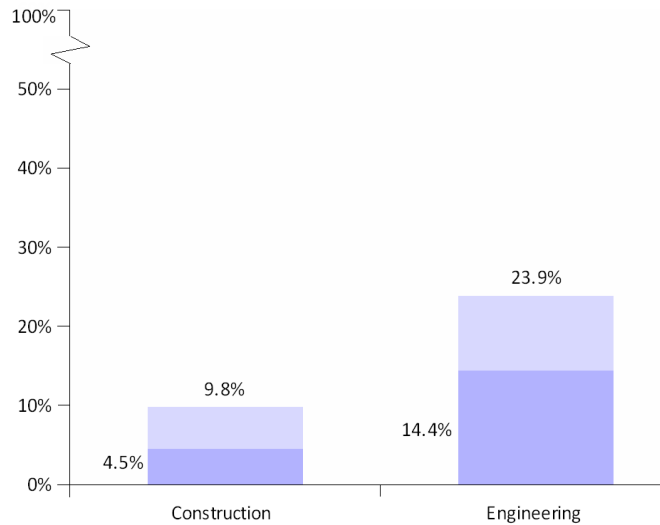
**Figure 7-2.**  
MBE/WBE and DBE share of dollars for  
construction and engineering  
contracts, July 2007-June 2013

**Note:**

Dark portion of bar is certified DBE utilization.  
Number of contracts/subcontracts analyzed is  
11,061 for construction and 2,445 for engineering.

**Source:**

Keen Independent from data on ADOT and LPA  
FHWA- and state-funded prime contracts and  
subcontracts, July 2007-June 2013.



### C. Utilization in ADOT Contracts and Local Public Agency Contracts

Most of the FHWA- and state-funded transportation contracts examined in this disparity study were for ADOT projects (\$4.5 billion out of the \$4.9 billion in contract dollars analyzed). Other contracts totaling \$0.4 billion are for local public agencies (LPAs). Keen Independent researched whether local public agency projects had a similar level of MBE/WBE and DBE participation as ADOT projects. (Note that eight large cities and counties bid and award their own LPA contracts, but ADOT handles LPA contracts on behalf of smaller public agencies.)

As shown in Figure 7-3, DBE participation was 5.7 percent on ADOT contracts, higher than for LPA contracts (4.8%). However, overall MBE/WBE utilization was higher on LPA projects (14.5%) than ADOT projects (11.1%).

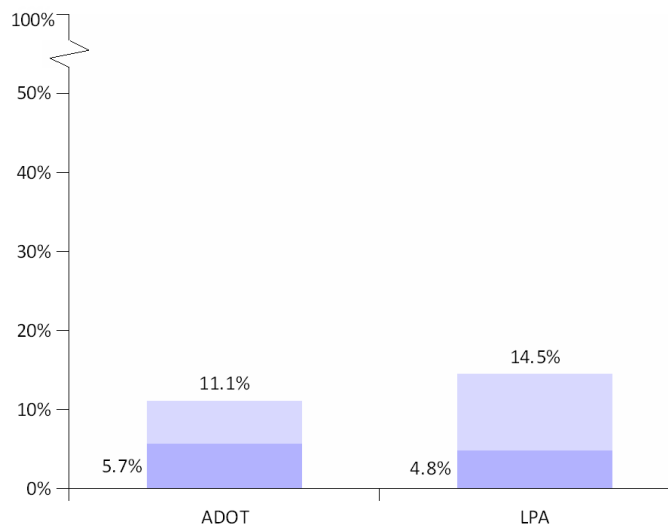
**Figure 7-3.**  
MBE/WBE and DBE share of dollars for  
ADOT and LPA projects, July 2007-June  
2013

**Note:**

Dark portion of bar is certified DBE utilization.  
Number of contracts/subcontracts analyzed is  
12,045 for ADOT contracts and 1,461 for LPA  
contracts.

**Source:**

Keen Independent from data on ADOT and LPA  
FHWA- and state-funded prime contracts and  
subcontracts, July 2007-June 2013.



#### D. Utilization in July 2007-June 2011 and July 2011-June 2013 Time Periods

Keen Independent analyzed whether overall MBE/WBE participation changed between the first four years and the last two years of the study period (when DBE contract goals were reintroduced). As shown in Figure 7-4, there was little difference in MBE/WBE participation for July 2007 through June 2011 compared with July 2011 through June 2013. The percentage DBE participation was higher for July 2011-June 2013 contracts (8.2%) than earlier contracts (4.3%).

**Figure 7-4.**  
MBE/WBE and DBE share of dollars for contracts awarded July 2007-June 2011 and awarded July 2011-June 2013

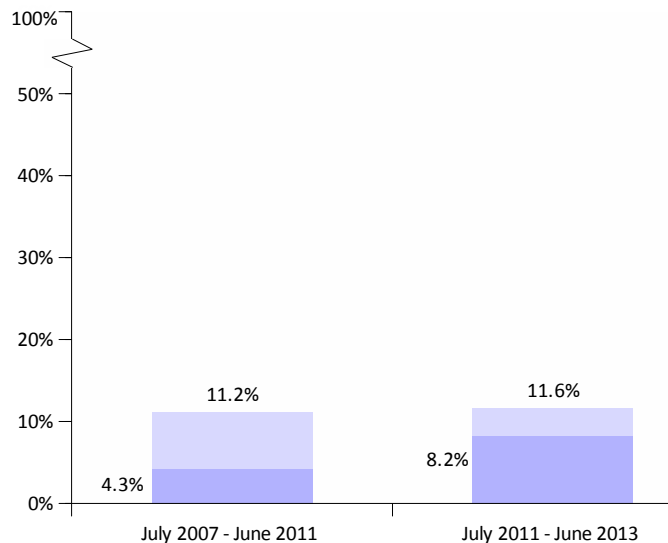
**Note:**

Dark portion of bar is certified DBE utilization.

Number of contracts/subcontracts analyzed is 7,377 for July 2007-June 2011 and 6,129 for July 2011-June 2013.

**Source:**

Keen Independent from data on ADOT and LPA FHWA- and state-funded prime contracts and subcontracts, July 2007-June 2013.



#### E. Utilization in Northern, Central and Southern Regions

Figure 7-5 shows that utilization of minority- and women-owned firms was about the same in Northern and Central Arizona (about 12%) and somewhat higher in Southern Arizona (14.8%). DBE participation ranged from 6.1 percent in Central Arizona to 7.3 percent in Southern Arizona. Total dollars going to MBE/WBEs and DBEs was highest for Central region projects as \$3.0 billion of the \$4.9 billion in contracts was in this region.

**Figure 7-5.**  
MBE/WBE and DBE share of dollars for contracts in Northern, Central and Southern regions

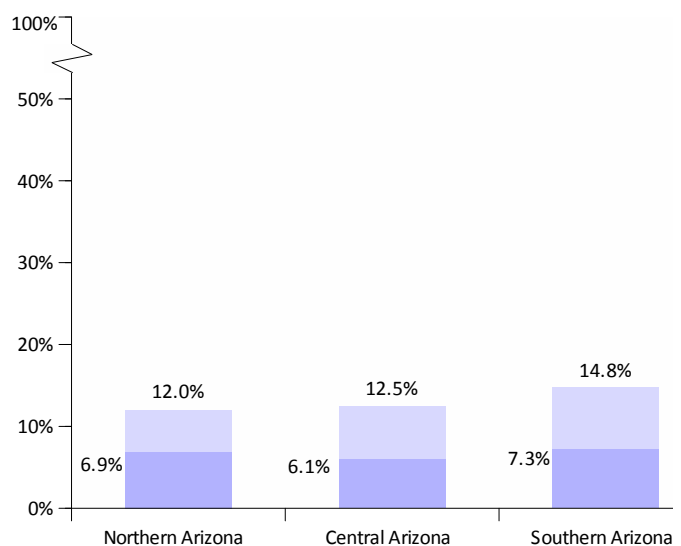
**Note:**

Dark portion of bar is certified DBE utilization.

Number of contracts/subcontracts analyzed is 6,576 for Northern region, 5,651 for Central region and 3,332 for Southern region.

**Source:**

Keen Independent from data on ADOT and LPA FHWA- and state-funded prime contracts and subcontracts, July 2007-June 2013.



## F. Utilization in Prime Contracts and Subcontracts

MBE/WBEs obtained about 22 percent of ADOT subcontract dollars, with DBEs accounting for about two-thirds of this amount (14.6 percentage points). This means that more than three-quarters of subcontract dollars went to majority-owned firms during the study period.

MBE/WBEs received 7 percent of prime contract dollars.<sup>2</sup> Two percent of total prime contract dollars went to DBEs.

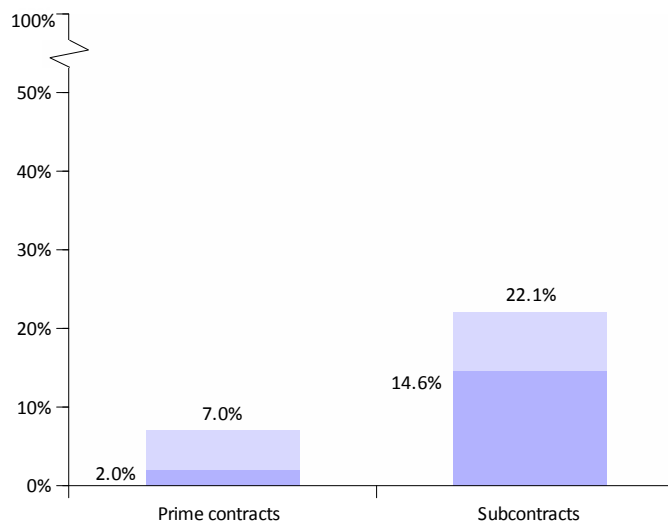
**Figure 7-6.**  
MBE/WBE and DBE share of dollars for  
prime contracts and subcontracts

**Note:**

Dark portion of bar is certified DBE utilization.  
Number of prime contracts analyzed is 1,552.  
Number of subcontracts analyzed is 11,496.

**Source:**

Keen Independent from data on ADOT and LPA  
FHWA- and state-funded prime contracts and  
subcontracts, July 2007-June 2013.



Keen Independent also analyzed MBE/WBE and DBE participation on large and small prime contracts during the July 2007 through June 2013 study period:

- MBE/WBEs received 6.9 percent of prime contract dollars on large contracts (\$100,000 or more); and
- On small contracts, 19.9 percent of prime contract dollars went to minority- and women-owned firms.

## G. Analysis of Potential Barriers to MBE/WBE/DBE Participation in ADOT Construction Contracts

Keen Independent analyzed participation of minority- and women-owned firms as prime contractors on ADOT construction contracts during the July 2007 through June 2013 study period.

### Utilization of MBE/WBEs and DBEs as prime contractors on ADOT construction contracts.

Minority- and women-owned firms won 177 or 12 percent of the 1,452 FHWA- and state-funded construction prime contracts during the study period. Because MBE/WBEs won smaller contracts,

---

<sup>2</sup> The study team analyzed dollars going to prime contractors based on amounts retained by prime contractors after subtracting the value of subcontracts.



on average, MBE/WBEs only received 5.2 percent of construction prime contract dollars, or \$650 million out of \$3.1 billion of the dollars retained by prime contractors (i.e., not subcontracted).

DBEs won 52 construction prime contracts totaling \$25 million during the study period (0.8% of the total dollars).

**ADOT bid process for construction contracts.** ADOT awards construction contracts to low bidders (that are deemed responsive and responsible). It is possible that some aspects of the bidding process present barriers to small business participation as prime contractors, including for MBE/WBEs.

Keen Independent examined ADOT requirements for bidding on its construction contracts, processes for notifying potential bidders of construction contract opportunities, and methods for selecting a prime contractor to perform the work in order to explore this possibility.

**State code.** Arizona Revised Statute Title 34 and Arizona Administrative Code Title 17 govern public construction and services ancillary to that mission, such as consulting. ADOT follows these requirements and other state law pertaining to public works contracts in its contracting practices.

**Bonding.** Bid, payment and performance bonds are required under Arizona state law for public works contracts. Bid bonds are required to be 10 percent of the proposed bid. In-depth interviews with business owners and managers and the results of the availability interviews with Arizona businesses identified bonding as a barrier for minority- and women-owned firms (see Chapter 4 and Appendix J).

**Advertisement of invitations to bid.** Public bidding of ADOT construction contracts is generally required by Arizona state law. Public bidding is advertised in at least one newspaper, at least 14 days prior to the bid's deadline. ADOT also advertises construction contract bid opportunities on its website. Private bid services such as BidExpress may also provide information on ADOT contracts that are available to bid.

It does not appear difficult to learn of ADOT contract opportunities if potential bidders are familiar with ADOT's process for communicating those opportunities. However, when surveyed, MBE/WBEs were much more likely than majority-owned firms to report difficulties learning about ADOT bid opportunities (and local agency bid opportunities).

**Bid process.** Firms seeking to bid on ADOT construction prime contracts follow the process below:

- The firm must be prequalified for ADOT projects, and for a project of the appropriate size;
- The firm must request project and bidding materials from ADOT; and
- The firm must submit a bid, either physically or through ADOT's electronic bidding system.

Prequalification is discussed below.

**Prequalification requirement for construction prime contractors.** Any firm wishing to bid as a prime contractor on an ADOT construction project must first be prequalified. To become prequalified, a firm must submit a prequalification application, which is assessed by a Contractor Prequalification Board comprised of ADOT employees.

The prequalification application requires:

- General information about the firm;
- A financial statement from a public accountant;
- A statement of experience containing details of completed projects; and
- Other information about the company.

Applications for prequalification must be submitted at least 15 calendar days prior to the bid opening date of a project a contractor wishes to bid to allow time for their prequalification application to be reviewed and either approved or denied. Once approved, prequalification is valid for fifteen months from the date of the submitted financial statement.

Should the Contractor Prequalification Board approve a firm's prequalification application, they then set a prequalification limit — the dollar limitation of each contract, based on the Department's estimate of contract value, for which a contractor may submit a proposal to the Department.

Prequalification limits are determined based on:

- The contents and nature of the submitted financial statement;
- The amount of experience the firm has with transportation construction, especially on ADOT projects; and
- Other information in the prequalification application that the Board deems relevant.

It is worth noting that, as set out in Arizona Administrative Code R17-3-202F, firms that have successfully completed a construction contract for ADOT in the past five years may be given a prequalification limit up to twice as high as firms that have not. The past experience factor may perpetuate advantages to firms that have been successful in obtaining ADOT construction contracts in the past.

**Analysis of bids on ADOT construction contracts.** Keen Independent analyzed bid information for a random sample of 66 ADOT construction contracts from July 2007 through June 2013 (see Appendix C for a description of this methodology). In total, 457 bids were submitted for these 66 contracts. MBE/WBEs submitted 54 of the 457 bids:

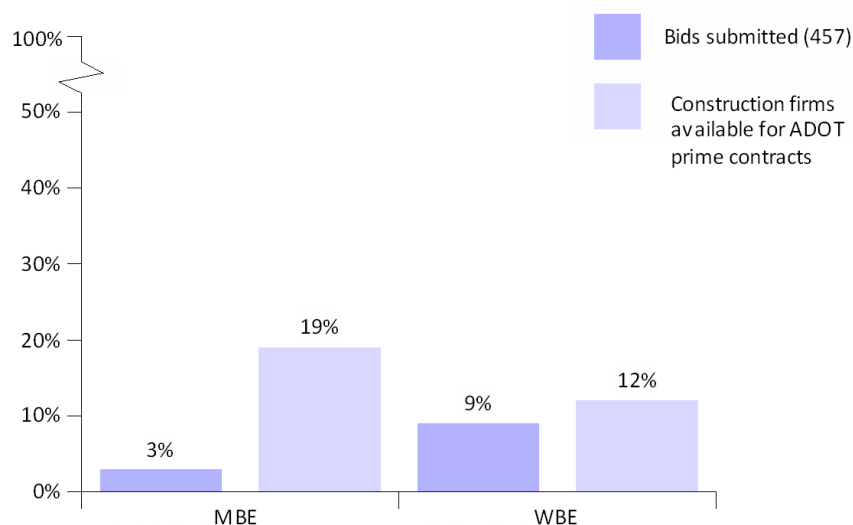
- A total of 12 bids on these prime contracts (3% of all bids) came from minority-owned firms (six different firms); and
- 42 bids (9% of all bids) came from WBEs (14 different firms).

The proportion of bids from MBEs was low compared with the share of firms available for prime construction contracts that were MBEs (19%). Bids from WBEs were more in line with the proportion of available firms that were WBEs (12%).<sup>3</sup>

**Figure 7-7.**  
MBE/WBE bids as a share of total bids submitted on ADOT construction contracts

Note: Based on analysis of 457 bids on 66 contracts randomly sampled with the July 2007-June 2013 study period.

Source: Keen Independent Research from ADOT contract records.



There is also some indication that minority-owned firms that did bid on ADOT construction contracts were less likely to be successful than other firms. As shown in Figure 7-8, 8 percent of the bids submitted by MBEs resulted in contract awards, below the 14 to 15 percent win rate found for WBEs and majority-owned firms bidding on ADOT contracts.

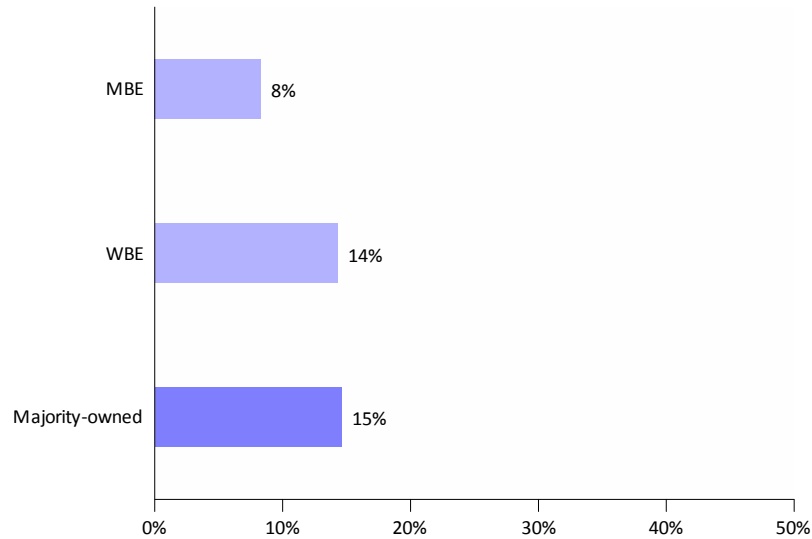
The analysis does not indicate that MBE bids were unfairly treated by ADOT; it may be that MBEs were less price-competitive. However, if this difference in winning percentage persisted for all contracts, not just the sample of 66, it might lead to discouragement of bids from minority-owned firms.

<sup>3</sup> Note that this is based on a count of firms identified in the availability analysis that were available for ADOT construction prime contracts; it is not dollar-weighted.

Figure 7-8.  
Percentage of bids  
that results in  
contract awards  
on ADOT  
construction  
contracts

Note: Can also be  
interpreted as “odds of  
winning” based on  
analysis of 457 bids on  
66 contracts randomly  
sampled within the July  
2007-June 2013 study  
period.

Source: Keen  
Independent Research  
from ADOT contract  
records.



## H. Analysis of Potential Barriers to MBE/WBE/DBE Participation in ADOT Engineering-related Prime Contracts

Keen Independent also explored participation of minority- and women-owned firms in the 558 engineering-related contracts during the study period (FHWA- and state-funded only).

**Utilization of MBE/WBEs and DBEs as prime consultants on ADOT engineering-related contracts.** Minority- and women-owned firms were awarded 106 of the engineering-related prime contracts, or 19 percent of the total number of contracts. About \$85 million in prime contract dollars (after deducting subcontracts) went to MBE/WBEs, 20 percent of total prime contract dollars for engineering-related contracts. This was mostly due to participation of DBEs:

- DBEs won 60 of these prime contracts. DBEs accounted for 10.7 percent of the total prime contract dollars examined (\$45 million of the \$421 million total prime contract dollars for these contracts).
- In fact, engineering prime contract dollars going to DBEs exceeded the construction prime contract dollars awarded to DBEs (\$25 million), even though there was more than seven times more construction prime contract dollars than engineering prime contract dollars in the study period.

ADOT encouraged participation of DBE prime consultants on engineering prime contracts during the study period.

However, it is instructive to note that just 2 percent of engineering-related contract dollars went to white women-owned firms and 18 percent went to minority-owned companies. WBEs did not appear to be as successful as MBEs in obtaining engineering prime contracts. This was largely because of relatively small prime contract amounts for WBEs (\$159,000 in average retained dollars

per prime contract) compared with other firms (\$755,000 in average retained dollars per prime contract).

**ADOT contract award process for engineering-related contracts.** ADOT uses a qualifications-based selection process to award engineering-related contracts. Firms competing for ADOT engineering-related contracts must first be prequalified by ADOT. Only firms seeking to be prime consultants require prequalification. ADOT uses the same advertising process for consultant selection as it does for contractor selection.

**Prequalification.** Compared to ADOT's prequalification of construction contractors, which focuses on the *amount* of work ADOT will allow a contractor to perform at one time, ADOT's consultant prequalification process focuses on the *types* of work it will allow a firm to conduct.

ADOT specifies general classes of work (such as bridge design) that may then have many specific "area classes" for which consultants must seek ADOT prequalification. Each firm applies for ADOT prequalification by specific area class (often for multiple area classes). ADOT considers firm qualifications to perform an area class and may approve a firm for some area classes and not others. Prequalification for consultants typically takes up to ten business days.

The prequalification application is both completed and submitted online using ADOT's electronic Contract Management System (eCMS). The prequalification application requires:

- General information about the firm;
- Information about the specific area classes the firm, and each key member of the firm, are qualified to perform;
- Information about past projects the firm has completed; and
- Other various information.

ADOT begins a new prequalification period every two years, and firms that submit an application during that time will be prequalified for that period. According to ADOT staff, firms' applications are rarely, if ever, entirely rejected.

**Selection process.** Prequalification for engineering-related contracts does not necessarily mean that a firm will receive any ADOT work. Once they are prequalified for specific area classes, firms must learn of and submit qualifications statements for specific ADOT contracts. And, a prime consultant's qualifications can be supplemented by subconsultants participating in a team.

ADOT typically begins the consultant selection process for a specific engineering-related contract by requesting that consultants submit statements of qualification, which are evaluated by a panel within ADOT consisting of at least three people. (Responses to these requests for SOQs are referred to as "proposals" in this report.) Each member of the panel conducts an independent evaluation of each firm and gives each proposal a score based upon their evaluation. The scoring rubric is included in the request for SOQs. Evaluation criteria and total number of points available change from project to project, but the ADOT panel typically evaluates consultants based on the following criteria:

- **Project understanding and approach.** One of the evaluation factors is how successfully, clearly and precisely the consultant expressed an understanding of the nature and scope of work and the major tasks and issues as well as how well they identified any problems they are likely to encounter.
- **Experience and qualifications.** Evaluators consider the experience and qualifications of the proposed consultant team in light of the scope of the project, work classes involved, and ADOT policies.
- **Firm capability.** ADOT reviews the ability of the firm to do the work, including specialized qualifications and the capacity of the consultant team to accomplish the work given current staff workloads.
- **Past performance.** A consultant's performance is regularly evaluated while completing a project for ADOT, and a poor evaluation score on that project may result in up to five points being deducted from their score during the selection process.

Other factors, such as the firm's availability or current workload may also be considered.

Depending on the project, ADOT may deem it necessary to interview submitting firms as well. In this case, ADOT may choose to interview all proposers, or only the highest-ranked ones. If not all proposers are to be interviewed, ADOT typically includes at least the three highest-ranking consultants in the interview process. Each panel member also scores consultants based on their interview.

Once all proposals have been independently scored by all panel members, the panel meets to discuss the scoring. Panel members may at this point adjust their scoring based on the discussion. Scores are then compiled and firms are ranked based on the highest to lowest average score. Firms must score at least 70 percent of the maximum available points in order to be eligible for award of the contract. The firm with the highest average score is awarded the contract. All participants are notified of the award within five business days.

Procedures are in place if consultants wish to protest an award. All firms that submitted a proposal are entitled to review the scores and proposals of the firm(s) selected for the contract.

In accordance with regulations regarding qualifications-based procurement, ADOT negotiates price after the consultant is selected.

**Analysis of proposals on ADOT engineering-related contracts.** Keen Independent analyzed the relative number of proposals submitted by MBEs and WBEs for a random sample of engineering-related contracts during the study period.

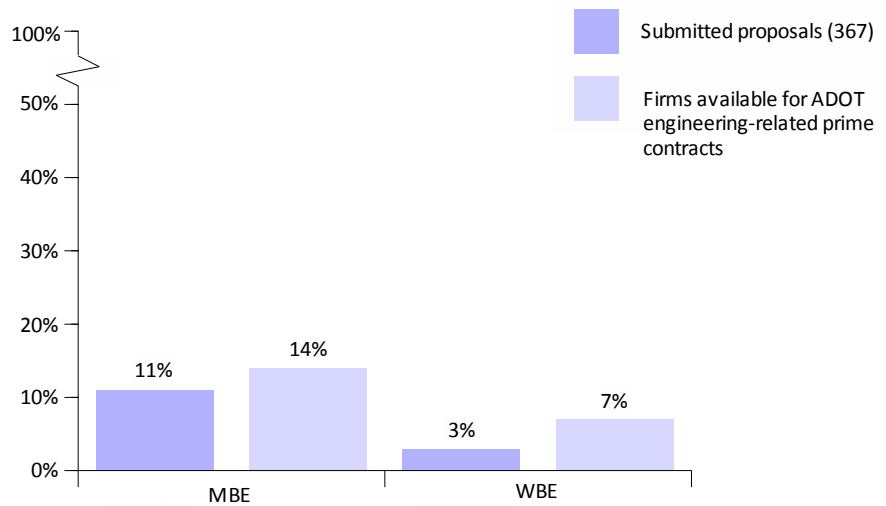
The study team was able to collect and analyze proposal evaluation data for 28 ADOT engineering-related projects for contracts executed during the study period. Of the 367 proposals submitted, 39 (11%) were submitted by MBEs and 12 (3%) were submitted by WBEs.

Based on the availability analysis, 14 percent of companies available for ADOT engineering-related prime contracts were MBEs and 7 percent were WBEs. The relative number of proposals for WBEs appears lower than what might be expected from their relative availability for this work (3% compared with 7%). Figure 7-9 displays these results.

Figure 7-9.  
MBE/WBE  
proposals as a  
share of total  
proposals  
submitted on a  
sample of ADOT  
engineering  
contracts

Note: Based on analysis  
of 367 proposals on 28  
contracts randomly  
sampled within the July  
2007-June 2013 study  
period.

Source: Keen  
Independent Research  
from ADOT contract  
records.



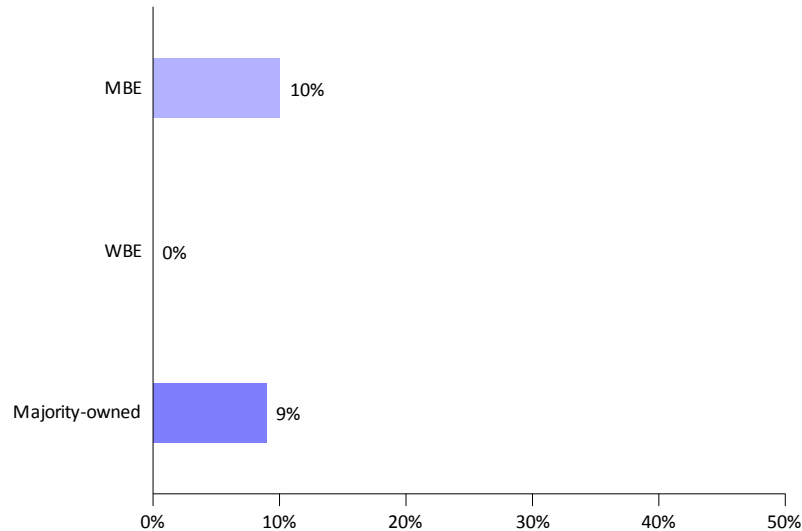
In the 28 randomly-sampled engineering-related contracts, none of the awards went to WBEs. Therefore, the success rate for WBEs was 0 percent, as shown in Figure 7-10. Four of the 39 proposals from MBEs resulted in a contract award (10% success).

Keen Independent examined a small sample of total ADOT engineering-related contracts, and the relatively low number of proposals and zero utilization in this sample was not consistent with the number of engineering-related contracts WBEs won overall (9% of the total).

Figure 7-10.  
Proportion of  
proposals that  
resulted in ADOT  
contract awards

Note: Can also be interpreted as “odds of winning” based on analysis of 367 proposals bids on 28 contracts randomly sampled within the July 2007-June 2013 study period.

Source: Keen Independent Research from ADOT contract records.



## I. ADOT Operation of the Federal DBE Program, including Overconcentration Analysis

This part of Chapter 7 examines:

- ADOT’s operation of the DBE contract goals program;
- Any overconcentration of DBEs;
- Participation of individual DBEs in ADOT contracts;
- DBE participation as prime contractors; and
- Race- and gender-neutral efforts.

**DBE contract goals program.** The Federal DBE Program provides for recipients of FHWA, FAA and FTA funds to set an overall goal for DBE participation and use DBE contract goals to meet any portion of their overall goal they do not project being able to meet using race-neutral means.<sup>4</sup> However, federal regulations direct those operating the program to reduce or eliminate the use of contract goals to ensure that they do not result in exceeding the overall goal.<sup>5</sup>

Because of the *Western States Paving* court decision in 2005 and subsequent guidance from USDOT, ADOT did not set DBE contract goals from January 2006 through fall 2010 (see Chapter 2 for further explanation). Since that time ADOT has set DBE contract goals for some of its FHWA-funded construction and engineering-related contracts, but not its FAA- and FTA-funded contracts. Keen Independent briefly reviews ADOT’s application of DBE contract goals here.

<sup>4</sup> 49 CFR Section 26.51(d).

<sup>5</sup> 49 CFR Section 26.51(f)(2). And, if an agency exceeds its overall goal in two consecutive years through the use of contract goals, it must reduce its use of contract goals proportionately in the following year (see 49 CFR Section 26.51(f)(4)).



**Federal regulations governing use of DBE contract goals.** The Federal DBE Program outlines proper use of DBE contract goals, including:

- Only setting DBE contract goals on USDOT-funded contracts that have subcontracting possibilities;<sup>6</sup>
- Not having to set a DBE contract goal on every USDOT-funded contract;<sup>7</sup>
- The fact a DBE goal for a specific contract is set separately from the overall DBE goal, and that it may be higher or lower than the overall goal depending on factors such as the type of work involved, the location of the work and the availability of DBEs for the work of the particular contract;<sup>8</sup> and
- That the DBE contract goal should not be divided into subgoals for specific DBE groups.<sup>9</sup>

Bidders or proposers comply with a DBE contract goal by making good faith efforts to meet it. A bidder or proposer can show this in one of two ways:

- By showing it has obtained enough DBE participation to meet the contract goal; or
- Documenting that it made adequate good faith efforts to meet the goal, even though it did not succeed in doing so.<sup>10</sup>

Federal regulations allow for an agency to require such information at time of bid or proposal or up to seven days after bid opening (to be reduced to five days beginning January 1, 2017).<sup>11</sup> The regulations provide for some flexibility for what a proposer needs to provide under negotiated procurements such as design-build contracts.<sup>12</sup> Regulations also establish procedures for calculating the value of the DBE participation for specific types of subcontractors and suppliers.<sup>13</sup> For example, only if a DBE performs a “commercially useful function” can it be counted toward the goal.

---

<sup>6</sup> 49 CFR Section 26.51(e)(1).

<sup>7</sup> 49 CFR Section 26.51(e)(2).

<sup>8</sup> Ibid.

<sup>9</sup> 49 CFR Section 26.51(e)(4).

<sup>10</sup> 49 CFR Section 26.53(a).

<sup>11</sup> 49 CFR Section 26.53(b)(3)(i).

<sup>12</sup> 49 CFR Section 26.53(b)(3)(ii).

<sup>13</sup> 49 CFR Section 26.55.

If the agency determines that a bidder or proposer did not make good faith efforts to meet the contract goal, it must provide that bidder or proposer an opportunity for administrative reconsideration.<sup>14</sup>

Once the prime contractor has identified a DBE subcontractor to meet a contract goal, it may not terminate that DBE or substitute another DBE without the agency's prior consent. An agency may only give such consent if there is good cause for terminating the listed DBE (federal regulations provide direction on what constitutes "good cause").<sup>15</sup>

**ADOT operation of DBE contract goals program.** ADOT uses DBE contract goals for FHWA-funded contracts in compliance with the federal regulations in 49 CFR Part 26. Key features include the following.

- ADOT sets DBE contract goals on a contract-by-contract basis. It sometimes sets goals higher than its overall DBE goal for FHWA-funded contracts and sometimes sets goals lower than its overall goal. On some contracts, it does not set a DBE contract goal.<sup>16</sup> ADOT does not divide a DBE contract goal by DBE group, in accordance with federal regulations.
- ADOT has recently adopted a new goal-setting methodology that considers the types of work involved in a contract, location of the contract, size of the contract, availability of DBEs for specific types of work and other factors (encompassing each of the factors listed in federal regulations concerning setting DBE contract goals<sup>17</sup>). It only considers currently-certified DBEs when establishing a DBE contract goal. As an example of "other factors," ADOT can reduce a contract goal for pavement preservation projects or other types of contracts where it is more difficult to obtain DBE participation. At the time of this report, ADOT included eight areas of special adjustments that it considered on each contract.

ADOT's Business Engagement and Compliance Office (BECO) is responsible for proposing an initial DBE contract goal through the quantitative and qualitative factors described above (using a committee structure). BECO then submits the goal to the contracting department, which can request reconsideration of a DBE contract goal if necessary. (This process is also applied for local agency contracts using FHWA funds.) ADOT developed this approach and factors it considers in goal-setting through consultation with DBEs, large prime contractors and others.

---

<sup>14</sup> 49 CFR Section 26.53(d).

<sup>15</sup> 49 CFR Section 26.53(f)(1).

<sup>16</sup> Based on discussions with ADOT staff and review of ADOT goal-setting procedures.

<sup>17</sup> 49 CFR Section 26.53(e)(2).

- ADOT has a process for considering good faith efforts submissions from any bidder or proposer that is unable to meet the DBE contract goal. In the past two years, bidders on construction contracts almost always meet the DBE contract goal; they very rarely attempt to comply with the program by showing good faith efforts to meet a goal that they were unable to meet. According to ADOT staff, this has occurred only twice in the past two years, with the same prime contractor.
  - ADOT found the good faith efforts lacking in the first instance as the contractor did not supply sufficient documentation.
  - In the second instance, it appeared to ADOT staff that the bidder used the lack of response to good faith efforts requirements to get out of a bid for which it was the apparent low bidder without having its bid bond used.<sup>18</sup>
- For engineering on-call contracts, ADOT informs proposers on these contracts of an overall DBE goal for the contract and that they will be required to meet it or make good faith efforts to do so as they perform specific task orders under the contract. Since prime consultants do not know the exact scope of work for task orders they will receive when they are awarded a contract, they can augment their teams of subconsultants to meet a DBE goal for a task order. ADOT staff report that prime consultants more frequently indicate they cannot meet a DBE goal on a task order even though they made good faith efforts to do so (estimated to be about 10 percent of the time by BECO staff). ADOT BECO staff reported that they rarely deny those submissions of good faith efforts. When they do, ADOT works with a prime consultant to comply with the DBE goal for the task order. BECO staff indicated that no prime consultant lost a task order because it did not comply with the DBE contract goals program.
- In sum, it appears that ADOT has procedures in place to effectively set DBE contract goals and consider bidders' and proposers' good faith efforts to meet those goals. Based on interviews with staff, it appears that only one contract was lost due to non-compliance with the program assuming that the other contract was because the bidder chose not to follow through on its requirement to show documentation of good faith efforts.

Keen Independent also examined local public agency compliance with the DBE contract goals program. ADOT staff reported that there was some confusion by local public agencies that the agency itself was responsible for meeting a DBE goal for a specific LPA contract. (This is not the case, as the bidder or proposer is responsible to comply with the DBE contract goal on a contract.)

ADOT staff also indicated that a few local public agencies attempt to circumvent the program by underreporting subcontracting opportunities in DBE goal assessment requests.

---

<sup>18</sup> Based on communications with ADOT BECO staff.

**Results of the DBE contract goals program.** Using a methodology that counts toward DBE participation any firm certified as a DBE during the study period (which includes some recently-graduated firms), Keen Independent determined that \$81.7 million in contract dollars were awarded to DBEs on FHWA-funded contracts for which DBE contract goals were applied. This was comprised of 667 subcontracts to DBEs totaling \$79 million and 16 prime contracts for \$3 million. There was a total of \$1.0 billion in FHWA-funded contracts for which DBE contract goals applied.

- Overall participation of DBEs was 8.1 percent on contracts with DBE contract goals, as shown in the bottom portion of Figure 7-11. DBE participation on contracts without goals was 5.0 percent.
- DBEs received 21 percent of the subcontract dollars and 0.4 percent of the prime contract dollars on contracts with DBE contract goals. By comparison, DBEs received 12 percent of the subcontract dollars and 2.4 percent of the prime contract dollars on FHWA- and state-funded contracts without DBE contract goals.
- These results indicate that DBE contract goals affect subcontractor participation and may have no direct positive effect on DBE participation as prime contractors.

Figure 7-11.  
MBE/WBE and DBE utilization for ADOT contracts with and without DBE contract goals,  
July 2007-June 2013

	FHWA-funded contract with goals			FHWA- and state-funded contracts w/o goals		
	Number of prime and subcontracts	\$1,000s	Percent of dollars	Number of prime and subcontracts	\$1,000s	Percent of dollars
<b>MBE/WBEs</b>						
African American-owned	29	\$ 1,052	0.1 %	45	\$ 18,881	0.5 %
Asian-Pacific American-owned	19	381	0.0	22	5,263	0.1
Subcontinent Asian American-owned	59	2,717	0.3	99	16,128	0.4
Hispanic American-owned	398	26,210	2.6	786	135,113	3.5
Native American-owned	78	33,726	3.4	97	24,725	0.6
WBE (white women-owned)	640	49,102	4.9	1,504	243,569	6.2
<b>Total MBE/WBE</b>	<b>1,223</b>	<b>\$ 113,188</b>	<b>11.3 %</b>	<b>2,553</b>	<b>\$ 443,679</b>	<b>11.4 %</b>
Majority-owned	2,540	891,450	92.1	7,190	3,462,354	88.6
<b>Total</b>	<b>3,763</b>	<b>\$ 1,004,638</b>	<b>100.0 %</b>	<b>9,743</b>	<b>\$ 3,906,033</b>	<b>100.0 %</b>
<b>DBEs</b>						
African American-owned	19	\$ 802	0.1 %	14	\$ 720	0.0 %
Asian-Pacific American-owned	1	34	0.0	9	4,679	0.1
Subcontinent Asian American-owned	48	2,550	0.3	90	15,952	0.4
Hispanic American-owned	244	20,547	2.0	477	82,308	2.1
Native American-owned	61	33,592	3.3	80	21,003	0.5
WBE (white women-owned)	310	24,213	2.4	518	69,480	1.8
White male-owned DBE	0	0	0.0	0	0	0.0
<b>Total DBE</b>	<b>683</b>	<b>\$ 81,739</b>	<b>8.1 %</b>	<b>1,188</b>	<b>\$ 194,143</b>	<b>5.0 %</b>
Non-DBE	3,080	922,899	91.9	8,555	3,711,890	95.0
<b>Total</b>	<b>3,763</b>	<b>\$ 1,004,638</b>	<b>100.0 %</b>	<b>9,743</b>	<b>\$ 3,906,033</b>	<b>100.0 %</b>

Note: Numbers rounded to nearest tenth of 1 percent. Numbers may not add to totals due to rounding.

Source: Keen Independent from data on ADOT and LPA Program contracts July 2007-June 2013.

Most of the DBE participation on contracts with goals was distributed across Hispanic American-, Native American- and white women-owned firms. These three groups accounted for all but 0.4 percentage points of the 8.1 percent utilization of DBEs on these contracts.

Another way to examine the impact of DBE contract goals is to compare the dollars going to MBE/WBE with dollars to DBEs on those contracts. Results presented in Figure 7-11 indicate that most of the participation of African American-, Subcontinent Asian American-, Hispanic American- and Native American-owned firms on contracts with goals was from DBEs. Although more dollars on goals contracts went to white women-owned firms than other groups, less than one-half of those dollars were to DBE-certified firms.

Although DBE participation was relatively less on contracts without DBE contract goals (5.0% versus 8.1%), the overall participation of MBE/WBEs (11.4%) was similar to goals contracts due to relatively high participation of non-DBE-certified white women-owned firms. Much of this participation was one WBE: Coffman Specialties.

**Effect of DBE contract goals for construction and engineering-related contracts.** Keen Independent analyzed contracts with goals and without goals for construction contracts and engineering-related contracts (only FHWA- and state-funded contracts). For both sets of contracts, DBE participation was higher with contract goals than without goals:

- For construction contracts, 7.8 percent of contract dollars went to DBEs on construction contracts with goals compared with 3.6 percent without goals. Overall MBE/WBE participation was higher on construction contracts with goals (10.9%) than contracts without goals (9.5%).
- For engineering-related contracts, DBEs received 17.3 percent of dollars on goals contracts and 12.2 percent of dollars on non-goals contracts. As with construction contracts, overall participation of MBE/WBEs was higher on engineering-related contracts with DBE contract goals (21.4%) than contracts without goals (20.1%).

**Procurement contracts.** ADOT also has contracts with FHWA funding that go through the Procurement Office. ADOT staff reported difficulty identifying these Procurement Office contracts for application of DBE contract goals, as appropriate, as well as issues tracking DBE participation on these contracts for inclusion in Uniform Reports.

Keen Independent was not able to identify solutions for these difficulties in the course of this disparity study, but it warrants further ADOT attention in the future. Compliance with federal regulations for contracts with USDOT funds is required across contracting departments.

**Analysis of any overconcentration of DBEs.** The Federal DBE Program requires agencies implementing the program to take certain steps if they determine that “DBE firms are so overconcentrated in a certain type of work as to unduly burden the opportunity of non-DBE firms to participate in this type of work” (see 49 CFR Section 26.33(a)). The Federal DBE Program does not specifically define “overconcentration.”

Keen Independent examined the representation of DBEs and work going to DBEs in three ways:

- Share of ADOT contract dollars within a type of work going to DBEs;
- Distribution of DBE dollars by work type; and
- Representation of DBEs among all firms available for specific types of contracts and subcontracts.

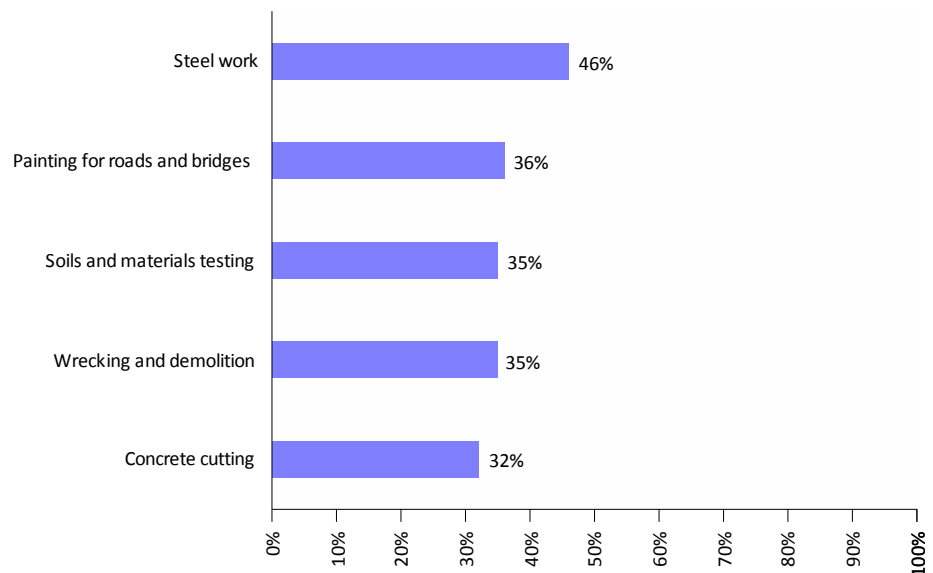
**Share of ADOT contract dollars within a type of work going to DBEs.** For each specific type of work examined in the study, the study team calculated the share of dollars going to firms certified as DBEs at any time during the study period. Figure 7-12 shows that DBEs accounted for more than 30 percent of the total work in five types of work. Steel work shows the highest percentage of DBE participation (46%) due to dollars received by Paradise Rebar. This firm has since graduated from the DBE Program, which may remove any concern that DBEs would account for a major portion of this work in the future.

For other state DOTs, trucking, traffic control, landscaping and surveying are areas that might have a relatively high share of work going to DBEs. Within the study period, only 16 percent of trucking dollars and 17 percent of surveying dollars went to DBEs. DBEs' share of landscaping was 12 percent and just 3 percent of traffic control dollars went to DBEs.

**Figure 7-12.**  
DBE share of total  
contract dollars on  
FHWA-, state-, FAA-  
and FTA-funded  
contracts, July 2007-  
June 2013

Note: Number of prime  
contracts/subcontracts  
analyzed is 13,667.

Source: Keen Independent  
Research from ADOT  
contract records.



**Distribution of DBE contract dollars across types of work.** Another way to examine potential overconcentration of DBEs is whether DBE participation is only found in certain types of work. That might be another indicator that DBE contract goals overly burden non-DBEs in those subindustries.

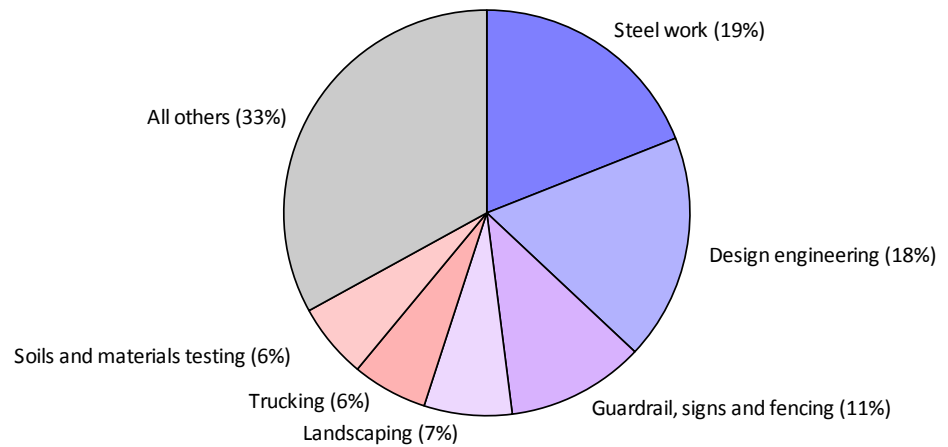
In the study period, steel work accounted for 19 percent of DBE participation, design engineering was 18 percent of DBE dollars and guardrail, signs and fencing work was 11 percent of dollars going to DBEs. Twenty other types of work individually represented between 1 and 7 percent of DBE

dollars, indicating broad participation of DBEs across types of work. This minimizes the possibility that any particular type of non-DBE is unduly burdened by the DBE contract goals program. Figure 7-13 presents these results.

**Figure 7-13.**  
DBE share of total contract dollars on FHWA-, state-, FAA- and FTA-funded contracts, July 2007-June 2013

Note: Number of prime contracts/subcontracts analyzed is 13,667.

Source: Keen Independent Research from ADOT contract records.



#### Representation of DBEs among firms available for particular types of contracts or subcontracts.

Finally, Keen Independent analyzed whether DBEs accounted for a dominant share of firms available for particular types, sizes or locations of ADOT prime contracts and subcontracts. The study team performed this analysis by:

- Determining the number of DBEs and total firms available for each prime contract and subcontract examined in the study.
- Divided the number of DBEs by total firms for each contract and subcontract to calculate the percentage of available firms for each contract that were DBEs (i.e., DBE representation = number of available DBEs ÷ total number of available firms).

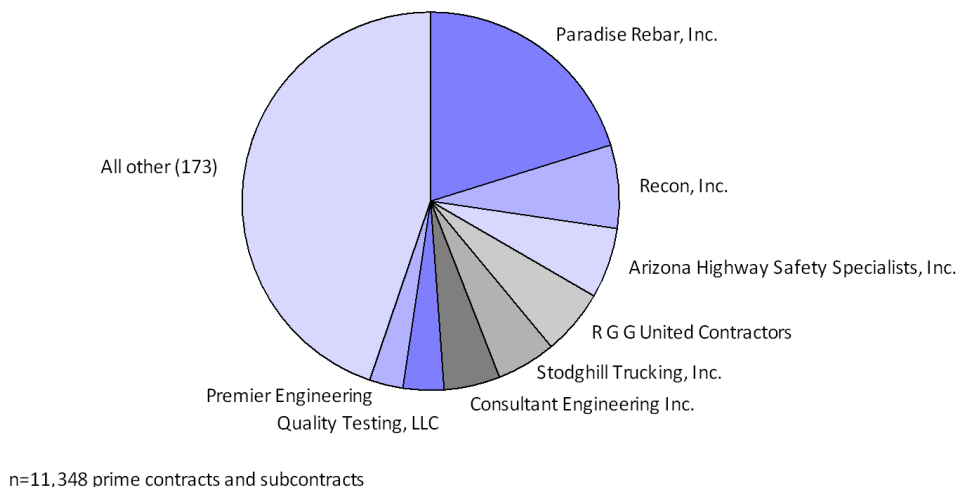
There were a few types of contracts for which DBEs represented 20 percent of the firms in the availability database matching that work, location and contract size, but none where worktype could be identified where DBEs were more than 20 percent of available firms. Based on firms in the availability analysis for this disparity study, DBEs did not constitute a dominant portion of firms available for any type of ADOT work.

**Participation of individual DBEs in ADOT contracts.** Eight DBEs accounted for more than one-half of the total FHWA-funded contract dollars going to DBEs during the study period. Most of these eight DBEs have either since graduated from the Program or have had their certification applications denied by ADOT. This shows that, in Arizona, firms benefiting the most from the Federal DBE Program do move out of the Program.

**Figure 7-14.**  
DBEs accounting for  
the most dollars of  
FHWA-funded  
contracts, July 2007  
– June 2013

Note: Number of prime  
contracts/subcontracts  
analyzed is 11,348.

Source: Keen Independent  
Research from ADOT  
contract records.



**DBE participation as prime contractors.** As noted earlier in Chapter 7, relatively little of prime contract dollars on FHWA-funded contracts went to DBE primes.

Keen Independent examined the 66 FHWA-funded prime contracts that went to DBE prime contractors. Three firms — Recon, Inc., Consultant Engineering Inc. and Premier Engineering Corp — accounted for more than two-thirds of these contract dollars. There were 26 other DBEs that won as prime contractors for FHWA-funded contracts, but in total accounted for relatively small dollars of those contracts.

**Race- and gender-neutral efforts.** Race- and gender-neutral programs are a major component of the Federal DBE Program. Federal regulations in 49 CFR Section 26.51(b) provide examples of race-neutral means of facilitating DBE participation, which we summarize below:

1. Arranging solicitations, times for the presentation of bids, quantities, specifications and delivery schedules in ways that facilitate participation by DBEs and other small businesses;
2. Providing assistance in overcoming limitations such as inability to obtain bonding or financing;
3. Providing technical assistance and other services;
4. Carrying out information and communications programs on contracting procedures and specific contract opportunities;



5. Implementing a supportive services program to develop and improve immediate and long-term business management, recordkeeping, and financial and accounting capability for DBEs and other small businesses;
6. Providing services to help DBEs, and other small business, improve long-term development, increase opportunities to participate in a variety of kinds of work, handle increasingly significant projects, and achieve eventual self-sufficiency;
7. Establishing a program to assist new, start-up firms, particularly in fields in which DBE participation has historically been low;
8. Ensuring distribution of a DBE directory; and
9. Assisting DBEs, and other small businesses, to develop their capability to utilize emerging technology and conduct business through electronic media.

In addition, agencies such as ADOT must have prompt payment mechanisms (requiring prime contractor payment of subcontractors within 30 days from receipt of each payment made to the prime contractor).<sup>19</sup>

Agencies must also have a program element that fosters competition by small business concerns, taking steps such as eliminating unnecessary bundling of contract requirements.<sup>20</sup> Other small business program elements can be:

- Establishing a small business set-aside for prime contracts;
- Requiring bidders on multi-year design-build contractors or other large contracts to specify elements of the contract that are of a size that small businesses, including DBEs, can reasonably perform;
- On projects not having DBE contract goals requiring prime contractors to provide subcontracting opportunities of a size that small businesses, including DBEs, can reasonably perform, rather than self-performing all the work;
- Identifying alternative acquisition strategies and structuring procurements to facilitate the ability of consortia or joint ventures consisting of small businesses, including DBEs to compete for and perform prime contracts; and
- Ensuring that a reasonable number of prime contracts are of a size that small businesses, including DBEs, can reasonably perform.

In addition, the Federal DBE Program provides guidance on establishing a mentor-protégé program to further the development of DBEs.<sup>21</sup>

---

<sup>19</sup> 49 CFR Section 26.29.

<sup>20</sup> 49 CFR Section 26.39.

<sup>21</sup> Appendix D to 49 CFR Part 26 – Mentor-Protégé Program Guidelines.

The study team's review of ADOT neutral initiatives identified efforts across each of these areas. In addition, other groups in Arizona provide assistance that ADOT can leverage for DBE and other small business contractors and consultants.

**1. Bid notification and bidding/proposal process to encourage participation of DBEs and other small business.** ADOT has made substantial efforts to improve the flow of information of any firm interested in potential prime contracts and subcontracts.

- By visiting ADOT's website, firms interested in working as prime contractors or subcontractors on ADOT construction contracts can obtain:
  - Information about currently available construction projects;
  - Information about future projects;
  - Lists of companies that are plan holders for contracts out for bid (especially useful for subcontractors and suppliers); and
  - Lists of firms that are prequalified with ADOT (also useful to subcontractors and suppliers).
- Companies can also receive email notifications about current projects. Having an account at BidExpress allows companies to receive emails about current and upcoming project that may interest them. (Note that BidExpress is not a free service — it includes both a one-time fee for creating an account and a monthly fee to continue using their service to develop your bid and submit it online.)
- ADOT operates the AZ UTRACS web portal for online Bidder's List/Vendor Registration, DBE certification and Annual Update, Small Business Concern Registration, DBE/SBC and Vendor Directories and online DBE compliance.
- ADOT provides construction plans and specifications to DBEs at the BECO office in Phoenix.
- Businesses interested in engineering and other professional services contracts can also obtain information from the ADOT website. ADOT also provides a list of prequalified consultants (again, helpful to potential subconsultants).
- Goods and services vendors can register with ProcureAZ, the State of Arizona's online procurement portal. After vendors identify the types of goods and services they provide, they are automatically notified of bid opportunities.
- ADOT issues bi-weekly e-newsletters on DBE news and events, ADOT contract opportunities and other topics.
- Its DBE/SBC News website/blog features ADOT and statewide bidding, training and teaming opportunities.
- ADOT encourages online bidding across its contracting and procurement. This can also make it easier for small businesses to easily submit bids and proposals.

- To communicate bid opportunities on LPA contracts, ADOT maintains links to procurement websites to cities and counties across Arizona.
- ADOT maintains an email and outreach service for prime consultants and contractors looking for DBEs to work on their projects.
- Department staff participate in procurement fairs and similar events throughout the state.
- ADOT holds regular meetings with the construction and professional services industries, and has created the Professional Services DBE Task Force and the Construction DBE Task Force.
- ADOT's DBE Program staff trains internal staff, consultants, constructors and local public agency staff on DBE recruitment, utilization and compliance. ADOT also maintains a complaint process related to DBE issues.

## **2. Providing assistance in overcoming limitations such as inability to obtain bonding or financing.**

ADOT provides workshops and other training for DBEs and other small businesses regarding bonding and financing. For example:

- ADOT has held bonding workshops in coordination with USDOT. Some DBEs have successfully obtained bonding through this effort.
- ADOT also has regular webinars and in-person training opportunities covering topics such as finance, bidding, marketing and operations (some of which are held in conjunction with AGC).
- ADOT holds joint meetings and training sessions with the Arizona Chapter of the Associated General Contractors of America (AGC) and with the American Council of Engineering Companies of Arizona (ACEC).
- The DBE/SBC News website/blog includes discussion of financing opportunities.

ADOT small business and DBE training provides information about opportunities to receive financing assistance through other organizations. A major component of this assistance is U.S. Small Business Administration loan programs offered through local banks and other private and not-for-profit organizations.

- For example, the Business Development Finance Corporation has locations in Phoenix and Tucson. Chicanos Por La Causa, Inc. in Phoenix offers small business financing (including SBA microloans of \$2,000 to \$5,000) and technical support.
- The PPEP Microbusiness and Housing Development Corporation provides loans between \$500 and \$75,000 to small business owners located in Southern Arizona.

- There are many other organizations throughout the state that assist minority- and women-owned firms and other small businesses that need training regarding financing or offer SBA loan programs.

**3. Providing technical assistance and other services.** ADOT has a well-developed technical assistance program and can provide referrals to other local organizations. Examples of other local sources of assistance include the following.

- **Chambers of commerce.** There are more than 70 chambers of commerce in the state, including minority and women's business organizations, that offer training and networking opportunities. There are membership organizations focusing on businesses owned by American Indians, Chinese Americans, Korean Americans, Philippine Americans, Hispanic Americans and African Americans.
- **Trade associations and professional groups.** There are many trade associations and professional groups related to transportation-related construction and professional services in Arizona. Organizations such as the Arizona Chapter of the Associated General Contractors of America (AGC) serve a broad range of firms engaged in transportation construction and other heavy construction. The American Council of Engineering Companies of Arizona (ACEC) is one example of a trade association serving engineering companies in the state. There are associations of minority contractors with Arizona chapters (e.g., Associated Minority Contractors of America) and associations of women business owners with Arizona locations (e.g., National Association of Women Business Owners). There are also local organizations such as the Minority and Small Business Alliance of Southern Arizona.

These types of organizations offer a broad range of training, other technical assistance and networking opportunities to transportation-related construction and engineering companies in Arizona. Groups such as AGC and ACEC have partnered with ADOT to provide targeted training and networking opportunities to DBEs. The groups mentioned above are just examples of trade associations and professional groups in the state; there are many more.

- **Small business assistance organizations.** Examples of small business assistance organizations are provided below.
  - There are 26 centers across the state in the Arizona Small Business Development Center Network. These centers provide business counseling, planning assistance, help concerning financing, classes and assistance bidding on government contracts.
  - SCORE has offices in communities throughout Arizona where it offers mentoring, business counseling, and workshops on topics including the basics of starting a business, how to administer and manage a business, marketing and social media, and business related computer skills and tools.

- Serving businesses in Southern Arizona, the PPEP Microbusiness and Housing Development Corporation offers training on topics such as management, pricing, market analysis, financial statements, marketing and social media, budgeting, legal services, and long-term planning.

Some business development centers focus on minority-owned companies. Examples include:

- The Minority Business Development Center in Phoenix provides minority certification assistance, procurement training, bonding assistance, management and organization consulting, access to capital, and marketing, bidding and networking assistance through partnership with the U.S. Department of Commerce.
- The National Center for American Indian Enterprise Development (NCAIED) has a Procurement Technical Assistance Center in Window Rock. It offers training, planning assistance, mentoring and technical assistance regarding marketing to all levels of government and to prime contractors. (NCAIED's national headquarters are in Mesa.)
- **Small business incubators.** Business incubators offer workspace for emerging businesses but also training, mentoring, networking and financing assistance. Examples of business incubators in Arizona include:
  - Arizona State University SkySong in Scottsdale;
  - Gangplank Business Initiatives centers in Chandler and Avondale;
  - The Northern Arizona Center for Entrepreneurship and Technology in Flagstaff; and
  - The Opportunity through Entrepreneurship Foundation center in Phoenix.

**4. Carrying out information and communications programs on contracting procedures and specific contract opportunities.** In addition to the activities discussed under Point #1 above, ADOT's activities include:

- Outreach events about specific projects;
- DBE training and one-on-one consulting sessions on construction and engineering related issues;
- "Bidding Boot Camp" training provided by the Arizona Chapter of the AGC; and
- Training at pre-bid, post award and pre-construction meetings.

Other local organizations are also available to provide such assistance. For example, the National Center for American Indian Enterprise Development (NCAIED) has a Procurement Technical Assistance Center in Window Rock.

**5. Implementing a supportive services program to develop and improve immediate and long-term business management, recordkeeping, and financial and accounting capability for DBEs and other small businesses.** ADOT has a well-developed supportive services program to provide these types of assistance to DBEs and other small businesses. It includes:

- Workshops and conferences;
- Project-specific networking events;
- Development of a Financial/Insurance/Bonding Services handbook;
- Friday Fundamentals webinars;
- DBE Academy Online;
- Mentor-protégé program;
- Outreach newsletters;
- Bid matching; and
- Free plans and specification review.

The DBE Supportive Services staff also provide referrals for business assistance and help with how to win contracts. One-on-one business counseling is also available.

**6. Providing services to help DBEs, and other small business, improve long-term development, increase opportunities to participate in a variety of kinds of work, handle increasing significant projects, and achieve eventual self-sufficiency.** ADOT has a tri-level Business Development Program for new and emerging DBEs, Pacesetter (mid-level) and Master (advanced) level DBEs.

**7. Establishing a program to assist new, start-up firms, particularly in fields in which DBE participation has historically been low.** ADOT's Business Development Program and other assistance include programs for start-up firms. In addition, ADOT has conducted outreach to potential DBEs to encourage and provide initial guidance on DBE certification. Such recruitment can help new and growing firms participate in the technical assistance and other services of the DBE Program.

**8. Ensuring distribution of a DBE directory.** ADOT provides online access to DBE, SBC and vendor directories.

**9. Assisting DBEs, and other small businesses, to develop their capability to utilize emerging technology and conduct business through electronic media.** ADOT's training efforts include emerging technology, especially assistance with accessing information about contracting opportunities through the ADOT website as well as online bidding.

**Prompt payment.** Under state law, ADOT requires prime contractor payment of their subcontractors and subconsultants within seven days from receipt of payment by ADOT. It is

ADOT policy not to hold retention from prime contractors. Prime contractors must make prompt and final payment to each subcontractor all monies, including retention, due the subcontractor within 14 days after the subcontractor has satisfactorily completed all of its work. ADOT imposes standard fines on any prime contractor violating this provision.

**Small Business Concern (SBC) Program.** ADOT has established an SBC program to promote use of registered SBC through an SBC directory and provide small businesses many of the same networking and educational opportunities as DBEs. In its contract solicitations and contracts, ADOT encourages prime consultants and contractors to foster small business inclusion.

Other ADOT efforts to promote inclusion of small businesses can positively affect SBCs.

Keen Independent researched whether ADOT could establish an SBC set-aside program or SBC contract goals program. According to ADOT legal staff, ADOT might not have authority to establish either type of program under state law.

**Mentor-protégé program.** ADOT informs DBEs and other firms of available mentor-protégé programs operated by other organizations.

**Conclusions from analysis of neutral measures.** Review of current race- and gender-neutral initiatives shows considerable ADOT efforts alone and in partnership with others. In addition, public, not-for-profit and private institutions provide networking, training and technical assistance, financing and other small business services. This assistance outside of ADOT efforts is substantial.

## **J. Summary from the Further Exploration of MBE/WBE and DBE Utilization**

The analyses presented in Chapter 7 indicate relatively consistent results of the MBE/WBE utilization analysis across:

- Contracts with and without DBE contract goals;
- ADOT and LPA contracts;
- Time periods; and
- Regions of the state.

With the consistency in utilization results, Keen Independent's disparity analyses also showed similar results across these subsets of ADOT contracts as shown for all ADOT FHWA- and state-funded contracts combined (see Chapter 6). There was a pattern of substantial disparities for each group of minority-owned firms. For white women-owned firms, some of the analyses indicated disparities and some did not.

Disparity results for construction contracts were similar to results for all contracts, as were the results for all prime contracts, large prime contracts, small prime contracts and subcontracts.

For engineering-related contracts, two groups fared better than other DBE groups: Hispanic American-owned firms and Subcontinent Asian American-owned firms. At the time of this report, ADOT had turned down the DBE certification application of the previously certified Hispanic American-owned firms that had received much of this work. As with other firms that have recently

graduated from the Federal DBE Program, this change in certified DBEs for engineering work may affect the future overall utilization of Hispanic American-owned engineering firms. The DBE-certified Subcontinent Asian American-owned firm receiving the most ADOT work had also graduated from the Program but was able to re-enter with the recent increase in certification ceilings for the Federal DBE Program.

Analysis of ADOT's operation of the Federal DBE Program indicates that it generally follows the requirements of the program, including its contract goal-setting process, provisions for good faith efforts and implementation of neutral measures. ADOT has an SBC component in its operation of the Federal DBE Program, although state law appears to constrain opportunities to extend it to a set-aside program or utilize SBC contract goals.

Keen Independent's analysis of potential DBE overconcentration did not identify any indication of overconcentration. As conditions can change, ADOT should closely monitor the potential for DBE overconcentration.



## **CHAPTER 8.**

### **Overall Annual DBE Goal and Projections for FHWA-funded Contracts**

As part of its implementation of the Federal DBE Program, ADOT is required to set an overall annual goal for DBE participation in its FHWA-funded transportation contracts. Through this process, agencies such as ADOT must determine “the level of DBE participation you would expect absent the effects of discrimination.”<sup>1</sup>

The Final Rule effective February 28, 2011 revised requirements for goal-setting so that agencies that implement the Federal DBE Program only need to develop and submit overall annual DBE goals every three years.

Keen Independent’s 2014 Availability Study for ADOT included an analysis of the overall DBE goal for FHWA-funded contracts. ADOT considered the report along with other information and public feedback before proposing a 9.38 percent overall DBE goal for its FHWA-funded contracts for October 2014 through September 2017 (FFY 2015-FFY2017). ADOT submitted its proposed DBE goal to FHWA in September 2014, while also informing FHWA that it might refine its goal based upon the completed Disparity Study. FHWA approved this goal. (ADOT’s previous DBE goal for FHWA-funded contracts was 7.76 percent for FFY 2012 through FFY 2014.)

Based in part on the 2014 Availability Study, ADOT also projected that it would meet 5.44 percentage points of its overall DBE goal for FHWA-funded contracts through race-neutral means and 3.94 percentage points through race-conscious means. ADOT proposed to continue use of DBE contract goals as its race-conscious program element. FHWA approved these requests as well. As with its overall DBE goal, ADOT informed FHWA that it might refine this information based on the complete Disparity Study in 2015.

Chapter 8 provides information for ADOT to consider if it were to refine its overall annual DBE goal for FHWA-funded contracts and its projection of how much of the goal to be met through race-neutral measures. As disparity analyses for minority- and women-owned firms for ADOT contracts have now been prepared (Chapter 6), ADOT might consider that information as well.

Chapter 8 is organized in three parts based on the process that 49 CFR Part 26.45 outlines for agencies to set their overall goals and project the portion to be met through neutral means:

- A. Establishing a base figure;
- B. Consideration of a step 2 adjustment; and
- C. Portion of overall DBE goal for FHWA-funded contracts to be met through neutral means.

---

<sup>1</sup> 49 CFR Section 26.45(b).

## A. Establishing a Base Figure

Establishing a base figure is the first step in calculating an overall annual goal for DBE participation in ADOT's FHWA-funded transportation contracts.

As presented in Chapter 5, current and potential DBEs are available for 8.90 percent of ADOT FHWA-funded transportation contracts based on analysis of July 2007 through June 2013 FHWA-funded contracts.<sup>2</sup> This refines the preliminary estimate of 14.61 percent in the 2014 Availability Study. If it were to refine its overall DBE goal, ADOT might consider 8.90 percent as the base figure for its DBE goal.

Chapter 5 explains the methodology for the base figure calculation in considerable detail.

## B. Consideration of a Step 2 Adjustment

Per the Federal DBE Program, ADOT considered potential step 2 adjustments to the base figure as part of determining its overall annual DBE goal for FHWA-funded contracts. The information presented here provides updated results that ADOT might consider if it were to refine its overall DBE goal for FFY 2015 through FFY 2017 for FHWA-funded contracts. If ADOT does so, it must explain its consideration of possible step 2 adjustments in its Goal and Methodology document.

The Federal DBE Program outlines factors that an agency must consider when assessing whether to make any step 2 adjustments to its base figure:

1. Current capacity of DBEs to perform work, as measured by the volume of work DBEs have performed in recent years;
2. Information related to employment, self-employment, education, training, and unions;
3. Any disparities in the ability of DBEs to get financing, bonding and insurance; and
4. Other relevant factors.<sup>3</sup>

Keen Independent completed an analysis of each of the above step 2 factors and was able to quantify the effect of certain factors on the base figure. Other information examined was not as easily quantifiable but is still relevant to ADOT as it determines whether to make any step 2 adjustments.

**1. Current capacity of DBEs to perform work, as measured by the volume of work DBEs have performed in recent years.** USDOT's "Tips for Goal-Setting" suggests that agencies should examine data on past DBE participation on their USDOT-funded contracts in recent years (i.e., the percentage of contract dollars going to DBEs).

---

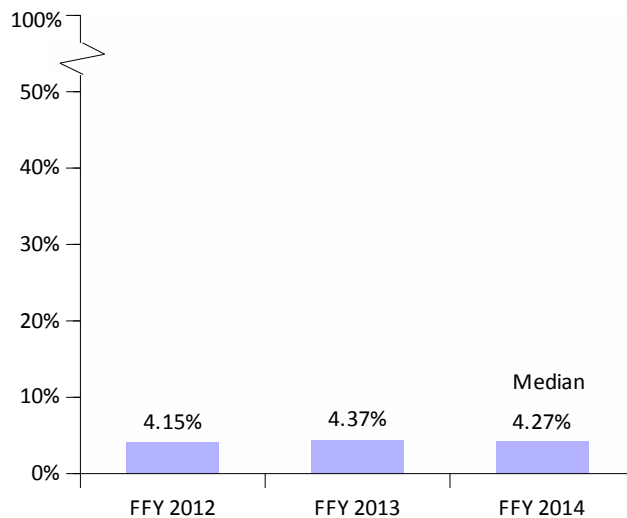
<sup>2</sup> As discussed in Chapter 5, potential DBEs include current DBEs and those MBE/WBEs that are DBE-certified or appear that they could be based on annual revenue limits described in 49 CFR Part 26.

<sup>3</sup> 49 CFR Section 26.45.

**DBE participation based on ADOT Uniform Reports to FHWA.** Figure 8-1 presents information about past DBE participation based on payments from ADOT Uniform Reports of DBE Awards or Commitments and Payments reported to the FHWA. Participation is shown for FFYs 2012, 2013 and 2014, the three most recent complete federal fiscal years at the time of the Disparity Study (FFY 2014 results had not been compiled at the time of the 2014 Availability Study). ADOT reports that, for purposes of indicating current capacity of DBEs, the payments information for this three-year period may be more reliable than its Commitments and Awards data.

**Figure 8-1.**  
ADOT reported past DBE participation on FHWA-funded contracts based on payments, federal fiscal years 2012, 2013 and 2014

Source: ADOT Uniform Reports of DBE Awards/Commitments and Payments.



After having discontinued setting DBE contract goals in 2006, ADOT reinstated DBE contract goals for FHWA-funded contracts in FFY 2011. Median DBE participation for FHWA-funded contracts for FFY 2012 through FFY 2014 was 4.27 percent based on ADOT's reports (based on payments). At the time of the 2015 Disparity Study, the most recent full federal fiscal year for which ADOT had reported data was FFY 2014 (ending September 2014).

The median DBE participation (based on payments) for FHWA-funded contracts for the last three full fiscal years, 4.27 percent, indicates that ADOT might make a downward step 2 adjustment based on this factor, as explained later in this chapter.

**DBE participation based on Keen Independent utilization analysis for FHWA- and state-funded contracts.** Keen Independent's analysis identified 8.18 percent participation of DBEs on FHWA- and state-funded contracts from July 2011 through June 2013 (see Figure 7-4 in Chapter 7). Keen Independent captured more information on FHWA-funded contracts and DBE participation than ADOT was able to include in the Uniform Reports.

Note that the 8.18 percent DBE participation estimate and the 8.90 percent base figure are very close. If ADOT were to use the Keen Independent results for its estimate of DBE participation, it would not need to make a downward step 2 adjustment.<sup>4</sup> ADOT might consider these data when determining whether to make a downward step 2 adjustment based on past DBE participation.

## **2. Information related to employment, self-employment, education, training, and unions.**

Chapter 4 summarizes information about conditions in the Arizona transportation contracting industry for minorities, women and MBE/WBEs. Detailed quantitative analyses of marketplace conditions in Arizona are presented in Appendices E through H. Keen Independent's analyses indicate that there are barriers that certain minority groups and women face related to entry and advancement and business ownership in the Arizona construction and engineering industries. Such barriers may affect the availability of MBE/WBEs to obtain and perform ADOT and local agency transportation contracts.

It may not be possible to quantify the cumulative effect that barriers in employment, education, and training may have had in depressing the availability of minority- and women-owned firms in the Arizona transportation contracting industry. However, the effects of barriers in business ownership can be quantified, as explained below.

The study team used regression analyses to investigate whether race, ethnicity and gender affected rates of business ownership among workers in the Arizona construction and engineering industries. The regression analyses allowed the study team to examine those effects while statistically controlling for various personal characteristics including education and age (Appendix F provides detailed results of the business ownership regression analyses).<sup>5</sup> Those analyses revealed that African Americans, Native Americans and white women working in construction were less likely than non-minorities and white men to own construction businesses, even after accounting for various gender-neutral personal characteristics. Each of these disparities was statistically significant.

Keen Independent analyzed the impact that barriers in business ownership would have on the base figure if African Americans, Native Americans and white women owned businesses at the same rate as similarly-situated non-minorities and white men. This type of inquiry is sometimes referred to as a "but for" analysis because it estimates the availability of MBE/WBEs *but for* the effects of race- and gender-based discrimination.

Figure 8-2 calculates the impact on overall MBE/WBE availability, resulting in possible upward adjustment of the base figure to 12.61 percent. The analysis included the same contracts that the study team analyzed to determine the base figure (i.e., FHWA-funded construction and engineering prime contracts and subcontracts that ADOT and local agencies awarded from July 2007 through June 2013). Calculations are explained below.

---

<sup>4</sup> Note that "Tips for Goal-Setting" considers the possibility that the base figure and the goal based on a step-2 adjustment might be very close. "If your records suggest levels of past participation very similar to the number you calculated in Step One, then it is not necessary to make any adjustment for past participation." The example USDOT provides for "very similar" is when the base figure and the calculation after the step-2 adjustment are within 1.4 percentage points of one another. "In that case, you do not need to make an adjustment for past participation. Nevertheless, you must explicitly state that the reason you are not making an adjustment for past participation is that your past participation has been very similar to your Step One Base Figure." (See III.A.2. of USDOT, "Tips for Goal Setting.")

<sup>5</sup> The study team examined U.S. Census data on business ownership rates using methods similar to analyses examined in court cases involving state departments of transportation in California, Illinois, and Minnesota.

Figure 8-2.  
Potential step 2 adjustment considering disparities in the rates of business ownership

Subindustry and group	a. Current availability	b. Disparity index for business ownership	c. Availability after initial adjustment*	d. Availability after scaling to 100%	e. Components of overall MBE/WBE availability**
<b>Construction</b>					
African American	1.02 %	77	1.32 %	1.26 %	
Native American	1.83	33	5.55	5.28	
Other minorities	6.30	n/a	6.30	6.00	
White women	<u>4.83</u>	84	<u>5.75</u>	<u>5.48</u>	
MBE/WBEs	13.98 %	n/a	18.92 %	18.03 %	16.59 %
Majority-owned businesses	<u>86.02</u>	n/a	<u>86.02</u>	<u>81.97</u>	
<b>Total firms</b>	<b>100.00 %</b>	n/a	<b>104.94 %</b>	<b>100.00 %</b>	
<b>Engineering and other subindustries</b>					
MBE/WBEs	20.71 %	n/a	20.71 %	20.71 %	1.66 %
Majority-owned businesses	<u>79.29</u>	n/a	<u>79.29</u>	<u>79.29</u>	
<b>Total firms</b>	<b>100.00 %</b>	n/a	<b>100.00 %</b>	<b>100.00 %</b>	
<b>Total for MBE/WBEs</b>	<b>14.53 %</b>	n/a	n/a		<b>18.24 %</b>
<b>Difference from current availability</b>					<b>3.71 %</b>

Note: Numbers may not add to 100.00% due to rounding.

\* Initial adjustment is calculated as current availability divided by the disparity index for business ownership.

\*\* Components of the base figure were calculated as the value after adjustment and scaling to 100 percent, multiplied by the percentage of total FHWA-funded contract dollars in each industry (construction = 92%, engineering = 8%).

Source: Keen Independent based on FHWA-funded contracts for July 2007 through June 2013, 2015 availability analysis, and statistical analysis of U.S. Census Bureau American Community Survey data for Arizona for 2008-2012.

The study team completed these “but for” analyses separately for construction and engineering contracts and then weighted the results based on the proportion of FHWA-funded contract dollars that ADOT awarded for construction and engineering for June 2007-June 2013 (i.e., a 92% weight for construction and 8% weight for engineering). The rows and columns of Figure 8-2 present the following information from Keen Independent’s “but for” analyses:

- Current availability.** Column (a) presents the current availability of MBE/WBEs by group for construction and for engineering and other subindustries. Each row presents the percentage availability for MBEs and WBEs. The current combined availability of MBE/WBEs for ADOT FHWA-funded transportation contracts for July 2007-June 2013 is 14.53 percent, as shown in bottom row of column (a).
- Disparity indices for business ownership.** As presented in Appendix F, African Americans, Native Americans and white women were significantly less likely to own construction firms than similarly-situated non-minorities and white men.

Keen Independent calculated simulated business ownership rates if those groups owned businesses at the same rate as non-minorities and white males who share similar personal characteristics. The study team then calculated a business ownership disparity index for each group by dividing the observed business ownership rate by the benchmark business ownership rate and then multiplying the result by 100.

Column (b) of Figure 8-2 presents disparity indices related to business ownership for the different racial/ethnic and gender groups. For example, as shown in column (b), white women own construction businesses at 84 percent of the rate that would be expected based on the simulated business ownership rates of white males who share similar personal characteristics. Appendix F explains how the study team calculated the disparity indices.

- c. **Availability after initial adjustment.** Column (c) presents availability estimates for MBEs and WBEs by industry after initially adjusting for statistically significant disparities in business ownership rates. The study team calculated those estimates by dividing the current availability in column (a) by the disparity index for business ownership in column (b) and then multiplying by 100.
- d. **Availability after scaling to 100%.** Column (d) shows adjusted availability estimates that were re-scaled so that the sum of the availability estimates equals 100 percent for each industry. The study team re-scaled the adjusted availability estimates by taking each group's adjusted availability estimate in column (c) and dividing it by the sum of availability estimates shown under "Total firms" in column (c) — and multiplying by 100. For example, the re-scaled availability estimate for white women shown for construction was calculated in the following way:  $(5.75\% \div 104.94\%) \times 100 = 5.48\%$ .
- e. **Components of overall DBE goal with upward adjustment.** Column (e) of Figure 8-2 shows the component of the total base figure attributed to the adjusted MBE and WBE availability for construction versus engineering and other subindustries. The study team calculated each component by taking the total availability estimate shown in column (d) for construction and for engineering/other — and multiplying it by the proportion of total FHWA-funded contract dollars in each industry (i.e., 92% for construction and 8% for engineering). For example, the study team used the 18.03 percent shown for MBE/WBE availability for construction firms in column (d) and multiplied it by 92 percent for a result of 16.59 percent. A similar weighting of MBE/WBE availability for engineering/other produced a value of 1.66 percent.

The values in column (e) were then summed to equal the overall base figure adjusted for barriers in business ownership, which is 18.24 percent as shown in the bottom of column (e).

Finally, Keen Independent calculated the difference between the "but for" MBE/WBE availability (18.24%) and the current availability (14.53%) to calculate the potential upward adjustment. This difference, and potential upward adjustment, is 3.71 percentage points ( $18.24\% - 14.53\% = 3.71\%$ ).

Therefore, based on information related to business ownership, ADOT might consider an upward adjustment to its overall DBE goal of up to 3.71 percentage points. This goal would be 12.61 percent as the 3.71 percentage point adjustment would be from a base figure of 8.90 percent calculated after subtracting availability for MBE/WBEs that are not potential DBEs and adding white male-owned DBEs ( $8.90\% + 3.71\% = 12.61\%$ ).

**3. Any disparities in the ability of DBEs to get financing, bonding and insurance.** Analysis of access to financing and bonding revealed quantitative and qualitative evidence of disadvantages for minorities, women and MBE/WBEs.

- Any barriers to obtaining financing and bonding might affect opportunities for minorities and women to successfully form and operate construction and engineering businesses in the Arizona marketplace.
- Any barriers that MBE/WBEs face in obtaining financing and bonding would also place those businesses at a disadvantage in obtaining ADOT and local agency construction and engineering prime contracts and subcontracts.

Note that financing and bonding are closely linked, as discussed in Chapter 4 and Appendix J.

There is also evidence that some firms cannot bid on certain public sector projects because they cannot afford the levels of insurance required by the agency. This barrier appears to affect small businesses, which might disproportionately impact minority- and women-owned firms.

The information about financing, bonding and insurance supports an upward step 2 adjustment in ADOT's overall annual goal for DBE participation in FHWA-funded contracts.

**4. Other factors.** The Federal DBE Program suggests that federal aid recipients also examine “other factors” when determining whether to make any step 2 adjustments to their base figure.<sup>6</sup>

**Success in the Arizona marketplace.** Among the “other factors” examined in this study was the success of MBE/WBEs relative to majority-owned businesses in the Arizona marketplace. There is quantitative evidence that certain groups of MBE/WBEs are less successful than majority-owned firms, and face greater barriers in the marketplace, even after considering neutral factors. Chapter 4 summarizes that evidence and Appendix H presents supporting quantitative analyses. There is also qualitative evidence of barriers to the success of minority- and women-owned businesses, as summarized in Chapter 4. Some of this qualitative information suggests that discrimination on the basis of race, ethnicity and gender affects minority- and women-owned firms in the Arizona transportation contracting industry.

---

<sup>6</sup> 49 CFR Section 26.45.

**Approaches for making step 2 adjustments.** Quantification is discussed below.

**1. Current capacity of DBEs to perform work, as measured by the volume of work DBEs have performed in recent years.** Analysis of this factor might indicate a downward step 2 adjustment if ADOT analyzed its estimates of past DBE participation (based on payments) — for recent years, the median reported DBE participation on FHWA-funded contracts was 4.27 percent (from Figure 8-1).

USDOT “Tips for Goal-Setting” suggests taking one-half of the difference between the base figure and evidence of current capacity as one approach to calculate the step 2 adjustment for that factor.

The difference between the 8.90 percent base figure (calculated in Chapter 5) and 4.27 percent DBE participation is 4.63 percentage points ( $8.90\% - 4.27\% = 4.63\%$ ). One-half of this difference is a downward adjustment of 2.32 percentage points ( $4.63\% \div 2 = 2.32\%$ ). The goal would then be calculated as follows:  $8.90\% - 2.32\% = 6.58\%$ .

**2. Information related to employment, self-employment, education, training, and unions.** The study team was not able to quantify all of the information regarding barriers to entry for MBE/WBEs. Quantification of the business ownership factor indicates an upward step 2 adjustment of 3.71 percentage points to reflect the “but-for” analyses of business ownership rates presented in Figure 8-2. If ADOT made this adjustment, the overall DBE goal for FHWA-funded contracts would be 12.61 percent ( $8.90\% + 3.71\% = 12.61\%$ ).

**3. Any disparities in the ability of DBEs to get financing, bonding and insurance.** Analysis of financing, bonding and insurance indicates that an upward adjustment is appropriate. However, impact of these factors on availability could not be quantified.

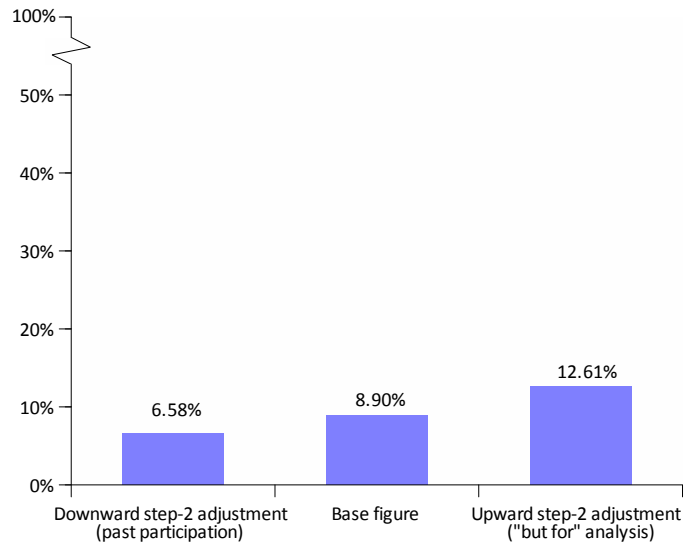
**4. Other factors.** Impact of the many barriers to success of MBE/WBEs in Arizona could not be specifically quantified. However, the evidence supports an upward adjustment.

**Summary.** ADOT will need to consider whether to make a downward, upward or no step 2 adjustment when determining its overall DBE goal. If ADOT makes a downward step 2 adjustment reflecting current capacity to perform work, its overall DBE goal for FHWA-funded contracts would be 6.58 percent as calculated at the top of page 8. If ADOT decides to not make a downward adjustment and to make an upward adjustment that reflects analyses of business ownership rates, its overall DBE goal would be 12.61 percent. Figure 8-3 summarizes this information.

Note that the downward step 2 adjustment in Figure 8-3 is based on median DBE participation for recent years (based on payments) from ADOT’s Uniform Reports. If ADOT instead evaluated the 8.18 percent DBE participation in the July 2011 through June 2013 time period for FHWA- and state-funded contracts, USDOT guidelines indicate that ADOT would not consider a downward adjustment.



Figure 8-3.  
Potential step 2 adjustments  
to overall DBE goal for FHWA-funded  
contracts



### C. Portion of DBE Goal for FHWA-funded Contracts to be Met through Neutral Means

The Federal DBE Program requires state and local transportation agencies to meet the maximum feasible portion of their overall DBE goals using race- and gender-neutral measures.<sup>7</sup> Race- and gender-neutral measures are initiatives that encourage the participation of all businesses, or all small businesses, and are not specifically limited to MBE/WBEs or DBEs. Agencies must determine whether they can meet their overall DBE goals solely through neutral means or whether race- and gender-conscious measures — such as DBE contract goals — are also needed. As part of doing so, agencies must project the portion of their overall DBE goals that they expect to meet (a) through race- and gender-neutral means, and (b) through race- and gender-conscious programs (if any).

- If an agency determines that it can meet its overall DBE goal solely through race- and gender-neutral means, then it would propose using only neutral measures as part of its program. The agency would project that 100 percent of its overall DBE goal would be met through neutral means and that 0 percent would be met through race- and gender-conscious means.
- If an agency determines that a combination of race- and gender-neutral and race- and gender-conscious measures are needed to meet its overall DBE goal, then the agency would propose using a combination of neutral and conscious measures as part of its program. The agency would project that some percent of its overall DBE goal would be met through neutral means and that the remainder would be met through race- and gender-conscious means.

<sup>7</sup> 49 CFR Section 26.51.

USDOT offers guidance concerning how transportation agencies should project the portions of their overall DBE goals that will be met through race- and gender-neutral and race- and gender-conscious measures, including the following:

- USDOT Questions and Answers about 49 CFR Part 26 addresses factors for federal aid recipients to consider when projecting the portion of their overall DBE goals that they will meet through race- and gender-neutral means.<sup>8</sup>
- USDOT “Tips for Goal-Setting” also suggests factors for federal aid recipients to consider when making such projections.<sup>9</sup>
- An FHWA template for how it considers approving DBE goal and methodology submissions includes a section on projecting the percentage of overall DBE goals to be met through neutral and conscious means. An excerpt from that template is provided in Figure 8-4.

Based on 49 CFR Part 26 and the resources above, general areas of questions that transportation agencies might ask related to making any projections include:

1. Is there evidence of discrimination within the local transportation contracting marketplace for any racial, ethnic or gender groups?
2. What has been the agency’s past experience in meeting its overall DBE goal?
3. What has DBE participation been when the agency did not use race- or gender-conscious measures?<sup>10</sup>
4. What is the extent and effectiveness of race- and gender-neutral measures that the agency could have in place for the next fiscal year?

The balance of Chapter 8 is organized around each of those general areas of questions.

**Figure 8-4.**  
Excerpt from Explanation of Approval of [State] DBE Goal Setting Process for FY [Year]

You must also explain the basis for the State’s race-neutral/race-conscious division and why it is the State’s best estimate of the maximum amount of participation that can be achieved through race-neutral means. There are a variety of types of information that can be relied upon when determining a recipient’s race-neutral/race-conscious division. Appropriate information should give a sound analysis of the recipient’s market, the race-neutral measures it employs and information on contracting in the recipient’s contracting area. Information that could be relied on includes: the extent of participation of DBEs in the recipient’s contracts that do not have contract goals; past prime contractors’ achievements; excess DBE achievements over past goals; how many DBE primes have participated in the state’s programs in the past; or information about state, local or private contracting in similar areas that do not use contracting goals and how many minority and women’s businesses participate in programs without goals.

Source:

FHWA, Explanation for Approval of [State] DBE Program Goal Setting Process for FY [Year].  
[http://www.fhwa.dot.gov/civilrights/dbe\\_memo\\_a4.htm](http://www.fhwa.dot.gov/civilrights/dbe_memo_a4.htm).

<sup>8</sup> See <http://www.dotcr.ost.dot.gov/Documents/Dbc/49CFRPART26.doc>.

<sup>9</sup> <http://www.osdbu.dot.gov/DBEProgram/tips.cfm>.

<sup>10</sup> USDOT guidance suggests evaluating (a) certain DBE participation as prime contractors if the DBE contract goals did not affect utilization, (b) DBE participation as prime contractors and subcontractors for agency contracts without DBE goals, and (c) overall utilization for other state, local or private contracting where contract goals are not used.

**1. Is there evidence of discrimination within the local transportation contracting marketplace for any racial, ethnic or gender groups?** The 2014 Availability Study considered conditions in the local marketplace to address this question. Quantitative and qualitative information is summarized below.

The 2015 Disparity Study also provides results of the analyses of MBE/WBE utilization and availability (see Chapters 6 and 7). This information is also summarized below.

**Marketplace conditions.** As discussed in Chapter 4, Keen Independent examined conditions in the Arizona marketplace, including:

- Entry and advancement;
- Business ownership;
- Access to capital, bonding and insurance; and
- Success of businesses.

There was quantitative evidence of disparities in outcomes for minority- and women-owned firms in general and for certain MBE/WBE groups concerning the above issues. Qualitative information indicated some evidence that discrimination may have been a factor in these outcomes. It is important to note that some minority and female business owners interviewed did not think they had been affected by race or gender discrimination.

ADOT should review the information about marketplace conditions presented in Chapter 4 and Appendices E through H, as well as other information it may have, when considering the extent to which it can meet its overall DBE goal through neutral measures.

**Disparity analysis.** Utilization of each racial/ethnic group of minority-owned businesses on ADOT FHWA- and state-funded contracts was substantially below what might be expected from the availability analysis. Based on further statistical analysis, Keen Independent could reject chance in the contracting process as an explanation for the disparities for MBEs. (See Chapter 6 for these results.) For white women-owned firms, some of the analyses indicated disparities and some did not.

Further exploration of utilization for contracts with and without goals, ADOT and LPA contracts, time periods and regions of the study identified generally consistent results for MBEs. There was a pattern of substantial disparities for each group of minority-owned firms. Disparity results for construction contracts were similar to results for all contracts, as were the results for all prime contracts, large prime contracts, small prime contracts and subcontracts. Two MBE groups fared better than other DBE groups for engineering-related contracts, as explained in Chapter 7.

**Summary.** The combined information from the marketplace and the disparity analysis indicates substantial evidence of different outcomes for each group of minority-owned firms included in the Federal DBE Program: African American-, Asian-Pacific American-, Subcontinent Asian American-, Hispanic American- and Native American-owned firms.

There is also substantial evidence that there is not a level playing field for women and women-owned firms in the Arizona marketplace. Disparities for women and women-owned firms include:

- Low entry into construction and engineering jobs;
- Lower construction business formation rates (regression analysis controlling for neutral factors);
- Lower business loan approval rates;
- Higher rate of not applying for business loans due to fear of loan denial (regression analysis controlling for neutral factors);
- Lower mean loan values;
- Higher interest rates;
- More likely to report difficulty in obtaining lines of credit or loans;
- More likely to report difficulty obtaining bonding;
- More likely to report insurance requirements as a barrier;
- Relatively few firms awarded contracts or subcontracts of \$1 million or more (after controlling for subindustry); and
- Lower business earnings (regression analysis after controlling for neutral factors).

If Coffman Specialties is included in the disparity analysis, there was not disparity between the utilization of white women-owned firms and what might be expected from the disparity analysis. However, if that firm is excluded from the analysis (for the reasons outlined in Chapter 6), utilization of WBEs was less than what might be expected based on their availability for this work.

ADOT might consider all of this information when determining whether it will include white women-owned firms as eligible for any race- and gender-conscious programs such as meeting DBE contract goals. If it does not include white women-owned DBEs in its DBE contract goals program, it would need to request a waiver from FHWA.

**2. What has been the agency's past experience in meeting its overall DBE goal?** ADOT's reported certified DBE participation since it reinstituted DBE contract goals is summarized in Figure 8-5. As shown, reported DBE participation based on DBE commitments/awards on FHWA-funded contracts was slightly lower but within 1 percentage point of the goal for FFY 2012 through FFY 2014.

ADOT also reported participation based on payments to DBEs. These data show participation of slightly more than 4 percent in FFY 2012, FFY 2013 and FFY 2014 after DBE contract goals were reinstated on FHWA-funded contracts. ADOT fell short of overall DBE goals when measured based on payments.

Figure 8-5.

ADOT overall DBE goal and reported DBE participation on FHWA-funded contracts, FFY 2011 through FFY 2014

Federal fiscal year	DBE goal	DBE commitments/ awards	DBE payments	Difference from DBE goal	
				Awards	Payments
2011	8.00 %	6.40 %	0.18 %	-1.60 %	-7.82 %
2012	7.76	6.82	4.15	-0.94	-3.61
2013	7.76	7.25	4.37	-0.51	-3.39
2014	7.76	7.33	4.27	-0.43	-3.49

Source: ADOT Uniform Reports of DBE Awards/Commitments and Payments.

### 3. What has DBE participation been when ADOT has not applied DBE contract goals (or other race-conscious remedies)?

Keen Independent examined three sources of information to assess race-neutral DBE participation:

- DBE participation on FHWA-funded contracts in the most recent three years in which ADOT did not apply DBE contract goals;
- ADOT-reported race-neutral DBE participation on FHWA-funded contracts for the most recent years;
- Keen Independent estimates of DBE participation on FHWA- and state-funded contracts for which no DBE contract goals applied; and
- Information concerning DBE participation as prime contractors.

The discussion in the following two pages examines these four sets of participation figures.

DBE participation in recent years in which ADOT did not apply DBE contract goals. ADOT did not apply race- or gender-conscious program elements from the beginning of 2006 until well into FFY 2011. For FFYs 2008, 2009 and 2010, the last three full fiscal years for which DBE contract goals were not applied, reported DBE utilization ranged from 1.21 percent to 2.08 percent based on DBE commitments/awards (median of 2.02 percent). ADOT reported DBE participation ranging from 0.87 to 4.30 percent for those fiscal years based on payments data (median of 4.19 percent), as reported in Figure 8-6.

Figure 8-6.

DBE participation on FHWA-funded contracts for most recent three years when DBE contract goals did not apply (FFY 2008-FFY 2010)

Federal fiscal year	Commitments/ awards	Payments
2008	1.21 %	4.19 %
2009	2.02	4.30
2010	2.08	0.87

Source: ADOT Uniform Reports of DBE Awards/Commitments and Payments.

**Race-neutral DBE participation in recent ADOT Uniform Reports.** Per USDOT instructions, ADOT counts as “neutral” participation any prime contracts going to DBEs as well as subcontracts to DBEs beyond what was needed to meet DBE contract goals set for a project or that were otherwise awarded in a race-neutral manner.

ADOT’s Uniform Reports of DBE Awards/Commitments and Payments submitted to FHWA for the three most recent federal fiscal years indicate race-neutral participation of:

- 2.81 percent in FFY 2012;
- 4.23 percent in FFY 2013; and
- 3.11 percent in FFY 2014.

Figure 8-7 presents these results. The right-hand column of Figure 8-7 calculates the share of total participation achieved through neutral means (neutral DBE participation ÷ total DBE participation). In FFY 2014, ADOT achieved 42 percent of its total DBE commitments/awards through neutral means ( $3.11 \div 7.33 = 42\%$ ), higher than in FFY 2012 and lower than in FFY 2013. (Note that agencies prepare these analyses based on commitments/awards, not payments.)

Figure 8-7.

ADOT-reported race-neutral and race-conscious DBE participation on FHWA-funded contracts for FFY 2011, FFY2012 and FFY 2013

Federal fiscal year	DBE commitments/awards			Share achieved through neutral
	Total	Race-neutral	Race-conscious	
2012	6.82	2.81	4.01	41
2013	7.25	4.23	3.02	58
2014	7.33	3.11	4.22	42

Source: ADOT Uniform Reports of DBE Awards/Commitments and Payments.

**DBE participation on contracts without DBE contract goals.** Keen Independent also analyzed DBE participation on ADOT’s FHWA- and state-funded contracts without DBE contract goals. As reported in Chapter 7, ADOT achieved 5.0 percent DBE participation on these contracts from July 2007 through June 2013.

**DBE participation as prime contractors.** Focusing just on participation as prime contractors, DBEs obtained 2 percent of prime contract dollars on FHWA- and state-funded contracts.

**4. What is the extent and effectiveness of race- and gender-neutral measures that the agency could have in place for the next fiscal year?** When determining the extent to which it could meet its overall DBE goal through the use of neutral measures, ADOT must review the race- and gender-neutral measures that it and other organizations have in place, and those it has planned or could consider for future implementation.

Keen Independent's analysis of neutral remedies in Chapter 7 indicates that ADOT has implemented an extensive set of neutral measures. Three current initiatives that could affect participation are:

- ADOT has retained Donato Consulting to conduct one-on-one meetings with potential DBEs identified in the 2014 Availability Study to encourage firms to become DBE certified. This is one way to increase reported DBE participation through neutral means, as some of these companies may already be doing business with ADOT. Certification will allow this participation to count toward ADOT's overall DBE goal.
- ADOT plans to expand online information available to small businesses, including DBEs, through a Virtual Assistant website. This new website might be launched within the next 12 months.
- ADOT has a "Just One More" campaign to encourage prime contracts to use one more DBE than needed to meet a DBE contract goal.

At this time, it is difficult to quantify how much the above initiatives can increase race-neutral participation of DBEs in ADOT's FHWA-funded contracts.

Keen Independent also examined other potential neutral measures. Research into expanded SBC programs, such as SBC contract goals and an SBC set-aside program, indicate that ADOT might not have the authority under state law to implement such measures. Although ADOT might consider further research into these two initiatives, it does not appear that they could be implemented within the FFY 2015 through FFY 2017 time period for which these projections apply (or ever under current restrictions).

## Summary

Chapter 8 provides information to ADOT as it considers (1) any refinements to its overall DBE goal for FFY 2015 through FFY 2017 for FHWA-funded contracts, (2) any revisions to its projection of the portion of its overall DBE goal to be achieved through neutral means, and (3) if all DBE groups will be allowed to participate in any DBE contract goals program, or whether ADOT will request a waiver that limits participation to certain groups.

**1. Overall DBE goal for FHWA-funded contracts.** ADOT might consider a refinement to its overall DBE goal based on updated information in the Disparity Study. As explained in Chapter 5 and further explored in Chapter 8, ADOT might consider setting its goal at the base figure of 8.90 percent DBE participation.

**2. Should ADOT project that it can meet all of its overall DBE goal through neutral means?**

ADOT must consider whether it can achieve 100 percent of its overall DBE goal through neutral means or whether race-conscious programs are needed. Such a determination depends in part on the level of the overall DBE goal. If ADOT's overall DBE goal for FHWA-funded contracts is in the range of 8.90 percent or higher, the evidence presented in this report indicates that ADOT might not meet its DBE goal solely through neutral means.

ADOT should consider all of the information in the report and other sources when reaching its decision on any use of race- and gender-conscious programs (such as DBE contract goals).

- There is information indicating disparities in outcomes for minorities and women and some qualitative evidence of discrimination within the local transportation contracting marketplace, as summarized in Chapter 4.
- Median annual DBE participation for the last three full federal fiscal years in which ADOT operated a 100 percent neutral program was 2.02 percent based on awards/commitments and 4.19 percent based on payments. This level of participation is considerably below an overall DBE goal in the range of 8.90 percent.

Since ADOT has set DBE contract goals on FHWA-funded contracts for the full federal fiscal year, its reported race-neutral participation has been 2.81 percent (FFY 2012), 4.23 percent (FFY 2013) and 3.11 percent (FFY 2014). Each of these figures for race-neutral participation is well below a future overall DBE goal in the range of 8.90 percent or higher.

Keen Independent estimates 5.0 percent DBE utilization on FHWA- and state-funded contracts without DBE contract goals during the study period. Although this estimate of participation is higher than what ADOT has reported, it is still considerably less than an 8.90 percent overall DBE goal.

- ADOT has extensive neutral measures in place and there are many small business assistance programs offered by other institutions throughout the state. Any additional measures ADOT might be able to immediately institute would probably have only a small impact in comparison with what already exists. It is unlikely that ADOT could increase its neutral participation of DBEs to reach an overall DBE goal in the range of 8.90 percent solely through additional neutral measures.

**3. If ADOT uses a combination of neutral means and DBE contract goals, how much of the overall DBE goal can ADOT project to be met through neutral means?** In fall 2014, ADOT set an overall DBE goal of 9.38 percent for FHWA-funded contracts for FFY 2015 through FFY 2017 and projected that 5.44 percentage points of its overall goal would be met through neutral means. The additional information in this Disparity Study not only supports a lower overall DBE goal but also a somewhat lower projection of DBE participation achieved through neutral measures, perhaps 5.00 percent. This is still above ADOT's projection of 2.68 percent neutral attainment in place for FHWA-funded contracts during the previous three-year period.

For the following reasons, ADOT might consider a race-neutral projection of about 5 percentage points for its overall DBE goal for FFY 2015 through FFY 2017:

- Median DBE participation was 4.19 percent for the three most recent federal fiscal years in which ADOT operated a 100 percent neutral program (from ADOT reports to FHWA using payments data as discussed on page 13 of this chapter).



- The race-neutral portion of ADOT's DBE participation was in the range of 3 to 4 percent based on ADOT's reports for FFY 2012 through FFY 2014 as examined on page 14 of this chapter).
- ADOT neutral initiatives are already considerable, and will continue to expand.
- Keen Independent's analysis of DBE participation on ADOT FHWA- and state-funded contracts without DBE contract goals indicated 5.0 percent utilization of DBEs.

As noted above, ADOT projected a 5.44 percent point neutral and 3.94 percentage point race-conscious split when it prepared its overall DBE goal of 9.38 percent for FFY2015 through FFY 2017 after the 2014 Availability Study. The first column Figure 8-8 presents these recent projections.

The second column of numbers in Figure 8-8 is an example of projections using an overall DBE goal of 8.90 percent and a 5.00 percentage point projection for race-neutral for FFY 2015 through FFY 2017. The race-conscious portion of the goal is 3.90 percentage points (8.90% - 5.00%=3.90%).

As shown, a 3.90 percentage point projection of DBE participation through race-conscious measures is similar to the 3.94 percentage point race-conscious projection developed in fall 2014.

**Figure 8-8.**

Current ADOT overall DBE goal and projections of race-neutral for FHWA-funded contracts for FFY 2015 through FFY 2017 and example of revised overall goal and projections (spring 2015)

<b>Component of overall DBE goal for FHWA FFY 2015-FFY 2017</b>	<b>Fall 2014</b>	<b>Spring 2015</b>
Overall goal	9.38 %	8.90 %
Neutral projection	5.44	5.00
Race-conscious projection	3.94	3.90

## **CHAPTER 9.**

### **Overall Annual DBE Goal and Projections for FAA-funded Contracts**

The Federal Aviation Administration (FAA) directly provides funds to ADOT for certain aviation-related contracts at the Grand Canyon National Park Airport.<sup>1</sup> Therefore, ADOT must operate the Federal DBE Program for FAA-funded contracts.

ADOT's current overall goal for DBE participation in those contracts — 3.30 percent — is for the three years ending September 30, 2016. By October 1, 2016, ADOT is required to set an overall annual goal for DBE participation in its FAA-funded transportation contracts. ADOT has been operating a solely race-neutral program for these contracts.

This Disparity Study provides information to ADOT that will help it set this overall DBE goal and make other decisions concerning its operation of the Federal DBE Program for FAA-funded contracts. (The 2014 Availability Study did not analyze information for setting an overall three-year DBE goal for FAA-funded contracts.) Chapter 9 contains three parts:

- A. Establishing a base figure;
- B. Consideration of a step 2 adjustment; and
- C. Portion of overall DBE goal for FAA-funded contracts to be met through neutral means.

#### **A. Establishing a Base Figure**

As for FHWA-funded contracts discussed in Chapter 8, establishing a base figure is the first step in calculating an overall annual goal for DBE participation in ADOT's FAA-funded contracts.

Chapter 5 presented results from the availability analysis for FAA-funded contracts during the July 2007 through June 2013 study period. Currently-certified DBEs were available for 4.87 percent of those ADOT FAA-funded transportation contracts ADOT might consider 4.87 percent as the base figure for its DBE goal. Chapter 5 explains the methodology for the base figure calculation in considerable detail.

---

<sup>1</sup> The Keen Independent study team identified 19 FAA-funded contracts at Grand Canyon National Park Airport between July 2007 and June 2013 for a total of \$19.7 million.

## B. Consideration of a Step 2 Adjustment

Per the Federal DBE Program, ADOT must consider potential step 2 adjustments to the base figure when determining its overall DBE goal for FAA-funded contracts. Federal regulations outline factors that an agency must consider:

1. Current capacity of DBEs to perform work, as measured by the volume of work DBEs have performed in recent years;
2. Information related to employment, self-employment, education, training, and unions;
3. Any disparities in the ability of DBEs to get financing, bonding and insurance; and
4. Other relevant factors.<sup>2</sup>

Keen Independent completed an analysis of each of the above step 2 factors and was able to quantify the effect of certain factors on the base figure. Other information examined was not as easily quantifiable but is still relevant to ADOT as it determines whether to make any step 2 adjustments.

**1. Current capacity of DBEs to perform work, as measured by the volume of work DBEs have performed in recent years.** USDOT's "Tips for Goal-Setting" suggests that agencies should examine data on past DBE participation on their USDOT-funded contracts in recent years (i.e., the percentage of contract dollars going to DBEs).

**DBE participation based on ADOT Uniform Reports to FAA.** ADOT reported no prime contract or subcontract awards or payments to DBEs in its FFY 2012, FFY 2013 and FFY 2014 in Uniform Reports of DBE Awards or Commitments and Payments reported to the FAA. (Median DBE participation based these data for these three years is 0.00 percent.)

**DBE participation based on Keen Independent utilization analysis for FAA-funded contracts.** The Keen Independent study team collected FAA-funded contract information directly from Grand Canyon National Park Airport. The study team identified two contracts going to one DBE firm totaling \$1.3 million (one contract in 2010 and one in 2013). Based on these data, DBE participation on FAA-funded contracts was 6.9 percent.

**Summary.** ADOT might consider these data when determining whether to make a step 2 adjustment based on past DBE participation. Keen Independent recommends using the 6.90 percent figure from the Disparity Study.

### **2. Information related to employment, self-employment, education, training, and unions.**

Chapter 4 summarizes information about conditions in the Arizona transportation contracting industry for minorities, women and MBE/WBEs. Detailed quantitative analyses of marketplace conditions in Arizona are presented in Appendices E through H. Keen Independent's analyses indicate that there are barriers that certain minority groups and women face related to entry and advancement and business ownership in the Arizona construction and engineering industries. Such barriers may affect the availability of MBE/WBEs to obtain and perform ADOT and local agency transportation contracts.

---

<sup>2</sup> 49 CFR Section 26.45.

It may not be possible to quantify the cumulative effect that barriers in employment, education, and training may have had in depressing the availability of minority- and women-owned firms in the Arizona transportation contracting industry. However, the effects of barriers in business ownership can be quantified, as explained in Chapter 8.

The study team used regression analyses to investigate whether race, ethnicity and gender affected rates of business ownership among workers in the Arizona construction and engineering industries. The regression analyses allowed the study team to examine those effects while statistically controlling for various personal characteristics including education and age (Appendix F provides detailed results of the business ownership regression analyses).<sup>3</sup> Those analyses revealed that African Americans, Native Americans and white women working in construction were less likely than non-minorities and white men to own construction businesses, even after accounting for various gender-neutral personal characteristics. Each of these disparities was statistically significant.

In Chapter 8, Keen Independent analyzed the impact that barriers in business ownership would have on the base figure for FHWA-funded contracts if African Americans, Native Americans and white women owned businesses at the same rate as similarly-situated non-minorities and white men. This type of inquiry is sometimes referred to as a “but for” analysis because it estimates the availability of MBE/WBEs *but for* the effects of race- and gender-based discrimination.

The analysis indicated a possible upward step 2 adjustment of 3.71 percentage points (see Figure 8-2 in Chapter 8). This might be an appropriate upward step 2 adjustment if ADOT chose to make such an adjustment.

**3. Any disparities in the ability of DBEs to get financing, bonding and insurance.** Analysis of access to financing and bonding revealed quantitative and qualitative evidence of disadvantages for minorities, women and MBE/WBEs.

- Any barriers to obtaining financing and bonding might affect opportunities for minorities and women to successfully form and operate construction and engineering businesses in the Arizona marketplace.
- Any barriers that MBE/WBEs face in obtaining financing and bonding would also place those businesses at a disadvantage in obtaining ADOT and local agency construction and engineering prime contracts and subcontracts.

Note that financing and bonding are closely linked, as discussed in Chapter 4 and Appendix J.

There is also evidence that some firms cannot bid on certain public sector projects because they cannot afford the levels of insurance required by the agency. This barrier appears to affect small businesses, which might disproportionately impact minority- and women-owned firms.

The information about financing, bonding and insurance supports an upward step 2 adjustment in ADOT’s overall annual goal for DBE participation in FAA-funded contracts.

---

<sup>3</sup> The study team examined U.S. Census data on business ownership rates using methods similar to analyses examined in court cases involving state departments of transportation in California, Illinois and Minnesota.

**4. Other factors.** The Federal DBE Program suggests that federal aid recipients also examine “other factors” when determining whether to make any step 2 adjustments to their base figure.<sup>4</sup>

Among the “other factors” examined in this disparity study was the success of MBE/WBEs relative to majority-owned businesses in the Arizona marketplace. There is quantitative evidence that certain groups of MBE/WBEs are less successful than majority-owned firms, and face greater barriers in the marketplace, even after considering neutral factors. Chapter 4 summarizes that evidence and Appendix H presents supporting quantitative analyses. There is also qualitative evidence of barriers to the success of minority- and women-owned businesses, as summarized in Chapter 4. Some of this qualitative information suggests that discrimination on the basis of race, ethnicity and gender affects minority- and women-owned firms in the Arizona transportation contracting industry.

**Approaches for making step 2 adjustments.** Quantification of potential step 2 adjustments is discussed below.

**1. Current capacity of DBEs to perform work, as measured by the volume of work DBEs have performed in recent years.** Analysis of this factor might indicate a downward step 2 adjustment if ADOT based this determination on its reported 0 percent DBE participation for recent years.

However, DBE participation estimated by Keen Independent indicated 6.9 percent participation over the study period and a contract to a DBE as recently as 2013. This might indicate an upward step 2 adjustment, or no adjustment at all.

**2. Information related to employment, self-employment, education, training, and unions.** The study team was not able to quantify all of the information regarding barriers to entry for MBE/WBEs. Quantification of the business ownership factor indicates an upward step 2 adjustment of 3.71 percentage points to reflect the “but-for” analyses of business ownership rates presented in Figure 10-2. If ADOT made this upward adjustment, the overall DBE goal for FAA-funded contracts would be  $4.87 + 3.71 = 8.58$  percent.

**3. Any disparities in the ability of DBEs to get financing, bonding and insurance.** Analysis of financing, bonding and insurance indicates that an upward adjustment is appropriate. However, impact of these factors on availability could not be quantified.

**4. Other factors.** Impact of the many barriers to success of MBE/WBEs in Arizona could not be specifically quantified. However, the evidence supports an upward adjustment.

**Summary.** ADOT will need to consider whether to make a downward, upward or no step 2 adjustment when determining its overall DBE goal.

---

<sup>4</sup> 49 CFR Section 26.45.

### **C. Portion of DBE Goal for FAA-funded Contracts to be Met through Neutral Means**

As explained in Chapter 8, the Federal DBE Program requires state and local transportation agencies to meet the maximum feasible portion of their overall DBE goals using race- and gender-neutral measures. Along with setting an overall goal for DBE participation, agencies must project the portion of that goal they expect to meet (a) through race- and gender-neutral means, and (b) through race- and gender-conscious programs (if any). USDOT offers guidance concerning how transportation agencies should project the portions of their overall DBE goals that will be met through race- and gender-neutral and race- and gender-conscious measures, as outlined in detail in Chapter 8. (The extensive discussion in Chapter 8 is not repeated here.)

**1. Is there evidence of discrimination within the local transportation contracting marketplace for any racial, ethnic or gender groups?** The 2015 Disparity Study provides results of the local marketplace research (summarized in Chapter 4) and analyses of MBE/WBE utilization and availability (see Chapters 6 and 7). This information is also summarized below.

**Marketplace conditions.** As discussed in Chapter 4, Keen Independent examined conditions in the Arizona marketplace, including:

- Entry and advancement;
- Business ownership;
- Access to capital, bonding and insurance; and
- Success of businesses.

There was quantitative evidence of disparities in outcomes for minority- and women-owned firms in general and for certain MBE/WBE groups concerning the above issues. Qualitative information indicated some evidence that discrimination may have been a factor in these outcomes. It is important to note that some minority and female business owners interviewed did not think they had been affected by race or gender discrimination.

ADOT should review the information about marketplace conditions presented in Chapter 4 and Appendices E through H, as well as other information it may have, when considering the extent to which it can meet its overall DBE goal through neutral measures.

**Disparity analysis.** There was a substantial disparity between the utilization of MBE/WBEs combined (11.5%) and what might be expected from the availability analysis for MBE/WBEs (24.8%). The disparity index was 46.

- MBEs received one contract that represented 4.5 percent of FAA-funded contract dollars, less than what might be expected based on the availability analysis for MBEs for these contracts (16.8%). The disparity index for MBEs was 27.
- White women-owned firms received 6.7 percent of contract dollars, also less than the 8.0 percent that might be expected based on the availability analysis for FAA-funded contracts. The disparity index for WBEs was 86.

Figure 6-10 in Chapter 6 presents overall utilization and availability results for MBEs and WBEs in FAA-funded contracts.

**Summary.** There is substantial evidence that there is not a level playing for minority- and women-owned firms in the Arizona marketplace.

**2. What has been the agency's past experience in meeting its overall DBE goal?** As ADOT reported no DBE participation in FFYs 2012, 2013 and 2014, it did not meet its goal of 3.30 percent in any of those years based on its Uniform Reports.

Results based Keen Independent data for July 2007 through June 2013 indicate that ADOT utilization of DBEs (6.7%) was higher than its current 3.30 percent overall goal for FAA-funded contracts.

Keen Independent recommends that ADOT consider the information for DBE participation in FAA-funded contracts developed as part of this Disparity Study. Based on those results, it appears that ADOT could meet a goal in the range of 4.87 percent solely through neutral means.

**3. What has DBE participation been when ADOT has not applied DBE contract goals (or other race-conscious remedies)?** All of the DBE participation for FAA-funded contracts has been without application of DBE contract goals or other race-conscious programs.

**4. What is the extent and effectiveness of race- and gender-neutral measures that the agency could have in place for the next fiscal year?** When determining the extent to which it could meet its overall DBE goal through the use of neutral measures, ADOT must review the race- and gender-neutral measures that it and other organizations have in place, and those it has planned or could consider for future implementation.

Keen Independent's analysis of neutral remedies in Chapter 7 indicates that ADOT has implemented an extensive set of neutral measures. At this time, it is difficult to quantify how much the current and planned initiatives can increase race-neutral participation of DBEs in ADOT's FAA-funded contracts.

Keen Independent also examined other potential neutral measures. Research into expanded SBC programs, such as SBC contract goals and an SBC set-aside program, indicate that ADOT might not have the authority under state law to implement such measures. Although ADOT might consider further research into these two initiatives, it does not appear that they could be implemented within the FFY 2016 through FFY 2018 time period for which these projections apply (or ever implemented).

## Summary

Chapter 9 provides information to ADOT as it considers its overall DBE goal for FFY 2017 through FFY 2019 for FAA-funded contracts and its projection of the portion of its overall DBE goal to be achieved through neutral means.

**1. Overall DBE goal for FAA-funded contracts.** ADOT might consider an overall DBE goal of 4.87 percent based on updated information in the Disparity Study (see Chapter 5 and further exploration earlier in Chapter 9).

**2. Should ADOT project that it can meet all of its overall DBE goal through neutral means?**

ADOT must consider whether it can achieve 100 percent of its overall DBE goal through neutral means or whether race-conscious programs are needed. The historical information summarized in Chapter 9 indicates that ADOT might be able to achieve an overall DBE goal of 4.87 percent entirely through neutral means.



## **CHAPTER 10.**

### **Overall Annual DBE Goal and Projections for FTA-funded Contracts**

As with FHWA and FAA, ADOT is required to set an overall annual goal for DBE participation in its FTA-funded transportation contracts. The 2014 Availability Study did not analyze information for setting an overall three-year DBE goal for FTA-funded contracts, as ADOT's deadline for having this new three-year goal in place is October 1, 2015.

Chapter 10 provides information for ADOT to consider for setting a new overall annual DBE goal for FTA-funded contracts and its projection of how much of the goal is to be met through race-neutral measures. Chapter 10 has three parts based on the process that 49 CFR Part 26.45 outlines for agencies to set their overall goals and project the portion to be met through neutral means:

- A. Establishing a base figure;
- B. Consideration of a step 2 adjustment; and
- C. Portion of overall DBE goal for FTA-funded contracts to be met through neutral means.

#### **A. Establishing a Base Figure**

Establishing a base figure is the first step in calculating an overall annual goal for DBE participation in ADOT's FTA-funded transportation contracts. As presented in Chapter 5, currently-certified DBEs are available for 7.25 percent of ADOT FTA-funded transportation contracts based on analysis of July 2007 through June 2013 FTA-funded contracts. ADOT might consider 7.25 percent as the base figure for its DBE goal.

Chapter 5 explains the methodology for the base figure calculation in considerable detail.

#### **B. Consideration of a Step 2 Adjustment**

Per the Federal DBE Program, ADOT must consider potential step 2 adjustments to the base figure as part of determining its overall annual DBE goal for FTA-funded contracts. Federal regulations outline factors that an agency must consider when assessing whether to make any step 2 adjustments to its base figure:

- 1. Current capacity of DBEs to perform work, as measured by the volume of work DBEs have performed in recent years;
- 2. Information related to employment, self-employment, education, training, and unions;
- 3. Any disparities in the ability of DBEs to get financing, bonding and insurance; and
- 4. Other relevant factors.<sup>1</sup>

---

<sup>1</sup> 49 CFR Section 26.45.

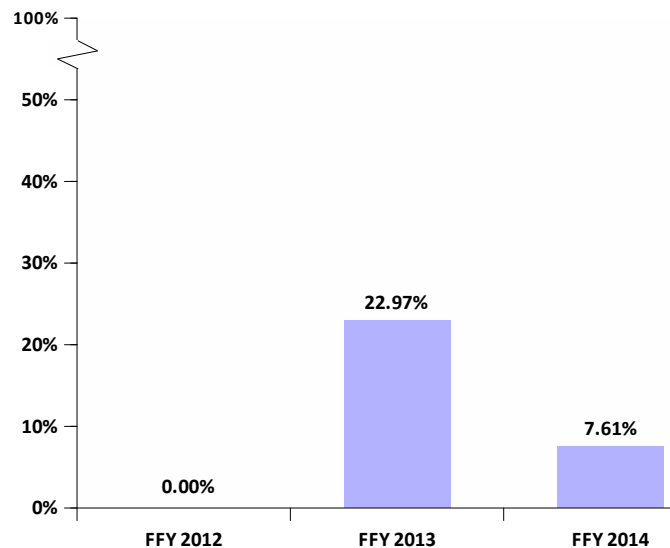
Keen Independent completed an analysis of each of the above step 2 factors and was able to quantify the effect of certain factors on the base figure. Other information examined was not as easily quantifiable but is still relevant to ADOT as it determines whether to make any step 2 adjustments.

**1. Current capacity of DBEs to perform work, as measured by the volume of work DBEs have performed in recent years.** USDOT’s “Tips for Goal-Setting” suggests that agencies should examine data on past DBE participation on their USDOT-funded contracts in recent years (i.e., the percentage of contract dollars going to DBEs).

DBE participation based on ADOT Uniform Reports to FTA. Figure 10-1 presents information about past DBE participation based on payments from ADOT Uniform Reports of DBE Awards or Commitments and Payments reported to the FTA. Participation is shown for FFYs 2012, 2013 and 2014, the three most recent complete federal fiscal years at the time of the disparity study. Median DBE participation based on payments for these three years is 7.61 percent. ADOT achieved this participation entirely through neutral means.

**Figure 10-1.**  
ADOT reported past DBE participation on FTA-funded contracts based on payments, federal fiscal years 2012, 2013 and 2014

Source: ADOT Uniform Reports of DBE Awards/Commitments and Payments



If the past DBE participation is close to value of the base figure, an agency does not need to make a step 2 adjustment as long as it explains why.<sup>2</sup>

DBE participation based on Keen Independent utilization analysis for FTA- funded contracts. Keen Independent’s analysis identified 26.90 percent participation of DBEs on FTA- funded contracts from July 2007 through June 2013. ADOT might consider these data when determining whether to make a step 2 adjustment based on past DBE participation.

---

<sup>2</sup> Note that “Tips for Goal-Setting” considers the possibility that the base figure and the goal based on a step-2 adjustment might be very close. “If your records suggest levels of past participation very similar to the number you calculated in Step One, then it is not necessary to make any adjustment for past participation.” The example USDOT provides for “very similar” is when the base figure and the calculation after the step 2 adjustment are within 1.4 percentage points of one another. “In that case, you do not need to make an adjustment for past participation. Nevertheless, you must explicitly state that the reason you are not making an adjustment for past participation is that your past participation has been very similar to your Step One Base Figure.” (See III.A.2. of USDOT, “Tips for Goal-Setting.”)

## **2. Information related to employment, self-employment, education, training, and unions.**

Chapter 4 summarizes information about conditions in the Arizona transportation contracting industry for minorities, women and MBE/WBEs. Detailed quantitative analyses of marketplace conditions in Arizona are presented in Appendices E through H. Keen Independent's analyses indicate that there are barriers that certain minority groups and women face related to entry and advancement and business ownership in the Arizona construction and engineering industries. Such barriers may affect the availability of MBE/WBEs to obtain and perform ADOT and local agency transportation contracts.

It may not be possible to quantify the cumulative effect that barriers in employment, education, and training may have had in depressing the availability of minority- and women-owned firms in the Arizona transportation contracting industry. However, the effects of barriers in business ownership can be quantified, as explained in Chapter 8.

The study team used regression analyses to investigate whether race, ethnicity and gender affected rates of business ownership among workers in the Arizona construction and engineering industries. The regression analyses allowed the study team to examine those effects while statistically controlling for various personal characteristics including education and age (Appendix F provides detailed results of the business ownership regression analyses).<sup>3</sup> Those analyses revealed that African Americans, Native Americans and white women working in construction were less likely than non-minorities and white men to own construction businesses, even after accounting for various gender-neutral personal characteristics. Each of these disparities was statistically significant.

In Chapter 8, Keen Independent analyzed the impact that barriers in business ownership would have on the base figure for FHWA-funded contracts if African Americans, Native Americans and white women owned businesses at the same rate as similarly-situated non-minorities and white men. This type of inquiry is sometimes referred to as a "but for" analysis because it estimates the availability of MBE/WBEs *but for* the effects of race- and gender-based discrimination.

The analysis indicated a possible upward step 2 adjustment of 3.71 percentage points (see Figure 8-2 in Chapter 8). This might be an appropriate upward step 2 adjustment if ADOT chose to make such an adjustment.

**3. Any disparities in the ability of DBEs to get financing, bonding and insurance.** Analysis of access to financing and bonding revealed quantitative and qualitative evidence of disadvantages for minorities, women and MBE/WBEs.

- Any barriers to obtaining financing and bonding might affect opportunities for minorities and women to successfully form and operate construction and engineering businesses in the Arizona marketplace.
- Any barriers that MBE/WBEs face in obtaining financing and bonding would also place those businesses at a disadvantage in obtaining ADOT and local agency construction and engineering prime contracts and subcontracts.

---

<sup>3</sup> The study team examined U.S. Census data on business ownership rates using methods similar to analyses examined in court cases involving state departments of transportation in California, Illinois and Minnesota.

Note that financing and bonding are closely linked, as discussed in Chapter 4 and Appendix J.

There is also evidence that some firms cannot bid on certain public sector projects because they cannot afford the levels of insurance required by the agency. This barrier appears to affect small businesses, which might disproportionately impact minority- and women-owned firms.

The information about financing, bonding and insurance supports an upward step 2 adjustment in ADOT's overall annual goal for DBE participation in FTA-funded contracts.

**4. Other factors.** The Federal DBE Program suggests that federal aid recipients also examine “other factors” when determining whether to make any step 2 adjustments to their base figure.<sup>4</sup>

**Success in the Arizona marketplace.** Among the “other factors” examined in this disparity study was the success of MBE/WBEs relative to majority-owned businesses in the Arizona marketplace. There is quantitative evidence that certain groups of MBE/WBEs are less successful than majority-owned firms, and face greater barriers in the marketplace, even after considering neutral factors. Chapter 4 summarizes that evidence and Appendix H presents supporting quantitative analyses. There is also qualitative evidence of barriers to the success of minority- and women-owned businesses, as summarized in Chapter 4. Some of this qualitative information suggests that discrimination on the basis of race, ethnicity and gender affects minority- and women-owned firms in the Arizona transportation contracting industry.

**Approaches for making step 2 adjustments.** Quantification of potential step 2 adjustments is discussed below.

**1. Current capacity of DBEs to perform work, as measured by the volume of work DBEs have performed in recent years.** Analysis of this factor might indicate a downward step 2 adjustment if ADOT analyzed its estimates of past DBE participation (based on payments) — for recent years, the median reported DBE participation on FTA-funded contracts was 7.61 percent (from Figure 10-1). As this is very close to the base figure, ADOT would not need to make a step 2 adjustment based on these data as long as it explained its reasoning.

**2. Information related to employment, self-employment, education, training, and unions.** The study team was not able to quantify all of the information regarding barriers to entry for MBE/WBEs. Quantification of the business ownership factor indicates an upward step 2 adjustment of 3.71 percentage points to reflect the “but-for” analyses of business ownership rates presented in Figure 8-1 in Chapter 8.

If ADOT made this same adjustment for FTA-funded contracts, the overall DBE goal would be 10.96 percent (7.25% + 3.71% = 10.96%).

**3. Any disparities in the ability of DBEs to get financing, bonding and insurance.** Analysis of financing, bonding and insurance indicates that an upward adjustment is appropriate. However, impact of these factors on availability could not be quantified.

---

<sup>4</sup> 49 CFR Section 26.45.

**4. Other factors.** Impact of the many barriers to success of MBE/WBEs in Arizona could not be specifically quantified. However, the evidence supports an upward adjustment.

**Summary.** ADOT will need to consider whether to make a downward, upward or no step 2 adjustment when determining its overall DBE goal.

### **C. Portion of DBE Goal for FTA-funded Contracts to be Met through Neutral Means**

As explained in Chapter 8, the Federal DBE Program requires state and local transportation agencies to meet the maximum feasible portion of their overall DBE goals using race- and gender-neutral measures. Along with setting an overall goal for DBE participation, agencies must project the portion of that goal they expect to meet (a) through race- and gender-neutral means, and (b) through race- and gender-conscious programs (if any). USDOT offers guidance concerning how transportation agencies should project the portions of their overall DBE goals that will be met through race- and gender-neutral and race- and gender-conscious measures, as outlined in detail in Chapter 8. (The extensive discussion in Chapter 8 is not repeated here.)

**1. Is there evidence of discrimination within the local transportation contracting marketplace for any racial, ethnic or gender groups?** The 2015 Disparity Study provides results of the local marketplace research (summarized in Chapter 4) and analyses of MBE/WBE utilization and availability (see Chapters 6 and 7). This information is also summarized below.

**Marketplace conditions.** As discussed in Chapter 4, Keen Independent examined conditions in the Arizona marketplace, including:

- Entry and advancement;
- Business ownership;
- Access to capital, bonding and insurance; and
- Success of businesses.

There was quantitative evidence of disparities in outcomes for minority- and women-owned firms in general and for certain MBE/WBE groups concerning the above issues. Qualitative information indicated some evidence that discrimination may have been a factor in these outcomes. It is important to note that some minority and female business owners interviewed did not think they had been affected by race or gender discrimination.

ADOT should review the information about marketplace conditions presented in Chapter 4 and Appendices E through H, as well as other information it may have, when considering the extent to which it can meet its overall DBE goal through neutral measures.

**Disparity analysis.** Overall, there was no disparity between the utilization of MBE/WBEs (45.8%), higher than what might be expected from the availability analysis (33.8%).

- Although MBEs received 15.2 percent of FTA-funded contracts, this level of utilization was less than what might be expected based on the availability analysis for MBEs for these contracts (24.7%). The disparity index for MBEs was 62. Utilization exceeded availability for African American-, Asian-Pacific American- and Native American-owned firms. There were disparities for Subcontinent Asian American- and Hispanic American-owned firms.
- White women-owned firms received 31 percent of contract dollars, higher than the 9.1 percent that might be expected based on the availability analysis for FTA-funded contracts.

Figure 6-11 in Chapter 6 presents overall utilization and availability results for MBEs and WBEs in FTA-funded contracts.

**Summary.** There is substantial evidence that there is not a level playing for minority- and women-owned firms in the Arizona marketplace. However, minority- and women-owned firms received nearly one-half of the FTA contract dollars during the study period, more than what might be anticipated from the availability analysis.

**2. What has been the agency's past experience in meeting its overall DBE goal?** Figure 10-2 summarizes ADOT's reported certified DBE participation for the most recent three federal fiscal years. As shown, reported DBE participation based on DBE commitments/awards on FTA-funded contracts was less than the DBE goal of 3.82 percent for two of the three years, but so exceeded the goal in FFY 2014 that overall attainment was 12.05 percent for the three-year period.

Results based on payments also indicate that ADOT utilization of DBEs was considerably above the 3.82 percent overall goal. Overall DBE utilization over these three years was 9.02 percent based on payments. In sum, DBE participation on ADOT's FTA-funded contracts has exceeded its 3.82 percent goal in recent years.

Figure 10-2.

ADOT overall DBE goal and reported DBE participation on FTA-funded contracts, FFY 2012 through FFY 2014

Federal fiscal year	DBE goal	DBE commitments/		Difference from DBE goal	
		awards	DBE payments	Awards	Payments
2012	3.82 %	1.07 %	0.00 %	-2.75 %	-3.82 %
2013	3.82	0.50	22.97	-3.32	19.15
2014	3.82	39.00	7.61	35.18	3.79

Source: ADOT Uniform Reports of DBE Awards/Commitments and Payments.

Keen Independent separately examined participation of DBEs on FTA-funded contracts for the July 2007 through June 2013 study period. As reported in Chapter 6, this analysis indicates 26.9 percent participation of DBEs in that time period.

**3. What has DBE participation been when ADOT has not applied DBE contract goals (or other race-conscious remedies)?** All of the DBE participation has been in a neutral environment.

**4. What is the extent and effectiveness of race- and gender-neutral measures that the agency could have in place for the next fiscal year?** When determining the extent to which it could meet its overall DBE goal through the use of neutral measures, ADOT must review the race- and gender-neutral measures that it and other organizations have in place, and those it has planned or could consider for future implementation.

Keen Independent's analysis of neutral remedies in Chapter 7 indicates that ADOT has implemented an extensive set of neutral measures. Three current initiatives that could affect participation are:

- ADOT has retained Donato Consulting to conduct one-on-one meetings with potential DBEs identified in the 2014 Availability Study to encourage firms to become DBE certified. This is one way to increase reported DBE participation through neutral means, as some of these companies may already be doing business with ADOT. Certification will allow this participation to count toward ADOT's overall DBE goal.
- ADOT plans to expand online information available to small businesses, including DBEs, through a Virtual Assistant website. This new website might be launched within the next 12 months.
- ADOT has a "Just One More" campaign to encourage prime contracts to use one more DBE than needed to meet a DBE contract goal.

At this time, it is difficult to quantify how much the above initiatives can increase race-neutral participation of DBEs in ADOT's FTA-funded contracts.

Keen Independent also examined other potential neutral measures. Research into expanded SBC programs, such as SBC contract goals and an SBC set-aside program, indicate that ADOT might not have the authority under state law to implement such measures. Although ADOT might consider further research into these two initiatives, it does not appear that they could be implemented within the FFY 2015 through FFY 2017 time period for which these projections apply (or ever under current restrictions).

## Summary

Chapter 10 provides information to ADOT as it considers its overall DBE goal for FFY 2016 through FFY 2018 for FTA-funded contracts and its projection of the portion of its overall DBE goal to be achieved through neutral means.

**1. Overall DBE goal for FTA-funded contracts.** ADOT might consider an overall DBE goal of 7.25 percent based on information in the Disparity Study (see Chapter 5 and further exploration earlier in Chapter 10).

**2. Should ADOT project that it can meet all of its overall DBE goal through neutral means?**

ADOT must consider whether it can achieve 100 percent of its overall DBE goal through neutral means or whether race-conscious programs are needed. The historical information summarized in Chapter 10 indicates that ADOT can achieve an overall DBE goal of 7.25 percent entirely through neutral means.



## APPENDIX A.

### Definition of Terms

Appendix A provides explanations and definitions useful to understanding the 2015 Disparity Study. The following definitions are only relevant in the context of these reports.

**Anecdotal evidence.** Anecdotal evidence includes personal accounts and perceptions of incidents — including any incidents of discrimination — told from each individual interviewee’s or participant’s perspective.

**Arizona Department of Transportation (ADOT).** ADOT is the steward of the State of Arizona’s transportation system. ADOT is responsible for building, maintaining, and operating the state highway system. In addition, ADOT works with various partners to maintain and improve local transportation infrastructure. ADOT also provides other transportation services such as transportation safety.

**Availability analysis.** The availability analysis examines the number of minority-, women-owned and majority-owned businesses ready, willing, and able to perform transportation-related construction and engineering work for ADOT or local agencies in Arizona.

“Availability” is often expressed as the percentage of contract dollars that might be expected to go to minority- or women-owned firms if based on analysis of the specific type, location, size and timing of each ADOT prime contract and subcontract and the relative number of minority- and women-owned firms available for that work.

**Business.** A business is a for-profit company, including all of its establishments (synonymous with “firm” and “company”).

**Business listing.** A business listing is a record in the Dun & Bradstreet (D&B) database (or other database) of business information. A D&B record is a “listing” until the study team determines it to actually be a business establishment with a working phone number.

**Business establishment.** A business establishment (or simply, “establishment”) is a place of business with an address and working phone number. One business can have many business establishments.

**Code of Federal Regulations or CFR.** Code of Federal Regulations (“CFR”) is a codification of the federal agency regulations. An electronic version can be found at <http://www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR>.

**Contract.** A contract is a legally binding relationship between the seller of goods or services and a buyer.

**Contract element.** A contract element is either a prime contract or subcontract that the study team included in its analyses.

**Consultant.** A business performing professional services contracts.

**Contractor.** A contractor is a business performing construction contracts.

**Controlled.** Controlled means exercising management and executive authority for a company.

**Disadvantaged Business Enterprise (DBE).** A small business that is 51 percent or more owned and controlled by one or more individuals who are both socially and economically disadvantaged according to the guidelines in the Federal DBE Program (49 CFR Part 26). Membership in certain race and ethnic groups identified under “minority-owned business enterprise” in this appendix may meet the presumption of socially and economically disadvantaged. Women are also presumed to be socially and economically disadvantaged. Examination of economic disadvantage also includes investigating the three-year average gross revenues and the business owner’s personal net worth (at the time of this report, a maximum of \$1.32 million excluding equity in the business and primary personal residence).

Some minority- and women-owned businesses do not qualify as DBEs because of gross revenue or net worth limits.

A business owned by a non-minority male can be certified as a DBE if the enterprise meets the requirements in 49 CFR Part 26.

**Disparity.** A disparity is a difference or gap between an actual outcome and a reference point or benchmark. For example, a difference between an outcome for one racial/ethnic group and an outcome for non-Hispanic whites may constitute a disparity.

**Disparity analysis.** A disparity analysis compares actual outcomes with what might be expected based on other data. Analysis of whether there is a “disparity” between the utilization and availability of minority- and women-owned businesses is one tool in examining whether there is evidence consistent with discrimination against such businesses.

**Disparity index.** A disparity index is calculated by dividing percent utilization (numerator) by percent availability (denominator) and then multiplying the result by 100. A disparity index of 100 indicates “parity.” Smaller disparity indices indicate larger disparities. For example, the disparity index would be “50” if the utilization of a particular group was 5 percent of contract dollars and its availability was 10 percent.

**Dun & Bradstreet (D&B).** D&B is the leading global provider of lists of business establishments and other business information (see [www.dnb.com](http://www.dnb.com)). Hoover’s is the D&B company that provides these lists.

**Employer firms.** Employer firms are firms with paid employees other than the business owner and family members.

**Enterprise.** An enterprise is an economic unit that could be a for-profit business or business establishment; not-for-profit organization; or public sector organization.

**Establishment.** See “business establishment.”

**Federal Aviation Administration (FAA).** The FAA is an agency of the United States Department of Transportation that administers federal funding to support all aspects of civil aviation in the United States including airports and air traffic control centers.

**Federal Disadvantaged Business Enterprise (DBE) Program.** Federal DBE Program refers to the Disadvantaged Business Enterprise Program established by the United States Department of Transportation after enactment of the Transportation Equity Act for the 21st Century (TEA-21) as amended in 1998. The regulations for the Federal DBE Program are set forth in 49 CFR Part 26.

**Federal Highway Administration (FHWA).** The FHWA is an agency of the United States Department of Transportation that works with state and local governments to construct, preserve, and improve the National Highway System, other roads eligible for federal aid, and certain roads on federal and tribal lands.

**Federal Transit Administration (FTA).** The FTA is an agency of the United States Department of Transportation that administers federal funding to support local public transportation systems including buses, subways, light rail, passenger ferry boats, and other forms of transportation.

**Firm.** See “business.”

**Federally-funded contract.** A federally-funded contract is any contract or project funded in whole or in part (a dollar or more) with United States Department of Transportation financial assistance, including loans. As used in this study, it is synonymous with “USDOT-funded contract.”

**Industry.** An industry is a broad classification for businesses providing related goods or services.

**Local agency.** A local agency is any city, county, town, tribal government, regional transportation commission or other local government receiving money through ADOT.

**Majority-owned business.** A majority-owned business is a for-profit business that is not owned and controlled by minorities or women (see definition of “minorities” below).

**MBE.** See minority-owned business.

**Minorities.** Minorities are individuals who belong to one of the racial/ethnic groups identified in the federal regulations in 49 CFR Section 26.5:

- Black Americans (or “African Americans” in this study), which include persons having origins in any of the black racial groups of Africa;
- Hispanic Americans, which include persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;
- Native Americans, which include persons who are American Indians, Eskimos, Aleuts or Native Hawaiians;

- Asian-Pacific Americans, which include persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, Hong Kong, and other countries and territories in the Pacific set forth in 49 CFR Section 26.5; and
- Subcontinent Asian Americans, which include persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka.

**Minority-owned business (MBE).** An MBE is a business with at least 51 percent ownership and control by minorities. Minority groups in this study are those listed in 49 CFR Section 26.5. For purposes of this study, a business need not be certified as such to be counted as a minority-owned business. Businesses owned by minority women are also counted as MBEs in this study (where that information is available).

**North American Industry Classification System (NAICS) codes.** NAICS codes identify the primary line of business of a business enterprise. See <http://www.census.gov/epcd/www/naics.html>.

**Non-DBEs.** Non-DBEs are firms that are not certified as DBEs, regardless of the race/ethnicity or gender of the owner.

**Non-response bias.** Non-response bias occurs when the observed responses to a survey question differ from what would have been obtained if all individuals in a population, including non-respondents, had answered the question.

**Owned.** Owned indicates at least 51 percent ownership of a company. For example, a “minority-owned” business is at least 51 percent owned by one or more minorities.

**Potential DBE.** A potential DBE is a minority- or woman-owned business that is DBE-certified or appears that it could be DBE-certified (regardless of actual DBE certification) based on revenue requirements specified as part of the Federal DBE Program.

**Prime consultant.** A prime consultant is a professional services firm that performed a prime contract for an end user, such as ADOT.

**Prime contract.** A prime contract is a contract between a prime contractor or a prime consultant and the end user, such as ADOT.

**Prime contractor.** A prime contractor is a construction firm that performs a prime contract for an end user, such as ADOT.

**Project.** A project refers to an ADOT or local agency transportation construction and/or engineering endeavor. A project could include one or multiple prime contracts and corresponding subcontracts.

**Race-and gender-conscious measures.** Race-and gender-conscious measures are programs in which businesses owned by some racial/ethnic groups may participate but non-minority-owned firms may not, or that apply to businesses owned by women but not men. A DBE contract goal is one example of a race- and gender-conscious measure.

Note that the term is a shortened version of “race-, ethnicity-, and gender-conscious measures.” For ease of communication, the study team has truncated the term to “race- and gender-conscious measures.”

**Race- and gender-neutral measures.** Race and gender-neutral measures apply to businesses regardless of the race/ethnicity or gender of firm ownership. Race- and gender-neutral measures may include assistance in overcoming bonding and financing obstacles, simplifying bidding procedures, providing technical assistance, establishing programs to assist start-up firms, and other methods open to all businesses or any disadvantaged business regardless of race or gender of ownership. (A broader list of examples can be found in 49 CFR Section 26.51(b).)

Note that the term is more accurately “race, ethnicity, and gender-neutral” measures. However, for ease of communication, the study team has shortened the term to “race- and gender-neutral measures.”

**Relevant geographic market area.** The relevant geographic market area is the geographic area in which the businesses receiving most ADOT and local agency contracting dollars are located. The relevant geographic market area is also referred to as the “local marketplace.” Case law related to MBE/WBE programs requires disparity analyses to focus on the “relevant geographic market area.”<sup>1</sup>

**Remedy.** A remedy is a contracting program measure that is designed to address barriers to full participation of a particular group of businesses.

**Small business.** A small business is a business with low revenues or size (based on revenue or number of employees) relative to other businesses in the industry. “Small business” does not necessarily mean that the business is certified as such.

**Small Business Administration (SBA).** The SBA refers to the United States Small Business Administration, which is an independent agency of the United States government that assists small businesses.

**State-funded contract.** A state-funded contract is any contract or project that is funded with State of Arizona or other local funds. As these contracts do not include federal funds, the Federal DBE Program does not apply.

**Statistically significant difference.** A statistically significant difference refers to a quantitative difference for which there is a 0.95 probability that chance can be correctly rejected as a reasonable explanation for the difference (meaning that there is a 0.05 probability that chance in the sampling process could correctly account for the difference).

---

<sup>1</sup> See, e.g., *Croson*, 448 U.S. at 509; 49 CFR Section 26.35; *Rothe*, 545 F.3d at 1041-1042; *N. Contracting*, 473 F.3d at 718, 722-23; *Western States Paving*, 407 F.3d at 995.

**Subconsultant.** A subconsultant is a professional services firm that performed services for a prime consultant as part of the prime consultant's contract for customer such as ADOT.

**Subcontract.** A subcontract is a contract between a prime contractor or prime consultant and another business selling goods or services to the prime contractor or prime consultant as part of the prime contractor's contract for a customer such as ADOT.

**Subcontractor.** A subcontractor is a construction firm that performed services for a prime contractor as part of a larger project.

**Subrecipient.** A subrecipient is a local agency receiving financial assistance from the United States Department of Transportation passed through ADOT.

**Supplier.** A supplier is a firm that sold supplies to a prime contractor as part of a larger project (or in some cases sold supplies directly to ADOT).

**United States Department of Transportation (USDOT).** USDOT refers to the United States Department of Transportation, which includes the Federal Highway Administration, the Federal Transit Administration, the Federal Aviation Administration and the Federal Rail Administration. Note that the Federal DBE Program does not apply to contracts solely using funds from Federal Rail Administration, and such contracts would not be included in the Disparity Study.

**Utilization.** Utilization refers to the percentage of total contracting dollars of a particular type of work going to a specific group of businesses (e.g., DBEs).

**WBE.** See women-owned business.

**Women-owned business (WBE).** A WBE is a business with at least 51 percent ownership and control by non-minority women. A business need not be certified as such to be included as a WBE in this study. For this study, businesses owned and controlled by minority women are counted as minority-owned businesses.

## APPENDIX B. Legal Framework and Analysis

### A. Introduction

In this appendix, Holland & Knight LLP analyzes recent cases regarding the Transportation Equity Act for the 21st Century (TEA-21) as amended and reauthorized (“MAP-21,” “SAFETEA” and “SAFETEA-LU”),<sup>1</sup> and the United States Department of Transportation (“USDOT” or “DOT”) regulations promulgated to implement TEA-21 known as the Federal Disadvantaged Business Enterprise (“DBE”) Program,<sup>2</sup> and local minority and women-owned business enterprise (“MBE/WBE”) programs to provide a summary of the legal framework for the disparity study as applicable to the Arizona Department of Transportation (ADOT).

Appendix B begins with a review of the landmark United States Supreme Court decision in *City of Richmond v. J.A. Croson*.<sup>3</sup> *Croson* sets forth the strict scrutiny constitutional analysis applicable in the legal framework for conducting a disparity study. This section also notes the United States Supreme Court decision in *Adarand Constructors, Inc. v. Peña*,<sup>4</sup> (“*Adarand I*”), which applied the strict scrutiny analysis set forth in *Croson* to federal programs that provide federal assistance to a recipient of federal funds. The Supreme Court’s decisions in *Adarand I* and *Croson*, and subsequent cases and authorities provide the basis for the legal analysis in connection with ADOT’s participation in the Federal DBE Program.

The legal framework then analyzes and reviews significant recent court decisions that have followed, interpreted, and applied *Croson* and *Adarand I* to the present and that are applicable to ADOT’s disparity study and the strict scrutiny analysis. In particular, this analysis reviews the Ninth Circuit decisions in *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation* (“*Caltrans*”), *et al.*<sup>5</sup> and *Western States Paving Co. v. Washington State DOT*.<sup>6</sup>

---

<sup>1</sup> Moving Ahead for Progress in the 21st Century Act (“MAP-21”), Pub L. 112-141, H.R. 4348, § 1101(b), July 6, 2012, 126 Stat. 405.; preceded by Pub L. 109-59, Title I, § 1101(b), August 10, 2005, 119 Stat. 1156; preceded by Pub L. 105-178, Title I, § 1101(b), June 9, 1998, 112 Stat. 107.

<sup>2</sup> 49 CFR Part 26 (Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs (“Federal DBE Program”).

<sup>3</sup> *City of Richmond v. J.A. Croson*, 488 U.S. 469 (1989).

<sup>4</sup> *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200 (1995).

<sup>5</sup> *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.*, 713 F. 3d 1187, (9th Cir. April 16, 2013); U.S.D.C., E.D. Cal, Civil Action No. S-09-1622, Slip Opinion Transcript (E.D. Cal. April 20, 2011), *appeal dismissed based on standing, on other grounds Ninth Circuit held Caltrans’ DBE Program constitutional, Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.*, 713 F. 3d 1187, (9th Cir. April 16, 2013)

<sup>6</sup> *Western States Paving Co. v. Washington State DOT*, 407 F.3d 983 (9th Cir. 2005), *cert. denied*, 546 U.S. 1170 (2006).

In *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation* (“Caltrans”), *et al.*, (“AGC, SDC v. Cal. DOT” or “Caltrans”), the Ninth Circuit in 2013 upheld the validity of California DOT’s DBE Program implementing the Federal DBE Program. In *Western States Paving*, the Ninth Circuit upheld the validity of the Federal DBE Program, but the Court held invalid Washington State DOT’s DBE Program implementing the DBE Federal Program. The Court held that mere compliance with the Federal DBE Program by state recipients of federal funds, absent independent and sufficient state-specific evidence of discrimination in the state’s transportation contracting industry marketplace, did not satisfy the strict scrutiny analysis.

In addition, the analysis reviews other recent federal cases that have considered the validity of the Federal DBE Program and a state government agency’s or recipient’s implementation of the DBE program, including *Northern Contracting, Inc. v. Illinois DOT*,<sup>7</sup> *Sherbrooke Turf, Inc. v. Minn DOT and Gross Seed v. Nebraska Department of Roads*,<sup>8</sup> *Adarand Construction, Inc. v. Slater*<sup>9</sup> (“Adarand VII”), *M.K. Weeden Construction v. State of Montana, Montana DOT*.<sup>10</sup> *Geod Corporation v. New Jersey Transit Corporation*<sup>11</sup>, *South Florida Chapter of the A.G.C. v. Broward County, Florida*.<sup>12</sup>

The analyses of *AGC, SDC v. Cal. DOT*, *Western States Paving* and these other recent cases are instructive to ADOT and the disparity study because they are the most recent and significant decisions by federal courts setting forth the legal framework applied to the Federal DBE Program and its implementation by recipients of federal financial assistance governed by 49 CFR Part 26. They also are applicable in terms of the preparation of its DBE Program by ADOT submitted in compliance with the Federal DBE regulations.

Following *Western States Paving*, the USDOT, in particular for agencies in states in the Ninth Circuit Court of Appeals, recommended the use of disparity studies by recipients of federal financial assistance to examine whether or not there is evidence of discrimination and its effects, and how remedies might be narrowly tailored in developing their DBE Program to comply with the Federal DBE Program.<sup>13</sup> The USDOT suggests consideration of both statistical and anecdotal evidence. The USDOT instructs that recipients should ascertain evidence for discrimination and its effects

---

<sup>7</sup> *Northern Contracting, Inc. v. Illinois DOT*, 473 F.3d 715 (7<sup>th</sup> Cir. 2007).

<sup>8</sup> *Sherbrooke Turf, Inc. v. Minn. DOT* 345 F.3d 964 (8<sup>th</sup> Cir. 2003), *cert. denied*, 541 U.S. 1041 (2004).

<sup>9</sup> 228 F.3d 1147 (10<sup>th</sup> Cir. 2000) (“Adarand VII”).

<sup>10</sup> *M.K. Weeden Construction v. State of Montana, Montana Department of Transportation, et al.* 2013 WL 4774517 (D. Mont.) (September 4, 2013).

<sup>11</sup> 766 F. Supp.2d 642, (D. N.J. 2010).

<sup>12</sup> 544 F. Supp.2d 1336 (S.D. Fla. 2008).

<sup>13</sup> Questions and Answers Concerning Response to *Western States Paving Company v. Washington State Department of Transportation* (January 2006) [hereinafter USDOT Guidance], available at 71 Fed. Reg. 14,775 and [http://www.fhwa.dot.gov/civilrights/dbe\\_memo\\_a5.htm](http://www.fhwa.dot.gov/civilrights/dbe_memo_a5.htm); see 49 CFR § 26.9; see also 49 CFR Section 26.45.



separately for each group presumed to be disadvantaged in 49 CFR Part 26.<sup>14</sup> The USDOT's Guidance provides that recipients should consider evidence of discrimination and its effects.<sup>15</sup>

The USDOT's Guidance is recognized by the federal regulations as “valid and binding, and constitutes the official position of the Department of Transportation”<sup>16</sup> for states in the Ninth Circuit.

In *Western States Paving*, the United States intervened to defend the Federal DBE Program's facial constitutionality, and, according to the Court, stated “that [the Federal DBE Program's] race conscious measures can be constitutionally applied only in those states where the effects of discrimination are present.”<sup>17</sup> Accordingly, the USDOT has advised federal aid recipients that any use of race-conscious measures must be predicated on evidence that the recipient has concerning discrimination or its effects within the local transportation contracting marketplace.<sup>18</sup>

Recently in the Ninth Circuit, the Ninth Circuit Court of Appeals and the United States District Court for the Eastern District of California in *AGC, San Diego Chapter, Inc. v. California DOT, et al.* held that Caltrans' current implementation of the Federal DBE Program is constitutional.<sup>19</sup> The Ninth Circuit held that Caltrans' DBE Program implementing the Federal DBE Program was constitutional and survived strict scrutiny by: (1) having a strong basis in evidence of discrimination within the California transportation contracting industry based in substantial part on the evidence from the Disparity Study conducted for Caltrans; and (2) being “narrowly tailored” to benefit only those groups that have actually suffered discrimination.

The District Court had held that the “Caltrans DBE Program is based on substantial statistical and anecdotal evidence of discrimination in the California contracting industry,” satisfied the strict scrutiny standard, and is “clearly constitutional” and “narrowly tailored” under *Western States Paving* and the Supreme Court cases.<sup>20</sup>

---

<sup>14</sup> USDOT Guidance, available at [http://www.fhwa.dot.gov/civilrights/dbe\\_memo\\_a5.htm](http://www.fhwa.dot.gov/civilrights/dbe_memo_a5.htm) (January 2006)

<sup>15</sup> *Id.*

<sup>16</sup> *Id.*, 49 CFR § 26.9.

<sup>17</sup> *Western States Paving*, 407 F.3d at 996; *see also* Br. for the United States, at 28 (April 19, 2004).

<sup>18</sup> DOT Guidance, available at 71 Fed. Reg. 14,775 and [http://www.fhwa.dot.gov/civilrights/dbe\\_memo\\_a5.htm](http://www.fhwa.dot.gov/civilrights/dbe_memo_a5.htm) (January 2006).

<sup>19</sup> *Associated General Contractors of America, San Diego Chapter, Inc. v. California DOT*, 713 F. 3d 1187, (9th Cir. April 16, 2013); *Associated General Contractor of America, San Diego Chapter, Inc. v. California DOT*, U.S.D.C. E.D. Cal., Civil Action No.S:09-cv-01622, Slip Opinion (E.D. Cal. April 20, 2011) *appeal dismissed based on standing*, on other grounds Ninth Circuit held Caltrans' DBE Program constitutional. *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.*, 713 F. 3d 1187, (9th Cir. April 16, 2013).

<sup>20</sup> *Id.*, *Associated General Contractors of America, San Diego Chapter, Inc. v. California DOT*, Slip Opinion Transcript of U.S. District Court at 42-56.

## **B. U.S. Supreme Court Cases**

### **1. *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989)**

In *Croson*, the U.S. Supreme Court struck down the City of Richmond's "set-aside" program as unconstitutional because it did not satisfy the strict scrutiny analysis applied to "race-based" governmental programs. J.A. Croson Co. ("Croson") challenged the City of Richmond's minority contracting preference plan, which required prime contractors to subcontract at least 30 percent of the dollar amount of contracts to one or more Minority Business Enterprises ("MBE"). In enacting the plan, the City cited past discrimination and an intent to increase minority business participation in construction projects as motivating factors.

The Supreme Court held the City of Richmond's "set-aside" action plan violated the Equal Protection Clause of the Fourteenth Amendment. The Court applied the "strict scrutiny" standard, generally applicable to any race-based classification, which requires a governmental entity to have a "compelling governmental interest" in remedying past identified discrimination and that any program adopted by a local or state government must be "narrowly tailored" to achieve the goal of remedying the identified discrimination.

The Court determined that the plan neither served a "compelling governmental interest" nor offered a "narrowly tailored" remedy to past discrimination. The Court found no "compelling governmental interest" because the City had not provided "a strong basis in evidence for its conclusion that [race-based] remedial action was necessary." The Court held the City presented no direct evidence of any race discrimination on its part in awarding construction contracts or any evidence that the City's prime contractors had discriminated against minority-owned subcontractors. The Court also found there were only generalized allegations of societal and industry discrimination coupled with positive legislative motives. The Court concluded that this was insufficient evidence to demonstrate a compelling interest in awarding public contracts on the basis of race.

Similarly, the Court held the City failed to demonstrate that the plan was "narrowly tailored" for several reasons, including because there did not appear to have been any consideration of race-neutral means to increase minority business participation in city contracting, and because of the over-inclusiveness of certain minorities in the "preference" program (for example, Aleuts) without any evidence they suffered discrimination in Richmond.

The Court further found "if the City could show that it had essentially become a 'passive participant' in a system of racial exclusion practiced by elements of the local construction industry, ... [i]t could take affirmative steps to dismantle such a system." The Court held that "[w]here there is a significant statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by the locality or the locality's prime contractors, an inference of discriminatory exclusion could arise." The Supreme Court noted that it did not intend its decision to preclude a state or local government from "taking action to rectify the effects of identified discrimination within its jurisdiction."

## **2. *Adarand Constructors, Inc. v. Peña* (“*Adarand I*”), 515 U.S. 200 (1995)**

In *Adarand I*, the U.S. Supreme Court extended the holding in *Croson* and ruled that all federal government programs that use racial or ethnic criteria as factors in procurement decisions must pass a test of strict scrutiny in order to survive constitutional muster. The cases interpreting *Adarand I* are the most recent and significant decisions by federal courts setting forth the legal framework for disparity studies as well as the predicate to satisfy the constitutional strict scrutiny standard of review, which applies to the implementation of the Federal DBE Program by recipients of federal funds.

### **C. The Legal Framework Applied to the Federal DBE Program and State and Local Government MBE/WBE Programs**

The following provides an analysis for the legal framework focusing on recent key cases regarding the Federal DBE Program and state and local MBE/WBE programs, and their implications for a disparity study. The recent decisions involving the Federal DBE Program are instructive to ADOT and the disparity study because they concern the strict scrutiny analysis and legal framework in this area, and implementation of the DBE Program by recipients of federal financial assistance (like ADOT) based on 49 CFR Part 26.

#### **1. The Federal DBE Program**

After the *Adarand* decision, the U.S. Department of Justice in 1996 conducted a study of evidence on the issue of discrimination in government construction procurement contracts, which Congress relied upon as documenting a compelling governmental interest to have a federal program to remedy the effects of current and past discrimination in the transportation contracting industry for federally-funded contracts.<sup>21</sup> Subsequently, in 1998, Congress passed the Transportation Equity Act for the 21<sup>st</sup> Century (“TEA-21”), which authorized the United States Department of Transportation to expend funds for federal highway programs for 1998 - 2003. Pub.L. 105-178, Title I, § 1101(b), 112 Stat. 107, 113 (1998). The USDOT promulgated new regulations in 1999 contained at 49 CFR Part 26 to establish the current Federal DBE Program. The TEA-21 was subsequently extended in 2003, 2005 and 2012. The reauthorization of TEA-21 in 2005 was for a five year period from 2005 to 2009. Pub.L. 109-59, Title I, § 1101(b), August 10, 2005, 119 Stat. 1153-57 (“SAFETEA”). In July 2012, Congress passed the Moving Ahead for Progress in the 21<sup>st</sup> Century Act (“MAP-21”).<sup>22</sup>

The Federal DBE Program as amended changed certain requirements for federal aid recipients and accordingly changed how recipients of federal funds implemented the Federal DBE Program for federally-assisted contracts. The federal government determined that there is a compelling governmental interest for race- and gender-based programs at the national level, and that the program is narrowly tailored because of the federal regulations, including the flexibility in implementation provided to individual federal aid recipients by the regulations. State and local governments are not required to implement race- and gender-based measures where they are not

---

<sup>21</sup> *Appendix-The Compelling Interest for Affirmative Action in Federal Procurement*, 61 Fed. Reg. 26,050, 26,051-63 & nn. 1-136 (May 23, 1996) (hereinafter “The Compelling Interest”); see *Adarand VII*, 228 F.3d at 1167-1176, citing *The Compelling Interest*.

<sup>22</sup> Pub L. 112-141, H.R. 4348, § 1101(b), July 6, 2012, 126 Stat 405.

necessary to achieve DBE goals and those goals may be achieved by race- and gender-neutral measures.<sup>23</sup>

The Federal DBE Program established responsibility for implementing the DBE Program to state and local government recipients of federal funds. A recipient of federal financial assistance must set an annual DBE goal specific to conditions in the relevant marketplace. Even though an overall annual 10 percent aspirational goal applies at the federal level, it does not affect the goals established by individual state or local governmental recipients. The Federal DBE Program outlines certain steps a state or local government recipient can follow in establishing a goal, and USDOT considers and must approve the goal and the recipient's DBE program. The implementation of the Federal DBE Program is substantially in the hands of the state or local government recipient and is set forth in detail in the federal regulations, including 49 CFR § 26.45.

Provided in 49 CFR § 26.45 are instructions as to how recipients of federal funds should set the overall goals for their DBE programs. In summary, the recipient establishes a base figure for relative availability of DBEs.<sup>24</sup> This is accomplished by determining the relative number of ready, willing, and able DBEs in the recipient's market.<sup>25</sup> Second, the recipient must determine an appropriate adjustment, if any, to the base figure to arrive at the overall goal.<sup>26</sup> There are many types of evidence considered when determining if an adjustment is appropriate, according to 49 CFR § 26.45(d). These include, among other types, the current capacity of DBEs to perform work on the recipient's contracts as measured by the volume of work DBEs have performed in recent years. If available, recipients consider evidence from related fields that affect the opportunities for DBEs to form, grow, and compete, such as statistical disparities between the ability of DBEs to obtain financing, bonding, and insurance, as well as data on employment, education, and training.<sup>27</sup> This process, based on the federal regulations, aims to establish a goal that reflects a determination of the level of DBE participation one would expect absent the effects of discrimination.<sup>28</sup>

Further, the Federal DBE Program requires state and local government recipients of federal funds to assess how much of the DBE goal can be met through race- and gender-neutral efforts and what percentage, if any, should be met through race- and gender-based efforts.<sup>29</sup>

A state or local government recipient is responsible for seriously considering and determining race- and gender-neutral measures that can be implemented.<sup>30</sup> A recipient of federal funds must establish a contract clause requiring prime contractors to promptly pay subcontractors in the Federal DBE Program (42 CFR § 26.29). The Federal DBE Program also established certain record-keeping

---

<sup>23</sup> 49 CFR § 26.51.

<sup>24</sup> 49 CFR § 26.45(a), (b), (c).

<sup>25</sup> *Id.*

<sup>26</sup> *Id.* at § 26.45(d).

<sup>27</sup> *Id.*

<sup>28</sup> 49 CFR § 26.45(b)-(d).

<sup>29</sup> 49 CFR § 26.51.

<sup>30</sup> 49 CFR § 26.51(b).

requirements, including maintaining a bidders list containing data on contractors and subcontractors seeking federally-assisted contracts from the agency (42 CFR § 26.11). There are multiple administrative requirements that recipients must comply with in accordance with the regulations.<sup>31</sup>

Federal aid recipients are to certify DBEs according to their race/gender, size, net worth and other factors related to defining an economically and socially disadvantaged business as outlined in 49 CFR §§ 26.61-26.73.

#### **MAP-21 (July 2012).**

In the 2012 Moving Ahead for Progress in the 21st Century Act (MAP-21), Congress provides “Findings” that “discrimination and related barriers” “merit the continuation of the” Federal DBE Program.<sup>32</sup> In MAP-21, Congress specifically finds as follows:

“(A) while significant progress has occurred due to the establishment of the disadvantaged business enterprise program, discrimination and related barriers continue to pose significant obstacles for minority- and women-owned businesses seeking to do business in federally-assisted surface transportation markets across the United States;

(B) the continuing barriers described in subparagraph (A) merit the continuation of the disadvantaged business enterprise program;

(C) Congress has received and reviewed testimony and documentation of race and gender discrimination from numerous sources, including congressional hearings and roundtables, scientific reports, reports issued by public and private agencies, news stories, reports of discrimination by organizations and individuals, and discrimination lawsuits, which show that race- and gender-neutral efforts alone are insufficient to address the problem;

(D) the testimony and documentation described in subparagraph (C) demonstrate that discrimination across the United States poses a barrier to full and fair participation in surface transportation-related businesses of women business owners and minority business owners and has impacted firm development and many aspects of surface transportation-related business in the public and private markets; and

(E) the testimony and documentation described in subparagraph (C) provide a strong basis that there is a compelling need for the continuation of the disadvantaged business enterprise program to address race and gender discrimination in surface transportation-related business.”<sup>33</sup>

---

<sup>31</sup> 49 CFR §§ 26.21-26.37.

<sup>32</sup> Pub L. 112-141, H.R. 4348, § 1101(b), July 6, 2012, 126 Stat 405.

<sup>33</sup> Pub L. 112-141, H.R. 4348, § 1101(b), July 6, 2012, 126 Stat 405.

Thus, Congress in MAP-21 determined based on testimony and documentation of race and gender discrimination that there is “a compelling need for the continuation of the” Federal DBE Program.<sup>34</sup>

USDOT Final Rule, 76 Fed. Reg. 5083 (January 28, 2011).

The United States Department of Transportation promulgated a new Final Rule on January 28, 2011, effective February 28, 2011, 76 Fed. Reg. 5083 (January 28, 2011) (“Final Rule”) amending the Federal DBE Program at 49 CFR Part 26. According to the United States DOT, the Rule increased accountability for recipients with respect to meeting overall goals, modified and updated certification requirements, adjusted the personal net worth threshold for inflation to \$1.32 million dollars, provided for expedited interstate certification, added provisions to foster small business participation, provided for additional post-award oversight and monitoring, and addressed other matters.<sup>35</sup>

In particular, the Final Rule provided that a recipient’s DBE Program must include a monitoring and enforcement mechanism to ensure that work committed to DBEs at contract award or subsequently is actually performed by the DBEs to which the work was committed and that this mechanism must include a written certification that the recipient has reviewed contracting records and monitored work sites for this purpose.<sup>36</sup>

In addition, the Final Rule added a Section 26.39 to Subpart B to provide for fostering small business participation.<sup>37</sup> The recipient’s DBE program must include an element to structure contracting requirements to facilitate competition by small business concerns, which must be submitted to the appropriate DOT operating administration for approval.<sup>38</sup> The new Final Rule provided a list of “strategies” that may be included as part of the small business program, including establishing a race-neutral small business set-aside for prime contracts under a stated amount; requiring bidders on prime contracts to specify elements or specific subcontracts that are of a size that small businesses, including DBEs, can reasonably perform; requiring the prime contractor to provide subcontracting opportunities of a size that small businesses, including DBEs, can reasonably perform; and to meet the portion of the recipient’s overall goal it projects to meet through race-neutral measures, ensuring that a reasonable number of prime contracts are of a size that small businesses, including DBEs, can reasonably perform and other strategies.<sup>39</sup> The new Final Rule provided that actively implementing program elements to foster small business participation is a requirement of good faith implementation of the recipient’s DBE program.<sup>40</sup>

---

<sup>34</sup> *Id.*

<sup>35</sup> 76 F.R. 5083-5101.

<sup>36</sup> *See* 49 CFR § 26.37, 76 F.R. at 5097.

<sup>37</sup> 76 F.R. at 5097, January 28, 2011.

<sup>38</sup> *Id.*

<sup>39</sup> *Id.* at 5097, amending 49 CFR § 26.39(b)(1)-(5).

<sup>40</sup> *Id.* at 5097, amending 49 CFR § 26.39(c).

The Final Rule also provided that recipients must take certain specific actions if the awards and commitments shown on its Uniform Report of Awards or Commitments and Payments, at the end of any fiscal year, are less than the overall goal applicable to that fiscal year, in order to be regarded by the DOT as implementing its DBE program in good faith.<sup>41</sup> The Final Rule set out what action the recipient must take in order to be regarded as implementing its DBE program in good faith, including analyzing the reasons for the difference between the overall goal and its awards and commitments, establishing specific steps and milestones to correct the problems identified, and submitting at the end of the fiscal year a timely analysis and corrective actions to the appropriate operating administration for approval, and additional actions.<sup>42</sup> The Final Rule provided a list of acts or omissions that DOT will regard the recipient as being in non-compliance for failing to implement its DBE program in good faith, including not submitting its analysis and corrective actions, disapproval of its analysis or corrective actions, or if it does not fully implement the corrective actions.<sup>43</sup>

The Department stated in the Final Rule with regard to disparity studies and in calculating goals, that it agrees “it is reasonable, in calculating goals and in doing disparity studies, to consider potential DBEs (*e.g.*, firms apparently owned and controlled by minorities or women that have not been certified under the DBE program) as well as certified DBEs. This is consistent with good practice in the field as well as with DOT guidance.”<sup>44</sup>

The United States DOT in the Final Rule stated that there is a continuing compelling need for the DBE program.<sup>45</sup> The DOT concluded that, as court decisions have noted, the DOT’s DBE regulations and the statutes authorizing them, “are supported by a compelling need to address discrimination and its effects.”<sup>46</sup> The DOT said that the “basis for the program has been established by Congress and applies on a nationwide basis...”, noted that both the House and Senate Federal Aviation Administration (“FAA”) Reauthorization Bills contained findings reaffirming the compelling need for the program, and referenced additional information presented to the House of Representatives in a March 26, 2009 hearing before the Transportation and Infrastructure Committee, and a Department of Justice document entitled “The Compelling Interest for Race- and Gender-Conscious Federal Contracting Programs: A Decade Later An Update to the May 23, 1996 Review of Barriers for Minority- and Women-Owned Businesses.”<sup>47</sup> This information, the DOT stated, “confirms the continuing compelling need for race- and gender-conscious programs such as the DOT DBE program.”<sup>48</sup>

---

<sup>41</sup> 76 F.R. at 5098, amending 49 CFR § 26.47(c).

<sup>42</sup> *Id.*, amending 49 CFR § 26.47(c)(1)-(5).

<sup>43</sup> *Id.*, amending 49 CFR § 26.47(c)(5).

<sup>44</sup> 76 F.R. at 5092.

<sup>45</sup> 76 F.R. at 5095.

<sup>46</sup> 76 F.R. at 5095.

<sup>47</sup> *Id.*

<sup>48</sup> *Id.*

**Notice of Proposed Rulemaking (NPRM) for the Disadvantaged Business Enterprise: Program Implementation Modifications for 49 CFR Part 26 (September 6, 2012).**

On September 6, 2012, the Department of Transportation published a Notice of Proposed Rulemaking (NPRM) entitled, “Disadvantaged Business Enterprise: Program Implementation Modifications” in the Federal Register at 77 Fed. Reg. 54952.<sup>49</sup> On October 25, 2012, the USDOT issued an extension of time for the Comment Period to comment on the NPRM, by extending the Comment Period until December 24, 2012.<sup>50</sup> On September 18, 2013, the USDOT issued a Notice of Reopening Comment Period and a Public Listening Session, which provided another extension of time for the Comment Period by extending the Comment Period until October 30, 2013.<sup>51</sup> On November 13, 2013, the USDOT, which previously cancelled the October 9, 2013 Public Listening Session, rescheduled the Public Listening Session to December 5, 2013 and extended again the Comment Period to December 26, 2013.<sup>52</sup>

This Notice of Proposed Rulemaking proposes three categories of changes that the Department indicates will improve implementation of the DOT’s Federal DBE Program. First, the NPRM proposes revisions to personal net worth, application, and reporting forms. Second, the NPRM proposes modifications to certification-related provisions of the rule. Third, the NPRM would modify several other provisions of the rule, including concerning such subjects as good faith efforts, transit vehicle manufacturers and counting of trucking companies.<sup>53</sup>

The USDOT notes the DBE Program was recently reauthorized in the Moving Ahead for Progress in the 21<sup>st</sup> Century Act (“MAP-21”), Public Law 112-141 (enacted July 6, 2012), and that the Department believes this reauthorization is intended to maintain the status quo of the DBE Program and does not include any significant substantive changes to the Program.<sup>54</sup>

The Notice of Proposed Rulemaking proposes changes to the Personal Net Worth Form and related requirements of 49 CFR 26.67; certification provisions at Section 26.65; what rules govern determinations of ownership at Section 26.69; what rules govern determinations concerning control at Section 26.71; what are other rules affecting certification at Section 26.73; what procedures do recipients follow in making certification decisions at Section 26.83; what rules govern recipients’ denials of initial requests for certification at Section 26.86; what procedures does a recipient use to remove a DBE’s eligibility at Section 26.87; summary suspension of certification at Section 26.88; and what is the process for certification appeals to the USDOT at Section 26.89.<sup>55</sup>

---

<sup>49</sup> 77 F.R. 54952-55024 (September 6, 2012).

<sup>50</sup> 77 F.R. 65164 (October 25, 2012).

<sup>51</sup> 78 F.R. 57336 (September 18, 2013).

<sup>52</sup> 78 F.R. 68016 (November 13, 2013).

<sup>53</sup> 77 F.R. 54952.

<sup>54</sup> *Id.* at 54952.

<sup>55</sup> *Id.* at 54952-54960.



In addition, other provisions that are proposed to be amended include: what are the objectives of this Part at Section 26.1; specific definitions at Section 26.5 adding eight new definitions for the following words or phrases: “assets;” “business, business concern, or business enterprise;” “contingent liability;” “days;” “immediate family member;” “liabilities;” “non-disadvantaged individual;” “principal place of business;” and “transit vehicle manufacturer (TVM).”<sup>56</sup>

Also, additional provisions proposed to be amended include: what records do recipients keep and report at Section 26.11; who must have a DBE Program at Section 26.21; how are overall goals established for transit vehicle manufacturers at Section 26.49; what means do recipients use to meet overall goals at Section 26.51; what are the rules governing information, confidentiality, cooperation, and intimidation or retaliation at Section 26.109.<sup>57</sup>

The NPRM proposes adding language to Appendix A - Good Faith Efforts, including recommending that recipients scrutinize the documented good faith efforts by contractors, and at a minimum, review the performance of other bidders in meeting the contract goal; propose mirroring language added in Section 26.53 revisions that recipients require contractors to submit all subcontractor quotes in order to review whether DBE prices were substantially higher; require recipients to contact the DBEs listed on a contractor’s solicitation to inquire as to whether they were, in fact, contacted by the prime; and language stating that pro forma mailings to DBEs requesting bids are not alone sufficient to satisfy good faith efforts under the rule.<sup>58</sup>

The NPRM proposed various modifications of the DBE Program, including four proposed modifications to existing and/or new information collections, including modifications to the Uniform Report of DBE Commitment/Awards and Payments Form found in Appendix B of 49 CFR Part 26.<sup>59</sup>

As part of the Rulemaking the Department intends to reinstate the information collection entitled, “Uniform Report of DBE Commitment/Rewards and Payments,” consistent with the changes proposed in the NPRM.<sup>60</sup> This information collection requires that DOT Form 4630 be submitted by each recipient and is used to enable DOT to conduct program oversight and recipients’ DBE Programs.<sup>61</sup> In this NPRM, the Department proposes to modify certain aspects of this information collection in response to issues raised by stakeholders, including: (1) Creating separate forms for routine DBE reporting and for transit vehicle manufacturers and mega projects; (2) amending and clarifying the report’s instructions to better explain how to fill out the form; and (3) changing the forms to better capture the desired DBE data on a more continuous basis.<sup>62</sup>

---

<sup>56</sup> *Id.* at 54960.

<sup>57</sup> *Id.* at 54960-54965.

<sup>58</sup> *Id.* at 54965-54966.

<sup>59</sup> *Id.* at 54976-54978.

<sup>60</sup> *Id.* at 54966-54967; 77 F.R. 65165 (October 25, 2012).

<sup>61</sup> *Id.*

<sup>62</sup> 77 F.R. 65165 (October 25, 2012).

It should be noted that because this is a Notice of Proposed Rulemaking, at the time of this report it is not known whether any or all of these proposed rules actually will be promulgated as a Final Rule, which may occur in 2014. It also is possible, based on the comments received by the USDOT, that there will be changes to the proposed amended language to these rules when they are published in the Final Rule.

#### **USDOT Order 4220.1 (February 5, 2014).**

USDOT Order 4220.1 is the USDOT's Order on the Coordination and Oversight of the DBE Program. According to the USDOT, this Order clarifies the leadership roles and responsibilities of the various offices and Operating Administrations within the USDOT responsible for supporting and overseeing the implementation of the Federal DBE program. The Order further establishes a framework for coordination, overall policy development, and program oversight among these offices. The Order provides that the Departmental Office of Civil Rights will act as the lead office in the Office of Secretary for the DBE program. The Operating Administrations will continue to be the first points of contacts regarding, and primarily responsible for overseeing and enforcing, the day-to-day administration of the program by recipients.

The USDOT Order also establishes a framework for coordination, overall policy development, and program oversight among these offices. The Order provides that these offices will engage in systematic coordination regarding the administration and implementation of the DBE program by DOT recipients.

The Order sets forth specific programmatic responsibilities for the Departmental Office of Civil Rights, the rules and responsibilities of the General Counsel as Chief Legal officer of the USDOT, and the Office of Small and Disadvantaged Business Utilization within the Office of the Secretary. The Order clarifies rules and responsibilities for the Operating Administrations in their overseeing of the day-to-day administration of the Federal DBE program by recipients, providing training and technical assistance, maintaining current and up-to-date DBE websites and, taking appropriate actions to ensure program compliance.

The USDOT Order also establishes the DBE Oversight and Compliance Council that will facilitate collaboration, communication, and accountability among the DOT components responsible for the DBE program oversight, and assist in the formulation of policy regarding DBE program management and operation. The Order provides that the Office of the General Counsel established DBE Working Group, which generates rules changes and official DOT guidance, will continue to coordinate the development of formal and informal guidance and interpretations, and to ensure consistent and clear communications regarding the application and interpretation of DBE program requirements.

The USDOT Order 4220.1 may be found at: [www.civilrights.dot.gov/disadvantaged-business-enterprise](http://www.civilrights.dot.gov/disadvantaged-business-enterprise).

## 2. Strict scrutiny analysis

A race- and ethnicity-based program implemented by a state or local government is subject to the strict scrutiny constitutional analysis.<sup>63</sup> ADOT's implementation of the Federal DBE Program also is subject to the strict scrutiny analysis if it utilizes race- and ethnicity-based efforts. The strict scrutiny analysis is comprised of two prongs:

- The program must serve an established compelling governmental interest; and
- The program must be narrowly tailored to achieve that compelling government interest.<sup>64</sup>

### a. The Compelling Governmental Interest Requirement.

The first prong of the strict scrutiny analysis requires a governmental entity to have a “compelling governmental interest” in remedying past identified discrimination in order to implement a race- and ethnicity-based program. State and local governments cannot rely on national statistics of discrimination in an industry to draw conclusions about the prevailing market conditions in their own regions.<sup>65</sup> Rather, state and local governments must measure discrimination in their state or local market. However, that is not necessarily confined by the jurisdiction's boundaries.<sup>66</sup>

The federal courts have held that, with respect to the Federal DBE Program, recipients of federal funds do not need to independently satisfy this prong because Congress has satisfied the compelling interest test of the strict scrutiny analysis.<sup>67</sup> The federal courts have held that Congress had ample evidence of discrimination in the transportation contracting industry to justify the Federal DBE Program (TEA-21), and the federal regulations implementing the program (49 CFR Part 26).<sup>68</sup>

---

<sup>63</sup> *Croson*, 448 U.S. at 492-493; *Adarand Constructors, Inc. v. Peña (Adarand I)*, 515 U.S. 200, 227 (1995); See *Fisher v. University of Texas*, \_\_\_\_ U.S. \_\_\_\_, 133 S.Ct. 2411 (2013).

<sup>64</sup> *Adarand I*, 515 U.S. 200, 227 (1995); *AGC, SDC v. Caltrans*, 713 F.3d 1187, 1195-1200 (9th Cir. 2013); *Northern Contracting*, 473 F.3d at 721; *Western States Paving*, 407 F.3d at 991; *Sherbrooke Turf*, 345 F.3d at 969; *Adarand VII*, 228 F.3d at 1176; *Associated Gen. Contractors of Ohio, Inc. v. Drabik (“Drabik II”)*, 214 F.3d 730 (6th Cir. 2000); *Eng’g Contractors Ass’n of South Florida, Inc. v. Metro. Dade County*, 122 F.3d 895 (11th Cir. 1997); *Contractors Ass’n of E. Pa. v. City of Philadelphia (“CAEP I”)*, 6 F.3d 990 (3d Cir. 1993).

<sup>65</sup> See e.g., *Concrete Works, Inc. v. City and County of Denver (“Concrete Works I”)*, 36 F.3d 1513, 1520 (10th Cir. 1994).

<sup>66</sup> *Id.*

<sup>67</sup> *N. Contracting*, 473 F.3d at 721; *Western States Paving*, 407 F.3d at 991; *Sherbrooke Turf*, 345 F.3d at 969; *Adarand VII*, 228 F.3d at 1176.

<sup>68</sup> *Id.* In the case of *Rotbe Dev. Corp. v. U.S. Dept. of Defense*, 545 F.3d 1023 (Fed. Cir. 2008), the Federal Circuit Court of Appeals pointed out it had questioned in its earlier decision whether the evidence of discrimination before Congress was in fact so “outdated” so as to provide an insufficient basis in evidence for the Department of Defense program (*i.e.*, whether a compelling interest was satisfied). 413 F.3d 1327 (Fed. Cir. 2005). The Federal Circuit Court of Appeals after its 2005 decision remanded the case to the district court to rule on this issue. *Rotbe* considered the validity of race- and gender-conscious Department of Defense (“DOD”) regulations (2006 Reauthorization of the 1207 Program). The decisions in *N. Contracting*, *Sherbrooke Turf*, *Adarand VII*, and *Western States Paving* held the evidence of discrimination nationwide in transportation contracting was sufficient to find the Federal DBE Program on its face was constitutional. On remand, the

Specifically, the federal courts found Congress “spent decades compiling evidence of race discrimination in government highway contracting, of barriers to the formation of minority-owned construction businesses, and of barriers to entry.”<sup>69</sup> The evidence found to satisfy the compelling interest standard included numerous congressional investigations and hearings, and outside studies of statistical and anecdotal evidence (*e.g.*, disparity studies).<sup>70</sup> The evidentiary basis on which Congress relied to support its finding of discrimination includes:

- **Barriers to minority business formation.** Congress found that discrimination by prime contractors, unions, and lenders has woefully impeded the formation of qualified minority business enterprises in the subcontracting market nationwide, noting the existence of “good ol’ boy” networks, from which minority firms have traditionally been excluded, and the race-based denial of access to capital, which affects the formation of minority subcontracting enterprise.<sup>71</sup>
- **Barriers to competition for existing minority enterprises.** Congress found evidence showing systematic exclusion and discrimination by prime contractors, private sector customers, business networks, suppliers, and bonding companies precluding minority enterprises from opportunities to bid. When minority firms are permitted to bid on subcontracts, prime contractors often resist working with them. Congress found evidence of the same prime contractor using a minority business enterprise on a government contract not using that minority business enterprise on a private contract, despite being satisfied with that subcontractor’s work. Congress found that informal, racially exclusionary business networks dominate the subcontracting construction industry.<sup>72</sup>

---

district court in *Rothe* on August 10, 2007 issued its order denying plaintiff *Rothe’s* Motion for Summary Judgment and granting Defendant United States Department of Defense’s Cross-Motion for Summary Judgment, holding the 2006 Reauthorization of the 1207 DOD Program constitutional. *Rothe Devel. Corp. v. U.S. Dept. of Defense*, 499 F.Supp.2d 775 (W.D. Tex. 2007). The district court found the data contained in the Appendix (The Compelling Interest, 61 Fed. Reg. 26050 (1996)), the Urban Institute Report, and the Benchmark Study – relied upon in part by the courts in *Sherbrooke Turf*, *Adarand VII*, and *Western States Paving* in upholding the constitutionality of the Federal DBE Program – was “stale” as applied to and for purposes of the 2006 Reauthorization of the 1207 DOD Program. This district court finding was not appealed or considered by the Federal Circuit Court of Appeals. 545 F.3d 1023, 1037. The Federal Circuit Court of Appeals reversed the district court decision in part and held invalid the DOD Section 1207 program as enacted in 2006. 545 F.3d 1023, 1050. See the discussion of the 2008 Federal Circuit Court of Appeals decision in *Rothe* below in Section G. See also the discussion below in Section G of the 2012 district court decision in *DynaLantic Corp. v. U.S. Department of Defense, et al*, 885 F.Supp.2d 237, (D.D.C.).

<sup>69</sup> *Sherbrooke Turf*, 345 F.3d at 970, (*citing Adarand VII*, 228 F.3d at 1167 – 76); *Western States Paving*, 407 F.3d at 992-93.

<sup>70</sup> See, *e.g.*, *Adarand VII*, 228 F.3d at 1167– 76; see also *Western States Paving*, 407 F.3d at 992 (Congress “explicitly relied upon” the Department of Justice study that “documented the discriminatory hurdles that minorities must overcome to secure federally funded contracts”).

<sup>71</sup> *Adarand VII*, 228 F.3d. at 1168-70; *Western States Paving*, 407 F.3d at 992; see *DynaLantic*, 885 F.Supp.2d 237.

<sup>72</sup> *Adarand VII*. at 1170-72; see *DynaLantic*, 885 F.Supp.2d 237.

- **Local disparity studies.** Congress found that local studies throughout the country tend to show a disparity between utilization and availability of minority-owned firms, raising an inference of discrimination.<sup>73</sup>
- **Results of removing affirmative action programs.** Congress found evidence that when race-conscious public contracting programs are struck down or discontinued, minority business participation in the relevant market drops sharply or even disappears, which courts have found strongly supports the government's claim that there are significant barriers to minority competition, raising the specter of discrimination.<sup>74</sup>
- **MAP-21.** Recently, in July 2012, Congress passed MAP-21 (see above), which made "Findings" that "discrimination and related barriers continue to pose significant obstacles for minority- and women-owned businesses seeking to do business in federally-assisted surface transportation markets," and that the continuing barriers "merit the continuation" of the Federal DBE Program.<sup>75</sup> Congress also found that it received and reviewed testimony and documentation of race and gender discrimination which "provide a strong basis that there is a compelling need for the continuation of the" Federal DBE Program.<sup>76</sup>

**Burden of proof.** Under the strict scrutiny analysis, and to the extent a state or local governmental entity has implemented a race- and gender-conscious program, the governmental entity has the initial burden of showing a strong basis in evidence (including statistical and anecdotal evidence) to support its remedial action.<sup>77</sup> If the government makes its initial showing, the burden shifts to the challenger to rebut that showing.<sup>78</sup> The challenger bears the ultimate burden of showing that the governmental entity's evidence "did not support an inference of prior discrimination."<sup>79</sup>

**Statistical evidence.** Statistical evidence of discrimination is a primary method used to determine whether or not a strong basis in evidence exists to develop, adopt and support a remedial program (i.e., to prove a compelling governmental interest), or in the case of a recipient complying with the Federal DBE Program, to prove narrow tailoring of program implementation at the state recipient

---

<sup>73</sup> *Id.* at 1172-74; see *DynaLantic*, 885 F.Supp.2d 237.

<sup>74</sup> *Id.* at 1174-75.

<sup>75</sup> Pub L. 112-141, H.R. 4348, § 1101(b), July 6, 2012, 126 Stat 405.

<sup>76</sup> *Id.* at § 1101(b)(1).

<sup>77</sup> See *Rothe Development Corp. v. Department of Defense*, 545 F.3d 1023, 1036 (Fed. Cir. 2008); *N. Contracting, Inc. Illinois*, 473 F.3d at 715, 721 (7th Cir. 2007) (Federal DBE Program); *Western States Paving Co. v. Washington State DOT*, 407 F.3d 983, 991 (9th Cir. 2005) (Federal DBE Program); *Sherbrooke Turf, Inc. v. Minnesota DOT*, 345 F.3d 964, 969 (8th Cir. 2003) (Federal DBE Program); *Adarand Constructors Inc. v. Slater* ("Adarand VII"), 228 F.3d 1147, 1166 (10th Cir. 2000) (Federal DBE Program); *Eng'g Contractors Ass'n*, 122 F.3d at 916; *Monterey Mechanical Co. v. Wilson*, 125 F.3d 702, 713 (9th Cir. 1997); *DynaLantic*, 885 F.Supp.2d 237, 2012 WL 3356813; *Hersbell Gill Consulting Engineers, Inc. v. Miami Dade County*, 333 F. Supp.2d 1305, 1316 (S.D. Fla. 2004).

<sup>78</sup> *Adarand VII*, 228 F.3d at 1166; *Eng'g Contractors Ass'n*, 122 F.3d at 916.

<sup>79</sup> See, e.g., *Adarand VII*, 228 F.3d at 1166; *Eng'g Contractors Ass'n*, 122 F.3d at 916; see also *Sherbrooke Turf*, 345 F.3d at 971; *N. Contracting*, 473 F.3d at 721.

level.<sup>80</sup> “Where gross statistical disparities can be shown, they alone in a proper case may constitute prima facie proof of a pattern or practice of discrimination.”<sup>81</sup>

One form of statistical evidence is the comparison of a government’s utilization of MBE/WBEs compared to the relative availability of qualified, willing and able MBE/WBEs.<sup>82</sup> The federal courts have held that a significant statistical disparity between the utilization and availability of minority- and women-owned firms may raise an inference of discriminatory exclusion.<sup>83</sup> However, a small statistical disparity, standing alone, may be insufficient to establish discrimination.<sup>84</sup>

Other considerations regarding statistical evidence include:

- **Availability analysis.** A disparity index requires an availability analysis. MBE/WBE and DBE availability measures the relative number of MBE/WBEs and DBEs among all firms ready, willing and able to perform a certain type of work within a particular geographic market area.<sup>85</sup> There is authority that measures of availability may be approached with different levels of specificity and the practicality of various approaches must be considered,<sup>86</sup> “An analysis is not devoid of probative value simply because it may theoretically be possible to adopt a more refined approach.”<sup>87</sup>
- **Utilization analysis.** Courts have accepted measuring utilization based on the proportion of an agency’s contract dollars going to MBE/WBEs and DBEs.<sup>88</sup>
- **Disparity index.** An important component of statistical evidence is the “disparity index.”<sup>89</sup> A disparity index is defined as the ratio of the percent utilization to the percent availability times

---

<sup>80</sup> See, e.g., *Croson*, 488 U.S. at 509; *AGC, SDC v. Caltrans*, 713 F.3d at 1195-1196; *N. Contracting*, 473 F.3d at 718-19, 723-24; *Western States Paving*, 407 F.3d at 991; *Adarand VII*, 228 F.3d at 1166.

<sup>81</sup> *Croson*, 488 U.S. at 501, quoting *Hazelwood School Dist. v. United States*, 433 U.S. 299, 307-08 (1977).

<sup>82</sup> *Croson*, 448 U.S. at 509; see *AGC, SDC v. Caltrans*, 713 F.3d at 1191-1197; *Rothe*, 545 F.3d at 1041-1042; *Concrete Works of Colo., Inc. v. City and County of Denver* (“*Concrete Works II*”), 321 F.3d 950, 959 (10th Cir. 2003); *Drabik II*, 214 F.3d 730, 734-736.

<sup>83</sup> See, e.g., *Croson*, 488 U.S. at 509; *AGC, SDC v. Caltrans*, 713 F.3d at 1191-1197; *Rothe*, 545 F.3d at 1041; *Concrete Works II*, 321 F.3d at 970; see *Western States Paving*, 407 F.3d at 1001.

<sup>84</sup> *Western States Paving*, 407 F.3d at 1001.

<sup>85</sup> See, e.g., *Croson*, 448 U.S. at 509; 49 CFR § 26.35; *AGC, SDC v. Caltrans*, 713 F.3d at 1191-1197; *Rothe*, 545 F.3d at 1041-1042; *N. Contracting*, 473 F.3d at 718, 722-23; *Western States Paving*, 407 F.3d at 995.

<sup>86</sup> *Contractors Ass’n of Easton Pennsylvania, Inc. v. City of Philadelphia* (“*CAEP II*”), 91 F.3d 586, 603 (3d Cir. 1996).

<sup>87</sup> *Id.*

<sup>88</sup> See *AGC, SDC v. Caltrans*, 713 F.3d at 1191-1197; *Eng’g Contractors Ass’n*, 122 F.3d at 912; *N. Contracting*, 473 F.3d at 717-720; *Sherbrooke Turf*, 345 F.3d at 973.

<sup>89</sup> *Eng’g Contractors Ass’n*, 122 F.3d at 914; *W.H. Scott Constr. Co. v. City of Jackson*, 199 F.3d 206, 218 (5th Cir. 1999); *Contractors Ass’n of Eastern Pennsylvania, Inc. v. City of Philadelphia*, 6 F.3d 990 at 1005 (3rd Cir. 1993).

100. A disparity index below 80 has been accepted as evidence of adverse impact. This has been referred to as “The Rule of Thumb” or “The 80 percent Rule.”<sup>90</sup>

- **Two standard deviation test.** The standard deviation figure describes the probability that the measured disparity is the result of mere chance. Some courts have held that a statistical disparity corresponding to a standard deviation of less than two is not considered statistically significant.<sup>91</sup>

**Anecdotal evidence.** Anecdotal evidence includes personal accounts of incidents, including of discrimination, told from the witness’ perspective. Anecdotal evidence of discrimination, standing alone, generally is insufficient to show a systematic pattern of discrimination.<sup>92</sup> But personal accounts of actual discrimination may complement empirical evidence and play an important role in bolstering statistical evidence.<sup>93</sup> It has been held that anecdotal evidence of a local or state government’s institutional practices that exacerbate discriminatory market conditions are often particularly probative.<sup>94</sup>

Examples of anecdotal evidence may include:

- Testimony of MBE/WBE or DBE owners regarding whether they face difficulties or barriers;
- Descriptions of instances in which MBE/WBE or DBE owners believe they were treated unfairly or were discriminated against based on their race, ethnicity, or gender or believe they were treated fairly without regard to race, ethnicity, or gender;
- Statements regarding whether firms solicit, or fail to solicit, bids or price quotes from MBE/WBEs or DBEs on non-goal projects; and

---

<sup>90</sup> See, e.g., *Ricci v. DeStefano*, 557 U.S. 557, 129 S.Ct. 2658, 2678 (2009); *AGC, SDC v. Caltrans*, 713 F.3d at 1191; *Rothe*, 545 F.3d at 1041; *Eng’g Contractors Ass’n*, 122 F.3d at 914, 923; *Concrete Works I*, 36 F.3d at 1524.

<sup>91</sup> *Eng’g Contractors Ass’n*, 122 F.3d at 914, 917, 923. The Eleventh Circuit found that a disparity greater than two or three standard deviations has been held to be statistically significant and may create a presumption of discriminatory conduct.; *Peightal v. Metropolitan Eng’g Contractors Ass’n*, 26 F.3d 1545, 1556 (11th Cir. 1994). The Seventh Circuit Court of Appeals in *Kadas v. MCI Systemhouse Corp.*, 255 F.3d 359 (7th Cir. 2001), raised questions as to the use of the standard deviation test alone as a controlling factor in determining the admissibility of statistical evidence to show discrimination. Rather, the Court concluded it is for the judge to say, on the basis of the statistical evidence, whether a particular significance level, in the context of a particular study in a particular case, is too low to make the study worth the consideration of judge or jury. 255 F.3d at 363.

<sup>92</sup> See, e.g., *AGC, SDC v. Caltrans*, 713 F.3d at 1192, 1196-1198; *Eng’g Contractors Ass’n*, 122 F.3d at 924-25; *Coral Constr. Co. v. King County*, 941 F.2d 910, 919 (9th Cir. 1991); *O’Donnel Constr. Co. v. District of Columbia*, 963 F.2d 420, 427 (D.C. Cir. 1992).

<sup>93</sup> See, e.g., *AGC, SDC v. Caltrans*, 713 F.3d at 1192, 1196-1198; *Eng’g Contractors Ass’n*, 122 F.3d at 925-26; *Concrete Works*, 36 F.3d at 1520; *Contractors Ass’n*, 6 F.3d at 1003; *Coral Constr. Co. v. King County*, 941 F.2d 910, 919 (9th Cir. 1991).

<sup>94</sup> *Concrete Works I*, 36 F.3d at 1520.

- Statements regarding whether there are instances of discrimination in bidding on specific contracts and in the financing and insurance markets.<sup>95</sup>

Courts have accepted and recognize that anecdotal evidence is the witness' narrative of incidents told from his or her perspective, including the witness' thoughts, feelings, and perceptions, and thus anecdotal evidence need not be verified.<sup>96</sup>

#### **b. The Narrow Tailoring Requirement.**

The second prong of the strict scrutiny analysis requires that a race- or ethnicity-based program or legislation implemented to remedy past identified discrimination in the relevant market be “narrowly tailored” to reach that objective.

The narrow tailoring requirement has several components and the courts analyze several criteria or factors in determining whether a program or legislation satisfies this requirement including:

- The necessity for the relief and the efficacy of alternative race-, ethnicity-, and gender-neutral remedies;
- The flexibility and duration of the relief, including the availability of waiver provisions;
- The relationship of numerical goals to the relevant labor market; and
- The impact of a race-, ethnicity-, or gender-conscious remedy on the rights of third parties.<sup>97</sup>

The second prong of the strict scrutiny analysis requires the implementation of the Federal DBE Program by recipients of federal funds be “narrowly tailored” to remedy identified discrimination in the particular recipient’s contracting and procurement market.<sup>98</sup> The narrow tailoring requirement has several components.

It should be pointed out that in the *Northern Contracting* decision (2007) the Seventh Circuit Court of Appeals cited its earlier precedent in *Milwaukee County Pavers v. Fielder* to hold “that a state is insulated from [a narrow tailoring] constitutional attack, absent a showing that the state exceeded its federal authority. IDOT [Illinois DOT] here is acting as an instrument of federal policy and Northern Contracting (NCI) cannot collaterally attack the federal regulations through a challenge to IDOT’s

---

<sup>95</sup> See, e.g., *AGC, SDC v. Caltrans*, 713 F.3d at 1197; *Northern Contracting*, 2005 WL 2230195, at 13-15 (N.D. Ill. 2005), *affirmed*, 473 F.3d 715 (7th Cir. 2007); e.g., *Concrete Works*, 321 F.3d at 989; *Adarand VII*, 228 F.3d at 1166-76. For additional examples of anecdotal evidence, see *Eng’g Contractors Ass’n*, 122 F.3d at 924; *Concrete Works*, 36 F.3d at 1520; *Cone Corp. v. Hillsborough County*, 908 F.2d 908, 915 (11th Cir. 1990); *DynaLantic*, 885 F.Supp.2d 237; *Florida A.G.C. Council, Inc. v. State of Florida*, 303 F. Supp.2d 1307, 1325 (N.D. Fla. 2004).

<sup>96</sup> See, e.g., *Concrete Works II*, 321 F.3d at 989; *Eng’g Contractors Ass’n*, 122 F.3d at 924-26; *Cone Corp.*, 908 F.2d at 915; *Northern Contracting, Inc. v. Illinois*, 2005 WL 2230195 at \*21, N. 32 (N.D. Ill. Sept. 8, 2005), *aff’d* 473 F.3d 715 (7th Cir. 2007).

<sup>97</sup> See, e.g., *AGC, SDC v. Caltrans*, 713 F.3d at 1198-1199; *Rothe*, 545 F.3d at 1036; *Western States Paving*, 407 F.3d at 993-995; *Sherbrooke Turf*, 345 F.3d at 971; *Adarand VII*, 228 F.3d at 1181; *Eng’g Contractors Ass’n*, 122 F.3d at 927 (internal quotations and citations omitted).

<sup>98</sup> *Western States Paving*, 407 F.3d at 995-998; *Sherbrooke Turf*, 345 F.3d at 970-71.



program.”<sup>99</sup> The Seventh Circuit Court of Appeals distinguished both the Ninth Circuit Court of Appeals decision in *Western States Paving* and the Eighth Circuit Court of Appeals decision in *Sherbrooke Turf*, relating to an as-applied narrow tailoring analysis.

The Seventh Circuit Court of Appeals held that the state DOT’s [Illinois DOT] application of a federally mandated program is limited to the question of whether the state exceeded its grant of federal authority under the Federal DBE Program.<sup>100</sup> The Seventh Circuit Court of Appeals analyzed IDOT’s compliance with the federal regulations regarding calculation of the availability of DBEs, adjustment of its goal based on local market conditions and its use of race-neutral methods set forth in the federal regulations.<sup>101</sup> The court held NCI failed to demonstrate that IDOT did not satisfy compliance with the federal regulations (49 CFR Part 26).<sup>102</sup> Accordingly, the Seventh Circuit Court of Appeals affirmed the district court’s decision upholding the validity of IDOT’s DBE program.<sup>103</sup> See the discussion of the *Northern Contracting* decision below in Section E.

In *Western States Paving*, the Ninth Circuit held the recipient of federal funds must have independent evidence of discrimination within the recipient’s own transportation contracting and procurement marketplace in order to determine whether or not there is the need for race-, ethnicity-, or gender-conscious remedial action.<sup>104</sup> Thus, the Ninth Circuit held in *Western States Paving* that mere compliance with the Federal DBE Program does not satisfy strict scrutiny.<sup>105</sup>

In *Western States Paving*, the Court found that even where evidence of discrimination is present in a recipient’s market, a narrowly tailored program must apply only to those minority groups who have actually suffered discrimination. Thus, under a race- or ethnicity -conscious program, for each of the minority groups to be included in any race- or ethnicity-conscious elements in a recipient’s implementation of the Federal DBE Program, there must be evidence that the minority group suffered discrimination within the recipient’s marketplace.<sup>106</sup>

To satisfy the narrowly tailored prong of the strict scrutiny analysis in the context of the Federal DBE Program, the federal courts, which evaluated state DOT DBE Programs and their implementation of the Federal DBE Program, have held the following factors are pertinent:

---

<sup>99</sup> 473 F.3d at 722.

<sup>100</sup> *Id.* at 722.

<sup>101</sup> *Id.* at 723-24.

<sup>102</sup> *Id.*

<sup>103</sup> See, e.g., *Geod Corp. v. New Jersey Transit Corp., et al.*, 746 F.Supp 2d 642 (D.N.J. 2010); *South Florida Chapter of the A.G.C. v. Broward County, Florida*, 544 F.Supp.2d 1336 (S.D. Fla. 2008).

<sup>104</sup> *Western States Paving*, 407 F.3d at 997-98, 1002-03.

<sup>105</sup> *Id.* at 995-1003. The Seventh Circuit Court of Appeals in *Northern Contracting* stated in a footnote that the court in *Western States Paving* “misread” the decision in *Milwaukee County Pavers*. 473 F.3d at 722, n. 5.

<sup>106</sup> 407 F.3d at 996-1000.

- Evidence of discrimination or its effects in the state transportation contracting industry;
- Flexibility and duration of a race- or ethnicity-conscious remedy;
- Relationship of any numerical DBE goals to the relevant market;
- Effectiveness of alternative race- and ethnicity-neutral remedies;
- Impact of a race- or ethnicity-conscious remedy on third parties; and
- Application of any race- or ethnicity-conscious program to only those minority groups who have actually suffered discrimination.<sup>107</sup>

The Eleventh Circuit described the “the essence of the ‘narrowly tailored’ inquiry [as] the notion that explicitly racial preferences ... must only be a ‘last resort’ option.”<sup>108</sup> Courts have found that “[w]hile narrow tailoring does not require exhaustion of every conceivable race-neutral alternative, it does require serious, good faith consideration of whether such alternatives could serve the governmental interest at stake.”<sup>109</sup>

Similarly, the Sixth Circuit Court of Appeals in *Associated Gen. Contractors v. Drabik* (“Drabik II”), stated: “*Adarand* teaches that a court called upon to address the question of narrow tailoring must ask, ‘for example, whether there was ‘any consideration of the use of race-neutral means to increase minority business participation’ in government contracting ... or whether the program was appropriately limited such that it ‘will not last longer than the discriminatory effects it is designed to eliminate.’”<sup>110</sup>

The Supreme Court in *Parents Involved in Community Schools v. Seattle School District*<sup>111</sup> also found that race- and ethnicity-based measures should be employed as a last resort. The majority opinion stated: “Narrow tailoring requires ‘serious, good faith consideration of workable race-neutral alternatives,’ and yet in Seattle several alternative assignment plans—many of which would not have used express racial classifications—were rejected with little or no consideration.”<sup>112</sup> The Court found that the District failed to show it seriously considered race-neutral measures.

The “narrowly tailored” analysis is instructive in terms of developing any potential legislation or programs that involve DBEs and implementing the Federal DBE Program, or in connection with determining appropriate remedial measures to achieve legislative objectives.

---

<sup>107</sup> See, e.g., *AGC, SDC v. Caltrans*, 713 F.3d at 1198-1199; *Western States Paving*, 407 F.3d at 998; *Sherbrooke Turf*, 345 F.3d at 971; *Adarand VII*, 228 F.3d at 1181; *Kornbass Construction, Inc. v. State of Oklahoma, Department of Central Services*, 140 F.Supp.2d at 1247-1248.

<sup>108</sup> *Eng’g Contractors Ass’n*, 122 F.3d at 926 (internal citations omitted); see also *Virdi v. DeKalb County School District*, 135 Fed. Appx. 262, 264, 2005 WL 138942 (11th Cir. 2005) (unpublished opinion); *Webster v. Fulton County*, 51 F. Supp.2d 1354, 1380 (N.D. Ga. 1999), *aff’d per curiam* 218 F.3d 1267 (11th Cir. 2000).

<sup>109</sup> See *Grutter v. Bollinger*, 539 U.S. 306, 339 (2003); *Richmond v. J.A. Croson Co.*, 488 U.S. 469, 509-10 (1989); *Western States Paving*, 407 F.3d at 993; see also *Adarand I*, 515 U.S. at 237-38.

<sup>110</sup> *Associated Gen. Contractors of Ohio, Inc. v. Drabik* (“Drabik II”), 214 F.3d 730, 738 (6th Cir. 2000).

<sup>111</sup> 551 U.S. 701, 734-37, 127 S.Ct. 2738, 2760-61 (2007)

<sup>112</sup> 551 U.S. 701, 734-37, 127 S.Ct. at 2760-61; see also *Grutter v. Bollinger*, 539 U.S. 305 (2003).

**Race-, ethnicity-, and gender-neutral measures.** To the extent a “strong basis in evidence” exists concerning discrimination in a local or state government’s relevant contracting and procurement market, the courts analyze several criteria or factors to determine whether a state’s implementation of a race- or ethnicity-conscious program is necessary and thus narrowly tailored to achieve remedying identified discrimination. One of the key factors discussed above is consideration of race-, ethnicity- and gender-neutral measures. The courts require that a local or state government seriously consider race-, ethnicity- and gender-neutral efforts to remedy identified discrimination.<sup>113</sup> And the courts have held unconstitutional those race- and ethnicity-conscious programs implemented without consideration of race- and ethnicity-neutral alternatives to increase minority business participation in state and local contracting.<sup>114</sup>

The Court in *Croson* followed by decisions from federal courts of appeal found that local and state governments have at their disposal a “whole array of race-neutral devices to increase the accessibility of city contracting opportunities to small entrepreneurs of all races.”<sup>115</sup>

The federal regulations and the courts require that recipients of federal financial assistance governed by 49 CFR Part 26 implement or seriously consider race-, ethnicity-, and gender-neutral remedies prior to the implementation of race-, ethnicity-, and gender-conscious remedies.<sup>116</sup> The courts have also found “the regulations require a state to ‘meet the maximum feasible portion of [its] overall goal by using race neutral means.’<sup>117</sup>

Examples of race-, ethnicity-, and gender-neutral alternatives include, but are not limited to, the following:

- Providing assistance in overcoming bonding and financing obstacles;
- Relaxation of bonding requirements;
- Providing technical, managerial and financial assistance;

---

<sup>113</sup> See, e.g., *AGC, SDC v. Caltrans*, 713 F.3d at 1199; *Western States Paving*, 407 F.3d at 993; *Sherbrooke Turf*, 345 F.3d at 972; *Adarand VII*, 228 F.3d at 1179; *Eng’g Contractors Ass’n*, 122 F.3d at 927; *Coral Constr.*, 941 F.2d at 923.

<sup>114</sup> See *Croson*, 488 U.S. at 507; *Drabik I*, 214 F.3d at 738 (citations and internal quotations omitted); see also *Eng’g Contractors Ass’n*, 122 F.3d at 927; *Virdi*, 135 Fed. Appx. At 268.

<sup>115</sup> *Croson*, 488 U.S. at 509-510.

<sup>116</sup> 49 CFR § 26.51(a) requires recipients of federal funds to “meet the maximum feasible portion of your overall goal by using race-neutral means of facilitating DBE participation.” See, e.g., *Adarand VII*, 228 F.3d at 1179; *Western States Paving*, 407 F.3d at 993; *Sherbrooke Turf*, 345 F.3d at 972. Additionally, in September of 2005, the United States Commission on Civil Rights (the “Commission”) issued its report entitled “Federal Procurement After *Adarand*” setting forth its findings pertaining to federal agencies’ compliance with the constitutional standard enunciated in *Adarand*. United States Commission on Civil Rights: Federal Procurement After *Adarand* (Sept. 2005), available at <http://www.usccr.gov>. The Commission found that 10 years after the Court’s *Adarand* decision, federal agencies have largely failed to narrowly tailor their reliance on race-conscious programs and have failed to seriously consider race-neutral measures that would effectively redress discrimination. See discussion of USCCR Report at Section G. below.

<sup>117</sup> See, e.g., *Northern Contracting*, 473 F.3d at 723 – 724; *Western States Paving*, 407 F.3d at 993 (citing 49 CFR § 26.51(a)).

- Establishing programs to assist start-up firms;
- Simplification of bidding procedures;
- Training and financial aid for all disadvantaged entrepreneurs;
- Non-discrimination provisions in contracts and in state law;
- Mentor-protégé programs and mentoring;
- Efforts to address prompt payments to smaller businesses;
- Small contract solicitations to make contracts more accessible to smaller businesses;
- Expansion of advertisement of business opportunities;
- Outreach programs and efforts;
- “How to do business” seminars;
- Sponsoring networking sessions throughout the state acquaint small firms with large firms;
- Creation and distribution of MBE/WBE and DBE directories; and
- Streamlining and improving the accessibility of contracts to increase small business participation.<sup>118</sup>

49 CFR § 26.51(b) provides examples of race-, ethnicity-, and gender-neutral measures that should be seriously considered and utilized. The courts have held that while the narrow tailoring analysis does not require a governmental entity to exhaust every possible race-, ethnicity-, and gender-neutral alternative, it does “require serious, good faith consideration of workable race-neutral alternatives.”<sup>119</sup>

In *AGC, SDC v. Caltrans*, the Ninth Circuit rejected the assertion that the state DOT’s DBE program was not narrowly tailored because it failed to evaluate race-neutral measures before implementing race conscious goals, and said the law imposes no such requirement.<sup>120</sup> The court held states are not required to independently meet this aspect of narrow tailoring, and instead concludes *Western States Paving* focuses on whether the federal statute sufficiently considered race-neutral alternatives.<sup>121</sup> In *AGC, SDC v. Caltrans*, the court found that narrow tailoring only requires “serious, good faith consideration of workable race-neutral alternatives.”<sup>122</sup>

---

<sup>118</sup> See 49 CFR § 26.51(b); see, e.g., *Croson*, 488 U.S. at 509-510; *N. Contracting*, 473 F.3d at 724; *Adarand VII*, 228 F.3d 1179; 49 CFR § 26.51(b); *Eng’g Contractors Ass’n*, 122 F.3d at 927-29.

<sup>119</sup> *Western States Paving*, 407 F.3d at 993.

<sup>120</sup> *AGC, SDC v. Caltrans*, 713 F.3d at 1199.

<sup>121</sup> *AGC, SDC v. Caltrans*, 713 F.3d at 1199.

<sup>122</sup> *AGC, SDC v. Caltrans*, 713 F.3d at 1199; citing *Grutter v. Bollinger*, 539 U.S. 306, 339 (2003).

**Additional factors considered under narrow tailoring.** In addition to the required consideration of the necessity for the relief and the efficacy of alternative remedies (race- and ethnicity-neutral efforts), the courts require evaluation of additional factors as listed above.<sup>123</sup> For example, to be considered narrowly tailored, courts have held that a MBE/WBE- or DBE-type program should include: (1) built-in flexibility;<sup>124</sup> (2) good faith efforts provisions;<sup>125</sup> (3) waiver provisions;<sup>126</sup> (4) a rational basis for goals;<sup>127</sup> (5) graduation provisions;<sup>128</sup> (6) remedies only for groups for which there were findings of discrimination;<sup>129</sup> (7) sunset provisions;<sup>130</sup> and (8) limitation in its geographical scope to the boundaries of the enacting jurisdiction.<sup>131</sup>

### 3. Intermediate scrutiny analysis

Certain Federal Courts of Appeal, including the Ninth Circuit Court of Appeals, apply intermediate scrutiny to gender-conscious programs.<sup>132</sup> The Ninth Circuit and other courts have interpreted this standard to require that gender-based classifications be:

1. Supported by “sufficient probative” evidence or “exceedingly persuasive justification” in support of the stated rationale for the program; and
2. Substantially related to the achievement of that underlying objective.<sup>133</sup>

Under the traditional intermediate scrutiny standard, the court reviews a gender-conscious program by analyzing whether the state actor has established a sufficient factual predicate for the claim that female-owned businesses have suffered discrimination, and whether the gender-conscious remedy is

---

<sup>123</sup> *Eng’g Contractors Ass’n*, 122 F.3d at 927.

<sup>124</sup> *CAEPI*, 6 F.3d at 1009; *Associated Gen. Contractors of Ca., Inc. v. Coalition for Economic Equality* (“AGC of Ca.”), 950 F.2d 1401, 1417 (9th Cir. 1991); *Coral Constr. Co. v. King County*, 941 F.2d 910, 923 (9th Cir. 1991); *Cone Corp. v. Hillsborough County*, 908 F.2d 908, 917 (11th Cir. 1990).

<sup>125</sup> *CAEPI*, 6 F.3d at 1019; *Cone Corp.*, 908 F.2d at 917.

<sup>126</sup> *CAEPI*, 6 F.3d at 1009; AGC of Ca., 950 F.2d at 1417; *Cone Corp.*, 908 F.2d at 917.

<sup>127</sup> *Id.*

<sup>128</sup> *Id.*

<sup>129</sup> *Western States Paving*, 407 F.3d at 998; AGC of Ca., 950 F.2d at 1417.

<sup>130</sup> *Peightal*, 26 F.3d at 1559.

<sup>131</sup> *Coral Constr.*, 941 F.2d at 925.

<sup>132</sup> See generally, *AGC, SDC v. Caltrans*, 713 F.3d at 1195; *Western States Paving*, 407 F.3d at 990 n. 6; *Coral Constr. Co.*, 941 F.2d at 931-932 (9th Cir. 1991); *Equal. Found. v. City of Cincinnati*, 128 F.3d 289 (6th Cir. 1997); *Eng’g Contractors Ass’n*, 122 F.3d at 905, 908, 910; *Ensley Branch N.A.A.C.P. v. Seibels*, 31 F.3d 1548 (11th Cir. 1994); see also *U.S. v. Virginia*, 518 U.S. 515, 532 and n. 6 (1996) (“exceedingly persuasive justification.”)

<sup>133</sup> *Id.*

an appropriate response to such discrimination. This standard requires the state actor to present “sufficient probative” evidence in support of its stated rationale for the program.<sup>134</sup>

Intermediate scrutiny, as interpreted by the Ninth Circuit and other federal circuit courts of appeal, requires a direct, substantial relationship between the objective of the gender preference and the means chosen to accomplish the objective. The measure of evidence required to satisfy intermediate scrutiny is less than that necessary to satisfy strict scrutiny. Unlike strict scrutiny, it has been held that the intermediate scrutiny standard does not require a showing of government involvement, active or passive, in the discrimination it seeks to remedy.<sup>135</sup> And the Eleventh Circuit has held that “[w]hen a gender-conscious affirmative action program rests on sufficient evidentiary foundation, the government is not required to implement the program only as a last resort .... Additionally, under intermediate scrutiny, a gender-conscious program need not closely tie its numerical goals to the proportion of qualified women in the market.”<sup>136</sup>

#### **4. Arizona Civil Rights Amendment - Proposition 107 - and the federal program exception**

In 2010 the State of Arizona approved Proposition 107, which was an Amendment to the State Constitution known as the “Arizona Civil Rights Amendment.” The Arizona Civil Rights Amendment is codified as Article II, Section 36 of the Arizona State Constitution. Section 36.A provides that the State shall not discriminate against or grant preferential treatment to any individual or group on the basis of race, sex, color, ethnicity or national origin in the operation of public employment, public education or public contracting. Section 36.B. provides that this section does not:

- “1. Prohibit bona fide qualifications based on sex that are reasonably necessary to the normal operation of public employment, public education or public contracting.
2. Prohibit action that must be taken to establish or maintain eligibility for any federal program, if ineligibility would result in a loss of federal monies to this state.
3. Invalidate any court order or consent decree that is in force as of the effective date of this section.”

The remedies available for a violation of this section are the same, regardless of the injured party’s race, sex, color, ethnicity or national origin. For purposes of this section, the term “state” includes: the State of Arizona, a city, town or a county, a public university, a community college district, a school district, a special district or any other political subdivision in the State of Arizona.

It is noteworthy in connection with ADOT’s implementation of the Federal DBE Program that Article II, Section 36 of the Arizona State Constitution, the Arizona Civil Rights Amendment,

---

<sup>134</sup> *Id.* The Seventh Circuit Court of Appeals, however, in *Builders Ass’n of Greater Chicago v. County of Cook, Chicago*, did not hold there is a different level of scrutiny for gender discrimination or gender based programs. 256 F.3d 642, 644-45 (7th Cir. 2001). The Court in *Builders Ass’n* rejected the distinction applied by the Eleventh Circuit in *Engineering Contractors*.

<sup>135</sup> *Coral Constr. Co.*, 941 F.2d at 931-932; *See Eng’g Contractors Ass’n*, 122 F.3d at 910.

<sup>136</sup> 122 F.3d at 929 (internal citations omitted.)

prohibits preferential treatment or discrimination in public contracting based on race, sex, color, ethnicity or national origin. But, Section 36 does not prohibit action that must be taken to establish or maintain eligibility for any federal program, if ineligibility would result in a loss of federal monies to Arizona.

## **5. Pending Cases (at the time of this report)**

Pending cases on appeal at the time of this report include:

- *Mountain West Holding Co., Inc. v. The State of Montana, Montana DOT, et al.* 2014 WL 6686734 (D. Mont. Nov. 26, 2014) *appeal pending* in the U.S. Court of Appeals, Ninth Circuit, Docket Numbers 14-36097 and 15-35003. (See Section D.6. below.)
- *Midwest Fence Corporation v. United States Department of Transportation and Federal Highway Administration, the Illinois Department of Transportation, the Illinois State Toll Highway Authority, et al.*, 2015 WL 1396376 (N.D. Ill, March 24, 2015), *appeal pending* in the U.S. Court of Appeals, Seventh Circuit, Docket Number 15-1827. (See Section E.9 below.)
- *Dunnet Bay Construction Company v. Gary Hannig, in its official capacity as Secretary of Transportation for the Illinois DOT and the Illinois DOT*, 2014 WL 552213 (C.D. Ill. Feb 12, 2014), *appeal pending* in the U.S. Court of Appeals, Seventh Circuit. (see Section E.10 below.)

This list of pending cases is not exhaustive, but is illustrative of current pending cases that may impact recipients of federal funds implementing the Federal DBE Program.

**Ongoing review.** The above represents a brief summary of the legal framework pertinent to implementation of DBE, MBE/WBE, or race-, ethnicity-, or gender-neutral programs. Because this is a dynamic area of the law, the framework is subject to ongoing review as the law continues to evolve. The following provides more detailed summaries of key recent decisions.

## **D. Recent Decisions Involving the Federal DBE Program and State or Local Government MBE/WBE Programs in the Ninth Circuit**

### **1. *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.*, 713 F. 3d 1187 (9th Cir. 2013)**

The Associated General Contractors of America, Inc., San Diego Chapter, Inc. , (“AGC”) sought declaratory and injunctive relief against the California Department of Transportation (“Caltrans”) and its officers on the grounds that Caltrans’ Disadvantaged Business Enterprise (“DBE”) program unconstitutionally provided race -and sex-based preferences to African American, Native American-, Asian-Pacific American-, and women-owned firms on certain transportation contracts. The federal district court upheld the constitutionality of Caltrans’ DBE program implementing the Federal DBE program and granted summary judgment to Caltrans. The district court held that Caltrans’ DBE program implementing the Federal DBE Program satisfied strict scrutiny because Caltrans had a strong basis in evidence of discrimination in the California transportation contracting industry, and the program was narrowly tailored to those groups that actually suffered discrimination.

The district court held that Caltrans' substantial statistical and anecdotal evidence from a disparity study conducted by BBC Research and Consulting, provided a strong basis in evidence of discrimination against the four named groups, and that the program was narrowly tailored to benefit only those groups. 713 F.3d at 1190.

The AGC appealed the decision to the Ninth Circuit Court of Appeals. The Ninth Circuit initially held that because the AGC did not identify any of the members who have suffered or will suffer harm as a result of Caltrans' program, the AGC did not establish that it had associational standing to bring the lawsuit. *Id.* Most significantly, the Ninth Circuit held that even if the AGC could establish standing, its appeal failed because the Court found Caltrans' DBE program implementing the Federal DBE program is constitutional and satisfied the applicable level of strict scrutiny required by the Equal Protection Clause of the United States Constitution. *Id.* at 1194-1200.

**Court Applies *Western States Paving Co. v. Washington State DOT* decision.** In 2005 the Ninth Circuit Court of Appeal decided *Western States Paving Co. v. Washington State Department of Transportation*, 407 F. 3d. 983 (9<sup>th</sup> Cir. 2005), which involved a facial challenge to the constitutional validity of the federal law authorizing the United States Department of Transportation to distribute funds to States for transportation-related projects. *Id.* at 1191. The challenge in the *Western States Paving* case also included an as-applied challenge to the Washington DOT program implementing the federal mandate. *Id.* Applying strict scrutiny, the Ninth Circuit upheld the constitutionality of the federal statute and the federal regulations (the Federal DBE Program), but struck down Washington DOT's program because it was not narrowly tailored. *Id.*, citing *Western States Paving Co.*, 407 F.3d at 990-995, 999-1002.

In *Western States Paving*, the Ninth Circuit announced a two-pronged test for "narrow tailoring":

“(1) the state must establish the presence of discrimination within its transportation contracting industry, and (2) the remedial program must be limited to those minority groups that have actually suffered discrimination.” *Id.* 1191, citing *Western States Paving Co.*, 407 F.3d at 997-998.

**Evidence gathering and the 2007 Disparity Study.** On May 1, 2006, Caltrans ceased to use race- and gender-conscious measures in implementing their DBE program on federally assisted contracts while it gathered evidence in an effort to comply with the *Western States Paving* decision. *Id.* at 1191. Caltrans commissioned a disparity study by BBC Research and Consulting to determine whether there was evidence of discrimination in California's transportation contracting industry. *Id.* The Court noted that disparity analysis involves making a comparison between the availability of minority- and women-owned businesses and their actual utilization, producing a number called a "disparity index." *Id.* An index of 100 represents statistical parity between availability and utilization, and a number below 100 indicates underutilization. *Id.* An index below 80 is considered a substantial disparity that supports an inference of discrimination. *Id.*

The Court found the research firm and the disparity study gathered extensive data to calculate disadvantaged business availability in the California transportation contracting industry. *Id.* at 1191. The Court stated: "Based on review of public records, interviews, assessments as to whether a firm could be considered available, for Caltrans contracts, as well as numerous other adjustments, the firm



concluded that minority- and women-owned businesses should be expected to receive 13.5% of contact dollars from Caltrans administered federally assisted contracts.” *Id.* at 1191-1192.

The Court said the research firm “examined over 10,000 transportation-related contracts administered by Caltrans between 2002 and 2006 to determine actual DBE utilization. The firm assessed disparities across a variety of contracts, separately assessing contracts based on funding source (state or federal), type of contract (prime or subcontract), and type of project (engineering or construction).” *Id.* at 1192.

The Court pointed out a key difference between federally funded and state funded contracts is that race-conscious goals were in place for the federally funded contracts during the 2002–2006 period, but not for the state funded contracts. *Id.* at 1192. Thus, the Court stated: “state funded contracts functioned as a control group to help determine whether previous affirmative action programs skewed the data.” *Id.*

Moreover, the Court found the research firm measured disparities in all twelve of Caltrans’ administrative districts, and computed aggregate disparities based on statewide data. *Id.* at 1192. The firm evaluated statistical disparities by race and gender. The Court stated that within and across many categories of contracts, the research firm found substantial statistical disparities for African American, Asian–Pacific, and Native American firms. *Id.* However, the research firm found that there were not substantial disparities for these minorities in *every* subcategory of contract. *Id.* The Court noted that the disparity study also found substantial disparities in utilization of women-owned firms for some categories of contracts. *Id.* After publication of the disparity study, the Court pointed out the research firm calculated disparity indices for all women-owned firms, including female minorities, showing substantial disparities in the utilization of all women-owned firms similar to those measured for white women. *Id.*

The Court found that the disparity study and Caltrans also developed extensive anecdotal evidence, by (1) conducting twelve public hearings to receive comments on the firm’s findings; (2) receiving letters from business owners and trade associations; and (3) interviewing representatives from twelve trade associations and 79 owners/managers of transportation firms. *Id.* at 1192. The Court stated that some of the anecdotal evidence indicated discrimination based on race or gender. *Id.*

**Caltrans’ DBE Program.** Caltrans concluded that the evidence from the disparity study supported an inference of discrimination in the California transportation contracting industry. *Id.* at 1192-1193. Caltrans concluded that it had sufficient evidence to make race- and gender-conscious goals for African American-, Asian–Pacific American-, Native American-, and women-owned firms. *Id.* The Court stated that Caltrans adopted the recommendations of the disparity report and set an overall goal of 13.5 percent for disadvantaged business participation. Caltrans expected to meet one-half of the 13.5 percent goal using race-neutral measures. *Id.*

Caltrans submitted its proposed DBE program to the USDOT for approval, including a request for a waiver to implement the program only for the four identified groups. *Id.* at 1193. The Caltrans’ DBE program included 66 race-neutral measures that Caltrans already operated or planned to implement, and subsequent proposals increased the number of race-neutral measures to 150. *Id.* The USDOT granted the waiver, but initially did not approve Caltrans’ DBE program until in 2009, the DOT approved Caltrans’ DBE program for fiscal year 2009.

**District Court proceedings.** AGC then filed a complaint alleging that Caltrans' implementation of the Federal DBE Program violated the Fourteenth Amendment of the U.S. Constitution, Title VI of the Civil Rights Act, and other laws. Ultimately, the AGC only argued an as-applied challenge to Caltrans' DBE program. The district court on motions of summary judgment held that Caltrans' program was "clearly constitutional," as it "was supported by a strong basis in evidence of discrimination in the California contracting industry and was narrowly tailored to those groups which had actually suffered discrimination. *Id.* at 1193.

**Subsequent Caltrans study and program.** While the appeal by the AGC was pending, Caltrans commissioned a new disparity study from BBC to update its DBE program as required by the federal regulations. *Id.* at 1193. In August 2012, BBC published its second disparity report, and Caltrans concluded that the updated study provided evidence of continuing discrimination in the California transportation contracting industry against the same four groups and Hispanic Americans. *Id.* Caltrans submitted a modified DBE program that is nearly identical to the program approved in 2009, except that it now includes Hispanic Americans and sets an overall goal of 12.5 percent, of which 9.5 percent will be achieved through race- and gender-conscious measures. *Id.* The USDOT approved Caltrans' updated program in November 2012. *Id.*

**Jurisdiction issue.** Initially, the Ninth Circuit Court of Appeals considered whether it had jurisdiction over the AGC's appeal based on the doctrines of mootness and standing. The Court held that the appeal is not moot because Caltrans' new DBE program is substantially similar to the prior program and is alleged to disadvantage AGC's members "in the same fundamental way" as the previous program. *Id.* at 1194.

The Court, however, held that the AGC did not establish associational standing. *Id.* at 1194-1195: The Court found that the AGC did not identify any affected members by name nor has it submitted declarations by any of its members attesting to harm they have suffered or will suffer under Caltrans' program. *Id.* at 1194-1195. Because AGC failed to establish standing, the Court held it must dismiss the appeal due to lack of jurisdiction. *Id.* at 1195.

**Caltrans' DBE Program held constitutional on the merits.** The Court then held that even if AGC could establish standing, its appeal would fail. *Id.* at 1194-1195. The Court held that Caltrans' DBE program is constitutional because it survives the applicable level of scrutiny required by the Equal Protection Clause and jurisprudence. *Id.* at 1195-1200.

The Court stated that race-conscious remedial programs must satisfy strict scrutiny and that although strict scrutiny is stringent, it is not "fatal in fact." *Id.* at 1194-1195 (quoting *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200, 237 (1995) (*Adarand III*)). The Court quoted *Adarand III*: "The unhappy persistence of both the practice and the lingering effects of racial discrimination against minority groups in this country is an unfortunate reality, and government is not disqualified from acting in response to it." *Id.* (quoting *Adarand III*, 515 U.S. at 237.)

The Court pointed out that gender-conscious programs must satisfy intermediate scrutiny which requires that gender-conscious programs be supported by an 'exceedingly persuasive justification' and be substantially related to the achievement of that underlying objective. *Id.* at 1195 (citing *Western States Paving*, 407 F.3d at 990 n. 6.).

The Court held that Caltrans' DBE program contains both race- and gender-conscious measures, and that the "entire program passes strict scrutiny." *Id.* at 1195.

**A. Application of strict scrutiny standard articulated in *Western States Paving*.** The Court held that the framework for AGC's as-applied challenge to Caltrans' DBE program is governed by *Western States Paving*. The Ninth Circuit in *Western States Paving* devised a two-pronged test for narrow tailoring: (1) the state must establish the presence of discrimination within its transportation contracting industry, and (2) the remedial program must be "limited to those minority groups that have actually suffered discrimination." *Id.* at 1195-1196 (quoting *Western States Paving*, 407 F.3d at 997-99).

**1. Evidence of discrimination in California contracting industry.** The Court held that in Equal Protection cases, courts consider statistical and anecdotal evidence to identify the existence of discrimination. *Id.* at 1196. The U.S. Supreme Court has suggested that a "significant statistical disparity" could be sufficient to justify race-conscious remedial programs. *Id.* at \*7 (citing *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469, 509 (1989)). The Court stated that although generally not sufficient, anecdotal evidence complements statistical evidence because of its ability to bring "the cold numbers convincingly to life." *Id.* (quoting *Int'l Bhd. of Teamsters v. United States*, 431 U.S. 324, 339 (1977)).

The Court pointed out that Washington DOT's DBE program in the *Western States Paving* case was held invalid because Washington DOT had performed no statistical studies and it offered no anecdotal evidence. *Id.* at 1196. The Court also stated that the Washington DOT used an oversimplified methodology resulting in little weight being given by the Court to the purported disparity because Washington's data "did not account for the relative capacity of disadvantaged businesses to perform work, nor did it control for the fact that existing affirmative action programs skewed the prior utilization of minority businesses in the state." *Id.* (quoting *Western States Paving*, 407 F.3d at 999-1001). The Court said that it struck down Washington's program after determining that the record was devoid of any evidence suggesting that minorities currently suffer – or have ever suffered – discrimination in the Washington transportation contracting industry." *Id.*

Significantly, the Court held in this case as follows: "In contrast, Caltrans' affirmative action program is supported by substantial statistical and anecdotal evidence of discrimination in the California transportation contracting industry." *Id.* at 1196. The Court noted that the disparity study documented disparities in many categories of transportation firms and the utilization of certain minority- and women-owned firms. *Id.* The Court found the disparity study "accounted for the factors mentioned in *Western States Paving* as well as others, adjusting availability data based on capacity to perform work and controlling for previously administered affirmative action programs." *Id.* (citing *Western States*, 407 F.3d at 1000).

The Court also held: "Moreover, the statistical evidence from the disparity study is bolstered by anecdotal evidence supporting an inference of discrimination. The substantial statistical disparities alone would give rise to an inference of discrimination, *see Croson*, 488 U.S. at 509, and certainly Caltrans' statistical evidence combined with anecdotal evidence passes constitutional muster." *Id.* at 1196.

The Court specifically rejected the argument by AGC that strict scrutiny requires Caltrans to provide evidence of “specific acts” of “deliberate” discrimination by Caltrans employees or prime contractors. *Id.* at 1196-1197. The Court found that the Supreme Court in *Croson* explicitly states that “[t]he degree of specificity required in the findings of discrimination ... may vary.” *Id.* at 1197 (quoting *Croson*, 488 U.S. at 489). The Court concluded that a rule requiring a state to show specific acts of deliberate discrimination by identified individuals would run contrary to the statement in *Croson* that statistical disparities alone could be sufficient to support race-conscious remedial programs. *Id.* (citing *Croson*, 488 U.S. at 509). The Court rejected AGC’s argument that Caltrans’ program does not survive strict scrutiny because the disparity study does not identify individual acts of deliberate discrimination. *Id.*

The Court rejected a second argument by AGC that this study showed inconsistent results for utilization of minority businesses depending on the type and nature of the contract, and thus cannot support an inference of discrimination in the entire transportation contracting industry. *Id.* at 1197. AGC argued that each of these subcategories of contracts must be viewed in isolation when considering whether an inference of discrimination arises, which the Court rejected. *Id.* The Court found that AGC’s argument overlooks the rationale underpinning the constitutional justification for remedial race-conscious programs: they are designed to root out “patterns of discrimination.” *Id.* quoting *Croson*, 488 U.S. at 504.

The Court stated that the issue is not whether Caltrans can show underutilization of disadvantaged businesses in *every* measured category of contract. But rather, the issue is whether Caltrans can meet the evidentiary standard required by *Western States Paving* if, looking at the evidence in its entirety, the data show substantial disparities in utilization of minority firms suggesting that public dollars are being poured into “a system of racial exclusion practiced by elements of the local construction industry.” *Id.* at 1197 quoting *Croson* 488 U.S. at 492.

The Court concluded that the disparity study and anecdotal evidence document a pattern of disparities for the four groups, and that the study found substantial underutilization of these groups in numerous categories of California transportation contracts, which the anecdotal evidence confirms. *Id.* at 1197. The Court held this is sufficient to enable Caltrans to infer that these groups are systematically discriminated against in publicly-funded contracts. *Id.*

Third, the Court considered and rejected AGC’s argument that the anecdotal evidence has little or no probative value in identifying discrimination because it is not verified. *Id.* at \*9. The Court noted that the Fourth and Tenth Circuits have rejected the need to verify anecdotal evidence, and the Court stated the AGC made no persuasive argument that the Ninth Circuit should hold otherwise. *Id.*

The Court pointed out that AGC attempted to discount the anecdotal evidence because some accounts ascribe minority underutilization to factors other than overt discrimination, such as difficulties with obtaining bonding and breaking into the “good ol boy” network of contractors. *Id.* at 1197-1198. The Court held, however, that the federal courts and regulations have identified precisely these factors as barriers that disadvantage minority firms because of the lingering effects of discrimination. *Id.* at 1198, citing *Western States Paving*, 407 and *AGCC II*, 950 F.2d at 1414.

The Court found that AGC ignores the many incidents of racial and gender discrimination presented in the anecdotal evidence. *Id.* at 1198. The Court said that Caltrans does not claim, and the anecdotal

evidence does not need to prove, that *every* minority-owned business is discriminated against. *Id.* The Court concluded: “It is enough that the anecdotal evidence supports Caltrans’ statistical data showing a pervasive pattern of discrimination.” *Id.* The individual accounts of discrimination offered by Caltrans, according to the Court, met this burden. *Id.*

Fourth, the Court rejected AGC’s contention that Caltrans’ evidence does not support an inference of discrimination against all women because gender-based disparities in the study are limited to white women. *Id.* at 1198. AGC, the Court said, misunderstands the statistical techniques used in the disparity study, and that the study correctly isolates the effect of gender by limiting its data pool to white women, ensuring that statistical results for gender-based discrimination are not skewed by discrimination against minority women on account of their race. *Id.*

In addition, after AGC’s early incorrect objections to the methodology, the research firm conducted a follow-up analysis of all women-owned firms that produced a disparity index of 59. *Id.* at 1198. The Court held that this index is evidence of a substantial disparity that raises an inference of discrimination and is sufficient to support Caltrans’ decision to include all women in its DBE program. *Id.* at 1195.

**2. Program tailored to groups who actually suffered discrimination.** The Court pointed out that the second prong of the test articulated in *Western States Paving* requires that a DBE program be limited to those groups that actually suffered discrimination in the state’s contracting industry. *Id.* at 1198. The Court found Caltrans’ DBE program is limited to those minority groups that have actually suffered discrimination. *Id.* The Court held that the 2007 disparity study showed systematic and substantial underutilization of African American-, Native American-, Asian-Pacific American-, and women-owned firms across a range of contract categories. *Id.* at 1198-1199. *Id.* These disparities, according to the Court, support an inference of discrimination against those groups. *Id.*

Caltrans concluded that the statistical evidence did not support an inference of a pattern of discrimination against Hispanic or Subcontinent Asian Americans. *Id.* at 1199. California applied for and received a waiver from the USDOT in order to limit its 2009 program to African American, Native American, Asian-Pacific American, and women-owned firms. *Id.* The Court held that Caltrans’ program “adheres precisely to the narrow tailoring requirements of *Western States*.” *Id.*

The Court rejected the AGC contention that the DBE program is not narrowly tailored because it creates race-based preferences for all transportation-related contracts, rather than distinguishing between construction and engineering contracts. *Id.* at 1199. The Court stated that AGC cited no case that requires a state preference program to provide separate goals for disadvantaged business participation on construction and engineering contracts. *Id.* The Court noted that to the contrary, the federal guidelines for implementing the federal program instruct states *not* to separate different types of contracts. *Id.* The Court found there are “sound policy reasons to not require such parsing, including the fact that there is substantial overlap in firms competing for construction and engineering contracts, as prime *and* subcontractors.” *Id.*

**B. Consideration of race-neutral alternatives.** The Court rejected the AGC assertion that Caltrans’ program is not narrowly tailored because it failed to evaluate race-neutral measures before implementing the system of racial preferences, and stated the law imposes no such requirement. *Id.* at 1199. The Court held that *Western States Paving* does not require states to independently meet this

aspect of narrow tailoring, and instead focuses on whether the federal statute sufficiently considered race-neutral alternatives. *Id.*

Second, the Court found that even if this requirement does apply to Caltrans' program, narrow tailoring only requires "serious, good faith consideration of workable race-neutral alternatives." *Id.* at 1199, citing *Grutter v. Bollinger*, 539 U.S. 306, 339 (2003). The Court found that the Caltrans program has considered an increasing number of race-neutral alternatives, and it rejected AGC's claim that Caltrans' program does not sufficiently consider race-neutral alternatives. *Id.* at 1199.

**C. Certification affidavits for Disadvantaged Business Enterprises.** The Court rejected the AGC argument that Caltrans' program is not narrowly tailored because affidavits that applicants must submit to obtain certification as DBEs do not require applicants to assert they have suffered discrimination *in California*. *Id.* at 1199-1200. The Court held the certification process employed by Caltrans follows the process detailed in the federal regulations, and that this is an impermissible collateral attack on the facial validity of the Congressional Act authorizing the Federal DBE Program and the federal regulations promulgated by the USDOT (The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, Pub.L.No. 109-59, § 1101(b), 119 Stat. 1144 (2005)). *Id.* at 1200.

**D. Application of program to mixed state- and federally-funded contracts.** The Court also rejected AGC's challenge that Caltrans applies its program to transportation contracts funded by both federal and state money. *Id.* at 1200. The Court held that this is another impermissible collateral attack on the federal program, which explicitly requires goals to be set for mix-funded contracts. *Id.*

**Conclusion.** The Court concluded that the AGC did not have standing, and that further, Caltrans' DBE program survives strict scrutiny by: 1) having a strong basis in evidence of discrimination within the California transportation contracting industry, and 2) being narrowly tailored to benefit only those groups that have actually suffered discrimination. *Id.* at 1200. The Court then dismissed the appeal. *Id.*

**2. *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.*, U.S.D.C., E.D. Cal. Civil Action No. S-09-1622, Slip Opinion (E.D. Cal. April 20, 2011), appeal dismissed based on standing, on other grounds Ninth Circuit held Caltrans' DBE Program constitutional, *Associated General Contractors of America, San Diego Chapter, Inc. v. California Department of Transportation, et al.*, 713 F.3d 1187 (9th Cir. April 16, 2013)**

This case involved a challenge by the Associated General Contractors of America, San Diego Chapter, Inc. ("AGC") against the California Department of Transportation ("Caltrans"), to the DBE program adopted by Caltrans implementing the Federal DBE Program at 49 CFR Part 26. The AGC sought an injunction against Caltrans enjoining its use of the DBE program and declaratory relief from the court declaring the Caltrans DBE program to be unconstitutional.

Caltrans' DBE program set a 13.5 percent DBE goal for its federally-funded contracts. The 13.5 percent goal, as implemented by Caltrans, included utilizing half race-neutral means and half race-conscious means to achieve the goal. Slip Opinion Transcript at 42. Caltrans did not include all minorities in the race-conscious component of its goal, excluding Hispanic males and Subcontinent Asian American males. *Id.* at 42. Accordingly, the race-conscious component of the Caltrans DBE

program applied only to African Americans, Native Americans, Asian Pacific Americans, and white women. *Id.*

Caltrans established this goal and its DBE program following a disparity study conducted by BBC Research & Consulting, which included gathering statistical and anecdotal evidence of race and gender disparities in the California construction industry. Slip Opinion Transcript at 42.

The parties filed motions for summary judgment. The district court issued its ruling at the hearing on the motions for summary judgment granting Caltrans' motion for summary judgment in support of its DBE program and denying the motion for summary judgment filed by the plaintiffs. Slip Opinion Transcript at 54. The court held Caltrans' DBE program applying and implementing the provisions of the Federal DBE Program is valid and constitutional. *Id.* at 56.

The district court analyzed Caltrans' implementation of the DBE program under the strict scrutiny doctrine and found the burden of justifying different treatment by ethnicity or gender is on the government. The district court applied the Ninth Circuit Court of Appeals ruling in *Western States Paving Company v. Washington State DOT*, 407 F.3d 983 (9<sup>th</sup> Cir. 2005). The court stated that the federal government has a compelling interest "in ensuring that its funding is not distributed in a manner that perpetuates the effects of either public or private discrimination within the transportation contracting industry." Slip Opinion Transcript at 43, *quoting Western States Paving*, 407 F.3d at 991, *citing City of Richmond v. J.A. Croson Company*, 488 U.S. 469 (1989).

The district court pointed out that the Ninth Circuit in *Western States Paving* and the Tenth Circuit Court of Appeals and the Eighth Circuit Court of Appeals have upheld the facial validity of the Federal DBE Program.

The district court stated that based on *Western States Paving*, the court is required to look at the Caltrans DBE program itself to see if there is a strong basis in evidence to show that Caltrans is acting for a proper purpose and if the program itself has been narrowly tailored. Slip Opinion Transcript at 45. The court concluded that narrow tailoring "does not require exhaustion of every conceivable race-neutral alternative, but it does require serious, good-faith consideration of workable race-neutral alternatives." Slip Opinion Transcript at 45.

The district court identified the issues as whether Caltrans has established a compelling interest supported by a strong basis in evidence for its program, and does Caltrans' race-conscious program meet the strict scrutiny required. Slip Opinion Transcript at 51-52. The court also phrased the issue as whether the Caltrans DBE program, "which does give preference based on race and sex, whether that program is narrowly tailored to remedy the effects of identified discrimination...", and whether Caltrans has complied with the Ninth Circuit's guidance in *Western States Paving*. Slip Opinion Transcript at 52.

The district court held "that Caltrans has done what the Ninth Circuit has required it to do, what the federal government has required it to do, and that it clearly has implemented a program which is supported by a strong basis in evidence that gives rise to a compelling interest, and that its race-conscious program, the aspect of the program that does implement race-conscious alternatives, it does under a strict-scrutiny standard meet the requirement that it be narrowly tailored as set forth in the case law." Slip Opinion Transcript at 52.

The court rejected the plaintiff's arguments that anecdotal evidence failed to identify specific acts of discrimination, finding "there are numerous instances of specific discrimination." Slip Opinion Transcript at 52. The district court found that after the *Western States Paving* case, Caltrans went to a racially neutral program, and the evidence showed that the program would not meet the goals of the federally-funded program, and the federal government became concerned about what was going on with Caltrans' program applying only race-neutral alternatives. *Id.* at 52-53. The court then pointed out that Caltrans engaged in an "extensive disparity study, anecdotal evidence, both of which is what was missing" in the *Western States Paving* case. *Id.* at 53.

The court concluded that Caltrans "did exactly what the Ninth Circuit required" and that Caltrans has gone "as far as is required." Slip Opinion Transcript at 53.

The court held that as a matter of law, the Caltrans DBE program is, under *Western States Paving* and the Supreme Court cases, "clearly constitutional," and "narrowly tailored." Slip Opinion Transcript at 56. The court found there are significant differences between Caltrans' program and the program in the *Western States Paving* case. *Id.* at 54-55. In *Western States Paving*, the court said there were no statistical studies performed to try and establish the discrimination in the highway contracting industry, and that Washington simply compared the proportion of DBE firms in the state with the percentage of contracting funds awarded to DBEs on race-neutral contracts to calculate a disparity. *Id.* at 55.

The district court stated that the Ninth Circuit in *Western States Paving* found this to be oversimplified and entitled to little weight "because it did not take into account factors that may affect the relative capacity of DBEs to undertake contracting work." Slip Opinion Transcript at 55. Whereas, the district court held the "disparity study used by Caltrans was much more comprehensive and accounted for this and other factors." *Id.* at 55. The district noted that the State of Washington did not introduce any anecdotal information. The difference in this case, the district court found, "is that the disparity study includes both extensive statistical evidence, as well as anecdotal evidence gathered through surveys and public hearings, which support the statistical findings of the underutilization faced by DBEs without the DBE program. Add to that the anecdotal evidence submitted in support of the summary judgment motion as well. And this evidence before the Court clearly supports a finding that this program is constitutional." *Id.* at 56.

The court held that because "Caltrans' DBE program is based on substantial statistical and anecdotal evidence of discrimination in the California contracting industry and because the Court finds that it is narrowly tailored, the Court upholds the program as constitutional." Slip Opinion Transcript at 56.

The decision of the district court was appealed to the Ninth Circuit Court of Appeals. The Ninth Circuit dismissed the appeal based on lack of standing by the AGC, San Diego Chapter, but ruled on the merits on alternative grounds holding constitutional Caltrans' DBE Program. *See discussion above of AGC, SDC v. Cal. DOT.*

### **3. *Braunstein v. Arizona DOT*, 683 F.3d 1177 (9th Cir. 2012)**

Braunstein is an engineering contractor that provided subsurface utility location services for ADOT. Braunstein sued the Arizona DOT and others seeking damages under the Civil Rights Act, pursuant to §§ 1981 and 1983, and challenging the use of Arizona's former affirmative action program, or



race- and gender- conscious DBE program implementing the Federal DBE Program, alleging violation of the equal protection clause.

**Factual background.** ADOT solicited bids for a new engineering and design contract. Six firms bid on the prime contract, but Braunstein did not bid because he could not satisfy a requirement that prime contractors complete 50 percent of the contract work themselves. Instead, Braunstein contacted the bidding firms to ask about subcontracting for the utility location work. 683 F.3d at 1181. All six firms rejected Braunstein's overtures, and Braunstein did not submit a quote or subcontracting bid to any of them. *Id.*

As part of the bid, the prime contractors were required to comply with federal regulations that provide states receiving federal highway funds maintain a DBE program. 683 F.3d at 1182. Under this contract, the prime contractor would receive a maximum of 5 points for DBE participation. *Id. at 1182.* All six firms that bid on the prime contract received the maximum 5 points for DBE participation. All six firms committed to hiring DBE subcontractors to perform at least 6 percent of the work. Only one of the six bidding firms selected a DBE as its desired utility location subcontractor. Three of the bidding firms selected another company other than Braunstein to perform the utility location work. *Id.* DMJM won the bid for the 2005 contract using Aztec to perform the utility location work. Aztec was not a DBE. *Id. at 1182.*

**District Court rulings.** Braunstein brought this suit in federal court against ADOT and employees of the DOT alleging that ADOT violated his right to equal protection by using race and gender preferences in its solicitation and award of the 2005 contract. The district court dismissed as moot Braunstein's claims for injunctive and declaratory relief because ADOT had suspended its DBE program in 2006 following the Ninth Circuit decision in *Western States Paving Co. v. Washington State DOT*, 407 F.3d 9882 (9<sup>th</sup> Cir. 2005). This left only Braunstein's damages claims against the State and ADOT under §2000d, and against the named individual defendants in their individual capacities under §§ 1981 and 1983. *Id. at 1183.*

The district court concluded that Braunstein lacked Article III standing to pursue his remaining claims because he had failed to show that ADOT's DBE program had affected him personally. The court noted that "Braunstein was afforded the opportunity to bid on subcontracting work, and the DBE goal did not serve as a barrier to doing so, nor was it an impediment to his securing a subcontract." *Id. at 1183.* The district court found that Braunstein's inability to secure utility location work stemmed from his past unsatisfactory performance, not his status as a non-DBE. *Id.*

**Lack of standing.** The Ninth Circuit Court of Appeals held that Braunstein lacked Article III standing and affirmed the entry of summary judgment in favor of ADOT and the individual employees of ADOT. The Court found that Braunstein had not provided any evidence showing that ADOT's DBE program affected him personally or that it impeded his ability to compete for utility location work on an equal basis. *Id. at 1185.* The Court noted that Braunstein did not submit a quote or a bid to any of the prime contractors bidding on the government contract. *Id.*

The Court also pointed out that Braunstein did not seek prospective relief against the government "affirmative action" program, noting the district court dismissed as moot his claims for declaratory and injunctive relief since ADOT had suspended its DBE program before he brought the suit. *Id. at 1186.* Thus, Braunstein's surviving claims were for damages based on the contract at issue rather than

prospective relief to enjoin the DBE Program. *Id.* Accordingly, the Court held he must show more than that he is “able and ready” to seek subcontracting work. *Id.*

The Court found Braunstein presented no evidence to demonstrate that he was in a position to compete equally with the other subcontractors, no evidence comparing himself with the other subcontractors in terms of price or other criteria, and no evidence explaining why the six prospective prime contractors rejected him as a subcontractor. *Id. at 1186.* The Court stated that there was nothing in the record indicating the ADOT DBE program posed a barrier that impeded Braunstein’s ability to compete for work as a subcontractor. *Id. at 1187.* The Court held that the existence of a racial or gender barrier is not enough to establish standing, without a plaintiff’s showing that he has been subjected to such a barrier. *Id. at 1186.*

The Court noted Braunstein had explicitly acknowledged previously that the winning bidder on the contract would not hire him as a subcontractor for reasons unrelated to the DBE program. *Id. at 1186.* At the summary judgment stage, the Court stated that Braunstein was required to set forth specific facts demonstrating the DBE program impeded his ability to compete for the subcontracting work on an equal basis. *Id. at 1187.*

**Summary judgment granted to ADOT.** The Court concluded that Braunstein was unable to point to any evidence to demonstrate how the ADOT DBE program adversely affected him personally or impeded his ability to compete for subcontracting work. *Id.* The Court thus held that Braunstein lacked Article III standing and affirmed the entry of summary judgment in favor of ADOT.

#### **4. *Western States Paving Co. v. Washington State DOT*, 407 F.3d 983 (9<sup>th</sup> Cir. 2005), cert. denied, 546 U.S. 1170 (2006)**

This case out of the Ninth Circuit struck down a state’s implementation of the Federal DBE Program for failure to pass constitutional muster. In *Western States Paving*, the Ninth Circuit held that the State of Washington’s implementation of the Federal DBE Program was unconstitutional because it did not satisfy the narrow tailoring element of the constitutional test. The Ninth Circuit held that the State must present its own evidence of past discrimination within its own boundaries in order to survive constitutional muster and could not merely rely upon data supplied by Congress. The United States Supreme Court denied certiorari. The analysis in the decision also is instructive in particular as to the application of the narrowly tailored prong of the strict scrutiny test.

Plaintiff Western States Paving Co. (“plaintiff”) was a white male-owned asphalt and paving company. 407 F.3d 983, 987 (9<sup>th</sup> Cir. 2005). In July of 2000, plaintiff submitted a bid for a project for the City of Vancouver; the project was financed with federal funds provided to the Washington State DOT (“WSDOT”) under the Transportation Act for the 21<sup>st</sup> Century (“TEA-21”). *Id.*

Congress enacted TEA-21 in 1991 and after multiple renewals, it was set to expire on May 31, 2004. *Id. at 988.* TEA-21 established minimum minority-owned business participation requirements (10%) for certain federally-funded projects. *Id.* The regulations require each state accepting federal transportation funds to implement a DBE program that comports with the TEA-21. *Id.* TEA-21 indicates the 10 percent DBE utilization requirement is “aspirational,” and the statutory goal “does not authorize or require recipients to set overall or contract goals at the 10 percent level, or any other

particular level, or to take any special administrative steps if their goals are above or below 10 percent.” *Id.*

TEA-21 sets forth a two-step process for a state to determine its own DBE utilization goal: (1) the state must calculate the relative availability of DBEs in its local transportation contracting industry (one way to do this is to divide the number of ready, willing and able DBEs in a state by the total number of ready, willing and able firms); and (2) the state is required to “adjust this base figure upward or downward to reflect the proven capacity of DBEs to perform work (as measured by the volume of work allocated to DBEs in recent years) and evidence of discrimination against DBEs obtained from statistical disparity studies.” *Id.* at 989 (citing regulation). A state is also permitted to consider discrimination in the bonding and financing industries and the present effects of past discrimination. *Id.* (citing regulation). TEA-21 requires a generalized, “undifferentiated” minority goal and a state is prohibited from apportioning their DBE utilization goal among different minority groups (*e.g.*, between Hispanics, blacks, and women). *Id.* at 990 (citing regulation).

“A state must meet the maximum feasible portion of this goal through race- [and gender-] neutral means, including informational and instructional programs targeted toward all small businesses.” *Id.* (citing regulation). Race- and gender-conscious contract goals must be used to achieve any portion of the contract goals not achievable through race- and gender-neutral measures. *Id.* (citing regulation). However, TEA-21 does not require that DBE participation goals be used on every contract or at the same level on every contract in which they are used; rather, the overall effect must be to “obtain that portion of the requisite DBE participation that cannot be achieved through race- [and gender-] neutral means.” *Id.* (citing regulation).

A prime contractor must use “good faith efforts” to satisfy a contract’s DBE utilization goal. *Id.* (citing regulation). However, a state is prohibited from enacting rigid quotas that do not contemplate such good faith efforts. *Id.* (citing regulation).

Under the TEA-21 minority utilization requirements, the City set a goal of 14 percent minority participation on the first project plaintiff bid on; the prime contractor thus rejected plaintiff’s bid in favor of a higher bidding minority-owned subcontracting firm. *Id.* at 987. In September of 2000, plaintiff again submitted a bid on a project financed with TEA-21 funds and was again rejected in favor of a higher bidding minority-owned subcontracting firm. *Id.* The prime contractor expressly stated that he rejected plaintiff’s bid due to the minority utilization requirement. *Id.*

Plaintiff filed suit against the WSDOT, Clark County, and the City, challenging the minority preference requirements of TEA-21 as unconstitutional both facially and as applied. *Id.* The district court rejected both of plaintiff’s challenges. The district court held the program was facially constitutional because it found that Congress had identified significant evidence of discrimination in the transportation contracting industry and the TEA-21 was narrowly tailored to remedy such discrimination. *Id.* at 988. The district court rejected the as-applied challenge concluding that Washington’s implementation of the program comported with the federal requirements and the state was not required to demonstrate that its minority preference program independently satisfied strict scrutiny. *Id.* Plaintiff appealed to the Ninth Circuit Court of Appeals. *Id.*

The Ninth Circuit considered whether the TEA-21, which authorizes the use of race- and gender-based preferences in federally-funded transportation contracts, violated equal protection, either on its face or as applied by the State of Washington.

The court applied a strict scrutiny analysis to both the facial and as-applied challenges to TEA-21. *Id.* at 990-91. The court did not apply a separate intermediate scrutiny analysis to the gender-based classifications because it determined that it “would not yield a different result.” *Id.* at 990, n. 6.

**Facial challenge (Federal Government).** The court first noted that the federal government has a compelling interest in “ensuring that its funding is not distributed in a manner that perpetuates the effects of either public or private discrimination within the transportation contracting industry.” *Id.* at 991, citing *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469, 492 (1989) and *Adarand Constructors, Inc. v. Slater* (“Adarand VII”), 228 F.3d 1147, 1176 (10th Cir. 2000). The court found that “[b]oth statistical and anecdotal evidence are relevant in identifying the existence of discrimination.” *Id.* at 991. The court found that although Congress did not have evidence of discrimination against minorities in every state, such evidence was unnecessary for the enactment of nationwide legislation. *Id.* However, citing both the Eighth and Tenth Circuits, the court found that Congress had ample evidence of discrimination in the transportation contracting industry to justify TEA-21. *Id.* The court also found that because TEA-21 set forth flexible race-conscious measures to be used only when race-neutral efforts were unsuccessful, the program was narrowly tailored and thus satisfied strict scrutiny. *Id.* at 992-93. The court accordingly rejected plaintiff’s facial challenge. *Id.*

**As-applied challenge (State of Washington).** Plaintiff alleged TEA-21 was unconstitutional as-applied because there was no evidence of discrimination in Washington’s transportation contracting industry. *Id.* at 995. The State alleged that it was not required to independently demonstrate that its application of TEA-21 satisfied strict scrutiny. *Id.* The United States intervened to defend TEA-21’s facial constitutionality, and “unambiguously conceded that TEA-21’s race conscious measures can be constitutionally applied only in those states where the effects of discrimination are present.” *Id.* at 996; see also Br. for the United States at 28 (April 19, 2004) (“DOT’s regulations ... are designed to assist States in ensuring that race-conscious remedies are limited to only those jurisdictions where discrimination or its effects are a problem and only as a last resort when race-neutral relief is insufficient.” (emphasis in original)).

The court found that the Eighth Circuit was the only other court to consider an as-applied challenge to TEA-21 in *Sherbrooke Turf, Inc. v. Minnesota DOT*, 345 F.3d 964 (8<sup>th</sup> Cir. 2003), *cert. denied* 124 S. Ct. 2158 (2004). *Id.* at 996. The Eighth Circuit did not require Minnesota and Nebraska to identify a compelling purpose for their programs independent of Congress’s nationwide remedial objective. *Id.* However, the Eighth Circuit did consider whether the states’ implementation of TEA-21 was narrowly tailored to achieve Congress’s remedial objective. *Id.* The Eighth Circuit thus looked to the states’ independent evidence of discrimination because “to be narrowly tailored, a *national* program must be limited to those parts of the country where its race-based measures are demonstrably needed.” *Id.* (internal citations omitted). The Eighth Circuit relied on the states’ statistical analyses of the availability and capacity of DBEs in their local markets conducted by outside consulting firms to conclude that the states satisfied the narrow tailoring requirement. *Id.* at 997.

The court concurred with the Eighth Circuit and found that Washington did not need to demonstrate a compelling interest for its DBE program, independent from the compelling

nationwide interest identified by Congress. *Id.* However, the court determined that the district court erred in holding that mere compliance with the federal program satisfied strict scrutiny. *Id.* Rather, the court held that whether Washington's DBE program was narrowly tailored was dependent on the presence or absence of discrimination in Washington's transportation contracting industry. *Id.* at 997-98. "If no such discrimination is present in Washington, then the State's DBE program does not serve a remedial purpose; it instead provides an unconstitutional windfall to minority contractors solely on the basis of their race or sex." *Id.* at 998. The court held that a Sixth Circuit decision to the contrary, *Tennessee Asphalt Co. v. Farris*, 942 F.2d 969, 970 (6<sup>th</sup> Cir. 1991), misinterpreted earlier case law. *Id.* at 997, n. 9.

The court found that moreover, even where discrimination is present in a state, a program is narrowly tailored only if it applies only to those minority groups who have actually suffered discrimination. *Id.* at 998, *citing Croson*, 488 U.S. at 478. The court also found that in *Monterey Mechanical Co. v. Wilson*, 125 F.3d 702, 713 (9<sup>th</sup> Cir. 1997), it had "previously expressed similar concerns about the haphazard inclusion of minority groups in affirmative action programs ostensibly designed to remedy the effects of discrimination." *Id.* In *Monterey Mechanical*, the court held that "the overly inclusive designation of benefited minority groups was a 'red flag signaling that the statute is not, as the Equal Protection Clause requires, narrowly tailored.'" *Id.*, *citing Monterey Mechanical*, 125 F.3d at 714. The court found that other courts are in accord. *Id.* at 998-99, *citing Builders Ass'n of Greater Chi. v. County of Cook*, 256 F.3d 642, 647 (7<sup>th</sup> Cir. 2001); *Associated Gen. Contractors of Ohio, Inc. v. Drabik*, 214 F.3d 730, 737 (6<sup>th</sup> Cir. 2000); *O'Donnell Constr. Co. v. District of Columbia*, 963 F.2d 420, 427 (D.C. Cir. 1992). Accordingly, the court found that each of the principal minority groups benefited by WSDOT's DBE program must have suffered discrimination within the State. *Id.* at 999.

The court found that WSDOT's program closely tracked the sample USDOT DBE program. *Id.* WSDOT calculated its DBE participation goal by first calculating the availability of ready, willing and able DBEs in the State (dividing the number of transportation contracting firms in the Washington State Office of Minority, Women and Disadvantaged Business Enterprises Directory by the total number of transportation contracting firms listed in the Census Bureau's Washington database, which equaled 11.17%). *Id.* WSDOT then upwardly adjusted the 11.17 percent base figure to 14 percent "to account for the proven capacity of DBEs to perform work, as reflected by the volume of work performed by DBEs [during a certain time period]." *Id.* Although DBEs performed 18 percent of work on State projects during the prescribed time period, Washington set the final adjusted figure at 14 percent because TEA-21 reduced the number of eligible DBEs in Washington by imposing more stringent certification requirements. *Id.* at 999, n. 11. WSDOT did not make an adjustment to account for discriminatory barriers in obtaining bonding and financing. *Id.* WSDOT similarly did not make any adjustment to reflect present or past discrimination "because it lacked any statistical studies evidencing such discrimination." *Id.*

WSDOT then determined that it needed to achieve 5 percent of its 14 percent goal through race-conscious means based on a 9 percent DBE participation rate on state-funded contracts that did not include affirmative action components (*i.e.*, 9% participation could be achieved through race-neutral means). *Id.* at 1000. The USDOT approved WSDOT goal-setting program and the totality of its 2000 DBE program. *Id.*

Washington conceded that it did not have statistical studies to establish the existence of past or present discrimination. *Id.* It argued, however, that it had evidence of discrimination because minority-owned firms had the capacity to perform 14 percent of the State's transportation contracts in 2000 but received only 9 percent of the subcontracting funds on contracts that did not include an affirmative action's component. *Id.* The court found that the State's methodology was flawed because the 14 percent figure was based on the earlier 18 percent figure, discussed *supra*, which included contracts with affirmative action components. *Id.* The court concluded that the 14 percent figure did not accurately reflect the performance capacity of DBEs in a race-neutral market. *Id.* The court also found the State conceded as much to the district court. *Id.*

The court held that a disparity between DBE performance on contracts with an affirmative action component and those without "does not provide any evidence of discrimination against DBEs." *Id.* The court found that the only evidence upon which Washington could rely was the disparity between the proportion of DBE firms in the State (11.17%) and the percentage of contracts awarded to DBEs on race-neutral grounds (9%). *Id.* However, the court determined that such evidence was entitled to "little weight" because it did not take into account a multitude of other factors such as firm size. *Id.*

Moreover, the court found that the minimal statistical evidence was insufficient evidence, standing alone, of discrimination in the transportation contracting industry. *Id.* at 1001. The court found that WSDOT did not present any anecdotal evidence. *Id.* The court rejected the State's argument that the DBE applications themselves constituted evidence of past discrimination because the applications were not properly in the record, and because the applicants were not required to certify that they had been victims of discrimination in the contracting industry. *Id.* Accordingly, the court held that because the State failed to proffer evidence of discrimination within its own transportation contracting market, its DBE program was not narrowly tailored to Congress's compelling remedial interest. *Id.* at 1002-03.

The court affirmed the district court's grant on summary judgment to the United States regarding the facial constitutionality of TEA-21, reversed the grant of summary judgment to Washington on the as-applied challenge, and remanded to determine the State's liability for damages.

The dissent argued that where the State complied with TEA-21 in implementing its DBE program, it was not susceptible to an as-applied challenge.

#### **5. *Western States Paving Co. v. Washington DOT, USDOT & FHWA*, 2006 WL 1734163 (W.D. Wash. June 23, 2006) (unpublished opinion)**

This case was before the district court pursuant to the Ninth Circuit's remand order in *Western States Paving Co. v. Washington DOT, USDOT, and FHWA*, 407 F.3d 983 (9<sup>th</sup> Cir. 2005), *cert. denied*, 546 U.S. 1170 (2006). In this decision, the district court adjudicated cross Motions for Summary Judgment on plaintiff's claim for injunction and for damages under 42 U.S.C. §§1981, 1983, and §2000d.

Because the WSDOT voluntarily discontinued its DBE program after the Ninth Circuit decision, *supra*, the district court dismissed plaintiff's claim for injunctive relief as moot. The court found "it is absolutely clear in this case that WSDOT will not resume or continue the activity the Ninth Circuit

found unlawful in *Western States*,” and cited specifically to the informational letters WSDOT sent to contractors informing them of the termination of the program.

Second, the court dismissed Western States Paving’s claims under 42 U.S.C. §§ 1981, 1983, and 2000d against Clark County and the City of Vancouver holding neither the City or the County acted with the requisite discriminatory intent. The court held the County and the City were merely implementing the WSDOT’s unlawful DBE program and their actions in this respect were involuntary and required no independent activity. The court also noted that the County and the City were not parties to the precise discriminatory actions at issue in the case, which occurred due to the conduct of the “State defendants.” Specifically, the WSDOT — and not the County or the City — developed the DBE program without sufficient anecdotal and statistical evidence, and improperly relied on the affidavits of contractors seeking DBE certification “who averred that they had been subject to ‘general societal discrimination.’”

Third, the court dismissed plaintiff’s 42 U.S.C. §§ 1981 and 1983 claims against WSDOT, finding them barred by the Eleventh Amendment sovereign immunity doctrine. However, the court allowed plaintiff’s 42 U.S.C. §2000d claim to proceed against WSDOT because it was not similarly barred. The court held that Congress had conditioned the receipt of federal highway funds on compliance with Title VI (42 U.S.C. § 2000d et seq.) and the waiver of sovereign immunity from claims arising under Title VI. Section 2001 specifically provides that “a State shall not be immune under the Eleventh Amendment of the Constitution of the United States from suit in Federal court for a violation of ... Title VI.” The court held that this language put the WSDOT on notice that it faced private causes of action in the event of noncompliance.

The court held that WSDOT’s DBE program was not narrowly tailored to serve a compelling government interest. The court stressed that discriminatory intent is an essential element of a plaintiff’s claim under Title VI. The WSDOT argued that even if sovereign immunity did not bar plaintiff’s §2000d claim, WSDOT could be held liable for damages because there was no evidence that WSDOT staff knew of or consciously considered plaintiff’s race when calculating the annual utilization goal. The court held that since the policy was not “facially neutral” — and was in fact “specifically race conscious” — any resulting discrimination was therefore intentional, whether the reason for the classification was benign or its purpose remedial. As such, WSDOT’s program was subject to strict scrutiny.

In order for the court to uphold the DBE program as constitutional, WSDOT had to show that the program served a compelling interest and was narrowly tailored to achieve that goal. The court found that the Ninth Circuit had already concluded that the program was not narrowly tailored and the record was devoid of any evidence suggesting that minorities currently suffer or have suffered discrimination in the Washington transportation contracting industry. The court therefore denied WSDOT’s Motion for Summary Judgment on the §2000d claim. The remedy available to Western States remains for further adjudication and the case is currently pending.

**6. *Mountain West Holding Co., Inc. v. The State of Montana, Montana DOT, et al.* 2014 WL 6686734 (D. Mont. Nov. 26, 2014) appeal pending in the U.S. Court of Appeals, Ninth Circuit, Docket Nos. 14-36097 and 15-35003**

**Factual and procedural background.** *In Mountain West Holding Co., Inc. v. The State of Montana, Montana DOT, et al.*, Case No. 1:13-CV-00049-DLC, United States District Court for the District of Montana, Billings Division, Plaintiff Mountain West Holding Co., Inc. (“Mountain West”), alleged it is a contractor that provides construction-specific traffic planning and staffing for construction projects as well as the installation of signs, guardrails, and concrete barriers. Mountain West sued the Montana Department of Transportation (“MDT”) and the State of Montana, challenging their implementation of the Federal DBE Program. Mountain West brought this action alleging violation of the Equal Protection Clause of the Fourteenth Amendment of the United States Constitution, Title VI of the Civil Rights Act, 42 USC § 2000(d)(7), and 42 USC § 1983.

The State of Montana commissioned a disparity study, which was completed in 2009. Based upon the disparity study, Mountain West alleges the State of Montana utilized race, national origin, and gender-conscious goals in highway construction contracts. Mountain West claims the State did not have a strong basis in evidence to show there was past discrimination in the highway construction industry in Montana and that the implementation of race, gender, and national origin preferences were necessary or appropriate. Mountain West also alleges that Montana has instituted policies and practices which exceed the United States Department of Transportation DBE requirements.

Mountain West asserts that the 2009 study concluded all “relevant” minority groups were underutilized in “professional services” and Asian Pacific Americans and Hispanic Americans were underutilized in “business categories combined,” but it also concluded that all “relevant” minority groups were significantly overutilized in construction. Mountain West thus alleges that although the disparity study demonstrates that DBE groups are “significantly overrepresented” in the highway construction field, MDT has established preferences for DBE construction subcontractor firms over non-DBE construction subcontractor firms in the award of contracts.

Mountain West also asserts that the Montana DBE Program does not have a valid statistical basis for the establishment or inclusion of race, national origin, and gender conscious goals, that MDT inappropriately relies upon the 2009 study as the basis for its DBE Program, and that the study is flawed. Mountain West claims the Montana DBE Program is not narrowly tailored because it disregards large differences in DBE firm utilization in MDT contracts as among three different categories of subcontractors: business categories combined, construction, and professional services; the MDT DBE certification process does not require the applicant to specify any specific racial or ethnic prejudice or cultural bias that had a negative impact upon his or her business success; and the certification process does not require the applicant to certify that he or she was discriminated against in the State of Montana in highway construction.

Mountain West and the State of Montana and the Montana DOT filed cross Motions for Summary Judgment.

**Western States Paving Co. v. Washington DOT.** The Court in *Mountain West* applied the decision in *Western States*, 407 F.3d 983 (9th Cir. 2005), and the decision in *AGC, San Diego v. California DOT*, 71 F.3d 1187 (9th Cir. 2013) as establishing the law to be followed in this case. The Court noted that in



*Western States*, the Ninth Circuit held that a state's implementation of the Federal DBE Program can be subject to an as-applied constitutional challenge, despite the facial validity of the Federal DBE Program. 2014 WL 6686734 at \*2 (D. Mont. November 26, 2014). The Court stated the Ninth Circuit held that whether a state's implementation of the DBE Program "is narrowly tailored to further Congress's remedial objective depends upon the presence or absence of discrimination in the State's transportation contracting industry." *Id.* at \*2, *quoting Western States*, at 997-998. The Court in *Mountain West* also pointed out the Ninth Circuit held that "even when discrimination is present within a State, a remedial program is only narrowly tailored if its application is limited to those minority groups that have actually suffered discrimination." *Mountain West*, 2014 WL 6686734 at \*2, *quoting Western States*, 407 F.3d at 998.

**Montana DOT study.** The Montana DOT obtained a firm to conduct a disparity study, which was completed in 2009. The Court in *Mountain West* stated that the results of the study indicated significant underutilization of DBEs in all minority groups in "professional services" contracts, significant underutilization of Asian Pacific Americans and Hispanic Americans in "business categories combined," slight underutilization of nonminority women in "business categories combined," and overutilization of all groups in subcontractor "construction" contracts. *Mountain West*, 2014 WL 6686734 at \*2.

In addition to the statistical evidence, the 2009 disparity study gathered anecdotal evidence through surveys and other means. The Court stated the anecdotal evidence suggested various forms of discrimination existed within Montana's transportation contracting industry, including evidence of an exclusive "good ole boy network" that made it difficult for DBEs to break into the market. *Id.* at \*3. The Court said that despite these findings, the consulting firm recommended that Montana DOT continue to monitor DBE utilization while employing only race-neutral means to meet its overall goal. *Id.* The consulting firm recommended that Montana DOT consider the use of race-conscious measures if DBE utilization decreased or did not improve.

Montana followed the recommendations provided in the study, and continued using only race-neutral means in its effort to accomplish its overall goal for DBE utilization. *Id.* Based on the statistical analysis provided in the study, Montana established an overall DBE utilization goal of 5.83 percent. *Id.*

**Montana's DBE utilization after ceasing the use of contract goals.** The Court found that in 2006, Montana achieved a DBE utilization rate of 13.1 percent, however, after Montana ceased using contract goals to achieve its overall goal, the rate of DBE utilization declined sharply. 2014 WL 6686734 at \*3. The utilization rate dropped, according to the Court, to 5 percent in 2007, 3 percent in 2008, 2.5 percent in 2009, 0.8 percent in 2010, and in 2011, it was 2.8 percent. *Id.* In response to this decline, for fiscal years 2011-2014, the Court said Montana DOT employed contract goals on certain USDOT contracts in order to achieve 3.27 percentage points of Montana's overall goal of 5.83 percent DBE utilization.

Montana DOT then conducted and prepared a new Goal Methodology for DBE utilization for federal fiscal years 2014-2016. *Id.* US DOT approved the new and current goal methodology for Montana DOT, which does not provide for the use of contract goals to meet the overall goal. *Id.* Thus, the new overall goal is to be made entirely through the use of race-neutral means. *Id.*

**Mountain West's claims for relief.** Mountain West seeks declaratory and injunctive relief, including prospective relief, against the individual defendants, and sought monetary damages against the State of Montana and the Montana DOT for alleged violation of Title VI. 2014 WL 6686734 at \*3.

Mountain West's claim for monetary damages is based on its claim that on three occasions it was a low-quoting subcontractor to a prime contractor submitting a bid to the Montana DOT on a project that utilized contract goals, and that despite being a low-quoting bidder, Mountain West was not awarded the contract. *Id.* Mountain West brings an as-applied challenge to Montana's DBE program. *Id.*

**The two-prong test to demonstrate that a DBE program is narrowly tailored.** The Court, citing AGC, *San Diego v. California DOT*, 713 F.3d 1187, 1196, stated that under the two-prong test established in *Western States*, in order to demonstrate that its DBE program is narrowly tailored, (1) the state must establish the presence of discrimination within its transportation contracting industry, and (2) the remedial program must be limited to those minority groups that have actually suffered discrimination. *Mountain West*, at \*5.

The Court said that a state implementing the facially valid Federal DBE Program need not demonstrate an independent compelling interest for its implementation of the DBE Program because when Congress passed the relevant legislation it identified a compelling nationwide interest in remedying discrimination in the transportation contracting industry. *Id.* at \*4. In order to pass such scrutiny, the Court found a state need only demonstrate that its program is narrowly tailored. *Id.* at \*3, citing *Western States*, 407 F.3d 997.

The Court held that states can meet the evidentiary standard required by *Western States* if, looking at the evidence in its entirety, "the data shows substantial disparities in utilization of minority firms suggesting that public dollars are being poured into 'a system of racial exclusion practiced by elements of the local construction industry.'" *Mountain West*, at \*5, quoting AGC, *San Diego v. California DOT*, 713 F.3d at 1197. The Court in *Mountain West* said that the federal guidelines provide that narrow tailoring does not require a state to parse its DBE Program to distinguish between certain types of contracts within the transportation contracting industry. *Mountain West*, at \*5, citing AGC, *San Diego*, 713 F.3d at 1199.

The Court in *Mountain West*, following AGC, *San Diego*, concluded that a state's implementation of the DBE Program need not require minority firms to attest to the fact that they have been discriminated against in the relevant jurisdiction because such a requirement is contrary to federal regulation, and thus would constitute "an impermissible collateral attack on the facial validity of the federal Act and regulations." *Mountain West*, at \*5, quoting AGC, *San Diego*, at 1200.

**Statistical evidence.** The Court held that Montana's DBE program passes strict scrutiny. The Court found that Mountain West could not create a genuine dispute about the fact that the 2009 disparity study indicated significant underutilization of all minority groups in the award of professional services contracts in Montana's transportation contracting market. *Mountain West*, at \*5. In addition, the Court found that Mountain West could not dispute that the study indicated significant underutilization of Asian Pacific Americans and Hispanic Americans in the award of contracts in business categories combined in Montana's transportation contracting market. *Id.* Also, the Court found that Mountain West could not dispute that the study also indicated underutilization of nonminority women and business categories combined, and that the study documented, through

surveys and otherwise, significant anecdotal evidence of various forms of discrimination in Montana's transportation contracting industry. *Id.*

The Court noted that Mountain West merely disputed the validity of the findings in the study and argued that the methods the study used in gathering statistical and anecdotal evidence were flawed. *Id.* at \*6. The Court found that in mounting this attack on the study, Mountain West relied entirely on the expert report of Dr. George "Lanoue" (sic), and that Mountain West only cited to two pages in the report in which Dr. LaNoue opined that the table showing DBE utilization and business categories combined was improperly calculated. *Id.*

Mountain West, the Court stated, provided no evidence indicating that the data showing significant underutilization of all minority groups and professional services was invalid. *Id.* at \*6. In addition, the Court found contrary to the allegation by Mountain West, that the study controlled for factors other than discrimination in calculating DBE utilization and adjusted its calculation of the availability of DBE firms based on its control for factors other than discrimination *Id.*

**Anecdotal evidence.** The Court said that the attack on the study did not diminish the fact the study uncovered substantial anecdotal evidence of discrimination in Montana's transportation contracting market, including evidence of a "good ole boy network." *Id.* at \*6. The Court said that in *AGC, San Diego*, the Ninth Circuit noted "federal courts and regulations have identified precisely [the factors associated with good ole boy networks] as barriers that disadvantage minority firms because of the lingering effects of discrimination." *Mountain West*, at \*6, quoting *AGC, San Diego*, at 1197-98.

In connection with the anecdotal evidence, the Court stated that Dr. LaNoue's report merely criticized the sample size of the responses obtained, and that Mountain West also contended the anecdotal evidence is unreliable because Montana did not present affidavits in support of the anecdotal evidence gathered. *Id.* at \*6. Contrary to Mountain West's assertions, the Court held that nothing in *Western States* requires that anecdotal survey evidence gathered by a private firm assisting a state in preparing its goal methodology to the state's DBE program must be supported by affidavits. *Mountain West*, at \*6.

The Court concluded that Mountain West failed to create a genuine dispute that anecdotal evidence indicates the existence of discrimination in Montana's transportation contracting industry. *Id.* at \*6. The Court pointed out the Ninth Circuit held in *AGC, San Diego* that "substantial statistical disparities alone would give rise to an inference of discrimination, and certainly... statistical evidence combined with anecdotal evidence passes constitutional muster." *Mountain West* at \*6, quoting *AGC, San Diego*, 713 F.3d at 1196.

**Precipitous drop in utilization.** The Court in *Mountain West* also found that neither Dr. LaNoue's report nor any other evidence presented by Mountain West created a genuine dispute about the fact DBE utilization in Montana's transportation contracting industry dropped precipitously after 2006 when Montana ceased using contract goals. *Mountain West* at \*6. The Court found that while the study indicated Montana should utilize DBEs at a rate of 5.83 percent, by 2010, DBE utilization in Montana had fallen "dramatically" to 0.8 percent. *Id.* at \*6. The Court held that this undisputed fact "strongly supports [Defendants'] claim that there are significant barriers to minority competition in the public subcontracting market, raising the specter of racial discrimination." *Mountain West*, at \*6, quoting *Adarand Contractors, Inc. v. Slater*, 228 F.3d 1147, 1174 (10th Cir. 2000).

**Conclusion and holding.** In sum, the Court held that Montana presented sufficient evidence to demonstrate evidence of discrimination in Montana’s transportation contracting industry. *Id.* at \*7. The Court concluded that Montana’s DBE program is sufficiently narrowly tailored to address discrimination against only those groups that have actually suffered discrimination in the state’s transportation contracting industry based on the facts that (1) statistical evidence suggests that all minority groups in professional services are significantly underutilized, (2) there is evidence of an exclusive “good ole boy network” within the state contracting industry, and (3) DBE underutilization dramatically increased after 2006 when the State ceased using contract goals. *Id.* at \*7.

Therefore, the Court held Montana’s DBE program survives such scrutiny by: (1) having a strong basis in evidence of discrimination within Montana’s transportation contracting industry; and (2) being narrowly tailored to benefit only those groups that have actually suffered discrimination. *Id.* at \*7.

The Court also held that Mountain West failed to create a genuine dispute relative to its claims regarding Montana’s DBE program during 2012-2014 when Montana and Montana DOT utilized contract goals. *Id.* It follows then, according to the Court, that Mountain West’s claims for prospective, injunctive and declaratory relief also failed because Montana has currently ceased using contract goals and any potential utilization of contract goals will be based on a not-yet conducted disparity study. *Id.* Therefore, the Court ordered that Montana and Montana DOT are entitled to summary judgment on all claims.

The decision of the District Court has been appealed by Mountain West to the U.S. Court of Appeals for the Ninth Circuit, Docket No. 14-36097 (December 26, 2014).

**7. *M.K. Weeden Construction v. State of Montana, Montana Department of Transportation, et al.*, 2013 WL 4774517 (D. Mont.) (September 4, 2013)**

This case involved a challenge by a prime contractor, M.K. Weeden Construction, Inc. (“Weeden”) against the State of Montana, Montana Department of Transportation and others, to the DBE Program adopted by Montana DOT implementing the Federal DBE Program at 49 CFR Part 26. Weeden sought an application for Temporary Restraining Order and Preliminary Injunction against the State of Montana and the Montana DOT.

**Factual background and claims.** Weeden was the low dollar bidder with a bid of \$14,770,163.01 on the Arrow Creek Slide Project. The project received federal funding, and as such, was required to comply with the USDOT’s DBE Program. 2013 WL 4774517 at \*1. Montana DOT had established an overall goal of 5.83 percent DBE participation in Montana’s highway construction projects. On the Arrow Creek Slide Project, Montana DOT established a DBE goal of 2 percent. *Id.*

Plaintiff Weeden, although it submitted the low dollar bid, did not meet the 2 percent DBE requirement. 2013 WL 4774517 at \*1. Weeden claimed that its bid relied upon only 1.87 percent DBE subcontractors (although the court points out that Weeden’s bid actually identified only .81 percent DBE subcontractors). Weeden was the only bidder out of the six bidders who did not meet the 2 percent DBE goal. The other five bidders exceeded the 2 percent goal, with bids ranging from 2.19 percent DBE participation to 6.98 percent DBE participation. *Id.* at \*2.

Weeden attempted to utilize a good faith exception to the DBE requirement under the Federal DBE Program and Montana's DBE Program. Montana DOT's DBE Participation Review Committee considered Weeden's good faith documentation and found that Weeden's bid was non-compliant as to the DBE requirement, and that Weeden failed to demonstrate good faith efforts to solicit DBE subcontractor participation in the contract. 2013 WL 4774517 at \*2. Weeden appealed that decision to the Montana DOT DBE Review Board and appeared before the Board at a hearing. The DBE Review Board affirmed the Committee decision finding that Weeden's bid was not in compliance with the contract DBE goal and that Weeden had failed to make a good faith effort to comply with the goal. *Id.* at \*2. The DBE Review Board found that Weeden had received a DBE bid for traffic control, but Weeden decided to perform that work itself in order to lower its bid amount. *Id.* at \*2. Additionally, the DBE Review Board found that Weeden's mass email to 158 DBE subcontractors without any follow up was a *pro forma* effort not credited by the Review Board as an active and aggressive effort to obtain DBE participation. *Id.*

Plaintiff Weeden sought an injunction in federal district court against Montana DOT to prevent it from letting the contract to another bidder. Weeden claimed that Montana DOT's DBE Program violated the Equal Protection Clause of the U.S. Constitution and the Montana Constitution, asserting that there was no supporting evidence of discrimination in the Montana highway construction industry, and therefore, there was no government interest that would justify favoring DBE entities. 2013 WL 4774517 at \*2. Weeden also claimed that its right to Due Process under the U.S. Constitution and Montana Constitution had been violated. Specifically, Weeden claimed that Montana DOT did not provide reasonable notice of the good faith effort requirements. *Id.*

**No proof of irreparable harm and balance of equities favor Montana DOT.** First, the Court found that Weeden did not prove for a certainty that it would suffer irreparable harm based on the Court's conclusion that in the past four years, Weeden had obtained six state highway construction contracts valued at approximately \$26 million, and that Montana DOT had \$50 million more in highway construction projects to be let during the remainder of 2013 alone. 2013 WL 4774517 at \*3. Thus, the Court concluded that as demonstrated by its past performance, Weeden has the capacity to obtain other highway construction contracts and thus there is little risk of irreparable injury in the event Montana DOT awards the Project to another bidder. *Id.*

Second, the Court found the balance of the equities did not tip in Weeden's favor. 2013 WL 4774517 at \*3. Weeden had asserted that Montana DOT and USDOT rules regarding good faith efforts to obtain DBE subcontractor participation are confusing, non-specific and contradictory. *Id.* The Court held that it is obvious the other five bidders were able to meet and exceed the 2 percent DBE requirement without any difficulty whatsoever. *Id.* The Court found that Weeden's bid is not responsive to the requirements, therefore is not and cannot be the lowest responsible bid. *Id.* The balance of the equities, according to the Court, do not tilt in favor of Weeden, who did not meet the requirements of the contract, especially when numerous other bidders ably demonstrated an ability to meet those requirements. *Id.*

**No standing.** The Court also questioned whether Weeden raised any serious issues on the merits of its equal protection claim because Weeden is a prime contractor and not a subcontractor. Since Weeden is a prime contractor, the Court held it is clear that Weeden lacks Article III standing to assert its equal protection claim. *Id.* at \*3. The Court held that a prime contractor, such as Weeden, is

not permitted to challenge Montana DOT's DBE Project as if it were a non-DBE subcontractor because Weeden cannot show that *it* was subjected to a racial or gender-based barrier in its competition for the prime contract. *Id.* at \*3. Because Weeden was not deprived of the ability to compete on equal footing with the other bidders, the Court found Weeden suffered no equal protection injury and lacks standing to assert an equal protection claim as it were a non-DBE subcontractor. *Id.*

**Court applies AGC v. California DOT case; evidence supports narrowly tailored DBE program.**

Significantly, the Court found that even if Weeden had standing to present an equal protection claim, Montana DOT presented significant evidence of underutilization of DBE's generally, evidence that supports a narrowly tailored race and gender preference program. 2013 WL 4774517 at \*4.

Moreover, the Court noted that although Weeden points out that some business categories in Montana's highway construction industry do not have a history of discrimination (namely, the category of construction businesses in contrast to the category of professional businesses), the Ninth Circuit "has recently rejected a similar argument requiring the evidence of discrimination in every single segment of the highway construction industry before a preference program can be implemented." *Id.*, citing *Associated General Contractors v. California Dept. of Transportation*, 713 F.3d 1187 (9th Cir. 2013)(holding that Caltrans' DBE program survived strict scrutiny, was narrowly tailored, did not violate equal protection, and was supported by substantial statistical and anecdotal evidence of discrimination).

The Court stated that particularly relevant in this case, "the Ninth Circuit held that California's DBE program need not isolate construction from engineering contracts or prime from subcontracts to determine whether the evidence in each and every category gives rise to an inference of discrimination." *Id.* at 4, citing *Associated General Contractors v. California DOT*, 713 F.3d at 1197. Instead, according to the Court, California – and, by extension, Montana – "is entitled to look at the evidence 'in its entirety' to determine whether there are 'substantial disparities in utilization of minority firms' practiced by some elements of the construction industry." 2013 WL 4774517 at \*4, quoting *AGC v. California DOT*, 713 F.3d at 1197. The Court, also quoting the decision in *AGC v. California DOT*, said: "It is enough that the anecdotal evidence supports Caltrans' statistical data showing a pervasive pattern of discrimination." *Id.* at \*4, quoting *AGC v. California DOT*, 713 F.3d at 1197.

The Court pointed out that there is no allegation that Montana DOT has exceeded any federal requirement or done other than complied with USDOT regulations. 2013 WL 4774517 at \*4. Therefore, the Court concluded that given the similarities between Weeden's claim and AGC's equal protection claim against California DOT in the *AGC v. California DOT* case, it does not appear likely that Weeden will succeed on the merits of its equal protection claim. *Id.* at \*4.

**Due Process claim.** The Court also rejected Weeden's bald assertion that it has a protected property right in the contract that has not been awarded to it where the government agency retains discretion to determine the responsiveness of the bid. The Court found that Montana law requires that an award of a public contract for construction must be made to the lowest *responsible* bidder and that the applicable Montana statute confers upon the government agency broad discretion in the award of a public works contract. Thus, a lower bidder such as Weeden requires no vested property right in a contract until the contract has been awarded, which here obviously had not yet occurred. 2013 WL 4774517 at \*5. In any event, the Court noted that Weeden was granted notice, hearing and appeal for

Montana DOT's decision denying the good faith exception to the DBE contract requirement, and therefore it does not appear likely that Weeden would succeed on its due process claim. *Id.* at \*5.

**Holding and Voluntary Dismissal.** The Court denied Plaintiff Weeden's application for Temporary Restraining Order and Preliminary Injunction. Subsequently, Weeden filed a Notice of Voluntary Dismissal Without Prejudice on September 10, 2013.

#### **8. *Monterey Mechanical v. Wilson*, 125 F.3d 702 (9<sup>th</sup> Cir. 1997)**

This case is instructive in that the Ninth Circuit analyzed and held invalid the enforcement of a MBE/WBE-type program. Although the program at issue utilized the term "goals" as opposed to "quotas," the Ninth Circuit rejected such a distinction, holding "[t]he relevant question is not whether a statute requires the use of such measures, but whether it authorizes or encourages them." The case also is instructive because it found the use of "goals" and the application of "good faith efforts" in connection with achieving goals to trigger strict scrutiny.

Monterey Mechanical Co. (the "plaintiff") submitted the low bid for a construction project for the California Polytechnic State University (the "University"). 125 F.3d 702, 704 (9<sup>th</sup> Cir. 1994). The University rejected the plaintiff's bid because the plaintiff failed to comply with a state statute requiring prime contractors on such construction projects to subcontract 23 percent of the work to MBE/WBEs or, alternatively, demonstrate good faith outreach efforts. *Id.* The plaintiff conducted good faith outreach efforts but failed to provide the requisite documentation; the awardee prime contractor did not subcontract any portion of the work to MBE/WBEs but did include documentation of good faith outreach efforts. *Id.*

Importantly, the University did not conduct a disparity study, and instead argued that because "the 'goal requirements' of the scheme [did] not involve racial or gender quotas, set-asides or preferences," the University did not need a disparity study. *Id.* at 705. The plaintiff protested the contract award and sued the University's trustees, and a number of other individuals (collectively the "defendants") alleging the state law was violative of the Equal Protection Clause. *Id.* The district court denied the plaintiff's motion for an interlocutory injunction and the plaintiff appealed to the Ninth Circuit Court of Appeals. *Id.*

The defendants first argued that the statute was constitutional because it treated all general contractors alike, by requiring all to comply with the MBE/WBE participation goals. *Id.* at 708. The court held, however, that a minority or women business enterprise could satisfy the participation goals by allocating the requisite percentage of work to itself. *Id.* at 709. The court held that contrary to the district court's finding, such a difference was not *de minimis*. *Id.*

The defendant's also argued that the statute was not subject to strict scrutiny because the statute did not impose rigid quotas, but rather only required good faith outreach efforts. *Id.* at 710. The court rejected the argument finding that although the statute permitted awards to bidders who did not meet the percentage goals, "they are rigid in requiring precisely described and monitored efforts to attain those goals." *Id.* The court cited its own earlier precedent to hold that "the provisions are not immunized from scrutiny because they purport to establish goals rather than quotas ... [T]he relevant question is not whether a statute requires the use of such measures, but whether it authorizes or encourages them." *Id.* at 710-11 (internal citations and quotations omitted). The court found that the

statute encouraged set asides and cited *Concrete Works of Colorado v. Denver*, 36 F.3d 1512 (10<sup>th</sup> Cir. 1994), as analogous support for the proposition. *Id.* at 711.

The court found that the statute treated contractors differently based upon their race, ethnicity and gender, and although “worded in terms of goals and good faith, the statute imposes mandatory requirements with concreteness.” *Id.* The court also noted that the statute may impose additional compliance expenses upon non-MBE/WBE firms who are required to make good faith outreach efforts (e.g., advertising) to MBE/WBE firms. *Id.* at 712.

The court then conducted strict scrutiny (race), and an intermediate scrutiny (gender) analyses. *Id.* at 712-13. The court found the University presented “no evidence” to justify the race- and gender-based classifications and thus did not consider additional issues of proof. *Id.* at 713. The court found that the statute was not narrowly tailored because the definition of “minority” was overbroad (e.g., inclusion of Aleuts). *Id.* at 714, citing *Wygant v. Jackson Board of Education*, 476 U.S. 267, 284, n. 13 (1986) and *City of Richmond v. J.A. Croson, Co.*, 488 U.S. 469, 505-06 (1989). The court found “[a] broad program that sweeps in all minorities with a remedy that is in no way related to past harms cannot survive constitutional scrutiny.” *Id.* at 714, citing *Hopwood v. State of Texas*, 78 F.3d 932, 951 (5<sup>th</sup> Cir. 1996). The court held that the statute violated the Equal Protection Clause.

#### **9. *Associated Gen. Contractors of California, Inc. v. Coalition for Econ. Equity (“AGCC”),* 950 F.2d 1401 (9<sup>th</sup> Cir. 1991)**

In *Associated Gen. Contractors of California, Inc. v. Coalition for Econ. Equity (“AGCC”)*, the Ninth Circuit Court of Appeals denied plaintiffs request for preliminary injunction to enjoin enforcement of the city’s bid preference program. 950 F.2d 1401 (9<sup>th</sup> Cir. 1991). Although an older case, *AGCC* is instructive as to the analysis conducted by the Ninth Circuit. The court discussed the utilization of statistical evidence and anecdotal evidence in the context of the strict scrutiny analysis. *Id.* at 1413-18.

The City of San Francisco adopted an ordinance in 1989 providing bid preferences to prime contractors who were members of groups found disadvantaged by previous bidding practices, and specifically provided a 5 percent bid preference for LBEs, WBEs and MBEs. 950 F.2d at 1405. Local MBEs and WBEs were eligible for a 10 percent total bid preference, representing the cumulative total of the five percent preference given Local Business Enterprises (“LBEs”) and the 5 percent preference given MBEs and WBEs. *Id.* The ordinance defined “MBE” as an economically disadvantaged business that was owned and controlled by one or more minority persons, which were defined to include Asian, blacks and Latinos. “WBE” was defined as an economically disadvantaged business that was owned and controlled by one or more women. Economically disadvantaged was defined as a business with average gross annual receipts that did not exceed \$14 million. *Id.*

The Motion for Preliminary Injunction challenged the constitutionality of the MBE provisions of the 1989 Ordinance insofar as it pertained to Public Works construction contracts. *Id.* at 1405. The district court denied the Motion for Preliminary Injunction on the AGCC’s constitutional claim on the ground that AGCC failed to demonstrate a likelihood of success on the merits. *Id.* at 1412.

The Ninth Circuit Court of Appeals applied the strict scrutiny analysis following the decision of the U.S. Supreme Court in *City of Richmond v. Croson*. The court stated that according to the U.S. Supreme Court in *Croson*, a municipality has a compelling interest in redressing, not only discrimination



committed by the municipality itself, but also discrimination committed by private parties within the municipalities' legislative jurisdiction, so long as the municipality in some way perpetuated the discrimination to be remedied by the program. *Id.* at 1412-13, *citing Croson* at 488 U.S. at 491-92, 537-38. To satisfy this requirement, "the governmental actor need not be an active perpetrator of such discrimination; passive participation will satisfy this sub-part of strict scrutiny review." *Id.* at 1413, *quoting Coral Construction Company v. King County*, 941 F.2d 910 at 916 (9<sup>th</sup> Cir. 1991). In addition, the [m]ere infusion of tax dollars into a discriminatory industry may be sufficient governmental involvement to satisfy this prong." *Id.* at 1413 *quoting Coral Construction*, 941 F.2d at 916.

The court pointed out that the City had made detailed findings of prior discrimination in construction and building within its borders, had testimony taken at more than ten public hearings and received numerous written submissions from the public as part of its anecdotal evidence. *Id.* at 1414. The City Departments continued to discriminate against MBEs and WBEs and continued to operate under the "old boy network" in awarding contracts, thereby disadvantaging MBEs and WBEs. *Id.* And, the City found that large statistical disparities existed between the percentage of contracts awarded to MBEs and the percentage of available MBEs. 950 F.2d at 1414. The court stated the City also found "discrimination in the private sector against MBEs and WBEs that is manifested in and exacerbated by the City's procurement practices." *Id.* at 1414.

The Ninth Circuit found the study commissioned by the City indicated the existence of large disparities between the award of city contracts to available non-minority businesses and to MBEs. *Id.* at 1414. Using the City and County of San Francisco as the "relevant market," the study compared the number of available MBE prime construction contractors in San Francisco with the amount of contract dollars awarded by the City to San Francisco-based MBEs for a particular year. *Id.* at 1414. The study found that available MBEs received far fewer city contracts in proportion to their numbers than their available non-minority counterparts. *Id.* Specifically, the study found that with respect to prime construction contracting, disparities between the number of available local Asian-, black- and Hispanic-owned firms and the number of contracts awarded to such firms were statistically significant and supported an inference of discrimination. *Id.* For example, in prime contracting for construction, although MBE availability was determined to be at 49.5 percent, MBE dollar participation was only 11.1 percent. *Id.* The Ninth Circuit stated that in its decision in *Coral Construction*, it emphasized that such statistical disparities are "an invaluable tool and demonstrating the discrimination necessary to establish a compelling interest. *Id.* at 1414, *citing to Coral Construction*, 941 F.2d at 918 and *Croson*, 488 U.S. at 509.

The court noted that the record documents a vast number of individual accounts of discrimination, which bring "the cold numbers convincingly to life. *Id.* at 1414, *quoting Coral Construction*, 941 F.2d at 919. These accounts include numerous reports of MBEs being denied contracts despite being the low bidder, MBEs being told they were not qualified although they were later found qualified when evaluated by outside parties, MBEs being refused work even after they were awarded contracts as low bidder, and MBEs being harassed by city personnel to discourage them from bidding on city contracts. *Id.* at 1415. The City pointed to numerous individual accounts of discrimination, that an "old boy network" still exists, and that racial discrimination is still prevalent within the San Francisco construction industry. *Id.* The court found that such a "combination of convincing anecdotal and statistical evidence is potent." *Id.* at 1415 *quoting Coral Construction*, 941 F.2d at 919.

The court also stated that the 1989 Ordinance applies only to resident MBEs. The City, therefore, according to the court, appropriately confined its study to the city limits in order to focus on those whom the preference scheme targeted. *Id.* at 1415. The court noted that the statistics relied upon by the City to demonstrate discrimination in its contracting processes considered only MBEs located within the City of San Francisco. *Id.*

The court pointed out the City's findings were based upon dozens of specific instances of discrimination that are laid out with particularity in the record, as well as the significant statistical disparities in the award of contracts. The court noted that the City must simply demonstrate the existence of past discrimination with specificity, but there is no requirement that the legislative findings specifically detail each and every incidence that the legislative body has relied upon in support of this decision that affirmative action is necessary. *Id.* at 1416.

In its analysis of the "narrowly tailored" requirement, the court focused on three characteristics identified by the decision in *Croson* as indicative of narrow tailoring. First, an MBE program should be instituted either after, or in conjunction with, race-neutral means of increasing minority business participation in public contracting. *Id.* at 1416. Second, the plan should avoid the use of "rigid numerical quotas." *Id.* According to the Supreme Court, systems that permit waiver in appropriate cases and therefore require some individualized consideration of the applicants pose a lesser danger of offending the Constitution. *Id.* Mechanisms that introduce flexibility into the system also prevent the imposition of a disproportionate burden on a few individuals. *Id.* Third, "an MBE program must be limited in its effective scope to the boundaries of the enacting jurisdiction. *Id.* at 1416 *quoting Coral Construction*, 941 F.2d at 922.

The court found that the record showed the City considered, but rejected as not viable, specific race-neutral alternatives including a fund to assist newly established MBEs in meeting bonding requirements. The court stated that "while strict scrutiny requires serious, good faith consideration of race-neutral alternatives, strict scrutiny does not require exhaustion of every possible such alternative ... however irrational, costly, unreasonable, and unlikely to succeed such alternative may be." *Id.* at 1417 *quoting Coral Construction*, 941 F.2d at 923. The court found the City ten years before had attempted to eradicate discrimination in city contracting through passage of a race-neutral ordinance that prohibited city contractors from discriminating against their employees on the basis of race and required contractors to take steps to integrate their work force; and that the City made and continues to make efforts to enforce the anti-discrimination ordinance. *Id.* at 1417. The court stated inclusion of such race-neutral measures is one factor suggesting that an MBE plan is narrowly tailored. *Id.* at 1417.

The court also found that the Ordinance possessed the requisite flexibility. Rather than a rigid quota system, the City adopted a more modest system according to the court, that of bid preferences. *Id.* at 1417. The court pointed out that there were no goals, quotas, or set-asides and moreover, the plan remedies only specifically identified discrimination: the City provides preferences only to those minority groups found to have previously received a lower percentage of specific types of contracts than their availability to perform such work would suggest. *Id.* at 1417.

The court rejected the argument of AGCC that to pass constitutional muster any remedy must provide redress only to specific individuals who have been identified as victims of discrimination. *Id.* at 1417, n. 12. The Ninth Circuit agreed with the district court that an iron-clad requirement limiting

any remedy to individuals personally proven to have suffered prior discrimination would render any race-conscious remedy “superfluous,” and would thwart the Supreme Court’s directive in *Croson* that race-conscious remedies may be permitted in some circumstances. *Id.* at 1417, n. 12. The court also found that the burdens of the bid preferences on those not entitled to them appear “relatively light and well distributed.” *Id.* at 1417. The court stated that the Ordinance was “limited in its geographical scope to the boundaries of the enacting jurisdiction. *Id.* at 1418, *quoting Coral Construction*, 941 F.2d at 925. The court found that San Francisco had carefully limited the ordinance to benefit only those MBEs located within the City’s borders. *Id.* 1418.

#### **10. *Coral Construction Co. v. King County*, 941 F.2d 910 (9th Cir. 1991)**

In *Coral Construction Co. v. King County*, 941 F.2d 910 (9<sup>th</sup> Cir. 1991), the Ninth Circuit examined the constitutionality of King County, Washington’s minority and women business set-aside program in light of the standard set forth in *City of Richmond v. J.A. Croson Co.* The court held that although the County presented ample anecdotal evidence of disparate treatment of MBE contractors and subcontractors, the total absence of pre-program enactment statistical evidence was problematic to the compelling government interest component of the strict scrutiny analysis. The court remanded to the district court for a determination of whether the post-program enactment studies constituted a sufficient compelling government interest. Per the narrow tailoring prong of the strict scrutiny test, the court found that although the program included race-neutral alternative measures and was flexible (*i.e.*, included a waiver provision), the over breadth of the program to include MBEs outside of King County was fatal to the narrow tailoring analysis.

The court also remanded on the issue of whether the plaintiffs were entitled to damages under 42 U.S.C. §§ 1981 and 1983, and in particular to determine whether evidence of causation existed. With respect to the WBE program, the court held the plaintiff had standing to challenge the program, and applying the intermediate scrutiny analysis, held the WBE program survived the facial challenge.

In finding the absence of any statistical data in support of the County’s MBE Program, the court made it clear that statistical analyses have served and will continue to serve an important role in cases in which the existence of discrimination is a disputed issue. 941 F.2d at 918. The court noted that it has repeatedly approved the use of statistical proof to establish a *prima facie* case of discrimination. *Id.* The court pointed out that the U.S. Supreme Court in *Croson* held that where “gross statistical disparities can be shown, they alone may in a proper case constitute *prima facie* proof of a pattern or practice of discrimination.” *Id.* at 918, *quoting Hazelwood School Dist. v. United States*, 433 U.S. 299, 307-08, and *Croson*, 488 U.S. at 501.

The court points out that statistical evidence may not fully account for the complex factors and motivations guiding employment decisions, many of which may be entirely race-neutral. *Id.* at 919. The court noted that the record contained a plethora of anecdotal evidence, but that anecdotal evidence, standing alone, suffers the same flaws as statistical evidence. *Id.* at 919. While anecdotal evidence may suffice to prove individual claims of discrimination, rarely, according to the court, if ever, can such evidence show a systemic pattern of discrimination necessary for the adoption of an affirmative action plan. *Id.*

Nonetheless, the court held that the combination of convincing anecdotal and statistical evidence is potent. *Id.* at 919. The court pointed out that individuals who testified about their personal

experiences brought the cold numbers of statistics “convincingly to life.” *Id.* at 919, quoting *International Brotherhood of Teamsters v. United States*, 431 U.S. 324, 339 (1977). The court also pointed out that the Eleventh Circuit Court of Appeals, in passing upon a minority set aside program similar to the one in King County, concluded that the testimony regarding complaints of discrimination combined with the gross statistical disparities uncovered by the County studies provided more than enough evidence on the question of prior discrimination and need for racial classification to justify the denial of a Motion for Summary Judgment. *Id.* at 919, citing *Cone Corp. v. Hillsborough County*, 908 F.2d 908, 916 (11<sup>th</sup> Cir. 1990).

The court found that the MBE Program of the County could not stand without a proper statistical foundation. *Id.* at 919. The court addressed whether post-enactment studies done by the County of a statistical foundation could be considered by the court in connection with determining the validity of the County MBE Program. The court held that a municipality must have *some* concrete evidence of discrimination in a particular industry before it may adopt a remedial program. *Id.* at 920. However, the court said this requirement of *some* evidence does not mean that a program will be automatically struck down if the evidence before the municipality at the time of enactment does not completely fulfill both prongs of the strict scrutiny test. *Id.* Rather, the court held, the factual predicate for the program should be evaluated based upon all evidence presented to the district court, whether such evidence was adduced before or after enactment of the MBE Program. *Id.* Therefore, the court adopted a rule that a municipality should have before it some evidence of discrimination before adopting a race-conscious program, while allowing post-adoption evidence to be considered in passing on the constitutionality of the program. *Id.*

The court, therefore, remanded the case to the district court for determination of whether the consultant studies that were performed after the enactment of the MBE Program could provide an adequate factual justification to establish a “propelling government interest” for King County’s adopting the MBE Program. *Id.* at 922.

The court also found that *Croson* does not require a showing of active discrimination by the enacting agency, and that passive participation, such as the infusion of tax dollars into a discriminatory industry, suffices. *Id.* at 922, citing *Croson*, 488 U.S. at 492. The court pointed out that the Supreme Court in *Croson* concluded that if the City had evidence before it, that non-minority contractors were systematically excluding minority businesses from subcontracting opportunities, it could take action to end the discriminatory exclusion. *Id.* at 922. The court points out that if the record ultimately supported a finding of systemic discrimination, the County adequately limited its program to those businesses that receive tax dollars, and the program imposed obligations upon only those businesses which voluntarily sought King County tax dollars by contracting with the County. *Id.*

The court addressed several factors in terms of the narrowly tailored analysis, and found that first, an MBE program should be instituted either after, or in conjunction with, race-neutral means of increasing minority business participation and public contracting. *Id.* at 922, citing *Croson*, 488 U.S. at 507. The second characteristic of the narrowly-tailored program, according to the court, is the use of minority utilization goals on a case-by-case basis, rather than upon a system of rigid numerical quotas. *Id.* Finally, the court stated that an MBE program must be limited in its effective scope to the boundaries of the enacting jurisdiction. *Id.*

Among the various narrowly tailored requirements, the court held consideration of race-neutral alternatives is among the most important. *Id.* at 922. Nevertheless, the court stated that while strict scrutiny requires serious, good faith consideration of race-neutral alternatives, strict scrutiny does not require exhaustion of every possible such alternative. *Id.* at 923. The court noted that it does not intend a government entity exhaust *every* alternative, however irrational, costly, unreasonable, and unlikely to succeed such alternative might be. *Id.* Thus, the court required only that a state exhausts race-neutral measures that the state is authorized to enact, and that have a reasonable possibility of being effective. *Id.* The court noted in this case the County considered alternatives, but determined that they were not available as a matter of law. *Id.* The County cannot be required to engage in conduct that may be illegal, nor can it be compelled to expend precious tax dollars on projects where potential for success is marginal at best. *Id.*

The court noted that King County had adopted some race-neutral measures in conjunction with the MBE Program, for example, hosting one or two training sessions for small businesses, covering such topics as doing business with the government, small business management, and accounting techniques. *Id.* at 923. In addition, the County provided information on assessing Small Business Assistance Programs. *Id.* The court found that King County fulfilled its burden of considering race-neutral alternative programs. *Id.*

A second indicator of a program's narrowly tailoring is program flexibility. *Id.* at 924. The court found that an important means of achieving such flexibility is through use of case-by-case utilization goals, rather than rigid numerical quotas or goals. *Id.* at 924. The court pointed out that King County used a "percentage preference" method, which is not a quota, and while the preference is locked at five percent, such a fixed preference is not unduly rigid in light of the waiver provisions. The court found that a valid MBE Program should include a waiver system that accounts for both the availability of qualified MBEs and whether the qualified MBEs have suffered from the effects of past discrimination by the County or prime contractors. *Id.* at 924. The court found that King County's program provided waivers in both instances, including where neither minority nor a woman's business is available to provide needed goods or services and where available minority and/or women's businesses have given price quotes that are unreasonably high. *Id.*

The court also pointed out other attributes of the narrowly tailored and flexible MBE program, including a bidder that does not meet planned goals, may nonetheless be awarded the contract by demonstrating a good faith effort to comply. *Id.* The actual percentages of required MBE participation are determined on a case-by-case basis. Levels of participation may be reduced if the prescribed levels are not feasible, if qualified MBEs are unavailable, or if MBE price quotes are not competitive. *Id.*

The court concluded that an MBE program must also be limited in its geographical scope to the boundaries of the enacting jurisdiction. *Id.* at 925. Here the court held that King County's MBE program fails this third portion of "narrowly tailored" requirement. The court found the definition of "minority business" included in the Program indicated that a minority-owned business may qualify for preferential treatment if the business has been discriminated against in the particular geographical areas in which it operates. The court held this definition as overly broad. *Id.* at 925. The court held that the County should ask the question whether a business has been discriminated against in King County. *Id.* This determination, according to the court, is not an insurmountable burden for the

County, as the rule does not require finding specific instances of discriminatory exclusion for each MBE. *Id.* Rather, if the County successfully proves malignant discrimination within the King County business community, an MBE would be presumptively eligible for relief if it had previously sought to do business in the County. *Id.*

In other words, if systemic discrimination in the County is shown, then it is fair to presume that an MBE was victimized by the discrimination. *Id.* at 925. For the presumption to attach to the MBE, however, it must be established that the MBE is, or attempted to become, an active participant in the County's business community. *Id.* Because King County's program permitted MBE participation even by MBEs that have no prior contact with King County, the program was overbroad to that extent. *Id.* Therefore, the court reversed the grant of summary judgment to King County on the MBE program on the basis that it was geographically overbroad.

The court considered the gender-specific aspect of the MBE program. The court determined the degree of judicial scrutiny afforded gender-conscious programs was intermediate scrutiny, rather than strict scrutiny. *Id.* at 930. Under intermediate scrutiny, gender-based classification must serve an important governmental objective, and there must be a direct, substantial relationship between the objective and the means chosen to accomplish the objective. *Id.* at 931.

In this case, the court concluded, that King County's WBE preference survived a facial challenge. *Id.* at 932. The court found that King County had a legitimate and important interest in remedying the many disadvantages that confront women business owners and that the means chosen in the program were substantially related to the objective. *Id.* The court found the record adequately indicated discrimination against women in the King County construction industry, noting the anecdotal evidence including an affidavit of the president of a consulting engineering firm. *Id.* at 933. Therefore, the court upheld the WBE portion of the MBE program and affirmed the district court's grant of summary judgment to King County for the WBE program.

## **E. Recent Decisions Involving the Federal DBE Program and its Implementation in Other Jurisdictions**

There are several recent and pending cases involving challenges to the United States Federal DBE Program and its implementation by the states and their governmental entities for federally-funded projects. These cases could have a significant impact on the nature and provisions of contracting and procurement on federally-funded projects, including and relating to the utilization of DBEs. In addition, these cases provide an instructive analysis of the recent application of the strict scrutiny test to MBE/WBE- and DBE-type programs.

### **1. *Northern Contracting, Inc. v. Illinois*, 473 F.3d 715 (7<sup>th</sup> Cir. 2007)**

In *Northern Contracting, Inc. v. Illinois*, the Seventh Circuit affirmed the district court decision upholding the validity and constitutionality of the Illinois Department of Transportation's ("IDOT") DBE Program. Plaintiff Northern Contracting Inc. ("NCI") was a white male-owned construction company specializing in the construction of guardrails and fences for highway construction projects in Illinois. 473 F.3d 715, 717 (7<sup>th</sup> Cir. 2007). Initially, NCI challenged the constitutionality of both the federal regulations and the Illinois statute implementing these regulations. *Id.* at 719. The district court granted the USDOT's Motion for Summary Judgment, concluding that the federal government

had demonstrated a compelling interest and that TEA-21 was sufficiently narrowly tailored. NCI did not challenge this ruling and thereby forfeited the opportunity to challenge the federal regulations. *Id.* at 720. NCI also forfeited the argument that IDOT's DBE program did not serve a compelling government interest. *Id.* The sole issue on appeal to the Seventh Circuit was whether IDOT's program was narrowly tailored. *Id.*

IDOT typically adopted a new DBE plan each year. *Id.* at 718. In preparing for Fiscal Year 2005, IDOT retained a consulting firm to determine DBE availability. *Id.* The consultant first identified the relevant geographic market (Illinois) and the relevant product market (transportation infrastructure construction). *Id.* The consultant then determined availability of minority- and women-owned firms through analysis of Dun & Bradstreet's Marketplace data. *Id.* This initial list was corrected for errors in the data by surveying the D&B list. *Id.* In light of these surveys, the consultant arrived at a DBE availability of 22.77 percent. *Id.* The consultant then ran a regression analysis on earnings and business information and concluded that in the absence of discrimination, relative DBE availability would be 27.5 percent. *Id.* IDOT considered this, along with other data, including DBE utilization on IDOT's "zero goal" experiment conducted in 2002 to 2003, in which IDOT did not use DBE goals on 5 percent of its contracts (1.5% utilization) and data of DBE utilization on projects for the Illinois State Toll Highway Authority which does not receive federal funding and whose goals are completely voluntary (1.6% utilization). *Id.* at 719. On the basis of all of this data, IDOT adopted a 22.77 percent goal for 2005. *Id.*

Despite the fact the NCI forfeited the argument that IDOT's DBE program did not serve a compelling state interest, the Seventh Circuit briefly addressed the compelling interest prong of the strict scrutiny analysis, noting that IDOT had satisfied its burden. *Id.* at 720. The court noted that, post-*Adarand*, two other circuits have held that a state may rely on the federal government's compelling interest in implementing a local DBE plan. *Id.* at 720-21, citing *Western States Paving Co., Inc. v. Washington State DOT*, 407 F.3d 983, 987 (9<sup>th</sup> Cir. 2005), cert. denied, 126 S.Ct. 1332 (Feb. 21, 2006) and *Sherbrooke Turf, Inc. v. Minnesota DOT*, 345 F.3d 964, 970 (8<sup>th</sup> Cir. 2003), cert. denied, 541 U.S. 1041 (2004). The court stated that NCI had not articulated any reason to break ranks from the other circuits and explained that "[i]nsofar as the state is merely complying with federal law it is acting as the agent of the federal government .... If the state does exactly what the statute expects it to do, and the statute is conceded for purposes of litigation to be constitutional, we do not see how the state can be thought to have violated the Constitution." *Id.* at 721, quoting *Milwaukee County Pavers Association v. Fielder*, 922 F.2d 419, 423 (7<sup>th</sup> Cir. 1991). The court did not address whether IDOT had an independent interest that could have survived constitutional scrutiny.

In addressing the narrowly tailored prong with respect to IDOT's DBE program, the court held that IDOT had complied. *Id.* The court concluded its holding in *Milwaukee* that a state is insulated from a constitutional attack absent a showing that the state exceeded its federal authority remained applicable. *Id.* at 721-22. The court noted that the Supreme Court in *Adarand Constructors v. Peña*, 515 U.S. 200 (1995) did not seize the opportunity to overrule that decision, explaining that the Court did not invalidate its conclusion that a challenge to a state's application of a federally mandated program must be limited to the question of whether the state exceeded its authority. *Id.* at 722.

The court further clarified the *Milwaukee* opinion in light of the interpretations of the opinions offered in by the Ninth Circuit in *Western States* and Eighth Circuit in *Sherbrooke*. *Id.* The court stated

that the Ninth Circuit in *Western States* misread the *Milwaukee* decision in concluding that *Milwaukee* did not address the situation of an as-applied challenge to a DBE program. *Id.* at 722, n. 5. Relatedly, the court stated that the Eighth Circuit's opinion in *Sherbrooke* (that the *Milwaukee* decision was compromised by the fact that it was decided under the prior law "when the 10 percent federal set-aside was more mandatory") was unconvincing since all recipients of federal transportation funds are still required to have compliant DBE programs. *Id.* at 722. Federal law makes more clear now that the compliance could be achieved even with no DBE utilization if that were the result of a good faith use of the process. *Id.* at 722, n. 5. The court stated that IDOT in this case was acting as an instrument of federal policy and NCI's collateral attack on the federal regulations was impermissible. *Id.* at 722.

The remainder of the court's opinion addressed the question of whether IDOT exceeded its grant of authority under federal law, and held that all of NCI's arguments failed. *Id.* First, NCI challenged the method by which the local base figure was calculated, the first step in the goal-setting process. *Id.* NCI argued that the number of registered and prequalified DBEs in Illinois should have simply been counted. *Id.* The court stated that while the federal regulations list several examples of methods for determining the local base figure, *Id.* at 723, these examples are not intended as an exhaustive list. The court pointed out that the fifth item in the list is entitled "Alternative Methods," and states: "You may use other methods to determine a base figure for your overall goal. Any methodology you choose must be based on demonstrable evidence of local market conditions and be designated to ultimately attain a goal that is rationally related to the relative availability of DBEs in your market." *Id.* (citing 49 CFR § 26.45(c)(5)). According to the court, the regulations make clear that "relative availability" means "the availability of ready, willing and able DBEs relative to all business ready, willing, and able to participate" on DOT contracts. *Id.* The court stated NCI pointed to nothing in the federal regulations that indicated that a recipient must so narrowly define the scope of the ready, willing, and available firms to a simple count of the number of registered and prequalified DBEs. *Id.* The court agreed with the district court that the remedial nature of the federal scheme militates in favor of a method of DBE availability calculation that casts a broader net. *Id.*

Second, NCI argued that the IDOT failed to properly adjust its goal based on local market conditions. *Id.* The court noted that the federal regulations do not require any adjustments to the base figure, but simply provide recipients with authority to make such adjustments if necessary. *Id.* According to the court, NCI failed to identify any aspect of the regulations requiring IDOT to separate prime contractor availability from subcontractor availability, and pointed out that the regulations require the local goal to be focused on overall DBE participation. *Id.*

Third, NCI contended that IDOT violated the federal regulations by failing to meet the maximum feasible portion of its overall goal through race-neutral means of facilitating DBE participation. *Id.* at 723-24. NCI argued that IDOT should have considered DBEs who had won subcontracts on goal projects where the prime contractor did not consider DBE status, instead of only considering DBEs who won contracts on no-goal projects. *Id.* at 724. The court held that while the regulations indicate that where DBEs win subcontracts on goal projects strictly through low bid this can be counted as race-neutral participation, the regulations did not require IDOT to search for this data, for the purpose of calculating past levels of race-neutral DBE participation. *Id.* According to the court, the record indicated that IDOT used nearly all the methods described in the regulations to maximize the portion of the goal that will be achieved through race-neutral means. *Id.*



The court affirmed the decision of the district court upholding the validity of the IDOT DBE program and found that it was narrowly tailored to further a compelling governmental interest. *Id.*

**2. *Northern Contracting, Inc. v. Illinois*, 2005 WL 2230195 (N.D. Ill. Sept. 8, 2005), *aff'd* 473 F.3d 715 (7<sup>th</sup> Cir. 2007)**

This decision is the district court's order that was affirmed by the Seventh Circuit Court of Appeals. This decision is instructive in that it is one of the recent cases to address the validity of the Federal DBE Program and local and state governments' implementation of the program as recipients of federal funds. The case also is instructive in that the court set forth a detailed analysis of race-, ethnicity-, and gender-neutral measures as well as evidentiary data required to satisfy constitutional scrutiny.

The district court conducted a trial after denying the parties' Motions for Summary Judgment in *Northern Contracting, Inc. v. State of Illinois, Illinois DOT, and USDOT*, 2004 WL 422704 (N.D. Ill. March 3, 2004), discussed *infra*. The following summarizes the opinion of the district court.

Northern Contracting, Inc. (the "plaintiff"), an Illinois highway contractor, sued the State of Illinois, the Illinois DOT, the United States DOT, and federal and state officials seeking a declaration that federal statutory provisions, the federal implementing regulations ("TEA-21"), the state statute authorizing the DBE program, and the Illinois DBE program itself were unlawful and unconstitutional. 2005 WL 2230195 at \*1 (N.D. Ill. Sept. 8, 2005).

Under TEA-21, a recipient of federal funds is required to meet the "maximum feasible portion" of its DBE goal through race-neutral means. *Id.* at \*4 (citing regulations). If a recipient projects that it cannot meet its overall DBE goal through race-neutral means, it must establish contract goals to the extent necessary to achieve the overall DBE goal. *Id.* (citing regulation). [The court provided an overview of the pertinent regulations including compliance requirements and qualifications for DBE status.]

**Statistical evidence.** To calculate its 2005 DBE participation goals, IDOT followed the two-step process set forth in TEA-21: (1) calculation of a base figure for the relative availability of DBEs, and (2) consideration of a possible adjustment of the base figure to reflect the effects of the DBE program and the level of participation that would be expected but for the effects of past and present discrimination. *Id.* at \*6. IDOT engaged in a study to calculate its base figure and conduct a custom census to determine whether a more reliable method of calculation existed as opposed to its previous method of reviewing a bidder's list. *Id.*

In compliance with TEA-21, IDOT used a study to evaluate the base figure using a six-part analysis: (1) the study identified the appropriate and relevant geographic market for its contracting activity and its prime contractors; (2) the study identified the relevant product markets in which IDOT and its prime contractors contract; (3) the study sought to identify all available contractors and subcontractors in the relevant industries within Illinois using Dun & Bradstreet's *Marketplace*; (4) the study collected lists of DBEs from IDOT and 20 other public and private agencies; (5) the study attempted to correct for the possibility that certain businesses listed as DBEs were no longer qualified or, alternatively, businesses not listed as DBEs but qualified as such under the federal regulations; and (6) the study attempted to correct for the possibility that not all DBE businesses

were listed in the various directories. *Id.* at \*6-7. The study utilized a standard statistical sampling procedure to correct for the latter two biases. *Id.* at \*7. The study thus calculated a weighted average base figure of 22.7 percent. *Id.*

IDOT then adjusted the base figure based upon two disparity studies and some reports considering whether the DBE availability figures were artificially low due to the effects of past discrimination. *Id.* at \*8. One study examined disparities in earnings and business formation rates as between DBEs and their white male-owned counterparts. *Id.* Another study included a survey reporting that DBEs are rarely utilized in non-goals projects. *Id.*

IDOT considered three reports prepared by expert witnesses. *Id.* at \*9. The first report concluded that minority- and women-owned businesses were underutilized relative to their capacity and that such underutilization was due to discrimination. *Id.* The second report concluded, after controlling for relevant variables such as credit worthiness, “that minorities and women are less likely to form businesses, and that when they do form businesses, those businesses achieve lower earnings than did businesses owned by white males.” *Id.* The third report, again controlling for relevant variables (education, age, marital status, industry and wealth), concluded that minority- and female-owned businesses’ formation rates are lower than those of their white male counterparts, and that such businesses engage in a disproportionate amount of government work and contracts as a result of their inability to obtain private sector work. *Id.*

IDOT also conducted a series of public hearings in which a number of DBE owners who testified that they “were rarely, if ever, solicited to bid on projects not subject to disadvantaged-firm hiring goals.” *Id.* Additionally, witnesses identified 20 prime contractors in IDOT District 1 alone who rarely or never solicited bids from DBEs on non-goals projects. *Id.* The prime contractors did not respond to IDOT’s requests for information concerning their utilization of DBEs. *Id.*

Finally, IDOT reviewed unremediated market data from four different markets (the Illinois State Toll Highway Authority, the Missouri DOT, Cook County’s public construction contracts, and a “non-goals” experiment conducted by IDOT between 2001 and 2002), and considered past utilization of DBEs on IDOT projects. *Id.* at \*11. After analyzing all of the data, the study recommended an upward adjustment to 27.51 percent. However, IDOT decided to maintain its figure at 22.77 percent. *Id.*

IDOT’s representative testified that the DBE program was administered on a “contract-by-contract basis.” *Id.* She testified that DBE goals have no effect on the award of prime contracts but that contracts are awarded exclusively to the “lowest responsible bidder.” IDOT also allowed contractors to petition for a waiver of individual contract goals in certain situations (*e.g.*, where the contractor has been unable to meet the goal despite having made reasonable good faith efforts). *Id.* at \*12. Between 2001 and 2004, IDOT received waiver requests on 8.53 percent of its contracts and granted three out of four; IDOT also provided an appeal procedure for a denial from a waiver request. *Id.*

IDOT implemented a number of race- and gender-neutral measures both in its fiscal year 2005 plan and in response to the district court’s earlier summary judgment order, including:

1. A “prompt payment provision” in its contracts, requiring that subcontractors be paid promptly after they complete their work, and prohibiting prime contractors from delaying such payments;
2. An extensive outreach program seeking to attract and assist DBE and other small firms enter and achieve success in the industry (including retaining a network of consultants to provide management, technical and financial assistance to small businesses, and sponsoring networking sessions throughout the state to acquaint small firms with larger contractors and to encourage the involvement of small firms in major construction projects);
3. Reviewing the criteria for prequalification to reduce any unnecessary burdens;
4. “Unbundling” large contracts; and
5. Allocating some contracts for bidding only by firms meeting the SBA’s definition of small businesses.

*Id.* (internal citations omitted). IDOT was also in the process of implementing bonding and financing initiatives to assist emerging contractors obtain guaranteed bonding and lines of credit, and establishing a mentor-protégé program. *Id.*

The court found that IDOT attempted to achieve the “maximum feasible portion” of its overall DBE goal through race- and gender-neutral measures. *Id.* at \*13. The court found that IDOT determined that race- and gender-neutral measures would account for 6.43 percent of its DBE goal, leaving 16.34 percent to be reached using race- and gender-conscious measures. *Id.*

**Anecdotal evidence.** A number of DBE owners testified to instances of perceived discrimination and to the barriers they face. *Id.* The DBE owners also testified to difficulties in obtaining work in the private sector and “unanimously reported that they were rarely invited to bid on such contracts.” *Id.* The DBE owners testified to a reluctance to submit unsolicited bids due to the expense involved and identified specific firms that solicited bids from DBEs for goals projects but not for non-goals projects. *Id.* A number of the witnesses also testified to specific instances of discrimination in bidding, on specific contracts, and in the financing and insurance markets. *Id.* at \*13-14. One witness acknowledged that all small firms face difficulties in the financing and insurance markets, but testified that it is especially burdensome for DBEs who “frequently are forced to pay higher insurance rates due to racial and gender discrimination.” *Id.* at \*14. The DBE witnesses also testified they have obstacles in obtaining prompt payment. *Id.*

The plaintiff called a number of non-DBE business owners who unanimously testified that they solicit business equally from DBEs and non-DBEs on non-goals projects. *Id.* Some non-DBE firm owners testified that they solicit bids from DBEs on a goals project for work they would otherwise complete themselves absent the goals; others testified that they “occasionally award work to a DBE that was not the low bidder in order to avoid scrutiny from IDOT.” *Id.* A number of non-DBE firm owners accused of failing to solicit bids from DBEs on non-goals projects testified and denied the allegations. *Id.* at \*15.

**Strict scrutiny.** The court applied strict scrutiny to the program as a whole (including the gender-based preferences). *Id.* at \*16. The court, however, set forth a different burden of proof, finding that

the government must demonstrate identified discrimination with specificity and must have a “‘strong basis in evidence’ to conclude that remedial action was necessary, before it embarks on an affirmative action program ... If the government makes such a showing, the party challenging the affirmative action plan bears the ‘ultimate burden’ of demonstrating the unconstitutionality of the program.” *Id.* The court held that challenging party’s burden “can only be met by presenting credible evidence to rebut the government’s proffered data.” *Id.* at \*17.

To satisfy strict scrutiny, the court found that IDOT did not need to demonstrate an independent compelling interest; however, as part of the narrowly tailored prong, IDOT needed to show “that there is a demonstrable need for the implementation of the Federal DBE Program within its jurisdiction.” *Id.* at \*16.

The court found that IDOT presented “an abundance” of evidence documenting the disparities between DBEs and non-DBEs in the construction industry. *Id.* at \*17. The plaintiff argued that the study was “erroneous because it failed to limit its DBE availability figures to those firms ... registered and pre-qualified with IDOT.” *Id.* The plaintiff also alleged the calculations of the DBE utilization rate were incorrect because the data included IDOT subcontracts and prime contracts, despite the fact that the latter are awarded to the lowest bidder as a matter of law. *Id.* Accordingly, the plaintiff alleged that IDOT’s calculation of DBE availability and utilization rates was incorrect. *Id.*

The court found that other jurisdictions had utilized the custom census approach without successful challenge. *Id.* at \*18. Additionally, the court found “that the remedial nature of the federal statutes counsels for the casting of a broader net when measuring DBE availability.” *Id.* at \*19. The court found that IDOT presented “an array of statistical studies concluding that DBEs face disproportionate hurdles in the credit, insurance, and bonding markets.” *Id.* at \*21. The court also found that the statistical studies were consistent with the anecdotal evidence. *Id.* The court did find, however, that “there was no evidence of even a single instance in which a prime contractor failed to award a job to a DBE that offered the low bid. This ... is [also] supported by the statistical data ... which shows that at least at the level of subcontracting, DBEs are generally utilized at a rate in line with their ability.” *Id.* at \*21, n. 31. Additionally, IDOT did not verify the anecdotal testimony of DBE firm owners who testified to barriers in financing and bonding. However, the court found that such verification was unnecessary. *Id.* at \*21, n. 32.

The court further found:

That such discrimination indirectly affects the ability of DBEs to compete for prime contracts, despite the fact that they are awarded solely on the basis of low bid, cannot be doubted: ‘[E]xperience and size are not race- and gender-neutral variables ... [DBE] construction firms are generally smaller and less experienced *because of* industry discrimination.’

*Id.* at \*21, *citing Concrete Works of Colorado, Inc. v. City and County of Denver*, 321 F.3d 950 (10th Cir. 2003).

The parties stipulated to the fact that DBE utilization goals exceed DBE availability for 2003 and 2004. *Id.* at \*22. IDOT alleged, and the court so found, that the high utilization on goals projects was due to the success of the DBE program, and not to an absence of discrimination. *Id.* The court

found that the statistical disparities coupled with the anecdotal evidence indicated that IDOT's fiscal year 2005 goal was a "plausible lower-bound estimate" of DBE participation in the absence of discrimination." *Id.* The court found that the plaintiff did not present persuasive evidence to contradict or explain IDOT's data. *Id.*

The plaintiff argued that even if accepted at face value, IDOT's marketplace data did not support the imposition of race- and gender-conscious remedies because there was no evidence of direct discrimination by prime contractors. *Id.* The court found first that IDOT's indirect evidence of discrimination in the bonding, financing, and insurance markets was sufficient to establish a compelling purpose. *Id.* Second, the court found:

[M]ore importantly, Plaintiff fails to acknowledge that, in enacting its DBE program, IDOT acted not to remedy its own prior discriminatory practices, but pursuant to federal law, which both authorized and required IDOT to remediate the effects of *private* discrimination on federally-funded highway contracts. This is a fundamental distinction ... [A] state or local government need not independently identify a compelling interest when its actions come in the course of enforcing a federal statute.

*Id.* at \*23. The court distinguished *Builders Ass'n of Greater Chicago v. County of Cook*, 123 F. Supp.2d 1087 (N.D. Ill. 2000), *aff'd* 256 F.3d 642 (7<sup>th</sup> Cir. 2001), noting that the program in that case was not federally-funded. *Id.* at \*23, n. 34.

The court also found that "IDOT has done its best to maximize the portion of its DBE goal" through race- and gender-neutral measures, including anti-discrimination enforcement and small business initiatives. *Id.* at \*24. The anti-discrimination efforts included: an internet website where a DBE can file an administrative complaint if it believes that a prime contractor is discriminating on the basis of race or gender in the award of sub-contracts; and requiring contractors seeking prequalification to maintain and produce solicitation records on all projects, both public and private, with and without goals, as well as records of the bids received and accepted. *Id.* The small business initiative included: "unbundling" large contracts; allocating some contracts for bidding only by firms meeting the SBA's definition of small businesses; a "prompt payment provision" in its contracts, requiring that subcontractors be paid promptly after they complete their work, and prohibiting prime contractors from delaying such payments; and an extensive outreach program seeking to attract and assist DBE and other small firms DBE and other small firms enter and achieve success in the industry (including retaining a network of consultants to provide management, technical and financial assistance to small businesses, and sponsoring networking sessions throughout the state to acquaint small firms with larger contractors and to encourage the involvement of small firms in major construction projects). *Id.*

The court found "[s]ignificantly, Plaintiff did not question the efficacy or sincerity of these race- and gender-neutral measures." *Id.* at \*25. Additionally, the court found the DBE program had significant flexibility in that utilized contract-by-contract goal setting (without a fixed DBE participation minimum) and contained waiver provisions. *Id.* The court found that IDOT approved 70 percent of waiver requests although waivers were requested on only 8 percent of all contracts. *Id.*, citing *Adarand Constructors, Inc. v. Slater* "Adarand VII", 228 F.3d 1147, 1177 (10<sup>th</sup> Cir. 2000) (citing for the proposition that flexibility and waiver are critically important).

The court held that IDOT's DBE plan was narrowly tailored to the goal of remedying the effects of racial and gender discrimination in the construction industry, and was therefore constitutional.

**3. *Northern Contracting, Inc. v. State of Illinois, Illinois DOT, and USDOT*, 2004 WL 422704 (N.D. Ill. March 3, 2004)**

This is the earlier decision in *Northern Contracting, Inc.*, 2005 WL 2230195 (N.D. Ill. Sept. 8, 2005), *see* above, which resulted in the remand of the case to consider the implementation of the Federal DBE Program by the IDOT. This case involves the challenge to the Federal DBE Program. The plaintiff contractor sued the IDOT and the USDOT challenging the facial constitutionality of the Federal DBE Program (TEA-21 and 49 CFR Part 26) as well as the implementation of the Federal Program by the IDOT (*i.e.*, the IDOT DBE Program). The court held valid the Federal DBE Program, finding there is a compelling governmental interest and the federal program is narrowly tailored. The court also held there are issues of fact regarding whether IDOT's DBE Program is narrowly tailored to achieve the federal government's compelling interest. The court denied the Motions for Summary Judgment filed by the plaintiff and by IDOT, finding there were issues of material fact relating to IDOT's implementation of the Federal DBE Program.

The court in *Northern Contracting*, held that there is an identified compelling governmental interest for implementing the Federal DBE Program and that the Federal DBE Program is narrowly tailored to further that interest. Therefore, the court granted the Federal defendants' Motion for Summary Judgment challenging the validity of the Federal DBE Program. In this connection, the district court followed the decisions and analysis in *Sherbrooke Turf, Inc. v. Minnesota Department of Transportation*, 345 F.3d 964 (8<sup>th</sup> Cir. 2003) and *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147 (10<sup>th</sup> Cir. 2000) ("*Adarand VII*"), *cert. granted then dismissed as improvidently granted*, 532 U.S. 941, 534 U.S. 103 (2001). The court held, like these two Courts of Appeals that have addressed this issue, that Congress had a strong basis in evidence to conclude that the DBE Program was necessary to redress private discrimination in federally-assisted highway subcontracting. The court agreed with the *Adarand VII* and *Sherbrooke Turf* courts that the evidence presented to Congress is sufficient to establish a compelling governmental interest, and that the contractors had not met their burden of introducing credible particularized evidence to rebut the Government's initial showing of the existence of a compelling interest in remedying the nationwide effects of past and present discrimination in the federal construction procurement subcontracting market. 2004 WL422704 at \*34, *citing Adarand VII*, 228 F.3d at 1175.

In addition, the court analyzed the second prong of the strict scrutiny test, whether the government provided sufficient evidence that its program is narrowly tailored. In making this determination, the court looked at several factors, such as the efficacy of alternative remedies; the flexibility and duration of the race-conscious remedies, including the availability of waiver provisions; the relationships between the numerical goals and relevant labor market; the impact of the remedy on third parties; and whether the program is over-or-under-inclusive. The narrow tailoring analysis with regard to the as-applied challenge focused on IDOT's implementation of the Federal DBE Program.

First, the court held that the Federal DBE Program does not mandate the use of race-conscious measures by recipients of federal dollars, but in fact requires only that the goal reflect the recipient's determination of the level of DBE participation it would expect absent the effects of the discrimination. 49 CFR § 26.45(b). The court recognized, as found in the *Sherbrooke Turf* and *Adarand*

*VII* cases, that the Federal Regulations place strong emphasis on the use of race-neutral means to increase minority business participation in government contracting, that although narrow tailoring does not require exhaustion of every conceivable race-neutral alternative, it does require “serious, good faith consideration of workable race-neutral alternatives.” 2004 WL422704 at \*36, *citing* and *quoting Sherbrooke Turf*, 345 F.3d at 972, *quoting Grutter v. Bollinger*, 539 U.S. 306 (2003). The court held that the Federal regulations, which prohibit the use of quotas and severely limit the use of set-asides, meet this requirement. The court agreed with the *Adarand VII* and *Sherbrooke Turf* courts that the Federal DBE Program does require recipients to make a serious good faith consideration of workable race-neutral alternatives before turning to race-conscious measures.

Second, the court found that because the Federal DBE Program is subject to periodic reauthorization, and requires recipients of Federal dollars to review their programs annually, the Federal DBE scheme is appropriately limited to last no longer than necessary.

Third, the court held that the Federal DBE Program is flexible for many reasons, including that the presumption that women and minority are socially disadvantaged is deemed rebutted if an individual’s personal net worth exceeds \$750,000.00, and a firm owned by individual who is not presumptively disadvantaged may nevertheless qualify for such status if the firm can demonstrate that its owners are socially and economically disadvantaged. 49 CFR § 26.67(b)(1)(d). The court found other aspects of the Federal Regulations provide ample flexibility, including recipients may obtain waivers or exemptions from any requirements. Recipients are not required to set a contract goal on every USDOT-assisted contract. If a recipient estimates that it can meet the entirety of its overall goals for a given year through race-neutral means, it must implement the Program without setting contract goals during the year. If during the course of any year in which it is using contract goals a recipient determines that it will exceed its overall goals, it must adjust the use of race-conscious contract goals accordingly. 49 CFR § 26.51(e)(f). Recipients also administering a DBE Program in good faith cannot be penalized for failing to meet their DBE goals, and a recipient may terminate its DBE Program if it meets its annual overall goal through race-neutral means for two consecutive years. 49 CFR § 26.51(f). Further, a recipient may award a contract to a bidder/offeror that does not meet the DBE Participation goals so long as the bidder has made adequate good faith efforts to meet the goals. 49 CFR § 26.53(a)(2). The regulations also prohibit the use of quotas. 49 CFR § 26.43.

Fourth, the court agreed with the *Sherbrooke Turf* court’s assessment that the Federal DBE Program requires recipients to base DBE goals on the number of ready, willing and able disadvantaged business in the local market, and that this exercise requires recipients to establish realistic goals for DBE participation in the relevant labor markets.

Fifth, the court found that the DBE Program does not impose an unreasonable burden on third parties, including non-DBE subcontractors and taxpayers. The court found that the Federal DBE Program is a limited and properly tailored remedy to cure the effects of prior discrimination, a sharing of the burden by parties such as non-DBEs is not impermissible.

Finally, the court found that the Federal DBE Program was not over-inclusive because the regulations do not provide that every women and every member of a minority group is disadvantaged. Preferences are limited to small businesses with a specific average annual gross receipts over three fiscal years of \$16.6 million or less (at the time of this decision), and businesses

whose owners' personal net worth exceed \$750,000.00 are excluded. 49 CFR § 26.67(b)(1). In addition, a firm owned by a white male may qualify as socially and economically disadvantaged. 49 CFR § 26.67(d).

The court analyzed the constitutionality of the IDOT DBE Program. The court adopted the reasoning of the Eighth Circuit in *Sherbrooke Turf*, that a recipient's implementation of the Federal DBE Program must be analyzed under the narrow tailoring analysis but not the compelling interest inquiry. Therefore, the court agreed with *Sherbrooke Turf* that a recipient need not establish a distinct compelling interest before implementing the Federal DBE Program, but did conclude that a recipient's implementation of the Federal DBE Program must be narrowly tailored. The court found that issues of fact remain in terms of the validity of the IDOT's DBE Program as implemented in terms of whether it was narrowly tailored to achieve the Federal Government's compelling interest. The court, therefore, denied the contractor plaintiff's Motion for Summary Judgment and the Illinois DOT's Motion for Summary Judgment.

**4. *Sherbrooke Turf, Inc. v. Minnesota DOT, and Gross Seed Company v. Nebraska Department of Roads*, 345 F.3d 964 (8<sup>th</sup> Cir. 2003), cert. denied, 541 U.S. 1041 (2004)**

This case is instructive in its analysis of state DOT DBE-type programs and their evidentiary basis and implementation. This case also is instructive in its analysis of the narrowly tailored requirement for state DBE programs. In upholding the challenged Federal DBE Program at issue in this case the Eighth Circuit emphasized the race-, ethnicity- and gender-neutral elements, the ultimate flexibility of the Program, and the fact the Program was tied closely only to labor markets with identified discrimination.

In *Sherbrooke Turf, Inc. v. Minnesota DOT*, and *Gross Seed Company v. Nebraska Department of Roads*, the U.S. Court of Appeals for the Eighth Circuit upheld the constitutionality of the Federal DBE Program (49 CFR Part 26 ). The court held the Federal Program was narrowly tailored to remedy a compelling governmental interest. The court also held the federal regulations governing the states' implementation of the Federal DBE Program were narrowly tailored, and the state DOT's implementation of the Federal DBE Program was narrowly tailored to serve a compelling government interest.

Sherbrooke and Gross Seed both contended that the Federal DBE Program on its face and as applied in Minnesota and Nebraska violated the Equal Protection component of the Fifth Amendment's Due Process Clause. The Eighth Circuit engaged in a review of the Federal DBE Program and the implementation of the Program by the Minnesota DOT and the Nebraska Department of Roads ("Nebraska DOR") under a strict scrutiny analysis and held that the Federal DBE Program was valid and constitutional and that the Minnesota DOT's and Nebraska DOR's implementation of the Program also was constitutional and valid. Applying the strict scrutiny analysis, the court first considered whether the Federal DBE Program established a compelling governmental interest, and found that it did. It concluded that Congress had a strong basis in evidence to support its conclusion that race-based measures were necessary for the reasons stated by the Tenth Circuit in *Adarand*, 228 F.3d at 1167-76. Although the contractors presented evidence that challenged the data, they failed to present affirmative evidence that no remedial action was necessary because minority-owned small businesses enjoy non-discriminatory access to participation in highway



contracts. Thus, the court held they failed to meet their ultimate burden to prove that the DBE Program is unconstitutional on this ground.

Finally, Sherbrooke and Gross Seed argued that the Minnesota DOT and Nebraska DOR must independently satisfy the compelling governmental interest test aspect of strict scrutiny review. The government argued, and the district courts below agreed, that participating states need not independently meet the strict scrutiny standard because under the DBE Program the state must still comply with the DOT regulations. The Eighth Circuit held that this issue was not addressed by the Tenth Circuit in *Adarand*. The Eighth Circuit concluded that neither side's position is entirely sound.

The court rejected the contention of the contractors that their facial challenges to the DBE Program must be upheld unless the record before Congress included strong evidence of race discrimination in construction contracting in Minnesota and Nebraska. On the other hand, the court held a valid race-based program must be narrowly tailored, and to be narrowly tailored, a national program must be limited to those parts of the country where its race-based measures are demonstrably needed to the extent that the federal government delegates this tailoring function, as a state's implementation becomes relevant to a reviewing court's strict scrutiny. Thus, the court left the question of state implementation to the narrow tailoring analysis.

The court held that a reviewing court applying strict scrutiny must determine if the race-based measure is narrowly tailored. That is, whether the means chosen to accomplish the government's asserted purpose are specifically and narrowly framed to accomplish that purpose. The contractors have the ultimate burden of establishing that the DBE Program is not narrowly tailored. *Id.* The compelling interest analysis focused on the record before Congress; the narrow-tailoring analysis looks at the roles of the implementing highway construction agencies.

For determining whether a race-conscious remedy is narrowly tailored, the court looked at factors such as the efficacy of alternative remedies, the flexibility and duration of the race-conscious remedy, the relationship of the numerical goals to the relevant labor market, and the impact of the remedy on third parties. *Id.* Under the DBE Program, a state receiving federal highway funds must, on an annual basis, submit to USDOT an overall goal for DBE participation in its federally-funded highway contracts. *See*, 49 CFR § 26.45(f)(1). The overall goal "must be based on demonstrable evidence" as to the number of DBEs who are ready, willing, and able to participate as contractors or subcontractors on federally-assisted contracts. 49 CFR § 26.45(b). The number may be adjusted upward to reflect the state's determination that more DBEs would be participating absent the effects of discrimination, including race-related barriers to entry. *See*, 49 CFR § 26.45(d).

The state must meet the "maximum feasible portion" of its overall goal by race-neutral means and must submit for approval a projection of the portion it expects to meet through race-neutral means. *See*, 49 CFR § 26.45(a), (c). If race-neutral means are projected to fall short of achieving the overall goal, the state must give preference to firms it has certified as DBEs. However, such preferences may not include quotas. 49 CFR § 26.45(b). During the course of the year, if a state determines that it will exceed or fall short of its overall goal, it must adjust its use of race-conscious and race-neutral methods "[t]o ensure that your DBE program continues to be narrowly tailored to overcome the effects of discrimination." 49 CFR § 26.51(f).

Absent bad faith administration of the program, a state's failure to achieve its overall goal will not be penalized. *See*, 49 CFR § 26.47. If the state meets its overall goal for two consecutive years through race-neutral means, it is not required to set an annual goal until it does not meet its prior overall goal for a year. *See*, 49 CFR § 26.51(f)(3). In addition, DOT may grant an exemption or waiver from any and all requirements of the Program. *See*, 49 CFR § 26.15(b).

Like the district courts below, the Eighth Circuit concluded that the USDOT regulations, on their face, satisfy the Supreme Court's narrowing tailoring requirements. First, the regulations place strong emphasis on the use of race-neutral means to increase minority business participation in government contracting. 345 F.3d at 972. Narrow tailoring does not require exhaustion of every conceivable race-neutral alternative, but it does require serious good faith consideration of workable race-neutral alternatives. 345 F.3d at 971, *citing Grutter v. Bollinger*, 539 U.S. 306.

Second, the revised DBE program has substantial flexibility. A state may obtain waivers or exemptions from any requirements and is not penalized for a good faith effort to meet its overall goal. In addition, the program limits preferences to small businesses falling beneath an earnings threshold, and any individual whose net worth exceeds \$750,000.00 cannot qualify as economically disadvantaged. *See*, 49 CFR § 26.67(b). Likewise, the DBE program contains built-in durational limits. 345 F.3d at 972. A state may terminate its DBE program if it meets or exceeds its annual overall goal through race-neutral means for two consecutive years. *Id.*; 49 CFR § 26.51(f)(3).

Third, the court found, the USDOT has tied the goals for DBE participation to the relevant labor markets. The regulations require states to set overall goals based upon the likely number of minority contractors that would have received federal assisted highway contracts but for the effects of past discrimination. *See*, 49 CFR § 26.45(c)-(d)(Steps 1 and 2). Though the underlying estimates may be inexact, the exercise requires states to focus on establishing realistic goals for DBE participation in the relevant contracting markets. *Id.* at 972.

Finally, Congress and DOT have taken significant steps, the court held, to minimize the race-based nature of the DBE Program. Its benefits are directed at all small businesses owned and controlled by the socially and economically disadvantaged. While TEA-21 creates a presumption that members of certain racial minorities fall within that class, the presumption is rebuttable, wealthy minority owners and wealthy minority-owned firms are excluded, and certification is available to persons who are not presumptively disadvantaged that demonstrate actual social and economic disadvantage. Thus, race is made relevant in the Program, but it is not a determinative factor. 345 F.3d at 973. For these reasons, the court agreed with the district courts that the revised DBE Program is narrowly tailored on its face.

Sherbrooke and Gross Seed also argued that the DBE Program as applied in Minnesota and Nebraska is not narrowly tailored. Under the Federal Program, states set their own goals, based on local market conditions; their goals are not imposed by the federal government; nor do recipients have to tie them to any uniform national percentage. 345 F.3d at 973, citing 64 Fed. Reg. at 5102.

The court analyzed what Minnesota and Nebraska did in connection with their implementation of the Federal DBE Program. Minnesota DOT commissioned a disparity study of the highway contracting market in Minnesota. The study group determined that DBEs made up 11.4 percent of the prime contractors and subcontractors in a highway construction market. Of this number, 0.6

percent were minority-owned and 10.8 percent women-owned. Based upon its analysis of business formation statistics, the consultant estimated that the number of participating minority-owned business would be 34 percent higher in a race-neutral market. Therefore, the consultant adjusted its DBE availability figure from 11.4 percent to 11.6 percent. Based on the study, Minnesota DOT adopted an overall goal of 11.6 percent DBE participation for federally-assisted highway projects. Minnesota DOT predicted that it would need to meet 9 percent of that overall goal through race and gender-conscious means, based on the fact that DBE participation in State highway contracts dropped from 10.25 percent in 1998 to 2.25 percent in 1999 when its previous DBE Program was suspended by the injunction by the district court in an earlier decision in *Sherbrooke*. Minnesota DOT required each prime contract bidder to make a good faith effort to subcontract a prescribed portion of the project to DBEs, and determined that portion based on several individualized factors, including the availability of DBEs in the extent of subcontracting opportunities on the project.

The contractor presented evidence attacking the reliability of the data in the study, but it failed to establish that better data were available or that Minnesota DOT was otherwise unreasonable in undertaking this thorough analysis and relying on its results. *Id.* The precipitous drop in DBE participation when no race-conscious methods were employed, the court concluded, supports Minnesota DOT's conclusion that a substantial portion of its overall goal could not be met with race-neutral measures. *Id.* On that record, the court agreed with the district court that the revised DBE Program serves a compelling government interest and is narrowly tailored on its face and as applied in Minnesota.

In Nebraska, the Nebraska DOR commissioned a disparity study also to review availability and capability of DBE firms in the Nebraska highway construction market. The availability study found that between 1995 and 1999, when Nebraska followed the mandatory 10 percent set-aside requirement, 9.95 percent of all available and capable firms were DBEs, and DBE firms received 12.7 percent of the contract dollars on federally assisted projects. After apportioning part of this DBE contracting to race-neutral contracting decisions, Nebraska DOR set an overall goal of 9.95 percent DBE participation and predicted that 4.82 percent of this overall goal would have to be achieved by race-and-gender conscious means. The Nebraska DOR required that prime contractors make a good faith effort to allocate a set portion of each contract's funds to DBE subcontractors. The Eighth Circuit concluded that Gross Seed, like *Sherbrooke*, failed to prove that the DBE Program is not narrowly tailored as applied in Nebraska. Therefore, the court affirmed the district courts' decisions in *Gross Seed* and *Sherbrooke*. (See district court opinions discussed *infra*).

**5. *Sherbrooke Turf, Inc. v. Minnesota DOT*, 2001 WL 1502841, No. 00-CV-1026 (D. Minn. 2001) (unpublished opinion), aff'd 345 F.3d 964 (8<sup>th</sup> Cir. 2003)**

*Sherbrooke* involved a landscaping service contractor owned and operated by Caucasian males. The contractor sued the Minnesota DOT claiming the Federal DBE provisions of the TEA-21 are unconstitutional. *Sherbrooke* challenged the "federal affirmative action programs," the USDOT implementing regulations, and the Minnesota DOT's participation in the DBE Program. The USDOT and the FHWA intervened as Federal defendants in the case. *Sherbrooke*, 2001 WL 1502841 at \*1.

The United States District Court in *Sherbrooke* relied substantially on the Tenth Circuit Court of Appeals decision in *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147 (10<sup>th</sup> Cir. 2000), in holding that

the Federal DBE Program is constitutional. The district court addressed the issue of “random inclusion” of various groups as being within the Program in connection with whether the Federal DBE Program is “narrowly tailored.” The court held that Congress cannot enact a national program to remedy discrimination without recognizing classes of people whose history has shown them to be subject to discrimination and allowing states to include those people in its DBE Program.

The court held that the Federal DBE Program attempts to avoid the “potentially invidious effects of providing blanket benefits to minorities” in part,

by restricting a state’s DBE preference to identified groups actually appearing in the target state. In practice, this means Minnesota can only certify members of one or another group as potential DBEs if they are present in the local market. This minimizes the chance that individuals — simply on the basis of their birth — will benefit from Minnesota’s DBE program. If a group is not present in the local market, or if they are found in such small numbers that they cannot be expected to be able to participate in the kinds of construction work TEA-21 covers, that group will not be included in the accounting used to set Minnesota’s overall DBE contracting goal.

*Sherbrooke*, 2001 WL 1502841 at \*10 (D. Minn.).

The court rejected plaintiff’s claim that the Minnesota DOT must independently demonstrate how its program comports with *Croson*’s strict scrutiny standard. The court held that the “Constitution calls out for different requirements when a state implements a federal affirmative action program, as opposed to those occasions when a state or locality initiates the Program.” *Id.* at \*11 (emphasis added). The court in a footnote ruled that TEA-21, being a federal program, “relieves the state of any burden to independently carry the strict scrutiny burden.” *Id.* at \*11 n. 3. The court held states that establish DBE programs under TEA-21 and 49 CFR Part 26 are implementing a Congressionally-required program and not establishing a local one. As such, the court concluded that the state need not independently prove its DBE program meets the strict scrutiny standard. *Id.*

**6. *Gross Seed Co. v. Nebraska Department of Roads*, Civil Action File No. 4:00CV3073 (D. Neb. May 6, 2002), *aff’d* 345 F.3d 964 (8<sup>th</sup> Cir. 2003)**

The United States District Court for the District of Nebraska held in *Gross Seed Co. v. Nebraska* (with the USDOT and FHWA as Interveners), that the Federal DBE Program (codified at 49 CFR Part 26) is constitutional. The court also held that the Nebraska Department of Roads (“Nebraska DOR”) DBE Program adopted and implemented solely to comply with the Federal DBE Program is “approved” by the court because the court found that 49 CFR Part 26 and TEA-21 were constitutional.

The court concluded, similar to the court in *Sherbrooke Turf*, that the State of Nebraska did not need to independently establish that its program met the strict scrutiny requirement because the Federal DBE Program satisfied that requirement, and was therefore constitutional. The court did not engage in a thorough analysis or evaluation of the Nebraska DOR Program or its implementation of the Federal DBE Program. The court points out that the Nebraska DOR Program is adopted in

compliance with the Federal DBE Program, and that the USDOT approved the use of Nebraska DOR's proposed DBE goals for fiscal year 2001, pending completion of USDOT's review of those goals. Significantly, however, the court in its findings does note that the Nebraska DOR established its overall goals for fiscal year 2001 based upon an independent availability/disparity study.

The court upheld the constitutionality of the Federal DBE Program by finding the evidence presented by the federal government and the history of the federal legislation are sufficient to demonstrate that past discrimination does exist "in the construction industry" and that racial and gender discrimination "within the construction industry" is sufficient to demonstrate a compelling interest in individual areas, such as highway construction. The court held that the Federal DBE Program was sufficiently "narrowly tailored" to satisfy a strict scrutiny analysis based again on the evidence submitted by the federal government as to the Federal DBE Program.

**7. *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147 (10<sup>th</sup> Cir. 2000) cert. granted then dismissed as improvidently granted sub nom. *Adarand Constructors, Inc. v. Mineta*, 532 U.S. 941, 534 U.S. 103 (2001)**

This is the *Adarand* decision by the United States Court of Appeals for the Tenth Circuit, which was on remand from the earlier Supreme Court decision applying the strict scrutiny analysis to any constitutional challenge to the Federal DBE Program. See *Adarand Constructors, Inc. v. Pena*, 515 U.S. 200 (1995). The decision of the Tenth Circuit in this case was considered by the United States Supreme Court, after that court granted certiorari to consider certain issues raised on appeal. The Supreme Court subsequently dismissed the writ of certiorari "as improvidently granted" without reaching the merits of the case. The court did not decide the constitutionality of the Federal DBE Program as it applies to state DOTs or local governments.

The Supreme Court held that the Tenth Circuit had not considered the issue before the Supreme Court on certiorari, namely whether a race-based program applicable to direct federal contracting is constitutional. This issue is distinguished from the issue of the constitutionality of the USDOT DBE Program as it pertains to procurement of federal funds for highway projects let by states, and the implementation of the Federal DBE Program by state DOTs. Therefore, the Supreme Court held it would not reach the merits of a challenge to federal laws relating to direct federal procurement.

Turning to the Tenth Circuit decision in *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147 (10<sup>th</sup> Cir. 2000), the Tenth Circuit upheld in general the facial constitutionality of the Federal DBE Program. The court found that the federal government had a compelling interest in not perpetuating the effects of racial discrimination in its own distribution of federal funds and in remediating the effects of past discrimination in government contracting, and that the evidence supported the existence of past and present discrimination sufficient to justify the Federal DBE Program. The court also held that the Federal DBE Program is "narrowly tailored," and therefore upheld the constitutionality of the Federal DBE Program.

It is significant to note that the court in determining the Federal DBE Program is "narrowly tailored" focused on the current regulations, 49 CFR Part 26, and in particular § 26.1(a), (b), and (f). The court pointed out that the federal regulations instruct recipients as follows:

[y]ou must meet the maximum feasible portion of your overall goal by using race-neutral means of facilitating DBE participation, 49 CFR § 26.51(a)(2000); *see also* 49 CFR § 26.51(f)(2000) (if a recipient can meet its overall goal through race-neutral means, it must implement its program without the use of race-conscious contracting measures), and enumerate a list of race-neutral measures, *see* 49 CFR § 26.51(b)(2000). The current regulations also outline several race-neutral means available to program recipients including assistance in overcoming bonding and financing obstacles, providing technical assistance, establishing programs to assist start-up firms, and other methods. *See* 49 CFR § 26.51(b). We therefore are dealing here with revisions that emphasize the continuing need to employ non-race-conscious methods even as the need for race-conscious remedies is recognized. 228 F.3d at 1178-1179.

In considering whether the Federal DBE Program is narrowly tailored, the court also addressed the argument made by the contractor that the program is over- and under-inclusive for several reasons, including that Congress did not inquire into discrimination against each particular minority racial or ethnic group. The court held that insofar as the scope of inquiry suggested was a particular state's construction industry alone, this would be at odds with its holding regarding the compelling interest in Congress's power to enact nationwide legislation. *Id.* at 1185-1186. The court held that because of the "unreliability of racial and ethnic categories and the fact that discrimination commonly occurs based on much broader racial classifications," extrapolating findings of discrimination against the various ethnic groups "is more a question of nomenclature than of narrow tailoring." *Id.* The court found that the "Constitution does not erect a barrier to the government's effort to combat discrimination based on broad racial classifications that might prevent it from enumerating particular ethnic origins falling within such classifications." *Id.*

Finally, the Tenth Circuit did not specifically address a challenge to the letting of federally-funded construction contracts by state departments of transportation. The court pointed out that plaintiff Adarand "conceded that its challenge in the instant case is to 'the federal program, implemented by federal officials,' and not to the letting of federally-funded construction contracts by state agencies." 228 F.3d at 1187. The court held that it did not have before it a sufficient record to enable it to evaluate the separate question of Colorado DOT's implementation of race-conscious policies. *Id.* at 1187-1188.

## **8. *Geyer Signal, Inc. v. Minnesota, DOT*, 2014 WL 1309092 (D. Minn. March 31, 2014)**

In *Geyer Signal, Inc., et al. v. Minnesota DOT, USDOT, Federal Highway Administration, et al.*, Case No. 11-CV-321, United States District Court for the District Court of Minnesota, the Plaintiffs Geyer Signal, Inc. and its owner filed this lawsuit against the Minnesota DOT (MnDOT) seeking a permanent injunction against enforcement and a declaration of unconstitutionality of the Federal DBE Program and Minnesota DOT's implementation of the DBE Program on its face and as applied. Geyer Signal sought an injunction against the Minnesota DOT prohibiting it from enforcing the DBE Program or, alternatively, from implementing the Program improperly; a declaratory judgment declaring that the DBE Program violates the Equal protection element of the Fifth Amendment of the United States Constitution and/or the Equal Protection clause of the Fourteenth Amendment to the United States Constitution and is unconstitutional, or, in the alternative that Minnesota DOT's implementation of the Program is an unconstitutional violation of the Equal Protection Clause, and/or that the Program is void for vagueness; and other relief.

**Procedural background.** Plaintiff Geyer Signal is a small, family-owned business that performs traffic control work generally on road construction projects. Geyer Signal is a firm owned by a Caucasian male, who also is a named plaintiff.

Subsequent to the lawsuit filed by Geyer Signal, the USDOT and the Federal Highway Administration filed their Motion to permit them to intervene as defendants in this case. The Federal Defendant-Intervenors requested intervention on the case in order to defend the constitutionality of the Federal DBE Program and the federal regulations at issue. The Federal Defendant-Intervenors and the Plaintiffs filed a Stipulation that the Federal Defendant-Intervenors have the right to intervene and should be permitted to intervene in the matter, and consequently the Plaintiffs did not contest the Federal Defendant-Intervenor's Motion for Intervention. The Court issued an Order that the Stipulation of Intervention, agreeing that the Federal Defendant-Intervenors may intervene in this lawsuit, be approved and that the Federal Defendant-Intervenors are permitted to intervene in this case.

The Federal Defendants moved for summary judgment and the State Defendants moved to dismiss, or in the alternative for summary judgment, arguing that the DBE Program on its face and as implemented by MnDOT is constitutional. The Court concluded that the Plaintiffs, Geyer Signal and its white male owner, Kevin Kissner, raised no genuine issue of material fact with respect to the constitutionality of the DBE Program facially or as applied. Therefore, the Court granted the Federal Defendants and the State Defendants' motions for summary judgment in their entirety.

Plaintiffs alleged that there is insufficient evidence of a compelling governmental interest to support a race based program for DBE use in the fields of traffic control or landscaping. (2014 WL 1309092 at \*10) Additionally, Plaintiffs alleged that the DBE Program is not narrowly tailored because it (1) treats the construction industry as monolithic, leading to an overconcentration of DBE participation in the areas of traffic signal and landscaping work; (2) allows recipients to set contract goals; and (3) sets goals based on the number of DBEs there are, not the amount of work those DBEs can actually perform. *Id.* \*10. Plaintiffs also alleged that the DBE Program is unconstitutionally vague because it allows prime contractors to use bids from DBEs that are higher than the bids of non-DBEs, provided the increase in price is not unreasonable, without defining what increased costs are "reasonable." *Id.*

**Constitutional claims.** The Court states that the “heart of Plaintiffs’ claims is that the DBE Program and MnDOT’s implementation of it are unconstitutional because the impact of curing discrimination in the construction industry is overconcentrated in particular sub-categories of work.” *Id.* at \*11. The Court noted that because DBEs are, by definition, small businesses, Plaintiffs contend they “simply cannot perform the vast majority of the types of work required for federally-funded MnDOT projects because they lack the financial resources and equipment necessary to conduct such work. *Id.*

As a result, Plaintiffs claimed that DBEs only compete in certain small areas of MnDOT work, such as traffic control, trucking, and supply, but the DBE goals that prime contractors must meet are spread out over the entire contract. *Id.* Plaintiffs asserted that prime contractors are forced to disproportionately use DBEs in those small areas of work, and that non-DBEs in those areas of work are forced to bear the entire burden of “correcting discrimination”, while the vast majority of non-DBEs in MnDOT contracting have essentially no DBE competition. *Id.*

Plaintiffs therefore argued that the DBE Program is not narrowly tailored because it means that any DBE goals are only being met through a few areas of work on construction projects, which burden non-DBEs in those sectors and do not alleviate any problems in other sectors. *Id.* at #11.

Plaintiffs brought two facial challenges to the Federal DBE Program. *Id.* Plaintiffs allege that the DBE Program is facially unconstitutional because it is “fatally prone to overconcentration” where DBE goals are met disproportionately in areas of work that require little overhead and capital. *Id.* at 11. Second, Plaintiffs alleged that the DBE Program is unconstitutionally vague because it requires prime contractors to accept DBE bids even if the DBE bids are higher than those from non-DBEs, provided the increased cost is “reasonable” without defining a reasonable increase in cost. *Id.*

Plaintiffs also brought three as-applied challenges based on MnDOT’s implementation of the DBE Program. *Id.* at 12. First, Plaintiffs contended that MnDOT has unconstitutionally applied the DBE Program to its contracting because there is no evidence of discrimination against DBEs in government contracting in Minnesota. *Id.* Second, they contended that MnDOT has set impermissibly high goals for DBE participation. Finally, Plaintiffs argued that to the extent the DBE Federal Program allows MnDOT to correct for overconcentration, it has failed to do so, rendering its implementation of the Program unconstitutional. *Id.*

**A. Strict scrutiny.** It is undisputed that strict scrutiny applied to the Court’s evaluation of the Federal DBE Program, whether the challenge is facial or as - applied. *Id.* at \*12. Under strict scrutiny, a “statute’s race-based measures ‘are constitutional only if they are narrowly tailored to further compelling governmental interests.’” *Id.* at \*12, quoting *Grutter v. Bollinger*, 539 U.S. 306, 326 (2003).

The Court notes that the DBE Program also contains a gender conscious provision, a classification the Court says that would be subject to intermediate scrutiny. *Id.* at \*12, at n.4. Because race is also used by the Federal DBE Program, however, the Program must ultimately meet strict scrutiny, and the Court therefore analyzes the entire Program for its compliance with strict scrutiny. *Id.*

**B. Facial challenge based on overconcentration.** The Court says that in order to prevail on a facial challenge, the Plaintiff must establish that no set of circumstances exist under which the Federal DBE Program would be valid. *Id.* at \*12. The Court states that Plaintiffs bear the ultimate burden to prove that the DBE Program is unconstitutional. *Id.* at \*.



**1. Compelling governmental interest.** The Court points out that the Eighth Circuit Court of Appeals has already held the federal government has a compelling interest in not perpetuating the effects of racial discrimination in its own distribution of federal funds and in remediating the effects of past discrimination in the government contracting markets created by its disbursements. *Id.* \*13, quoting *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147, 1165 (10th Cir. 2000). The Plaintiffs did not dispute that remedying discrimination in federal transportation contracting is a compelling governmental interest. *Id.* at \*13. In accessing the evidence offered in support of a finding of discrimination, the Court concluded that Defendants have articulated a compelling interest underlying enactment of the DBE Program. *Id.*

Second, the Court states that the government must demonstrate a strong basis in the evidence supporting its conclusion that race-based remedial action was necessary to further the compelling interest. *Id.* at \*13. In assessing the evidence offered in support of a finding of discrimination, the Court considers both direct and circumstantial evidence, including post-enactment evidence introduced by defendants as well as the evidence in the legislative history itself. *Id.* The party challenging the constitutionality of the DBE Program bears the burden of demonstrating that the government's evidence did not support an inference of prior discrimination. *Id.*

**Congressional evidence of discrimination: disparity studies and barriers.** Plaintiffs argued that the evidence relied upon by Congress in reauthorizing the DBE Program is insufficient and generally critique the reports, studies, and evidence from the Congressional record produced by the Federal Defendants. *Id.* at \*13. But, the Court found that Plaintiffs did not raise any specific issues with respect to the Federal Defendants' proffered evidence of discrimination. *Id.* \*14. Plaintiffs had argued that no party could ever afford to retain an expert to analyze the numerous studies submitted as evidence by the Federal Defendants and find all of the flaws. *Id.* \*14. Federal Defendants had proffered disparity studies from throughout the United States over a period of years in support of the Federal DBE Program. *Id.* at \*14. Based on these studies, the Federal Defendants' consultant concluded that minorities and women formed businesses at disproportionately lower rates and their businesses earn statistically less than businesses owned by men or non-minorities. *Id.* at \*6.

The Federal Defendants' consultant also described studies supporting the conclusion that there is credit discrimination against minority- and women-owned businesses, concluded that there is a consistent and statistically significant underutilization of minority- and women-owned businesses in public contracting, and specifically found that discrimination existed in MnDOT contracting when no race-conscious efforts were utilized. *Id.* \*6. The Court notes that Congress had considered a plethora of evidence documenting the continued presence of discrimination in transportation projects utilizing Federal dollars. *Id.* at \*5.

The Court concluded that neither of the Plaintiffs' contentions established that Congress lacked a substantial basis in the evidence to support its conclusion that race-based remedial action was necessary to address discrimination in public construction contracting. *Id.* at \*14. The Court rejected Plaintiffs' argument that because Congress found multiple forms of discrimination against minority- and women-owned business, that evidence showed Congress failed to also find that such businesses specifically face discrimination in public contracting, or that such discrimination is not relevant to the effect that discrimination has on public contracting. *Id.*

The Court referenced the decision in *Adarand Constructors, Inc.* 228 F.3d at 1175-1176. In *Adarand*, the Court that found evidence relevant to Congressional enactment of the DBE Program to include that both race-based barriers to entry and the ongoing race-based impediments to success faced by minority subcontracting enterprises are caused either by continuing discrimination or the lingering effects of past discrimination on the relevant market. *Id.* at \*14.

The Court, citing again with approval the decision in *Adarand Constructors, Inc.*, found the evidence presented by the federal government demonstrates the existence of two kinds of discriminatory barriers to minority subcontracting enterprises, both of which show a strong link between racial disparities in the federal government's disbursements of public funds for construction contracts and the channeling of those funds due to private discrimination. *Id.* at \*14, *quoting* *Adarand Constructors, Inc.* 228 F.3d at 1167-68. The first discriminatory barriers are to the formation of qualified minority subcontracting enterprises due to private discrimination. *Id.* The second discriminatory barriers are to fair competition between minority and non-minority subcontracting enterprises, again due to private discrimination. *Id.* Both kinds of discriminatory barriers preclude existing minority firms from effectively competing for public construction contracts. *Id.*

Accordingly, the Court found that Congress' consideration of discriminatory barriers to entry for DBEs as well as discrimination in existing public contracting establish a strong basis in the evidence for reauthorization of the Federal DBE Program. *Id.* at \*14.

**Court rejects Plaintiffs' general critique of evidence as failing to meet their burden of proof.** The Court held that Plaintiffs' general critique of the methodology of the studies relied upon by the Federal Defendants is similarly insufficient to demonstrate that Congress lacked a substantial basis in the evidence. *Id.* at \*14. The Court stated that the Eighth Circuit Court of Appeals has already rejected Plaintiffs' argument that Congress was required to find specific evidence of discrimination in Minnesota in order to enact the national Program. *Id.* at \*14.

Finally, the Court pointed out that Plaintiffs have failed to present affirmative evidence that no remedial action was necessary because minority-owned small businesses enjoy non-discriminatory access to and participation in highway contracts. *Id.* at \*15. Thus, the Court concluded that Plaintiffs failed to meet their ultimate burden to prove that the Federal DBE Program is unconstitutional on this ground. *Id.* at \*15, *quoting* *Sherbrooke Turf, Inc.*, 345 F.3d at 971-73.

Therefore, the Court held that Plaintiffs did not meet their burden of raising a genuine issue of material fact as to whether the government met its evidentiary burden in reauthorizing the DBE Federal Program, and granted summary judgment in favor of the Federal Defendants with respect to the government's compelling interest. *Id.* at \*15.

**2. Narrowly tailored.** The Court states that several factors are examined in determining whether race-conscious remedies are narrowly tailored, and that numerous Federal Courts have already concluded that the DBE Federal Program is narrowly tailored. *Id.* at \*15. Plaintiffs in this case did not dispute the various aspects of the Federal DBE Program that courts have previously found to demonstrate narrowly tailoring. *Id.* Instead, Plaintiffs argue only that the Federal DBE Program is not narrowly tailored on its face because of overconcentration.

**Overconcentration.** Plaintiffs argued that if the recipients of federal funds use overall industry participation of minorities to set goals, yet limit actual DBE participation to only defined small businesses that are limited in the work they can perform, there is no way to avoid overconcentration of DBE participation in a few, limited areas of MnDOT work. *Id.* at \*15. Plaintiffs asserted that small businesses cannot perform most of the types of work needed or necessary for large highway projects, and if they had the capital to do it, they would not be small businesses. *Id.* at \*16. Therefore, Plaintiffs argued the DBE Program will always be overconcentrated. *Id.*

The Court states that in order for Plaintiffs to prevail on this facial challenge, Plaintiffs must establish that the overconcentration it identifies is unconstitutional, and that there are no circumstances under which the Federal DBE Program could be operated without overconcentration. *Id.* The Court concludes that Plaintiffs' claim fails on the basis that there are circumstances under which the Federal DBE Program could be operated without overconcentration. *Id.*

First, the Court found that Plaintiffs fail to establish that the DBE Program goals will always be fulfilled in a manner that creates overconcentration, because they misapprehend the nature of the goal setting mandated by the DBE Program. *Id.* at \*16. The Court states that recipients set goals for DBE participation based on evidence of the availability of ready, willing and able DBEs to participate on DOT-assisted contracts. *Id.* The DBE Program, according to the Court, necessarily takes into account, when determining goals, that there are certain types of work that DBEs may never be able to perform because of the capital requirements. *Id.* In other words, if there is a type of work that no DBE can perform, there will be no demonstrable evidence of the availability of ready, willing and able DBEs in that type of work, and those non-existent DBEs will not be factored into the level of DBE participation that a locality would expect absent the effects of discrimination. *Id.*

Second, the Court found that even if the DBE Program could have the incidental effect of overconcentration in particular areas, the DBE Program facially provides ample mechanisms for a recipient of federal funds to address such a problem. *Id.* at \*16. The Court notes that a recipient retains substantial flexibility in setting individual contract goals and specifically may consider the type of work involved, the location of the work, and the availability of DBEs for the work of the particular contract. *Id.* If overconcentration presents itself as a problem, the Court points out that a recipient can alter contract goals to focus less on contracts that require work in an already overconcentrated area and instead involve other types of work where overconcentration of DBEs is not present. *Id.*

The federal regulations also require contractors to engage in good faith efforts that require breaking out the contract work items into economically feasible units to facilitate DBE participation. *Id.* Therefore, the Court found, the regulations anticipate the possible issue identified by Plaintiffs and require prime contractors to subdivide projects that would otherwise typically require more capital or equipment than a single DBE can acquire. *Id.* Also, the Court, states that recipients may obtain waivers of the DBE Program's provisions pertaining to overall goals, contract goals, or good faith efforts, if, for example, local conditions of overconcentration threaten operation of the DBE Program. *Id.*

The Court also rejects Plaintiffs claim that 49 CFR § 26.45(h), which provides that recipients are not allowed to subdivide their annual goals into "group-specific goals", but rather must provide for participation by all certified DBEs, as evidence that the DBE Program leads to overconcentration. *Id.*

at \*16. The Court notes that other courts have interpreted this provision to mean that recipients cannot apportion its DBE goal among different minority groups, and therefore the provision does not appear to prohibit recipients from identifying particular overconcentrated areas and remedying overconcentration in those areas. *Id.* at \*16. And, even if the provision operated as Plaintiffs suggested, that provision is subject to waiver and does not affect a recipient's ability to tailor specific contract goals to combat overconcentration. *Id.* at \*16, n. 5.

The Court states with respect to overconcentration specifically, the federal regulations provide that recipients may use incentives, technical assistance, business development programs, mentor-protégé programs, and other appropriate measures designed to assist DBEs in performing work outside of the specific field in which the recipient has determined that non-DBEs are unduly burdened. *Id.* at \*17. All of these measures could be used by recipients to shift DBEs from areas in which they are overconcentrated to other areas of work. *Id.* at \*17.

Therefore, the Court held that because the DBE Program provides numerous avenues for recipients of federal funds to combat overconcentration, the Court concluded that Plaintiffs' facial challenge to the Program fails, and granted the Federal Defendants' motion for summary judgment. *Id.*

**C. Facial challenged based on vagueness.** The Court held that Plaintiffs could not maintain a facial challenge against the Federal DBE Program for vagueness, as their constitutional challenges to the Program are not based in the First Amendment. *Id.* at \*17. The Court states that the Eighth Circuit Court of Appeals has held that courts need not consider facial vagueness challenges based upon constitutional grounds other than the First Amendment. *Id.*

The Court thus granted Federal Defendants' motion for summary judgment with respect to Plaintiffs' facial claim for vagueness based on the allegation that the Federal DBE Program does not define "reasonable" for purposes of when a prime contractor is entitled to reject a DBEs' bid on the basis of price alone. *Id.*

**D. As-Applied Challenges to MnDOT's DBE Program: MnDOT's program held narrowly tailored.** Plaintiffs brought three as-applied challenges against MnDOT's implementation of the Federal DBE Program, alleging that MnDOT has failed to support its implementation of the Program with evidence of discrimination in its contracting, sets inappropriate goals for DBE participation, and has failed to respond to overconcentration in the traffic control industry. *Id.* at \*17.

**1. Alleged failure to find evidence of discrimination.** The Court held that a state's implementation of the Federal DBE Program must be narrowly tailored. *Id.* at \*18. To show that a state has violated the narrow tailoring requirement of the Federal DBE Program, the Court says a challenger must demonstrate that "better data was available" and the recipient of federal funds "was otherwise unreasonable in undertaking [its] thorough analysis and in relying on its results." *Id.*, quoting *Sherbrook Turf, Inc.* at 973.

Plaintiffs' expert critiqued the statistical methods used and conclusions drawn by the consultant for MnDOT in finding that discrimination against DBEs exists in MnDOT contracting sufficient to support operation of the DBE Program. *Id.* at \*18. Plaintiffs' expert also critiqued the measures of DBE availability employed by the MnDOT consultant and the fact he measured discrimination in both prime and subcontracting markets, instead of solely in subcontracting markets. *Id.*

Plaintiffs present no affirmative evidence that discrimination does not exist. The Court held that Plaintiffs' disputes with MnDOT's conclusion that discrimination exists in public contracting are insufficient to establish that MnDOT's implementation of the Federal DBE Program is not narrowly tailored. *Id.* at \*18. First, the Court found that it is insufficient to show that "data was susceptible to multiple interpretations," instead, plaintiffs must "present affirmative evidence that no remedial action was necessary because minority-owned small businesses enjoy non-discriminatory access to and participation in highway contracts." *Id.* at \*18, *quoting Sherbrooke Turf, Inc.*, 345 F.3d at 970. Here, the Court found, Plaintiffs' expert has not presented affirmative evidence upon which the Court could conclude that no discrimination exists in Minnesota's public contracting. *Id.* at \*18.

As for the measures of availability and measurement of discrimination in both prime and subcontracting markets, both of these practices are included in the federal regulations as part of the mechanisms for goal setting. *Id.* at \*18. The Court found that it would make little sense to separate prime contractor and subcontractor availability, when DBEs will also compete for prime contracts and any success will be reflected in the recipient's calculation of success in meeting the overall goal. *Id.* at \*18, *quoting Northern Contracting, Inc. v. Illinois*, 473 F.3d 715, 723 (7th Cir. 2007). Because these factors are part of the federal regulations defining state goal setting that the Eighth Circuit Court of Appeals has already approved in assessing MnDOT's compliance with narrow tailoring in *Sherbrooke Turf*, the Court concluded these criticisms do not establish that MnDOT has violated the narrow tailoring requirement. *Id.* at \*18.

In addition, the Court held these criticisms fail to establish that MnDOT was unreasonable in undertaking its thorough analysis and relying on its results, and consequently do not show lack of narrow tailoring. *Id.* at \*18. Accordingly, the Court granted the State Defendants' motion for summary judgment with respect to this claim.

**2. Alleged inappropriate goal setting.** Plaintiffs second challenge was to the aspirational goals MnDOT has set for DBE performance between 2009 and 2015. *Id.* at \*19. The Court found that the goal setting violations the Plaintiffs alleged are not the types of violations that could reasonably be expected to recur. *Id.* Plaintiffs raised numerous arguments regarding the data and methodology used by MnDOT in setting its earlier goals. *Id.* But, Plaintiffs did not dispute that every three years MnDOT conducts an entirely new analysis of discrimination in the relevant market and establishes new goals. *Id.* Therefore, disputes over the data collection and calculations used to support goals that are no longer in effect are moot. *Id.* Thus, the Court only considered Plaintiffs' challenges to the 2013–2015 goals. *Id.*

Plaintiffs raised the same challenges to the 2013–2015 goals as it did to MnDOT's finding of discrimination, namely that the goals rely on multiple approaches to ascertain the availability of DBEs and rely on a measurement of discrimination that accounts for both prime and subcontracting markets. *Id.* at \*19. Because these challenges identify only a different interpretation of the data and do not establish that MnDOT was unreasonable in relying on the outcome of the consultants' studies, Plaintiffs have failed to demonstrate a material issue of fact related to MnDOT's narrow tailoring as it relates to goal setting. *Id.*

**3. Alleged overconcentration in the traffic control market.** Plaintiffs' final argument was that MnDOT's implementation of the DBE Program violates the Equal Protection Clause because MnDOT has failed to find overconcentration in the traffic control market and correct for such

overconcentration. *Id.* at \*20. MnDOT presented an expert report that reviewed four different industries into which Plaintiffs' work falls based on NAICs codes that firms conducting traffic control-type work identify themselves by. *Id.* After conducting a disproportionality comparison, the consultant concluded that there was not statistically significant overconcentration of DBEs in Plaintiffs' type of work.

Plaintiffs' expert found that there is overconcentration, but relied upon six other contractors that have previously bid on MnDOT contracts, which Plaintiffs believe perform the same type of work as Plaintiff. *Id.* at \*20. But, the Court found Plaintiffs have provided no authority for the proposition that the government must conform its implementation of the DBE Program to every individual business' self-assessment of what industry group they fall into and what other businesses are similar. *Id.*

The Court held that to require the State to respond to and adjust its calculations on account of such a challenge by a single business would place an impossible burden on the government because an individual business could always make an argument that some of the other entities in the work area the government has grouped it into are not alike. *Id.* at \*20. This, the Court states, would require the government to run endless iterations of overconcentration analyses to satisfy each business that non-DBEs are not being unduly burdened in its self-defined group, which would be quite burdensome. *Id.*

Because Plaintiffs did not show that MnDOT's reliance on its overconcentration analysis using NAICs codes was unreasonable or that overconcentration exists in its type of work as defined by MnDOT, it has not established that MnDOT has violated narrow tailoring by failing to identify overconcentration or failing to address it. *Id.* at \*20. Therefore, the Court granted the State Defendants' motion for summary judgment with respect to this claim.

**III. Claims Under 42 U.S.C. § 1981 and 42 U.S.C. § 2000.** Because the Court concluded that MnDOT's actions are in compliance with the Federal DBE Program, its adherence to that Program cannot constitute a basis for a violation of § 1981. *Id.* at \*21. In addition, because the Court concluded that Plaintiffs failed to establish a violation of the Equal Protection Clause, it granted the Defendants' motions for summary judgment on the 42 U.S.C. § 2000d claim.

**Holding.** Therefore, the Court granted the Federal Defendants' motion for summary judgment and the States' Defendants' motion to dismiss/motion for summary judgment, and dismissed all the claims asserted by the Plaintiffs.

**Notice of Appeal.** At the time of this report, Geyer Signal, Inc. has filed a Notice of Appeal to the United States Court of Appeals for the Eighth Circuit, which appeal is pending.

**9. *Midwest Fence Corporation v. United States Department of Transportation and Federal Highway Administration, the Illinois Department of Transportation, the Illinois State Toll Highway Authority, et al.*, 2015 WL 1396376 (N.D. Ill., March 24, 2015).**

In *Midwest Fence Corporation v. USDOT, the FHWA, the Illinois DOT and the Illinois State Toll Highway Authority*, Case No. 1:10-3-CV-5627, United States District Court for the Northern District of Illinois, Eastern Division, Plaintiff Midwest Fence Corporation, which is a guardrail, bridge rail and

fencing contractor owned and controlled by white males challenged the constitutionality and the application of the USDOT, Disadvantaged Business Enterprise (“DBE”) Program. In addition, Midwest Fence similarly challenged the Illinois Department of Transportation’s (“IDOT”) implementation of the Federal DBE Program for federally-funded projects, IDOT’s implementation of its own DBE Program for state-funded projects and the Illinois State Tollway Highway Authority’s (“Tollway”) separate DBE Program.

The federal district court in 2011 issued an Opinion and Order denying the Defendants’ Motion to Dismiss for lack of standing, denying the Federal Defendants’ Motion to Dismiss certain Counts of the Complaint as a matter of law, granting IDOT Defendants’ Motion to Dismiss certain Counts and granting the Tollway Defendants’ Motion to Dismiss certain Counts, but giving leave to Midwest to replead subsequent to this Order. *Midwest Fence Corp. v. United States DOT, Illinois DOT, et al.*, 2011 WL 2551179 (N.D. Ill. June 27, 2011).

Midwest Fence in its Third Amended Complaint challenged the constitutionality of the Federal DBE Program on its face and as applied, and challenged the IDOT’s implementation of the Federal DBE Program. Midwest Fence also sought a declaration that the USDOT regulations have not been properly authorized by Congress and a declaration that SAFETEA-LU is unconstitutional. Midwest Fence sought relief from the IDOT Defendants, including a declaration that state statutes authorizing IDOT’s DBE Program for State-funded contracts are unconstitutional; a declaration that IDOT does not follow the USDOT regulations; a declaration that the IDOT DBE Program is unconstitutional and other relief against the IDOT. The remaining Counts sought relief against the Tollway Defendants, including that the Tollway’s DBE Program is unconstitutional, and a request for punitive damages against the Tollway Defendants. The court in 2012 granted the Tollway Defendants’ Motion to Dismiss Midwest Fence’s request for punitive damages.

**Equal protection framework, strict scrutiny and burden of proof.** The court held that under a strict scrutiny analysis, the burden is on the government to show both a compelling interest and narrowly tailoring. 2015 WL 1396376 at \*7. The government must demonstrate a strong basis in evidence for its conclusion that remedial action is necessary. *Id.* Since the Supreme Court decision in *Croson*, numerous courts have recognized that disparity studies provide probative evidence of discrimination. *Id.* The court stated that an inference of discrimination may be made with empirical evidence that demonstrates a significant statistical disparity between the number of qualified minority contractors and the number of such contractors actually engaged by the locality or the locality’s prime contractors. *Id.* The court said that anecdotal evidence may be used in combination with statistical evidence to establish a compelling governmental interest. *Id.*

In addition to providing “hard proof” to back its compelling interest, the court stated that the government must also show that the challenged program is narrowly tailored. *Id.* at \*7. While narrow tailoring requires “serious, good faith consideration of workable race-neutral alternatives,” the court said it does not require “exhaustion of every conceivable race-neutral alternative.” *Id.*, citing *Grutter v. Bollinger*, 539 U.S. 306, 339 (2003); *Fischer v. Univ. of Texas at Austin*, 133 S.Ct. 2411, 2420 (2013).

Once the governmental entity has shown acceptable proof of a compelling interest in remedying past discrimination and illustrated that its plan is narrowly tailored to achieve this goal, the party challenging the affirmative action plan bears the ultimate burden of proving that the plan is

unconstitutional. 2015 WL 1396376 at \*7. To successfully rebut the government’s evidence, a challenger must introduce “credible, particularized evidence” of its own. *Id.*

This can be accomplished, according to the court, by providing a neutral explanation for the disparity between DBE utilization and availability, showing that the government’s data is flawed, demonstrating that the observed disparities are statistically insignificant, or presenting contrasting statistical data. *Id.* Conjecture and unsupported criticisms of the government’s methodology are insufficient. *Id.*

**Standing.** The court found that Midwest had standing to challenge the Federal DBE Program, IDOT’s implementation of it, and the Tollway Program. *Id.* at \*8. The court, however, did not find that Midwest had presented any facts suggesting its inability to compete on an equal footing for the Target Market Program contracts. The Target Market Program identified a variety of remedial actions that IDOT was authorized to take in certain Districts, which included individual contract goals, DBE participation incentives, as well as set-asides. *Id.* at \*9.

The court noted that Midwest did not identify any contracts that were subject to the Target Market Program, nor identify any set-asides that were in place in these districts that would have hindered its ability to compete for fencing and guardrails work. *Id.* at \*9. Midwest did not allege that it would have bid on contracts set aside pursuant to the Target Market Program had it not been prevented from doing so. *Id.* Because nothing in the record Midwest provided suggested that the Target Market Program impeded Midwest’s ability to compete for work in these Districts, the court dismissed Midwest’s claim relating to the Target Market Program for lack of standing.

**Facial challenge to the Federal DBE Program.** The court found that remedying the effects of race and gender discrimination within the road construction industry is a compelling governmental interest. The court also found that the Federal Defendants have supported their compelling interest with a strong basis in evidence. *Id.* at \*11. The Federal Defendants, the court said, presented an extensive body of testimony, reports, and studies that they claim provided the strong basis in evidence for their conclusion that race and gender-based classifications are necessary. *Id.* The court took judicial notice of the existence of Congressional hearings and reports and the collection of evidence presented to Congress in support of the Federal DBE Program’s 2012 reauthorization under MAP-21, including both statistical and anecdotal evidence. *Id.*

The court also considered a report from a consultant who reviewed 95 disparity and availability studies concerning minority-and women-owned businesses, as well as anecdotal evidence, that were completed from 2000 to 2012. *Id.* at \*11. Sixty-four of the studies had previously been presented to Congress. *Id.* The studies examine procurement for over 100 public entities and funding sources across 32 states. *Id.* The consultant’s report opined that metrics such as firm revenue, number of employees, and bonding limits should not be considered when determining DBE availability because they are all “likely to be influenced by the presence of discrimination if it exists” and could potentially result in a built-in downward bias in the availability measure. *Id.* at \*11.

To measure disparity, the consultant divided DBE utilization by availability and multiplied by 100 to calculate a “disparity index” for each study. *Id.* at \*11. The report found 66 percent of the studies showed a disparity index of 80 or below, that is, significantly underutilized relative to their availability. *Id.* The report also examined data that showed lower earnings and business formation



rates among women and minorities, even when variables such as age and education were held constant. *Id.* The report concluded that the disparities were not attributable to factors other than race and sex and were consistent with the presence of discrimination in construction and related professional services. *Id.*

The court distinguished the Federal Circuit decision in *Rothe Dev. Corp. v. Dep't. of Def.*, 545 F. 3d 1023 (Fed. Cir. 2008) where the Federal Circuit Court held insufficient the reliance on only six disparity studies to support the government's compelling interest in implementing a national program. *Id. at* \*12, *citing Rothe*, 545 F. 3d at 1046. The court here noted the consultant report supplements the testimony and reports presented to Congress in support of the Federal DBE Program, which courts have found to establish a "strong basis in evidence" to support the conclusion that race-and gender-conscious action is necessary. *Id. at* \*12.

The court found through the evidence presented by the Federal Defendants satisfied their burden in showing that the Federal DBE Program stands on a strong basis in evidence. *Id. at* \*12. The Midwest expert's suggestion that the studies used in consultant's report do not properly account for capacity, the court stated, does not compel the court to find otherwise. The court *quoting Adarand VII*, 228 F.3d at 1173 N.H. (10<sup>th</sup> Cir. 2000) said that general criticism of disparity studies, as opposed to particular evidence undermining the reliability of the particular disparity studies relied upon by the government, is of little persuasive value and does not compel the court to discount the disparity evidence. *Id.* Midwest failed to present "affirmative evidence" that no remedial action was necessary. *Id.*

**Federal DBE Program is narrowly tailored.** Once the government has established a compelling interest for implementing a race-conscious program, it must show that the program is narrowly tailored to achieve this interest. *Id. at* \*12. In determining whether a program is narrowly tailored, courts examine several factors, including (a) the necessity for the relief and efficacy of alternative race-neutral measures, (b) the flexibility and duration of the relief, including the availability of waiver provisions, (c) the relationship of the numerical goals to the relevant labor market, and (d) the impact of the relief on the rights of third parties. *Id.* The court stated that courts may also assess whether a program is "overinclusive." *Id.* The court found that each of the above factors supports the conclusion that the Federal DBE Program is narrowly tailored. *Id.*

First, the court said that under the federal regulations, recipients of federal funds can only turn to race- and gender-conscious measures after they have attempted to meet their DBE participation goal through race-neutral means. *Id. at* \*13. The court noted that race-neutral means include making contracting opportunities more accessible to small businesses, providing assistance in obtaining bonding and financing, and offering technical and other support services. *Id.* The court found that the regulations require serious, good faith consideration of workable race-neutral alternatives. *Id.*

Second, the federal regulations contain provisions that limit the Federal DBE Program's duration and ensure its flexibility. *Id. at* \*13. The court found that the Federal DBE Program lasts only as long as its current authorizing act allows, noting that with each reauthorization, Congress must reevaluate the Federal DBE Program in light of supporting evidence. *Id.* The court also found that the Federal DBE Program affords recipients of federal funds and prime contractors substantial flexibility. *Id. at* \*13. Recipients may apply for exemptions or waivers, releasing them from program requirements. *Id.*

Prime contractors can apply to IDOT for a “good faith efforts waiver” on an individual contract goal. *Id.*

The court stated the availability of waivers is particularly important in establishing flexibility. *Id. at \*13.* The court rejected Midwest’s argument that the federal regulations impose a quota in light of the Program’s explicit waiver provision. *Id.* Based on the availability of waivers, coupled with regular congressional review, the court found that the Federal DBE Program is sufficiently limited and flexible. *Id.*

Third, the court said that the Federal DBE Program employs a two-step goal-setting process that ties DBE participation goals by recipients of federal funds to local market conditions. *Id. at \*13.* The court pointed out that the regulations delegate goal setting to recipients of federal funds who tailor DBE participation to local DBE availability. *Id.* The court found that the Federal DBE Program’s goal-setting process requires states to focus on establishing realistic goals for DBE participation that are closely tied to the relevant labor market. *Id.*

Fourth, the federal regulations, according to the court, contain provisions that seek to minimize the Program’s burden on non-DBEs. *Id. at \*13.* The court pointed out the following provisions aim to keep the burden on non-DBEs minimal: the Federal DBE Program’s presumption of social and economic disadvantage is rebuttable; race is not a determinative factor; in the event DBEs become “overconcentrated” in a particular area of contract work, recipients must take appropriate measures to address the overconcentration; the use of race-neutral measures; and the availability of good faith efforts waivers. *Id. at \*13.*

The court said Midwest’s primary argument is that the practice of states to award prime contracts to the lowest bidder, and the fact the federal regulations prescribe that DBE participation goals be applied to the value of the entire contract, unduly burdens non-DBE subcontractors. *Id. at \*14.* Midwest argued that because most DBEs are small subcontractors, setting goals as a percentage of all contract dollars, while requiring a remedy to come only from subcontracting dollars, unduly burdens smaller, specialized non-DBEs. *Id.* The court found that the fact innocent parties may bear some of the burden of a DBE program is itself insufficient to warrant the conclusion that a program is not narrowly tailored. *Id.* The court also found that strong policy reasons support the Federal DBE Program’s approach. *Id.*

The court stated that congressional testimony and the expert report from the Federal Defendants provide evidence that the Federal DBE Program is not overly inclusive. *Id. at \*14.* The court noted the report observed statistically significant disparities in business formation and earnings rates in all 50 states for all minority groups and for non-minority women. *Id.*

The court said that Midwest did not attempt to rebut the Federal Defendants’ evidence. *Id. at \*14.* Therefore, because the Federal DBE Program stands on a strong basis in evidence and is narrowly tailored to achieve the goal of remedying discrimination, the court found the Program is constitutional on its face. *Id. at \*14.* The court thus granted summary judgment in favor of the Federal Defendants. *Id.*

**As-applied challenge to IDOT’s implementation of the Federal DBE Program.** In addition to challenging the Federal DBE Program on its face, Midwest also argued that it is unconstitutional as

applied. *Id.* The court stated because the Federal DBE Program is applied to Midwest through IDOT, the court must examine IDOT's implementation of the Federal DBE Program. *Id.* Following the Seventh Circuit's decision in *Northern Contracting v. Illinois DOT*, the court said that whether the Federal DBE Program is unconstitutional as applied is a question of whether IDOT exceeded its authority in implementing it. *Id.* at \*14, citing *Northern Contracting, Inc. v. Illinois*, 473 F.3d 715 at 722 (7<sup>th</sup> Cir. 2007). The court, quoting *Northern Contracting*, held that a challenge to a state's application of a federally mandated program must be limited to the question of whether the state exceeded its authority. *Id.* at \*14.

IDOT not only applies the Federal DBE Program to USDOT-assisted projects, but it also applies the Federal DBE Program to state-funded projects. *Id.* at \*14. The court, therefore, held it must determine whether the IDOT Defendants have established a compelling reason to apply the IDOT Program to state-funded projects in Illinois. *Id.*

The court pointed out that the Federal DBE Program delegates the narrow tailoring function to the state, and thus, IDOT must demonstrate that there is a demonstrable need for the implementation of the Federal DBE Program within its jurisdiction. *Id.* at \*14. Accordingly, the court assessed whether IDOT has established evidence of discrimination in Illinois sufficient to (1) support its application of the Federal DBE Program to state-funded contracts, and (2) demonstrate that IDOT's implementation of the Federal DBE Program is limited to a place where race-based measures are demonstrably needed. *Id.*

**IDOT's evidence of discrimination and DBE availability in Illinois.** The evidence that IDOT has presented to establish the existence of discrimination in Illinois included two studies, one that was done in 2004 and the other in 2011. *Id.* at \*15. The court said that the 2004 study uncovered disparities in earnings and business formation rates among women and minorities in the construction and engineering fields that the study concluded were consistent with discrimination. IDOT maintained that the 2004 study and the 2011 study must be read in conjunction with one another. *Id.* at \*15. The court found that the 2011 study provided evidence to establish the disparity from which IDOT's inference of discrimination primarily arises. *Id.* at \*15.

The 2011 study compared the proportion of contracting dollars awarded to DBEs (utilization) with the availability of DBEs. *Id.* The study determined availability through multiple sources, including bidders lists, prequalified business lists, and other methods recommended in the federal regulations. *Id.* The study applied NAICS codes to different types of contract work, assigning greater weight to categories of work in which IDOT had expended the most money. *Id.* This resulted in a "weighted" DBE availability calculation. *Id.*

The 2011 study examined prime and subcontracts and anecdotal evidence concerning race and gender discrimination in the Illinois road construction industry, including one-on-one interviews and a survey of more than 5,000 contractors. *Id.* at \*15. The 2011 study, the court said, contained a regression analysis of private sector data and found disparities in earnings and business ownership rates among minorities and women, even when controlling for race- and gender-neutral variables. *Id.*

The study concluded that there was a statistically significant underutilization of DBEs in the award of both prime and subcontracts in Illinois. *Id.* For example, the court noted the difference the study found in the percentage of available prime construction contractors to the percentage of prime

construction contracts under \$500,000, and the percentage of available construction subcontractors to the amount of percentage of dollars received of construction subcontracts. *Id.*

IDOT presented certain evidence to measure DBE availability in Illinois. The court pointed out that the 2004 study and two subsequent Goal-Setting Reports were used in establishing IDOT's DBE participation goal. *Id.* at \*15. The 2004 study arrived at IDOT's 22.77 percent DBE participation goal in accordance with the two-step process defined in the federal regulations. *Id.* The court stated the 2004 study employed a seven-step "custom census" approach to calculate baseline DBE availability under step one of the regulations. *Id.*

The process begins by identifying the relevant markets in which IDOT operates and the categories of businesses that account for the bulk of IDOT spending. *Id.* at \*15. The industries and counties in which IDOT expends relatively more contract dollars receive proportionately higher weights in the ultimate calculation of statewide DBE availability. *Id.* The study then counts the number of businesses in the relevant markets, and identifies which are minority- and women-owned. *Id.* To ensure the accuracy of this information, the study provides that it takes additional steps to verify the ownership status of each business. *Id.* Under step two of the regulations, the study adjusted this figure to 27.51 percent based on Census Bureau data. *Id.* According to the study, the adjustment takes into account its conclusion that baseline numbers are artificially lower than what would be expected in a race-neutral marketplace. *Id.*

IDOT used separate Goal-Setting Reports that calculated IDOT's DBE participation goal pursuant to the two-step process in the federal regulations, drawing from bidders lists, DBE directories, and the 2011 study to calculate baseline DBE availability. *Id.* at \*16. The study and the Goal-Setting Reports gave greater weight to the types of contract work in which IDOT had expended relatively more money. *Id.*

**Court rejected Midwest arguments as to the data and evidence.** The court rejected the challenges by Midwest to the accuracy of IDOT's data. For example, Midwest argued that the anecdotal evidence contained in the 2011 study does not prove discrimination. *Id.* at \*16. The court stated, however, where anecdotal evidence has been offered in conjunction with statistical evidence, it may lend support to the government's determination that remedial action is necessary. *Id.* at \*16. The court noted that anecdotal evidence on its own could not be used to show a general policy of discrimination. *Id.*

The court rejected another argument by Midwest that the data collected after IDOT's implementation of the Federal DBE Program may be biased because anything observed about the public sector may be affected by the DBE Program. *Id.* at \*16. The court rejected that argument finding post-enactment evidence of discrimination permissible. *Id.*

Midwest's main objection to the IDOT evidence, according to the court, is that it failed to account for capacity when measuring DBE availability and underutilization. *Id.* at \*16. Midwest argued that IDOT's disparity studies failed to rule out capacity as a possible explanation for the observed disparities. *Id.* at \*16.

IDOT argued that on prime contracts under \$500,000, capacity is a variable that makes little difference. *Id.* at \*17. Prime contracts of varying sizes under \$500,000 were distributed to DBEs and

non-DBEs alike at approximately the same rate. *Id.* at \*17. IDOT also argued that through regression analysis, the 2011 study demonstrated factors other than discrimination did not account for the disparity between DBE utilization and availability. *Id.*

The court stated that despite Midwest's argument that the 2011 study took insufficient measures to rule out capacity as a race-neutral explanation for the underutilization of DBEs, the Supreme Court has indicated that a regression analysis need not take into account "all measurable variables" to rule out race-neutral explanations for observed disparities. *Id.* at \*17 *quoting Bazemore v. Friday*, 478 U.S. 385, 400 (1986).

**Midwest criticisms insufficient, speculative and conjecture – no independent statistical analysis; IDOT followed Northern Contracting and did not exceed the federal regulations.** The court found Midwest's criticisms insufficient to rebut IDOT's evidence of discrimination or discredit IDOT's methods of calculating DBE availability. *Id.* at \*17. First, the court said, the "evidence" offered by Midwest's expert reports "is speculative at best." *Id.* at \*17. The court found that for a reasonable jury to find in favor of Midwest, Midwest would have to come forward with "credible, particularized evidence" of its own, such as a neutral explanation for the disparity, or contrasting statistical data. *Id.* at \*17. The court held that Midwest failed to make the showing in this case. *Id.*

Second, the court stated that IDOT's method of calculating DBE availability is consistent with the federal regulations and has been endorsed by the Seventh Circuit. *Id.* at \*17. The federal regulations, the court said, approve a variety of methods for accurately measuring ready, willing, and available DBEs, such as the use of DBE directories, Census Bureau data, and bidders lists. *Id.* The court found that these are the methods the 2011 study adopted in calculating DBE availability. *Id.*

The court said that the Seventh Circuit Court of Appeals approved the "custom census" approach as consistent with the federal regulations. *Id.* at \*17, *citing to Northern Contracting v. Illinois DOT*, 473 F.3d at 723. The court noted the Seventh Circuit rejected the argument that availability should be based on a simple count of registered and prequalified DBEs under Illinois law, finding no requirement in the federal regulations that a recipient must so narrowly define the scope of ready, willing, and available firms. *Id.* The court also rejected the notion that an availability measure should distinguish between prime and subcontractors. *Id.* at \*17.

The court held that through the 2004 and 2011 studies, and Goal-Setting Reports, IDOT provided evidence of discrimination in the Illinois road construction industry and a method of DBE availability calculation that is consistent with both the federal regulations and the Seventh Circuit decision in *Northern Contract v. Illinois DOT*. *Id.* at \*18. The court said that in response to the Seventh Circuit decision and IDOT's evidence, Midwest offered only conjecture about how these studies supposed failure to account for capacity may or may not have impacted the studies' result. *Id.*

The court pointed out that although Midwest's expert's reports "cast doubt on the validity of IDOT's methodology, they failed to provide any independent statistical analysis or other evidence demonstrating actual bias." *Id.* at \*18. Without this showing, the court stated, the record fails to demonstrate a lack of evidence of discrimination or actual flaws in IDOT's availability calculations.

**Burden on non-DBE subcontractors; overconcentration.** The court addressed the narrow tailoring factor concerning whether a program's burden on third parties is undue or unreasonable. The parties

disagreed about whether the IDOT program resulted in an overconcentration of DBEs in the fencing and guardrail industry. *Id.* at \*18. IDOT prepared an overconcentration study comparing the total number of prequalified fencing and guardrail contractors to the number of DBEs that also perform that type of work and determined that no overconcentration problem existed. Midwest presented its evidence relating to overconcentration. *Id.* The court found that Midwest did not show IDOT's determination that overconcentration does not exist among fencing and guardrail contractors to be unreasonable. *Id.* at \*18.

The court stated the fact IDOT sets contract goals as a percentage of total contract dollars does not demonstrate that IDOT imposes an undue burden on non-DBE subcontractors, but to the contrary, IDOT is acting within the scope of the federal regulations that requires goals to be set in this manner. *Id.* at \*19. The court noted that it recognizes setting goals as a percentage of total contract value addresses the widespread, indirect effects of discrimination that may prevent DBEs from competing as primes in the first place, and that a sharing of the burden by innocent parties, here non-DBE subcontractors, is permissible. *Id.* at \*19. The court held that IDOT carried its burden in providing persuasive evidence of discrimination in Illinois, and found that such sharing of the burden is permissible here. *Id.*

**Use of race-neutral alternatives.** The court found that IDOT identified several race-neutral programs it used to increase DBE participation, including its Supportive Services, Mentor–Protégé, and Model Contractor Programs. *Id.* at \*19. The programs provide workshops and training that help small businesses build bonding capacity, gain access to financial and project management resources, and learn about specific procurement opportunities. *Id.* IDOT conducted several studies including zero-participation goals contracts in which there was no DBE participation goal, and found that DBEs received only 0.84 percent of the total dollar value awarded. *Id.*

The court held IDOT was compliant with the federal regulations, noting that in the *Northern Contracting v. Illinois DOT* case, the Seventh Circuit found IDOT employed almost all of the methods suggested in the regulations to maximize DBE participation without resorting to race, including providing assistance in obtaining bonding and financing, implementing a supportive services program, and providing technical assistance. *Id.* at \*19. The court agreed with the Seventh Circuit, and found that IDOT has made serious, good faith consideration of workable race-neutral alternatives. *Id.*

**Duration and flexibility.** The court pointed out that the state statute through which the Federal DBE Program is implemented is limited in duration and must be reauthorized every two to five years. *Id.* at \*19. The court reviewed evidence that IDOT granted 270 of the 362 good faith waiver requests that it received from 2006 to 2014, and that IDOT granted 1,002 post-award waivers on over \$36 million in contracting dollars. *Id.* at \*19. The court noted that IDOT granted the only good faith efforts waiver that Midwest requested. *Id.*

The court held the undisputed facts established that IDOT did not have a “no-waiver policy.” *Id.* at \*20. The court found that it could not conclude that the waiver provisions were impermissibly vague, and that IDOT took into consideration the substantial guidance provided in the federal regulations. *Id.* Because Midwest's own experience demonstrated the flexibility of the Federal DBE Program in practice, the court said it could not conclude that the IDOT program amounts to an impermissible quota system that is unconstitutional on its face. *Id.* at \*20.

The court again stated that Midwest had not presented any affirmative evidence showing that IDOT's implementation of the Federal DBE Program imposes an undue burden on non-DBEs, fails to employ race-neutral measures, or lacks flexibility. *Id.* at \*20. Accordingly, the court granted IDOT's motion for summary judgment.

**Facial and as-applied challenges to the Tollway program.** The Illinois Tollway Program exists independently of the Federal DBE Program. Midwest challenged the Tollway Program as unconstitutional on its face and as applied. *Id.* at \*20. Like the Federal and IDOT Defendants, the Tollway was required to show that its compelling interest in remedying discrimination in the Illinois road construction industry rests on a strong basis in evidence. *Id.* The Tollway relied on a 2006 disparity study, which examined the disparity between the Tollway's utilization of DBEs and their availability. *Id.*

The study employed a "custom census" approach to calculate DBE availability, and examined the Tollway's contract data to determine utilization. *Id.* at \*20. The 2006 study reported statistically significant disparities for all race and sex categories examined. *Id.* The study also conducted an "economy-wide analysis" examining other race and sex disparities in the wider construction economy from 1979 to 2002. *Id.* at \*21. Controlling for race- and gender-neutral variables, the study showed a significant negative correlation between a person's race or sex and their earning power and ability to form a business. *Id.*

**Midwest's challenges to the Tollway evidence insufficient and speculative.** In 2013, the Tollway commissioned a new study, which the court noted was not complete, but there was an "economy-wide analysis" similar to the analysis done in 2006 that updated census data gathered from 2007 to 2011. *Id.* at \*21. The updated census analysis, according to the court, controlled for variables such as education, age and occupation and found lower earnings and rates of business formation among women and minorities as compared to white men. *Id.*

Midwest attacked the Tollway's 2006 study similar to how it attacked the other studies with regard to IDOT's DBE Program. *Id.* at \*21. For example, Midwest attacked the 2006 study as being biased because it failed to take into account capacity in determining the disparities. *Id.* at \*21. The Tollway defended the 2006 study arguing that capacity metrics should not be taken into account because the Tollway asserted they are themselves a product of indirect discrimination, the construction industry is elastic in nature, and that firms can easily ramp up or ratchet down to accommodate the size of a project. *Id.* The Tollway also argued that the "economy-wide analysis" revealed a negative correlation between an individual's race and sex and their earning power and ability to own or form a business, showing that the underutilization of DBEs is consistent with discrimination. *Id.* at \*21.

To successfully rebut the Tollway's evidence of discrimination, the court stated that Midwest must come forward with a neutral explanation for the disparity, show that the Tollway's statistics are flawed, demonstrate that the observed disparities are insignificant, or present contrasting data of its own. *Id.* at \*22. Again, the court found that Midwest failed to make this showing, and that the evidence offered through the expert reports for Midwest was far too speculative to create a disputed issue of fact suitable for trial. *Id.* at \*22. Accordingly, the court found the Tollway Defendants established a strong basis in evidence for the Tollway Program. *Id.*

Tollway Program is narrowly tailored. As to determining whether the Tollway Program is narrowly tailored, Midwest also argued that the Tollway Program imposed an undue burden on non-DBE subcontractors. Like IDOT, the Tollway sets individual contract goals as a percentage of the value of the entire contract based on the availability of DBEs to perform particular line items. *Id.* at \*22.

The court reiterated that setting goals as a percentage of total contract dollars does not demonstrate an undue burden on non-DBE subcontractors, and that the Tollway's method of goal setting is identical to that prescribed by the federal regulations, which the court already found to be supported by strong policy reasons. *Id.* at \*22. The court stated that the sharing of a remedial program's burden is itself insufficient to warrant the conclusion that the program is not narrowly tailored. *Id.* at \*22. The court held the Tollway Program's burden on non-DBE subcontractors to be permissible. *Id.*

In addressing the efficacy of race-neutral measures, the court found the Tollway implemented race-neutral programs to increase DBE participation, including a program that allows smaller contracts to be unbundled from larger ones, a Small Business Initiative that sets aside contracts for small businesses on a race-neutral basis, partnerships with agencies that provide support services to small businesses, and other programs designed to make it easier for smaller contractors to do business with the Tollway in general. *Id.* at \*22. The court held the Tollway's race-neutral measures are consistent with those suggested under the federal regulations and found that the availability of these programs, which mirror IDOT's, demonstrates serious, good faith consideration of workable race-neutral alternatives. *Id.* at \*22.

In considering the issue of flexibility, the court found the Tollway Program, like the Federal DBE Program, provides for waivers where prime contractors are unable to meet DBE participation goals, but have made good faith efforts to do so. *Id.* at \*23. Like IDOT, the court said the Tollway adheres to the federal regulations in determining whether a bidder has made good faith efforts. *Id.* As under the Federal DBE Program, the Tollway Program also allows bidders who have been denied waivers to appeal. *Id.*

From 2006 to 2011, the court stated, the Tollway granted waivers on approximately 20 percent of the 200 prime construction contracts it awarded. *Id.* Because the Tollway demonstrated that waivers are available, routinely granted, and awarded or denied based on guidance found in the federal regulations, the court found the Tollway Program sufficiently flexible. *Id.* at \*23.

Midwest presented no affirmative evidence. The court held the Tollway Defendants provided a strong basis in evidence for their DBE Program, whereas Midwest, did not come forward with any concrete, affirmative evidence to shake this foundation. *Id.* at \*23. The court thus held the Tollway Program was narrowly tailored and granted the Tollway Defendants' motion for summary judgment.

**10. *Dunnet Bay Construction Company v. Gary Hannig, in its official capacity as Secretary of Transportation for the Illinois DOT and the Illinois DOT*, 2014 WL 552213 (C.D. Ill. Feb 12, 2014), appeal pending in U.S. Court of Appeals, Seventh Circuit**

In *Dunnet Bay Construction Company v. Gary Hannig, in its official capacity as Secretary of the Illinois DOT and the Illinois DOT*, 2014 WL 552213 (C.D. Ill. Feb. 12, 2014), plaintiff Dunnet Bay Construction Company brought a lawsuit against the Illinois Department of Transportation (IDOT) and the Secretary of IDOT in his official capacity challenging the IDOT DBE Program and its



implementation of the Federal DBE Program, including an alleged unwritten “no waiver” policy, and claiming that the IDOT’s program is not narrowly tailored.

**Motion to Dismiss certain claims granted.** IDOT initially filed a Motion to Dismiss certain Counts of the Complaint. The United States District Court granted the Motion to Dismiss Counts I, II and III against IDOT primarily based on the defense of immunity under the Eleventh Amendment to the United States Constitution. The Opinion held that claims in Counts I and II against Secretary Hannig of IDOT in his official capacity remained in the case.

In addition, the other Counts of the Complaint that remained in the case not subject to the Motion to Dismiss, sought declaratory and injunctive relief and damages based on the challenge to the IDOT DBE Program and its application by IDOT. Plaintiff Dunnet Bay alleged the IDOT DBE Program is unconstitutional based on the unwritten no-waiver policy, requiring Dunnet Bay to meet DBE goals and denying Dunnet Bay a waiver of the goals despite its good faith efforts, and based on other allegations. Dunnet Bay sought a declaratory judgment that IDOT’s DBE program discriminates on the basis of race in the award of federal-aid highway construction contracts in Illinois.

**Motions for Summary Judgment.** Subsequent to the Court’s Order granting the partial Motion to Dismiss, Dunnet Bay filed a Motion for Summary Judgment, asserting that IDOT had departed from the federal regulations implementing the Federal DBE Program, that IDOT’s implementation of the Federal DBE Program was not narrowly tailored to further a compelling governmental interest, and that therefore, the actions of IDOT could not withstand strict scrutiny. 2014 WL 552213 at \* 1. IDOT also filed a Motion for Summary Judgment, alleging that all applicable guidelines from the federal regulations were followed with respect to the IDOT DBE Program, and because IDOT is federally mandated and did not abuse its federal authority, IDOT’s DBE Program is not subject to attack. *Id.*

IDOT further asserted in its Motion for Summary Judgment that there is no Equal Protection violation, claiming that neither the rejection of the bid by Dunnet Bay, nor the decision to re-bid the project, was based upon Dunnet Bay’s race. IDOT also asserted that, because Dunnet Bay was relying on the rights of others and was not denied equal opportunity to compete for government contracts, Dunnet Bay lacked standing to bring a claim for racial discrimination.

**Factual background.** Plaintiff Dunnet Bay Construction Company is owned by two white males and is engaged in the business of general highway construction. It has been qualified to work on IDOT highway construction projects. In accordance with the federal regulations, IDOT prepared and submitted to the USDOT for approval a DBE Program governing federally funded highway construction contracts. For fiscal year 2010, IDOT established an overall aspirational DBE goal of 22.77 percent for DBE participation, and it projected that 4.12 percent of the overall goal could be met through race neutral measures and the remaining 18.65 percent would require the use of race-conscious goals. 2014 WL 552213 at \*3. IDOT normally achieved somewhere between 10 and 14 percent participation by DBEs. *Id.* The overall aspirational goal was based upon a statewide disparity study conducted on behalf of IDOT in 2004.

Utilization goals under the IDOT DBE Program Document are determined based upon an assessment for the type of work, location of the work, and the availability of DBE companies to do a part of the work. *Id.* at \*4. Each pay item for a proposed contract is analyzed to determine if there are

at least two ready, willing, and able DBEs to perform the pay item. *Id.* The capacity of the DBEs, their willingness to perform the work in the particular district, and their possession of the necessary workforce and equipment are also factors in the overall determination. *Id.*

Initially, IDOT calculated the DBE goal for the Eisenhower Project to be 8 percent. When goals were first set on the Eisenhower Project, taking into account every item listed for work, the maximum potential goal for DBE participation for the Eisenhower Project was 20.3 percent. Eventually, an overall goal of approximately 22 percent was set. *Id.* at \*4.

At the bid opening, Dunnet Bay's bid was the lowest received by IDOT. Its low bid was over IDOT's estimate for the project. Dunnet Bay, in its bid, identified 8.2 percent of its bid for DBEs. The second low bidder projected DBE participation of 22 percent. Dunnet Bay's DBE participation bid did not meet the percentage participation in the bid documents, and thus IDOT considered Dunnet Bay's good faith efforts to meet the DBE goal. IDOT rejected Dunnet Bay's bid determining that Dunnet Bay had not demonstrated a good faith effort to meet the DBE goal. *Id.* at \*9.

The Court found that although it was the low bidder for the construction project, Dunnet Bay did not meet the goal for participation of DBEs despite its alleged good faith efforts. IDOT contended it followed all applicable guidelines in handling the DBE Program, and that because it did not abuse its federal authority in administering the Program, the IDOT DBE Program is not subject to attack. *Id.* at \*23. IDOT further asserted that neither rejection of Dunnet Bay's bid nor the decision to re-bid the Project was based on its race or that of its owners, and that Dunnet Bay lacked standing to bring a claim for racial discrimination on behalf of others (i.e., small businesses operated by white males). *Id.* at \*23.

The Court found that the federal regulations recommend a number of non-mandatory, non-exclusive and non-exhaustive actions when considering a bidder's good faith efforts to obtain DBE participation. *Id.* at \*25. The federal regulations also provide the state DOT may consider the ability of other bidders to meet the goal. *Id.*

**IDOT implementing the Federal DBE Program is acting as an agent of the federal government insulated from constitutional attack absent showing the state exceeded federal authority.** The Court held that a state entity such as IDOT implementing a congressionally mandated program may rely "on the federal government's compelling interest in remedying the effects of pass discrimination in the national construction market." *Id.* at \*26, *quoting Northern Contracting Co., Inc. v. Illinois*, 473 F.3d 715 at 720-21 (7<sup>th</sup> Cir. 2007). In these instances, the Court stated, the state is acting as an agent of the federal government and is "insulated from this sort of constitutional attack, absent a showing that the state exceeded its federal authority." *Id.* at \*26, *quoting Northern Contracting, Inc.*, 473 F.3d at 721. The Court held that accordingly, any "challenge to a state's application of a federally mandated program must be limited to the question of whether the state exceeded its authority." *Id.* at \*26, *quoting Northern Contracting, Inc.*, 473 F.3d at 722. Therefore, the Court identified the key issue as determining if IDOT exceeded its authority granted under the federal rules or if Dunnet Bay's challenges are foreclosed by *Northern Contracting*. *Id.* at \*26.

The Court found that IDOT did in fact employ a thorough process before arriving at the 22 percent DBE participation goal for the Eisenhower Project. *Id.* at \*26. The Court also concluded "because the federal regulations do not specify a procedure for arriving at contract goals, it is not apparent

how IDOT could have exceeded its federal authority. Any challenge on this factor fails under *Northern Contracting*.” *Id.* at \*26. Therefore, the Court concluded there is no basis for finding that the DBE goal was arbitrarily set or that IDOT exceeded its federal authority with respect to this factor. *Id.* at \*27.

**The “no-waiver” policy.** The Court held that there was not a no-waiver policy considering all the testimony and factual evidence. In particular, the Court pointed out that a waiver was in fact granted in connection with the same bid letting at issue in this case. *Id.* at \*27. The Court found that IDOT granted a waiver of the DBE participation goal for another construction contractor on a different contract, but under the same bid letting involved in this matter. *Id.*

Thus, the Court held that Dunnet Bay’s assertion that IDOT adopted a “no-waiver” policy was unsupported and contrary to the record evidence. *Id.* at \*27. The Court found the undisputed facts established that IDOT did not have a “no-waiver” policy, and that IDOT did not exceed its federal authority because it did not adopt a “no-waiver” policy. *Id.* Therefore, the Court again concluded that any challenge by Dunnet Bay on this factor failed pursuant to the *Northern Contracting* decision.

**IDOT’s decision to reject Dunnet Bay’s bid based on lack of good faith efforts did not exceed IDOT’s authority under federal law.** The Court found that IDOT has significant discretion under federal regulations and is often called upon to make a “judgment call” regarding the efforts of the bidder in terms of establishing good faith attempt to meet the DBE goals. *Id.* at \*28. The Court stated it was unable to conclude that IDOT erred in determining Dunnet Bay did not make adequate good faith efforts. *Id.* The Court surmised that the strongest evidence that Dunnet Bay did not take all necessary and reasonable steps to achieve the DBE goal is that its DBE participation was under 9 percent while other bidders were able to reach the 22 percent goal. *Id.* Accordingly, the Court concluded that IDOT’s decision rejecting Dunnet Bay’s bid was consistent with the regulations and did not exceed IDOT’s authority under the federal regulations. *Id.*

The Court also rejected Dunnet Bay’s argument that IDOT failed to provide Dunnet Bay with a written explanation as to why its good faith efforts were not sufficient, and thus there were deficiencies with the reconsideration of Dunnet Bay’s bid and efforts as required by the federal regulations. *Id.* at \*29. The Court found it was unable to conclude that a technical violation such as to provide Dunnet Bay with a written explanation will provide any relief to Dunnet Bay. *Id.* Additionally, the Court found that because IDOT rebid the project, Dunnet Bay was not prejudiced by any deficiencies with the reconsideration. *Id.*

The Court emphasized that because of the decision to rebid the project, IDOT was not even required to hold a reconsideration hearing. *Id.* at \*24. Because the decision on reconsideration as to good faith efforts did not exceed IDOT’s authority under federal law, the Court held Dunnet Bay’s claim failed under the *Northern Contracting* decision. *Id.*

**Dunnet Bay lacked standing to raise an equal protection claim.** The Court found that Dunnet Bay was not disadvantaged in its ability to compete against a racially favored business, and neither IDOT’s rejection of Dunnet Bay’s bid nor the decision to rebid was based on the race of Dunnet Bay’s owners or any class-based animus. *Id.* at \*29. The Court stated that Dunnet Bay did not point to any other business that was given a competitive advantage because of the DBE goals. *Id.* Dunnet Bay did not cite any cases which involve plaintiffs that are similarly situated to it - businesses that are not

at a competitive disadvantage against minority-owned companies or DBEs - and have been determined to have standing. *Id.* at \*30.

The Court concluded that any company similarly situated to Dunnet Bay had to meet the same DBE goal under the contract. *Id.* Dunnet Bay, the Court held, was not at a competitive disadvantage and/or unable to compete equally with those given preferential treatment. *Id.*

Dunnet Bay did not point to another contractor that did not have to meet the same requirements it did. The Court thus concluded that Dunnet Bay lacked standing to raise an equal protection challenge because it had not suffered a particularized injury that was caused by IDOT. *Id.* at \*30. Dunnet Bay was not deprived of the ability to compete on an equal basis. *Id.* Also, based on the amount of its profits, Dunnet Bay did not qualify as a small business, and therefore, it lacked standing to vindicate the rights of a hypothetical white-owned small business. *Id.* at \*30. Because the Court found that Dunnet Bay was not denied the ability to compete on an equal footing in bidding on the contract, Dunnet Bay lacked standing to challenge the DBE Program based on the Equal Protection Clause. *Id.* at \*30.

**Dunnet Bay did not establish equal protection violation even if it had standing.** The Court held that even if Dunnet Bay had standing to bring an equal protection claim, IDOT still is entitled to summary judgment. The Court stated the Supreme Court has held that the “injury in fact” in an equal protection case challenging a DBE Program is the denial of equal treatment resulting from the imposition of the barrier, not the ultimate inability to obtain the benefit. *Id.* at \*31. Dunnet Bay, the Court said, implied that but for the alleged “no-waiver” policy and DBE goals which were not narrowly tailored to address discrimination, it would have been awarded the contract. The Court again noted the record established that IDOT did not have a “no-waiver” policy. *Id.* at \*31.

The Court also found that because the gravamen of equal protection lies not in the fact of deprivation of a right but in the invidious classification of persons, it does not appear Dunnet Bay can assert a viable claim. *Id.* at \*31. The Court stated it is unaware of any authority which suggests that Dunnet Bay can establish an equal protection violation even if it could show that IDOT failed to comply with the regulations relating to the DBE Program. *Id.* The Court said that even if IDOT did employ a “no-waiver policy,” such a policy would not constitute an equal protection violation because the federal regulations do not confer specific entitlements upon any individuals. *Id.* at \*31.

In order to support an equal protection claim, the plaintiff would have to establish it was treated less favorably than another entity with which it was similarly situated in all material respects. *Id.* at \*51. Based on the record, the Court stated it could only speculate whether Dunnet Bay or another entity would have been awarded a contract without IDOT’s DBE Program. But, the Court found it need not speculate as to whether Dunnet Bay or another company would have been awarded the contract, because what is important for equal protection analysis is that Dunnet Bay was treated the same as other bidders. *Id.* at \*31. Every bidder had to meet the same percentage goal for subcontracting to DBEs or make good faith efforts. *Id.* Because Dunnet Bay was held to the same standards as every other bidder, it cannot establish it was the victim of discrimination pursuant to the Equal Protection Clause. *Id.* Therefore, IDOT, the Court held, is entitled to summary judgment on Dunnet Bay’s claims under the Equal Protection Clause and under Title VI.

**Conclusion.** The Court concluded IDOT is entitled to summary judgment, holding Dunnet Bay lacked standing to raise an equal protection challenge based on race, and that even if Dunnet Bay had standing, Dunnet Bay was unable to show that it would have been awarded the contract in the absence of any violation. *Id.* at \*32. Any other federal claims, the Court held, were foreclosed by the *Northern Contracting* decision because there is no evidence IDOT exceeded its authority under federal law. *Id.* Finally, the Court found Dunnet Bay had not established the likelihood of future harm, and thus was not entitled to injunctive relief.

**Notice of Appeal.** At the time of this report, Dunnet Bay Construction Company has filed a Notice of Appeal to the United States Court of Appeals for the Seventh Circuit, which appeal is pending.

**11. *Geod Corporation v. New Jersey Transit Corporation, et. al.*, 746 F. Supp.2d 642, 2010 WL 4193051 (D. N. J. October 19, 2010)**

Plaintiffs, white male owners of Geod Corporation (“Geod”), brought this action against the New Jersey Transit Corporation (“NJT”) alleging discriminatory practices by NJT in designing and implementing the Federal DBE program. 746 F. Supp 2d at 644. The Plaintiffs alleged that the NJT’s DBE program violated the United States Constitution, 42 U.S.C. § 1981, Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000(d) and state law. The district court previously dismissed the Complaint against all Defendants except for NJT and concluded that a genuine issue material fact existed only as to whether the method used by NJT to determine its DBE goals during 2010 were sufficiently narrowly tailored, and thus constitutional. *Id.*

**New Jersey Transit Program and Disparity Study.** NJT relied on the analysis of consultants for the establishment of their goals for the DBE program. The study established the effects of past discrimination, the district court found, by looking at the disparity and utilization of DBEs compared to their availability in the market. *Id.* at 648. The study used several data sets and averaged the findings in order to calculate this ratio, including: (1) the New Jersey DBE vendor List; (2) a Survey of Minority-Owned Business Enterprises (SMOBE) and a Survey of Women-Owned Enterprises (SWOBE) as determined by the U.S. Census Bureau; and (3) detailed contract files for each racial group. *Id.*

The court found the study determined an average annual utilization of 23 percent for DBEs, and to examine past discrimination, several analyses were run to measure the disparity among DBEs by race. *Id.* at 648. The Study found that all but one category was underutilized among the racial and ethnic groups. *Id.* All groups other than Asian DBEs were found to be underutilized. *Id.*

The court held that the test utilized by the study, “conducted to establish a pattern of discrimination against DBEs, proved that discrimination occurred against DBEs during the pre-qualification process and in the number of contracts that are awarded to DBEs. *Id.* at 649. The court found that DBEs are more likely than non-DBEs to be pre-qualified for small construction contracts, but are less likely to pre-qualify for larger construction projects. *Id.*

For fiscal year 2010, the study consultant followed the “three-step process pursuant to USDOT regulations to establish the NJT DBE goal.” *Id.* at 649. First, the consultant determined “the base figure for the relative availability of DBEs in the specific industries and geographical market from which DBE and non-DBE contractors are drawn.” *Id.* In determining the base figure, the consultant

(1) defined the geographic marketplace, (2) identified “the relevant industries in which NJ Transit contracts,” and (3) calculated “the weighted availability measure.” *Id.* at 649.

The court found that the study consultant used political jurisdictional methods and virtual methods to pinpoint the location of contracts and/or contractors for NJT, and determined that the geographical market place for NJT contracts included New Jersey, New York and Pennsylvania. *Id.* at 649. The consultant used contract files obtained from NJT and data obtained from Dun & Bradstreet to identify the industries with which NJT contracts in these geographical areas. *Id.* The consultant then used existing and estimated expenditures in these particular industries to determine weights corresponding to NJT contracting patterns in the different industries for use in the availability analysis. *Id.*

The availability of DBEs was calculated by using the following data: Unified Certification Program Business Directories for the states of New Jersey, New York and Pennsylvania; NJT Vendor List; Dun & Bradstreet database; 2002 Survey of Small Business Owners; and NJT Pre-Qualification List. *Id.* at 649-650. The availability rates were then “calculated by comparing the number of ready, willing, and able minority and women-owned firms in the defined geographic marketplace to the total number of ready, willing, and able firms in the same geographic marketplace. *Id.* The availability rates in each industry were weighed in accordance with NJT expenditures to determine a base figure. *Id.*

Second, the consultant adjusted the base figure due to evidence of discrimination against DBE prime contractors and disparities in small purchases and construction pre-qualification. *Id.* at 650. The discrimination analysis examined discrimination in small purchases, discrimination in pre-qualification, two regression analyses, an Essex County disparity study, market discrimination, and previous utilization. *Id.* at 650.

The Final Recommendations Report noted that there were sizeable differences in the small purchases awards to DBEs and non-DBEs with the awards to DBEs being significantly smaller. *Id.* at 650. DBEs were also found to be less likely to be pre-qualified for contracts over \$1 million in comparison to similarly situated non-DBEs. *Id.* The regression analysis using the dummy variable method yielded an average estimate of a discriminatory effect of -28.80 percent. *Id.* The discrimination regression analysis using the residual difference method showed that on average 12.2 percent of the contract amount disparity awarded to DBEs and non-DBEs was unexplained. *Id.*

The consultant also considered evidence of discrimination in the local market in accordance with 49 CFR § 26.45(d). The Final Recommendations Report cited in the 2005 Essex County Disparity Study suggested that discrimination in the labor market contributed to the unexplained portion of the self-employment, employment, unemployment, and wage gaps in Essex County, New Jersey. *Id.* at 650.

The consultant recommended that NJT focus on increasing the number of DBE prime contractors. Because qualitative evidence is difficult to quantify, according to the consultant, only the results from the regression analyses were used to adjust the base goal. *Id.* The base goal was then adjusted from 19.74 percent to 23.79 percent. *Id.*

Third, in order to partition the DBE goal by race-neutral and race-conscious methods, the consultant analyzed the share of all DBE contract dollars won with no goals. *Id.* at 650. He also performed two different regression analyses: one involving predicted DBE contract dollars and DBE receipts if the

goal was set at zero. *Id.* at 651. The second method utilized predicted DBE contract dollars with goals and predicted DBE contract dollars without goals to forecast how much firms with goals would receive had they not included the goals. *Id.* The consultant averaged his results from all three methods to conclude that the fiscal year 2010 NJT a portion of the race-neutral DBE goal should be 11.94 percent and a portion of the race-conscious DBE goal should be 11.84 percent. *Id.* at 651.

The district court applied the strict scrutiny standard of review. The district court already decided, in the course of the motions for summary judgment, that compelling interest was satisfied as New Jersey was entitled to adopt the federal government's compelling interest in enacting TEA-21 and its implementing regulations. *Id.* at 652, citing *Geod v. N.J. Transit Corp.*, 678 F.Supp.2d 276, 282 (D.N.J. 2009). Therefore, the court limited its analysis to whether NJT's DBE program was narrowly tailored to further that compelling interest in accordance with "its grant of authority under federal law." *Id.* at 652 citing *Northern Contracting, Inc. v. Illinois Department of Transportation*, 473 F.3d 715, 722 (7<sup>th</sup> Cir. 2007).

**Applying *Northern Contracting v. Illinois*.** The district court clarified its prior ruling in 2009 (see 678 F.Supp.2d 276) regarding summary judgment, that the court agreed with the holding in *Northern Contracting, Inc. v. Illinois*, that "a challenge to a state's application of a federally mandated program must be limited to the question of whether the state exceeded its authority." *Id.* at 652 quoting *Northern Contracting*, 473 F.3d at 721. The district court in *Geod* followed the Seventh Circuit explanation that when a state department of transportation is acting as an instrument of federal policy, a plaintiff cannot collaterally attack the federal regulations through a challenge to a state's program. *Id.* at 652, citing *Northern Contracting*, 473 F.3d at 722. Therefore, the district court held that the inquiry is limited to the question of whether the state department of transportation "exceeded its grant of authority under federal law." *Id.* at 652-653, quoting *Northern Contracting*, 473 F.3d at 722 and citing also *Tennessee Asphalt Co. v. Farris*, 942 F.2d 969, 975 (6<sup>th</sup> Cir. 1991).

The district court found that the holding and analysis in *Northern Contracting* does not contradict the Eighth Circuit's analysis in *Sherbrooke Turf, Inc. v. Minnesota Department of Transportation*, 345 F.3d 964, 970-71 (8<sup>th</sup> Cir. 2003). *Id.* at 653. The court held that the Eighth Circuit's discussion of whether the DBE programs as implemented by the State of Minnesota and the State of Nebraska were narrowly tailored focused on whether the states were following the USDOT regulations. *Id.* at 653 citing *Sherbrooke Turf*, 345 F.3d 973-74. Therefore, "only when the state exceeds its federal authority is it susceptible to an as-applied constitutional challenge." *Id.* at 653 quoting *Western States Paving Co., Inc. v. Washington State Department of Transportation*, 407 F.3d 983 (9<sup>th</sup> Cir. 2005)(McKay, C.J.)(concurring in part and dissenting in part) and citing *South Florida Chapter of the Associated General Contractors v. Broward County*, 544 F.Supp.2d 1336, 1341 (S.D.Fla.2008).

The court held the initial burden of proof falls on the government, but once the government has presented proof that its affirmative action plan is narrowly tailored, the party challenging the affirmative action plan bears the ultimate burden of proving that the plan is unconstitutional. *Id.* at 653.

In analyzing whether NJT's DBE program was constitutionally defective, the district court focused on the basis of plaintiffs' argument that it was not narrowly tailored because it includes in the category of DBEs racial or ethnic groups as to which the plaintiffs alleged NJT had no evidence of past discrimination. *Id.* at 653. The court found that most of plaintiffs' arguments could be

summarized as questioning whether NJT presented demonstrable evidence of the availability of ready, willing and able DBEs as required by 49 CFR § 26.45. *Id.* The court held that NJT followed the goal setting process required by the federal regulations. *Id.* The court stated that NJT began this process with the 2002 disparity study that examined past discrimination and found that all of the groups listed in the regulations were underutilized with the exception of Asians. *Id.* at 654. In calculating the fiscal year 2010 goals, the consultant used contract files and data from Dun & Bradstreet to determine the geographical location corresponding to NJT contracts and then further focused that information by weighting the industries according to NJT's use. *Id.*

The consultant used various methods to calculate the availability of DBEs, including: the UCP Business Directories for the states of New Jersey, New York and Pennsylvania; NJT Vendor List; Dun & Bradstreet database; 2002 Survey of Small Business Owners; and NJT Pre-Qualification List. *Id.* at 654. The court stated that NJT only utilized one of the examples listed in 49 CFR § 26.45(c), the DBE directories method, in formulating the fiscal year 2010 goals. *Id.*

The district court pointed out, however, the regulations state that the “examples are provided as a starting point for your goal setting process and that the examples are not intended as an exhaustive list. *Id.* at 654, *citing* 46 CFR § 26.45(c). The court concluded the regulations clarify that other methods or combinations of methods to determine a base figure may be used. *Id.* at 654.

The court stated that NJT had used these methods in setting goals for prior years as demonstrated by the reports for 2006 and 2009. *Id.* at 654. In addition, the court noted that the Seventh Circuit held that a custom census, the Dun & Bradstreet database, and the IDOT's list of DBEs were an acceptable combination of methods with which to determine the base figure for TEA-21 purposes. *Id.* at 654, *citing Northern Contracting*, 473 F.3d at 718.

The district court found that the expert witness for plaintiffs had not convinced the court that the data were faulty, and the testimony at trial did not persuade the court that the data or regression analyses relied upon by NJT were unreliable or that another method would provide more accurate results. *Id.* at 654-655.

The court in discussing step two of the goals setting process pointed out that the data examined by the consultant is listed in the regulations as proper evidence to be used to adjust the base figure. *Id.* at 655, *citing* 49 CFR § 26.45(d). These data included evidence from disparity studies and statistical disparities in the ability of DBEs to get pre-qualification. *Id.* at 655. The consultant stated that evidence of societal discrimination was not used to adjust the base goal and that the adjustment to the goal was based on the discrimination analysis, which controls for size of firm and effect of having a DBE goal. *Id.* at 655.

The district court then analyzed NJT's division of the adjusted goal into race-conscious and race-neutral portions. *Id.* at 655. The court noted that narrowly tailoring does not require exhaustion of every conceivable race-neutral alternative, but instead requires serious, good faith consideration of workable race-neutral alternatives. *Id.* at 655. The court agreed with *Western States Paving* that only “when race-neutral efforts prove inadequate do these regulations authorize a State to resort to race-conscious measures to achieve the remainder of its DBE utilization goal.” *Id.* at 655, *quoting Western States Paving*, 407 F.3d at 993-94.



The court found that the methods utilized by NJT had been used by it on previous occasions, which were approved by the USDOT. *Id.* at 655. The methods used by NJT, the court found, also complied with the examples listed in 49 CFR § 26.51, including arranging solicitations, times for the presentation of bids, quantities, specifications, and delivery schedules in ways that facilitate DBE participation; providing pre-qualification assistance; implementing supportive services programs; and ensuring distribution of DBE directories. *Id.* at 655. The court held that based on these reasons and following the *Northern Contracting, Inc. v. Illinois* line of cases, NJT's DBE program did not violate the Constitution as it did not exceed its federal authority. *Id.* at 655.

However, the district court also found that even under the *Western States Paving Co., Inc. v. Washington State DOT* standard, the NJT program still was constitutional. *Id.* at 655. Although the court found that the appropriate inquiry is whether NJT exceeded its federal authority as detailed in *Northern Contracting, Inc. v. Illinois*, the court also examined the NJT DBE program under *Western States Paving Co. v. Washington State DOT*. *Id.* at 655-656. The court stated that under *Western States Paving*, a Court must “undertake an as-applied inquiry into whether [the state’s] DBE program is narrowly tailored.” *Id.* at 656, quoting *Western States Paving*, 407 F.3d at 997.

**Applying Western States Paving.** The district court then analyzed whether the NJT program was narrowly tailored applying *Western States Paving*. Under the first prong of the narrowly tailoring analysis, a remedial program is only narrowly tailored if its application is limited to those minority groups that have actually suffered discrimination. *Id.* at 656, citing *Western States Paving*, 407 F.3d at 998. The court acknowledged that according to the 2002 Final Report, the ratios of DBE utilization to DBE availability was 1.31. *Id.* at 656. However, the court found that the Plaintiffs’ argument failed as the facts in *Western States Paving* were distinguishable from those of NJT, because NJT did receive complaints, i.e., anecdotal evidence, of the lack of opportunities for Asian firms. *Id.* at 656. NJT employees testified that Asian firms informally and formally complained of a lack of opportunity to grow and indicated that the DBE program was assisting with this issue. *Id.* In addition, Plaintiff’s expert conceded that Asian firms have smaller average contract amounts in comparison to non-DBE firms. *Id.*

The Plaintiff relied solely on the utilization rate as evidence that Asians are not discriminated against in NJT contracting. *Id.* at 656. The court held this was insufficient to overcome the consultant’s determination that discrimination did exist against Asians, and thus this group was properly included in the DBE program. *Id.* at 656.

The district court rejected Plaintiffs’ argument that the first step of the narrow tailoring analysis was not met because NJT focuses its program on sub-contractors when NJT’s expert identified “prime contracting” as the area in which NJT procurements evidence discrimination. *Id.* at 656. The court held that narrow tailoring does not require exhaustion of every conceivable race-neutral alternative but it does require serious, good faith consideration of workable race-neutral alternatives. *Id.* at 656, citing *Sherbrook Turf*, 345 F.3d at 972 (quoting *Grutter v. Bollinger*, 539 U.S. 306, 339, (2003)). In its efforts to implement race-neutral alternatives, the court found NJT attempted to break larger contracts up in order to make them available to smaller contractors and continues to do so when logistically possible and feasible to the procurement department. *Id.* at 656-657.

The district court found NJT satisfied the third prong of the narrowly tailored analysis, the “relationship of the numerical goals to the relevant labor market.” *Id.* at 657. Finally, under the fourth

prong, the court addressed the impact on third-parties. *Id.* at 657. The court noted that placing a burden on third parties is not impermissible as long as that burden is minimized. *Id.* at 657, *citing Western States Paving*, 407 F.3d at 995. The court stated that instances will inevitably occur where non-DBEs will be bypassed for contracts that require DBE goals. However, TEA-21 and its implementing regulations contain provisions intended to minimize the burden on non-DBEs. *Id.* at 657, *citing Western States Paving*, 407 F.3d at 994-995.

The court pointed out the Ninth Circuit in *Western States Paving* found that inclusion of regulations allowing firms that were not presumed to be DBEs to demonstrate that they were socially and economically disadvantaged, and thus qualified for DBE programs, as well as the net worth limitations, were sufficient to minimize the burden on DBEs. *Id.* at 657, *citing Western States Paving*, 407 F.3d at 955. The court held that the Plaintiffs did not provide evidence that NJT was not complying with implementing regulations designed to minimize harm to third parties. *Id.*

Therefore, even if the district court utilized the as-applied narrow tailoring inquiry set forth in *Western States Paving*, NJT's DBE program would not be found to violate the Constitution, as the court held it was narrowly tailored to further a compelling governmental interest. *Id.* at 657.

**12. *Geod Corporation v. New Jersey Transit Corporation, et. seq.* 678 F.Supp.2d 276, 2009 WL 2595607 (D.N.J. August 20, 2009)**

Plaintiffs Geod and its officers, who are white males, sued the NJT and state officials seeking a declaration that NJT's DBE program was unconstitutional and in violation of the United States 5<sup>th</sup> and 14<sup>th</sup> Amendment to the United States Constitution and the Constitution of the State of New Jersey, and seeking a permanent injunction against NJT for enforcing or utilizing its DBE program. The NJT's DBE program was implemented in accordance with the Federal DBE Program and TEA-21 and 49 CFR Part 26.

The parties filed cross Motions for Summary Judgment. The plaintiff Geod challenged the constitutionality of NJT's DBE program for multiple reasons, including alleging NJT could not justify establishing a program using race- and sex-based preferences; the NJT's disparity study did not provide a sufficient factual predicate to justify the DBE Program; NJT's statistical evidence did not establish discrimination; NJT did not have anecdotal data evidencing a "strong basis in evidence" of discrimination which justified a race- and sex-based program; NJT's program was not narrowly tailored and over-inclusive; NJT could not show an exceedingly persuasive justification for gender preferences; and that NJT's program was not narrowly tailored because race-neutral alternatives existed. In opposition, NJT filed a Motion for Summary Judgment asserting that its DBE program was narrowly tailored because it fully complied with the requirements of the Federal DBE Program and TEA-21.

The district court held that states and their agencies are entitled to adopt the federal governments' compelling interest in enacting TEA-21 and its implementing regulations. 2009 WL 2595607 at \*4. The court stated that plaintiff's argument that NJT cannot establish the need for its DBE program was a "red herring, which is unsupported." The plaintiff did not question the constitutionality of the compelling interest of the Federal DBE Program. The court held that all states "inherit the federal governments' compelling interest in establishing a DBE program." *Id.*

The court found that establishing a DBE program “is not contingent upon a state agency demonstrating a need for same, as the federal government has already done so.” *Id.* The court concluded that this reasoning rendered plaintiff’s assertions that NJT’s disparity study did not have sufficient factual predicate for establishing its DBE program, and that no exceedingly persuasive justification was found to support gender based preferences, as without merit. *Id.* The court held that NJT does not need to justify establishing its DBE program, as it has already been justified by the legislature. *Id.*

The court noted that both plaintiff’s and defendant’s arguments were based on an alleged split in the Federal Circuit Courts of Appeal. Plaintiff Geod relies on *Western States Paving Company v. Washington State DOT*, 407 F.3d 983(9<sup>th</sup> Cir. 2005) for the proposition that an as-applied challenge to the constitutionality of a particular DBE program requires a demonstration by the recipient of federal funds that the program is narrowly tailored. *Id.* at \*5. In contrast, the NJT relied primarily on *Northern Contracting, Inc. v. State of Illinois*, 473 F.3d 715 (7<sup>th</sup> Cir. 2007) for the proposition that if a DBE program complies with TEA-21, it is narrowly tailored. *Id.*

The court viewed the various Federal Circuit Court of Appeals decisions as fact specific determinations which have led to the parties distinguishing cases without any substantive difference in the application of law. *Id.*

The court reviewed the decisions by the Ninth Circuit in *Western States Paving* and the Seventh Circuit of *Northern Contracting*. In *Western States Paving*, the district court stated that the Ninth Circuit held for a DBE program to pass constitutional muster, it must be narrowly tailored; specifically, the recipient of federal funds must evidence past discrimination in the relevant market in order to utilize race conscious DBE goals. *Id.* at \*5. The Ninth Circuit, according to district court, made a fact specific determination as to whether the DBE program complied with TEA-21 in order to decide if the program was narrowly tailored to meet the federal regulation’s requirements. The district court stated that the requirement that a recipient must evidence past discrimination “is nothing more than a requirement of the regulation.” *Id.*

The court stated that the Seventh Circuit in *Northern Contracting* held a recipient must demonstrate that its program is narrowly tailored, and that generally a recipient is insulated from this sort of constitutional attack absent a showing that the state exceeded its federal authority. *Id.*, citing *Northern Contracting*, 473 F.3d at 721. The district court held that implicit in *Northern Contracting* is the fact one may challenge the constitutionality of a DBE program, as it is applied, to the extent that the program exceeds its federal authority. *Id.*

The court, therefore, concluded that it must determine first whether NJT’s DBE program complies with TEA-21, then whether NJT exceeded its federal authority in its application of its DBE program. In other words, the district court stated it must determine whether the NJT DBE program complies with TEA-21 in order to determine whether the program, as implemented by NJT, is narrowly tailored. *Id.*

The court pointed out that the Eighth Circuit Court of Appeals in *Sherbrook Turf, Inc. v. Minnesota DOT*, 345 F.3d 964 (8<sup>th</sup> Cir. 2003) found Minnesota’s DBE program was narrowly tailored because it was in compliance with TEA-21’s requirements. The Eighth Circuit in *Sherbrook*, according to the district court, analyzed the application of Minnesota’s DBE program to ensure compliance with

TEA-21's requirements to ensure that the DBE program implemented by Minnesota DOT was narrowly tailored. *Id.* at \*5.

The court held that TEA-21 delegates to each state that accepts federal transportation funds the responsibility of implementing a DBE program that comports with TEA-21. In order to comport with TEA-21, the district court stated a recipient must (1) determine an appropriate DBE participation goal, (2) examine all evidence and evaluate whether an adjustment, if any, is needed to arrive at their goal, and (3) if the adjustment is based on continuing effects of past discrimination, provide demonstrable evidence that is logically and directly related to the effect for which the adjustment is sought. *Id.* at \*6, *citing Western States Paving Company*, 407 F.3d at 983, 988.

First, the district court stated a recipient of federal funds must determine, at the local level, the figure that would constitute an appropriate DBE involvement goal, based on their relative availability of DBEs. *Id.* at \*6, *citing* 49 CFR § 26.45(c). In this case, the court found that NJT did determine a base figure for the relative availability of DBEs, which accounted for demonstrable evidence of local market conditions and was designed to be rationally related to the relative availability of DBEs. *Id.* The court pointed out that NJT conducted a disparity study, and the disparity study utilized NJT's DBE lists from fiscal years 1995-1999 and Census Data to determine its base DBE goal. The court noted that the plaintiffs' argument that the data used in the disparity study were stale was without merit and had no basis in law. The court found that the disparity study took into account the primary industries, primary geographic market, and race neutral alternatives, then adjusted its goal to encompass these characteristics. *Id.* at \*6.

The court stated that the use of DBE directories and Census data are what the legislature intended for state agencies to utilize in making a base DBE goal determination. *Id.* Also, the court stated that "perhaps more importantly, NJT's DBE goal was approved by the USDOT every year from 2002 until 2008." *Id.* at \*6. Thus, the court found NJT appropriately determined their DBE availability, which was approved by the USDOT, pursuant to 49 CFR § 26.45(c). *Id.* at \*6. The court held that NJT demonstrated its overall DBE goal is based on demonstrable evidence of the availability of ready, willing, and able DBEs relative to all businesses ready, willing, and able to participate in DOT assisted contracts and reflects its determination of the level of DBE participation it would expect absent the effects of discrimination. *Id.*

Also of significance, the court pointed out that plaintiffs did not provide any evidence that NJT did not set a DBE goal based upon 49 C.F. § 26.45(c). The court thus held that genuine issues of material fact remain only as to whether a reasonable jury may find that the method used by NJT to determine its DBE goal was sufficiently narrowly tailored. *Id.* at \*6.

The court pointed out that to determine what adjustment to make, the disparity study examined qualitative data such as focus groups on the pre-qualification status of DBEs, working with prime contractors, securing credit, and its effect on DBE participation, as well as procurement officer interviews to analyze, and compare and contrast their relationships with non-DBE vendors and DBE vendors. *Id.* at \*7. This qualitative information was then compared to DBE bids and DBE goals for each year in question. NJT's adjustment to its DBE goal also included an analysis of the overall disparity ratio, as well as, DBE utilization based on race, gender and ethnicity. *Id.* A decomposition analysis was also performed. *Id.*

The court concluded that NJT provided evidence that it, at a minimum, examined the current capacity of DBEs to perform work in its DOT-assisted contracting program, as measured by the volume of work DBEs have performed in recent years, as well as utilizing the disparity study itself. The court pointed out there were two methods specifically approved by 49 CFR § 26.45(d). *Id.*

The court also found that NJT took into account race neutral measures to ensure that the greatest percentage of DBE participation was achieved through race and gender neutral means. The district court concluded that “critically,” plaintiffs failed to provide evidence of another, more perfect, method that could have been utilized to adjust NJT’s DBE goal. *Id.* at \*7. The court held that genuine issues of material fact remain only as to whether NJT’s adjustment to its DBE goal is sufficiently narrowly tailored and thus constitutional. *Id.*

NJT, the court found, adjusted its DBE goal to account for the effects of past discrimination, noting the disparity study took into account the effects of past discrimination in the pre-qualification process of DBEs. *Id.* at \*7. The court quoted the disparity study as stating that it found non-trivial and statistically significant measures of discrimination in contract amounts awarded during the study period. *Id.* at \*8.

The court found, however, that what was “gravely critical” about the finding of the past effects of discrimination is that it only took into account six groups including American Indian, Hispanic, Asian, blacks, women and “unknown,” but did not include an analysis of past discrimination for the ethnic group “Iraqi,” which is now a group considered to be a DBE by the NJT. *Id.* Because the disparity report included a category entitled “unknown,” the court held a genuine issue of material fact remains as to whether “Iraqi” is legitimately within NJT’s defined DBE groups and whether a demonstrable finding of discrimination exists for Iraqis. Therefore, the court denied both plaintiffs’ and defendants’ Motions for Summary Judgment as to the constitutionality of NJT’s DBE program.

The court also held that because the law was not clearly established at the time NJT established its DBE program to comply with TEA-21, the individual state defendants were entitled to qualified immunity and their Motion for Summary Judgment as to the state officials was granted. The court, in addition, held that plaintiff’s Title VI claims were dismissed because the individual defendants were not recipients of federal funds, and that the NJT as an instrumentality of the State of New Jersey is entitled to sovereign immunity. Therefore, the court held that the plaintiff’s claims based on the violation of 42 U.S.C. § 1983 were dismissed and NJT’s Motion for Summary Judgment was granted as to that claim.

**13. *South Florida Chapter of the Associated General Contractors v. Broward County, Florida*, 544 F. Supp.2d 1336 (S.D. Fla. 2008)**

Plaintiff, the South Florida Chapter of the Associated General Contractors, brought suit against the Defendant, Broward County, Florida challenging Broward County’s implementation of the Federal DBE Program and Broward County’s issuance of contracts pursuant to the Federal DBE Program. Plaintiff filed a Motion for a Preliminary Injunction. The court considered only the threshold legal issue raised by Plaintiff in the Motion, namely whether or not the decision in *Western States Paving Company v. Washington State Department of Transportation*, 407 F.3d 983 (9<sup>th</sup> Cir. 2005) should govern the Court’s consideration of the merits of Plaintiffs’ claim. 544 F.Supp.2d at 1337. The court identified

the threshold legal issue presented as essentially, “whether compliance with the federal regulations is all that is required of Defendant Broward County.” *Id.* at 1338.

The Defendant County contended that as a recipient of federal funds implementing the Federal DBE Program, all that is required of the County is to comply with the federal regulations, relying on case law from the Seventh Circuit in support of its position. 544 F.Supp.2d at 1338, *citing Northern Contracting v. Illinois*, 473 F.3d 715 (7<sup>th</sup> Cir. 2007). The Plaintiffs disagreed, and contended that the County must take additional steps beyond those explicitly provided for in the federal regulations to ensure the constitutionality of the County’s implementation of the Federal DBE Program, as administered in the County, *citing Western States Paving*, 407 F.3d 983. The court found that there was no case law on point in the Eleventh Circuit Court of Appeals. *Id.* at 1338.

Ninth Circuit Approach: *Western States*. The district court analyzed the Ninth Circuit Court of Appeals approach in *Western States Paving* and the Seventh Circuit approach in *Milwaukee County Pavers Association v. Fiedler*, 922 F.2d 419 (7<sup>th</sup> Cir. 1991) and *Northern Contracting*, 473 F.3d 715. The district court in Broward County concluded that the Ninth Circuit in *Western States Paving* held that whether Washington’s DBE program is narrowly tailored to further Congress’s remedial objective depends upon the presence or absence of discrimination in the State’s transportation contracting industry, and that it was error for the district court in *Western States Paving* to uphold Washington’s DBE program simply because the state had complied with the federal regulations. 544 F.Supp.2d at 1338-1339. The district court in Broward County pointed out that the Ninth Circuit in *Western States Paving* concluded it would be necessary to undertake an as-applied inquiry into whether the state’s program is narrowly tailored. 544 F.Supp.2d at 1339, *citing Western States Paving*, 407 F.3d at 997.

In a footnote, the district court in *Broward County* noted that the USDOT “appears not to be of one mind on this issue, however.” 544 F.Supp.2d at 1339, n. 3. The district court stated that the “United States DOT has, in analysis posted on its Web site, implicitly instructed states and localities outside of the Ninth Circuit to ignore the *Western States Paving* decision, which would tend to indicate that this agency may not concur with the ‘opinion of the United States’ as represented in *Western States*.” 544 F.Supp.2d at 1339, n. 3. The district court noted that the United States took the position in the *Western States Paving* case that the “state would have to have evidence of past or current effects of discrimination to use race-conscious goals.” 544 F.Supp.2d at 1338, *quoting Western States Paving*.

The Court also pointed out that the Eighth Circuit Court of Appeals in *Sherbrooke Turf, Inc. v. Minnesota Department of Transportation*, 345 F.3d 964 (8<sup>th</sup> Cir. 2003) reached a similar conclusion as in *Western States Paving*. 544 F.Supp.2d at 1339. The Eighth Circuit in *Sherbrooke*, like the court in *Western States Paving*, “concluded that the federal government had delegated the task of ensuring that the state programs are narrowly tailored, and looked to the underlying data to determine whether those programs were, in fact, narrowly tailored, rather than simply relying on the states’ compliance with the federal regulations.” 544 F.Supp.2d at 1339.

Seventh Circuit Approach: *Milwaukee County* and *Northern Contracting*. The district court in Broward County next considered the Seventh Circuit approach. The Defendants in Broward County agreed that the County must make a local finding of discrimination for its program to be constitutional. 544 F.Supp.2d at 1339. The County, however, took the position that it must make this finding through the process specified in the federal regulations, and should not be subject to a

lawsuit if that process is found to be inadequate. *Id.* In support of this position, the County relied primarily on the Seventh Circuit's approach, first articulated in *Milwaukee County Pavers Association v. Fiedler*, 922 F.2d 419 (7th Cir. 1991), then reaffirmed in *Northern Contracting*, 473 F.3d 715 (7th Cir. 2007). 544 F.Supp.2d at 1339.

Based on the Seventh Circuit approach, insofar as the state is merely doing what the statute and federal regulations envisage and permit, the attack on the state is an impermissible collateral attack on the federal statute and regulations. 544 F.Supp.2d at 1339-1340. This approach concludes that a state's role in the federal program is simply as an agent, and insofar "as the state is merely complying with federal law it is acting as the agent of the federal government and is no more subject to being enjoined on equal protection grounds than the federal civil servants who drafted the regulations." 544 F.Supp.2d at 1340, *quoting Milwaukee County Pavers*, 922 F.2d at 423.

The Ninth Circuit addressed the *Milwaukee County Pavers* case in *Western States Paving*, and attempted to distinguish that case, concluding that the constitutionality of the federal statute and regulations were not at issue in *Milwaukee County Pavers*. 544 F.Supp.2d at 1340. In 2007, the Seventh Circuit followed up the critiques made in *Western States Paving* in the *Northern Contracting* decision. *Id.* The Seventh Circuit in *Northern Contracting* concluded that the majority in *Western States Paving* misread its decision in *Milwaukee County Pavers* as did the Eighth Circuit Court of Appeals in *Sherbrooke*. 544 F.Supp.2d at 1340, *citing Northern Contracting*, 473 F.3d at 722, n.5. The district court in Broward County pointed out that the Seventh Circuit in *Northern Contracting* emphasized again that the state DOT is acting as an instrument of federal policy, and a plaintiff cannot collaterally attack the federal regulations through a challenge to the state DOT's program. 544 F.Supp.2d at 1340, *citing Northern Contracting*, 473 F.3d at 722.

The district court in *Broward County* stated that other circuits have concurred with this approach, including the Sixth Circuit Court of Appeals decision in *Tennessee Asphalt Company v. Farris*, 942 F.2d 969 (6th Cir. 1991). 544 F.Supp.2d at 1340. The district court in *Broward County* held that the Tenth Circuit Court of Appeals took a similar approach in *Ellis v. Skinner*, 961 F.2d 912 (10th Cir. 1992). 544 F.Supp.2d at 1340. The district court in *Broward County* held that these Circuit Courts of Appeal have concluded that "where a state or county fully complies with the federal regulations, it cannot be enjoined from carrying out its DBE program, because any such attack would simply constitute an improper collateral attack on the constitutionality of the regulations." 544 F.Supp.2d at 1340-41.

The district court in *Broward County* held that it agreed with the approach taken by the Seventh Circuit Court of Appeals in *Milwaukee County Pavers* and *Northern Contracting* and concluded that "the appropriate factual inquiry in the instant case is whether or not Broward County has fully complied with the federal regulations in implementing its DBE program." 544 F.Supp.2d at 1341. It is significant to note that the Plaintiffs did not challenge the as-applied constitutionality of the federal regulations themselves, but rather focused their challenge on the constitutionality of Broward County's actions in carrying out the DBE program. 544 F.Supp.2d at 1341. The district court in *Broward County* held that this type of challenge is "simply an impermissible collateral attack on the constitutionality of the statute and implementing regulations." *Id.*

The district court concluded that it would apply the case law as set out in the Seventh Circuit Court of Appeals and concurring circuits, and that the trial in this case would be conducted solely for the

purpose of establishing whether or not the County has complied fully with the federal regulations in implementing its DBE program. 544 F.Supp.2d at 1341.

Subsequently, there was a Stipulation of Dismissal filed by all parties in the district court, and an Order of Dismissal was filed without a trial of the case in November 2008.

#### **14. *Klaver Construction, Inc. v. Kansas DOT*, 211 F. Supp.2d 1296 (D. Kan. 2002)**

This is another case that involved a challenge to the USDOT Regulations that implement TEA-21 (49 CFR Part 26), in which the plaintiff contractor sought to enjoin the Kansas Department of Transportation (“DOT”) from enforcing its DBE Program on the grounds that it violates the Equal Protection Clause under the Fourteenth Amendment. This case involves a direct constitutional challenge to racial and gender preferences in federally-funded state highway contracts. This case concerned the constitutionality of the Kansas DOT’s implementation of the Federal DBE Program, and the constitutionality of the gender-based policies of the federal government and the race- and gender-based policies of the Kansas DOT. The court granted the federal and state defendants’ (USDOT and Kansas DOT) Motions to Dismiss based on lack of standing. The court held the contractor could not show the specific aspects of the DBE Program that it contends are unconstitutional have caused its alleged injuries.

### **F. Recent Decisions Involving State or Local Government MBE/WBE Programs in Other Jurisdictions**

#### **Recent Decisions in Federal Circuit Courts of Appeal**

##### **1. *H. B. Rowe Co., Inc. v. W. Lyndo Tippet, NCDOT, et al.*, 615 F.3d 233 (4th Cir. 2010)**

The State of North Carolina enacted statutory legislation that required prime contractors to engage in good faith efforts to satisfy participation goals for minority and women subcontractors on state-funded projects. (See facts as detailed in the decision of the United States District Court for the Eastern District of North Carolina discussed below.). The plaintiff, a prime contractor, brought this action after being denied a contract because of its failure to demonstrate good faith efforts to meet the participation goals set on a particular contract that it was seeking an award to perform work with the North Carolina Department of Transportation (“NCDOT”). Plaintiff asserted that the participation goals violated the Equal Protection Clause and sought injunctive relief and money damages.

After a bench trial, the district court held the challenged statutory scheme constitutional both on its face and as applied, and the plaintiff prime contractor appealed. 615 F.3d 233 at 236. The Court of Appeals held that the State did not meet its burden of proof in all respects to uphold the validity of the state legislation. But, the Court agreed with the district court that the State produced a strong basis in evidence justifying the statutory scheme on its face, and as applied to African American and Native American subcontractors, and that the State demonstrated that the legislative scheme is narrowly tailored to serve its compelling interest in remedying discrimination against these racial groups. The Court thus affirmed the decision of the district court in part, reversed it in part and remanded for further proceedings consistent with the opinion. *Id.*



The Court found that the North Carolina statutory scheme “largely mirrored the federal Disadvantaged Business Enterprise (“DBE”) program, with which every state must comply in awarding highway construction contracts that utilize federal funds.” 615 F.3d 233 at 236. The Court also noted that federal courts of appeal “have uniformly upheld the Federal DBE Program against equal-protection challenges.” *Id.*, at footnote 1, *citing, Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147 (10<sup>th</sup> Cir. 2000).

In 2004, the State retained a consultant to prepare and issue a third study of subcontractors employed in North Carolina’s highway construction industry. The study, according to the Court, marshaled evidence to conclude that disparities in the utilization of minority subcontractors persisted. 615 F.3d 233 at 238. The Court pointed out that in response to the study, the North Carolina General Assembly substantially amended state legislation section 136-28.4 and the new law went into effect in 2006. The new statute modified the previous statutory scheme, according to the Court in five important respects. *Id.*

First, the amended statute expressly conditions implementation of any participation goals on the findings of the 2004 study. Second, the amended statute eliminates the 5 and 10 percent annual goals that were set in the predecessor statute. 615 F.3d 233 at 238-239. Instead, as amended, the statute requires the NCDOT to “establish annual aspirational goals, not mandatory goals, ... for the overall participation in contracts by disadvantaged minority-owned and women-owned businesses ... [that] shall not be applied rigidly on specific contracts or projects.” *Id.* at 239, *quoting*, N.C. Gen.Stat. § 136-28.4(b)(2010). The statute further mandates that the NCDOT set “contract-specific goals or project-specific goals ... for each disadvantaged minority-owned and women-owned business category that has demonstrated significant disparity in contract utilization” based on availability, as determined by the study. *Id.*

Third, the amended statute narrowed the definition of “minority” to encompass only those groups that have suffered discrimination. *Id.* at 239. The amended statute replaced a list of defined minorities to any certain groups by defining “minority” as “only those racial or ethnicity classifications identified by [the study] ... that have been subjected to discrimination in the relevant marketplace and that have been adversely affected in their ability to obtain contracts with the Department.” *Id.* at 239 *quoting* section 136-28.4(c)(2)(2010).

Fourth, the amended statute required the NCDOT to reevaluate the Program over time and respond to changing conditions. 615 F.3d 233 at 239. Accordingly, the NCDOT must conduct a study similar to the 2004 study at least every five years. *Id.* § 136-28.4(b). Finally, the amended statute contained a sunset provision which was set to expire on August 31, 2009, but the General Assembly subsequently extended the sunset provision to August 31, 2010. *Id.* Section 136-28.4(e) (2010).

The Court also noted that the statute required only good faith efforts by the prime contractors to utilize subcontractors, and that the good faith requirement, the Court found, proved permissive in practice: prime contractors satisfied the requirement in 98.5 percent of cases, failing to do so in only 13 of 878 attempts. 615 F.3d 233 at 239.

**Strict scrutiny.** The Court stated the strict scrutiny standard was applicable to justify a race-conscious measure, and that it is a substantial burden but not automatically “fatal in fact.” 615 F.3d 233 at 241. The Court pointed out that “[t]he unhappy persistence of both the practice and the lingering effects

of racial discrimination against minority groups in this country is an unfortunate reality, and government is not disqualified from acting in response to it.” *Id.* at 241 *quoting Alexander v. Estepp*, 95 F.3d 312, 315 (4th Cir. 1996). In so acting, a governmental entity must demonstrate it had a compelling interest in “remedying the effects of past or present racial discrimination.” *Id.*, *quoting Shaw v. Hunt*, 517 U.S. 899, 909 (1996).

Thus, the Court found that to justify a race-conscious measure, a state must identify that discrimination, public or private, with some specificity, and must have a strong basis in evidence for its conclusion that remedial action is necessary. 615 F.3d 233 at 241 *quoting Croson*, 488 U.S. at 504 and *Wygant v. Jackson Board of Education*, 476 U.S. 267, 277 (1986)(plurality opinion).

The Court significantly noted that: “There is no ‘precise mathematical formula to assess the quantum of evidence that rises to the *Croson* ‘strong basis in evidence’ benchmark.” 615 F.3d 233 at 241, *quoting Rothe Dev. Corp. v. Department of Defense*, 545 F.3d 1023, 1049 (Fed.Cir. 2008). The Court stated that the sufficiency of the State’s evidence of discrimination “must be evaluated on a case-by-case basis.” *Id.* at 241. (internal quotation marks omitted).

The Court held that a state “need not conclusively prove the existence of past or present racial discrimination to establish a strong basis in evidence for concluding that remedial action is necessary. 615 F.3d 233 at 241, *citing Concrete Works*, 321 F.3d at 958. “Instead, a state may meet its burden by relying on “a significant statistical disparity” between the availability of qualified, willing, and able minority subcontractors and the utilization of such subcontractors by the governmental entity or its prime contractors. *Id.* at 241, *citing Croson*, 488 U.S. at 509 (plurality opinion). The Court stated that we “further require that such evidence be ‘corroborated by significant anecdotal evidence of racial discrimination.’” *Id.* at 241, *quoting Maryland Troopers Association, Inc. v. Evans*, 993 F.2d 1072, 1077 (4<sup>th</sup> Cir. 1993).

The Court pointed out that those challenging race-based remedial measures must “introduce credible, particularized evidence to rebut” the state’s showing of a strong basis in evidence for the necessity for remedial action. *Id.* at 241-242, *citing Concrete Works*, 321 F.3d at 959. Challengers may offer a neutral explanation for the state’s evidence, present contrasting statistical data, or demonstrate that the evidence is flawed, insignificant, or not actionable. *Id.* at 242 (citations omitted). However, the Court stated “that mere speculation that the state’s evidence is insufficient or methodologically flawed does not suffice to rebut a state’s showing. *Id.* at 242, *citing Concrete Works*, 321 F.3d at 991.

The Court held that to satisfy strict scrutiny, the state’s statutory scheme must also be “narrowly tailored” to serve the state’s compelling interest in not financing private discrimination with public funds. 615 F.3d 233 at 242, *citing Alexander*, 95 F.3d at 315 (*citing Adarand*, 515 U.S. at 227).

**Intermediate scrutiny.** The Court held that courts apply “intermediate scrutiny” to statutes that classify on the basis of gender. *Id.* at 242. The Court found that a defender of a statute that classifies on the basis of gender meets this intermediate scrutiny burden “by showing at least that the classification serves important governmental objectives and that the discriminatory means employed are substantially related to the achievement of those objectives.” *Id.*, *quoting Mississippi University for Women v. Hogan*, 458 U.S. 718, 724 (1982). The Court noted that intermediate scrutiny requires less of a showing than does “the most exacting” strict scrutiny standard of review. *Id.* at 242. The Court found that its “sister circuits” provide guidance in formulating a governing evidentiary standard for

intermediate scrutiny. These courts agree that such a measure “can rest safely on something less than the ‘strong basis in evidence’ required to bear the weight of a race- or ethnicity-conscious program.” *Id.* at 242, *quoting Engineering Contractors*, 122 F.3d at 909 (other citations omitted).

In defining what constitutes “something less” than a ‘strong basis in evidence,’ the courts, ... also agree that the party defending the statute must ‘present [ ] sufficient probative evidence in support of its stated rationale for enacting a gender preference, *i.e.*,...the evidence [must be] sufficient to show that the preference rests on evidence-informed analysis rather than on stereotypical generalizations.” 615 F.3d 233 at 242 *quoting Engineering Contractors*, 122 F.3d at 910 and *Concrete Works*, 321 F.3d at 959. The gender-based measures must be based on “reasoned analysis rather than on the mechanical application of traditional, often inaccurate, assumptions.” *Id.* at 242 *quoting Hogan*, 458 U.S. at 726.

**Plaintiff’s burden.** The Court found that when a plaintiff alleges that a statute violates the Equal Protection Clause as applied and on its face, the plaintiff bears a heavy burden. In its facial challenge, the Court held that a plaintiff “has a very heavy burden to carry, and must show that [a statutory scheme] cannot operate constitutionally under any circumstance.” *Id.* at 243, *quoting West Virginia v. U.S. Department of Health & Human Services*, 289 F.3d 281, 292 (4th Cir. 2002).

**Statistical evidence.** The Court examined the State’s statistical evidence of discrimination in public-sector subcontracting, including its disparity evidence and regression analysis. The Court noted that the statistical analysis analyzed the difference or disparity between the amount of subcontracting dollars minority- and women-owned businesses actually won in a market and the amount of subcontracting dollars they would be expected to win given their presence in that market. 615 F.3d 233 at 243. The Court found that the study grounded its analysis in the “disparity index,” which measures the participation of a given racial, ethnic, or gender group engaged in subcontracting. *Id.* In calculating a disparity index, the study divided the percentage of total subcontracting dollars that a particular group won by the percent that group represents in the available labor pool, and multiplied the result by 100. *Id.* The closer the resulting index is to 100, the greater that group’s participation. *Id.*

The Court held that after *Crosby*, a number of our sister circuits have recognized the utility of the disparity index in determining statistical disparities in the utilization of minority- and women-owned businesses. *Id.* at 243-244 (Citations to multiple federal circuit court decisions omitted.) The Court also found that generally “courts consider a disparity index lower than 80 as an indication of discrimination.” *Id.* at 244. Accordingly, the study considered only a disparity index lower than 80 as warranting further investigation. *Id.*

The Court pointed out that after calculating the disparity index for each relevant racial or gender group, the consultant tested for the statistical significance of the results by conducting standard deviation analysis through the use of t-tests. The Court noted that standard deviation analysis “describes the probability that the measured disparity is the result of mere chance.” 615 F.3d 233 at 244, *quoting Eng’g Contractors*, 122 F.3d at 914. The consultant considered the finding of two standard deviations to demonstrate “with 95 percent certainty that disparity, as represented by either overutilization or underutilization, is actually present.” *Id.*, *citing Eng’g Contractors*, 122 F.3d at 914.

The study analyzed the participation of minority and women subcontractors in construction contracts awarded and managed from the central NCDOT office in Raleigh, North Carolina. 615 F.3d 233 at 244. To determine utilization of minority and women subcontractors, the consultant

developed a master list of contracts mainly from State-maintained electronic databases and hard copy files; then selected from that list a statistically valid sample of contracts, and calculated the percentage of subcontracting dollars awarded to minority- and women-owned businesses during the 5-year period ending in June 2003. (The study was published in 2004). *Id.* at 244.

The Court found that the use of data for centrally-awarded contracts was sufficient for its analysis. It was noted that data from construction contracts awarded and managed from the NCDOT divisions across the state and from preconstruction contracts, which involve work from engineering firms and architectural firms on the design of highways, was incomplete and not accurate. 615 F.3d 233 at 244, n.6. These data were not relied upon in forming the opinions relating to the study. *Id.* at 244, n. 6.

To estimate availability, which the Court defined as the percentage of a particular group in the relevant market area, the consultant created a vendor list comprising: (1) subcontractors approved by the department to perform subcontract work on state-funded projects, (2) subcontractors that performed such work during the study period, and (3) contractors qualified to perform prime construction work on state-funded contracts. 615 F.3d 233 at 244. The Court noted that prime construction work on state-funded contracts was included based on the testimony by the consultant that prime contractors are qualified to perform subcontracting work and often do perform such work. *Id.* at 245. The Court also noted that the consultant submitted its master list to the NCDOT for verification. *Id.* at 245.

Based on the utilization and availability figures, the study prepared the disparity analysis comparing the utilization based on the percentage of subcontracting dollars over the five year period, determining the availability in numbers of firms and their percentage of the labor pool, a disparity index which is the percentage of utilization in dollars divided by the percentage of availability multiplied by 100, and a T Value. 615 F.3d 233 at 245.

The Court concluded that the figures demonstrated prime contractors underutilized all of the minority subcontractor classifications on state-funded construction contracts during the study period. 615 F.3d 233 245. The disparity index for each group was less than 80 and, thus, the Court found warranted further investigation. *Id.* The t-test results, however, demonstrated marked underutilization only of African American and Native American subcontractors. *Id.* For African Americans the t-value fell outside of two standard deviations from the mean and, therefore, was statistically significant at a 95 percent confidence level. *Id.* The Court found there was at least a 95 percent probability that prime contractors' underutilization of African American subcontractors was *not* the result of mere chance. *Id.*

For Native American subcontractors, the t-value of 1.41 was significant at a confidence level of approximately 85 percent. 615 F.3d 233 at 245. The t-values for Hispanic American and Asian American subcontractors, demonstrated significance at a confidence level of approximately 60 percent. The disparity index for women subcontractors found that they were overutilized during the study period. The overutilization was statistically significant at a 95 percent confidence level. *Id.*

To corroborate the disparity study, the consultant conducted a regression analysis studying the influence of certain company and business characteristics – with a particular focus on owner race and gender – on a firm's gross revenues. 615 F.3d 233 at 246. The consultant obtained the data from a

telephone survey of firms that conducted or attempted to conduct business with the NCDOT. The survey pool consisted of a random sample of such firms. *Id.*

The consultant used the firms' gross revenues as the dependent variable in the regression analysis to test the effect of other variables, including company age and number of full-time employees, and the owners' years of experience, level of education, race, ethnicity, and gender. 615 F.3d 233 at 246. The analysis revealed that minority and women ownership universally had a negative effect on revenue, and African American ownership of a firm had the largest negative effect on that firm's gross revenue of all the independent variables included in the regression model. *Id.* These findings led to the conclusion that for African Americans the disparity in firm revenue was not due to capacity-related or managerial characteristics alone. *Id.*

The Court rejected the arguments by the plaintiffs attacking the availability estimates. The Court rejected the plaintiff's expert, Dr. George LaNoue, who testified that bidder data – reflecting the number of subcontractors that actually bid on Department subcontracts – estimates availability better than “vendor data.” 615 F.3d 233 at 246. Dr. LaNoue conceded, however, that the State does not compile bidder data and that bidder data actually reflects skewed availability in the context of a goals program that urges prime contractors to solicit bids from minority and women subcontractors. *Id.* The Court found that the plaintiff's expert did not demonstrate that the vendor data used in the study was unreliable, or that the bidder data would have yielded less support for the conclusions reached. In sum, the Court held that the plaintiffs challenge to the availability estimate failed because it could not demonstrate that the 2004 study's availability estimate was inadequate. *Id.* at 246. The Court cited *Concrete Works*, 321 F.3d at 991 for the proposition that a challenger cannot meet its burden of proof through conjecture and unsupported criticisms of the state's evidence,” and that the plaintiff Rowe presented no viable alternative for determining availability. *Id.* at 246-247, citing *Concrete Works*, 321 F.3d 991 and *Sherbrooke Turf, Inc. v. Minn. Department of Transportation*, 345 F.3d 964, 973 (8<sup>th</sup> Cir. 2003).

The Court also rejected the plaintiff's argument that minority subcontractors participated on state-funded projects at a level consistent with their availability in the relevant labor pool, based on the state's response that evidence as to the *number* of minority subcontractors working with state-funded projects does not effectively rebut the evidence of discrimination in terms of subcontracting *dollars*. 615 F.3d 233 at 247. The State pointed to evidence indicating that prime contractors used minority businesses for low-value work in order to comply with the goals, and that African American ownership had a significant negative impact on firm revenue unrelated to firm capacity or experience. *Id.* The Court concluded plaintiff did not offer any contrary evidence. *Id.*

The Court found that the State bolstered its position by presenting evidence that minority subcontractors have the capacity to perform higher-value work. 615 F.3d 233 at 247. The study concluded, based on a sample of subcontracts and reports of annual firm revenue, that exclusion of minority subcontractors from contracts under \$500,000 was not a function of capacity. *Id.* at 247. Further, the State showed that over 90 percent of the NCDOT's subcontracts were valued at \$500,000 or less, and that capacity constraints do not operate with the same force on subcontracts as they may on prime contracts because subcontracts tend to be relatively small. *Id.* at 247. The Court pointed out that the Court in *Rothe II*, 545 F.3d at 1042-45, faulted disparity analyses of total

construction dollars, including prime contracts, for failing to account for the relative capacity of firms in that case. *Id.* at 247.

The Court pointed out that in addition to the statistical evidence, the State also presented evidence demonstrating that from 1991 to 1993, during the Program's suspension, prime contractors awarded substantially fewer subcontracting dollars to minority and women subcontractors on state-funded projects. The Court rejected the plaintiff's argument that evidence of a decline in utilization does not raise an inference of discrimination. 615 F.3d 233 at 247-248. The Court held that the very significant decline in utilization of minority and women-subcontractors – nearly 38 percent – “surely provides a basis for a fact finder to infer that discrimination played some role in prime contractors’ reduced utilization of these groups during the suspension.” *Id.* at 248, *citing Adarand v. Slater*, 228 F.3d at 1174 (finding that evidence of declining minority utilization after a program has been discontinued “strongly supports the government’s claim that there are significant barriers to minority competition in the public subcontracting market, raising the specter of racial discrimination.”) The Court found such an inference is particularly compelling for minority-owned businesses because, even during the study period, prime contractors continue to underutilize them on state-funded road projects. *Id.* at 248.

**Anecdotal evidence.** The State additionally relied on three sources of anecdotal evidence contained in the study: a telephone survey, personal interviews, and focus groups. The Court found the anecdotal evidence showed an informal “good old boy” network of white contractors that discriminated against minority subcontractors. 615 F.3d 233 at 248. The Court noted that three-quarters of African American respondents to the telephone survey agreed that an informal network of prime and subcontractors existed in the State, as did the majority of other minorities, that more than half of African American respondents believed the network excluded their companies from bidding or awarding a contract as did many of the other minorities. *Id.* at 248. The Court found that nearly half of nonminority male respondents corroborated the existence of an informal network, however, only 17 percent of them believed that the network excluded their companies from bidding or winning contracts. *Id.*

Anecdotal evidence also showed a large majority of African American respondents reported that double standards in qualifications and performance made it more difficult for them to win bids and contracts, that prime contractors view minority firms as being less competent than nonminority firms, and that nonminority firms change their bids when not required to hire minority firms. 615 F.3d 233 at 248. In addition, the anecdotal evidence showed African American and Native American respondents believed that prime contractors sometimes dropped minority subcontractors after winning contracts. *Id.* at 248. The Court found that interview and focus-group responses echoed and underscored these reports. *Id.*

The anecdotal evidence indicated that prime contractors already know who they will use on the contract before they solicit bids: that the “good old boy network” affects business because prime contractors just pick up the phone and call their buddies, which excludes others from that market completely; that prime contractors prefer to use other less qualified minority-owned firms to avoid subcontracting with African American-owned firms; and that prime contractors use their preferred subcontractor regardless of the bid price. 615 F.3d 233 at 248-249. Several minority subcontractors reported that prime contractors do not treat minority firms fairly, pointing to instances in which

prime contractors solicited quotes the day before bids were due, did not respond to bids from minority subcontractors, refused to negotiate prices with them, or gave minority subcontractors insufficient information regarding the project. *Id.* at 249.

The Court rejected the plaintiffs' contention that the anecdotal data was flawed because the study did not verify the anecdotal data and that the consultant oversampled minority subcontractors in collecting the data. The Court stated that the plaintiffs offered no rationale as to why a fact finder could not rely on the State's "unverified" anecdotal data, and pointed out that a fact finder could very well conclude that anecdotal evidence need not- and indeed cannot-be verified because it "is nothing more than a witness' narrative of an incident told from the witness' perspective and including the witness' perceptions." 615 F.3d 233 at 249, *quoting Concrete Works*, 321 F.3d at 989.

The Court held that anecdotal evidence simply supplements statistical evidence of discrimination. *Id.* at 249. The Court rejected plaintiffs' argument that the study oversampled representatives from minority groups, and found that surveying more non-minority men would not have advanced the inquiry. *Id.* at 249. It was noted that the samples of the minority groups were randomly selected. *Id.* The Court found the state had compelling anecdotal evidence that minority subcontractors face race-based obstacles to successful bidding. *Id.* at 249.

**Strong basis in evidence that the minority participation goals were necessary to remedy discrimination.** The Court held that the State presented a "strong basis in evidence" for its conclusion that minority participation goals were necessary to remedy discrimination against African American and Native American subcontractors." 615 F.3d 233 at 250. Therefore, the Court held that the State satisfied the strict scrutiny test. The Court found that the State's data demonstrated that prime contractors grossly underutilized African American and Native American subcontractors in public sector subcontracting during the study. *Id.* at 250. The Court noted that these findings have particular resonance because since 1983, North Carolina has encouraged minority participation in state-funded highway projects, and yet African American and Native American subcontractors continue to be underutilized on such projects. *Id.* at 250.

In addition, the Court found the disparity index in the study demonstrated statistically significant underutilization of African American subcontractors at a 95 percent confidence level, and of Native American subcontractors at a confidence level of approximately 85 percent. 615 F.3d 233 at 250. The Court concluded the State bolstered the disparity evidence with regression analysis demonstrating that African American ownership correlated with a significant, negative impact on firm revenue, and demonstrated there was a dramatic decline in the utilization of minority subcontractors during the suspension of the program in the 1990s. *Id.*

Thus, the Court held the State's evidence showing a gross statistical disparity between the availability of qualified American and Native American subcontractors and the amount of subcontracting dollars they win on public sector contracts established the necessary statistical foundation for upholding the minority participation goals with respect to these groups. 615 F.3d 233 at 250. The Court then found that the State's anecdotal evidence of discrimination against these two groups sufficiently supplemented the State's statistical showing. *Id.* The survey in the study exposed an informal, racially exclusive network that systemically disadvantaged minority subcontractors. *Id.* at 251. The Court held that the State could conclude with good reason that such networks exert a chronic and pernicious influence on the marketplace that calls for remedial action. *Id.* The Court found the anecdotal

evidence indicated that racial discrimination is a critical factor underlying the gross statistical disparities presented in the study. *Id.* at 251. Thus, the Court held that the State presented substantial statistical evidence of gross disparity, corroborated by “disturbing” anecdotal evidence.

The Court held in circumstances like these, the Supreme Court has made it abundantly clear a state can remedy a public contracting system that withholds opportunities from minority groups because of their race. 615 F.3d 233 at 251-252.

**Narrowly tailored.** The Court then addressed whether the North Carolina statutory scheme was narrowly tailored to achieve the State’s compelling interest in remedying discrimination against African American and Native American subcontractors in public-sector subcontracting. The following factors were considered in determining whether the statutory scheme was narrowly tailored.

**Neutral measures.** The Court held that narrowly tailoring requires “serious, good faith consideration of workable race-neutral alternatives,” but a state need not “exhaust [ ] ... every conceivable race-neutral alternative.” 615 F.3d 233 at 252 quoting *Grutter v. Bollinger*, 539 U.S. 306, 339 (2003). The Court found that the study details numerous alternative race-neutral measures aimed at enhancing the development and competitiveness of small or otherwise disadvantaged businesses in North Carolina. *Id.* at 252. The Court pointed out various race-neutral alternatives and measures, including a Small Business Enterprise Program; waiving institutional barriers of bonding and licensing requirements on certain small business contracts of \$500,000 or less; and the Department contracts for support services to assist disadvantaged business enterprises with bookkeeping and accounting, taxes, marketing, bidding, negotiation, and other aspects of entrepreneurial development. *Id.* at 252.

The Court found that plaintiff identified no viable race-neutral alternatives that North Carolina had failed to consider and adopt. The Court also found that the State had undertaken most of the race-neutral alternatives identified by USDOT in its regulations governing the Federal DBE Program. 615 F.3d 233 at 252, *citing* 49 CFR § 26.51(b). The Court concluded that the State gave serious good faith consideration to race-neutral alternatives prior to adopting the statutory scheme. *Id.*

The Court concluded that despite these race-neutral efforts, the study demonstrated disparities continue to exist in the utilization of African American and Native American subcontractors in state-funded highway construction subcontracting, and that these “persistent disparities indicate the necessity of a race-conscious remedy.” 615 F.3d 233 at 252.

**Duration.** The Court agreed with the district court that the program was narrowly tailored in that it set a specific expiration date and required a new disparity study every five years. 615 F.3d 233 at 253. The Court found that the program’s inherent time limit and provisions requiring regular reevaluation ensure it is carefully designed to endure only until the discriminatory impact has been eliminated. *Id.* at 253, *citing* *Adarand Constructors v. Slater*, 228 F.3d at 1179 (quoting *United States v. Paradise*, 480 U.S. 149, 178 (1987)).

**Program’s goals related to percentage of minority subcontractors.** The Court concluded that the State had demonstrated that the Program’s participation goals are related to the percentage of minority subcontractors in the relevant markets in the State. 615 F.3d 233 at 253. The Court found



that the NCDOT had taken concrete steps to ensure that these goals accurately reflect the availability of minority-owned businesses on a project-by-project basis. *Id.*

**Flexibility.** The Court held that the Program was flexible and thus satisfied this indicator of narrow tailoring. 615 F.3d 233 at 253. The Program contemplated a waiver of project-specific goals when prime contractors make good faith efforts to meet those goals, and that the good faith efforts essentially require only that the prime contractor solicit and consider bids from minorities. *Id.* The State does not require or expect the prime contractor to accept any bid from an unqualified bidder, or any bid that is not the lowest bid. *Id.* The Court found there was a lenient standard and flexibility of the “good faith” requirement, and noted the evidence showed only 13 of 878 good faith submissions failed to demonstrate good faith efforts. *Id.*

**Burden on non-MWBE/DBEs.** The Court rejected the two arguments presented by plaintiff that the Program created onerous solicitation and follow-up requirements, finding that there was no need for additional employees dedicated to the task of running the solicitation program to obtain MBE/WBEs, and that there was no evidence to support the claim that plaintiff was required to subcontract millions of dollars of work that it could perform itself for less money. 615 F.3d 233 at 254. The State offered evidence from the study that prime contractors need not submit subcontract work that they can self-perform. *Id.*

**Overinclusive.** The Court found by its own terms the statutory scheme is not overinclusive because it limited relief to only those racial or ethnicity classifications that have been subjected to discrimination in the relevant marketplace and that had been adversely affected in their ability to obtain contracts with the Department. 615 F.3d 233 at 254. The Court concluded that in tailoring the remedy this way, the legislature did not randomly include racial groups that may never have suffered from discrimination in the construction industry, but rather, contemplated participation goals only for those groups shown to have suffered discrimination. *Id.*

In sum, the Court held that the statutory scheme is narrowly tailored to achieve the State’s compelling interest in remedying discrimination in public-sector subcontracting against African American and Native American subcontractors. *Id.* at 254.

**Women-owned businesses overutilized.** The study’s public-sector disparity analysis demonstrated that women-owned businesses won far more than their expected share of subcontracting dollars during the study period. 615 F.3d 233 at 254. In other words, the Court concluded that prime contractors substantially overutilized women subcontractors on public road construction projects. *Id.* The Court found the public-sector evidence did not evince the “exceedingly persuasive justification” the Supreme Court requires. *Id.* at 255.

The Court noted that the State relied heavily on private-sector data from the study attempting to demonstrate that prime contractors significantly underutilized women subcontractors in the general construction industry statewide and in the Charlotte, North Carolina area. 615 F.3d 233 at 255. However, because the study did not provide a t-test analysis on the private-sector disparity figures to calculate statistical significance, the Court could not determine whether this private underutilization was “the result of mere chance.” *Id.* at 255. The Court found troubling the “evidentiary gap” that there was no evidence indicating the extent to which women-owned businesses competing on public-sector road projects vied for private-sector subcontracts in the general construction industry. *Id.* at

255. The Court also found that the State did not present any anecdotal evidence indicating that women subcontractors successfully bidding on State contracts faced private-sector discrimination. *Id.* In addition, the Court found missing any evidence prime contractors that discriminate against women subcontractors in the private sector nevertheless win public-sector contracts. *Id.*

The Court pointed out that it did not suggest that the proponent of a gender-conscious program “must always tie private discrimination to public action.” 615 F.3d 233 at 255, n. 11. But, the Court held where, as here, there existed substantial probative evidence of overutilization in the relevant public sector, a state must present something more than generalized private-sector data unsupported by compelling anecdotal evidence to justify a gender-conscious program. *Id.* at 255, n. 11.

Moreover, the Court found the state failed to establish the amount of overlap between general construction and road construction subcontracting. 615 F.3d 233 at 256. The Court said that the dearth of evidence as to the correlation between public road construction subcontracting and private general construction subcontracting severely limits the private data’s probative value in this case. *Id.*

Thus, the Court held that the State could not overcome the strong evidence of overutilization in the public sector in terms of gender participation goals, and that the proffered private-sector data failed to establish discrimination in the particular field in question. 615 F.3d 233 at 256. Further, the anecdotal evidence, the Court concluded, indicated that most women subcontractors do not experience discrimination. *Id.* Thus, the Court held that the State failed to present sufficient evidence to support the Program’s current inclusion of women subcontractors in setting participation goals. *Id.*

**Holding.** The Court held that the state legislature had crafted legislation that withstood the constitutional scrutiny. 615 F.3d 233 at 257. The Court concluded that in light of the statutory scheme’s flexibility and responsiveness to the realities of the marketplace, and given the State’s strong evidence of discrimination against African American and Native American subcontractors in public-sector subcontracting, the State’s application of the statute to these groups is constitutional. *Id.* at 257. However, the Court also held that because the State failed to justify its application of the statutory scheme to women, Asian American, and Hispanic American subcontractors, the Court found those applications were not constitutional.

Therefore, the Court affirmed the judgment of the district court with regard to the facial validity of the statute, and with regard to its application to African American and Native American subcontractors. 615 F.3d 233 at 258. The Court reversed the district court’s judgment insofar as it upheld the constitutionality of the state legislature as applied to women, Asian American and Hispanic American subcontractors. *Id.* The Court thus remanded the case to the district court to fashion an appropriate remedy consistent with the opinion. *Id.*

**Concurring opinions.** It should be pointed out that there were two concurring opinions by the three Judge panel: one judge concurred in the judgment, and the other judge concurred fully in the majority opinion and the judgment.

## **2. *Jana-Rock Construction, Inc. v. New York State Dept. of Economic Development*, 438 F.3d 195 (2d Cir. 2006)**

This recent case is instructive in connection with the determination of the groups that may be included in a MBE/WBE-type program, and the standard of analysis utilized to evaluate a local government's non-inclusion of certain groups. In this case, the Second Circuit Court of Appeals held racial classifications that are challenged as "under-inclusive" (*i.e.*, those that exclude persons from a particular racial classification) are subject to a "rational basis" review, not strict scrutiny.

Plaintiff Luiere, a 70 percent shareholder of Jana-Rock Construction, Inc. ("Jana Rock") and the "son of a Spanish mother whose parents were born in Spain," challenged the constitutionality of the State of New York's definition of "Hispanic" under its local minority-owned business program. 438 F.3d 195, 199-200 (2d Cir. 2006). Under the USDOT regulations, 49 CFR § 26.5, "Hispanic Americans" are defined as "persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race." *Id.* at 201. Upon proper application, Jana-Rock was certified by the New York Department of Transportation as a Disadvantaged Business Enterprise ("DBE") under the federal regulations. *Id.*

However, unlike the federal regulations, the State of New York's local minority-owned business program included in its definition of minorities "Hispanic persons of Mexican, Puerto Rican, Dominican, Cuban, Central or South American of either Indian or Hispanic origin, regardless of race." The definition did not include all persons from, or descendants of persons from, Spain or Portugal. *Id.* Accordingly, Jana-Rock was denied MBE certification under the local program; Jana-Rock filed suit alleging a violation of the Equal Protection Clause. *Id.* at 202-03. The plaintiff conceded that the overall minority-owned business program satisfied the requisite strict scrutiny, but argued that the definition of "Hispanic" was fatally under-inclusive. *Id.* at 205.

The Second Circuit found that the narrow-tailoring prong of the strict scrutiny analysis "allows New York to identify which groups it is prepared to prove are in need of affirmative action without demonstrating that no other groups merit consideration for the program." *Id.* at 206. The court found that evaluating under-inclusiveness as an element of the strict scrutiny analysis was at odds with the United States Supreme Court decision in *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989) which required that affirmative action programs be no broader than necessary. *Id.* at 207-08. The court similarly rejected the argument that the state should mirror the federal definition of "Hispanic," finding that Congress has more leeway than the states to make broader classifications because Congress is making such classifications on the national level. *Id.* at 209.

The court opined — without deciding — that it may be impermissible for New York to simply adopt the "federal USDOT definition of Hispanic without at least making an independent assessment of discrimination against Hispanics of Spanish Origin in New York." *Id.* Additionally, finding that the plaintiff failed to point to any discriminatory purpose by New York in failing to include persons of Spanish or Portuguese descent, the court determined that the rational basis analysis was appropriate. *Id.* at 213.

The court held that the plaintiff failed the rational basis test for three reasons: (1) because it was not irrational nor did it display animus to exclude persons of Spanish and Portuguese descent from the definition of Hispanic; (2) because the fact the plaintiff could demonstrate evidence of discrimination

that he personally had suffered did not render New York's decision to exclude persons of Spanish and Portuguese descent irrational; and (3) because the fact New York may have relied on Census data including a small percentage of Hispanics of Spanish descent did not mean that it was irrational to conclude that Hispanics of Latin American origin were in greater need of remedial legislation. *Id.* at 213-14. Thus, the Second Circuit affirmed the conclusion that New York had a rational basis for its definition to not include persons of Spanish and Portuguese descent, and thus affirmed the district court decision upholding the constitutionality of the challenged definition.

### **3. *Rapid Test Prods., Inc. v. Durham Sch. Servs., Inc.*, 460 F.3d 859 (7<sup>th</sup> Cir. 2006)**

In *Rapid Test Products, Inc. v. Durham School Services Inc.*, the Seventh Circuit Court of Appeals held that 42 U.S.C. § 1981 (the federal anti-discrimination law) did not provide an "entitlement" in disadvantaged businesses to receive contracts subject to set aside programs; rather, § 1981 provided a remedy for individuals who were subject to discrimination.

Durham School Services, Inc. ("Durham"), a prime contractor, submitted a bid for and won a contract with an Illinois school district. The contract was subject to a set-aside program reserving some of the subcontracts for disadvantaged business enterprises (a race- and gender-conscious program). Prior to bidding, Durham negotiated with Rapid Test Products, Inc. ("Rapid Test"), made one payment to Rapid Test as an advance, and included Rapid Test in its final bid. Rapid Test believed it had received the subcontract. However, after the school district awarded the contract to Durham, Durham gave the subcontract to one of Rapid Test's competitor's, a business owned by an Asian male. The school district agreed to the substitution. Rapid Test brought suit against Durham under 42 U.S.C. § 1981 alleging that Durham discriminated against it because Rapid's owner was a black woman.

The district court granted summary judgment in favor of Durham holding the parties' dealing had been too indefinite to create a contract. On appeal, the Seventh Circuit Court of Appeals stated that "§ 1981 establishes a rule against discrimination in contracting and does not create any entitlement to be the beneficiary of a contract reserved for firms owned by specified racial, sexual, ethnic, or religious groups. Arguments that a particular set-aside program is a lawful remedy for prior discrimination may or may not prevail if a potential subcontractor claims to have been excluded, but it is to victims of discrimination rather than frustrated beneficiaries that § 1981 assigns the right to litigate."

The court held that if race or sex discrimination is the reason why Durham did not award the subcontract to Rapid Test, then § 1981 provides relief. Having failed to address this issue, the Seventh Circuit Court of Appeals remanded the case to the district court to determine whether Rapid Test had evidence to back up its claim that race and sex discrimination, rather than a nondiscriminatory reason such as inability to perform the services Durham wanted, accounted for Durham's decision to hire Rapid Test's competitor.

### **4. *Virdi v. DeKalb County School District*, 135 Fed. Appx. 262, 2005 WL 138942 (11<sup>th</sup> Cir. 2005) (unpublished opinion)**

Although it is an unpublished opinion, *Virdi v. DeKalb County School District* is a recent Eleventh Circuit decision reviewing a challenge to a local government MBE/WBE-type program, which is

instructive to the disparity study. In *Virdi*, the Eleventh Circuit struck down a MBE/WBE goal program that the court held contained racial classifications. The court based its ruling primarily on the failure of the DeKalb County School District (the “District”) to seriously consider and implement a race-neutral program and to the infinite duration of the program.

Plaintiff Virdi, an Asian American architect of Indian descent, filed suit against the District, members of the DeKalb County Board of Education (both individually and in their official capacities) (the “Board”) and the Superintendent (both individually and in his official capacity) (collectively “defendants”) pursuant to 42 U.S.C. §§ 1981 and 1983 and the Fourteenth Amendment alleging that they discriminated against him on the basis of race when awarding architectural contracts. 135 Fed. Appx. 262, 264 (11<sup>th</sup> Cir. 2005). Virdi also alleged the school district’s Minority Vendor Involvement Program was facially unconstitutional. *Id.*

The district court initially granted the defendants’ Motions for Summary Judgment on all of Virdi’s claims and the Eleventh Circuit Court of Appeals reversed in part, vacated in part, and remanded. *Id.* On remand, the district court granted the defendants’ Motion for Partial Summary Judgment on the facial challenge, and then granted the defendants’ motion for a judgment as a matter of law on the remaining claims at the close of Virdi’s case. *Id.*

In 1989, the Board appointed the Tillman Committee (the “Committee”) to study participation of female- and minority-owned businesses with the District. *Id.* The Committee met with various District departments and a number of minority contractors who claimed they had unsuccessfully attempted to solicit business with the District. *Id.* Based upon a “general feeling” that minorities were under-represented, the Committee issued the Tillman Report (the “Report”) stating “the Committee’s impression that [m]inorities ha[d] not participated in school board purchases and contracting in a ratio reflecting the minority make-up of the community.” *Id.* The Report contained no specific evidence of past discrimination nor any factual findings of discrimination. *Id.*

The Report recommended that the District: (1) Advertise bids and purchasing opportunities in newspapers targeting minorities, (2) conduct periodic seminars to educate minorities on doing business with the District, (3) notify organizations representing minority firms regarding bidding and purchasing opportunities, and (4) publish a “how to” booklet to be made available to any business interested in doing business with the District.

*Id.* The Report also recommended that the District adopt annual, aspirational participation goals for women- and minority-owned businesses. *Id.* The Report contained statements indicating the selection process should remain neutral and recommended that the Board adopt a non-discrimination statement. *Id.*

In 1991, the Board adopted the Report and implemented several of the recommendations, including advertising in the AJC, conducting seminars, and publishing the “how to” booklet. *Id.* The Board also implemented the Minority Vendor Involvement Program (the “MVP”) which adopted the participation goals set forth in the Report. *Id.* at 265.

The Board delegated the responsibility of selecting architects to the Superintendent. *Id.* Virdi sent a letter to the District in October 1991 expressing interest in obtaining architectural contracts. *Id.* Virdi sent the letter to the District Manager and sent follow-up literature; he re-contacted the District

Manager in 1992 and 1993. *Id.* In August 1994, Virdi sent a letter and a qualifications package to a project manager employed by Heery International. *Id.* In a follow-up conversation, the project manager allegedly told Virdi that his firm was not selected not based upon his qualifications, but because the “District was only looking for ‘black-owned firms.’” *Id.* Virdi sent a letter to the project manager requesting confirmation of his statement in writing and the project manager forwarded the letter to the District. *Id.*

After a series of meetings with District officials, in 1997, Virdi met with the newly hired Executive Director. *Id.* at 266. Upon request of the Executive Director, Virdi re-submitted his qualifications but was informed that he would be considered only for future projects (Phase III SPLOST projects). *Id.* Virdi then filed suit before any Phase III SPLOST projects were awarded. *Id.*

The Eleventh Circuit considered whether the MVP was facially unconstitutional and whether the defendants intentionally discriminated against Virdi on the basis of his race. The court held that strict scrutiny applies to all racial classifications and is not limited to merely set-asides or mandatory quotas; therefore, the MVP was subject to strict scrutiny because it contained racial classifications. *Id.* at 267. The court first questioned whether the identified government interest was compelling. *Id.* at 268. However, the court declined to reach that issue because it found the race-based participation goals were not narrowly tailored to achieving the identified government interest. *Id.*

The court held the MVP was not narrowly tailored for two reasons. *Id.* First, because no evidence existed that the District considered race-neutral alternatives to “avoid unwitting discrimination.” The court found that “[w]hile narrow tailoring does not require exhaustion of every conceivable race-neutral alternative, it does require serious, good faith consideration of whether such alternatives could serve the governmental interest at stake.” *Id.*, citing *Grutter v. Bollinger*, 539 U.S. 306, 339 (2003), and *Richmond v. J.A. Croson Co.*, 488 U.S. 469, 509-10 (1989). The court found that District could have engaged in any number of equally effective race-neutral alternatives, including using its outreach procedure and tracking the participation and success of minority-owned business as compared to non-minority-owned businesses. *Id.* at 268, n.8. Accordingly, the court held the MVP was not narrowly tailored. *Id.* at 268.

Second, the court held that the unlimited duration of the MVP’s racial goals negated a finding of narrow tailoring. *Id.* “[R]ace conscious ... policies must be limited in time.” *Id.*, citing *Grutter*, 539 U.S. at 342, and *Walker v. City of Mesquite, TX*, 169 F.3d 973, 982 (5<sup>th</sup> Cir. 1999). The court held that because the government interest could have been achieved utilizing race-neutral measures, and because the racial goals were not temporally limited, the MVP could not withstand strict scrutiny and was unconstitutional on its face. *Id.* at 268.

With respect to Virdi’s claims of intentional discrimination, the court held that although the MVP was facially unconstitutional, no evidence existed that the MVP or its unconstitutionality caused Virdi to lose a contract that he would have otherwise received. *Id.* Thus, because Virdi failed to establish a causal connection between the unconstitutional aspect of the MVP and his own injuries, the court affirmed the district court’s grant of judgment on that issue. *Id.* at 269. Similarly, the court found that Virdi presented insufficient evidence to sustain his claims against the Superintendent for intentional discrimination. *Id.*

The court reversed the district court's order pertaining to the facial constitutionality of the MVP's racial goals, and affirmed the district court's order granting defendants' motion on the issue of intentional discrimination against Viridi. *Id.* at 270.

**5. *Concrete Works of Colorado, Inc. v. City and County of Denver*, 321 F.3d 950 (10<sup>th</sup> Cir. 2003), cert. denied, 540 U.S. 1027, 124 S. Ct. 556 (2003) (Scalia, Justice with whom the Chief Justice Rehnquist, joined, dissenting from the denial of certiorari)**

This case is instructive to the disparity study because it is one of the only recent decisions to uphold the validity of a local government MBE/WBE program. It is significant to note that the Tenth Circuit did not apply the narrowly tailored test and thus did not rule on an application of the narrowly tailored test, instead finding that the plaintiff had waived that challenge in one of the earlier decisions in the case. This case also is one of the only cases to have found private sector marketplace discrimination as a basis to uphold an MBE/WBE-type program.

In *Concrete Works* the United States Court of Appeals for the Tenth Circuit held that the City and County of Denver had a compelling interest in limiting race discrimination in the construction industry, that the City had an important governmental interest in remedying gender discrimination in the construction industry, and found that the City and County of Denver had established a compelling governmental interest to have a race- and gender-based program. In *Concrete Works*, the Court of Appeals did not address the issue of whether the MWBE Ordinance was narrowly tailored because it held the district court was barred under the law of the case doctrine from considering that issue since it was not raised on appeal by the plaintiff construction companies after they had lost that issue on summary judgment in an earlier decision. Therefore, the Court of Appeals did not reach a decision as to narrowly tailoring or consider that issue in the case.

**Case history.** Plaintiff, Concrete Works of Colorado, Inc. ("CWC") challenged the constitutionality of an "affirmative action" ordinance enacted by the City and County of Denver (hereinafter the "City" or "Denver"). 321 F.3d 950, 954 (10th Cir. 2003). The ordinance established participation goals for racial minorities and women on certain City construction and professional design projects. *Id.*

The City enacted an Ordinance No. 513 ("1990 Ordinance") containing annual goals for MBE/WBE utilization on all competitively bid projects. *Id.* at 956. A prime contractor could also satisfy the 1990 Ordinance requirements by using "good faith efforts." *Id.* In 1996, the City replaced the 1990 Ordinance with Ordinance No. 304 (the "1996 Ordinance"). The district court stated that the 1996 Ordinance differed from the 1990 Ordinance by expanding the definition of covered contracts to include some privately financed contracts on City-owned land; added updated information and findings to the statement of factual support for continuing the program; refined the requirements for MBE/WBE certification and graduation; mandated the use of MBEs and WBEs on change orders; and expanded sanctions for improper behavior by MBEs, WBEs or majority-owned contractors in failing to perform the affirmative action commitments made on City projects. *Id.* at 956-57.

The 1996 Ordinance was amended in 1998 by Ordinance No. 948 (the "1998 Ordinance"). The 1998 Ordinance reduced annual percentage goals and prohibited an MBE or a WBE, acting as a bidder, from counting self-performed work toward project goals. *Id.* at 957.

CWC filed suit challenging the constitutionality of the 1990 Ordinance. *Id.* The district court conducted a bench trial on the constitutionality of the three ordinances. *Id.* The district court ruled in favor of CWC and concluded that the ordinances violated the Fourteenth Amendment. *Id.* The City then appealed to the Tenth Circuit Court of Appeals. *Id.* The Court of Appeals reversed and remanded. *Id.* at 954.

The Court of Appeals applied strict scrutiny to race-based measures and intermediate scrutiny to the gender-based measures. *Id.* at 957-58, 959. The Court of Appeals also cited *Richmond v. J.A. Croson Co.*, for the proposition that a governmental entity “can use its spending powers to remedy private discrimination, if it identifies that discrimination with the particularity required by the Fourteenth Amendment.” 488 U.S. 469, 492 (1989) (plurality opinion). Because “an effort to alleviate the effects of *societal* discrimination is not a compelling interest,” the Court of Appeals held that Denver could demonstrate that its interest is compelling only if it (1) identified the past or present discrimination “with some specificity,” and (2) demonstrated that a “strong basis in evidence” supports its conclusion that remedial action is necessary. *Id.* at 958, *quoting Shaw v. Hunt*, 517 U.S. 899, 909-10 (1996).

The court held that Denver could meet its burden without conclusively proving the existence of past or present racial discrimination. *Id.* Rather, Denver could rely on “empirical evidence that demonstrates ‘a significant statistical disparity between the number of qualified minority contractors ... and the number of such contractors actually engaged by the locality or the locality’s prime contractors.’” *Id.*, *quoting Croson*, 488 U.S. at 509 (plurality opinion). Furthermore, the Court of Appeals held that Denver could rely on statistical evidence gathered from the six-county Denver Metropolitan Statistical Area (MSA) and could supplement the statistical evidence with anecdotal evidence of public and private discrimination. *Id.*

The Court of Appeals held that Denver could establish its compelling interest by presenting evidence of its own direct participation in racial discrimination or its passive participation in private discrimination. *Id.* The Court of Appeals held that once Denver met its burden, CWC had to introduce “credible, particularized evidence to rebut [Denver’s] initial showing of the existence of a compelling interest, which could consist of a neutral explanation for the statistical disparities.” *Id.* (internal citations and quotations omitted). The Court of Appeals held that CWC could also rebut Denver’s statistical evidence “by (1) showing that the statistics are flawed; (2) demonstrating that the disparities shown by the statistics are not significant or actionable; or (3) presenting contrasting statistical data.” *Id.* (internal citations and quotations omitted). The Court of Appeals held that the burden of proof at all times remained with CWC to demonstrate the unconstitutionality of the ordinances. *Id.* at 960.

The Court of Appeals held that to meet its burden of demonstrating an important governmental interest per the intermediate scrutiny analysis, Denver must show that the gender-based measures in the ordinances were based on “reasoned analysis rather than through the mechanical application of traditional, often inaccurate, assumptions.” *Id.*, *quoting Miss. Univ. for Women v. Hogan*, 458 U.S. 718, 726 (1982).

**The studies.** Denver presented historical, statistical and anecdotal evidence in support of its MBE/WBE programs. Denver commissioned a number of studies to assess its MBE/WBE programs. *Id.* at 962. The consulting firm hired by Denver utilized disparity indices in part. *Id.* at 962.



The 1990 Study also examined MBE and WBE utilization in the overall Denver MSA construction market, both public and private. *Id.* at 963.

The consulting firm also interviewed representatives of MBEs, WBEs, majority-owned construction firms, and government officials. *Id.* Based on this information, the 1990 Study concluded that, despite Denver's efforts to increase MBE and WBE participation in Denver Public Works projects, some Denver employees and private contractors engaged in conduct designed to circumvent the goals program. *Id.* After reviewing the statistical and anecdotal evidence contained in the 1990 Study, the City Council enacted the 1990 Ordinance. *Id.*

After the Tenth Circuit decided *Concrete Works II*, Denver commissioned another study (the "1995 Study"). *Id.* at 963. Using 1987 Census Bureau data, the 1995 Study again examined utilization of MBEs and WBEs in the construction and professional design industries within the Denver MSA. *Id.* The 1995 Study concluded that MBEs and WBEs were more likely to be one-person or family-run businesses. The Study concluded that Hispanic-owned firms were less likely to have paid employees than white-owned firms but that Asian/Native American-owned firms were more likely to have paid employees than white- or other minority-owned firms. To determine whether these factors explained overall market disparities, the 1995 Study used the Census data to calculate disparity indices for all firms in the Denver MSA construction industry and separately calculated disparity indices for firms with paid employees and firms with no paid employees. *Id.* at 964.

The Census Bureau information was also used to examine average revenues per employee for Denver MSA construction firms with paid employees. Hispanic-, Asian-, Native American-, and women-owned firms with paid employees all reported lower revenues per employee than majority-owned firms. The 1995 Study also used 1990 Census data to calculate rates of self-employment within the Denver MSA construction industry. The Study concluded that the disparities in the rates of self-employment for blacks, Hispanics, and women persisted even after controlling for education and length of work experience. The 1995 Study controlled for these variables and reported that blacks and Hispanics working in the Denver MSA construction industry were less than half as likely to own their own businesses as were whites of comparable education and experience. *Id.*

In late 1994 and early 1995, a telephone survey of construction firms doing business in the Denver MSA was conducted. *Id.* at 965. Based on information obtained from the survey, the consultant calculated percentage utilization and percentage availability of MBEs and WBEs. Percentage utilization was calculated from revenue information provided by the responding firms. Percentage availability was calculated based on the number of MBEs and WBEs that responded to the survey question regarding revenues. Using these utilization and availability percentages, the 1995 Study showed disparity indices of 64 for MBEs and 70 for WBEs in the construction industry. In the professional design industry, disparity indices were 67 for MBEs and 69 for WBEs. The 1995 Study concluded that the disparity indices obtained from the telephone survey data were more accurate than those obtained from the 1987 Census data because the data obtained from the telephone survey were more recent, had a narrower focus, and included data on C corporations. Additionally, it was possible to calculate disparity indices for professional design firms from the survey data. *Id.*

In 1997, the City conducted another study to estimate the availability of MBEs and WBEs and to examine, *inter alia*, whether race and gender discrimination limited the participation of MBEs and WBEs in construction projects of the type typically undertaken by the City (the "1997 Study"). *Id.* at

966. The 1997 Study used geographic and specialization information to calculate MBE/WBE availability. Availability was defined as “the ratio of MBE/WBE firms to the total number of firms in the four-digit SIC codes and geographic market area relevant to the City’s contracts.” *Id.*

The 1997 Study compared MBE/WBE availability and utilization in the Colorado construction industry. *Id.* The statewide market was used because necessary information was unavailable for the Denver MSA. *Id.* at 967. Additionally, data collected in 1987 by the Census Bureau was used because more current data was unavailable. The Study calculated disparity indices for the statewide construction market in Colorado as follows: 41 for African American firms, 40 for Hispanic firms, 14 for Asian and other minorities, and 74 for women-owned firms. *Id.*

The 1997 Study also contained an analysis of whether African Americans, Hispanics, or Asian Americans working in the construction industry are less likely to be self-employed than similarly situated whites. *Id.* Using data from the Public Use Microdata Samples (“PUMS”) of the 1990 Census of Population and Housing, the Study used a sample of individuals working in the construction industry. The Study concluded that in both Colorado and the Denver MSA, African Americans, Hispanics, and Native Americans working in the construction industry had lower self-employment rates than whites. Asian Americans had higher self-employment rates than whites.

Using the availability figures calculated earlier in the Study, the Study then compared the actual availability of MBE/WBEs in the Denver MSA with the potential availability of MBE/WBEs if they formed businesses at the same rate as whites with the same characteristics. *Id.* Finally, the Study examined whether self-employed minorities and women in the construction industry have lower earnings than white males with similar characteristics. *Id.* at 968. Using linear regression analysis, the Study compared business owners with similar years of education, of similar age, doing business in the same geographic area, and having other similar demographic characteristics. Even after controlling for several factors, the results showed that self-employed African Americans, Hispanics, Native Americans, and women had lower earnings than white males. *Id.*

The 1997 Study also conducted a mail survey of both MBE/WBEs and non-MBE/WBEs to obtain information on their experiences in the construction industry. Of the MBE/WBEs who responded, 35 percent indicated that they had experienced at least one incident of disparate treatment within the last five years while engaged in business activities. The survey also posed the following question: “How often do prime contractors who use your firm as a subcontractor on public sector projects with [MBE/WBE] goals or requirements ... also use your firm on public sector or private sector projects without [MBE/WBE] goals or requirements?” Fifty-eight percent of minorities and 41 percent of white women who responded to this question indicated they were “seldom or never” used on non-goals projects. *Id.*

MBE/WBEs were also asked whether the following aspects of procurement made it more difficult or impossible to obtain construction contracts: (1) bonding requirements, (2) insurance requirements, (3) large project size, (4) cost of completing proposals, (5) obtaining working capital, (6) length of notification for bid deadlines, (7) prequalification requirements, and (8) previous dealings with an agency. This question was also asked of non-MBE/WBEs in a separate survey. With one exception, MBE/WBEs considered each aspect of procurement more problematic than non-MBE/WBEs. To determine whether a firm’s size or experience explained the different responses, a regression analysis was conducted that controlled for age of the firm, number of employees, and level of revenues. The

results again showed that with the same, single exception, MBE/WBEs had more difficulties than non-MBE/WBEs with the same characteristics. *Id.* at 968-69.

After the 1997 Study was completed, the City enacted the 1998 Ordinance. The 1998 Ordinance reduced the annual goals to 10 percent for both MBEs and WBEs and eliminated a provision which previously allowed MBE/WBEs to count their own work toward project goals. *Id.* at 969.

The anecdotal evidence included the testimony of the senior vice-president of a large, majority-owned construction firm who stated that when he worked in Denver, he received credible complaints from minority and women-owned construction firms that they were subject to different work rules than majority-owned firms. *Id.* He also testified that he frequently observed graffiti containing racial or gender epithets written on job sites in the Denver metropolitan area. Further, he stated that he believed, based on his personal experiences, that many majority-owned firms refused to hire minority- or women-owned subcontractors because they believed those firms were not competent. *Id.*

Several MBE/WBE witnesses testified that they experienced difficulty prequalifying for private sector projects and projects with the City and other governmental entities in Colorado. One individual testified that her company was required to prequalify for a private sector project while no similar requirement was imposed on majority-owned firms. Several others testified that they attempted to prequalify for projects but their applications were denied even though they met the prequalification requirements. *Id.*

Other MBE/WBEs testified that their bids were rejected even when they were the lowest bidder; that they believed they were paid more slowly than majority-owned firms on both City projects and private sector projects; that they were charged more for supplies and materials; that they were required to do additional work not part of the subcontracting arrangement; and that they found it difficult to join unions and trade associations. *Id.* There was testimony detailing the difficulties MBE/WBEs experienced in obtaining lines of credit. One WBE testified that she was given a false explanation of why her loan was declined; another testified that the lending institution required the co-signature of her husband even though her husband, who also owned a construction firm, was not required to obtain her co-signature; a third testified that the bank required her father to be involved in the lending negotiations. *Id.*

The court also pointed out anecdotal testimony involving recitations of racially- and gender-motivated harassment experienced by MBE/WBEs at work sites. There was testimony that minority and female employees working on construction projects were physically assaulted and fondled, spat upon with chewing tobacco, and pelted with two-inch bolts thrown by males from a height of 80 feet. *Id.* at 969-70.

**The legal framework applied by the court.** The Court held that the district court incorrectly believed Denver was required to prove the existence of discrimination. Instead of considering whether Denver had demonstrated strong evidence from which an inference of past or present discrimination could be drawn, the district court analyzed whether Denver's evidence showed that there is pervasive discrimination. *Id.* at 970. The court, quoting *Concrete Works II*, stated that "the Fourteenth Amendment does not require a court to make an ultimate finding of discrimination before a municipality may take affirmative steps to eradicate discrimination." *Id.* at 970, quoting

*Concrete Works II*, 36 F.3d 1513, 1522 (10th Cir. 1994). Denver’s initial burden was to demonstrate that strong evidence of discrimination supported its conclusion that remedial measures were necessary. Strong evidence is that “approaching a prima facie case of a constitutional or statutory violation,” not irrefutable or definitive proof of discrimination. *Id.* at 97, quoting *Croson*, 488 U.S. at 500. The burden of proof at all times remained with the contractor plaintiff to prove by a preponderance of the evidence that Denver’s “evidence did not support an inference of prior discrimination and thus a remedial purpose.” *Id.*, quoting *Adarand VII*, 228 F.3d at 1176.

Denver, the Court held, did introduce evidence of discrimination against each group included in the ordinances. *Id.* at 971. Thus, Denver’s evidence did not suffer from the problem discussed by the court in *Croson*. The Court held the district court erroneously concluded that Denver must demonstrate that the private firms directly engaged in any discrimination in which Denver passively participates do so intentionally, with the purpose of disadvantaging minorities and women. The *Croson* majority concluded that a “city would have a compelling interest in preventing its tax dollars from assisting [local trade] organizations in maintaining a racially segregated construction market.” *Id.* at 971, quoting *Croson*, 488 U.S. 503. Thus, the Court held Denver’s burden was to introduce evidence which raised the inference of discriminatory exclusion in the local construction industry and linked its spending to that discrimination. *Id.*

The Court noted the Supreme Court has stated that the inference of discriminatory exclusion can arise from statistical disparities. *Id.*, citing *Croson*, 488 U.S. at 503. Accordingly, it concluded that Denver could meet its burden through the introduction of statistical and anecdotal evidence. To the extent the district court required Denver to introduce additional evidence to show discriminatory motive or intent on the part of private construction firms, the district court erred. Denver, according to the Court, was under no burden to identify any specific practice or policy that resulted in discrimination. Neither was Denver required to demonstrate that the purpose of any such practice or policy was to disadvantage women or minorities. *Id.* at 972.

The court found Denver’s statistical and anecdotal evidence relevant because it identifies discrimination in the local construction industry, not simply discrimination in society. The court held the genesis of the identified discrimination is irrelevant and the district court erred when it discounted Denver’s evidence on that basis. *Id.*

The court held the district court erroneously rejected the evidence Denver presented on marketplace discrimination. *Id.* at 973. The court rejected the district court’s erroneous legal conclusion that a municipality may only remedy its own discrimination. The court stated this conclusion is contrary to the holdings in *Concrete Works II* and the plurality opinion in *Croson*. *Id.* The court held it previously recognized in this case that “a municipality has a compelling interest in taking affirmative steps to remedy both public *and private* discrimination specifically identified in its area.” *Id.*, quoting *Concrete Works II*, 36 F.3d at 1529 (emphasis added). In *Concrete Works II*, the court stated that “we do not read *Croson* as requiring the municipality to identify an exact linkage between its award of public contracts and private discrimination.” *Id.*, quoting *Concrete Works II*, 36 F.3d at 1529.

The court stated that Denver could meet its burden of demonstrating its compelling interest with evidence of private discrimination in the local construction industry coupled with evidence that it has become a passive participant in that discrimination. *Id.* at 973. Thus, Denver was not required to demonstrate that it is “guilty of prohibited discrimination” to meet its initial burden. *Id.*

Additionally, the court had previously concluded that Denver's statistical studies, which compared utilization of MBE/WBEs to availability, supported the inference that "local prime contractors" are engaged in racial and gender discrimination. *Id.* at 974, *quoting Concrete Works II*, 36 F.3d at 1529. Thus, the court held Denver's disparity studies should not have been discounted because they failed to specifically identify those individuals or firms responsible for the discrimination. *Id.*

#### The Court's rejection of CWC's arguments and the district court findings.

**Use of marketplace data.** The court held the district court, *inter alia*, erroneously concluded that the disparity studies upon which Denver relied were significantly flawed because they measured discrimination in the overall Denver MSA construction industry, not discrimination by the City itself. *Id.* at 974. The court found that the district court's conclusion was directly contrary to the holding in *Adarand VII* that evidence of both public and private discrimination in the construction industry is relevant. *Id.*, citing *Adarand VII*, 228 F.3d at 1166-67).

The court held the conclusion reached by the majority in *Croson* that marketplace data are relevant in equal protection challenges to affirmative action programs was consistent with the approach later taken by the court in *Shaw v. Hunt*. *Id.* at 975. In *Shaw*, a majority of the court relied on the majority opinion in *Croson* for the broad proposition that a governmental entity's "interest in remedying the effects of past or present racial discrimination may in the proper case justify a government's use of racial distinctions." *Id.*, *quoting Shaw*, 517 U.S. at 909. The *Shaw* court did not adopt any requirement that only discrimination by the governmental entity, either directly or by utilizing firms engaged in discrimination on projects funded by the entity, was remediable. The court, however, did set out two conditions that must be met for the governmental entity to show a compelling interest. "First, the discrimination must be identified discrimination." *Id.* at 976, *quoting Shaw*, 517 U.S. at 910. The City can satisfy this condition by identifying the discrimination, "'public or private, with some specificity.'" *Id.* at 976, *citing Shaw*, 517 U.S. at 910, *quoting Croson*, 488 U.S. at 504 (emphasis added). The governmental entity must also have a "strong basis in evidence to conclude that remedial action was necessary." *Id.* Thus, the court concluded *Shaw* specifically stated that evidence of either public or private discrimination could be used to satisfy the municipality's burden of producing strong evidence. *Id.* at 976.

In *Adarand VII*, the court noted it concluded that evidence of marketplace discrimination can be used to support a compelling interest in remedying past or present discrimination through the use of affirmative action legislation. *Id.*, *citing Adarand VII*, 228 F.3d at 1166-67 ("[W]e may consider public and private discrimination not only in the specific area of government procurement contracts but also in the construction industry generally; thus *any findings Congress has made as to the entire construction industry are relevant*." (emphasis added)). Further, the court pointed out in this case it earlier rejected the argument CWC reasserted here that marketplace data are irrelevant and remanded the case to the district court to determine whether Denver could link its public spending to "the Denver MSA evidence of industry-wide discrimination." *Id.*, *quoting Concrete Works II*, 36 F.3d at 1529. The court stated that evidence explaining "the Denver government's role in contributing to the underutilization of MBEs and WBEs in the *private construction market in the Denver MSA*" was relevant to Denver's burden of producing strong evidence. *Id.*, *quoting Concrete Works II*, 36 F.3d at 1530 (emphasis added).

Consistent with the court's mandate in *Concrete Works II*, the City attempted to show at trial that it "indirectly contributed to private discrimination by awarding public contracts to firms that in turn

discriminated against MBE and/or WBE subcontractors in other private portions of their business.” *Id.* The City can demonstrate that it is a “‘passive participant’ in a system of racial exclusion practiced by elements of the local construction industry” by compiling evidence of marketplace discrimination and then linking its spending practices to the private discrimination. *Id.*, quoting *Croson*, 488 U.S. at 492.

The court rejected CWC’s argument that the lending discrimination studies and business formation studies presented by Denver were irrelevant. In *Adarand VII*, the court concluded that evidence of discriminatory barriers to the formation of businesses by minorities and women and fair competition between MBE/WBEs and majority-owned construction firms shows a “strong link” between a government’s “disbursements of public funds for construction contracts and the channeling of those funds due to private discrimination.” *Id.* at 977, quoting *Adarand VII*, 228 F.3d at 1167-68. The court found that evidence that private discrimination resulted in barriers to business formation is relevant because it demonstrates that MBE/WBEs are precluded *at the outset* from competing for public construction contracts. The court also found that evidence of barriers to fair competition is relevant because it again demonstrates that *existing* MBE/WBEs are precluded from competing for public contracts. Thus, like the studies measuring disparities in the utilization of MBE/WBEs in the Denver MSA construction industry, studies showing that discriminatory barriers to business formation exist in the Denver construction industry are relevant to the City’s showing that it indirectly participates in industry discrimination. *Id.* at 977.

The City presented evidence of lending discrimination to support its position that MBE/WBEs in the Denver MSA construction industry face discriminatory barriers to business formation. Denver introduced a disparity study prepared in 1996 and sponsored by the Denver Community Reinvestment Alliance, Colorado Capital Initiatives, and the City. The Study ultimately concluded that “despite the fact that loan applicants of three different racial/ethnic backgrounds in this sample were not appreciably different as businesspeople, they were ultimately treated differently by the lenders on the crucial issue of loan approval or denial.” *Id.* at 977-78. In *Adarand VII*, the court concluded that this study, among other evidence, “strongly support[ed] an initial showing of discrimination in lending.” *Id.* at 978, quoting *Adarand VII*, 228 F.3d at 1170, n. 13 (“Lending discrimination alone of course does not justify action in the construction market. However, the persistence of such discrimination ... supports the assertion that the formation, as well as utilization, of minority-owned construction enterprises has been impeded.”). The City also introduced anecdotal evidence of lending discrimination in the Denver construction industry.

CWC did not present any evidence that undermined the reliability of the lending discrimination evidence but simply repeated the argument, foreclosed by circuit precedent, that it is irrelevant. The court rejected the district court criticism of the evidence because it failed to determine whether the discrimination resulted from discriminatory attitudes or from the neutral application of banking regulations. The court concluded that discriminatory motive can be inferred from the results shown in disparity studies. The court held the district court’s criticism did not undermine the study’s reliability as an indicator that the City is passively participating in marketplace discrimination. The court noted that in *Adarand VII* it took “judicial notice of the obvious causal connection between access to capital and ability to implement public works construction projects.” *Id.* at 978, quoting *Adarand VII*, 228 F.3d at 1170.

Denver also introduced evidence of discriminatory barriers to competition faced by MBE/WBEs in the form of business formation studies. The 1990 Study and the 1995 Study both showed that all minority groups in the Denver MSA formed their own construction firms at rates lower than the total population but that women formed construction firms at higher rates. The 1997 Study examined self-employment rates and controlled for gender, marital status, education, availability of capital, and personal/family variables. As discussed, *supra*, the Study concluded that African Americans, Hispanics, and Native Americans working in the construction industry have lower rates of self-employment than similarly situated whites. Asian Americans had higher rates. The 1997 Study also concluded that minority and female business owners in the construction industry, with the exception of Asian American owners, have lower earnings than white male owners. This conclusion was reached after controlling for education, age, marital status, and disabilities. *Id.* at 978.

The court held that the district court's conclusion that the business formation studies could not be used to justify the ordinances conflicts with its holding in *Adarand VII*. "[T]he existence of evidence indicating that the number of [MBEs] would be significantly (but unquantifiably) higher but for such barriers is nevertheless relevant to the assessment of whether a disparity is sufficiently significant to give rise to an inference of discriminatory exclusion." *Id.* at 979, quoting *Adarand VII*, 228 F.3d at 1174.

In sum, the court held the district court erred when it refused to consider or give sufficient weight to the lending discrimination study, the business formation studies, and the studies measuring marketplace discrimination. That evidence was legally relevant to the City's burden of demonstrating a strong basis in evidence to support its conclusion that remedial legislation was necessary. *Id.* at 979-80.

**Variables.** CWC challenged Denver's disparity studies as unreliable because the disparities shown in the studies may be attributable to firm size and experience rather than discrimination. Denver countered, however, that a firm's size has little effect on its qualifications or its ability to provide construction services and that MBE/WBEs, like all construction firms, can perform most services either by hiring additional employees or by employing subcontractors. CWC responded that elasticity itself is relative to size and experience; MBE/WBEs are less capable of expanding because they are smaller and less experienced. *Id.* at 980.

The court concluded that even if it assumed that MBE/WBEs are less able to expand because of their smaller size and more limited experience, CWC did not respond to Denver's argument and the evidence it presented showing that experience and size are not race- and gender-neutral variables and that MBE/WBE construction firms are generally smaller and less experienced *because* of industry discrimination. *Id.* at 981. The lending discrimination and business formation studies, according to the court, both strongly supported Denver's argument that MBE/WBEs are smaller and less experienced because of marketplace and industry discrimination. In addition, Denver's expert testified that discrimination by banks or bonding companies would reduce a firm's revenue and the number of employees it could hire. *Id.*

Denver also argued its Studies controlled for size and the 1995 Study controlled for experience. It asserted that the 1990 Study measured revenues per employee for construction for MBE/WBEs and concluded that the resulting disparities, "suggest[ ] that even among firms of the same employment size, industry utilization of MBEs and WBEs was lower than that of non-minority male-owned

firms.” *Id.* at 982. Similarly, the 1995 Study controlled for size, calculating, *inter alia*, disparity indices for firms with no paid employees which presumably are the same size.

Based on the uncontroverted evidence presented at trial, the court concluded that the district court did not give sufficient weight to Denver’s disparity studies because of its erroneous conclusion that the studies failed to adequately control for size and experience. The court held that Denver is permitted to make assumptions about capacity and qualification of MBE/WBEs to perform construction services if it can support those assumptions. The court found the assumptions made in this case were consistent with the evidence presented at trial and supported the City’s position that a firm’s size does not affect its qualifications, willingness, or ability to perform construction services and that the smaller size and lesser experience of MBE/WBEs are, themselves, the result of industry discrimination. Further, the court pointed out CWC did not conduct its own disparity study using marketplace data and thus did not demonstrate that the disparities shown in Denver’s studies would decrease or disappear if the studies controlled for size and experience to CWC’s satisfaction. Consequently, the court held CWC’s rebuttal evidence was insufficient to meet its burden of discrediting Denver’s disparity studies on the issue of size and experience. *Id.* at 982.

**Specialization.** The district court also faulted Denver’s disparity studies because they did not control for firm specialization. The court noted the district court’s criticism would be appropriate only if there was evidence that MBE/WBEs are more likely to specialize in certain construction fields. *Id.* at 982.

The court found there was no identified evidence showing that certain construction specializations require skills less likely to be possessed by MBE/WBEs. The court found relevant the testimony of the City’s expert, that the data he reviewed showed that MBEs were represented “widely across the different [construction] specializations.” *Id.* at 982-83. There was no contrary testimony that aggregation bias caused the disparities shown in Denver’s studies. *Id.* at 983.

The court held that CWC failed to demonstrate that the disparities shown in Denver’s studies are eliminated when there is control for firm specialization. In contrast, one of the Denver studies, which controlled for SIC-code subspecialty and still showed disparities, provided support for Denver’s argument that firm specialization does not explain the disparities. *Id.* at 983.

The court pointed out that disparity studies may make assumptions about availability as long as the same assumptions can be made for all firms. *Id.* at 983.

**Utilization of MBE/WBEs on City projects.** CWC argued that Denver could not demonstrate a compelling interest because it overutilized MBE/WBEs on City construction projects. This argument, according to the court, was an extension of CWC’s argument that Denver could justify the ordinances only by presenting evidence of discrimination by the City itself or by contractors while working on City projects. Because the court concluded that Denver could satisfy its burden by showing that it is an indirect participant in industry discrimination, CWC’s argument relating to the utilization of MBE/WBEs on City projects goes only to the weight of Denver’s evidence. *Id.* at 984.

Consistent with the court’s mandate in *Concrete Works II*, at trial Denver sought to demonstrate that the utilization data from projects subject to the goals program were tainted by the program and “reflect[ed] the intended remedial effect on MBE and WBE utilization.” *Id.* at 984, *quoting Concrete Works II*, 36 F.3d at 1526. Denver argued that the non-goals data were the better indicator of past



discrimination in public contracting than the data on all City construction projects. *Id.* at 984-85. The court concluded that Denver presented ample evidence to support the conclusion that the evidence showing MBE/WBE utilization on City projects not subject to the ordinances or the goals programs is the better indicator of discrimination in City contracting. *Id.* at 985.

The court rejected CWC's argument that the marketplace data were irrelevant but agreed that the non-goals data were also relevant to Denver's burden. The court noted that Denver did not rely heavily on the non-goals data at trial but focused primarily on the marketplace studies to support its burden. *Id.* at 985.

In sum, the court held Denver demonstrated that the utilization of MBE/WBEs on City projects had been affected by the affirmative action programs that had been in place in one form or another since 1977. Thus, the non-goals data were the better indicator of discrimination in public contracting. The court concluded that, on balance, the non-goals data provided some support for Denver's position that racial and gender discrimination existed in public contracting before the enactment of the ordinances. *Id.* at 987-88.

**Anecdotal evidence.** The anecdotal evidence, according to the court, included several incidents involving profoundly disturbing behavior on the part of lenders, majority-owned firms, and individual employees. *Id.* at 989. The court found that the anecdotal testimony revealed behavior that was not merely sophomoric or insensitive, but which resulted in real economic or physical harm. While CWC also argued that all new or small contractors have difficulty obtaining credit and that treatment the witnesses characterized as discriminatory is experienced by all contractors, Denver's witnesses specifically testified that they believed the incidents they experienced were motivated by race or gender discrimination. The court found they supported those beliefs with testimony that majority-owned firms were not subject to the same requirements imposed on them. *Id.*

The court held there was no merit to CWC's argument that the witnesses' accounts must be verified to provide support for Denver's burden. The court stated that anecdotal evidence is nothing more than a witness' narrative of an incident told from the witness' perspective and including the witness' perceptions. *Id.*

After considering Denver's anecdotal evidence, the district court found that the evidence "shows that race, ethnicity and gender affect the construction industry and those who work in it" and that the egregious mistreatment of minority and women employees "had direct financial consequences" on construction firms. *Id.* at 989, *quoting Concrete Works III*, 86 F. Supp.2d at 1074, 1073. Based on the district court's findings regarding Denver's anecdotal evidence and its review of the record, the court concluded that the anecdotal evidence provided persuasive, un rebutted support for Denver's initial burden. *Id.* at 989-90, *citing Int'l Bhd. of Teamsters v. United States*, 431 U.S. 324, 339 (1977) (concluding that anecdotal evidence presented in a pattern or practice discrimination case was persuasive because it "brought the cold [statistics] convincingly to life").

**Summary.** The court held the record contained extensive evidence supporting Denver's position that it had a strong basis in evidence for concluding that the 1990 Ordinance and the 1998 Ordinance were necessary to remediate discrimination against both MBEs and WBEs. *Id.* at 990. The information available to Denver and upon which the ordinances were predicated, according to the

court, indicated that discrimination was persistent in the local construction industry and that Denver was, at least, an indirect participant in that discrimination.

To rebut Denver's evidence, the court stated CWC was required to "establish that Denver's evidence did not constitute strong evidence of such discrimination." *Id.* at 991, *quoting Concrete Works II*, 36 F.3d at 1523. CWC could not meet its burden of proof through conjecture and unsupported criticisms of Denver's evidence. Rather, it must present "credible, particularized evidence." *Id.*, *quoting Adarand VII*, 228 F.3d at 1175. The court held that CWC did not meet its burden. CWC *hypothesized* that the disparities shown in the studies on which Denver relies could be explained by any number of factors other than racial discrimination. However, the court found it did not conduct its own marketplace disparity study controlling for the disputed variables and presented no other evidence from which the court could conclude that such variables explain the disparities. *Id.* at 991-92.

**Narrow tailoring.** Having concluded that Denver demonstrated a compelling interest in the race-based measures and an important governmental interest in the gender-based measures, the court held it must examine whether the ordinances were narrowly tailored to serve the compelling interest and are substantially related to the achievement of the important governmental interest. *Id.* at 992.

The court stated it had previously concluded in its earlier decisions that Denver's program was narrowly tailored. CWC appealed the grant of summary judgment and that appeal culminated in the decision in *Concrete Works II*. The court reversed the grant of summary judgment on the compelling-interest issue and concluded that CWC had waived any challenge to the narrow tailoring conclusion reached by the district court. Because the court found *Concrete Works* did not challenge the district court's conclusion with respect to the second prong of *Croson's* strict scrutiny standard — *i.e.*, that the Ordinance is narrowly tailored to remedy past and present discrimination — the court held it need not address this issue. *Id.* at 992, *citing Concrete Works II*, 36 F.3d at 1531, n. 24.

The court concluded that the district court lacked authority to address the narrow tailoring issue on remand because none of the exceptions to the law of the case doctrine are applicable. The district court's earlier determination that Denver's affirmative-action measures were narrowly tailored is law of the case and binding on the parties.

#### **6. *Kornhass Construction, Inc. v. State of Oklahoma, Department of Central Services*, 140 F.Supp.2d 1232 (W.D. OK. 2001)**

Plaintiffs, non-minority contractors, brought this action against the State of Oklahoma challenging minority bid preference provisions in the Oklahoma Minority Business Enterprise Assistance Act ("MBE Act"). The Oklahoma MBE Act established a bid preference program by which certified minority business enterprises are given favorable treatment on competitive bids submitted to the state. 140 F.Supp.2d at 1235–36. Under the MBE Act, the bids of non-minority contractors were raised by 5 percent, placing them at a competitive disadvantage according to the district court. *Id.* at 1235–1236.

The named plaintiffs bid on state contracts in which their bids were increased by 5 percent as they were non-minority business enterprises. Although the plaintiffs actually submitted the lowest dollar bids, once the 5 percent factor was applied, minority bidders became the successful bidders on certain contracts. 140 F.Supp. at 1237.

In determining the constitutionality or validity of the Oklahoma MBE Act, the district court was guided in its analysis by the Tenth Circuit Court of Appeals decision in *Adarand Constructors, Inc. v. Slater*, 288 F.3d 1147 (10<sup>th</sup> Cir. 2000). The district court pointed out that in *Adarand VII*, the Tenth Circuit found compelling evidence of barriers to both minority business formation and existing minority businesses. *Id.* at 1238. In sum, the district court noted that the Tenth Circuit concluded that the Government had met its burden of presenting a strong basis in evidence sufficient to support its articulated, constitutionally valid, compelling interest. 140 F.Supp.2d at 1239, *citing Adarand VII*, 228 F.3d 1147, 1174.

**Compelling state interest.** The district court, following *Adarand VII*, applied the strict scrutiny analysis, arising out of the Fourteenth Amendment's Equal Protection Clause, in which a race-based affirmative action program withstands strict scrutiny only if it is narrowly tailored to serve a compelling governmental interest. *Id.* at 1239. The district court pointed out that it is clear from Supreme Court precedent, there may be a compelling interest sufficient to justify race-conscious affirmative action measures. *Id.* The Fourteenth Amendment permits race-conscious programs that seek both to eradicate discrimination by the governmental entity itself and to prevent the governmental entity from becoming a "passive participant" in a system of racial exclusion practiced by private businesses. *Id.* at 1240. Therefore, the district court concluded that both the federal and state governments have a compelling interest assuring that public dollars do not serve to finance the evil of private prejudice. *Id.*

The district court stated that a "mere statistical disparity in the proportion of contracts awarded to a particular group, standing alone, does not demonstrate the evil of private or public racial prejudice." *Id.* Rather, the court held that the "benchmark for judging the adequacy of a state's factual predicate for affirmative action legislation is whether there exists a strong basis in the evidence of the state's conclusion that remedial action was necessary." *Id.* The district court found that the Supreme Court made it clear that the state bears the burden of demonstrating a strong basis in evidence for its conclusion that remedial action was necessary by proving either that the state itself discriminated in the past or was "a passive participant" in private industry's discriminatory practices. *Id.* at 1240, *citing to Associated General Contractors of Ohio, Inc. v. Drabik*, 214 F.3d 730, 735 (6<sup>th</sup> Cir. 2000) and *City of Richmond v. J.A. Croson Company*, 488 U.S. 469 at 486-492 (1989).

With this background, the State of Oklahoma stated that its compelling state interest "is to promote the economy of the State and to ensure that minority business enterprises are given an opportunity to compete for state contracts." *Id.* at 1240. Thus, the district court found the State admitted that the MBE Act's bid preference "is not based on past discrimination," rather, it is based on a desire to "encourag[e] economic development of minority business enterprises which in turn will benefit the State of Oklahoma as a whole." *Id.* In light of *Adarand VII*, and prevailing Supreme Court case law, the district court found that this articulated interest is not "compelling" in the absence of evidence of past or present racial discrimination. *Id.*

The district court considered testimony presented by Intervenors who participated in the case for the defendants and asserted that the Oklahoma legislature conducted an interim study prior to adoption of the MBE Act, during which testimony and evidence were presented to members of the Oklahoma Legislative Black Caucus and other participating legislators. The study was conducted more than 14 years prior to the case and the Intervenors did not actually offer any of the evidence to the court in

this case. The Intervenor submitted an affidavit from the witness who serves as the Title VI Coordinator for the Oklahoma Department of Transportation. The court found that the affidavit from the witness averred in general terms that minority businesses were discriminated against in the awarding of state contracts. The district court found that the Intervenor have not produced — or indeed even described — the evidence of discrimination. *Id.* at 1241. The district court found that it cannot be discerned from the documents which minority businesses were the victims of discrimination, or which racial or ethnic groups were targeted by such alleged discrimination. *Id.*

The court also found that the Intervenor's evidence did not indicate what discriminatory acts or practices allegedly occurred, or when they occurred. *Id.* The district court stated that the Intervenor did not identify "a single qualified, minority-owned bidder who was excluded from a state contract." *Id.* The district court, thus, held that broad allegations of "systematic" exclusion of minority businesses were not sufficient to constitute a compelling governmental interest in remedying past or current discrimination. *Id.* at 1242. The district court stated that this was particularly true in light of the "State's admission here that the State's governmental interest was not in remedying past discrimination in the state competitive bidding process, but in 'encouraging economic development of minority business enterprises which in turn will benefit the State of Oklahoma as a whole.'" *Id.* at 1242.

The court found that the State defendants failed to produce any admissible evidence of a single, specific discriminatory act, or any substantial evidence showing a pattern of deliberate exclusion from state contracts of minority-owned businesses. *Id.* at 1241 - 1242, footnote 11.

The district court also noted that the Sixth Circuit Court of Appeals in *Drabik* rejected Ohio's statistical evidence of underutilization of minority contractors because the evidence did not report the actual use of minority firms; rather, they reported only the use of those minority firms that had gone to the trouble of being certified and listed by the state. *Id.* at 1242, footnote 12. The district court stated that, as in *Drabik*, the evidence presented in support of the Oklahoma MBE Act failed to account for the possibility that some minority contractors might not register with the state, and the statistics did not account for any contracts awarded to businesses with minority ownership of less than 51 percent, or for contracts performed in large part by minority-owned subcontractors where the prime contractor was not a certified minority-owned business. *Id.*

The district court found that the MBE Act's minority bidding preference was not predicated upon a finding of discrimination in any particular industry or region of the state, or discrimination against any particular racial or ethnic group. The court stated that there was no evidence offered of actual discrimination, past or present, against the specific racial and ethnic groups to whom the preference was extended, other than an attempt to show a history of discrimination against African Americans. *Id.* at 1242.

**Narrow tailoring.** The district court found that even if the State's goals could not be considered "compelling," the State did not show that the MBE Act was narrowly tailored to serve those goals. The court pointed out that the Tenth Circuit in *Adarand VII* identified six factors the court must consider in determining whether the MBE Act's minority preference provisions were sufficiently narrowly tailored to satisfy equal protection: (1) the availability of race-neutral alternative remedies; (2) limits on the duration of the challenged preference provisions; (3) flexibility of the preference

provisions; (4) numerical proportionality; (5) the burden on third parties; and (6) over- or under-inclusiveness. *Id.* at 1242-1243.

First, in terms of race-neutral alternative remedies, the court found that the evidence offered showed, at most, that nominal efforts were made to assist minority-owned businesses prior to the adoption of the MBE Act's racial preference program. *Id.* at 1243. The court considered evidence regarding the Minority Assistance Program, but found that to be primarily informational services only, and was not designed to actually assist minorities or other disadvantaged contractors to obtain contracts with the State of Oklahoma. *Id.* at 1243. In contrast to this "informational" program, the court noted the Tenth Circuit in *Adarand VII* favorably considered the federal government's use of racially neutral alternatives aimed at disadvantaged businesses, including assistance with obtaining project bonds, assistance with securing capital financing, technical assistance, and other programs designed to assist start-up businesses. *Id.* at 1243 *citing Adarand VII*, 228 F.3d at 1178-1179.

The district court found that it does not appear from the evidence that Oklahoma's Minority Assistance Program provided the type of race-neutral relief required by the Tenth Circuit in *Adarand VII*, in the Supreme Court in the *Croson* decision, nor does it appear that the Program was racially neutral. *Id.* at 1243. The court found that the State of Oklahoma did not show any meaningful form of assistance to new or disadvantaged businesses prior to the adoption of the MBE Act, and thus, the court found that the state defendants had not shown that Oklahoma considered race-neutral alternative means to achieve the state's goal prior to adoption of the minority bid preference provisions. *Id.* at 1243.

In a footnote, the district court pointed out that the Tenth Circuit has recognized racially neutral programs designed to assist *all* new or financially disadvantaged businesses in obtaining government contracts tend to benefit minority-owned businesses, and can help alleviate the effects of past and present-day discrimination. *Id.* at 1243, footnote 15 *citing Adarand VII*.

The court considered the evidence offered of post-enactment efforts by the State to increase minority participation in State contracting. The court found that most of these efforts were directed toward encouraging the participation of certified minority business enterprises, "and are thus not racially neutral. This evidence fails to demonstrate that the State employed race-neutral alternative measures prior to or after adopting the Minority Business Enterprise Assistance Act." *Id.* at 1244. Some of the efforts the court found were directed toward encouraging the participation of certified minority business enterprises and thus not racially neutral, included mailing vendor registration forms to minority vendors, telephoning and mailing letters to minority vendors, providing assistance to vendors in completing registration forms, assuring the vendors received bid information, preparing a minority business directory and distributing it to all state agencies, periodically mailing construction project information to minority vendors, and providing commodity information to minority vendors upon request. *Id.* at 1244, footnote 16.

In terms of durational limits and flexibility, the court found that the "goal" of 10 percent of the state's contracts being awarded to certified minority business enterprises had never been reached, or even approached, during the thirteen years since the MBE Act was implemented. *Id.* at 1244. The court found the defendants offered no evidence that the bid preference was likely to end at any time in the foreseeable future, or that it is otherwise limited in its duration. *Id.* Unlike the federal programs at issue in *Adarand VII*, the court stated the Oklahoma MBE Act has no inherent time limit, and no

provision for disadvantaged minority-owned businesses to “graduate” from preference eligibility. *Id.* The court found the MBE Act was not limited to those minority-owned businesses which are shown to be economically disadvantaged. *Id.*

The court stated that the MBE Act made no attempt to address or remedy any actual, demonstrated past or present racial discrimination, and the MBE Act’s duration was not tied in any way to the eradication of such discrimination. *Id.* Instead, the court found the MBE Act rests on the “questionable assumption that 10 percent of all state contract dollars should be awarded to certified minority-owned and operated businesses, without any showing that this assumption is reasonable.” *Id.* at 1244.

By the terms of the MBE Act, the minority preference provisions would continue in place for five years after the goal of 10 percent minority participation was reached, and thus the district court concluded that the MBE Act’s minority preference provisions lacked reasonable durational limits. *Id.* at 1245.

With regard to the factor of “numerical proportionality” between the MBE Act’s aspirational goal and the number of existing available minority-owned businesses, the court found the MBE Act’s 10 percent goal was not based upon demonstrable evidence of the availability of minority contractors who were either qualified to bid or who were ready, willing and able to become qualified to bid on state contracts. *Id.* at 1246–1247. The court pointed out that the MBE Act made no attempt to distinguish between the four minority racial groups, so that contracts awarded to members of all of the preferred races were aggregated in determining whether the 10 percent aspirational goal had been reached. *Id.* at 1246. In addition, the court found the MBE Act aggregated all state contracts for goods and services, so that minority participation was determined by the total number of dollars spent on state contracts. *Id.*

The court stated that in *Adarand VII*, the Tenth Circuit rejected the contention that the aspirational goals were required to correspond to an actual finding as to the number of existing minority-owned businesses. *Id.* at 1246. The court noted that the government submitted evidence in *Adarand VII*, that the effects of past discrimination had excluded minorities from entering the construction industry, and that the number of available minority subcontractors reflected that discrimination. *Id.* In light of this evidence, the district court said the Tenth Circuit held that the existing percentage of minority-owned businesses is “not necessarily an absolute cap” on the percentage that a remedial program might legitimately seek to achieve. *Id.* at 1246, *citing Adarand VII*, 228 F.3d at 1181.

Unlike *Adarand VII*, the court found that the Oklahoma State defendants did not offer “substantial evidence” that the minorities given preferential treatment under the MBE Act were prevented, through past discrimination, from entering any particular industry, or that the number of available minority subcontractors in that industry reflects that discrimination. 140 F.Supp.2d at 1246. The court concluded that the Oklahoma State defendants did not offer any evidence of the number of minority-owned businesses doing business in any of the many industries covered by the MBE Act. *Id.* at 1246–1247.

With regard to the impact on third parties factor, the court pointed out the Tenth Circuit in *Adarand VII* stated the mere possibility that innocent parties will share the burden of a remedial program is itself insufficient to warrant the conclusion that the program is not narrowly tailored. *Id.* at 1247. The

district court found the MBE Act's bid preference provisions prevented non-minority businesses from competing on an equal basis with certified minority business enterprises, and that in some instances plaintiffs had been required to lower their intended bids because they knew minority firms were bidding. *Id.* The court pointed out that the 5 percent preference is applicable to *all* contracts awarded under the state's Central Purchasing Act with no time limitation. *Id.*

In terms of the "under- and over-inclusiveness" factor, the court observed that the MBE Act extended its bidding preference to several racial minority groups without regard to whether each of those groups had suffered from the effects of past or present racial discrimination. *Id.* at 1247. The district court reiterated the Oklahoma State defendants did not offer any evidence at all that the minority racial groups identified in the Act had actually suffered from discrimination. *Id.*

Second, the district court found the MBE Act's bidding preference extends to all contracts for goods and services awarded under the State's Central Purchasing Act, without regard to whether members of the preferred minority groups had been the victims of past or present discrimination within that particular industry or trade. *Id.*

Third, the district court noted the preference extends to all businesses certified as minority-owned and controlled, without regard to whether a particular business is economically or socially disadvantaged, or has suffered from the effects of past or present discrimination. *Id.* The court thus found that the factor of over-inclusiveness weighs against a finding that the MBE Act was narrowly tailored. *Id.*

The district court in conclusion found that the Oklahoma MBE Act violated the Constitution's Fifth Amendment guarantee of equal protection and granted the plaintiffs' Motion for Summary Judgment.

#### **7. *In re City of Memphis*, 293 F.3d 345 (6th Cir. 2002)**

This case is instructive to the disparity study in particular based on its holding that a local government may be prohibited from utilizing post-enactment evidence in support of a MBE/WBE-type program. The United States Court of Appeals for Sixth Circuit held that pre-enactment evidence was required to justify the City of Memphis' MBE/WBE Program. The Sixth Circuit held that a government must have had sufficient evidentiary justification for a racially conscious statute in advance of its passage. The district court had ruled that the City could not introduce the post-enactment study as evidence of a compelling interest to justify its MBE/WBE Program. The Sixth Circuit denied the City's application for an interlocutory appeal on the district court's order and refused to grant the City's request to appeal this issue.

#### **8. *Builders Ass'n of Greater Chicago v. County of Cook, Chicago*, 256 F.3d 642 (7th Cir. 2001)**

This case is instructive to the disparity study because of its analysis of the Cook County MBE/WBE program and the evidence used to support that program. The decision emphasizes the need for any race-conscious program to be based upon credible evidence of discrimination by the local government against MBE/WBEs and to be narrowly tailored to remedy only that identified discrimination.

In *Builders Ass'n of Greater Chicago v. County of Cook, Chicago*, 256 F.3d 642 (7<sup>th</sup> Cir. 2001) the United States Court of Appeals for the Seventh Circuit held the Cook County, Chicago MBE/WBE Program was unconstitutional. The court concluded there was insufficient evidence of a compelling interest. The court held there was no credible evidence that Cook County in the award of construction contracts discriminated against any of the groups “favored” by the Program. The court also found that the Program was not “narrowly tailored” to remedy the wrong sought to be redressed, in part because it was over-inclusive in the definition of minorities. The court noted the list of minorities included groups that have not been subject to discrimination by Cook County.

The court considered as an unresolved issue whether a different, and specifically a more permissive, standard than strict scrutiny is applicable to preferential treatment on the basis of sex, rather than race or ethnicity. 256 F.3d at 644. The court noted that the United States Supreme Court in *United States v. Virginia* (“*VMI*”), 518 U.S. 515, 532 and n.6 (1996), held racial discrimination to a stricter standard than sex discrimination, although the court in *Cook County* stated the difference between the applicable standards has become “vanishingly small.” *Id.* The court pointed out that the Supreme Court said in the *VMI* case, that “parties who seek to defend gender-based government action must demonstrate an ‘exceedingly persuasive’ justification for that action ...” and, realistically, the law can ask no more of race-based remedies either.” 256 F.3d at 644, quoting in part *VMI*, 518 U.S. at 533. The court indicated that the Eleventh Circuit Court of Appeals in the *Engineering Contract Association of South Florida, Inc. v. Metropolitan Dade County*, 122 F.3d 895, 910 (11<sup>th</sup> Cir. 1997) decision created the “paradox that a public agency can provide stronger remedies for sex discrimination than for race discrimination; it is difficult to see what sense that makes.” 256 F.3d at 644. But, since Cook County did not argue for a different standard for the minority and women’s “set aside programs,” the women’s program the court determined must clear the same “hurdles” as the minority program.” 256 F.3d at 644-645.

The court found that since the ordinance requires prime contractors on public projects to reserve a substantial portion of the subcontracts for minority contractors, which is inapplicable to private projects, it is “to be expected that there would be more soliciting of these contractors on public than on private projects.” *Id.* Therefore, the court did not find persuasive that there was discrimination based on this difference alone. 256 F.3d at 645. The court pointed out the County “conceded that [it] had no specific evidence of pre-enactment discrimination to support the ordinance.” 256 F.3d at 645 quoting the district court decision, 123 F.Supp.2d at 1093. The court held that a “public agency must have a strong evidentiary basis for thinking a discriminatory remedy appropriate *before* it adopts the remedy.” 256 F.3d at 645 (emphasis in original).

The court stated that minority enterprises in the construction industry “tend to be subcontractors, moreover, because as the district court found not clearly erroneously, 123 F.Supp.2d at 1115, they tend to be new and therefore small and relatively untested — factors not shown to be attributable to discrimination by the County.” 256 F.3d at 645. The court held that there was no basis for attributing to the County any discrimination that prime contractors may have engaged in. *Id.* The court noted that “[i]f prime contractors on County projects were discriminating against minorities and this was known to the County, whose funding of the contracts thus knowingly perpetuated the discrimination, the County might be deemed sufficiently complicit ... to be entitled to take remedial action.” *Id.* But, the court found “of that there is no evidence either.” *Id.*



The court stated that if the County had been complicit in discrimination by prime contractors, it found “puzzling” to try to remedy that discrimination by requiring discrimination in favor of minority stockholders, as distinct from employees. 256 F.3d at 646. The court held that even if the record made a case for remedial action of the general sort found in the MWBE ordinance by the County, it would “flunk the constitutional test” by not being carefully designed to achieve the ostensible remedial aim and no more. 256 F.3d at 646. The court held that a state and local government that has discriminated just against blacks may not by way of remedy discriminate in favor of blacks and Asian Americans and women. *Id.* Nor, the court stated, may it discriminate more than is necessary to cure the effects of the earlier discrimination. *Id.* “Nor may it continue the remedy in force indefinitely, with no effort to determine whether, the remedial purpose attained, continued enforcement of the remedy would be a gratuitous discrimination against nonminority persons.” *Id.* The court, therefore, held that the ordinance was not “narrowly tailored” to the wrong that it seeks to correct. *Id.*

The court thus found that the County both failed to establish the premise for a racial remedy, and also that the remedy goes further than is necessary to eliminate the evil against which it is directed. 256 F.3d at 647. The court held that the list of “favored minorities” included groups that have never been subject to significant discrimination by Cook County. *Id.* The court found it unreasonable to “presume” discrimination against certain groups merely on the basis of having an ancestor who had been born in a particular country. *Id.* Therefore, the court held the ordinance was overinclusive.

The court found that the County did not make any effort to show that, were it not for a history of discrimination, minorities would have 30 percent, and women 10 percent, of County construction contracts. 256 F.3d at 647. The court also rejected the proposition advanced by the County in this case—“that a comparison of the fraction of minority subcontractors on public and private projects established discrimination against minorities by prime contractors on the latter type of project.” 256 F.3d at 647-648.

**9. *Associated Gen. Contractors v. Drabik*, 214 F.3d 730 (6th Cir. 2000), affirming Case No. C2-98-943, 998 WL 812241 (S.D. Ohio 1998)**

This case is instructive to the disparity study based on the analysis applied in finding the evidence insufficient to justify an MBE/WBE program, and the application of the narrowly tailored test. The Sixth Circuit Court of Appeals enjoined the enforcement of the state MBE program, and in so doing reversed state court precedent finding the program constitutional. This case affirmed a district court decision enjoining the award of a “set-aside” contract based on the State of Ohio’s MBE program with the award of construction contracts. The court held, among other things, that the mere existence of societal discrimination was insufficient to support a racial classification. The court found that the economic data were insufficient and too outdated. The court held the State could not establish a compelling governmental interest and that the statute was not narrowly tailored. The court held, among other things, the statute failed the narrow tailoring test because there was no evidence that the State had considered race-neutral remedies.

The court was mindful of the fact that it was striking down an entire class of programs by declaring the State of Ohio MBE statute in question unconstitutional, and noted that its decision was “not reconcilable” with the Ohio Supreme Court’s decision in *Ritchie Produce*, 707 N.E.2d 871 (Ohio 1999) (upholding the Ohio State MBE Program).

**10. *W.H. Scott Constr. Co. v. City of Jackson*, 199 F.3d 206 (5th Cir. 1999)**

This case is instructive to the disparity study because the decision highlights the evidentiary burden imposed by the courts necessary to support a local MBE/WBE program. In addition, the Fifth Circuit permitted the aggrieved contractor to recover lost profits from the City of Jackson, Mississippi due to the City's enforcement of the MBE/WBE program that the court held was unconstitutional.

The Fifth Circuit, applying strict scrutiny, held that the City of Jackson, Mississippi failed to establish a compelling governmental interest to justify its policy placing 15 percent minority participation goals for City construction contracts. In addition, the court held the evidence upon which the City relied was faulty for several reasons, including because it was restricted to the letting of prime contracts by the City under the City's Program, and it did not include an analysis of the availability and utilization of qualified minority subcontractors, the relevant statistical pool in the City's construction projects. Significantly, the court also held that the plaintiff in this case could recover lost profits against the City as damages as a result of being denied a bid award based on the application of the MBE/WBE program.

**11. *Eng'g Contractors Ass'n of S. Florida v. Metro. Dade County*, 122 F.3d 895 (11th Cir. 1997)**

*Engineering Contractors Association of South Florida v. Metropolitan Engineering Contractors Association* is a paramount case in the Eleventh Circuit and is instructive to the disparity study. This decision has been cited and applied by the courts in various circuits that have addressed MBE/WBE-type programs or legislation involving local government contracting and procurement.

In *Engineering Contractors Association*, six trade organizations (the "plaintiffs") filed suit in the district court for the Southern District of Florida, challenging three affirmative action programs administered by Engineering Contractors Association, Florida, (the "County") as violative of the Equal Protection Clause. 122 F.3d 895, 900 (11<sup>th</sup> Cir. 1997). The three affirmative action programs challenged were the Black Business Enterprise program ("BBE"), the Hispanic Business Enterprise program ("HBE"), and the Woman Business Enterprise program, ("WBE"), (collectively "MWBE" programs). *Id.* The plaintiffs challenged the application of the program to County construction contracts. *Id.*

For certain classes of construction contracts valued over \$25,000, the County set participation goals of 15 percent for BBEs, 19 percent for HBEs, and 11 percent for WBEs. *Id.* at 901. The County established five "contract measures" to reach the participation goals: (1) set asides, (2) subcontractor goals, (3) project goals, (4) bid preferences, and (5) selection factors. Once a contract was identified as covered by a participation goal, a review committee would determine whether a contract measure should be utilized. *Id.* The County Commission would make the final determination and its decision was appealable to the County Manager. *Id.* The County reviewed the efficacy of the MWBE programs annually, and reevaluated the continuing viability of the MWBE programs every five years. *Id.*

In a bench trial, the district court applied strict scrutiny to the BBE and HBE programs and held that the County lacked the requisite "strong basis in evidence" to support the race- and ethnicity-conscious measures. *Id.* at 902. The district court applied intermediate scrutiny to the WBE program and found that the "County had presented insufficient probative evidence to support its stated

rationale for implementing a gender preference.” *Id.* Therefore, the County had failed to demonstrate a “compelling interest” necessary to support the BBE and HBE programs, and failed to demonstrate an “important interest” necessary to support the WBE program. *Id.* The district court assumed the existence of a sufficient evidentiary basis to support the existence of the MWBE programs but held the BBE and HBE programs were not narrowly tailored to the interests they purported to serve; the district court held the WBE program was not substantially related to an important government interest. *Id.* The district court entered a final judgment enjoining the County from continuing to operate the MWBE programs and the County appealed. The Eleventh Circuit Court of Appeals affirmed. *Id.* at 900, 903.

On appeal, the Eleventh Circuit considered four major issues:

1. Whether the plaintiffs had standing. [The Eleventh Circuit answered this in the affirmative and that portion of the opinion is omitted from this summary];
2. Whether the district court erred in finding the County lacked a “strong basis in evidence” to justify the existence of the BBE and HBE programs;
3. Whether the district court erred in finding the County lacked a “sufficient probative basis in evidence” to justify the existence of the WBE program; and
4. Whether the MWBE programs were narrowly tailored to the interests they were purported to serve.

*Id.* at 903.

The Eleventh Circuit held that the BBE and HBE programs were subject to the strict scrutiny standard enunciated by the U.S. Supreme Court in *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469 (1989). *Id.* at 906. Under this standard, “an affirmative action program must be based upon a ‘compelling government interest’ and must be ‘narrowly tailored’ to achieve that interest.” *Id.* The Eleventh Circuit further noted:

“In practice, the interest that is alleged in support of racial preferences is almost always the same — remedying past or present discrimination. That interest is widely accepted as compelling. As a result, the true test of an affirmative action program is usually not the nature of the government’s interest, but rather the adequacy of the evidence of discrimination offered to show that interest.”

*Id.* (internal citations omitted).

Therefore, strict scrutiny requires a finding of a “‘strong basis in evidence’ to support the conclusion that remedial action is necessary.” *Id.*, citing *Croson*, 488 U.S. at 500). The requisite “‘strong basis in evidence’ cannot rest on ‘an amorphous claim of societal discrimination, on simple legislative assurances of good intention, or on congressional findings of discrimination in the national economy.’” *Id.* at 907, citing *Ensley Branch, NAACP v. Seibels*, 31 F.3d 1548, 1565 (11<sup>th</sup> Cir. 1994) (citing and applying *Croson*). However, the Eleventh Circuit found that a governmental entity can “justify affirmative action by demonstrating ‘gross statistical disparities’ between the proportion of

minorities hired ... and the proportion of minorities willing and able to do the work ... Anecdotal evidence may also be used to document discrimination, especially if buttressed by relevant statistical evidence.” *Id.* (internal citations omitted).

Notwithstanding the “exceedingly persuasive justification” language utilized by the Supreme Court in *United States v. Virginia*, 116 S. Ct. 2264 (1996) (evaluating gender-based government action), the Eleventh Circuit held that the WBE program was subject to traditional intermediate scrutiny. *Id.* at 908. Under this standard, the government must provide “sufficient probative evidence” of discrimination, which is a lesser standard than the “strong basis in evidence” under strict scrutiny. *Id.* at 910.

The County provided two types of evidence in support of the MWBE programs: (1) statistical evidence, and (2) non-statistical “anecdotal” evidence. *Id.* at 911. As an initial matter, the Eleventh Circuit found that in support of the BBE program, the County permissibly relied on substantially “post-enactment” evidence (*i.e.*, evidence based on data related to years following the initial enactment of the BBE program). *Id.* However, “such evidence carries with it the hazard that the program at issue may itself be masking discrimination that might otherwise be occurring in the relevant market.” *Id.* at 912. A district court should not “speculate about what the data *might* have shown had the BBE program never been enacted.” *Id.*

**The statistical evidence.** The County presented five basic categories of statistical evidence: (1) County contracting statistics; (2) County subcontracting statistics; (3) marketplace data statistics; (4) The Wainwright Study; and (5) The Brimmer Study. *Id.* In summary, the Eleventh Circuit held that the County’s statistical evidence (described more fully below) was subject to more than one interpretation. *Id.* at 924. The district court found that the evidence was “insufficient to form the requisite strong basis in evidence for implementing a racial or ethnic preference, and that it was insufficiently probative to support the County’s stated rationale for imposing a gender preference.” *Id.* The district court’s view of the evidence was a permissible one. *Id.*

**County contracting statistics.** The County presented a study comparing three factors for County non-procurement construction contracts over two time periods (1981-1991 and 1993): (1) the percentage of bidders that were MWBE firms; (2) the percentage of awardees that were MWBE firms; and (3) the proportion of County contract dollars that had been awarded to MWBE firms. *Id.* at 912.

The Eleventh Circuit found that notably, for the BBE and HBE statistics, generally there were no “consistently negative disparities between the bidder and awardee percentages. In fact, by 1993, the BBE and HBE bidders are being awarded *more* than their proportionate ‘share’ ... when the bidder percentages are used as the baseline.” *Id.* at 913. For the WBE statistics, the bidder/awardee statistics were “decidedly mixed” as across the range of County construction contracts. *Id.*

The County then refined those statistics by adding in the total percentage of annual County construction dollars awarded to MBE/WBEs, by calculating “disparity indices” for each program and classification of construction contract. The Eleventh Circuit explained:

“[A] disparity index compares the amount of contract awards a group actually got to the amount we would have expected it to get

based on that group's bidding activity and awardee success rate. More specifically, a disparity index measures the participation of a group in County contracting dollars by dividing that group's contract dollar percentage by the related bidder or awardee percentage, and multiplying that number by 100 percent."

*Id.* at 914. "The utility of disparity indices or similar measures ... has been recognized by a number of federal circuit courts." *Id.*

The Eleventh Circuit found that "[i]n general ... disparity indices of 80 percent or greater, which are close to full participation, are not considered indications of discrimination." *Id.* The Eleventh Circuit noted that "the EEOC's disparate impact guidelines use the 80 percent test as the boundary line for determining a prima facie case of discrimination." *Id.*, citing 29 CFR § 1607.4D. In addition, no circuit that has "explicitly endorsed the use of disparity indices [has] indicated that an index of 80 percent or greater might be probative of discrimination." *Id.*, citing *Concrete Works v. City & County of Denver*, 36 F.3d 1513, 1524 (10<sup>th</sup> Cir. 1994) (crediting disparity indices ranging from 0 % to 3.8%); *Contractors Ass'n v. City of Philadelphia*, 6 F.3d 990 (3d Cir. 1993) (crediting disparity index of 4%).

After calculation of the disparity indices, the County applied a standard deviation analysis to test the statistical significance of the results. *Id.* at 914. "The standard deviation figure describes the probability that the measured disparity is the result of mere chance." *Id.* The Eleventh Circuit had previously recognized "[s]ocial scientists consider a finding of two standard deviations significant, meaning there is about one chance in 20 that the explanation for the deviation could be random and the deviation must be accounted for by some factor other than chance." *Id.*

The statistics presented by the County indicated "statistically significant underutilization of BBEs in County construction contracting." *Id.* at 916. The results were "less dramatic" for HBEs and mixed as between favorable and unfavorable for WBEs. *Id.*

The Eleventh Circuit then explained the burden of proof:

"[O]nce the proponent of affirmative action introduces its statistical proof as evidence of its remedial purpose, thereby supplying the [district] court with the means for determining that [it] had a firm basis for concluding that remedial action was appropriate, it is incumbent upon the [plaintiff] to prove their case; they continue to bear the ultimate burden of persuading the [district] court that the [defendant's] evidence did not support an inference of prior discrimination and thus a remedial purpose, or that the plan instituted on the basis of this evidence was not sufficiently 'narrowly tailored.'"

*Id.* (internal citations omitted).

The Eleventh Circuit noted that a plaintiff has at least three methods to rebut the inference of discrimination with a "neutral explanation" by: "(1) showing that the statistics are flawed; (2) demonstrating that the disparities shown by the statistics are not significant or actionable; or (3)

presenting contrasting statistical data.” *Id.* (internal quotations and citations omitted). The Eleventh Circuit held that the plaintiffs produced “sufficient evidence to establish a neutral explanation for the disparities.” *Id.*

The plaintiffs alleged that the disparities were “better explained by firm size than by discrimination ... [because] minority and female-owned firms tend to be smaller, and that it stands to reason smaller firms will win smaller contracts.” *Id.* at 916-17. The plaintiffs produced Census data indicating, on average, minority- and female-owned construction firms in Engineering Contractors Association were smaller than non-MBE/WBE firms. *Id.* at 917. The Eleventh Circuit found that the plaintiff’s explanation of the disparities was a “plausible one, in light of the uncontroverted evidence that MBE/WBE construction firms tend to be substantially smaller than non-MBE/WBE firms.” *Id.*

Additionally, the Eleventh Circuit noted that the County’s own expert admitted that “firm size plays a significant role in determining which firms win contracts.” *Id.* The expert stated:

The size of the firm has got to be a major determinant because of course some firms are going to be larger, are going to be better prepared, are going to be in a greater natural capacity to be able to work on some of the contracts while others simply by virtue of their small size simply would not be able to do it. *Id.*

The Eleventh Circuit then summarized:

Because they are bigger, bigger firms have a bigger chance to win bigger contracts. It follows that, all other factors being equal and in a perfectly nondiscriminatory market, one would expect the bigger (on average) non-MWBE firms to get a disproportionately higher percentage of total construction dollars awarded than the smaller MWBE firms. *Id.*

In anticipation of such an argument, the County conducted a regression analysis to control for firm size. *Id.* A regression analysis is “a statistical procedure for determining the relationship between a dependent and independent variable, *e.g.*, the dollar value of a contract award and firm size.” *Id.* (internal citations omitted). The purpose of the regression analysis is “to determine whether the relationship between the two variables is statistically meaningful.” *Id.*

The County’s regression analysis sought to identify disparities that could not be explained by firm size, and theoretically instead based on another factor, such as discrimination. *Id.* The County conducted two regression analyses using two different proxies for firm size: (1) total awarded value of all contracts bid on; and (2) largest single contract awarded. *Id.* The regression analyses accounted for most of the negative disparities regarding MBE/WBE participation in County construction contracts (*i.e.*, most of the unfavorable disparities became statistically insignificant, corresponding to standard deviation values less than two). *Id.*

Based on an evaluation of the regression analysis, the district court held that the demonstrated disparities were attributable to firm size as opposed to discrimination. *Id.* at 918. The district court concluded that the few unexplained disparities that remained after regressing for firm size were

insufficient to provide the requisite “strong basis in evidence” of discrimination of BBEs and HBEs. *Id.* The Eleventh Circuit held that this decision was not clearly erroneous. *Id.*

With respect to the BBE statistics, the regression analysis explained all but one negative disparity, for one type of construction contract between 1989-1991. *Id.* The Eleventh Circuit held the district court permissibly found that this did not constitute a “strong basis in evidence” of discrimination. *Id.*

With respect to the HBE statistics, one of the regression methods failed to explain the unfavorable disparity for one type of contract between 1989-1991, and both regression methods failed to explain the unfavorable disparity for another type of contract during that same time period. *Id.* However, by 1993, both regression methods accounted for all of the unfavorable disparities, and one of the disparities for one type of contract was actually favorable for HBEs. *Id.* The Eleventh Circuit held the district court permissibly found that this did not constitute a “strong basis in evidence” of discrimination. *Id.*

Finally, with respect to the WBE statistics, the regression analysis explained all but one negative disparity, for one type of construction contract in the 1993 period. *Id.* The regression analysis explained all of the other negative disparities, and in the 1993 period, a disparity for one type of contract was actually favorable to WBEs. *Id.* The Eleventh Circuit held the district court permissibly found that this evidence was not “sufficiently probative of discrimination.” *Id.*

The County argued that the district court erroneously relied on the disaggregated data (*i.e.*, broken down by contract type) as opposed to the consolidated statistics. *Id.* at 919. The district court declined to assign dispositive weight to the aggregated data for the BBE statistics for 1989-1991 because (1) the aggregated data for 1993 did not show negative disparities when regressed for firm size, (2) the BBE disaggregated data left only one unexplained negative disparity for one type of contract for 1989-1991 when regressed for firm size, and (3) “the County’s own expert testified as to the utility of examining the disaggregated data ‘insofar as they reflect different kinds of work, different bidding practices, perhaps a variety of other factors that could make them heterogeneous with one another.’” *Id.*

Additionally, the district court noted, and the Eleventh Circuit found that “the aggregation of disparity statistics for nonheterogenous data populations can give rise to a statistical phenomenon known as ‘Simpson’s Paradox,’ which leads to illusory disparities in improperly aggregated data that disappear when the data are disaggregated.” *Id.* at 919, n. 4 (internal citations omitted). “Under those circumstances,” the Eleventh Circuit held that the district court did not err in assigning less weight to the aggregated data, in finding the aggregated data for BBEs for 1989-1991 did not provide a “strong basis in evidence” of discrimination, or in finding that the disaggregated data formed an insufficient basis of support for any of the MBE/WBE programs given the applicable constitutional requirements. *Id.* at 919.

**County subcontracting statistics.** The County performed a subcontracting study to measure MBE/WBE participation in the County’s subcontracting businesses. For each MBE/WBE category (BBE, HBE, and WBE), “the study compared the proportion of the designated group that filed a subcontractor’s release of lien on a County construction project between 1991 and 1994 with the proportion of sales and receipt dollars that the same group received during the same time period.” *Id.*

The district court found the statistical evidence insufficient to support the use of race- and ethnicity-conscious measures, noting problems with some of the data measures. *Id.* at 920.

Most notably, the denominator used in the calculation of the MWBE sales and receipts percentages is based upon the total sales and receipts from all sources for the firm filing a subcontractor's release of lien with the County. That means, for instance, that if a nationwide non-MWBE company performing 99 percent of its business outside of Dade County filed a single subcontractor's release of lien with the County during the relevant time frame, all of its sales and receipts for that time frame would be counted in the denominator against which MWBE sales and receipts are compared. As the district court pointed out, that is not a reasonable way to measure Dade County subcontracting participation.

*Id.* The County's argument that a strong majority (72%) of the subcontractors were located in Dade County did not render the district court's decision to fail to credit the study erroneous. *Id.*

**Marketplace data statistics.** The County conducted another statistical study "to see what the differences are in the marketplace and what the relationships are in the marketplace." *Id.* The study was based on a sample of 568 contractors, from a pool of 10,462 firms, that had filed a "certificate of competency" with Dade County as of January 1995. *Id.* The selected firms participated in a telephone survey inquiring about the race, ethnicity, and gender of the firm's owner, and asked for information on the firm's total sales and receipts from all sources. *Id.* The County's expert then studied the data to determine "whether meaningful relationships existed between (1) the race, ethnicity, and gender of the surveyed firm owners, and (2) the reported sales and receipts of that firm. *Id.* The expert's hypothesis was that unfavorable disparities may be attributable to marketplace discrimination. The expert performed a regression analysis using the number of employees as a proxy for size. *Id.*

The Eleventh Circuit first noted that the statistical pool used by the County was substantially larger than the actual number of firms, willing, able, and qualified to do the work as the statistical pool represented all those firms merely licensed as a construction contractor. *Id.* Although this factor did not render the study meaningless, the district court was entitled to consider that in evaluating the weight of the study. *Id.* at 921. The Eleventh Circuit quoted the Supreme Court for the following proposition: "[w]hen special qualifications are required to fill particular jobs, comparisons to the general population (rather than to the smaller group of individuals who possess the necessary qualifications) may have little probative value." *Id.*, quoting *Croson*, 488 U.S. at 501, quoting *Hazelwood Sch. Dist. v. United States*, 433 U.S. 299, 308 n. 13 (1977).

The Eleventh Circuit found that after regressing for firm size, neither the BBE nor WBE data showed statistically significant unfavorable disparities. *Id.* Although the marketplace data did reveal unfavorable disparities even after a regression analysis, the district court was not required to assign those disparities controlling weight, especially in light of the dissimilar results of the County Contracting Statistics, discussed *supra*. *Id.*



**The Wainwright Study.** The County also introduced a statistical analysis prepared by Jon Wainwright, analyzing “the personal and financial characteristics of self-employed persons working full-time in the Dade County construction industry, based on data from the 1990 Public Use Microdata Sample database” (derived from the decennial census). *Id.* The study “(1) compared construction business ownership rates of MBE/WBEs to those of non-MBE/WBEs, and (2) analyzed disparities in personal income between MBE/WBE and non-MBE/WBE business owners.” *Id.* “The study concluded that blacks, Hispanics, and women are less likely to own construction businesses than similarly situated white males, and MBE/WBEs that do enter the construction business earn less money than similarly situated white males.” *Id.*

With respect to the first conclusion, Wainwright controlled for “human capital” variables (education, years of labor market experience, marital status, and English proficiency) and “financial capital” variables (interest and dividend income, and home ownership). *Id.* The analysis indicated that blacks, Hispanics and women enter the construction business at lower rates than would be expected, once numerosity, and identified human and financial capital are controlled for. *Id.* The disparities for blacks and women (but not Hispanics) were substantial and statistically significant. *Id.* at 922. The underlying theory of this business ownership component of the study is that any significant disparities remaining after control of variables are due to the ongoing effects of past and present discrimination. *Id.*

The Eleventh Circuit held, in light of *Croson*, the district court need not have accepted this theory. *Id.* The Eleventh Circuit quoted *Croson*, in which the Supreme Court responded to a similar argument advanced by the plaintiffs in that case: “There are numerous explanations for this dearth of minority participation, including past societal discrimination in education and economic opportunities *as well as both black and white career and entrepreneurial choices. Blacks may be disproportionately attracted to industries other than construction.*” *Id.*, quoting *Croson*, 488 U.S. at 503. Following the Supreme Court in *Croson*, the Eleventh Circuit held “the disproportionate attraction of a minority group to non-construction industries does not mean that discrimination in the construction industry is the reason.” *Id.*, quoting *Croson*, 488 U.S. at 503. Additionally, the district court had evidence that between 1982 and 1987, there was a substantial growth rate of MBE/WBE firms as opposed to non-MBE/WBE firms, which would further negate the proposition that the construction industry was discriminating against minority- and women-owned firms. *Id.* at 922.

With respect to the personal income component of the Wainwright study, after regression analyses were conducted, only the BBE statistics indicated a statistically significant disparity ratio. *Id.* at 923. However, the Eleventh Circuit held the district court was not required to assign the disparity controlling weight because the study did not regress for firm size, and in light of the conflicting statistical evidence in the County Contracting Statistics and Marketplace Data Statistics, discussed *supra*, which did regress for firm size. *Id.*

**The Brimmer Study.** The final study presented by the County was conducted under the supervision of Dr. Andrew F. Brimmer and concerned only black-owned firms. *Id.* The key component of the study was an analysis of the business receipts of black-owned construction firms for the years of 1977, 1982 and 1987, based on the Census Bureau’s Survey of Minority- and Women-Owned Businesses, produced every five years. *Id.* The study sought to determine the existence of disparities

between sales and receipts of black-owned firms in Dade County compared to the sales and receipts of all construction firms in Dade County. *Id.*

The study indicated substantial disparities in 1977 and 1987 but not 1982. *Id.* The County alleged that the absence of disparity in 1982 was due to substantial race-conscious measures for a major construction contract (Metrorail project), and not due to a lack of discrimination in the industry. *Id.* However, the study made no attempt to filter for the Metrorail project and “complete[ly] fail[ed]” to account for firm size. *Id.* Accordingly, the Eleventh Circuit found the district court permissibly discounted the results of the Brimmer study. *Id.* at 924.

**Anecdotal evidence.** In addition, the County presented a substantial amount of anecdotal evidence of perceived discrimination against BBEs, a small amount of similar anecdotal evidence pertaining to WBEs, and no anecdotal evidence pertaining to HBEs. *Id.* The County presented three basic forms of anecdotal evidence: “(1) the testimony of two County employees responsible for administering the MBE/WBE programs; (2) the testimony, primarily by affidavit, of twenty-three MBE/WBE contractors and subcontractors; and (3) a survey of black-owned construction firms.” *Id.*

The County employees testified that the decentralized structure of the County construction contracting system affords great discretion to County employees, which in turn creates the opportunity for discrimination to infect the system. *Id.* They also testified to specific incidents of discrimination, for example, that MBE/WBEs complained of receiving lengthier punch lists than their non-MBE/WBE counterparts. *Id.* They also testified that MBE/WBEs encounter difficulties in obtaining bonding and financing. *Id.*

The MBE/WBE contractors and subcontractors testified to numerous incidents of perceived discrimination in the Dade County construction market, including:

Situations in which a project foreman would refuse to deal directly with a black or female firm owner, instead preferring to deal with a white employee; instances in which an MWBE owner knew itself to be the low bidder on a subcontracting project, but was not awarded the job; instances in which a low bid by an MWBE was “shopped” to solicit even lower bids from non-MWBE firms; instances in which an MWBE owner received an invitation to bid on a subcontract within a day of the bid due date, together with a “letter of unavailability” for the MWBE owner to sign in order to obtain a waiver from the County; and instances in which an MWBE subcontractor was hired by a prime contractor, but subsequently was replaced with a non-MWBE subcontractor within days of starting work on the project.

*Id.* at 924-25.

Finally, the County submitted a study prepared by Dr. Joe E. Feagin, comprised of interviews of 78 certified black-owned construction firms. *Id.* at 925. The interviewees reported similar instances of perceived discrimination, including: “difficulty in securing bonding and financing; slow payment by general contractors; unfair performance evaluations that were tainted by racial stereotypes; difficulty

in obtaining information from the County on contracting processes; and higher prices on equipment and supplies than were being charged to non-MBE/WBE firms.” *Id.*

The Eleventh Circuit found that numerous black- and some female-owned construction firms in Dade County perceived that they were the victims of discrimination and two County employees also believed that discrimination could taint the County’s construction contracting process. *Id.* However, such anecdotal evidence is helpful “only when it [is] combined with and reinforced by sufficiently probative statistical evidence.” *Id.* In her plurality opinion in *Croson*, Justice O’Connor found that “evidence of a pattern of individual discriminatory acts can, *if supported by appropriate statistical proof*, lend support to a local government’s determination that broader remedial relief is justified.” *Id.*, *quoting Croson*, 488 U.S. at 509 (emphasis added by the Eleventh Circuit). Accordingly, the Eleventh Circuit held that “anecdotal evidence can play an important role in bolstering statistical evidence, but that only in the rare case will anecdotal evidence suffice standing alone.” *Id.* at 925. The Eleventh Circuit also cited to opinions from the Third, Ninth and Tenth Circuits as supporting the same proposition. *Id.* at 926. The Eleventh Circuit affirmed the decision of the district court enjoining the continued operation of the MBE/WBE programs because they did not rest on a “constitutionally sufficient evidentiary foundation.” *Id.*

Although the Eleventh Circuit determined that the MBE/WBE program did not survive constitutional muster due to the absence of a sufficient evidentiary foundation, the Eleventh Circuit proceeded with the second prong of the strict scrutiny analysis of determining whether the MBE/WBE programs were narrowly tailored (BBE and HBE programs) or substantially related (WBE program) to the legitimate government interest they purported to serve, *i.e.*, “remedying the effects of present and past discrimination against blacks, Hispanics, and women in the Dade County construction market.” *Id.*

**Narrow tailoring.** “The essence of the ‘narrowly tailored’ inquiry is the notion that explicitly racial preferences ... must only be a ‘last resort’ option.” *Id.*, *quoting Hayes v. North Side Law Enforcement Officers Ass’n*, 10 F.3d 207, 217 (4th Cir. 1993) and *citing Croson*, 488 U.S. at 519 (Kennedy, J., concurring in part and concurring in the judgment) (“[T]he strict scrutiny standard ... forbids the use of even narrowly drawn racial classifications except as a last resort.”).

The Eleventh Circuit has identified four factors to evaluate whether a race- or ethnicity-conscious affirmative action program is narrowly tailored: (1) “the necessity for the relief and the efficacy of alternative remedies; (2) the flexibility and duration of the relief; (3) the relationship of numerical goals to the relevant labor market; and (4) the impact of the relief on the rights of innocent third parties.” *Id.* at 927, *citing Ensley Branch*, 31 F.3d at 1569. The four factors provide “a useful analytical structure.” *Id.* at 927. The Eleventh Circuit focused only on the first factor in the present case “because that is where the County’s MBE/WBE programs are most problematic.” *Id.*

The Eleventh Circuit

flatly reject[ed] the County’s assertion that ‘given a strong basis in evidence of a race-based problem, a race-based remedy is necessary.’ That is simply not the law. If a race-neutral remedy is sufficient to cure a race-based problem, then a race-conscious remedy can never be narrowly tailored to that problem.” *Id.*, *citing*

*Crosby*, 488 U.S. at 507 (holding that affirmative action program was not narrowly tailored where “there does not appear to have been any consideration of the use of race-neutral means to increase minority business participation in city contracting”) ... Supreme Court decisions teach that a race-conscious remedy is not merely one of many equally acceptable medications the government may use to treat a race-based problem. Instead, it is the strongest of medicines, with many potential side effects, and must be reserved for those severe cases that are highly resistant to conventional treatment.

*Id.* at 927.

The Eleventh Circuit held that the County “clearly failed to give serious and good faith consideration to the use of race- and ethnicity-neutral measures.” *Id.* Rather, the determination of the necessity to establish the MWBE programs was based upon a conclusory legislative statement as to its necessity, which in turn was based upon an “equally conclusory analysis” in the Brimmer study, and a report that the SBA only was able to direct 5 percent of SBA financing to black-owned businesses between 1968-1980. *Id.*

The County admitted, and the Eleventh Circuit concluded, that the County failed to give any consideration to any alternative to the HBE affirmative action program. *Id.* at 928. Moreover, the Eleventh Circuit found that the testimony of the County’s own witnesses indicated the viability of race- and ethnicity-neutral measures to remedy many of the problems facing black- and Hispanic-owned construction firms. *Id.* The County employees identified problems, virtually all of which were related to the County’s own processes and procedures, including: “the decentralized County contracting system, which affords a high level of discretion to County employees; the complexity of County contract specifications; difficulty in obtaining bonding; difficulty in obtaining financing; unnecessary bid restrictions; inefficient payment procedures; and insufficient or inefficient exchange of information.” *Id.* The Eleventh Circuit found that the problems facing MBE/WBE contractors were “institutional barriers” to entry facing every new entrant into the construction market, and were perhaps affecting the MBE/WBE contractors disproportionately due to the “institutional youth” of black- and Hispanic-owned construction firms. *Id.* “It follows that those firms should be helped the most by dismantling those barriers, something the County could do at least in substantial part.” *Id.*

The Eleventh Circuit noted that the race- and ethnicity-neutral options available to the County mirrored those available and cited by Justice O’Connor in *Crosby*:

[T]he city has at its disposal a whole array of race-neutral measures to increase the accessibility of city contracting opportunities to small entrepreneurs of all races. Simplification of bidding procedures, relaxation of bonding requirements, and training and financial aid for disadvantaged entrepreneurs of all races would open the public contracting market to all those who have suffered the effects of past societal discrimination and neglect ... The city may also act to prohibit discrimination in the provision of credit or bonding by local suppliers and banks.

*Id.*, quoting *Croson*, 488 U.S. at 509-10. The Eleventh Circuit found that except for some “half-hearted programs” consisting of “limited technical and financial aid that might benefit BBEs and HBEs,” the County had not “seriously considered” or tried most of the race- and ethnicity-neutral alternatives available. *Id.* at 928. “Most notably ... the County has not taken any action whatsoever to ferret out and respond to instances of discrimination if and when they have occurred in the County’s own contracting process.” *Id.*

The Eleventh Circuit found that the County had taken no steps to “inform, educate, discipline, or penalize” discriminatory misconduct by its own employees. *Id.* at 929. Nor had the County passed any local ordinances expressly prohibiting discrimination by local contractors, subcontractors, suppliers, bankers, or insurers. *Id.* “Instead of turning to race- and ethnicity-conscious remedies as a last resort, the County has turned to them as a first resort.” Accordingly, the Eleventh Circuit held that even if the BBE and HBE programs were supported by the requisite evidentiary foundation, they violated the Equal Protection Clause because they were not narrowly tailored. *Id.*

**Substantial relationship.** The Eleventh Circuit held that due to the relaxed “substantial relationship” standard for gender-conscious programs, if the WBE program rested upon a sufficient evidentiary foundation, it could pass the substantial relationship requirement. *Id.* However, because it did not rest upon a sufficient evidentiary foundation, the WBE program could not pass constitutional muster. *Id.*

For all of the foregoing reasons, the Eleventh Circuit affirmed the decision of the district court declaring the MBE/WBE programs unconstitutional and enjoining their continued operation.

### **Recent District Court Decisions**

#### **12. *H.B. Rowe Corp., Inc. v. W. Lyndo Tippet, North Carolina DOT, et al.*, 589 F. Supp.2d 587 (E.D.N.C. 2008), affirmed in part, reversed in part, and remanded, 615 F.3d 233 (4th Cir. 2010)**

In *H.B. Rowe Company v. Tippet, North Carolina Department of Transportation, et al.* (“*Rowe*”), the United States District Court for the Eastern District of North Carolina, Western Division, heard a challenge to the State of North Carolina MBE and WBE Program, which is a State of North Carolina “affirmative action” program administered by the NCDOT. The NCDOT MWBE Program challenged in *Rowe* involves projects funded solely by the State of North Carolina and not funded by the USDOT. 589 F.Supp.2d 587.

**Background.** In this case plaintiff, a family-owned road construction business, bid on a NCDOT initiated state-funded project. NCDOT rejected plaintiff’s bid in favor of the next low bid that had proposed higher minority participation on the project as part of its bid. According to NCDOT, plaintiff’s bid was rejected because of plaintiff’s failure to demonstrate “good faith efforts” to obtain pre-designated levels of minority participation on the project.

As a prime contractor, plaintiff Rowe was obligated under the MWBE Program to either obtain participation of specified levels of MBE and WBE participation as subcontractors, or to demonstrate good faith efforts to do so. For this particular project, NCDOT had set MBE and WBE subcontractor participation goals of 10 percent and 5 percent, respectively. Plaintiff’s bid included 6.6 percent WBE participation, but no MBE participation. The bid was rejected after a review of plaintiff’s good faith efforts to obtain MBE participation. The next lowest bidder submitted a bid

including 3.3 percent MBE participation and 9.3 percent WBE participation, and although not obtaining a specified level of MBE participation, it was determined to have made good faith efforts to do so. (Order of the District Court, dated March 29, 2007).

NCDOT's MWBE Program "largely mirrors" the Federal DBE Program, which NCDOT is required to comply with in awarding construction contracts that utilize Federal funds. (589 F.Supp.2d 587; Order of the District Court, dated September 28, 2007). Like the Federal DBE Program, under NCDOT's MWBE Program, the goals for minority and female participation are aspirational rather than mandatory. *Id.* An individual target for MBE participation was set for each project. *Id.*

Historically, NCDOT had engaged in several disparity studies. The most recent study was done in 2004. *Id.* The 2004 study, which followed the study in 1998, concluded that disparities in utilization of MBEs persist and that a basis remains for continuation of the MWBE Program. The new statute as revised was approved in 2006, which modified the previous MBE statute by eliminating the 10 percent and 5 percent goals and establishing a fixed expiration date of 2009.

Plaintiff filed its complaint in this case in 2003 against the NCDOT and individuals associated with the NCDOT, including the Secretary of NCDOT, W. Lyndo Tippet. In its complaint, plaintiff alleged that the MWBE statute for NCDOT was unconstitutional on its face and as applied. 589 F.Supp.2d 587.

**March 29, 2007 Order of the District Court.** The matter came before the district court initially on several motions, including the defendants' Motion to Dismiss or for Partial Summary Judgment, defendants' Motion to Dismiss the Claim for Mootness and plaintiff's Motion for Summary Judgment. The court in its October 2007 Order granted in part and denied in part defendants' Motion to Dismiss or for partial summary judgment; denied defendants' Motion to Dismiss the Claim for Mootness; and dismissed without prejudice plaintiff's Motion for Summary Judgment.

The court held the Eleventh Amendment to the United States Constitution bars plaintiff from obtaining any relief against defendant NCDOT, and from obtaining a retrospective damages award against any of the individual defendants in their official capacities. The court ruled that plaintiff's claims for relief against the NCDOT were barred by the Eleventh Amendment, and the NCDOT was dismissed from the case as a defendant. Plaintiff's claims for interest, actual damages, compensatory damages and punitive damages against the individual defendants sued in their official capacities also was held barred by the Eleventh Amendment and were dismissed. But, the court held that plaintiff was entitled to sue for an injunction to prevent state officers from violating a federal law, and under the *Ex Parte Young* exception, plaintiff's claim for declaratory and injunctive relief was permitted to go forward as against the individual defendants who were acting in an official capacity with the NCDOT. The court also held that the individual defendants were entitled to qualified immunity, and therefore dismissed plaintiff's claim for money damages against the individual defendants in their individual capacities. Order of the District Court, dated March 29, 2007.

Defendants argued that the recent amendment to the MWBE statute rendered plaintiff's claim for declaratory injunctive relief moot. The new MWBE statute adopted in 2006, according to the court, does away with many of the alleged shortcomings argued by the plaintiff in this lawsuit. The court found the amended statute has a sunset date in 2009; specific aspirational participation goals by women and minorities are eliminated; defines "minority" as including only those racial groups which

disparity studies identify as subject to underutilization in state road construction contracts; explicitly references the findings of the 2004 Disparity Study and requires similar studies to be conducted at least once every five years; and directs NCDOT to enact regulations targeting discrimination identified in the 2004 and future studies.

The court held, however, that the 2004 Disparity Study and amended MWBE statute do not remedy the primary problem which the plaintiff complained of: the use of remedial race- and gender- based preferences allegedly without valid evidence of past racial and gender discrimination. In that sense, the court held the amended MWBE statute continued to present a live case or controversy, and accordingly denied the defendants' Motion to Dismiss Claim for Mootness as to plaintiff's suit for prospective injunctive relief. Order of the District Court, dated March 29, 2007.

The court also held that since there had been no analysis of the MWBE statute apart from the briefs regarding mootness, plaintiff's pending Motion for Summary Judgment was dismissed without prejudice. Order of the District Court, dated March 29, 2007.

**September 28, 2007 Order of the District Court.** On September 28, 2007, the district court issued a new order in which it denied both the plaintiff's and the defendants' Motions for Summary Judgment. Plaintiff claimed that the 2004 Disparity Study is the sole basis of the MWBE statute, that the study is flawed, and therefore it does not satisfy the first prong of strict scrutiny review. Plaintiff also argued that the 2004 study tends to prove non-discrimination in the case of women; and finally the MWBE Program fails the second prong of strict scrutiny review in that it is not narrowly tailored.

The court found summary judgment was inappropriate for either party and that there are genuine issues of material fact for trial. The first and foremost issue of material fact, according to the court, was the adequacy of the 2004 Disparity Study as used to justify the MWBE Program. Therefore, because the court found there was a genuine issue of material fact regarding the 2004 Study, summary judgment was denied on this issue.

The court also held there was confusion as to the basis of the MWBE Program, and whether it was based solely on the 2004 Study or also on the 1993 and 1998 Disparity Studies. Therefore, the court held a genuine issue of material fact existed on this issue and denied summary judgment. Order of the District Court, dated September 28, 2007.

**December 9, 2008 Order of the District Court (589 F.Supp.2d 587).** The district court on December 9, 2008, after a bench trial, issued an Order that found as a fact and concluded as a matter of law that plaintiff failed to satisfy its burden of proof that the North Carolina Minority and Women's Business Enterprise program, enacted by the state legislature to affect the awarding of contracts and subcontracts in state highway construction, violated the United States Constitution.

Plaintiff, in its complaint filed against the NCDOT alleged that N.C. Gen. St. § 136-28.4 is unconstitutional on its face and as applied, and that the NCDOT while administering the MWBE program violated plaintiff's rights under the federal law and the United States Constitution. Plaintiff requested a declaratory judgment that the MWBE program is invalid and sought actual and punitive damages.

As a prime contractor, plaintiff was obligated under the MWBE program to either obtain participation of specified levels of MBE and WBE subcontractors, or to demonstrate that good faith efforts were made to do so. Following a review of plaintiff's good faith efforts to obtain minority participation on the particular contract that was the subject of plaintiff's bid, the bid was rejected. Plaintiff's bid was rejected in favor of the next lowest bid, which had proposed higher minority participation on the project as part of its bid. According to NCDOT, plaintiff's bid was rejected because of plaintiff's failure to demonstrate good faith efforts to obtain pre-designated levels of minority participation on the project. 589 F.Supp.2d 587.

**North Carolina's MWBE program.** The MWBE program was implemented following amendments to N.C. Gen. Stat. §136-28.4. Pursuant to the directives of the statute, the NCDOT promulgated regulations governing administration of the MWBE program. See N.C. Admin. Code tit. 19A, § 2D.1101, et seq. The regulations had been amended several times and provide that NCDOT shall ensure that MBEs and WBEs have the maximum opportunity to participate in the performance of contracts financed with non-federal funds. N.C. Admin. Code Tit. 19A § 2D.1101.

North Carolina's MWBE program, which affected only highway bids and contracts funded solely with state money, according to the district court, largely mirrored the Federal DBE Program which NCDOT is required to comply with in awarding construction contracts that utilize federal funds. 589 F.Supp.2d 587. Like the Federal DBE Program, under North Carolina's MWBE program, the targets for minority and female participation were aspirational rather than mandatory, and individual targets for disadvantaged business participation were set for each individual project. N.C. Admin. Code tit. 19A § 2D.1108. In determining what level of MBE and WBE participation was appropriate for each project, NCDOT would take into account "the approximate dollar value of the contract, the geographical location of the proposed work, a number of the eligible funds in the geographical area, and the anticipated value of the items of work to be included in the contract." *Id.* NCDOT would also consider "the annual goals mandated by Congress and the North Carolina General Assembly." *Id.*

A firm could be certified as a MBE or WBE by showing NCDOT that it is "owner controlled by one or more socially and economically disadvantaged individuals." NC Admin. Code tit. 1980, § 2D.1102.

The district court stated the MWBE program did not directly discriminate in favor of minority and women contractors, but rather "encouraged prime contractors to favor MBEs and WBEs in subcontracting before submitting bids to NCDOT." 589 F.Supp.2d 587. In determining whether the lowest bidder is "responsible," NCDOT would consider whether the bidder obtained the level of certified MBE and WBE participation previously specified in the NCDOT project proposal. If not, NCDOT would consider whether the bidder made good faith efforts to solicit MBE and WBE participation. N.C. Admin. Code tit. 19A § 2D.1108.

There were multiple studies produced and presented to the North Carolina General Assembly in the years 1993, 1998 and 2004. The 1998 and 2004 studies concluded that disparities in the utilization of minority and women contractors persist, and that there remains a basis for continuation of the MWBE program. The MWBE program as amended after the 2004 study includes provisions that eliminated the 10 percent and 5 percent goals and instead replaced them with contract-specific participation goals created by NCDOT; established a sunset provision that has the statute expiring on August 31, 2009; and provides reliance on a disparity study produced in 2004.



The MWBE program, as it stood at the time of this decision, provides that NCDOT “dictates to prime contractors the express goal of MBE and WBE subcontractors to be used on a given project. However, instead of the state hiring the MBE and WBE subcontractors itself, the NCDOT makes the prime contractor solely responsible for vetting and hiring these subcontractors. If a prime contractor fails to hire the goal amount, it must submit efforts of ‘good faith’ attempts to do so.” 589 F.Supp.2d 587.

**Compelling interest.** The district court held that NCDOT established a compelling governmental interest to have the MWBE program. The court noted that the United States Supreme Court in *Croson* made clear that a state legislature has a compelling interest in eradicating and remedying private discrimination in the private subcontracting inherent in the letting of road construction contracts. 589 F.Supp.2d 587, *citing Croson*, 488 U.S. at 492. The district court found that the North Carolina Legislature established it relied upon a strong basis of evidence in concluding that prior race discrimination in North Carolina’s road construction industry existed so as to require remedial action.

The court held that the 2004 Disparity Study demonstrated the existence of previous discrimination in the specific industry and locality at issue. The court stated that disparity ratios provided for in the 2004 Disparity Study highlighted the underutilization of MBEs by prime contractors bidding on state funded highway projects. In addition, the court found that evidence relied upon by the legislature demonstrated a dramatic decline in the utilization of MBEs during the program’s suspension in 1991. The court also found that anecdotal support relied upon by the legislature confirmed and reinforced the general data demonstrating the underutilization of MBEs. The court held that the NCDOT established that, “based upon a clear and strong inference raised by this Study, they concluded minority contractors suffer from the lingering effects of racial discrimination.” 589 F.Supp.2d 587.

With regard to WBEs, the court applied a different standard of review. The court held the legislative scheme as it relates to MWBEs must serve an important governmental interest and must be substantially related to the achievement of those objectives. The court found that NCDOT established an important governmental interest. The 2004 Disparity Study provided that the average contracts awarded WBEs are significantly smaller than those awarded non-WBEs. The court held that NCDOT established based upon a clear and strong inference raised by the Study, women contractors suffer from past gender discrimination in the road construction industry.

**Narrowly tailored.** The district court noted that the Fourth Circuit of Appeals lists a number of factors to consider in analyzing a statute for narrow tailoring: (1) the necessity of the policy and the efficacy of alternative race neutral policies; (2) the planned duration of the policy; (3) the relationship between the numerical goal and the percentage of minority group members in the relevant population; (4) the flexibility of the policy, including the provision of waivers if the goal cannot be met; and (5) the burden of the policy on innocent third parties. 589 F.Supp.2d 587, *quoting Belk v. Charlotte-Mecklenburg Board of Education*, 269 F.3d 305, 344 (4th Cir. 2001).

The district court held that the legislative scheme in N.C. Gen. Stat. § 136-28.4 is narrowly tailored to remedy private discrimination of minorities and women in the private subcontracting inherent in the letting of road construction contracts. The district court’s analysis focused on narrowly tailoring factors (2) and (4) above, namely the duration of the policy and the flexibility of the policy. With respect to the former, the court held the legislative scheme provides the program be reviewed at least every five years to revisit the issue of utilization of MWBEs in the road construction industry. N.C.

Gen. Stat. §136-28.4(b). Further, the legislative scheme includes a sunset provision so that the program will expire on August 31, 2009, unless renewed by an act of the legislature. *Id.* at § 136-28.4(e). The court held these provisions ensured the legislative scheme last no longer than necessary.

The court also found that the legislative scheme enacted by the North Carolina legislature provides flexibility insofar as the participation goals for a given contract or determined on a project by project basis. § 136-28.4(b)(1). Additionally, the court found the legislative scheme in question is not overbroad because the statute applies only to “those racial or ethnicity classifications identified by a study conducted in accordance with this section that had been subjected to discrimination in a relevant marketplace and that had been adversely affected in their ability to obtain contracts with the Department.” § 136-28.4(c)(2). The court found that plaintiff failed to provide any evidence that indicates minorities from non-relevant racial groups had been awarded contracts as a result of the statute.

The court held that the legislative scheme is narrowly tailored to remedy private discrimination of minorities and women in the private subcontracting inherent in the letting of road construction contracts, and therefore found that § 136-28.4 is constitutional.

The decision of the district court was appealed to the United States Court of Appeals for the Fourth Circuit, which affirmed in part and reversed in part the decision of the district court. *See* 615 F3d 233 (4<sup>th</sup> Cir. 2010), discussed above.

**13. *Thomas v. City of Saint Paul*, 526 F. Supp.2d 959 (D. Minn 2007), affirmed, 321 Fed. Appx. 541, 2009 WL 777932 (8th Cir. March 26, 2009) (unpublished opinion), cert. denied, 130 S.Ct. 408 (2009)**

In *Thomas v. City of Saint Paul*, the plaintiffs are African American business owners who brought this lawsuit claiming that the City of Saint Paul, Minnesota discriminated against them in awarding publicly-funded contracts. The City moved for summary judgment, which the United States District Court granted and issued an order dismissing the plaintiff's lawsuit in December 2007.

The background of the case involves the adoption by the City of Saint Paul of a Vendor Outreach Program (“VOP”) that was designed to assist minority and other small business owners in competing for City contracts. Plaintiffs were VOP-certified minority business owners. Plaintiffs contended that the City engaged in racially discriminatory illegal conduct in awarding City contracts for publicly-funded projects. Plaintiff Thomas claimed that the City denied him opportunities to work on projects because of his race arguing that the City failed to invite him to bid on certain projects, the City failed to award him contracts and the fact independent developers had not contracted with his company. 526 F. Supp.2d at 962. The City contended that Thomas was provided opportunities to bid for the City's work.

Plaintiff Brian Conover owned a trucking firm, and he claimed that none of his bids as a subcontractor on 22 different projects to various independent developers were accepted. 526 F. Supp.2d at 962. The court found that after years of discovery, plaintiff Conover offered no admissible evidence to support his claim, had not identified the subcontractors whose bids were accepted, and did not offer any comparison showing the accepted bid and the bid he submitted. *Id.* Plaintiff Conover also complained that he received bidding invitations only a few days before a bid

was due, which did not allow him adequate time to prepare a competitive bid. *Id.* The court found, however, he failed to identify any particular project for which he had only a single day of bid, and did not identify any similarly situated person of any race who was afforded a longer period of time in which to submit a bid. *Id.* at 963. Plaintiff Newell claimed he submitted numerous bids on the City's projects all of which were rejected. *Id.* The court found, however, that he provided no specifics about why he did not receive the work. *Id.*

**The VOP.** Under the VOP, the City sets annual bench marks or levels of participation for the targeted minorities groups. *Id.* at 963. The VOP prohibits quotas and imposes various "good faith" requirements on prime contractors who bid for City projects. *Id.* at 964. In particular, the VOP requires that when a prime contractor rejects a bid from a VOP-certified business, the contractor must give the City its basis for the rejection, and evidence that the rejection was justified. *Id.* The VOP further imposes obligations on the City with respect to vendor contracts. *Id.* The court found the City must seek where possible and lawful to award a portion of vendor contracts to VOP-certified businesses. *Id.* The City contract manager must solicit these bids by phone, advertisement in a local newspaper or other means. Where applicable, the contract manager may assist interested VOP participants in obtaining bonds, lines of credit or insurance required to perform under the contract. *Id.* The VOP ordinance provides that when the contract manager engages in one or more possible outreach efforts, he or she is in compliance with the ordinance. *Id.*

**Analysis and Order of the Court.** The district court found that the City is entitled to summary judgment because plaintiffs lack standing to bring these claims and that no genuine issue of material fact remains. *Id.* at 965. The court held that the plaintiffs had no standing to challenge the VOP because they failed to show they were deprived of an opportunity to compete, or that their inability to obtain any contract resulted from an act of discrimination. *Id.* The court found they failed to show any instance in which their race was a determinant in the denial of any contract. *Id.* at 966. As a result, the court held plaintiffs failed to demonstrate the City engaged in discriminatory conduct or policy which prevented plaintiffs from competing. *Id.* at 965-966.

The court held that in the absence of any showing of intentional discrimination based on race, the mere fact the City did not award any contracts to plaintiffs does not furnish that causal nexus necessary to establish standing. *Id.* at 966. The court held the law does not require the City to voluntarily adopt "aggressive race-based affirmative action programs" in order to award specific groups publicly-funded contracts. *Id.* at 966. The court found that plaintiffs had failed to show a violation of the VOP ordinance, or any illegal policy or action on the part of the City. *Id.*

The court stated that the plaintiffs must identify a discriminatory policy in effect. *Id.* at 966. The court noted, for example, even assuming the City failed to give plaintiffs more than one day's notice to enter a bid, such a failure is not, per se, illegal. *Id.* The court found the plaintiffs offered no evidence that anyone else of any other race received an earlier notice, or that he was given this allegedly tardy notice as a result of his race. *Id.*

The court concluded that even if plaintiffs may not have been hired as a subcontractor to work for prime contractors receiving City contracts, these were independent developers and the City is not required to defend the alleged bad acts of others. *Id.* Therefore, the court held plaintiffs had no standing to challenge the VOP. *Id.* at 966.

**Plaintiff's claims.** The court found that even assuming plaintiffs possessed standing, they failed to establish facts which demonstrated a need for a trial, primarily because each theory of recovery is viable only if the City “intentionally” treated plaintiffs unfavorably because of their race. *Id.* at 967. The court held to establish a prima facie violation of the equal protection clause, there must be state action. *Id.* Plaintiffs must offer facts and evidence that constitute proof of “racially discriminatory intent or purpose.” *Id.* at 967. Here, the court found that plaintiff failed to allege any single instance showing the City “intentionally” rejected VOP bids based on their race. *Id.*

The court also found that plaintiffs offered no evidence of a specific time when any one of them submitted the lowest bid for a contract or a subcontract, or showed any case where their bids were rejected on the basis of race. *Id.* The court held the alleged failure to place minority contractors in a preferred position, without more, is insufficient to support a finding that the City failed to treat them equally based upon their race. *Id.*

The City rejected the plaintiff's claims of discrimination because the plaintiffs did not establish by evidence that the City “intentionally” rejected their bid due to race or that the City “intentionally” discriminated against these plaintiffs. *Id.* at 967-968. The court held that the plaintiffs did not establish a single instance showing the City deprived them of their rights, and the plaintiffs did not produce evidence of a “discriminatory motive.” *Id.* at 968. The court concluded that plaintiffs had failed to show that the City's actions were “racially motivated.” *Id.*

The Eighth Circuit Court of Appeals affirmed the ruling of the district court. *Thomas v. City of Saint Paul*, 2009 WL 777932 (8<sup>th</sup> Cir. 2009)(unpublished opinion). The Eighth Circuit affirmed based on the decision of the district court and finding no reversible error.

**14. *Thompson Building Wrecking Co. v. Augusta, Georgia*, No. 1:07CV019, 2007 WL 926153 (S.D. Ga. Mar. 14, 2007)(Slip. Op.)**

This case considered the validity of the City of Augusta's local minority DBE program. The district court enjoined the City from favoring any contract bid on the basis of racial classification and based its decision principally upon the outdated and insufficient data proffered by the City in support of its program. 2007 WL 926153 at \*9-10.

The City of Augusta enacted a local DBE program based upon the results of a disparity study completed in 1994. The disparity study examined the disparity in socioeconomic status among races, compared black-owned businesses in Augusta with those in other regions and those owned by other racial groups, examined “Georgia's racist history” in contracting and procurement, and examined certain data related to Augusta's contracting and procurement. *Id.* at \*1-4. The plaintiff contractors and subcontractors challenged the constitutionality of the DBE program and sought to extend a temporary injunction enjoining the City's implementation of racial preferences in public bidding and procurement.

The City defended the DBE program arguing that it did not utilize racial classifications because it only required vendors to make a “good faith effort” to ensure DBE participation. *Id.* at \*6. The court rejected this argument noting that bidders were required to submit a “Proposed DBE Participation” form and that bids containing DBE participation were treated more favorably than those bids without DBE participation. The court stated: “Because a person's business can qualify for the

favorable treatment based on that person's race, while a similarly situated person of another race would not qualify, the program contains a racial classification.” *Id.*

The court noted that the DBE program harmed subcontractors in two ways: first, because prime contractors will discriminate between DBE and non-DBE subcontractors and a bid with a DBE subcontractor would be treated more favorably; and second, because the City would favor a bid containing DBE participation over an equal or even superior bid containing no DBE participation. *Id.*

The court applied the strict scrutiny standard set forth in *Croson* and *Engineering Contractors Association* to determine whether the City had a compelling interest for its program and whether the program was narrowly tailored to that end. The court noted that pursuant to *Croson*, the City would have a compelling interest in assuring that tax dollars would not perpetuate private prejudice. But, the court found (*citing to Croson*), that a state or local government must identify that discrimination, “public or private, with some specificity before they may use race-conscious relief.” The court cited the Eleventh Circuit’s position that “‘gross statistical disparities’ between the proportion of minorities hired by the public employer and the proportion of minorities willing and able to work” may justify an affirmative action program. *Id.* at \*7. The court also stated that anecdotal evidence is relevant to the analysis.

The court determined that while the City’s disparity study showed some statistical disparities buttressed by anecdotal evidence, the study suffered from multiple issues. *Id.* at \*7-8. Specifically, the court found that those portions of the study examining discrimination outside the area of subcontracting (*e.g.*, socioeconomic status of racial groups in the Augusta area) were irrelevant for purposes of showing a compelling interest. The court also cited the failure of the study to differentiate between different minority races as well as the improper aggregation of race- and gender-based discrimination referred to as Simpson’s Paradox.

The court assumed for purposes of its analysis that the City could show a compelling interest but concluded that the program was not narrowly tailored and thus could not satisfy strict scrutiny. The court found that it need look no further beyond the fact of the thirteen-year duration of the program absent further investigation, and the absence of a sunset or expiration provision, to conclude that the DBE program was not narrowly tailored. *Id.* at \*8. Noting that affirmative action is permitted only sparingly, the court found: “[i]t would be impossible for Augusta to argue that, 13 years after last studying the issue, racial discrimination is so rampant in the Augusta contracting industry that the City must affirmatively act to avoid being complicit.” *Id.* The court held in conclusion, that the plaintiffs were “substantially likely to succeed in proving that, when the City requests bids with minority participation and in fact favors bids with such, the plaintiffs will suffer racial discrimination in violation of the Equal Protection Clause.” *Id.* at \*9.

In a subsequent Order dated September 5, 2007, the court denied the City’s motion to continue plaintiff’s Motion for Summary Judgment, denied the City’s Rule 12(b)(6) motion to dismiss, and stayed the action for 30 days pending mediation between the parties. Importantly, in this Order, the court reiterated that the female- and locally-owned business components of the program (challenged in plaintiff’s Motion for Summary Judgment) would be subject to intermediate scrutiny and rational basis scrutiny, respectively. The court also reiterated its rejection of the City’s challenge to the plaintiffs’ standing. The court noted that under *Adarand*, preventing a contractor from competing on

an equal footing satisfies the particularized injury prong of standing. And showing that the contractor will sometime in the future bid on a City contract “that offers financial incentives to a prime contractor for hiring disadvantaged subcontractors” satisfies the second requirement that the particularized injury be actual or imminent. Accordingly, the court concluded that the plaintiffs have standing to pursue this action.

**15. *Hershell Gill Consulting Engineers, Inc. v. Miami-Dade County*, 333 F. Supp.2d 1305 (S.D. Fla. 2004)**

The decision in *Hershell Gill Consulting Engineers, Inc. v. Miami-Dade County*, is significant to the disparity study because it applied and followed the *Engineering Contractors Association* decision in the context of contracting and procurement for goods and services (including architect and engineer services). Many of the other cases focused on construction, and thus *Hershell Gill* is instructive as to the analysis relating to architect and engineering services. The decision in *Hershell Gill* also involved a district court in the Eleventh Circuit imposing compensatory and punitive damages upon individual County Commissioners due to the district court’s finding of their willful failure to abrogate an unconstitutional MBE/WBE Program. In addition, the case is noteworthy because the district court refused to follow the 2003 Tenth Circuit Court of Appeals decision in *Concrete Works of Colorado, Inc. v. City and County of Denver*, 321 F.3d 950 (10<sup>th</sup> Cir. 2003). See discussion, *infra*.

Six years after the decision in *Engineering Contractors Association*, two white male-owned engineering firms (the “plaintiffs”) brought suit against Engineering Contractors Association (the “County”), the former County Manager, and various current County Commissioners (the “Commissioners”) in their official and personal capacities (collectively the “defendants”), seeking to enjoin the same “participation goals” in the same MWBE program deemed to violate the Fourteenth Amendment in the earlier case. 333 F. Supp. 1305, 1310 (S.D. Fla. 2004). After the Eleventh Circuit’s decision in *Engineering Contractors Association* striking down the MWBE programs as applied to construction contracts, the County enacted a Community Small Business Enterprise (“CSBE”) program for construction contracts, “but continued to apply racial, ethnic, and gender criteria to its purchases of goods and services in other areas, including its procurement of A&E services.” *Id.* at 1311.

The plaintiffs brought suit challenging the Black Business Enterprise (BBE) program, the Hispanic Business Enterprise (HBE) program, and the Women Business Enterprise (WBE) program (collectively “MBE/WBE”). *Id.* The MBE/WBE programs applied to A&E contracts in excess of \$25,000. *Id.* at 1312. The County established five “contract measures” to reach the participation goals: (1) set asides, (2) subcontractor goals, (3) project goals, (4) bid preferences, and (5) selection factors. *Id.* Once a contract was identified as covered by a participation goal, a review committee would determine whether a contract measure should be utilized. *Id.* The County was required to review the efficacy of the MBE/WBE programs annually, and reevaluated the continuing viability of the MBE/WBE programs every five years. *Id.* at 1313. However, the district court found “the participation goals for the three MBE/WBE programs challenged ... remained unchanged since 1994.” *Id.*

In 1998, counsel for plaintiffs contacted the County Commissioners requesting the discontinuation of contract measures on A&E contracts. *Id.* at 1314. Upon request of the Commissioners, the county manager then made two reports (an original and a follow-up) measuring parity in terms of dollars awarded and dollars paid in the areas of A&E for blacks, Hispanics, and women, and concluded both

times that the “County has reached parity for black, Hispanic, and Women-owned firms in the areas of [A&E] services.” The final report further stated “Based on all the analyses that have been performed, the County does not have a basis for the establishment of participation goals which would allow staff to apply contract measures.” *Id.* at 1315. The district court also found that the Commissioners were informed that “there was even less evidence to support [the MBE/WBE] programs as applied to architects and engineers than there was in contract construction.” *Id.* Nonetheless, the Commissioners voted to continue the MBE/WBE participation goals at their previous levels. *Id.*

In May of 2000 (18 months after the lawsuit was filed), the County commissioned Dr. Manuel J. Carvajal, an econometrician, to study architects and engineers in the county. His final report had four parts:

(1) data identification and collection of methodology for displaying the research results; (2) presentation and discussion of tables pertaining to architecture, civil engineering, structural engineering, and awards of contracts in those areas; (3) analysis of the structure and empirical estimates of various sets of regression equations, the calculation of corresponding indices, and an assessment of their importance; and (4) a conclusion that there is discrimination against women and Hispanics — but not against blacks — in the fields of architecture and engineering.

*Id.* The district court issued a preliminary injunction enjoining the use of the MBE/WBE programs for A&E contracts, pending the United States Supreme Court decisions in *Gratz v. Bollinger*, 539 U.S. 244 (2003) and *Grutter v. Bollinger*, 539 U.S. 306 (2003). *Id.* at 1316.

The court considered whether the MBE/WBE programs were violative of Title VII of the Civil Rights Act, and whether the County and the County Commissioners were liable for compensatory and punitive damages.

The district court found that the Supreme Court decisions in *Gratz* and *Grutter* did not alter the constitutional analysis as set forth in *Adarand* and *Croson*. *Id.* at 1317. Accordingly, the race- and ethnicity-based classifications were subject to strict scrutiny, meaning the County must present “a strong basis of evidence” indicating the MBE/WBE program was necessary and that it was narrowly tailored to its purported purpose. *Id.* at 1316. The gender-based classifications were subject to intermediate scrutiny, requiring the County to show the “gender-based classification serves an important governmental objective, and that it is substantially related to the achievement of that objective.” *Id.* at 1317 (internal citations omitted). The court found that the proponent of a gender-based affirmative action program must present “sufficient probative evidence” of discrimination. *Id.* (internal citations omitted). The court found that under the intermediate scrutiny analysis, the County must (1) demonstrate past discrimination against women but not necessarily at the hands of the County, and (2) that the gender-conscious affirmative action program need not be used only as a “last resort.” *Id.*

The County presented both statistical and anecdotal evidence. *Id.* at 1318. The statistical evidence consisted of Dr. Carvajal’s report, most of which consisted of “post-enactment” evidence. *Id.* Dr. Carvajal’s analysis sought to discover the existence of racial, ethnic and gender disparities in the A&E industry, and then to determine whether any such disparities could be attributed to discrimination. *Id.* The study used four data sets: three were designed to establish the marketplace availability of firms

(architecture, structural engineering, and civil engineering), and the fourth focused on awards issued by the County. *Id.* Dr. Carvajal used the phone book, a list compiled by infoUSA, and a list of firms registered for technical certification with the County's Department of Public Works to compile a list of the "universe" of firms competing in the market. *Id.* For the architectural firms only, he also used a list of firms that had been issued an architecture professional license. *Id.*

Dr. Carvajal then conducted a phone survey of the identified firms. Based on his data, Dr. Carvajal concluded that disparities existed between the percentage of A&E firms owned by blacks, Hispanics, and women, and the percentage of annual business they received. *Id.* Dr. Carvajal conducted regression analyses "in order to determine the effect a firm owner's gender or race had on certain dependent variables." *Id.* Dr. Carvajal used the firm's annual volume of business as a dependent variable and determined the disparities were due in each case to the firm's gender and/or ethnic classification. *Id.* at 1320. He also performed variants to the equations including: (1) using certification rather than survey data for the experience / capacity indicators, (2) with the outliers deleted, (3) with publicly-owned firms deleted, (4) with the dummy variables reversed, and (5) using only currently certified firms." *Id.* Dr. Carvajal's results remained substantially unchanged. *Id.*

Based on his analysis of the marketplace data, Dr. Carvajal concluded that the "gross statistical disparities" in the annual business volume for Hispanic- and women-owned firms could be attributed to discrimination; he "did not find sufficient evidence of discrimination against blacks." *Id.*

The court held that Dr. Carvajal's study constituted neither a "strong basis in evidence" of discrimination necessary to justify race- and ethnicity-conscious measures, nor did it constitute "sufficient probative evidence" necessary to justify the gender-conscious measures. *Id.* The court made an initial finding that no disparity existed to indicate underutilization of MBE/WBEs in the award of A&E contracts by the County, nor was there underutilization of MBE/WBEs in the contracts they were awarded. *Id.* The court found that an analysis of the award data indicated, "[i]f anything, the data indicates an overutilization of minority-owned firms by the County in relation to their numbers in the marketplace." *Id.*

With respect to the marketplace data, the County conceded that there was insufficient evidence of discrimination against blacks to support the BBE program. *Id.* at 1321. With respect to the marketplace data for Hispanics and women, the court found it "unreliable and inaccurate" for three reasons: (1) the data failed to properly measure the geographic market, (2) the data failed to properly measure the product market, and (3) the marketplace survey was unreliable. *Id.* at 1321-25.

The court ruled that it would not follow the Tenth Circuit decision of *Concrete Works of Colorado, Inc. v. City and County of Denver*, 321 F.3d 950 (10<sup>th</sup> Cir. 2003), as the burden of proof enunciated by the Tenth Circuit conflicts with that of the Eleventh Circuit, and the "Tenth Circuit's decision is flawed for the reasons articulated by Justice Scalia in his dissent from the denial of certiorari." *Id.* at 1325 (internal citations omitted).

The defendant intervenors presented anecdotal evidence pertaining only to discrimination against women in the County's A&E industry. *Id.* The anecdotal evidence consisted of the testimony of three A&E professional women, "nearly all" of which was related to discrimination in the award of County contracts. *Id.* at 1326. However, the district court found that the anecdotal evidence contradicted Dr.



Carvajal's study indicating that no disparity existed with respect to the award of County A&E contracts. *Id.*

The court quoted the Eleventh Circuit in *Engineering Contractors Association* for the proposition "that only in the rare case will anecdotal evidence suffice standing alone." *Id.* (internal citations omitted). The court held that "[t]his is not one of those rare cases." The district court concluded that the statistical evidence was "unreliable and fail[ed] to establish the existence of discrimination," and the anecdotal evidence was insufficient as it did not even reach the level of anecdotal evidence in *Engineering Contractors Association* where the County employees themselves testified. *Id.*

The court made an initial finding that a number of minority groups provided preferential treatment were in fact majorities in the County in terms of population, voting capacity, and representation on the County Commission. *Id.* at 1326-1329. For purposes only of conducting the strict scrutiny analysis, the court then assumed that Dr. Carvajal's report demonstrated discrimination against Hispanics (note the County had conceded it had insufficient evidence of discrimination against blacks) and sought to determine whether the HBE program was narrowly tailored to remedying that discrimination. *Id.* at 1330. However, the court found that because the study failed to "identify who is engaging in the discrimination, what form the discrimination might take, at what stage in the process it is taking place, or how the discrimination is accomplished ... it is virtually impossible to narrowly tailor any remedy, and the HBE program fails on this fact alone." *Id.*

The court found that even after the County Managers informed the Commissioners that the County had reached parity in the A&E industry, the Commissioners declined to enact a CSBE ordinance, a race-neutral measure utilized in the construction industry after *Engineering Contractors Association*. *Id.* Instead, the Commissioners voted to continue the HBE program. *Id.* The court held that the County's failure to even explore a program similar to the CSBE ordinance indicated that the HBE program was not narrowly tailored. *Id.* at 1331.

The court also found that the County enacted a broad anti-discrimination ordinance imposing harsh penalties for a violation thereof. *Id.* However, "not a single witness at trial knew of any instance of a complaint being brought under this ordinance concerning the A&E industry," leading the court to conclude that the ordinance was either not being enforced, or no discrimination existed. *Id.* Under either scenario, the HBE program could not be narrowly tailored. *Id.*

The court found the waiver provisions in the HBE program inflexible in practice. *Id.* Additionally, the court found the County had failed to comply with the provisions in the HBE program requiring adjustment of participation goals based on annual studies, because the County had not in fact conducted annual studies for several years. *Id.* The court found this even "more problematic" because the HBE program did not have a built-in durational limit, and thus blatantly violated Supreme Court jurisprudence requiring that racial and ethnic preferences "must be limited in time." *Id.* at 1332, citing *Grutter*, 123 S. Ct. at 2346. For the foregoing reasons, the court concluded the HBE program was not narrowly tailored. *Id.* at 1332.

With respect to the WBE program, the court found that "the failure of the County to identify who is discriminating and where in the process the discrimination is taking place indicates (though not conclusively) that the WBE program is not substantially related to eliminating that discrimination." *Id.* at 1333. The court found that the existence of the anti-discrimination ordinance, the refusal to

enact a small business enterprise ordinance, and the inflexibility in setting the participation goals rendered the WBE program unable to satisfy the substantial relationship test. *Id.*

The court held that the County was liable for any compensatory damages. *Id.* at 1333-34. The court held that the Commissioners had absolute immunity for their legislative actions; however, they were not entitled to qualified immunity for their actions in voting to apply the race-, ethnicity-, and gender-conscious measures of the MBE/WBE programs if their actions violated “clearly established statutory or constitutional rights of which a reasonable person would have known ... Accordingly, the question is whether the state of the law at the time the Commissioners voted to apply [race-, ethnicity-, and gender-conscious measures] gave them ‘fair warning’ that their actions were unconstitutional. “ *Id.* at 1335-36 (internal citations omitted).

The court held that the Commissioners were not entitled to qualified immunity because they “had before them at least three cases that gave them fair warning that their application of the MBE/WBE programs ... were unconstitutional: *Croson*, *Adarand* and [*Engineering Contractors Association*].” *Id.* at 1137. The court found that the Commissioners voted to apply the contract measures after the Supreme Court decided both *Croson* and *Adarand*. *Id.* Moreover, the Eleventh Circuit had already struck down the construction provisions of the same MBE/WBE programs. *Id.* Thus, the case law was “clearly established” and gave the Commissioners fair warning that the MBE/WBE programs were unconstitutional. *Id.*

The court also found the Commissioners had specific information from the County Manager and other internal studies indicating the problems with the MBE/WBE programs and indicating that parity had been achieved. *Id.* at 1338. Additionally, the Commissioners did not conduct the annual studies mandated by the MBE/WBE ordinance itself. *Id.* For all the foregoing reasons, the court held the Commissioners were subject to individual liability for any compensatory and punitive damages.

The district court enjoined the County, the Commissioners, and the County Manager from using, or requiring the use of, gender, racial, or ethnic criteria in deciding (1) whether a response to an RFP submitted for A&E work is responsive, (2) whether such a response will be considered, and (3) whether a contract will be awarded to a consultant submitting such a response. The court awarded the plaintiffs \$100 each in nominal damages and reasonable attorneys’ fees and costs, for which it held the County and the Commissioners jointly and severally liable.

#### **16. *Florida A.G.C. Council, Inc. v. State of Florida*, 303 F. Supp.2d 1307 (N.D. Fla. 2004)**

This case is instructive to the disparity study as to the manner in which district courts within the Eleventh Circuit are interpreting and applying *Engineering Contractors Association*. It is also instructive in terms of the type of legislation to be considered by the local and state governments as to what the courts consider to be a “race-conscious” program and/or legislation, as well as to the significance of the implementation of the legislation to the analysis.

The plaintiffs, A.G.C. Council, Inc. and the South Florida Chapter of the Associated General Contractors brought this case challenging the constitutionality of certain provisions of a Florida statute (Section 287.09451, *et seq.*). The plaintiffs contended that the statute violated the Equal Protection Clause of the Fourteenth Amendment by instituting race- and gender-conscious “preferences” in order to increase the numeric representation of “MBEs” in certain industries.

According to the court, the Florida Statute enacted race-conscious and gender-conscious remedial programs to ensure minority participation in state contracts for the purchase of commodities and in construction contracts. The State created the Office of Supplier Diversity (“OSD”) to assist MBEs to become suppliers of commodities, services and construction to the state government. The OSD had certain responsibilities, including adopting rules meant to assess whether state agencies have made good faith efforts to solicit business from MBEs, and to monitor whether contractors have made good faith efforts to comply with the objective of greater overall MBE participation.

The statute enumerated measures that contractors should undertake, such as minority-centered recruitment in advertising as a means of advancing the statute’s purpose. The statute provided that each State agency is “encouraged” to spend 21 percent of the monies actually expended for construction contracts, 25 percent of the monies actually expended for architectural and engineering contracts, 24 percent of the monies actually expended for commodities and 50.5 percent of the monies actually expended for contractual services during the fiscal year for the purpose of entering into contracts with certified MBEs. The statute also provided that state agencies are allowed to allocate certain percentages for black Americans, Hispanic Americans and for American women, and the goals are broken down by construction contracts, architectural and engineering contracts, commodities and contractual services.

The State took the position that the spending goals were “precatory.” The court found that the plaintiffs had standing to maintain the action and to pursue prospective relief. The court held that the statute was unconstitutional based on the finding that the spending goals were not narrowly tailored to achieve a governmental interest. The court did not specifically address whether the articulated reasons for the goals contained in the statute had sufficient evidence, but instead found that the articulated reason would, “if true,” constitute a compelling governmental interest necessitating race-conscious remedies. Rather than explore the evidence, the court focused on the narrowly tailored requirement and held that it was not satisfied by the State.

The court found that there was no evidence in the record that the State contemplated race-neutral means to accomplish the objectives set forth in Section 287.09451 *et seq.*, such as “simplification of bidding procedures, relaxation of bonding requirements, training or financial aid for disadvantaged entrepreneurs of all races [which] would open the public contracting market to all those who have suffered the effects of past discrimination.” *Florida A.G.C. Council*, 303 F.Supp.2d at 1315, *quoting Eng’g Contractors Ass’n*, 122 F.3d at 928, *quoting Croson*, 488 U.S. at 509-10.

The court noted that defendants did not seem to disagree with the report issued by the State of Florida Senate that concluded there was little evidence to support the spending goals outlined in the statute. Rather, the State of Florida argued that the statute is “permissive.” The court, however, held that “there is no distinction between a statute that is precatory versus one that is compulsory when the challenged statute ‘induces an employer to hire with an eye toward meeting ... [a] numerical target.’ *Florida A.G.C. Council*, 303 F.Supp.2d at 1316.

The court found that the State applies pressure to State agencies to meet the legislative objectives of the statute extending beyond simple outreach efforts. The State agencies, according to the court, were required to coordinate their MBE procurement activities with the OSD, which includes adopting a MBE utilization plan. If the State agency deviated from the utilization plan in two consecutive and three out of five total fiscal years, then the OSD could review any and all

solicitations and contract awards of the agency as deemed necessary until such time as the agency met its utilization plan. The court held that based on these factors, although alleged to be “permissive,” the statute textually was not.

Therefore, the court found that the statute was not narrowly tailored to serve a compelling governmental interest, and consequently violated the Equal Protection Clause of the Fourteenth Amendment.

**17. *The Builders Ass’n of Greater Chicago v. The City of Chicago*, 298 F. Supp.2d 725 (N.D. Ill. 2003)**

This case is instructive because of the court’s focus and analysis on whether the City of Chicago’s MBE/WBE program was narrowly tailored. The basis of the court’s holding that the program was not narrowly tailored is instructive for any program considered because of the reasons provided as to why the program did not pass muster.

The plaintiff, the Builders Association of Greater Chicago, brought this suit challenging the constitutionality of the City of Chicago’s construction Minority- and Women-Owned Business (“MWBE”) Program. The court held that the City of Chicago’s MWBE program was unconstitutional because it did not satisfy the requirement that it be narrowly tailored to achieve a compelling governmental interest. The court held that it was not narrowly tailored for several reasons, including because there was no “meaningful individualized review” of MBE/WBEs; it had no termination date nor did it have any means for determining a termination; the “graduation” revenue amount for firms to graduate out of the program was very high, \$27,500,000, and in fact very few firms graduated; there was no net worth threshold; and, waivers were rarely or never granted on construction contracts. The court found that the City program was a “rigid numerical quota,” not related to the number of available, willing and able firms. Formulistic percentages, the court held, could not survive the strict scrutiny.

The court held that the goals plan did not address issues raised as to discrimination regarding market access and credit. The court found that a goals program does not directly impact prime contractor’s selection of subcontractors on non-goals private projects. The court found that a set-aside or goals program does not directly impact difficulties in accessing credit, and does not address discriminatory loan denials or higher interest rates. The court found the City has not sought to attack discrimination by primes directly, “but it could.” 298 F.2d 725. “To monitor possible discriminatory conduct it could maintain its certification list and require those contracting with the City to consider unsolicited bids, to maintain bidding records, and to justify rejection of any certified firm submitting the lowest bid. It could also require firms seeking City work to post private jobs above a certain minimum on a website or otherwise provide public notice ...” *Id.*

The court concluded that other race-neutral means were available to impact credit, high interest rates, and other potential marketplace discrimination. The court pointed to race-neutral means including linked deposits, with the City banking at institutions making loans to startup and smaller firms. Other race-neutral programs referenced included quick pay and contract downsizing; restricting self-performance by prime contractors; a direct loan program; waiver of bonds on contracts under \$100,000; a bank participation loan program; a 2 percent local business preference; outreach programs and technical assistance and workshops; and seminars presented to new construction firms.

The court held that race and ethnicity do matter, but that racial and ethnic classifications are highly suspect, can be used only as a last resort, and cannot be made by some mechanical formulation. Therefore, the court concluded the City's MWBE Program could not stand in its present guise. The court held that the present program was not narrowly tailored to remedy past discrimination and the discrimination demonstrated to now exist.

The court entered an injunction, but delayed the effective date for six months from the date of its Order, December 29, 2003. The court held that the City had a "compelling interest in not having its construction projects slip back to near monopoly domination by white male firms." The court ruled a brief continuation of the program for six months was appropriate "as the City rethinks the many tools of redress it has available." Subsequently, the court declared unconstitutional the City's MWBE Program with respect to construction contracts and permanently enjoined the City from enforcing the Program. 2004 WL 757697 (N.D. Ill 2004).

**18. *Associated Utility Contractors of Maryland, Inc. v. Mayor and City Council of Baltimore*, 218 F. Supp.2d 749 (D. Md. 2002)**

This case is instructive because the court found the Executive Order of the Mayor of the City of Baltimore was precatory in nature (creating no legal obligation or duty) and contained no enforcement mechanism or penalties for noncompliance and imposed no substantial restrictions; the Executive Order announced goals that were found to be aspirational only.

The Associated Utility Contractors of Maryland, Inc. ("AUC") sued the City of Baltimore challenging its ordinance providing for minority and women-owned business enterprise ("MWBE") participation in city contracts. Previously, an earlier City of Baltimore MWBE program was declared unconstitutional. *Associated Utility Contractors of Maryland, Inc. v. Mayor and City Council of Baltimore*, 83 F. Supp.2d 613 (D. Md. 2000). The City adopted a new ordinance that provided for the establishment of MWBE participation goals on a contract-by-contract basis, and made several other changes from the previous MWBE program declared unconstitutional in the earlier case.

In addition, the Mayor of the City of Baltimore issued an Executive Order that announced a goal of awarding 35 percent of all City contracting dollars to MBE/WBEs. The court found this goal of 35 percent participation was aspirational only and the Executive Order contained no enforcement mechanism or penalties for noncompliance. The Executive Order also specified many "noncoercive" outreach measures to be taken by the City agencies relating to increasing participation of MBE/WBEs. These measures were found to be merely aspirational and no enforcement mechanism was provided.

The court addressed in this case only a motion to dismiss filed by the City of Baltimore arguing that the Associated Utility Contractors had no standing. The court denied the motion to dismiss holding that the association had standing to challenge the new MBE/WBE ordinance, although the court noted that it had significant issues with the AUC having representational standing because of the nature of the MBE/WBE plan and the fact the AUC did not have any of its individual members named in the suit. The court also held that the AUC was entitled to bring an as applied challenge to the Executive Order of the Mayor, but rejected it having standing to bring a facial challenge based on a finding that it imposes no requirement, creates no sanctions, and does not inflict an injury upon any member of the AUC in any concrete way. Therefore, the Executive Order did not create a "case or

controversy” in connection with a facial attack. The court found the wording of the Executive Order to be precatory and imposing no substantive restrictions.

After this decision the City of Baltimore and the AUC entered into a settlement agreement and a dismissal with prejudice of the case. An order was issued by the court on October 22, 2003 dismissing the case with prejudice.

**19. *Associated Utility Contractors of Maryland, Inc. v. The Mayor and City Council of Baltimore*, 83 F. Supp.2d 613 (D. Md. 2000)**

The court held unconstitutional the City of Baltimore’s “affirmative action” program, which had construction subcontracting “set-aside” goals of 20 percent for MBEs and 3 percent for WBEs. The court held there was no data or statistical evidence submitted by the City prior to enactment of the Ordinance. There was no evidence showing a disparity between MBE/WBE availability and utilization in the subcontracting construction market in Baltimore. The court enjoined the City Ordinance.

**20. *Webster v. Fulton County*, 51 F. Supp.2d 1354 (N.D. Ga. 1999), *a’ff’d per curiam* 218 F.3d 1267 (11th Cir. 2000)**

This case is instructive as it is another instance in which a court has considered, analyzed, and ruled upon a race-, ethnicity- and gender-conscious program, holding the local government MBE/WBE-type program failed to satisfy the strict scrutiny constitutional standard. The case also is instructive in its application of the *Engineering Contractors Association* case, including to a disparity analysis, the burdens of proof on the local government, and the narrowly tailored prong of the strict scrutiny test.

In this case, plaintiff Webster brought an action challenging the constitutionality of Fulton County’s (the “County”) minority and female business enterprise program (“M/FBE”) program. 51 F. Supp.2d 1354, 1357 (N.D. Ga. 1999). [The district court first set forth the provisions of the M/FBE program and conducted a standing analysis at 51 F. Supp.2d at 1356-62].

The court, *citing Engineering Contractors Association of S. Florida, Inc. v. Metro. Engineering Contractors Association*, 122 F.3d 895 (11<sup>th</sup> Cir. 1997), held that “[e]xplicit racial preferences may not be used except as a ‘last resort.’” *Id.* at 1362-63. The court then set forth the strict scrutiny standard for evaluating racial and ethnic preferences and the four factors enunciated in *Engineering Contractors Association*, and the intermediate scrutiny standard for evaluating gender preferences. *Id.* at 1363. The court found that under *Engineering Contractors Association*, the government could utilize both post-enactment and pre-enactment evidence to meet its burden of a “strong basis in evidence” for strict scrutiny, and “sufficient probative evidence” for intermediate scrutiny. *Id.*

The court found that the defendant bears the initial burden of satisfying the aforementioned evidentiary standard, and the ultimate burden of proof remains with the challenging party to demonstrate the unconstitutionality of the M/FBE program. *Id.* at 1364. The court found that the plaintiff has at least three methods “to rebut the inference of discrimination with a neutral explanation: (1) demonstrate that the statistics are flawed; (2) demonstrate that the disparities shown by the statistics are not significant; or (3) present conflicting statistical data.” *Id.*, *citing Eng’g Contractors Ass’n*, 122 F.3d at 916.

[The district court then set forth the *Engineering Contractors Association* opinion in detail.]

The court first noted that the Eleventh Circuit has recognized that disparity indices greater than 80 percent are generally not considered indications of discrimination. *Id.* at 1368, citing *Eng'g Contractors Assoc.*, 122 F.3d at 914. The court then considered the County's pre-1994 disparity study (the "Brimmer-Marshall Study") and found that it failed to establish a strong basis in evidence necessary to support the M/FBE program. *Id.* at 1368.

First, the court found that the study rested on the inaccurate assumption that a statistical showing of underutilization of minorities in the marketplace as a whole was sufficient evidence of discrimination. *Id.* at 1369. The court cited *City of Richmond v. J.A. Croson Co.*, 488 U.S. 496 (1989) for the proposition that discrimination must be focused on contracting by the entity that is considering the preference program. *Id.* Because the Brimmer-Marshall Study contained no statistical evidence of discrimination by the County in the award of contracts, the court found the County must show that it was a "passive participant" in discrimination by the private sector. *Id.* The court found that the County could take remedial action if it had evidence that prime contractors were systematically excluding minority-owned businesses from subcontracting opportunities, or if it had evidence that its spending practices are "exacerbating a pattern of prior discrimination that can be identified with specificity." *Id.* However, the court found that the Brimmer-Marshall Study contained no such data. *Id.*

Second, the Brimmer-Marshall study contained no regression analysis to account for relevant variables, such as firm size. *Id.* at 1369-70. At trial, Dr. Marshall submitted a follow-up to the earlier disparity study. However, the court found the study had the same flaw in that it did not contain a regression analysis. *Id.* The court thus concluded that the County failed to present a "strong basis in evidence" of discrimination to justify the County's racial and ethnic preferences. *Id.*

The court next considered the County's post-1994 disparity study. *Id.* at 1371. The study first sought to determine the availability and utilization of minority- and female-owned firms. *Id.* The court explained:

Two methods may be used to calculate availability: (1) bid analysis; or (2) bidder analysis. In a bid analysis, the analyst counts the number of bids submitted by minority or female firms over a period of time and divides it by the total number of bids submitted in the same period. In a bidder analysis, the analyst counts the number of minority or female firms submitting bids and divides it by the total number of firms which submitted bids during the same period.

*Id.* The court found that the information provided in the study was insufficient to establish a firm basis in evidence to support the M/FBE program. *Id.* at 1371-72. The court also found it significant to conduct a regression analysis to show whether the disparities were either due to discrimination or other neutral grounds. *Id.* at 1375-76.

The plaintiff and the County submitted statistical studies of data collected between 1994 and 1997. *Id.* at 1376. The court found that the data were potentially skewed due to the operation of the M/FBE program. *Id.* Additionally, the court found that the County's standard deviation analysis yielded non-statistically significant results (noting the Eleventh Circuit has stated that scientists consider a finding of two standard deviations significant). *Id.* (internal citations omitted).

The court considered the County's anecdotal evidence, and quoted *Engineering Contractors Association* for the proposition that "[a]necdotal evidence can play an important role in bolstering statistical evidence, but that only in the rare case will anecdotal evidence suffice standing alone." *Id.*, quoting *Eng'g Contractors Ass'n*, 122 F.3d at 907. The Brimmer-Marshall Study contained anecdotal evidence. *Id.* at 1379. Additionally, the County held hearings but after reviewing the tape recordings of the hearings, the court concluded that only two individuals testified to discrimination by the County; one of them complained that the County used the M/FBE program to only benefit African Americans. *Id.* The court found the most common complaints concerned barriers in bonding, financing, and insurance and slow payment by prime contractors. *Id.* The court concluded that the anecdotal evidence was insufficient in and of itself to establish a firm basis for the M/FBE program. *Id.*

The court also applied a narrow tailoring analysis of the M/FBE program. "The Eleventh Circuit has made it clear that the essence of this inquiry is whether racial preferences were adopted only as a 'last resort.'" *Id.* at 1380, citing *Eng'g Contractors Assoc.*, 122 F.3d at 926. The court cited the Eleventh Circuit's four-part test and concluded that the County's M/FBE program failed on several grounds. First, the court found that a race-based problem does not necessarily require a race-based solution. "If a race-neutral remedy is sufficient to cure a race-based problem, then a race-conscious remedy can never be narrowly tailored to that problem." *Id.*, quoting *Eng'g Contractors Ass'n*, 122 F.3d at 927. The court found that there was no evidence of discrimination by the County. *Id.* at 1380.

The court found that even though a majority of the Commissioners on the County Board were African American, the County had continued the program for decades. *Id.* The court held that the County had not seriously considered race-neutral measures:

There is no evidence in the record that any Commissioner has offered a resolution during this period substituting a program of race-neutral measures as an alternative to numerical set-asides based upon race and ethnicity. There is no evidence in the record of any proposal by the staff of Fulton County of substituting a program of race-neutral measures as an alternative to numerical set-asides based upon race and ethnicity. There has been no evidence offered of any debate within the Commission about substituting a program of race-neutral measures as an alternative to numerical set-asides based upon race and ethnicity .... *Id.*

The court found that the random inclusion of ethnic and racial groups who had not suffered discrimination by the County also mitigated against a finding of narrow tailoring. *Id.* The court found that there was no evidence that the County considered race-neutral alternatives as an alternative to race-conscious measures nor that race-neutral measures were initiated and failed. *Id.* at 1381. The court concluded that because the M/FBE program was not adopted as a last resort, it failed the narrow tailoring test. *Id.*

Additionally, the court found that there was no substantial relationship between the numerical goals and the relevant market. *Id.* The court rejected the County's argument that its program was permissible because it set "goals" as opposed to "quotas," because the program in *Engineering Contractors Association* also utilized "goals" and was struck down. *Id.*

Per the M/FBE program's gender-based preferences, the court found that the program was sufficiently flexible to satisfy the substantial relationship prong of the intermediate scrutiny standard. *Id.* at 1383. However, the court held that the County failed to present "sufficient probative evidence"



of discrimination necessary to sustain the gender-based preferences portion of the M/FBE program. *Id.*

The court found the County's M/FBE program unconstitutional and entered a permanent injunction in favor of the plaintiff. *Id.* On appeal, the Eleventh Circuit affirmed per curiam, stating only that it affirmed on the basis of the district court's opinion. *Webster v. Fulton County, Georgia*, 218 F.3d 1267 (11<sup>th</sup> Cir. 2000).

#### **21. *Associated Gen. Contractors v. Drabik*, 50 F. Supp.2d 741 (S.D. Ohio 1999)**

In this decision, the district court reaffirmed its earlier holding that the State of Ohio's MBE program of construction contract awards is unconstitutional. The court cited to *F. Buddie Contracting v. Cuyaboga Community College*, 31 F. Supp.2d 571 (N.D. Ohio 1998), holding a similar local Ohio program unconstitutional. The court repudiated the Ohio Supreme Court's holding in *Ritchey Produce*, 707 N.E. 2d 871 (Ohio 1999), which held that the State's MBE program as applied to the state's purchase of non-construction-related goods and services was constitutional. The court found the evidence to be insufficient to justify the MBE program. The court held that the program was not narrowly tailored because there was no evidence that the State had considered a race-neutral alternative.

This opinion underscored that governments must show four factors to demonstrate narrow tailoring: (1) the necessity for the relief and the efficacy of alternative remedies, (2) flexibility and duration of the relief, (3) relationship of numerical goals to the relevant labor market, and (4) impact of the relief on the rights of third parties. The court held the Ohio MBE program failed to satisfy this test.

#### **22. *Phillips & Jordan, Inc. v. Watts*, 13 F. Supp.2d 1308 (N.D. Fla. 1998)**

This case is instructive because it addressed a challenge to a state and local government MBE/WBE-type program and considered the requisite evidentiary basis necessary to support the program. In *Phillips & Jordan*, the district court for the Northern District of Florida held that the Florida Department of Transportation's ("FDOT") program of "setting aside" certain highway maintenance contracts for African American- and Hispanic-owned businesses violated the Equal Protection Clause of the Fourteenth Amendment to the United States Constitution. The parties stipulated that the plaintiff, a non-minority business, had been excluded in the past and may be excluded in the future from competing for certain highway maintenance contracts "set aside" for business enterprises owned by Hispanic and African American individuals. The court held that the evidence of statistical disparities was insufficient to support the Florida DOT program.

The district court pointed out that Florida DOT did not claim that it had evidence of intentional discrimination in the award of its contracts. The court stated that the essence of FDOT's claim was that the two year disparity study provided evidence of a disparity between the proportion of minorities awarded FDOT road maintenance contracts and a portion of the minorities "supposedly willing and able to do road maintenance work," and that FDOT did not itself engage in any racial or ethnic discrimination, so FDOT must have been a passive participant in "somebody's" discriminatory practices.

Since it was agreed in the case that FDOT did not discriminate against minority contractors bidding on road maintenance contracts, the court found that the record contained insufficient proof of discrimination. The court found the evidence insufficient to establish acts of discrimination against African American- and Hispanic-owned businesses.

The court raised questions concerning the choice and use of the statistical pool of available firms relied upon by the disparity study. The court expressed concern about whether it was appropriate to use Census data to analyze and determine which firms were available (qualified and/or willing and able) to bid on FDOT road maintenance contracts.

## **G. Recent Decisions and Authorities Involving Federal Procurement that May Impact DBE and MBE/WBE Programs**

### **1. *Rothe Development Corp. v. U.S. Department of Defense, et al.*, 545 F.3d 1023 (Fed. Cir. 2008)**

Although this case does not involve the Federal DBE Program (49 CFR Part 26), it is an analogous case that may impact the legal analysis and law related to the validity of programs implemented by recipients of federal funds, including the Federal DBE Program. Additionally, it underscores the requirement that race-, ethnic- and gender-based programs of any nature must be supported by substantial evidence. In *Rothe*, an unsuccessful bidder on a federal defense contract brought suit alleging that the application of an evaluation preference, pursuant to a federal statute, to a small disadvantaged bidder (SDB) to whom a contract was awarded, violated the Equal Protection clause of the U.S. Constitution. The federal statute challenged is Section 1207 of the National Defense Authorization Act of 1987 and as reauthorized in 2003. The statute provides a goal that 5 percent of the total dollar amount of defense contracts for each fiscal year would be awarded to small businesses owned and controlled by socially and economically disadvantaged individuals. 10 U.S.C. § 2323. Congress authorized the Department of Defense (“DOD”) to adjust bids submitted by non-socially and economically disadvantaged firms upwards by 10 percent (the “Price Evaluation Adjustment Program” or “PEA”).

The district court held the federal statute, as reauthorized in 2003, was constitutional on its face. The court held the 5 percent goal and the PEA program as reauthorized in 1992 and applied in 1998 was unconstitutional. The basis of the decision was that Congress considered statistical evidence of discrimination that established a compelling governmental interest in the reauthorization of the statute and PEA program in 2003. Congress had not documented or considered substantial statistical evidence that the DOD discriminated against minority small businesses when it enacted the statute in 1992 and reauthorized it in 1998. The plaintiff appealed the decision.

The Federal Circuit found that the “analysis of the facial constitutionality of an act is limited to evidence before Congress prior to the date of reauthorization.” 413 F.3d 1327 (Fed. Cir. 2005)(affirming in part, vacating in part, and remanding 324 F. Supp.2d 840 (W.D. Tex. 2004). The court limited its review to whether Congress had sufficient evidence in 1992 to reauthorize the provisions in 1207. The court held that for evidence to be relevant to a strict scrutiny analysis, “the evidence must be proven to have been before Congress prior to enactment of the racial classification.” The Federal Circuit held that the district court erred in relying on the statistical studies without first determining whether the studies were before Congress when it reauthorized section

1207. The Federal Circuit remanded the case and directed the district court to consider whether the data presented was so outdated that it did not provide the requisite strong basis in evidence to support the reauthorization of section 1207.

On August 10, 2007 the Federal District Court for the Western District of Texas in *Rothe Development Corp. v. U.S. Dept. of Defense*, 499 F.Supp.2d 775 (W.D.Tex. Aug 10, 2007) issued its Order on remand from the Federal Circuit Court of Appeals decision in *Rothe*, 413 F.3d 1327 (Fed Cir. 2005). The district court upheld the constitutionality of the 2006 Reauthorization of Section 1207 of the National Defense Authorization Act of 1987 (10 USC § 2323), which permits the U.S. Department of Defense to provide preferences in selecting bids submitted by small businesses owned by socially and economically disadvantaged individuals (“SDBs”). The district court found the 2006 Reauthorization of the 1207 Program satisfied strict scrutiny, holding that Congress had a compelling interest when it reauthorized the 1207 Program in 2006, that there was sufficient statistical and anecdotal evidence before Congress to establish a compelling interest, and that the reauthorization in 2006 was narrowly tailored.

The district court, among its many findings, found certain evidence before Congress was “stale,” that the plaintiff (*Rothe*) failed to rebut other evidence which was not stale, and that the decisions by the Eighth, Ninth and Tenth Circuits in the decisions in *Concrete Works*, *Adarand Constructors*, *Sherbrooke Turf* and *Western States Paving* (discussed above and below) were relevant to the evaluation of the facial constitutionality of the 2006 Reauthorization.

**2007 Order of the District Court (499 F.Supp.2d 775).** In the Section 1207 Act, Congress set a goal that 5 percent of the total dollar amount of defense contracts for each fiscal year would be awarded to small businesses owned and controlled by socially and economically disadvantaged individuals. In order to achieve that goal, Congress authorized the DOD to adjust bids submitted by non-socially and economically disadvantaged firms up to 10 percent. 10 U.S.C. § 2323(e)(3). *Rothe*, 499 F.Supp.2d. at 782. Plaintiff *Rothe* did not qualify as an SDB because it was owned by a Caucasian female. Although *Rothe* was technically the lowest bidder on a DOD contract, its bid was adjusted upward by 10 percent, and a third party, who qualified as a SDB, became the “lowest” bidder and was awarded the contract. *Id.* *Rothe* claims that the 1207 Program is facially unconstitutional because it takes race into consideration in violation of the Equal Protection component of the Due Process Clause of the Fifth Amendment. *Id.* at 782-83. The district court’s decision only reviewed the facial constitutionality of the 2006 Reauthorization of the 2007 Program.

The district court initially rejected six legal arguments made by *Rothe* regarding strict scrutiny review based on the rejection of the same arguments by the Eighth, Ninth, and Tenth Circuit Courts of Appeal in the *Sherbrooke Turf*, *Western States Paving*, *Concrete Works*, *Adarand VII* cases, and the Federal Circuit Court of Appeal in *Rothe*. *Rothe* at 825-833.

The district court discussed and cited the decisions in *Adarand VII* (2000), *Sherbrooke Turf* (2003), and *Western States Paving* (2005), as holding that Congress had a compelling interest in eradicating the economic roots of racial discrimination in highway transportation programs funded by federal monies, and concluding that the evidence cited by the government, particularly that contained in *The Compelling Interest* (a.k.a. the Appendix), more than satisfied the government’s burden of production regarding the compelling interest for a race-conscious remedy. *Rothe* at 827. Because the Urban Institute Report, which presented its analysis of 39 state and local disparity studies, was cross-

referenced in the Appendix, the district court found the courts in *Adarand VII*, *Sherbrooke Turf*, and *Western States Paving*, also relied on it in support of their compelling interest holding. *Id.* at 827.

The district court also found that the Tenth Circuit decision in *Concrete Works IV*, 321 F.3d 950 (10<sup>th</sup> Cir. 2003), established legal principles that are relevant to the court's strict scrutiny analysis. First, Rothe's claims for declaratory judgment on the racial constitutionality of the earlier 1999 and 2002 Reauthorizations were moot. Second, the government can meet its burden of production without conclusively proving the existence of past or present racial discrimination. Third, the government may establish its own compelling interest by presenting evidence of its own direct participation in racial discrimination or its passive participation in private discrimination. Fourth, once the government meets its burden of production, Rothe must introduce "credible, particularized" evidence to rebut the government's initial showing of the existence of a compelling interest. Fifth, Rothe may rebut the government's statistical evidence by giving a race-neutral explanation for the statistical disparities, showing that the statistics are flawed, demonstrating that the disparities shown are not significant or actionable, or presenting contrasting statistical data. Sixth, the government may rely on disparity studies to support its compelling interest, and those studies may control for the effect that pre-existing affirmative action programs have on the statistical analysis. *Id.* at 829-32.

Based on *Concrete Works IV*, the district court did not require the government to conclusively prove that there is pervasive discrimination in the relevant market, that each presumptively disadvantaged group suffered equally from discrimination, or that private firms intentionally and purposefully discriminated against minorities. The court found that the inference of discriminatory exclusion can arise from statistical disparities. *Id.* at 830-31.

The district court held that Congress had a compelling interest in the 2006 Reauthorization of the 1207 Program, which was supported by a strong basis in the evidence. The court relied in significant part upon six state and local disparity studies that were before Congress prior to the 2006 Reauthorization of the 1207 Program. The court based this evidence on its finding that Senator Kennedy had referenced these disparity studies, discussed and summarized findings of the disparity studies, and Representative Cynthia McKinney also cited the same six disparity studies that Senator Kennedy referenced. The court stated that based on the content of the floor debate, it found that these studies were put before Congress prior to the date of the Reauthorization of Section 1207. *Id.* at 838.

The district court found that these six state and local disparity studies analyzed evidence of discrimination from a diverse cross-section of jurisdictions across the United States, and "they constitute prima facie evidence of a nation-wide pattern or practice of discrimination in public and private contracting." *Id.* at 838-39. The court found that the data used in these six disparity studies is not "stale" for purposes of strict scrutiny review. *Id.* at 839. The court disagreed with Rothe's argument that all the data were stale (data in the studies from 1997 through 2002), "because this data was the most current data available at the time that these studies were performed." *Id.* The court found that the governmental entities should be able to rely on the most recently available data so long as those data are reasonably up-to-date. *Id.* The court declined to adopt a "bright-line rule for determining staleness." *Id.*

The court referred to the reliance by the Ninth Circuit and the Eighth Circuit on the *Appendix* to affirm the constitutionality of the USDOT MBE [now DBE] Program, and rejected five years as a

bright-line rule for considering whether data are “stale.” *Id.* at n.86. The court also stated that it “accepts the reasoning of the *Appendix*, which the court found stated that for the most part “the federal government does business in the same contracting markets as state and local governments. Therefore, the evidence in state and local studies of the impact of discriminatory barriers to minority opportunity in contracting markets throughout the country is relevant to the question of whether the federal government has a compelling interest to take remedial action in its own procurement activities.” *Id.* at 839, *quoting* 61 *Fed.Reg.* 26042-01, 26061 (1996).

The district court also discussed additional evidence before Congress that it found in Congressional Committee Reports and Hearing Records. *Id.* at 865-71. The court noted SBA Reports that were before Congress prior to the 2006 Reauthorization. *Id.* at 871.

The district court found that the data contained in the *Appendix*, the Benchmark Study, and the Urban Institute Report were “stale,” and the court did not consider those reports as evidence of a compelling interest for the 2006 Reauthorization. *Id.* at 872-75. The court stated that the Eighth, Ninth and Tenth Circuits relied on the *Appendix* to uphold the constitutionality of the Federal DBE Program, citing to the decisions in *Sherbrooke Turf*, *Adarand VII*, and *Western States Paving*. *Id.* at 872. The court pointed out that although it does not rely on the data contained in the *Appendix* to support the 2006 Reauthorization, the fact the Eighth, Ninth, and Tenth Circuits relied on these data to uphold the constitutionality of the Federal DBE Program as recently as 2005, convinced the court that a bright-line staleness rule is inappropriate. *Id.* at 874.

Although the court found that the data contained in the *Appendix*, the Urban Institute Report, and the Benchmark Study were stale for purposes of strict scrutiny review regarding the 2006 Reauthorization, the court found that Rothe introduced no concrete, particularized evidence challenging the reliability of the methodology or the data contained in the six state and local disparity studies, and other evidence before Congress. The court found that Rothe failed to rebut the data, methodology or anecdotal evidence with “concrete, particularized” evidence to the contrary. *Id.* at 875. The district court held that based on the studies, the government had satisfied its burden of producing evidence of discrimination against African Americans, Asian Americans, Hispanic Americans, and Native Americans in the relevant industry sectors. *Id.* at 876.

The district court found that Congress had a compelling interest in reauthorizing the 1207 Program in 2006, which was supported by a strong basis of evidence for remedial action. *Id.* at 877. The court held that the evidence constituted prima facie proof of a nationwide pattern or practice of discrimination in both public and private contracting, that Congress had sufficient evidence of discrimination throughout the United States to justify a nationwide program, and the evidence of discrimination was sufficiently pervasive across racial lines to justify granting a preference to all five purportedly disadvantaged racial groups. *Id.*

The district court also found that the 2006 Reauthorization of the 1207 Program was narrowly tailored and designed to correct present discrimination and to counter the lingering effects of past discrimination. The court held that the government’s involvement in both present discrimination and the lingering effects of past discrimination was so pervasive that the DOD and the Department of Air Force had become passive participants in perpetuating it. *Id.* The court stated it was law of the case and could not be disturbed on remand that the Federal Circuit in *Rothe III* had held that the 1207

Program was flexible in application, limited in duration and it did not unduly impact on the rights of third parties. *Id.*, quoting *Rothe III*, 262 F.3d at 1331.

The district court thus conducted a narrowly tailored analysis that reviewed three factors:

1. The efficacy of race-neutral alternatives;
2. Evidence detailing the relationship between the stated numerical goal of 5 percent and the relevant market; and
3. Over- and under-inclusiveness.

*Id.* The court found that Congress examined the efficacy of race-neutral alternatives prior to the enactment of the 1207 Program in 1986 and that these programs were unsuccessful in remedying the effects of past and present discrimination in federal procurement. *Id.* The court concluded that Congress had attempted to address the issues through race-neutral measures, discussed those measures, and found that Congress' adoption of race-conscious provisions were justified by the ineffectiveness of such race-neutral measures in helping minority-owned firms overcome barriers. *Id.* The court found that the government seriously considered and enacted race-neutral alternatives, but these race-neutral programs did not remedy the widespread discrimination that affected the federal procurement sector, and that Congress was not required to implement or exhaust every conceivable race-neutral alternative. *Id.* at 880. Rather, the court found that narrow tailoring requires only "serious, good faith consideration of workable race-neutral alternatives." *Id.*

The district court also found that the 5 percent goal was related to the minority business availability identified in the six state and local disparity studies. *Id.* at 881. The court concluded that the 5 percent goal was aspirational, not mandatory. *Id.* at 882. The court then examined and found that the regulations implementing the 1207 Program were not over-inclusive for several reasons.

**November 4, 2008 decision by the Federal Circuit Court of Appeals.** On November 4, 2008, the Federal Circuit Court of Appeals reversed the judgment of the district court in part, and remanded with instructions to enter a judgment (1) denying Rothe any relief regarding the facial constitutionality of Section 1207 as enacted in 1999 or 2002, (2) declaring that Section 1207 as enacted in 2006 (10 U.S.C. § 2323) is facially unconstitutional, and (3) enjoining application of Section 1207 (10 U.S.C. § 2323).

The Federal Circuit Court of Appeals held that Section 1207, on its face, as reenacted in 2006, violated the Equal Protection component of the Fifth Amendment right to due process. The court found that because the statute authorized the DOD to afford preferential treatment on the basis of race, the court applied strict scrutiny, and because Congress did not have a "strong basis in evidence" upon which to conclude that the DOD was a passive participant in pervasive, nationwide racial discrimination — at least not on the evidence produced by the DOD and relied on by the district court in this case — Section 1207 failed to meet this strict scrutiny test. 545 F.3d at 1050.

**Strict scrutiny framework.** The Federal Circuit Court of Appeals recognized that the Supreme Court has held a government may have a compelling interest in remedying the effects of past or present racial discrimination. 545 F.3d at 1036. The court cited the decision in *Croson*, 488 U.S. at 492, that it

is “beyond dispute that any public entity, state or federal, has a compelling interest in assuring that public dollars, drawn from the tax contributions of all citizens, do not serve to finance the evil of private prejudice.” 545 F.3d at 1036, *quoting Croson*, 488 U.S. at 492.

The court held that before resorting to race-conscious measures, the government must identify the discrimination to be remedied, public or private, with some specificity, and must have a strong basis of evidence upon which to conclude that remedial action is necessary. 545 F.3d at 1036, *quoting Croson*, 488 U.S. at 500, 504. Although the party challenging the statute bears the ultimate burden of persuading the court that it is unconstitutional, the Federal Circuit stated that the government first bears a burden to produce strong evidence supporting the legislature’s decision to employ race-conscious action. 545 F.3d at 1036.

Even where there is a compelling interest supported by strong basis in evidence, the court held the statute must be narrowly tailored to further that interest. *Id.* The court noted that a narrow tailoring analysis commonly involves six factors: (1) the necessity of relief; (2) the efficacy of alternative, race-neutral remedies; (3) the flexibility of relief, including the availability of waiver provisions; (4) the relationship with the stated numerical goal to the relevant labor market; (5) the impact of relief on the rights of third parties; and (6) the overinclusiveness or underinclusiveness of the racial classification. *Id.*

**Compelling interest – strong basis in evidence.** The Federal Circuit pointed out that the statistical and anecdotal evidence relied upon by the district court in its ruling below included six disparity studies of state or local contracting. The Federal Circuit also pointed out that the district court found that the data contained in the Appendix, the Urban Institute Report, and the Benchmark Study were stale for purposes of strict scrutiny review of the 2006 Authorization, and therefore, the district court concluded that it would not rely on those three reports as evidence of a compelling interest for the 2006 reauthorization of the 1207 Program. 545 F.3d 1023, citing to *Rothe VI*, 499 F.Supp.2d at 875. Since the DOD did not challenge this finding on appeal, the Federal Circuit stated that it would not consider the Appendix, the Urban Institute Report, or the Department of Commerce Benchmark Study, and instead determined whether the evidence relied on by the district court was sufficient to demonstrate a compelling interest. *Id.*

**Six state and local disparity studies.** The Federal Circuit found that disparity studies can be relevant to the compelling interest analysis because, as explained by the Supreme Court in *Croson*, “[w]here there is a significant statistical disparity between the number of qualified minority contractors willing and able to perform a particular service and the number of such contractors actually engaged by [a] locality or the locality’s prime contractors, an inference of discriminatory exclusion could arise.” 545 F.3d at 1037-1038, *quoting Croson*, 488 U.S.C. at 509. The Federal Circuit also cited to the decision by the Fifth Circuit Court of Appeals in *W.H. Scott Constr. Co. v. City of Jackson*, 199 F.3d 206 (5th Cir. 1999) that given *Croson*’s emphasis on statistical evidence, other courts considering equal protection challenges to minority-participation programs have looked to disparity indices, or to computations of disparity percentages, in determining whether *Croson*’s evidentiary burden is satisfied. 545 F.3d at 1038, *quoting W.H. Scott*, 199 F.3d at 218.

The Federal Circuit noted that a disparity study is a study attempting to measure the difference- or disparity- between the number of contracts or contract dollars actually awarded minority-owned businesses in a particular contract market, on the one hand, and the number of contracts or contract

dollars that one would expect to be awarded to minority-owned businesses given their presence in that particular contract market, on the other hand. 545 F.3d at 1037.

**Staleness.** The Federal Circuit declined to adopt a per se rule that data more than five years old are stale per se, which rejected the argument put forth by *Rothe*. 545 F.3d at 1038. The court pointed out that the district court noted other circuit courts have relied on studies containing data more than five years old when conducting compelling interest analyses, *citing to Western States Paving v. Washington State Department of Transportation*, 407 F.3d 983, 992 (9th Cir. 2005) and *Sherbrooke Turf, Inc. v. Minnesota Department of Transportation*, 345 F.3d 964, 970 (8th Cir. 2003)(relying on the Appendix, published in 1996).

The Federal Circuit agreed with the district court that Congress “should be able to rely on the most recently available data so long as that data is reasonably up-to-date.” 545 F.3d at 1039. The Federal Circuit affirmed the district court’s conclusion that the data analyzed in the six disparity studies were not stale at the relevant time because the disparity studies analyzed data pertained to contracts awarded as recently as 2000 or even 2003, and because *Rothe* did not point to more recent, available data. *Id.*

**Before Congress.** The Federal Circuit found that for evidence to be relevant in the strict scrutiny analysis, it “must be proven to have been before Congress prior to enactment of the racial classification.” 545 F.3d at 1039, quoting *Rothe V*, 413 F.3d at 1338. The Federal Circuit had issues with determining whether the six disparity studies were actually before Congress for several reasons, including that there was no indication that these studies were debated or reviewed by members of Congress or by any witnesses, and because Congress made no findings concerning these studies. 545 F.3d at 1039-1040. However, the court determined it need not decide whether the six studies were put before Congress, because the court held in any event that the studies did not provide a substantially probative and broad-based statistical foundation necessary for the strong basis in evidence that must be the predicate for nation-wide, race-conscious action. *Id.* at 1040.

The court did note that findings regarding disparity studies are to be distinguished from formal findings of discrimination by the DOD “which Congress was emphatically not required to make.” *Id.* at 1040, footnote 11 (emphasis in original). The Federal Circuit cited the *Dean v. City of Shreveport* case that the “government need not incriminate itself with a formal finding of discrimination prior to using a race-conscious remedy.” 545 F.3d at 1040, footnote 11 *quoting Dean v. City of Shreveport*, 438 F.3d 448, 445 (5<sup>th</sup> Cir. 2006).

**Methodology.** The Federal Circuit found that there were methodological defects in the six disparity studies. The court found that the objections to the parameters used to select the relevant pool of contractors was one of the major defects in the studies. 545 F.3d at 1040-1041.

The court stated that in general, “[a] disparity ratio less than 0.80” — *i.e.*, a finding that a given minority group received less than 80 percent of the expected amount — “indicates a relevant degree of disparity,” and “might support an inference of discrimination.” 545 F.3d at 1041, quoting the district court opinion in *Rothe VI*, 499 F.Supp.2d at 842; and *citing Engineering Contractors Association of South Florida, Inc. v. Metropolitan Dade County*, 122 F.3d 895, 914 (11<sup>th</sup> Cir. 1997). The court noted that this disparity ratio attempts to calculate a ratio between the expected contract amount of a given race/gender group and the actual contract amount received by that group. 545 F.3d at 1041.



The court considered the availability analysis, or benchmark analysis, which is utilized to ensure that only those minority-owned contractors who are qualified, willing and able to perform the prime contracts at issue are considered when performing the denominator of a disparity ratio. 545 F.3d at 1041. The court cited to an expert used in the case that a “crucial question” in disparity studies is to develop a credible methodology to estimate this benchmark share of contracts minorities would receive in the absence of discrimination and the touchstone for measuring the benchmark is to determine whether the firm is ready, willing, and able to do business with the government. 545 F.3d at 1041-1042.

The court concluded the contention by Rothe, that the six studies misapplied this “touchstone” of *Croson* and erroneously included minority-owned firms that were deemed willing or potentially willing and able, without regard to whether the firm was qualified, was not a defect that substantially undercut the results of four of the six studies, because “the bulk of the businesses considered in these studies were identified in ways that would tend to establish their qualifications, such as by their presence on city contract records and bidder lists.” 545 F.3d at 1042. The court noted that with regard to these studies available prime contractors were identified via certification lists, willingness survey of chamber membership and trade association membership lists, public agency and certification lists, utilized prime contractor, bidder lists, county and other government records and other type lists. *Id.*

The court stated it was less confident in the determination of qualified minority-owned businesses by the two other studies because the availability methodology employed in those studies, the court found, appeared less likely to have weeded out unqualified businesses. *Id.* However, the court stated it was more troubled by the failure of five of the studies to account officially for potential differences in size, or “relative capacity,” of the business included in those studies. 545 F.3d at 1042-1043.

The court noted that qualified firms may have substantially different capacities and thus might be expected to bring in substantially different amounts of business even in the absence of discrimination. 545 F.3d at 1043. The Federal Circuit referred to the Eleventh Circuit explanation similarly that because firms are bigger, bigger firms have a bigger chance to win bigger contracts, and thus one would expect the bigger (on average) non-MWBE firms to get a disproportionately higher percentage of total construction dollars awarded than the smaller MWBE firms. 545 F.3d at 1043 *quoting Engineering Contractors Association*, 122 F.3d at 917. The court pointed out its issues with the studies accounting for the relative sizes of contracts awarded to minority-owned businesses, but not considering the relative sizes of the businesses themselves. *Id.* at 1043.

The court noted that the studies measured the availability of minority-owned businesses by the percentage of firms in the market owned by minorities, instead of by the percentage of total marketplace capacity those firms could provide. *Id.* The court said that for a disparity ratio to have a significant probative value, the same time period and metric (dollars or numbers) should be used in measuring the utilization and availability shares. 545 F.3d at 1044, n. 12.

The court stated that while these parameters relating to the firm size may have ensured that each minority-owned business in the studies met a capacity threshold, these parameters did not account for the relative capacities of businesses to bid for more than one contract at a time, which failure rendered the disparity ratios calculated by the studies substantially less probative on their own, of the likelihood of discrimination. *Id.* at 1044. The court pointed out that the studies could have accounted

for firm size even without changing the disparity ratio methodologies by employing regression analysis to determine whether there was a statistically significant correlation between the size of a firm and the share of contract dollars awarded to it. 545 F.3d at 1044 citing to *Engineering Contractors Association*, 122 F.3d at 917. The court noted that only one of the studies conducted this type of regression analysis, which included the independent variables of a firm-age of a company, owner education level, number of employees, percent of revenue from the private sector and owner experience for industry groupings. *Id.* at 1044-1045.

The court stated, to “be clear,” that it did not hold that the defects in the availability and capacity analyses in these six disparity studies render the studies wholly unreliable for any purpose. *Id.* at 1045. The court said that where the calculated disparity ratios are low enough, the court does not foreclose the possibility that an inference of discrimination might still be permissible for some of the minority groups in some of the studied industries in some of the jurisdictions. *Id.* The court recognized that a minority-owned firm’s capacity and qualifications may themselves be affected by discrimination. *Id.* The court held, however, that the defects it noted detracted dramatically from the probative value of the six studies, and in conjunction with their limited geographic coverage, rendered the studies insufficient to form the statistical core of the strong basis and evidence required to uphold the statute. *Id.*

**Geographic coverage.** The court pointed out that whereas municipalities must necessarily identify discrimination in the immediate locality to justify a race-based program, the court does not think that Congress needs to have had evidence before it of discrimination in all 50 states in order to justify the 1207 program. *Id.* The court stressed, however, that in holding the six studies insufficient in this particular case, “we do not necessarily disapprove of decisions by other circuit courts that have relied, directly or indirectly, on municipal disparity studies to establish a federal compelling interest.” 545 F.3d at 1046. The court stated in particular, the Appendix relied on by the Ninth and Tenth Circuits in the context of certain race-conscious measures pertaining to federal highway construction, references the Urban Institute Report, which itself analyzed over 50 disparity studies and relied for its conclusions on over 30 of those studies, a far broader basis than the six studies provided in this case. *Id.*

**Anecdotal evidence.** The court held that given its holding regarding statistical evidence, it did not review the anecdotal evidence before Congress. The court did point out, however, that there was not evidence presented of a single instance of alleged discrimination by the DOD in the course of awarding a prime contract, or to a single instance of alleged discrimination by a private contractor identified as the recipient of a prime defense contract. 545 F.3d at 1049. The court noted this lack of evidence in the context of the opinion in *Croson* that if a government has become a passive participant in a system of racial exclusion practiced by elements of the local construction industry, then that government may take affirmative steps to dismantle the exclusionary system. 545 F.3d at 1048, citing *Croson*, 488 U.S. at 492.

The Federal Circuit pointed out that the Tenth Circuit in *Concrete Works* noted the City of Denver offered more than dollar amounts to link its spending to private discrimination, but instead provided testimony from minority business owners that general contractors who use them in city construction projects refuse to use them on private projects, with the result that Denver had paid tax dollars to support firms that discriminated against other firms because of their race, ethnicity and gender. 545 F.3d at 1049, quoting *Concrete Works*, 321 F.3d at 976-977.

In concluding, the court stated that it stressed its holding was grounded in the particular items of evidence offered by the DOD, and “should not be construed as stating blanket rules, for example about the reliability of disparity studies. As the Fifth Circuit has explained, there is no ‘precise mathematical formula’ to assess the quantum of evidence that rises to the *Crosen* ‘strong basis in evidence’ benchmark.” 545 F.3d at 1049, *quoting* *W.H. Scott Constr. Co.*, 199 F.3d at 218 n. 11.

**Narrowly tailoring.** The Federal Circuit only made two observations about narrowly tailoring, because it held that Congress lacked the evidentiary predicate for a compelling interest. First, it noted that the 1207 Program was flexible in application, limited in duration, and that it did not unduly impact on the rights of third parties. 545 F.3d at 1049. Second, the court held that the absence of strongly probative statistical evidence makes it impossible to evaluate at least one of the other narrowly tailoring factors. Without solid benchmarks for the minority groups covered by the Section 1207, the court said it could not determine whether the 5 percent goal is reasonably related to the capacity of firms owned by members of those minority groups — i.e., whether that goal is comparable to the share of contracts minorities would receive in the absence of discrimination.” 545 F.3d at 1049-1050.

**2. *DynaLantic Corp. v. United States Dept. of Defense, et al.*, 885 F.Supp.2d 237, 2012 WL 3356813 (D.D.C. Aug. 15, 2012), appeals voluntarily dismissed, United States Court of Appeals, District of Columbia, Docket Numbers 12-5329 and 12-5330 (2014)**

Plaintiff, the DynaLantic Corporation (“DynaLantic”), is a small business that designs and manufactures aircraft, submarine, ship, and other simulators and training equipment. DynaLantic sued the United States Department of Defense (“DoD”), the Department of the Navy, and the Small Business Administration (“SBA”) challenging the constitutionality of Section 8(a) of the Small Business Act (the “Section 8(a) program”), on its face and as applied: namely, the SBA’s determination that it is necessary or appropriate to set aside contracts in the military simulation and training industry. 2012 WL 3356813, at \*1, \*37.

The Section 8(a) program authorizes the federal government to limit the issuance of certain contracts to socially and economically disadvantaged businesses. *Id.* at \*1. DynaLantic claimed that the Section 8(a) is unconstitutional on its face because the DoD’s use of the program, which is reserved for “socially and economically disadvantaged individuals,” constitutes an illegal racial preference in violation of the equal protection in violating its right to equal protection under the Due Process Clause of the Fifth Amendment to the Constitution and other rights. *Id.* at \*1. DynaLantic also claimed the Section 8(a) program is unconstitutional as applied by the federal defendants in DynaLantic’s specific industry, defined as the military simulation and training industry. *Id.*

As described in *DynaLantic Corp. v. United States Department of Defense*, 503 F.Supp. 2d 262 (D.D.C. 2007) (*see below*), the court previously had denied Motions for Summary Judgment by the parties and directed them to propose future proceedings in order to supplement the record with additional evidence subsequent to 2007 before Congress. 503 F.Supp. 2d at 267.

**The Section 8(a) Program.** The Section 8(a) program is a business development program for small businesses owned by individuals who are both socially and economically disadvantaged as defined by the specific criteria set forth in the congressional statute and federal regulations at 15 U.S.C. §§ 632, 636 and 637; *see* 13 CFR § 124. “Socially disadvantaged” individuals are persons who have been “subjected to racial or ethnic prejudice or cultural bias within American society because of their

identities as members of groups without regard to their individual qualities.” 13 CFR § 124.103(a); *see also* 15 U.S.C. § 637(a)(5). “Economically disadvantaged” individuals are those socially disadvantaged individuals “whose ability to compete in the free enterprise system has been impaired due to diminished capital and credit opportunities as compared to others in the same or similar line of business who are not socially disadvantaged.” 13 CFR § 124.104(a); *see also* 15 U.S.C. § 637(a)(6)(A). *DynaLantic Corp.*, 2012WL 3356813 at \*2.

Individuals who are members of certain racial and ethnic groups are presumptively socially disadvantaged; such groups include, but are not limited to, Black Americans, Hispanic Americans, Native Americans, Indian tribes, Asian Pacific Americans, Native Hawaiian Organizations, and other minorities. *Id.* at \*2 *quoting* 15 U.S.C. § 631(f)(1)(B)-(c); *see also* 13 CFR § 124.103(b)(1). All prospective program participants must show that they are economically disadvantaged, which requires an individual to show a net worth of less than \$250,000 upon entering the program, and a showing that the individual’s income for three years prior to the application and the fair market value of all assets do not exceed a certain threshold. 2012 WL 3356813 at \*3; *see* 13 CFR § 124.104(c)(2).

Congress has established an “aspirational goal” for procurement from socially and economically disadvantaged individuals, which includes but is not limited to the Section 8(a) program, of five percent of procurements dollars government wide. *See* 15 U.S.C. § 644(g)(1). *DynaLantic*, at \*3. Congress has not, however, established a numerical goal for procurement from the Section 8(a) program specifically. *See Id.* Each federal agency establishes its own goal by agreement between the agency head and the SBA. *Id.* DoD has established a goal of awarding approximately two percent of prime contract dollars through the Section 8(a) program. *DynaLantic*, at \*3. The Section 8(a) program allows the SBA, “whenever it determines such action is necessary and appropriate,” to enter into contracts with other government agencies and then subcontract with qualified program participants. 15 U.S.C. § 637(a)(1). Section 8(a) contracts can be awarded on a “sole source” basis (i.e., reserved to one firm) or on a “competitive” basis (i.e., between two or more Section 8(a) firms). *DynaLantic*, at \*3-4; 13 CFR 124.501(b).

**Plaintiff’s business and the simulation and training industry.** DynaLantic performs contracts and subcontracts in the simulation and training industry. The simulation and training industry is composed of those organizations that develop, manufacture, and acquire equipment used to train personnel in any activity where there is a human-machine interface. *DynaLantic* at \*5.

**Compelling interest.** The Court rules that the government must make two showings to articulate a compelling interest served by the legislative enactment to satisfy the strict scrutiny standard that racial classifications are constitutional only if they are narrowly tailored measures that further compelling governmental interests.” *DynaLantic*, at \*9. First, the government must “articulate a legislative goal that is properly considered a compelling government interest.” *Id. quoting Sherbrooke Turf v. Minn. DOT.*, 345 F.3d 964, 969 (8th Cir.2003). Second, in addition to identifying a compelling government interest, “the government must demonstrate ‘a strong basis in evidence’ supporting its conclusion that race-based remedial action was necessary to further that interest.” *DynaLantic*, at \*9, *quoting Sherbrooke*, 345 F.3d 969.

After the government makes an initial showing, the burden shifts to DynaLantic to present “credible, particularized evidence” to rebut the government’s “initial showing of a compelling interest.” *DynaLantic*, at \*10 *quoting Concrete Works of Colorado, Inc. v. City and County of Denver*, 321 F.3d 950, 959

(10<sup>th</sup> Cir. 2003). The court points out that although Congress is entitled to no deference in its ultimate conclusion that race-conscious action is warranted, its fact-finding process is generally entitled to a presumption of regularity and deferential review. *DynaLantic*, at \*10, citing *Rothe Dev. Corp. v. U.S. Dep't of Def.* (“*Rothe III*”), 262 F.3d 1306, 1321 n. 14 (Fed. Cir. 2001).

The court held that the federal Defendants state a compelling purpose in seeking to remediate either public discrimination or private discrimination in which the government has been a “passive participant.” *DynaLantic*, at \*11. The Court rejected *DynaLantic*’s argument that the federal Defendants could only seek to remedy discrimination by a governmental entity, or discrimination by private individuals directly using government funds to discriminate. *DynaLantic*, at \*11. The Court held that it is well established that the federal government has a compelling interest in ensuring that its funding is not distributed in a manner that perpetuates the effect of either public or private discrimination within an industry in which it provides funding. *DynaLantic*, at \*11, citing *Western States Paving v. Washington State DOT*, 407 F.3d 983, 991 (9<sup>th</sup> Cir. 2005).

The Court noted that any public entity, state or federal, has a compelling interest in assuring that public dollars, drawn from the tax dollars of all citizens, do not serve to finance the evils of private prejudice, and such private prejudice may take the form of discriminatory barriers to the formation of qualified minority businesses, precluding from the outset competition for public contracts by minority enterprises. *DynaLantic* at \*11 quoting *City of Richmond v. J. A. Croson Co.*, 488 U.S. 469, 492 (1995), and *Adarand Constructors, Inc. v. Slater*, 228 F.3d 1147, 1167-68 (10<sup>th</sup> Cir. 2000). In addition, private prejudice may also take the form of “discriminatory barriers” to “fair competition between minority and non-minority enterprises ... precluding existing minority firms from effectively competing for public construction contracts.” *DynaLantic*, at \*11, quoting *Adarand VII*, 228 F.3d at 1168.

Thus, the Court concluded that the government may implement race-conscious programs not only for the purpose of correcting its own discrimination, but also to prevent itself from acting as a “passive participant” in private discrimination in the relevant industries or markets. *DynaLantic*, at \*11, citing *Concrete Works IV*, 321 F.3d at 958.

**Evidence before Congress.** The Court analyzed the legislative history of the Section 8(a) program, and then addressed the issue as to whether the Court is limited to the evidence before Congress when it enacted Section 8(a) in 1978 and revised it in 1988, or whether it could consider post-enactment evidence. *DynaLantic*, at \*16-17. The Court found that nearly every circuit court to consider the question has held that reviewing courts may consider post-enactment evidence in addition to evidence that was before Congress when it embarked on the program. *DynaLantic*, at \*17. The Court noted that post-enactment evidence is particularly relevant when the statute is over thirty years old, and evidence used to justify Section 8(a) is stale for purposes of determining a compelling interest in the present. *Id.* The Court then followed the 10<sup>th</sup> Circuit Court of Appeals’ approach in *Adarand VII*, and reviewed the post-enactment evidence in three broad categories: (1) evidence of barriers to the formation of qualified minority contractors due to discrimination, (2) evidence of discriminatory barriers to fair competition between minority and non-minority contractors, and (3) evidence of discrimination in state and local disparity studies. *DynaLantic*, at \*17.

The Court found that the government presented sufficient evidence of barriers to minority business formation, including evidence on race-based denial of access to capital and credit, lending

discrimination, routine exclusion of minorities from critical business relationships, particularly through closed or “old boy” business networks that make it especially difficult for minority-owned businesses to obtain work, and that minorities continue to experience barriers to business networks. *DynaLantic*, at \*17-21. The Court considered as part of the evidentiary basis before Congress multiple disparity studies conducted throughout the United States and submitted to Congress, and qualitative and quantitative testimony submitted at Congressional hearings. *Id.*

The Court also found that the government submitted substantial evidence of barriers to minority business development, including evidence of discrimination by prime contractors, private sector customers, suppliers, and bonding companies. *DynaLantic*, at \*21-23. The Court again based this finding on recent evidence submitted before Congress in the form of disparity studies, reports and Congressional hearings. *Id.*

**State and local disparity studies.** Although the Court noted there have been hundreds of disparity studies placed before Congress, the Court considers in particular studies submitted by the federal Defendants of 50 disparity studies, encompassing evidence from 28 states and the District of Columbia, which have been before Congress since 2006. *DynaLantic*, at \*25-29. The Court stated it reviewed the studies with a focus on two indicators that other courts have found relevant in analyzing disparity studies. First, the Court considered the disparity indices calculated, which was a disparity index, calculated by dividing the percentage of MBE, WBE, and/or DBE firms *utilized* in the contracting market by the percentage of M/W/DBE firms *available* in the same market. *DynaLantic*, at \*26. The Court said that normally, a disparity index of 100 demonstrates full M/W/DBE participation; the closer the index is to zero, the greater the M/W/DBE disparity due to underutilization. *DynaLantic*, at \*26.

Second, the Court reviewed the method by which studies calculated the *availability* and *capacity* of minority firms. *DynaLantic*, at \*26. The Court noted that some courts have looked closely at these factors to evaluate the reliability of the disparity indices, reasoning that the indices are not probative unless they are restricted to firms of significant size and with significant government contracting experience. *DynaLantic*, at \*26. The Court pointed out that although discriminatory barriers to formation and development would impact capacity, the Supreme Court decision in *Croson* and the Court of Appeals decision in *O'Donnell Construction Co. v. District of Columbia, et al.*, 963 F.2d 420 (D.C. Cir. 1992) “require the additional showing that eligible minority firms experience disparities, notwithstanding their abilities, in order to give rise to an inference of discrimination.” *DynaLantic*, at \*26, n. 10.

**Analysis: Strong basis in evidence.** Based on an analysis of the disparity studies and other evidence, the Court concluded that the government articulated a compelling interest for the Section 8(a) program and satisfied its initial burden establishing that Congress had a strong basis in evidence permitting race-conscious measures to be used under the Section 8(a) program. *DynaLantic*, at \*29-37. The Court held that DynaLantic did not meet its burden to establish that the Section 8(a) program is unconstitutional on its face, finding that DynaLantic could not show that Congress did not have a strong basis in evidence for permitting race-conscious measures to be used under any circumstances, in any sector or industry in the economy. *DynaLantic*, at \*29.

The Court discussed and analyzed the evidence before Congress, which included extensive statistical analysis, qualitative and quantitative consideration of the unique challenges facing minorities from all

businesses, and an examination of their race-neutral measures that have been enacted by previous Congresses, but had failed to reach the minority owned firms. *DynaLantic*, at \*31. The Court said Congress had spent decades compiling evidence of race discrimination in a variety of industries, including but not limited to construction. *DynaLantic*, at \*31. The Court also found that the federal government produced significant evidence related to professional services, architecture and engineering, and other industries. *DynaLantic*, at \*31. The Court stated that the government has therefore “established that there are at least some circumstances where it would be ‘necessary or appropriate’ for the SBA to award contracts to businesses under the Section 8(a) program. *DynaLantic*, at \*31, *citing* 15 U.S.C. § 637(a)(1).

Therefore, the Court concluded that in response to Plaintiff’s facial challenge, the government met its initial burden to present a strong basis in evidence sufficient to support its articulated, constitutionally valid, compelling interest. *DynaLantic*, at \*31. The Court also found that the evidence from around the country is sufficient for Congress to authorize a nationwide remedy. *DynaLantic*, at \*31, n. 13.

**Rejection of DynaLantic’s rebuttal arguments.** The Court held that since the federal Defendants made the initial showing of a compelling interest, the burden shifted to the Plaintiff to show why the evidence relied on by Defendants fails to demonstrate a compelling governmental interest. *DynaLantic*, at \*32. The Court rejected each of the challenges by DynaLantic, including holding that: the legislative history is sufficient; the government compiled substantial evidence that identified private racial discrimination which affected minority utilization in specific industries of government contracting, both before and after the enactment of the Section 8(a) program; any flaws in the evidence, including the disparity studies, DynaLantic has identified in the data do not rise to the level of credible, particularized evidence necessary to rebut the government’s initial showing of a compelling interest; DynaLantic cited no authority in support of its claim that fraud in the administration of race-conscious programs is sufficient to invalidate Section 8(a) program on its face; and Congress had strong evidence that the discrimination is sufficiently pervasive across racial lines to justify granting a preference for all five groups included in Section 8(a). *DynaLantic*, at \*32-36.

In this connection, the Court stated it agreed with *Croson* and its progeny that the government may properly be deemed a “passive participant” when it fails to adjust its procurement practices to account for the effects of identified private discrimination on the availability and utilization of minority-owned businesses in government contracting. *DynaLantic*, at \*34. In terms of flaws in the evidence, the Court pointed out that the proponent of the race-conscious remedial program is not required to unequivocally establish the existence of discrimination, nor is it required to negate all evidence of non-discrimination. *DynaLantic*, at \*35, *citing Concrete Work IV*, 321 F.3d at 991. Rather, a strong basis in evidence exists, the Court stated, when there is evidence approaching a *prima facie* case of a constitutional or statutory violation, not irrefutable or definitive proof of discrimination. *Id.*, *citing Croson*, 488 U.S. 500. Accordingly, the Court stated that DynaLantic’s claim that the government must independently verify the evidence presented to it is unavailing. *Id.* *DynaLantic*, at \*35.

Also in terms of DynaLantic’s arguments about flaws in the evidence, the Court noted that Defendants placed in the record approximately 50 disparity studies which had been introduced or discussed in Congressional Hearings since 2006, which DynaLantic did not rebut or even discuss any of the studies individually. *DynaLantic*, at \*35. DynaLantic asserted generally that the studies did not

control for the capacity of the firms at issue, and were therefore unreliable. *Id.* The Court pointed out that Congress need not have evidence of discrimination in all 50 states to demonstrate a compelling interest, and that in this case, the federal Defendants presented recent evidence of discrimination in a significant number of states and localities which, taken together, represents a broad cross-section of the nation. *DynaLantic*, at \*35, n. 15. The Court stated that while not all of the disparity studies accounted for the capacity of the firms, many of them did control for capacity and still found significant disparities between minority and non-minority owned firms. *DynaLantic*, at \*35. In short, the Court found that DynaLantic’s “general criticism” of the multitude of disparity studies does not constitute particular evidence undermining the reliability of the particular disparity studies and therefore is of little persuasive value. *DynaLantic*, at \*35.

In terms of the argument by DynaLantic as to requiring proof of evidence of discrimination against each minority group, the Court stated that Congress has a strong basis in evidence if it finds evidence of discrimination is sufficiently pervasive across racial lines to justify granting a preference to all five disadvantaged groups included in Section 8(a). The Court found Congress had strong evidence that the discrimination is sufficiently pervasive across racial lines to justify a preference to all five groups. *DynaLantic*, at \*36. The fact that specific evidence varies, to some extent, within and between minority groups, was not a basis to declare this statute facially invalid. *DynaLantic*, at \*36.

**Facial challenge: Conclusion.** The Court concluded Congress had a compelling interest in eliminating the roots of racial discrimination in federal contracting and had established a strong basis of evidence to support its conclusion that remedial action was necessary to remedy that discrimination by providing significant evidence in three different areas. First, it provided extensive evidence of discriminatory barriers to minority business formation. *DynaLantic*, at \*37. Second, it provided “forceful” evidence of discriminatory barriers to minority business development. *Id.* Third, it provided significant evidence that, even when minority businesses are qualified and eligible to perform contracts in both the public and private sectors, they are awarded these contracts far less often than their similarly situated non-minority counterparts. *Id.* The Court found the evidence was particularly strong, nationwide, in the construction industry, and that there was substantial evidence of widespread disparities in other industries such as architecture and engineering, and professional services. *Id.*

**As-applied challenge.** *DynaLantic* also challenged the SBA and DoD’s use of the Section 8(a) program as applied: namely, the agencies’ determination that it is necessary or appropriate to set aside contracts in the military simulation and training industry. *DynaLantic*, at \*37. Significantly, the Court points out that the federal Defendants “concede that they do not have evidence of discrimination in this industry.” *Id.* Moreover, the Court points out that the federal Defendants admitted that there “is no Congressional report, hearing or finding that references, discusses or mentions the simulation and training industry.” *DynaLantic*, at \*38. The federal Defendants also admit that they are “unaware of any discrimination in the simulation and training industry.” *Id.* In addition, the federal Defendants admit that none of the documents they have submitted as justification for the Section 8(a) program mentions or identifies instances of past or present discrimination in the simulation and training industry. *DynaLantic*, at \*38.

The federal Defendants maintain that the government need not tie evidence of discriminatory barriers to minority business formation and development to evidence of discrimination in any



particular industry. *DynaLantic*, at \*38. The Court concludes that the federal Defendants' position is irreconcilable with binding authority upon the Court, specifically, the United States Supreme Court's decision in *Croson*, as well as the Federal Circuit's decision in *O'Donnell Construction Company*, which adopted *Croson*'s reasoning. *DynaLantic*, at \*38. The Court holds that *Croson* made clear the government must provide evidence demonstrating there were eligible minorities in the relevant market. *DynaLantic*, at \*38. The Court held that absent an evidentiary showing that, in a highly skilled industry such as the military simulation and training industry, there are eligible minorities who are qualified to undertake particular tasks and are nevertheless denied the opportunity to thrive there, the government cannot comply with *Croson*'s evidentiary requirement to show an inference of discrimination. *DynaLantic*, at \*39, citing *Croson*, 488 U.S. 501. The Court rejects the federal government's position that it does not have to make an industry-based showing in order to show strong evidence of discrimination. *DynaLantic*, at \*40.

The Court notes that the Department of Justice has recognized that the federal government must take an industry-based approach to demonstrating compelling interest. *DynaLantic*, at \*40, citing *Cortez III Service Corp. v. National Aeronautics & Space Administration*, 950 F.Supp. 357 (D.D.C. 1996). In *Cortez*, the Court found the Section 8(a) program constitutional on its face, but found the program unconstitutional as applied to the NASA contract at issue because the government had provided no evidence of discrimination in the industry in which the NASA contract would be performed. *DynaLantic*, at \*40. The Court pointed out that the Department of Justice had advised federal agencies to make industry-specific determinations before offering set-aside contracts and specifically cautioned them that without such particularized evidence, set-aside programs may not survive *Croson* and *Adarand*. *DynaLantic*, at \*40.

The Court recognized that legislation considered in *Croson*, *Adarand* and *O'Donnell* were all restricted to one industry, whereas this case presents a different factual scenario, because Section 8(a) is not industry-specific. *DynaLantic*, at \*40, n. 17. The Court noted that the government did not propose an alternative framework to *Croson* within which the Court can analyze the evidence, and that in fact, the evidence the government presented in the case is industry specific. *Id.*

The Court concluded that agencies have a responsibility to decide if there has been a history of discrimination in the particular industry at issue. *DynaLantic*, at \*40. According to the Court, it need not take a party's definition of "industry" at face value, and may determine the appropriate industry to consider is broader or narrower than that proposed by the parties. *Id.* However, the Court stated, in this case the government did not argue with Plaintiff's industry definition, and more significantly, it provided no evidence whatsoever from which an inference of discrimination in that industry could be made. *DynaLantic*, at \*40.

**Narrowly tailoring.** In addition to showing strong evidence that a race-conscious program serves a compelling interest, the government is required to show that the means chosen to accomplish the government's asserted purpose are specifically and narrowly framed to accomplish that purpose. *DynaLantic*, at \*41. The Court considered several factors in the narrowly tailoring analysis: the efficacy of alternative, race-neutral remedies, flexibility, over- or under-inclusiveness of the program, duration, the relationship between numerical goals and the relevant labor market, and the impact of the remedy on third parties. *Id.*

The Court analyzed each of these factors and found that the federal government satisfied all six factors. *DynaLantic*, at \*41-48. The Court found that the federal government presented sufficient evidence that Congress attempted to use race-neutral measures to foster and assist minority owned businesses relating to the race-conscious component in Section 8(a), and that these race-neutral measures failed to remedy the effects of discrimination on minority small business owners. *DynaLantic*, at \*42. The Court found that the Section 8(a) program is sufficiently flexible in granting race-conscious relief because race is made relevant in the program, but it is not a determinative factor or a rigid racial quota system. *DynaLantic*, at \*43. The Court noted that the Section 8(a) program contains a waiver provision and that the SBA will not accept a procurement for award as an 8(a) contract if it determines that acceptance of the procurement would have an adverse impact on small businesses operating outside the Section 8(a) program. *DynaLantic*, at \*44.

The Court found that the Section 8(a) program was not over- and under-inclusive because the government had strong evidence of discrimination which is sufficiently pervasive across racial lines to all five disadvantaged groups, and Section 8(a) does not provide that every member of a minority group is disadvantaged. *DynaLantic*, at \*44. In addition, the program is narrowly tailored because it is based not only on social disadvantage, but also on an individualized inquiry into economic disadvantage, and that a firm owned by a non-minority may qualify as socially and economically disadvantaged. *DynaLantic*, at \*44.

The Court also found that the Section 8(a) program places a number of strict durational limits on a particular firm's participation in the program, places temporal limits on every individual's participation in the program, and that a participant's eligibility is continually reassessed and must be maintained throughout its program term. *DynaLantic*, at \*45. Section 8(a)'s inherent time limit and graduation provisions ensure that it is carefully designed to endure only until the discriminatory impact has been eliminated, and thus it is narrowly tailored. *DynaLantic*, at \*46.

In light of the government's evidence, the Court concluded that the aspirational goals at issue, all of which were less than five percent of contract dollars, are facially constitutional. *DynaLantic*, at \*46-47. The evidence, the Court noted, established that minority firms are ready, willing, and able to perform work equal to two to five percent of government contracts in industries including but not limited to construction. *Id.* The Court found the effects of past discrimination have excluded minorities from forming and growing businesses, and the number of available minority contractors reflects that discrimination. *DynaLantic*, at \*47.

Finally, the Court found that the Section 8(a) program takes appropriate steps to minimize the burden on third parties, and that the Section 8(a) program is narrowly tailored on its face. *DynaLantic*, at \*48. The Court concluded that the government is not required to eliminate the burden on non-minorities in order to survive strict scrutiny, but a limited and properly tailored remedy to cure the effects of prior discrimination is permissible even when it burdens third parties. *Id.* The Court points to a number of provisions designed to minimize the burden on non-minority firms, including the presumption that a minority applicant is socially disadvantaged may be rebutted, an individual who is not presumptively disadvantaged may qualify for such status, the 8(a) program requires an individualized determination of economic disadvantage, and it is not open to individuals whose net worth exceeds \$250,000 regardless of race. *Id.*

**Conclusion.** The Court concluded that the Section 8(a) program is constitutional on its face. The Court also held that it is unable to conclude that the federal Defendants have produced evidence of discrimination in the military simulation and training industry sufficient to demonstrate a compelling interest. Therefore, *DynaLantic* prevailed on its as-applied challenge. *DynaLantic*, at \*51. Accordingly, the Court granted the federal Defendants' Motion for Summary Judgment in part (holding the Section 8(a) program is valid on its face) and denied it in part, and granted the Plaintiff's Motion for Summary Judgment in part (holding the program is invalid as applied to the military simulation and training industry) and denied it in part. The Court held that the SBA and the DoD are enjoined from awarding procurements for military simulators under the Section 8(a) program without first articulating a strong basis in evidence for doing so.

**Appeals voluntarily dismissed, and Stipulation and Agreement of Settlement Approved and Ordered by District Court.** A Notice of Appeal and Notice of Cross Appeal were filed in this case to the United States Court of Appeals for the District of Columbia by the United States and DynaLantic: Docket Numbers 12-5329 and 12-5330. Subsequently, the appeals were voluntarily dismissed, and the parties entered into a Stipulation and Agreement of Settlement, which was approved by the District Court (Jan. 30, 2014). The parties stipulated and agreed *inter alia*, as follows: (1) the Federal Defendants were enjoined from awarding prime contracts under the Section 8(a) program for the purchase of military simulation and military simulation training contracts without first articulating a strong basis in evidence for doing so; (2) the Federal Defendants agreed to pay Plaintiff the sum of \$1,000,000.00; and (3) the Federal Defendants agreed they shall refrain from seeking to vacate the injunction entered by the Court for at least two years.

The District Court on January 30, 2014 approved the Stipulation and Agreement of Settlement, and So Ordered the terms of the original 2012 injunction modified as provided in the Stipulation and Agreement of Settlement.

### **3. *DynaLantic Corp. v. United States Dept. of Defense, et al.*, 503 F. Supp.2d 262 (D.D.C. 2007)**

*DynaLantic Corp.* involved a challenge to the DOD's utilization of the Small Business Administration's ("SBA") 8(a) Business Development Program ("8(a) Program"). In its Order of August 23, 2007, the district court denied both parties' Motions for Summary Judgment because there was no information in the record regarding the evidence before Congress supporting its 2006 reauthorization of the program in question; the court directed the parties to propose future proceedings to supplement the record. 503 F. Supp.2d 262, 263 (D.D.C. 2007).

The court first explained that the 8(a) Program sets a goal that no less than 5 percent of total prime federal contract and subcontract awards for each fiscal year be awarded to socially and economically disadvantaged individuals. *Id.* Each federal government agency is required to establish its own goal for contracting but the goals are not mandatory and there is no sanction for failing to meet the goal. Upon application and admission into the 8(a) Program, small businesses owned and controlled by disadvantaged individuals are eligible to receive technological, financial, and practical assistance, and support through preferential award of government contracts. For the past few years, the 8(a) Program was the primary preferential treatment program the DOD used to meet its 5 percent goal. *Id.* at 264.

This case arose from a Navy contract that the DOD decided to award exclusively through the 8(a) Program. The plaintiff owned a small company that would have bid on the contract but for the fact it was not a participant in the 8(a) Program. After multiple judicial proceedings the D.C. Circuit dismissed the plaintiff's action for lack of standing but granted the plaintiff's motion to enjoin the contract procurement pending the appeal of the dismissal order. The Navy cancelled the proposed procurement but the D.C. Circuit allowed the plaintiff to circumvent the mootness argument by amending its pleadings to raise a facial challenge to the 8(a) program as administered by the SBA and utilized by the DOD. The D.C. Circuit held the plaintiff had standing because of the plaintiff's inability to compete for DOD contracts reserved to 8(a) firms, the injury was traceable to the race-conscious component of the 8(a) Program, and the plaintiff's injury was imminent due to the likelihood the government would in the future try to procure another contract under the 8(a) Program for which the plaintiff was ready, willing, and able to bid. *Id.* at 264-65.

On remand, the plaintiff amended its complaint to challenge the constitutionality of the 8(a) Program and sought an injunction to prevent the military from awarding any contract for military simulators based upon the race of the contractors. *Id.* at 265. The district court first held that the plaintiff's complaint could be read only as a challenge to the DOD's implementation of the 8(a) Program [pursuant to 10 U.S.C. § 2323] as opposed to a challenge to the program as a whole. *Id.* at 266. The parties agreed that the 8(a) Program uses race-conscious criteria so the district court concluded it must be analyzed under the strict scrutiny constitutional standard. The court found that in order to evaluate the government's proffered "compelling government interest," the court must consider the evidence that Congress considered at the point of authorization or reauthorization to ensure that it had a strong basis in evidence of discrimination requiring remedial action. The court cited to *Western States Paving* in support of this proposition. *Id.* The court concluded that because the DOD program was reauthorized in 2006, the court must consider the evidence before Congress in 2006.

The court cited to the recent *Rothe* decision as demonstrating that Congress considered significant evidentiary materials in its reauthorization of the DOD program in 2006, including six recently published disparity studies. The court held that because the record before it in the present case did not contain information regarding this 2006 evidence before Congress, it could not rule on the parties' Motions for Summary Judgment. The court denied both motions and directed the parties to propose future proceedings in order to supplement the record. *Id.* at 267.

#### **4. "Federal Procurement After Adarand" (USCCR Report September, 2005)**

In September of 2005, the United States Commission on Civil Rights ("Commission") issued its report entitled "Federal Procurement After *Adarand*" setting forth its findings pertaining to federal agencies' compliance with the constitutional standard enunciated in *Adarand*. United States Commission on Civil Rights: Federal Procurement After *Adarand* (Sept. 2005), available at <http://www.usccr.gov>, citing *Adarand*, 515 U.S. at 237-38. The following is a brief summary of the report.

In 1995, the United States Supreme Court decided *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200 (1995), which set forth the constitutional standard for evaluating race-conscious programs in federal contracting. The Commission states in its report that the court in *Adarand* held that racial classifications imposed by federal, state and local governments are subject to strict scrutiny and the burden is upon the government entity to show that the racial classification is the least restrictive way

to serve a “compelling public interest;” the government program must be narrowly tailored to meet that interest. The court held that narrow tailoring requires, among other things, that “agencies must first consider race-neutral alternatives before using race conscious measures.” [p. ix]

**Scope and methodology of the Commission’s report.** The purpose of the Commission’s study was to examine the race-neutral programs and strategies implemented by agencies to meet the requirements set forth in *Adarand*. Accordingly, the study considered the following questions:

- Do agencies seriously consider workable race-neutral alternatives, as required by *Adarand*?
- Do agencies sufficiently promote and participate in race-neutral practices such as mentor-protégé programs, outreach, and financial and technical assistance?
- Do agencies employ and disclose to each other specific best practices for consideration of race-neutral alternatives?
- How do agencies measure the effects of race-neutral programs on federal contracting?
- What race-neutral mechanisms exist to ensure government contracting is not discriminatory?

The Commission’s staff conducted background research, reviewing government documents, federal procurement and economic data, federal contracting literature, and pertinent statutes, regulations and court decisions. The Commission selected seven agencies to study in depth and submitted interrogatories to assess the agencies’ procurement methods. The agencies selected for evaluation procure relatively large amounts of goods and services, have high numbers of contracts with small businesses, SDBs, or HUBZone firms, or play a significant support or enforcement role: the Small Business Administration (SBA), and the Departments of Defense (DOD), Transportation (DOT), Education (DOEd), Energy (DOEn), Housing and Urban Development (HUD), and State (DOS).

The report did not evaluate existing disparity studies or assess the validity of data suggesting the persistence of discrimination. It also did not seek to identify whether, or which, aspects of the contracting process disparately affect minority-owned firms.

**Findings and recommendations.** The Commission concluded that “among other requirements, agencies must consider race-neutral strategies before adopting any that allow eligibility based, even in part, on race.” [p. ix] The Commission further found “that federal agencies have not complied with their constitutional obligation, according to the Supreme Court, to narrowly tailor programs that use racial classifications by considering race-neutral alternatives to redress discrimination.” [p. ix]

The Commission found that “agencies have largely failed to apply the Supreme Court’s requirements, or [the U.S. Department of Justice’s (“DOJ”)] guidelines, to their contracting programs.” [p. 70] The Commission found that agencies “have not seriously considered race-neutral alternatives, relying instead on SBA-run programs, without developing new initiatives or properly assessing the results of existing programs.” [p. 70]

The Commission identified four elements that underlie “serious consideration” of race-neutral efforts, ensure an inclusive and fair race-neutral system, and tailor race-conscious programs to meet a documented need: “Element 1: Standards — Agencies must develop policy, procedures, and statistical standards for evaluating race-neutral alternatives; Element 2: Implementation — Agencies

must develop or identify a wide range of race-neutral approaches, rather than relying on only one or two generic government-wide programs; Element 3: Evaluation — Agencies must measure the effectiveness of their chosen procurement strategies based on established empirical standards and benchmarks; Element 4: Communication — Agencies should communicate and coordinate race-neutral practices to ensure maximum efficiency and consistency government-wide.” [p. xi]

The Commission found that “despite the requirements that *Adarand* imposed, federal agencies fail to consider race-neutral alternatives in the manner required by the Supreme Court’s decision.” [p. xiii] The Commission also concluded that “[a]gencies engage in few race-neutral strategies designed to make federal contracting more inclusive, but do not exert the effort associated with serious consideration that the Equal Protection Clause requires. Moreover, they do not integrate race-neutral strategies into a comprehensive procurement approach for small and disadvantaged businesses.” [p. xiii]

Serious consideration [P. 71]

**Finding:** Most agencies could not demonstrate that they consider race-neutral alternatives before resorting to race-conscious programs. Due to the lack of specific guidance from the DOJ, “agencies appear to give little thought to their legal obligations and disagree both about what the law requires and about the legal ramifications of their actions.”

**Recommendation:** Agencies must adopt and follow guidelines to ensure consideration of race-neutral alternatives, which system could include: (1) identifying and evaluating a wide range of alternatives; (2) articulating the underlying facts that demonstrate whether race-neutral plans work; (3) collecting empirical research to evaluate success; (4) ensuring such assessments are based on current, competent and comprehensive data; (5) periodically reviewing race conscious plans to determine their continuing need; and (6) establishing causal relationships before concluding that a race-neutral plan is ineffective. Best practices could include: (1) statistical standards by which agencies would determine when to abandon race race-conscious efforts; (2) ongoing data collection, including racial and ethnic information, by which agencies would assess effectiveness; and (3) policies for reviewing what constitutes disadvantaged status and the continued necessity for strategies to increase inclusiveness.

Antidiscrimination policy and enforcement [P. 72]

**Finding:** The federal government lacks an appropriate framework for enforcing nondiscrimination in procurement. Limited causes of action are available to contractors and subcontractors, but the most accessible mechanisms are restricted to procedural complaints about bidding processes.

**Recommendation:** The enactment of legislation expressly prohibiting discrimination based on race, color, religion, sex, national origin, age, and disability, in federal contracting and procurement. Such legislation should include protections for both contractors and subcontractors and establish clear sanctions, remedies and compliance standards. Enforcement authority should be delegated to each agency with contracting capabilities.

**Finding:** Most agencies do not have policies or procedures to prevent discrimination in contracting. Generally, agencies are either unaware of or confused about whether federal law protects government contractors from discrimination.

**Recommendation:** The facilitation of agency development and implementation of civil rights enforcement policies for contracting. Agencies must establish strong enforcement systems to provide individuals a means to file and resolve complaints of discriminatory conduct. Agencies must also adopt clear compliance review standards and delegate authority for these functions to a specific, high-level component. Once agencies adopt nondiscrimination policies, they should conduct regular compliance reviews of prime and other large contract recipients, such as state and local agencies. Agencies should widely publicize complaint procedures, include them with bid solicitations, and codify them in acquisition regulations. Civil rights personnel in each agency should work with procurement officers to ensure that contractors understand their rights and responsibilities and implement additional policies upon legislative action.

**Finding:** Agencies generally employ systems for reviewing compliance with subcontracting goals made at the bidding stage, but do not establish norms for the number of reviews they will conduct, nor the frequency with which they will do so.

**Recommendation:** Good faith effort policies should be rooted in race-neutral outreach. Agencies should set standards for and carry out regular on-site audits and formal compliance reviews of SDB subcontracting plans to make determinations of contractors' good faith efforts to achieve established goals. Agencies should develop and disseminate clear regulations for what constitutes a good faith effort, specific to individual procurement goals and procedures. Agencies should also require that all prime contractors be subject to audits, and require prime contractors to demonstrate all measures taken to ensure equal opportunity for SDBs to compete, paying particular attention to contractors that have not achieved goals expressed in their offers.

Ongoing review [P. 73]

**Finding:** Narrow tailoring requires regular review of race-conscious programs to determine their continued necessity and to ensure that they are focused enough to serve their intended purpose. However, no agency reported policies, procedures, or statistical standards for when to use race-conscious instead of race-neutral strategies, nor had agencies established procedures to reassess presumptions of disadvantage.

**Recommendation:** Agencies must engage in regular, systematic reviews (perhaps biennial) of race-conscious programs, including those that presume race-based disadvantage. They should develop and document clear policies, standards and justifications for when race-conscious programs are in effect. Agencies should develop and implement standards for the quality of data they collect and use to analyze race-conscious and race-neutral programs and apply these criteria when deciding effectiveness. Agencies should also evaluate whether race-neutral alternatives could reasonably generate the same or similar outcomes, and should implement such alternatives whenever possible.

Data and measurement [P. 73-75]

**Finding:** Agencies have neither conducted race disparity studies nor collected empirical data to assess the effects of procurement programs on minority-owned firms.

**Recommendation:** Agencies should conduct regular benchmark studies which should be tailored to each agency's specific contracting needs; and the results of the studies should be used in setting procurement goals.

**Finding:** The current procurement data does not evaluate the effectiveness or continuing need for race-neutral and/or race-conscious programs.

**Recommendation:** A task force should determine what data is necessary to implement narrow tailoring and assess whether (1) race-conscious programs are still necessary, and (2) the extent to which race-neutral strategies are effective as an alternative to race-conscious programs.

**Finding:** Agencies do not assess the effectiveness of individual race-neutral strategies (e.g., whether contract unbundling is a successful race-neutral strategy).

**Recommendation:** Agencies should measure the success of race-neutral strategies independently so they can determine viability as alternatives to race-conscious measures (e.g., agencies could track the number and dollar value of contracts broken apart, firms to which smaller contracts are awarded, and the effect of such efforts on traditionally excluded firms).

#### Communication and collaboration [P. 75]

**Finding:** Agencies do not communicate effectively with each other about efforts to strengthen procurement practices (e.g., there is no exchange of race-neutral best practices).

**Recommendation:** Agencies should engage in regular meetings with each other to share information and best practices, coordinate outreach, and develop measurement strategies.

#### Outreach [P. 76]

**Finding:** Even though agencies engage in outreach efforts, there is little evidence that their efforts to reach small and disadvantaged businesses are successful. They do not produce planning or reporting documents on outreach activities, nor do they apply methods for tracking activities, expenditures, or the number and types of beneficiaries.

**Recommendation:** Widely broadcast information on the Internet and in popular media is only one of several steps necessary for a comprehensive and effective outreach program. Agencies can use a variety of formats — conferences, meetings, forums, targeted media, Internet, printed materials, ad campaigns, and public service announcements — to reach appropriate audiences. In addition, agencies should capitalize on technological capabilities, such as listservs, text messaging, audio subscription services, and new technologies associated with portable listening devices, to circulate information about contracting opportunities. Agencies should include outreach in budget and planning documents, establish goals for conducting outreach activities, track the events and diversity of the audience, and train staff in outreach strategies and skills.

#### Conclusion

The Commission found that 10 years after the Supreme Court's *Adarand* decision, federal agencies have largely failed to narrowly tailor their reliance on race-conscious programs and have failed to seriously consider race-neutral decisions that would effectively redress discrimination. Although some agencies employ some race-neutral strategies, the agencies fail "to engage in the basic activities that are the hallmarks of serious consideration," including program evaluation, outcomes measurement, reliable empirical research and data collection, and periodic review.



The Commission found that most federal agencies have not implemented “even the most basic race-neutral strategy to ensure equal access, *i.e.*, the development, dissemination, and enforcement of clear, effective antidiscrimination policies. Significantly, most agencies do not provide clear recourse for contractors who are victims of discrimination or guidelines for enforcement.”

One Commission member, Michael Yaki, filed an extensive Dissenting Statement to the Report. [pp. 79-170]. This Dissenting Statement by Commissioner Yaki was referred to and discussed by the district court in *Rothe Development Corp. v. US DOD*, 499 F.Supp.2d 775, 864-65 (W.D. Tex. August 10, 2007), *reversed* on appeal, *Rothe*, 545 F.3d 1023 (Fed.Cir 2008), (*see* discussion of *Rothe* above. In his dissent, Commissioner Yaki criticized the Majority Opinion, including noting that his statistical data was “*deleted*” from the original version of the draft Majority Opinion that was received by all Commissioners. The district court in *Rothe* considered the data discussed by Yaki.

## APPENDIX C.

### Contract Data Collection

Keen Independent compiled data about ADOT and local agency contracts and the firms used as prime contractors and subcontractors on those contracts. Keen Independent sought sources of data that consistently included information about prime contractors and subcontractors on both federally- (FHWA, FTA and FAA) and state-funded contracts, regardless of firm ownership or DBE status. The study team compiled USDOT-funded and state-funded construction, engineering and other transportation-related contracts. Data collection encompasses contracts awarded by local agencies receiving FHWA, FTA, FAA or state funds through ADOT.

Appendix C describes the study team's utilization data collection processes in six parts:

- A. ADOT contract and agreement data;
- B. Local public agency (LPA) contract data;
- C. ADOT bid and proposal data;
- D. Characteristics of utilized firms and bidders;
- E. ADOT review; and
- F. Data limitations.

#### A. ADOT Contract and Agreement Data

Keen Independent collected data on transportation-related construction and engineering contracts that ADOT awarded during the study period. The study team also collected data for local government contracts that ADOT administers through local public agencies (LPAs).

**ADOT construction projects.** Keen Independent collected data on transportation-related construction prime contracts and associated subcontracts that ADOT awarded from July 1, 2007 through June 30, 2013. Throughout, the data collection focused on transportation-related contracts such as highway construction, road maintenance and related activities. FAA-funded contracts were for paving and buildings at Grand Canyon National Park Airport. Analysis of FTA-funded contracts included items such as vehicle purchases and transit services.

The primary information sources for construction contracts were ADOT Contracts and Specifications (C&S) Section Excel spreadsheets identifying dollars going to prime contractors and subcontractors for each project. ADOT created these spreadsheets by running reports from its contract database (FAST) to provide information such as:

- Project and contract number;
- Description of work;
- Award date;
- Award amount;
- Amendment or change order amounts (when applicable);
- Location of work (i.e., county);

- Whether the contract included federal funding;
- Prime contractor name;
- Whether DBE goals were applied, and if so, level of goal; and
- For subcontractors, firm names, dollar amounts and type of work performed.

**Engineering-related contracts.** The study team also collected data on transportation-related engineering contracts. ADOT administers consulting work through consultant contracts and “task orders.” Keen Independent identified engineering-related contracts from an Agreement Database provided by ADOT’s Engineering Consultant Section (ECS). ECS created a spreadsheet for consulting and other contracts that had activity (awards, amendments or task orders) during the July 2007 through June 2013 study period. Keen Independent reviewed these data to develop a refined list of contracts.

- ADOT administered some on-call contracts during the study period. Keen Independent only included in the utilization analysis those task orders under on-call contracts that were issued during the study period.<sup>1</sup> This included task orders executed during the study period for on-call contracts awarded prior to July 2007.
- When ADOT augmented pre-July 2007 contracts through contract amendments, the dollar amounts for these amendments were included in the utilization analysis.
- Many engineering-related contracts in the utilization analysis were not on-call and were awarded within the July 2007 through June 2013 time period. The total dollar amounts for these contracts including any contract amendments were counted in the utilization analysis during the study period.

The final data for engineering contracts included the following information about the agreement or task order:

- Agreement number (and task order or amendment number);
- Description of work;
- Award date;
- Award and payment amounts;
- Project location;
- Whether the contract involved federal funding;
- Whether DBE contract goals were set on the project (and level of goal);
- Prime consultant name and address; and
- For each subconsultant (if any), name, address, work type and dollar amount.

After collecting the necessary data about transportation-related engineering prime contracts and subcontracts, the study team created electronic prime contract and subcontract tables for use in the utilization and other analyses.

---

<sup>1</sup> Keen Independent treated each task order as a stand-alone contract element.

**ADOT Multimodal Planning projects.** The study team collected data on transportation-related planning contracts. ADOT administers this consulting work through consultant contracts and “task orders.” Keen Independent identified planning-related contracts from a Task-Order Database provided by ADOT’s Multimodal Planning Division (MPD). MPD created a spreadsheet for consulting and other contracts that had activity (awards, amendments or task orders) during the July 2007 through June 2013 study period. Keen Independent reviewed these data to develop a refined list of contracts.

**ADOT Procurement Section projects.** The study team also collected information on transportation-related Procurement contracts. ADOT’s Procurement Section uses purchase orders for supply and other procurements as well as certain contracts for consulting and maintenance services. Keen Independent identified consulting-, supplier- and maintenance-related contracts from a Contracts Database provided by ADOT’s Procurement Section. Procurement provided a spreadsheet that had activity (awards, amendments or task orders) during the July 2007 through June 2013 study period. Keen Independent reviewed these data to develop a refined list of contracts.

## **B. Local Public Agency (LPA) Contract Data**

Under its Stewardship Agreement with FHWA, ADOT administers FHWA funding that goes to local agencies throughout the state. ADOT established the Local Public Agency (LPA) Section to administer these local agency contracts. Sometimes ADOT awards those contracts on behalf of the local agencies. In other instances, cities, counties, regional transportation agencies, other local agencies and tribal entities award transportation contracts and ADOT reimburses the local agencies using federal or state funds.<sup>2</sup>

When federal funds are involved, USDOT requires local agencies to comply with federal requirements including implementation of the Federal DBE Program.

ADOT funds some of the local agency projects solely using state funds. In addition to any federal requirements, Arizona state law governs local government public works contracting.

**Certification Acceptance agencies.** Eight Certification Acceptance (CA) agencies self-advertise, award and manage their own engineering and construction contracts awarded using LPA money from ADOT. The eight agencies are two counties (Maricopa and Pima counties) and six cities (Chandler, Mesa, Phoenix, Scottsdale, Tempe and Tucson). ADOT administers the advertising, awarding and managing of all other local agency construction and engineering contracts. (Occasionally, other local agencies request to administer engineering contracts once approved by ADOT.)

**Data collection.** ADOT’s LPA Section provided a list of LPA contracts with activity during the July 2007 through June 2013 study period. These LPA data identified the local agency, a project description, funding source and agreement date.

---

<sup>2</sup> Sometimes LPA funds go to reimburse local agencies for work performed with their own forces. Such work is not included in the study.

The eight Certification Acceptance (CA) agencies provided contract information as well, at the mutual request of ADOT and Keen Independent.

- CA Program agency representatives were asked to provide the award amount or actual payment amounts to all prime contractors and subcontractors involved in the relevant project phases.
- Local agencies were asked to e-mail the data back to Keen Independent or ADOT. Contact information for Keen Independent and ADOT staff was provided if local agencies had any questions.

After compiling the data available from ADOT records and the CA agencies, Keen Independent reviewed project descriptions to ensure that the type of work involved was consistent with the transportation-related engineering and construction contracts examined in the study.

### **C. ADOT Bid and Proposal Data**

To complete case studies of ADOT's contracting processes, Keen Independent analyzed firms bidding and proposing on a sample of ADOT construction contracts and engineering-related agreements.

- ADOT provided bidder information for construction contracts from July 2007 through June 2013. From those data, Keen Independent examined more than 125 bidders for a sample of more than 65 ADOT construction contracts.
- Keen Independent also collected information concerning proposers on a sample of 28 ADOT engineering-related contracts from July 2007 through June 2013. Data for these 28 agreements included 367 qualification statements or proposal submissions from 133 different firms.

### **D. Characteristics of Utilized Firms and Bidders**

For each firm identified as working on an ADOT or local agency contract, Keen Independent attempted to collect business characteristics including the race, ethnicity and gender of the business owner. Keen Independent also collected information about bidders and proposers (including those not receiving work). Firm-level data included company name, address, race/ethnicity and gender ownership, and whether the firm was DBE certified.

Keen Independent compiled company information from multiple sources. ADOT and local agencies provided contact and other information on businesses that they utilized as prime contractors and subcontractors. The study team obtained additional information about utilized firms from Dun & Bradstreet and other sources.

Collecting data on the race, ethnicity and gender ownership of utilized firms was key to building the database on firm characteristics.

Sources of information to determine whether firms were owned by minorities or women (including race/ethnicity) and whether MBE/WBEs were DBE-certified, included:

- Study team telephone interviews with firm owners and managers (attempted with each utilized firm with a contract over \$5,000);
- Information from the 2014 AZ UTRACS database;
- ADOT data on firms certified as DBEs in the past (whether or not they were currently certified);
- Other review of firm information (i.e., information about ownership on firm websites);
- Information from Dun & Bradstreet; and
- ADOT staff review.

## **E. ADOT Review**

ADOT reviewed Keen Independent contract data during several stages of the study process. The study team met with ADOT staff multiple times to review data collection, information the study team gathered, sample data for specific contracts and preliminary results. After Keen Independent developed an initial database for construction contracts, ADOT Contracts and Specifications Section staff conducted a detailed review of those data.

ADOT also reviewed the racial, ethnicity and gender coding of firm ownership for utilized firms as Keen Independent prepared the utilization and disparity analyses.

Keen Independent reviewed and incorporated this ADOT feedback throughout the study process.

## **F. Data Limitation**

Two limitations concerning contract data collection and analysis are worth noting.

- ADOT maintains comprehensive records about its prime contracts and most areas of subcontracting for its larger construction contracts. As previously discussed, state law requires listing of certain subcontractors at time of award of a construction contract as well as tracking of the value of subcontracts over the course of a contract. Even so, ADOT commitment and payment data for truckers, suppliers and certain other subcontract disciplines on its Procurement contracts were not complete. Although these limitations have little effect on Keen Independent's overall analysis, as the areas of data limitations also tend to be low dollar volume, ADOT should seek to improve data collection for Procurement contracts.
- Although Keen Independent made extensive efforts to correctly identify the race, ethnicity and gender of company business owners receiving ADOT prime contracts and subcontracts, there could be some inaccuracy in those data. For example, some sources of data showed differing ownership information for an individual firm that the study team had to resolve, which could lead to inaccuracies. Therefore, Keen Independent applied multiple layers of review of these results, including ADOT staff review. It is unlikely that any errors in the ownership data would have a material effect on overall results.

## **APPENDIX D.**

### **General Approach to Availability Analysis**

The study team used a custom census approach to analyze the availability of minority- and women-owned business enterprises (MBE/WBEs) for ADOT and local agency transportation-related construction and engineering prime contracts and subcontracts. Appendix D further explains the availability methodology and results and discussion presented in Chapter 5. Keen Independent updated this appendix from what was included in the 2014 Availability Study report. Appendix D includes discussions of:

- A. General approach to collecting availability information;
- B. Development of the interview instruments;
- C. Execution of interviews; and
- D. Additional considerations related to measuring availability.

Keen Independent provides the interview instrument at the end of this appendix.

#### **A. General Approach to Collecting Availability Information**

Keen Independent collected information from firms about their availability for ADOT and local government contracts through telephone interviews.

**Listings.** The firms contacted in the availability interviews primarily came from two sources:

- Company representatives who had previously identified themselves to ADOT as interested in learning about future work by registering with ADOT's Arizona Unified Transportation Registration and Certification System (AZ UTRACS); and
- Businesses that Dun & Bradstreet (D&B) identified in certain transportation contracting-related subindustries in Arizona (D&B's Hoover's business establishment database).

The availability analysis focused on companies in Arizona performing types of work relevant to ADOT and local agency transportation construction and engineering contracts (including subcontracts, trucking and supplies for those contracts). As such, Keen Independent did not include all of the listings in the AZ UTRACS or D&B database in the availability interviews, as described below.

**AZ UTRACS.** Individuals and businesses interested in bidding on ADOT construction- and engineering-related contracting opportunities can register as a vendor in ADOT's Arizona Unified Transportation Registration and Certification System (AZ UTRACS), an online database of firms that have indicated they are ready, willing and able to perform work on ADOT transportation projects in the State of Arizona. ADOT provided a registration list of about 1,500 subscribers as of April 2014. Registered firms included construction, engineering and related firms.

Because Keen Independent identified Arizona as the relevant geographic market area for the disparity study, the study team only included AZ UTRACS listings for individuals or companies with Arizona mailing addresses. Keen Independent also attempted to exclude from the AZ UTRACS database any listings for government agencies or not-for-profit organizations.

**Dun & Bradstreet Hoover's database.** Dun & Bradstreet's Hoover's affiliate maintains the largest commercially-available database of businesses in the United States. The study team used D&B listings to supplement the companies identified in the ADOT AZ UTRACS database.

Keen Independent determined the types of work involved in ADOT contract elements by reviewing prime contract and subcontract dollars that went to different types of businesses during the study period. D&B classifies types of work by 8-digit work specialization codes.<sup>1</sup> Figure D-1 on the following page identifies the work specialization codes the study team determined were the most related to the study contract dollars.

Keen Independent obtained a list of firms from the D&B Hoover's database within relevant work codes that had locations within Arizona. D&B provided phone numbers for these businesses. Keen Independent obtained 10,283 business listings from this source (this count includes duplicate records).

**Total listings.** Keen Independent attempted to consolidate information when a firm had multiple listings across these data sources. After consolidation, the data sources provided 12,459 unique listings for the availability interviews.

Keen Independent did not draw a sample of those firms for the availability analysis; rather, the study team attempted to contact each business identified through telephone interviews and other methods described below.

**Telephone interviews.** Keen Independent retained Customer Research International (CRI) to conduct telephone interviews with listed businesses. After receiving the list described above, CRI used the following steps to complete telephone interviews with business establishments:

- Firms were contacted by telephone. Up to five phone calls were made at different times of day and different days of the week to attempt to reach each company.
- Interviewers indicated that the calls were made on behalf of the Arizona Department of Transportation for purposes of expanding its list of companies interested in performing ADOT transportation-related work.
- Some firms indicated in the phone calls that they did not work in the transportation contracting industry or had no interest in ADOT work, so no further interview was necessary. (Such interviews were treated as complete at that point.)

**Other avenues to complete an interview.** Even if a company was not directly contacted by the study team, business owners could ask to complete an availability interview for their transportation contracting-related companies.

- Firm owners could also request that questionnaires be faxed or emailed to them. Fourteen firms returned completed questionnaires via fax and 31 firms returned them via email.

Keen Independent posted information about the interviews on the [www.adotdbestudy.com](http://www.adotdbestudy.com) website maintained throughout the project. Interested companies could request to have a member of the study team contact them for an interview.

---

<sup>1</sup> D&B has developed 8-digit industry codes to provide more precise definitions of firm specializations than the 4-digit SIC codes or the NAICS codes that the federal government has prepared.



Figure D-1. D&B 8-digit codes for availability list source			
Code	Description	Code	Description
07119906	Soil testing services	16299902	Earthmoving contractor
07820207	Sodding contractor	16299903	Land clearing contractor
07829903	Landscape contractors	16299904	Pile driving contractor
14420000	Construction sand and gravel	16299906	Trenching contractor
14420200	Gravel and pebble mining	17210200	Commercial painting
14420201	Gravel mining	17210300	Industrial painting
15410000	Industrial buildings and warehouses	17210302	Bridge painting
15419900	Industrial buildings and warehouses, nec	17210303	Pavement marking contractor
15419905	Industrial buildings, new construction, nec	17310000	Electrical work
15419908	Prefabricated building erection, industrial	17319903	General electrical contractor
15419909	Renovation, remodeling and repairs: industrial buildings	17410100	Foundation and retaining wall construction
15419910	Steel building construction	17410102	Retaining wall construction
15419912	Warehouse construction	17710000	Concrete work
15420000	Nonresidential construction, nec	17710200	Curb and sidewalk contractors
15420100	Commercial and office building contractors	17710201	Curb construction
15420101	Commercial and office building, new construction	17710202	Sidewalk contractor
15420102	Commercial and office buildings, prefabricated erection	17710301	Blacktop (asphalt) work
15420103	Commercial and office buildings, renovation and repair	17719901	Concrete pumping
15420300	Garage and service station contractors	17719902	Concrete repair
15420301	Garage construction	17719904	Foundation and footing contractor
15420400	Specialized public building contractors	17910000	Structural steel erection
15420402	Fire station construction	17919900	Structural steel erection, nec
15429900	Nonresidential construction, nec, nec	17919902	Concrete reinforcement, placing of
15429901	Custom builders, non-residential	17919905	Iron work, structural
15429902	Design and erection, combined: non-residential	17919907	Precast concrete struct. frmgs or panels, placing
16110000	Highway and street construction	17940000	Excavation work
16110100	Highway signs and guardrails	17949901	Excavation and grading, building construction
16110101	Guardrail construction, highways	17950000	Wrecking and demolition work
16110102	Highway and street sign installation	17959901	Concrete breaking for streets and highways
16110200	Surfacing and paving	17959902	Demolition, buildings and other structures
16110201	Airport runway construction	17990900	Building site preparation
16110202	Concrete construction: roads, hwy, sidewalks	17990901	Boring for building construction
16110203	Grading	17990903	Shoring and underpinning work
16110204	Highway and street paving contractor	17999904	Building mover, including houses
16110205	Resurfacing contractor	17999906	Core drilling and cutting
16110206	Sidewalk construction	17999907	Dewatering
16110207	Gravel or dirt road construction	17999908	Diamond drilling and sawing
16119900	Highway and street construction, nec	17999912	Fence construction
16119901	General contractor, hwy and street construction	17999929	Sign installation and maintenance
16119902	Highway and street maintenance	17999932	Welding on site
16119903	Highway reflector installation	29110501	Asphalt or asphaltic matls, made in refineries
16220000	Bridge, tunnel, and elevated hwy construction	29110505	Road materials, bituminous
16229900	Bridge, tunnel, and elevated highway, nec	29110506	Road oils
16229901	Bridge construction	29510000	Asphalt paving mixtures and blocks
16229902	Highway construction, elevated	29510200	Paving mixtures
16229903	Tunnel construction	29510201	Asphalt/asphaltic paving mixtures (not from ref.)
16229904	Viaduct construction	29510202	Coal tar paving materials (not from refineries)
16239902	Manhole construction	29510203	Concrete, asphaltic (not from refineries)
16290400	Land preparation construction	29510204	Concrete, bituminous
16299901	Blasting contractor, except building demolition	29510206	Road materials, bituminous (not from ref.)

Figure D-1. D&B 8-digit codes for availability list source, continued			
Code	Description	Code	Description
32720000	Concrete products, nec	50510209	Forms, concrete construction (steel)
32720710	Pier footings, prefabricated concrete	50630504	Signaling equipment, electrical
32720711	Piling, prefabricated concrete	50990304	Reflective road markers
32729903	Paving materials, prefabricated concrete	52110502	Cement
32729904	Prestressed concrete products	52110506	Sand and gravel
32730000	Ready-mixed concrete	55110000	New and used car dealers
33120400	Structural and rail mill products	55119900	New and used car dealers, nec
33120405	Structural shapes and pilings, steel	55119901	Automobiles, new and used
33120500	Bar, rod, and wire products	55119902	Pickups, new and used
34410200	Fabricated structural metal for bridges	55119903	Trucks, tractors, and trailers: new and used
34410201	Bridge sections, prefabricated, highway	55119904	Vans, new and used
34490100	Fabricated bar joists, concrete reinforcing bars	73530000	Heavy construction equipment rental
34490101	Bars, concrete reinforcing: fabricated steel	73530100	Oil equipment rental services
41110000	Local and suburban transit	73530101	Oil field equipment, rental or leasing
41110100	Bus transportation	73530102	Oil well drilling equipment, rental or leasing
41110101	Bus line operations	73539901	Cranes and aerial lift equipment, rental or leasing
41110102	Commuter bus operation	73539902	Earth moving equipment, rental or leasing
41110200	Street and trolley car transportation	73599912	Work zone traffic eqpt (flags, cones, barrels, etc.)
41110201	Streetcar operation	73890200	Inspection and testing services
41110202	Trolley operation	73890800	Mapmaking services
41119900	Local and suburban transit, nec	73890801	Mapmaking or drafting, including aerial
41310000	Intercity and rural bus transportation	73890802	Photogrammatic mapping
41319900	Intercity and rural bus transportation, nec	73899909	Crane and aerial lift service
41319901	Intercity bus line	73899921	Flagging service (traffic control)
41319902	Intercity highway transport, special service	73899937	Pilot car escort service
42120000	Local trucking, without storage	87110000	Engineering services
42120200	Liquid transfer services	87110400	Construction and civil engineering
42120201	Liquid haulage, local	87110402	Civil engineering
42120202	Petroleum haulage, local	87110404	Structural engineering
42129904	Drying, local: without storage	87119903	Consulting engineer
42129905	Dump truck haulage	87120101	Architectural engineering
42129908	Heavy machinery transport, local	87130000	Surveying services
42129912	Steel hauling, local	87139900	Surveying services, nec
42130000	Trucking, except local	87139901	Photogrammetric engineering
42139902	Building materials transport	87139902	Aerial digital imaging
42139904	Heavy hauling, nec	87310302	Environmental research
42139905	Heavy machinery transport	87330201	Archeological expeditions
42139908	Liquid petroleum transport, non-local	87340000	Testing laboratories
49590102	Sweeping service: road, airport, parking lot, etc.	87349909	Soil analysis
50320100	Paving materials	87419902	Construction management
50320101	Asphalt mixture	87420402	Construction project management consultant
50320102	Paving mixtures	87420410	Transportation consultant
50320504	Concrete mixtures	87480200	Urban planning and consulting services
50329901	Aggregate	87480204	Traffic consultant
50329904	Cement	87489905	Environmental consultant
50329905	Gravel	89990700	Earth science services
50329908	Stone, crushed or broken	89990701	Geological consultant
50399912	Soil erosion control fabrics	89990702	Geophysical consultant

## B. Development of the Interview Instruments

Keen Independent developed the interview instruments through the following steps:

- Keen Independent drafted an availability interview instrument; and
- ADOT staff reviewed the draft interview instrument.

The final telephone interview instrument is presented at the end of this appendix.

**Interview structure.** The availability interview included 12 sections. The study team did not know the race, ethnicity or gender of the business owner when calling a business establishment. Obtaining that information was a key component of the interview.

Areas of interview questions included:

- **Identification of purpose.** The interviews began by identifying ADOT as the interview sponsor and describing the purpose of the study (i.e., “compiling a list of companies interested in construction, maintenance or design on highway and other state or local government transportation-related projects”).
- **Verification of correct business name.** CRI confirmed that the business reached was in fact the business sought out.
- **Contact information.** CRI then collected complete contact information for the establishment and the individual who completed the interview.
- **Verification of work related to transportation-related projects.** The interviewer asked whether the organization does work or provides materials related to construction, maintenance, or design on transportation-related projects (Question 1). Interviewers continued the interview with businesses that responded “yes” to that question.
- **Verification of for-profit business status.** The survey then asked whether the organization was a for-profit business as opposed to a government or not-for-profit entity (Question 2). Interviewers continued the interview with businesses that responded “yes” to that question.
- **Identification of main lines of business.** Businesses then chose from a list of work types that their firm performed in categories of construction-related work, engineering-related work, and supply activities. In addition to choosing all areas that the firms did work, the study team asked businesses to briefly describe their main line of business as an open-ended question.
- **Sole location or multiple locations.** The interviewer asked business owners or managers if their businesses had other locations and whether their establishments were affiliates or subsidiaries of other firms. (Keen Independent combined responses from multiple locations into a single record for multi-establishment firms.)
- **Past bids or work with government agencies and private sector organizations.** The survey then asked about bids and work on past government and private sector contracts. The questions were asked in connection with both prime contracts and subcontracts.

- **Qualifications and interest in future transportation work.** The interviewer asked about businesses' qualifications and interest in future work with ADOT and other government agencies in connection with both prime contracts and subcontracts.
- **Geographic areas.** Interviewees were asked whether they could do work in several geographic areas in Arizona: Central Arizona, Southern Arizona and Northern Arizona.
- **Largest contracts.** The study team asked businesses to identify the value of the largest transportation-related contract or subcontract on which they had bid on or had been awarded in Arizona during the past seven years.
- **Ownership.** Businesses were asked if at least 51 percent of the firm was owned and controlled by women and/or minorities. If businesses indicated that they were minority-owned, they were also asked about the race and ethnicity of owners. The study team reviewed reported ownership against other available data sources such as DBE and MBE directories.
- **Business background.** The study team asked businesses to identify the approximate year in which they were established. The interviewer asked several questions about the size of businesses in terms of their revenues and number of employees. For businesses with multiple locations, this section also asked about their revenues and number of employees across all locations.
- **Potential barriers in the marketplace.** Establishments were asked a series of questions concerning general insights about the marketplace and ADOT contracting practices including obtaining loans, bonding and insurance. The interview also included an open-ended question asking for any additional barriers or general thoughts about contracting in Arizona. In addition, the interview included a question asking whether interviewees would be willing to participate in a follow-up interview about marketplace conditions.

### **C. Execution of Interviews**

Keen Independent held planning and training sessions with CRI as part of the launch of the availability interviews. For the 2014 Availability Study for FHWA-funded contracts, CRI began conducting full availability interviews in April of 2014 and completed the interviews in early June.

As part of the Disparity Study, Keen Independent determined the additional types of work involved in ADOT's FAA- and FTA-funded contracts (they were vertical construction, vehicle purchases and transit operations). Keen Independent purchased names of firms providing these services from Dun & Bradstreet and provided them to CRI to conduct additional availability telephone interviews in early 2015. In both the 2014 and 2015 survey waves, CRI submitted weekly data reports to Keen Independent.

To minimize non-response, CRI made at least five attempts at different times of day and on different days of the week to reach each business establishment. CRI identified and attempted to interview an available company representative such as the owner, manager or other key official who could provide accurate and detailed responses to the questions included in the interview.

**Establishments that the study team successfully contacted.** Figure D-2 presents the disposition of the businesses the study team attempted to contact for availability interviews.

Note that the following analysis is based on business counts after Keen Independent removed duplicate listings (beginning list of 12,459 unique businesses).

Figure D-2.  
Disposition of  
attempts to  
interview  
business  
establishments

Note:

Study team made at  
least five attempts to  
complete an interview  
with each establishment.

Source:

Keen Independent from  
2014 and 2015  
availability Interviews.

	Number of firms	Percent of business listings
<b>Beginning list (unique businesses)</b>	<b>12,459</b>	
Less non-working phone numbers	1,578	
Less wrong number	702	
<b>Firms with working phone numbers</b>	<b>10,179</b>	<b>100.0 %</b>
Less no answer	4,154	40.8
Less could not reach responsible staff member	390	3.8
Less unreturned fax/email	450	4.4
<b>Firms successfully contacted</b>	<b>5,185</b>	<b>50.9 %</b>

**Non-working or wrong phone numbers.** Some of the business listings that the study team attempted to contact were:

- Non-working phone numbers (1,578); or
- Wrong numbers for the desired businesses (702).

Some non-working phone and wrong numbers reflected business establishments that closed, were sold or changed their names and phone numbers between the time that a source listed them and the time that the study team attempted to contact them.

**Working phone numbers.** As shown in Figure D-2, there were 10,179 businesses with working phone numbers that the study team attempted to contact. For various reasons, the study team was unable to contact some of those businesses:

- **No answer.** Some businesses could not be reached after at least five attempts at different times of the day and on different days of the week (4,154) establishments.
- **Could not reach responsible staff member.** For a small number of businesses (390), a responsible staff person could not be reached after repeated attempts.
- **Unreturned fax/email.** The study team sent faxes or emailed the availability questionnaires upon request. There were 450 businesses that requested such surveys but did not return them.

After taking those unsuccessful attempts into account, the study team was able to successfully contact 5,185 businesses, or 51 percent of those with working phone numbers.

**Establishments included in the availability database.** Figure D-3 presents the disposition of the 5,185 businesses the study team successfully contacted and how that number resulted in the 1,429 businesses the study team included in the availability database.

**Figure D-3.**  
Disposition of  
successfully  
contacted  
businesses

Source:  
Keen Independent from  
2014 and 2015 availability  
Interviews.

	Number of firms
<b>Firms successfully contacted</b>	<b>5,185</b>
Less businesses not interested in discussing availability for ADOT work	1,385
Less language barrier	7
<b>Firms that completed interviews about business characteristics</b>	<b>3,793</b>
Less no road and highway related work	1,962
Less not a for-profit business	402
<b>Firms included in availability database</b>	<b>1,429</b>

**Establishments not interested in discussing availability for ADOT work.** Of the 5,185 businesses that the study team successfully contacted, 1,385 were not interested in discussing their availability for ADOT work.

**Language barriers.** Businesses with language barriers during an initial call were re-contacted by a Spanish-speaking CRI interviewer. The interviewee was asked if there was anyone available to perform the interview in English. If not, Questions 1 and 2 of the instrument were asked in Spanish. If the firm appeared that it performed transportation related work, the interviewer asked if the company would like to complete an email or faxed questionnaire (in English), which was then sent. This approach appeared to nearly eliminate any language barriers to participating in the availability interviews. Only seven firms successfully contacted by CRI appeared to not participate due to language barriers. Thus, 3,793 of successfully-contacted businesses (73%) completed availability interviews.

**Businesses included in the availability database.** Many firms completing interviews were excluded from the final availability database because they indicated that they did not perform work related to transportation contracting or reported that they were not a for-profit business:

- Keen Independent excluded 1,962 businesses that indicated that they were not involved in transportation contracting work.
- Of the completed interviews, 402 indicated that they were not a for-profit business (including non-profits, government agencies or homes). Interviews ended when respondents reported that their establishments were not for-profit businesses.

After those final screening steps, the interview effort produced a database of 1,429 businesses potentially available for ADOT work.

**Coding responses from multi-location businesses.** As described above, there were multiple responses from some firms. Responses from different locations of the same business were combined into a single, summary data record after reviewing the multiple responses.

## D. Additional Considerations Related to Measuring Availability

The study team made several additional considerations related to its approach to measuring availability, particularly as they related to ADOT's implementation of the Federal DBE program.

**Not providing a count of all businesses available for ADOT work.** The purpose of the availability interviews was to provide precise and representative estimates of the percentage of MBE/WBEs potentially available for ADOT work. The availability analysis did not provide a comprehensive listing of every business that could be available for ADOT work and should not be used in that way. Federal courts have approved the custom census approach to measuring availability that Keen Independent used in this study. The United States Department of Transportation's (USDOT's) "Tips for Goals Setting in the Disadvantaged Business Enterprise (DBE) Program" also recommends a similar approach to measuring availability for agencies implementing the Federal DBE Program.<sup>2</sup>

**Not using MBE/WBE or DBE directories, prequalification lists or bidders lists.** USDOT guidance for determining MBE/WBE availability recommends dividing the number of businesses in an agency's DBE directory by the total number of businesses in the marketplace, as reported in U.S. Census data. As another option, USDOT suggests using a list of prequalified businesses or a bidders list to estimate the availability of MBE/WBEs for an agency's prime contracts and subcontracts.

The methodology applied in this study takes a custom census approach to measuring availability and adds several layers of refinement to a simple head count approach. For example, the interviews provide data on businesses' qualifications, relative bid capacity and interest in ADOT work, which allowed the study team to take a more refined approach to measuring availability. Court cases involving state implementation of the Federal DBE Program have approved the use of a custom census approach to measuring availability.

Note that Keen Independent used DBE directories and other sources of information to confirm information about the race/ethnicity and gender of business ownership that it obtained from availability interviews. The study team re-contacted companies for clarification in the event of any inconsistencies in race, ethnicity and gender ownership information for the firm.

**Using D&B lists.** Dun & Bradstreet was one source of business listings in Keen Independent's availability analysis. Note that D&B does not require firms to pay a fee to be included in its listings — it is completely free to listed firms. D&B provides the most comprehensive private database of business listings in the United States. Even so, the database does not include all establishments operating in Arizona due to the following reasons:

- There can be a lag between formation of a new business and inclusion in D&B listings, meaning that the newest businesses may be underrepresented in the sample frame.
- Although D&B includes home-based businesses, those businesses are more difficult to identify and are thus somewhat less likely than other businesses to be included in D&B listings. Small, home-based businesses are more likely than large businesses to be minority- or women-owned, which again suggests that MBE/WBEs might be underrepresented in the final availability database.

Keen Independent is not able to quantify how much, if any, underrepresentation of MBE/WBEs exists in the final availability database. However, Keen Independent concludes that any such underrepresentation would be minor and would not have a meaningful effect on the availability and disparity analyses presented in this

---

<sup>2</sup> Tips for Goals Setting in the Disadvantaged Business Enterprise (DBE) Program, <http://www.osdbu.dot.gov/dbeprogram/tips.cfm>  
KEEN INDEPENDENT 2015 DISPARITY STUDY

report. Keen Independent also used the ADOT AZ UTRACS source of business listings for the availability analysis, which might capture some firms not included in the D&B data.

**Selection of specific subindustries.** Keen Independent identified specific subindustries when compiling business listings from Dun & Bradstreet. D&B provides highly specialized, 8-digit codes to assist in selecting firms within specific specializations. However, there are limitations when choosing specific D&B work specialization codes to define sets of establishments to be interviewed, which leave some businesses off the contact list. However, Keen Independent use of the ADOT AZ UTRACS data for Arizona helps to mitigate this potential concern.

**Non-response bias.** An analysis of non-response bias considers whether businesses that were not successfully interviewed are systematically different from those that were successfully interviewed and included in the final data set. There are opportunities for non-response bias in any survey effort. The study team considered the potential for non-response bias due to:

- Research sponsorship;
- Work specializations; and
- Language barriers.

**Research sponsorship.** Interviewers introduced themselves by identifying ADOT as the interview sponsor because businesses may be less likely to answer somewhat sensitive business questions if the interviewer was unable to identify the sponsor.

**Work specializations.** Businesses in highly mobile fields, such as trucking, may be more difficult to reach for availability interviews than businesses more likely to work out of fixed offices (e.g., engineering firms). That assertion suggests that response rates may differ by work specialization. Simply counting all interviewed businesses across work specializations to determine overall MBE/WBE availability would lead to estimates that were biased in favor of businesses that could be easily contacted by email or telephone.

However, work specialization as a potential source of non-response bias in the availability analysis is minimized because the availability analysis examines businesses within particular work fields before determining an MBE/WBE availability figure. In other words, the potential for trucking firms to be less likely to complete an interview is less important because the percentage of MBE/WBE availability is calculated within trucking before being combined with information from other work fields in a dollar-weighted fashion. In this example, work specialization would be a greater source of non-response bias if particular subsets of trucking firms were less likely than other subsets to be easily contacted by telephone.

**Potential language barriers.** Because of the methods explained previously in this appendix, any language barriers were minimal. Study results do not appear to have been affected by conducting the principal portions of the availability interview in English (including faxed and emailed questionnaires). Callbacks to firms in Spanish when an initial call identified an individual who only spoke Spanish appeared to be effective.



**Response reliability.** Business owners and managers were asked questions that may be difficult to answer, including questions about revenues and employment.

Keen Independent explored the reliability of interview responses in a number of ways. For example:

- Keen Independent reviewed data from the availability interviews in light of information from other sources such as AZ UTRACS and other vendor information that the study team collected from ADOT. This includes data on the race/ethnicity and gender of the owners of DBE-certified businesses and was compared with interview responses concerning business ownership.
- Keen Independent compared interview responses about the largest contracts that businesses won during the past seven years with actual ADOT and local agency contract data.

A copy of the interview instrument for construction and engineering follows. (The interview instruments for vehicle purchases and transit services were customized for those specific industry segments.)

# ADOT Disparity Study — Standard Availability Interview Instrument

Hello. My name is *[interviewer name]*. We are calling on behalf of the Arizona Department of Transportation (ADOT). This is not a sales call. ADOT [pronounced “A-dot”] is compiling a list of companies interested in working on road and highway, transit or aviation projects. This includes any construction, engineering and design, trucking and materials supply on highways, roads, bridges, transit systems, airports and related projects for state and local governments.

Who can I speak with to get the information we need from your firm?

[After reaching THE OWNER OR an appropriately senior staff member, the interviewer should re-introduce the purpose of the survey and begin with questions]

[IF NEEDED ... We are contacting thousands of contractors, engineering firms, trucking companies, suppliers and other types of businesses in Arizona.]

IF INTERVIEWEE REQUESTS ADDITIONAL INFORMATION ... You can visit the study website at [www.ADOTdbestudy.com](http://www.ADOTdbestudy.com) to learn more. And, you can call Vivien Lattibeaudiere at ADOT, 602-712-4071.

[IF ASKED, THE INFORMATION DEVELOPED IN THESE INTERVIEWS WILL ADD TO ADOT’S EXISTING DATA ON COMPANIES INTERESTED IN WORKING WITH THE DEPARTMENT]

X1. I have a few basic questions about your company and the type of work you do. Can you confirm that this is *[firm name]*?

- ☐ Right company – SKIP TO 1
- ☐ Not right company
- ☐ Refuse to give information – TERMINATE

Y1. Can you give me any information about *[firm name]*?

- ☐ Yes, same owner doing business under a different name – SKIP TO Y4
- ☐ Yes, can give information about named company
- ☐ Company bought/sold/changed ownership – SKIP TO Y4
- ☐ No, does not have information – TERMINATE
- ☐ Refused to give information – TERMINATE

Y3. Can you give me the complete address or city for [firm name]? – SKIP TO Y5

(NOTE TO INTERVIEWER - RECORD IN THE FOLLOWING FORMAT:

- ☐ STREET ADDRESS \_\_\_\_\_
- ☐ CITY \_\_\_\_\_
- ☐ STATE \_\_\_\_\_
- ☐ ZIP \_\_\_\_\_

Y4. And what is the new name of the business that used to be [firm name]?

- ☐ (ENTER UPDATED NAME)

Y5. Can you give me the name of the owner or manager of the new business?

- ☐ (ENTER UPDATED NAME)

Y6. Can I have a telephone number for him/her?

- ☐ (ENTER UPDATED PHONE)

Y7. Can you give me the complete address or city for [new firm name]?

- ☐ STREET ADDRESS \_\_\_\_\_
- ☐ CITY \_\_\_\_\_
- ☐ STATE \_\_\_\_\_
- ☐ ZIP \_\_\_\_\_

Y8. Do you work for this new company?

- ☐ Yes
- ☐ No - TERMINATE

1. Does your firm do any work related to road and highway, transit or aviation projects? This includes any construction, engineering and design, trucking and materials supply on highways, roads, bridges, transit systems, airports and related projects.

- ☐ Yes
- ☐ No

2. Is your firm a business, as opposed to a non-profit organization, a foundation or a government office?

- ☐ Yes
- ☐ No

**IF RESPONDENT ANSWERS NO TO QUESTION 1 OR 2, THE SURVEY IS COMPLETE.**

**IF YES TO QUESTIONS 1 AND 2, CONTINUE TO QUESTION 3.**

## Type of Work

---

3. What types of work does your firm perform related to construction, maintenance or design of transportation projects? Please indicate all that apply.

### Construction-related

- ☐ Milling
- ☐ Asphalt paving
- ☐ Pavement surface treatment (such as sealing)
- ☐ Portland cement concrete paving
- ☐ Concrete flatwork (sidewalk, curb and gutter)
- ☐ Structural concrete work
- ☐ Concrete pumping
- ☐ Concrete cutting
- ☐ Bridge work
- ☐ General road construction and widening
- ☐ Wrecking and demolition
- ☐ Excavation, grading and drainage
- ☐ Guardrail, signs or fencing
- ☐ Drilling and foundations
- ☐ Steel work
- ☐ Underground utilities
- ☐ Electrical work including lighting and signals
- ☐ Striping or pavement marking
- ☐ Painting for road or bridge projects
- ☐ Temporary traffic control
- ☐ Trucking and hauling
- ☐ Landscaping and related work
- ☐ Erosion control
- ☐ Other \_\_\_\_\_

Engineering-related

- ☐ Design engineering
- ☐ Transportation planning
- ☐ Construction management
- ☐ Environmental consulting
- ☐ Soils and materials testing
- ☐ Surveying and mapping
- ☐ Other \_\_\_\_\_

4. Does your firm sell: (Check all that apply.)

- ☐ Aggregate materials supply
- ☐ Asphalt, concrete or other paving materials
- ☐ Traffic or highway signs
- ☐ Fence, guardrail materials
- ☐ Steel
- ☐ Petroleum
- ☐ Other \_\_\_\_\_

5. Please briefly describe the main line of business at your firm. In what industry would you classify the primary line of work at your firm?

---

---

6. Does your firm have offices in multiple locations?

- ☐ Yes                      ☐ No                      ☐ Don't know

7. Is your company a subsidiary or affiliate of another firm?

- ☐ Independent
- ☐ Subsidiary of another firm                      *Parent company name:* \_\_\_\_\_
- ☐ Affiliate of another firm                      *Affiliated company name:* \_\_\_\_\_
- ☐ Don't know

## Role in Construction, Maintenance, Engineering or Other Work

---

8. During the past seven years, has your company submitted a bid or a price quote for any part of a contract for a state or local government agency in Arizona?
- ☐ Yes                      ☐ No                      ☐ Don't know
9. **[Answer if 'Yes' to Q8. Otherwise skip to Q10.]** Were those bids or price quotes to work as a prime contractor, a subcontractor, a trucker/hauler, or as a supplier? Check all that apply.
- ☐ Prime Contractor                      ☐ Trucker / Hauler
- ☐ Subcontractor                      ☐ Supplier
- ☐ Other \_\_\_\_\_
10. During the past seven years, has your company worked on any part of a contract for a state or local government agency in Arizona?
- ☐ Yes                      ☐ No                      ☐ Don't know
11. **[Answer if 'Yes' to Q10. Otherwise skip to Q12.]** Did your company work as a prime contractor, a subcontractor, a trucker/hauler, or as a supplier? Check all that apply.
- ☐ Prime Contractor                      ☐ Trucker / Hauler
- ☐ Subcontractor                      ☐ Supplier
- ☐ Other \_\_\_\_\_
12. During the past seven years, has your company submitted a bid or a price quote for any part of a contract for a private sector project in Arizona?
- ☐ Yes                      ☐ No                      ☐ Don't know
13. **[Answer if 'Yes' to Q12. Otherwise skip to Q14.]** Were those bids or price quotes to work as a prime contractor, a subcontractor, a trucker/hauler, or as a supplier? Check all that apply.
- ☐ Prime Contractor                      ☐ Trucker / Hauler
- ☐ Subcontractor                      ☐ Supplier
- ☐ Other \_\_\_\_\_
14. During the past seven years, has your company worked on any part of a contract for a private sector project in Arizona?
- ☐ Yes                      ☐ No                      ☐ Don't know

15. **[Answer if 'Yes' to Q14. Otherwise skip to Q16]** Did your company work as a prime contractor, a subcontractor, a trucker/hauler, or as a supplier? Check all that apply.
- ☐ Prime Contractor                      ☐ Trucker / Hauler
- ☐ Subcontractor                      ☐ Supplier
- ☐ Other \_\_\_\_\_
16. Thinking about future transportation work, is your company qualified and interested in working with ADOT as a prime contractor?
- ☐ Yes                      ☐ No                      ☐ Don't know
17. Thinking about future transportation-related work, is your company qualified and interested in working with cities, counties, transit agencies, airports or other local agencies in Arizona as a prime contractor?
- ☐ Yes                      ☐ No                      ☐ Don't know
18. Thinking about future transportation-related work, is your company qualified and interested in working with ADOT as a subcontractor, trucker/hauler, or supplier?
- ☐ Yes                      ☐ No                      ☐ Don't know
19. Thinking about future transportation-related work, is your company qualified and interested in working with cities, counties, transit agencies, airports or other local agencies in Arizona as a subcontractor, trucker/hauler, or supplier?
- ☐ Yes                      ☐ No                      ☐ Don't know

#### **Geographic Areas Your Company Serves in Arizona**

---

20. Can your company do work in Central Arizona (such as in the Maricopa-Pinal [pronounced pea-nal'] county area)?
- ☐ Yes                      ☐ No                      ☐ Don't know
21. Can your company do work in Southern Arizona such as the Tucson, Yuma or Wilcox areas?
- ☐ Yes                      ☐ No                      ☐ Don't know
22. We are referring to the rest of the state as Northern Arizona. Can your company do work in Northern Arizona?
- ☐ Yes                      ☐ No                      ☐ Don't know

## Contract History

---

23. In rough dollar terms, what was the largest road and highway-, transit- or aviation-related contract or subcontract your company was awarded in Arizona during the past seven years? Please include any government or private-sector contracts and any contracts not yet completed.
- |   |   |
|---|---|
| <input type="checkbox"/> Less than \$100,000            | <input type="checkbox"/> \$10 million up to \$20 million  |
| <input type="checkbox"/> \$100,000 up to \$500,000      | <input type="checkbox"/> \$20 million up to \$50 million  |
| <input type="checkbox"/> \$500,000 up to \$1 million    | <input type="checkbox"/> \$50 million up to \$100 million |
| <input type="checkbox"/> \$1 million up to \$2 million  | <input type="checkbox"/> More than \$100 million          |
| <input type="checkbox"/> \$2 million up to \$5 million  | <input type="checkbox"/> None                             |
| <input type="checkbox"/> \$5 million up to \$10 million | <input type="checkbox"/> Don't know                       |
24. Was this the largest road and highway-, transit- or aviation-related contract or subcontract that your company bid on or submitted quotes for in Arizona during the past seven years?
- ☐ Yes      ☐ No      ☐ Don't know
25. **[Answer if 'No' in Q24.]** What was the largest road and highway-, transit- or aviation-related contract or subcontract that your company bid on or submitted quotes for in Arizona during the past seven years?
- |   |   |
|---|---|
| <input type="checkbox"/> \$100,000 or less              | <input type="checkbox"/> \$10 million up to \$20 million  |
| <input type="checkbox"/> \$100,000 up to \$500,000      | <input type="checkbox"/> \$20 million up to \$50 million  |
| <input type="checkbox"/> \$500,000 up to \$1 million    | <input type="checkbox"/> \$50 million up to \$100 million |
| <input type="checkbox"/> \$1 million up to \$2 million  | <input type="checkbox"/> More than \$100 million          |
| <input type="checkbox"/> \$2 million up to \$5 million  | <input type="checkbox"/> None                             |
| <input type="checkbox"/> \$5 million up to \$10 million | <input type="checkbox"/> Don't know                       |



## Ownership

---

26. A business is defined as woman-owned if more than half—that is, 51 percent or more—of the ownership and control is by women. By this definition, is your firm a woman-owned business?
- ☐ Yes                      ☐ No                      ☐ Don't know
27. A business is defined as minority-owned if more than half—that is, 51 percent or more—of the ownership and control is African American, Asian, Hispanic, Native American or another minority group. By this definition, is your firm a minority-owned business?
- ☐ Yes                      ☐ No                      ☐ Don't know
28. **[Display if Q27 'Yes' is selected.]** Would you say that the minority group ownership is mostly African American, Asian-Pacific American, Subcontinent Asian American, Hispanic American, or Native American?
- ☐ African American                                      ☐ Native American
- ☐ Asian-Pacific American                                      ☐ Other: \_\_\_\_\_
- ☐ Subcontinent Asian American                                      ☐ Don't know
- ☐ Hispanic American

## Business Background

---

29. About what year was your firm established? \_\_\_\_\_
30. About how many employees did you have working out of just your location, on average, over the past three years?
- \_\_\_\_\_
31. Think about the annual gross revenue of your company, considering just your location. Dun and Bradstreet information for that location indicates annual revenue of about [xxx]. Please estimate the annual average for the past three years (or for the years your company was in business if started after 2010).
- ☐ Less than \$1 million                                      ☐ \$14.1 million to \$19.0 million
- ☐ \$1 million to \$4.5 million                                      ☐ \$19.1 million to \$22.4 million
- ☐ \$4.6 million to \$7 million                                      ☐ \$22.5 million or more
- ☐ \$7.1 million to \$12.5 million                                      ☐ Don't know
- ☐ \$12.6 million to \$14.0 million
32. About how many employees did you have, on average, for all of your locations over the past three years?
- \_\_\_\_\_

33. Think about the annual gross revenue of your company, for all your locations. Please estimate the annual average for the past three years (or for the years your company was in business if started after 2010).

- |   |   |
|---|---|
| <input type="checkbox"/> Less than \$1 million            | <input type="checkbox"/> \$14.1 million to \$19.0 million |
| <input type="checkbox"/> \$1 million to \$4.5 million     | <input type="checkbox"/> \$19.1 million to \$22.4 million |
| <input type="checkbox"/> \$4.6 million to \$7 million     | <input type="checkbox"/> \$22.5 million or more           |
| <input type="checkbox"/> \$7.1 million to \$12.5 million  | <input type="checkbox"/> Don't know                       |
| <input type="checkbox"/> \$12.6 million to \$14.0 million |   |

#### **Barriers or Difficulties**

---

Finally, we're interested in whether your company has experienced barriers or difficulties associated with starting or expanding a business in your industry or with obtaining work. Think about your experiences within the past seven years as you answer these questions.

34. Has your company experienced any difficulties in obtaining lines of credit or loans?

- |                                     |   |
|-------------------------------------|---|
| <input type="checkbox"/> Yes        | <input type="checkbox"/> No             |
| <input type="checkbox"/> Don't know | <input type="checkbox"/> Does not apply |

35. Has your company obtained or tried to obtain a bond for a project?

- |                                     |   |
|-------------------------------------|---|
| <input type="checkbox"/> Yes        | <input type="checkbox"/> No             |
| <input type="checkbox"/> Don't know | <input type="checkbox"/> Does not apply |

36. **[Answer if 'Yes' in Q35. Otherwise skip to Q37.]** Has your company had any difficulties obtaining bonds needed for a project?

- |                                     |   |
|-------------------------------------|---|
| <input type="checkbox"/> Yes        | <input type="checkbox"/> No             |
| <input type="checkbox"/> Don't know | <input type="checkbox"/> Does not apply |

37. Have you had any difficulty in licensing or being prequalified for work in Arizona?

- |                                     |   |
|-------------------------------------|---|
| <input type="checkbox"/> Yes        | <input type="checkbox"/> No             |
| <input type="checkbox"/> Don't know | <input type="checkbox"/> Does not apply |

38. Have any insurance requirements on projects presented a barrier to bidding?

- |                                     |   |
|-------------------------------------|---|
| <input type="checkbox"/> Yes        | <input type="checkbox"/> No             |
| <input type="checkbox"/> Don't know | <input type="checkbox"/> Does not apply |

39. Has the size of large projects presented a barrier to bidding?
- ☐ Yes ☐ No
- ☐ Don't know ☐ Does not apply
40. Has your company experienced any difficulties learning about bid opportunities with ADOT?
- ☐ Yes ☐ No
- ☐ Don't know ☐ Does not apply
41. Has your company experienced any difficulties learning about bid opportunities with cities, counties and other local agencies in Arizona?
- ☐ Yes ☐ No
- ☐ Don't know ☐ Does not apply
42. Has your company experienced any difficulties learning about bid opportunities in the private sector in Arizona?
- ☐ Yes ☐ No
- ☐ Don't know ☐ Does not apply
43. Has your company experienced any difficulties learning about subcontracting opportunities in Arizona?
- ☐ Yes ☐ No
- ☐ Don't know ☐ Does not apply
44. Has your company experienced any difficulties obtaining final approval on your work from inspectors or prime contractors?
- ☐ Yes ☐ No
- ☐ Don't know ☐ Does not apply
45. Has your company experienced any difficulties receiving payment in a timely manner?
- ☐ Yes ☐ No
- ☐ Don't know ☐ Does not apply

- 
- This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

- ☐
- Yes
- ☐
- No

**Thank you for your time. This is very helpful for ADOT.**

## APPENDIX E.

### Entry and Advancement in the Arizona Construction and Engineering Industries

Federal courts have found that Congress “spent decades compiling evidence of race discrimination in government highway contracting, of barriers to the formation of minority-owned construction businesses, and of barriers to entry.”<sup>1</sup> Congress found that discrimination had impeded the formation of qualified minority-owned businesses. In the marketplace appendices (Appendix E through Appendix I), Keen Independent examines whether some of the barriers to business formation that Congress found for minority- and women-owned businesses also appear to occur in Arizona.

Potential barriers to business formation include barriers associated with entry and advancement in the construction and engineering industries. Appendix E examines recent data on education, employment, and workplace advancement that may ultimately influence business formation in the Arizona construction and engineering industries.<sup>2,3</sup>

#### Introduction

Keen Independent examined whether there were barriers to the formation of minority- and women-owned businesses in Arizona. Business ownership often results from an individual entering an industry as an employee and then advancing within that industry. Within the entry and advancement process, there may be some barriers that limit opportunities for minorities and women. Figure E-1 presents a model of entry and advancement in the construction and engineering industries.

Appendix E uses 2000 Census data and 2008-2012 American Community Survey (ACS) data to analyze education, employment, and workplace advancement — all factors that may influence whether individuals start construction or engineering businesses. Keen Independent studied barriers to entry into construction and engineering separately, because entrance requirements and opportunities for advancement differ for those industries.

---

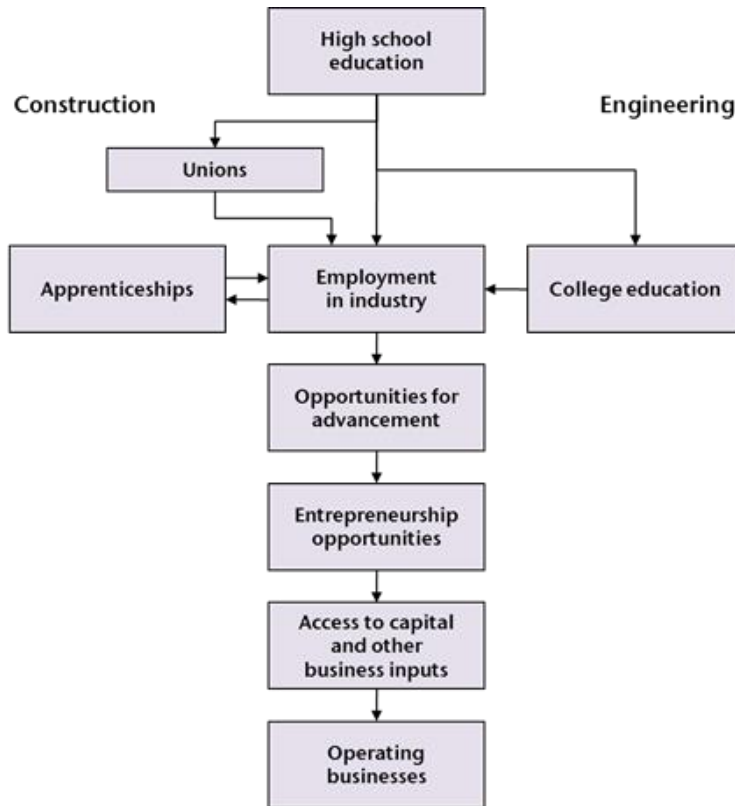
<sup>1</sup> *Sherbrooke Turf, Inc.*, 345 F.3d 964 (8th Cir. 2003) at 970 (citing *Adarand Constructors, Inc.*, 228 F.3d at 1167 – 76); *Western States Paving Co. v. Washington State DOT*, 407 F.3d 983 (9th Cir. 2005) at 992.

<sup>2</sup> In Appendix E and other appendices that present information about local marketplace conditions, information for “engineering” refers to architectural, engineering and related services. Each reference to “engineering” work pertains to those types of services. In the 2000 Census industrial classification system, “Architectural, engineering and related services” was coded as 729. In the 2008-2012 ACS, the same industry was coded as 7290.

<sup>3</sup> Several other report appendices analyze other quantitative aspects of conditions in the Arizona marketplace. Appendix F explores business ownership. Appendix G presents an examination of access to capital. Appendix H considers the success of businesses. Appendix I presents the data sources that Keen Independent used in those appendices.

Figure E-1.  
Model for studying entry  
into the construction and  
engineering industries

Source:  
Keen Independent.



**Representation of minorities among workers and business owners in Arizona.** As a starting point, Keen Independent examined the representation of racial/ethnic minorities among business owners and workers in Arizona. Figure E-2 shows the demographic distribution of business owners in construction and engineering, business owners in other industries (excluding construction and engineering) and the labor force, based on 2008-2012 ACS data. (Demographics of the construction and engineering industries workforce are presented separately later in Appendix E.) The demographic analysis for Arizona in 2008-2012 indicated the following:

- African Americans accounted for only 1 percent of business owners in construction and engineering, 2 percent of business owners in other industries and about 4 percent of all workers.
- Asian Americans also accounted for 1 percent of business owners in construction and engineering, about 5 percent of business owners in other industries and about 4 percent of all workers;
- Hispanic Americans accounted for about 26 percent of business owners in construction and engineering, 21 percent of business owners in other industries and 27 percent of all workers.
- Native Americans and other minorities accounted for approximately 2 percent of all business owners in construction and engineering, 2 percent of owners in other industries and 4 percent of all workers.
- Non-Hispanic whites accounted for about 71 percent of business owners in construction and engineering, 70 percent of business owners in other industries and 61 percent of all workers.

Figure E-2.  
Demographic distribution of business owners and the workforce, 2008-2012

Arizona	Business owners in construction and engineering	Business owners in all other industries	Workforce in all industries
<b>Race/ethnicity</b>			
African American	1.0 % **	1.9 %	4.2 %
Asian American	0.9 **	4.7	3.6
Hispanic American	25.7 **	21.0	27.2
Native American or other minority	1.7	2.0	4.0
<b>Total minority</b>	29.3 %	29.6 %	39.0 %
Non-Hispanic white	70.7	70.4	61.0
<b>Total</b>	100.0 %	100.0 %	100.0 %
<b>Gender</b>			
Female	11.5 % **	42.6 %	46.2 %
Male	88.5 **	57.4	53.8
<b>Total</b>	100.0 %	100.0 %	100.0 %

Note: \*,\*\* Denote that the difference in proportions between business owners in construction and engineering and business owners in all other industries for the given race/ethnicity/gender group is statistically significant at the 90% or 95% confidence level, respectively. The Engineering industry includes "architectural, engineering and related services."

Source: Keen Independent Research from 2008-2012 ACS Public Use Microdata Sample (PUMS). The 2008-2012 raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Keen Independent analyzed demographic data to determine if the differences in business ownership in construction and engineering and business ownership in other industries by race/ethnicity were statistically significant and found:

- Relatively fewer African American business owners in construction and engineering compared to African American business owners in other industries;
- Relatively fewer Asian American business owners in construction and engineering compared to Asian American business owners in other industries; and
- Relatively more Hispanic American business owners in construction and engineering compared to Hispanic American business owners in other industries.

**Representation of women among business owners and workers in Arizona.** Figure E-2 also examines the percentage of Arizona business owners and workers who are women. In 2008-2012, women accounted for about 12 percent of business owners in construction and engineering, significantly less than their representation among business owners in other industries (43 percent). During this period, women comprised 46 percent of the Arizona labor force.

## Construction Industry

Keen Independent examined how education, training, employment and advancement may affect the number of businesses that individuals of different races/ethnicities and genders owned in the Arizona construction industry in 2000 and in 2008-2012.

**Education.** Formal education beyond high school is not a prerequisite for most construction jobs. For that reason, the construction industry often attracts individuals who have less formal education. Based on 2008-2012 ACS data, 34 percent of workers in the Arizona construction industry were high school graduates with no post-secondary education and 25 percent had not finished high school. Only 10 percent of those working in the Arizona construction industry had a four-year college degree or higher, compared to 28 percent of workers in other industries in the state.

**Race/ethnicity.** Based on educational requirements of entry-level jobs and the limited education beyond high school for many Hispanic Americans, Native Americans and African Americans in Arizona, one would expect a relatively high representation of those groups in the Arizona construction industry, especially in entry-level positions.

- Hispanic Americans represented an especially large pool of Arizona workers with no post-secondary education. In 2008-2012, only 10 percent of all Hispanic American workers 25 and older who worked in Arizona held at least a four-year college degree, far below the figure for non-Hispanic whites working in the state (32%).
- The percentage of Native American (12%) and African American (23%) workers in Arizona with a four-year college degree was also substantially lower than that of non-Hispanic whites in 2008-2012.

Almost one-half (48%) of Asian American workers 25 and older in Arizona had four-year college degrees in 2008-2012. One might expect representation of Asian Americans in the Arizona construction industry to be lower than in other industries given this level of education.

**Gender.** On average, female workers in Arizona have a similar level of education as men. Based on 2008-2012 data, 26 percent of female workers and 25 percent of male workers age 25 and older had at least a four-year college degree.

**Apprenticeship and training.** Training in the construction industry is largely on-the-job and through trade schools and apprenticeship programs. Entry-level jobs for workers out of high school are often for laborers, helpers, or apprentices. More skilled positions in the construction industry may require additional training through a technical or trade school or through an apprenticeship or other employer-provided training program. Apprenticeship programs can be developed by employers, trade associations, trade union, or other groups.



Workers can enter apprenticeship programs from high school or trade school. Apprenticeships have traditionally been three- to five-year programs that combine on-the-job training with classroom instruction.<sup>4</sup> Opportunities for those programs across racial and ethnic groups are discussed later in Appendix E.

**Employment.** With educational attainment for minorities and women as context, Keen Independent examined employment in the Arizona construction industry. Figure E-3 presents data from 2000 and 2008-2012 to compare the demographic composition of the construction industry with the total workforce in Arizona.

**Race/ethnicity.** Based on 2008-2012 ACS data, 47 percent of people working in the Arizona construction industry were minorities, up from 40 percent in 2000. The increase was due to growth in the number of Hispanic American construction workers. Examination of the Arizona construction industry workforce in 2008-2012 shows that:

- 39 percent was made up of Hispanic Americans;
- 1 percent was made up of African Americans;
- 1 percent was made up of Asian Americans; and
- 5 percent was made up of Native Americans and other minorities.

In Arizona, Hispanic Americans made up a significantly larger percentage of workers in construction (39%) than in other industries (26%). Native Americans also were a larger percentage of workers in construction (5%) than in other industries (4%). In contrast, African Americans (1%) and Asian Americans (1%) accounted for a smaller percentage of workers in the construction industry than in other industries (4% and 4%, respectively). Figure E-3 provides these results.

The average educational attainment of African Americans is consistent with requirements for construction jobs, so education does not explain the relatively low number of African American workers in the Arizona construction industry. Several studies throughout the United States have argued that race discrimination by construction unions has contributed to the low employment of African Americans in construction trades.<sup>5</sup> The role of unions is discussed more thoroughly later in Appendix E (including research that suggests discrimination has been reduced in unions).

---

<sup>4</sup> Bureau of Labor Statistics, U.S. Department of Labor. 2006-07. "Construction." *Career Guide to Industries*. <http://www.bls.gov/oco/cg/cgs003.htm> (accessed February 15, 2007).

<sup>5</sup> Waldinger, Roger and Thomas Bailey. 1991. "The Continuing Significance of Race: Racial Conflict and Racial Discrimination in Construction." *Politics & Society*, 19(3).

Asian Americans made up 1 percent of the construction workforce and 4 percent of all other workers in Arizona in 2008-2012. The fact that Asian Americans were more likely than other groups to have a college education may explain part of that difference.

Figure E-3.  
Demographics of workers in construction and all other industries, 2000 and 2008-2012

Arizona	Construction		All other industries	
	2008-2012	2000	2008-2012	2000
<b>Race/ethnicity</b>				
African American	1.4 % **	1.6 % **	4.4 %	3.3 %
Asian American	0.8 **	0.8 **	3.9	2.6
Hispanic American	39.4 **	32.5 **	26.2	20.4
Native American or other minority	5.3 **	5.3 **	3.9	4.1
<b>Total minority</b>	<b>46.8 %</b>	<b>40.1 %</b>	<b>38.4 %</b>	<b>30.5 %</b>
Non-Hispanic white	53.2 **	59.9 **	61.6	69.5
<b>Total</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>
<b>Gender</b>				
Female	10.7 % **	11.0 % **	49.2 %	48.3 %
Male	89.3 **	89.0 **	50.8	51.7
<b>Total</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>

Note: \*,\*\* Denote that the difference in proportions between workers in the construction industry and all other industries for the given Census/ACS year is statistically significant at the 90% or 95% confidence level, respectively.

Source: Keen Independent Research from 2000 U.S. Census 5% sample and 2008-2012 ACS Public Use Microdata samples. The 2000 Census and 2008-2012 ACS raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

**Foreign-born workers.** A substantial portion of Arizona construction workers are foreign-born and the vast majority (about 90%) are Hispanic American based on ACS data.

- In 2000, 23 percent of the Arizona construction workers were foreign-born.
- By 2007, 34 percent of the Arizona construction workforce was foreign-born.
- In the 2008 to 2012 time period, foreign-born workers were 24 percent of the Arizona construction workforce.<sup>6</sup>

---

<sup>6</sup> The ACS may not fully reflect undocumented workers due to undercounting. The Department of Homeland Security estimates the undercount is about 5 percent.

The change in composition of the foreign-born construction workforce since 2007 may be a result of several factors, including:

- Changes in state laws concerning employer verification in 2007 with the passage of the Legal Arizona Workers Act (LAWA), which mandated the use of E-Verify for Arizona employers;
- Additional state laws enacted in 2010 with the passage of the Support Our Law Enforcement and Safe Neighborhoods Act (SB1070) regarding immigration enforcement; and
- The Great Recession.

Recent research indicates the passage of LAWA resulted in a decrease in the population of foreign-born workers and Hispanic non-citizens in Arizona as compared with similar states that did not enact such legislation (comparable states in the research had been chosen based on pre-LAWA population and employment trends).<sup>7</sup> Similar research suggests that one result of this legislation was a doubling of the historic self-employment rate among non-citizen Hispanic males with a high school education or less, because entering into independent contractor agreements versus wage and salary employment avoids E-Verify.<sup>8</sup> This research also estimates the effects of the legislation separately from the effects of the recession by comparing the average difference in foreign-born workers between Arizona and comparable states before and after the enactment of LAWA. Results suggest that both events led to a decrease in the foreign-born Arizona workforce.

**Gender.** There are large differences in the representation of women in construction compared with women in all industries. For 2008-2012, women represented 11 percent of all construction workers and 49 percent of workers in the state.

**Academic research concerning any effect of race- and gender-based discrimination.** There is substantial academic literature that has examined whether race- or gender-based discrimination affects opportunities for minorities and women to enter construction trades in the United States. Many studies indicate that race- and gender-based discrimination affects opportunities for minorities and women in the construction industry. For example, the literature concerning women in construction trades has identified substantial barriers to entry and advancement due to gender discrimination and sexual harassment.<sup>9</sup> Research concerning highway construction projects in three major U.S. cities (Boston, Los Angeles, and Oakland) identified evidence of prevailing attitudes that women do not belong in construction, and that such discrimination was worse for women of color than for white women.<sup>10</sup>

---

<sup>7</sup> Bohn, S., M. Lofstrum and S. Raphael. May 2014. "Did the 2007 Legal Arizona Workers Act Reduce the State's Unauthorized Immigrant Population?" *Review of Economics and Statistics* 96.2: 258-269.

<sup>8</sup> Lofstrum, M., S. Bohn and S. Raphael. March 2011. "Lessons from the 2007 Legal Arizona Workers Act." Public Policy Institute of California.

<sup>9</sup> See, for example, Erickson, Julia A and Donna E. Palladino. 2009. "Women Pursuing Careers in Trades and Construction." *Journal of Career Development*. 36(1): 68-89.

<sup>10</sup> Note that those interviews took place between 1996 and 1999. Price, Vivian, 2002. "Race, Affirmative Action and Women's Participation in U.S. Highway Construction." *Feminist Economics*. 8(2), 87-113.

**Importance of unions to entry in the construction industry.** Labor researchers characterize construction as a historically volatile industry that is sensitive to business cycles, making the presence of labor unions important for stability and job security within the industry.<sup>11</sup> The temporary nature of construction work results in uncertain job prospects, and the relatively high turnover of laborers presents a disincentive for construction firms to invest in training. Some researchers have claimed that constant turnover has lent itself to informal recruitment practices and nepotism, compelling laborers to tap social networks for training and work. They credit the importance of social networks with the high degree of ethnic segmentation in the construction industry.<sup>12</sup> Unable to integrate themselves into traditionally white social networks, African Americans and other minorities faced long-standing historical barriers to entering into the industry.<sup>13</sup>

Construction unions aim to provide a reliable source of labor for employers and preserve job opportunities for workers by formalizing the recruitment process, coordinating training and apprenticeships, enforcing standards of work, and mitigating wage competition. The unionized sector of construction would seemingly be the best road for African Americans and other underrepresented groups into the industry. However, some researchers have identified racial discrimination by trade unions that has historically prevented minorities from obtaining employment in skilled trades.<sup>14</sup> Some researchers argue that union discrimination has taken place in a variety of forms, including the following examples:

- Unions have used admissions criteria that adversely affect minorities. In the 1970s, federal courts ruled that standardized testing requirements for unions unfairly disadvantaged minority applicants who had less exposure to testing. In addition, the policies that required new union members to have relatives who were already in the union perpetuated the effects of past discrimination.<sup>15</sup>
- Of those minority individuals who are admitted to unions, a disproportionately low number are admitted into union-coordinated apprenticeship programs. Apprenticeship programs are an important means of producing skilled construction laborers, and the reported exclusion of African Americans from those programs has severely limited their access to skilled occupations in the construction industry.<sup>16</sup>
- Although formal training and apprenticeship programs exist within unions, most training of union members takes place informally through social networking. Nepotism characterizes the unionized sector of construction as it does the non-unionized sector, and that practice favors a white-dominated status quo.<sup>17</sup>

---

<sup>11</sup> Applebaum, Herbert. 1999. *Construction Workers, U.S.A.* Westport: Greenwood Press.

<sup>12</sup> Waldinger, Roger and Thomas Bailey. 1991. "The Continuing Significance of Race: Racial Conflict and Racial Discrimination in Construction." *Politics & Society*, 19(3).

<sup>13</sup> Feagin, Joe R. and Nikitah Imani. 1994. "Racial Barriers to African American Entrepreneurship: An Exploratory Study." *Social Problems*. 41( 4): 562-584.

<sup>14</sup> U.S. Department of Justice. 1996. Proposed Reforms to Affirmative Action in Federal Procurement. 61 FR 26042.

<sup>15</sup> *Ibid.* See *United States v. Iron Workers Local 86* (1971), *Sims v. Sheet Metal Workers International Association* (1973), and *United States v. International Association of Bridge, Structural and Ornamental Iron Workers* (1971).

<sup>16</sup> Applebaum. 1999. *Construction Workers, U.S.A.*

<sup>17</sup> *Ibid.* 299. A high percentage of skilled workers reported having a father or relative in the same trade. However, the author suggests this may not be indicative of current trends.

- Traditionally, white unions have been successful in resisting policies designed to increase African American participation in training programs. The political strength of unions in resisting affirmative action in construction has hindered the advancement of African Americans in the industry.<sup>18</sup>
- Discriminatory practices in employee referral procedures, including apportioning work based on seniority, have precluded minority union members from having the same access to construction work as their white counterparts.<sup>19</sup>
- According to testimony from African American union members, even when unions implement meritocratic mechanisms of apportioning employment to laborers, white workers are often allowed to circumvent procedures and receive preference for construction jobs.<sup>20</sup>

However, more recent research suggests that the relationship between minorities and unions has been changing. As a result, historical observations may not be indicative of current dynamics in construction unions. Recent studies focusing on the role of unions in apprenticeship programs have compared minority and female participation and graduation rates for apprenticeships in joint programs (that unions and employers organize together) with rates in employer-only programs. Many of those studies conclude that the impact of union involvement is generally positive or neutral for minorities and women, compared to non-Hispanic white males, as summarized below.

- Glover and Bilginsoy analyzed apprenticeship programs in the U.S. construction industry during 1996 through 2003. Their dataset covered about 65 percent of apprenticeships during that time. The authors found that joint programs had “much higher enrollments and participation of women and ethnic/racial minorities” and exhibited “markedly better performance for all groups on rates of attrition and completion” compared to employer-run programs.<sup>21</sup>
- In a similar analysis focusing on female apprentices, Bilginsoy and Berik found that women were most likely to work in highly-skilled construction professions as a result of enrollment in joint programs as opposed to employer-run programs. Moreover, the effect of union involvement in apprenticeship training was higher for African American women than for white women.<sup>22</sup>
- Additional research on the presence of African Americans and Hispanic Americans in apprenticeship programs found that African Americans were 8 percent more likely to be enrolled in a joint program than in an employer-run program. However, Hispanic Americans were less likely to be in a joint program than in an employer-run program.<sup>23</sup> Those data suggest

---

<sup>18</sup> Waldinger and Bailey. 1991. “The Continuing Significance of Race: Racial Conflict and Racial Discrimination in Construction.”

<sup>19</sup> U.S. Department of Justice. 1996. Proposed Reforms to Affirmative Action in Federal Procurement. 61 FR 26042. See *United Steelworkers of America v. Weber* (1979) and *Taylor v. United States Department of Labor* (1982).

<sup>20</sup> Feagin and Imani. 1994. “Racial Barriers to African American Entrepreneurship: An Exploratory Study.” *Social Problems*. 41 (4): 562-584.

<sup>21</sup> Glover, Robert and Bilginsoy, Cihan. 2005. “Registered Apprenticeship Training in the U.S. Construction Industry.” *Education & Training*. Vol. 47, 4/5, p 337.

<sup>22</sup> Günseli Berik, Cihan Bilginsoy. 2006. “Still a wedge in the door: women training for the construction trades in the USA”, *International Journal of Manpower*, Vol. 27 Iss: 4, pp.321 – 341.

<sup>23</sup> Bilginsoy, Cihan. 2005. “How Unions Affect Minority Representation in Building Trades Apprenticeship Programs.” *Journal of Labor Research*, 57(1).

that Hispanic Americans may be more likely than African Americans to enter the construction industry without the support of a union.

Other research focusing on specific states also indicates a more productive relationship between unions and minority workers than that which may have prevailed in the past. A study by Berik, Bilginsoy and Williams found minority and white women were overrepresented in union apprenticeship programs in Oregon. Although white women and minorities were less likely to graduate compared to white men, graduation rates for those groups in the union apprenticeship programs were higher than for nonunion programs.<sup>24</sup> Similar research conducted over a ten-year period in Massachusetts found women and minorities were recruited at a higher rate for union apprenticeship programs compared to nonunion programs and that the completion rates for these groups in union programs were consistently higher than those of nonunion programs.<sup>25</sup>

Recent union membership data support those findings as well. For example, 2012 Current Population Survey (CPS) data indicate that union membership rates for African Americans is slightly higher than for non-Hispanic whites and union membership rates for Hispanic Americans are similar to those of non-Hispanic whites.<sup>26</sup> The CPS asked participants, “Are you a member of a labor union or of an employee association similar to a union?” CPS data showed union membership to be 13 percent for African American workers, 10 percent for Hispanic American workers and 11 percent for non-Hispanic white workers. In the construction industry, the union membership rates for both African American workers and non-Hispanic white workers is 17 percent but the rate for Hispanic American construction workers is only 8 percent.

Although union membership and union program participation varies based on race and ethnicity, there is no clear picture from the research about the causes of those differences and their effects on construction industry employment. Research is especially limited concerning the impact of unions on Asian American employment. It is unclear from past studies whether unions presently help or hinder equal opportunity in construction and whether effects in Arizona are different from other parts of the country. In addition, the current research indicates that the effects of unions on entry into the construction industry may be different for different minority groups.

Overall, union membership is declining. Keen Independent researched union membership in Arizona and found only 5 percent of all employed wage and salary workers were members of a labor union or an employee association similar to a union in 2013. Membership had been at 9 percent of employed persons in 2008.<sup>27</sup> Union membership among private sector construction workers in Arizona has decreased from nearly 12 percent in 2008 to 4 percent in 2013.<sup>28</sup>

---

<sup>24</sup> Berik, Bilginsoy, and Williams. 2011. “Gender and Racial Training Gaps in Oregon Apprenticeship Programs.” *Labor Studies Journal*: 36(2): 221-244.

<sup>25</sup> Argyres, Annetta and Moir, Susan. 2008. “Building Trades Apprentice Training in Massachusetts: An Analysis of Union and Non-Union Programs, 1997-2007”. *Labor Resource Center Publications*. Paper 2.

<sup>26</sup> 2012 Current Population Survey (CPS), Merged Outgoing Rotation Groups, U.S. Census Bureau and Bureau of Labor Statistics.

<sup>27</sup> Bureau of Labor Statistics, U.S. Department of Labor. 2014. “Union Membership in Arizona – 2013.”

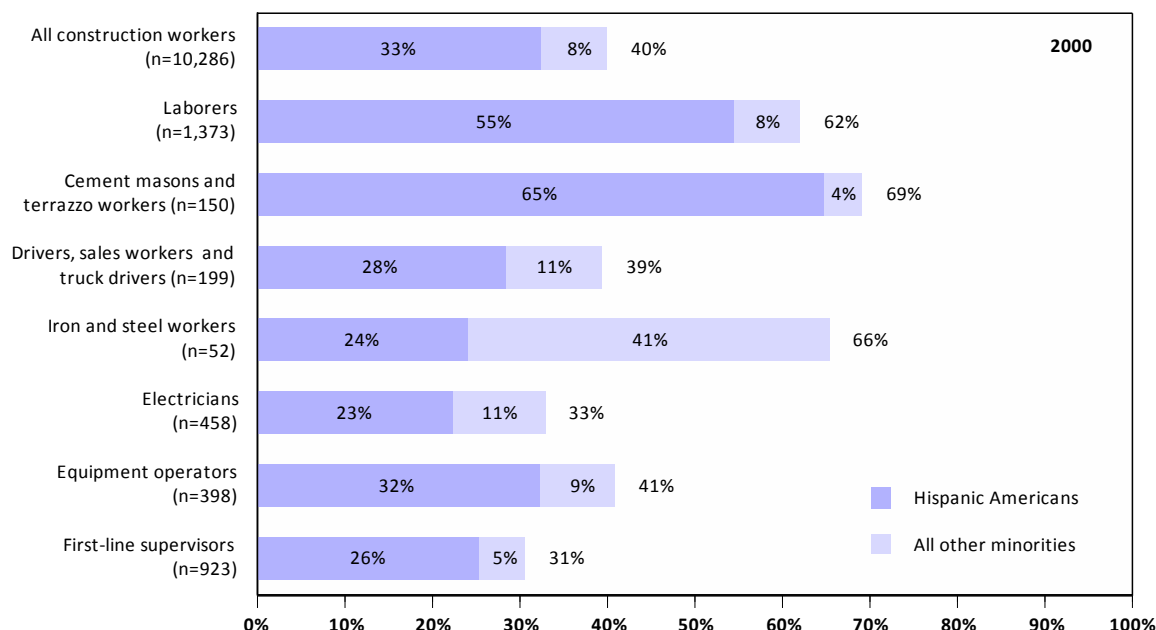
<sup>28</sup> Barry Hirsch and David Macpherson. 2014. “Union Membership and Coverage Database from the CPS.” <http://unionstats.com> (accessed May 6, 2014).

**Advancement.** To research opportunities for advancement in the Arizona construction industry, Keen Independent examined the representation of minorities and women in construction occupations defined by the U.S. Bureau of Labor Statistics.<sup>29</sup> Appendix I provides full descriptions of construction trades with large enough sample sizes in the 2000 Census and 2008-2012 ACS for analysis.

**Racial/ethnic composition of construction occupations.** Figures E-4 and E-5 present the race/ethnicity of workers in select construction-related occupations in Arizona, including low-skill occupations (e.g., construction laborers), higher-skill construction trades (e.g., electricians), and supervisory roles. The trades correspond to types of construction labor often involved in transportation contracting. Figure E-4 and E-5 present those data for 2000 and 2008-2012, respectively.

Based on 2000 Census and 2008-2012 ACS data, there are large differences in the racial/ethnic makeup of workers in various trades related to construction in Arizona. Overall, minorities comprised 40 percent of construction workers in 2000 and 47 percent in 2008-2012. Minorities comprised a relatively smaller percentage of construction labor working as electricians, as shown in Figures E-4 and E-5.

**Figure E-4.**  
Minorities as a percentage of selected construction occupations in Arizona, 2000



Note: Crane and tower operators, dredge, excavating and loading machine and dragline operators, paving, surfacing and tamping equipment operators and miscellaneous construction equipment operators were combined into the single category of equipment operators.

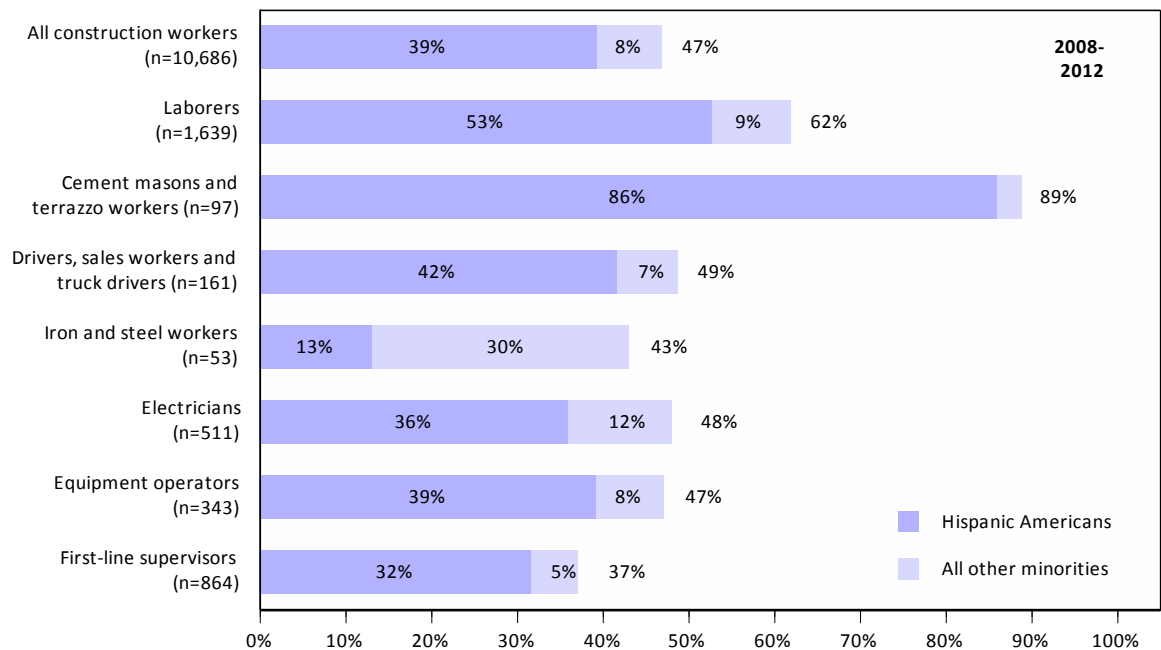
Source: Keen Independent Research from 2000 U.S. Census 5% sample Public Use Microdata samples. The 2000 Census raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

<sup>29</sup> Bureau of Labor Statistics, U.S. Department of Labor. 2001. "Standard Occupational Classification Major Groups." [http://www.bls.gov/soc/soc\\_majo.htm](http://www.bls.gov/soc/soc_majo.htm) (accessed February 15, 2007).

About 31 percent of first-line supervisors were minorities in 2000, less than the total percentage of Arizona construction workers who were minorities (40%). Minorities made up a larger percentage of first-line supervisors (37%) in 2008-2012, but that percentage was still less than the total percentage of construction workers who were minorities during those years (47%).

Most minorities working in the Arizona construction industry in 2008-2012 were Hispanic Americans (see Figure E-5). The representation of Hispanic Americans was substantially greater among cement masons (86%) and laborers (53%) than among all construction workers (39%). Those occupations tend to be low-skill occupations. Only 32 percent of first-line supervisors in 2008-2012 were Hispanic Americans.

**Figure E-5.**  
Minorities as a percentage of selected construction occupations in Arizona, 2008-2012



Note: Crane and tower operators, dredge, excavating and loading machine and dragline operators, paving, surfacing and tamping equipment operators and miscellaneous construction equipment operators were combined into the single category of equipment operators.

Source: Keen Independent Research from 2008-2012 ACS Public Use Microdata samples. The 2008-2012 ACS raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.



**Gender composition of construction occupations.** Keen Independent also analyzed the proportion of women in construction-related occupations. Figures E-6 and E-7 summarize the representation of women in select construction-related occupations for 2000 and 2008-2012, respectively. Overall, women made up only 11 percent of workers in the industry in 2000 and in 2008-2012.

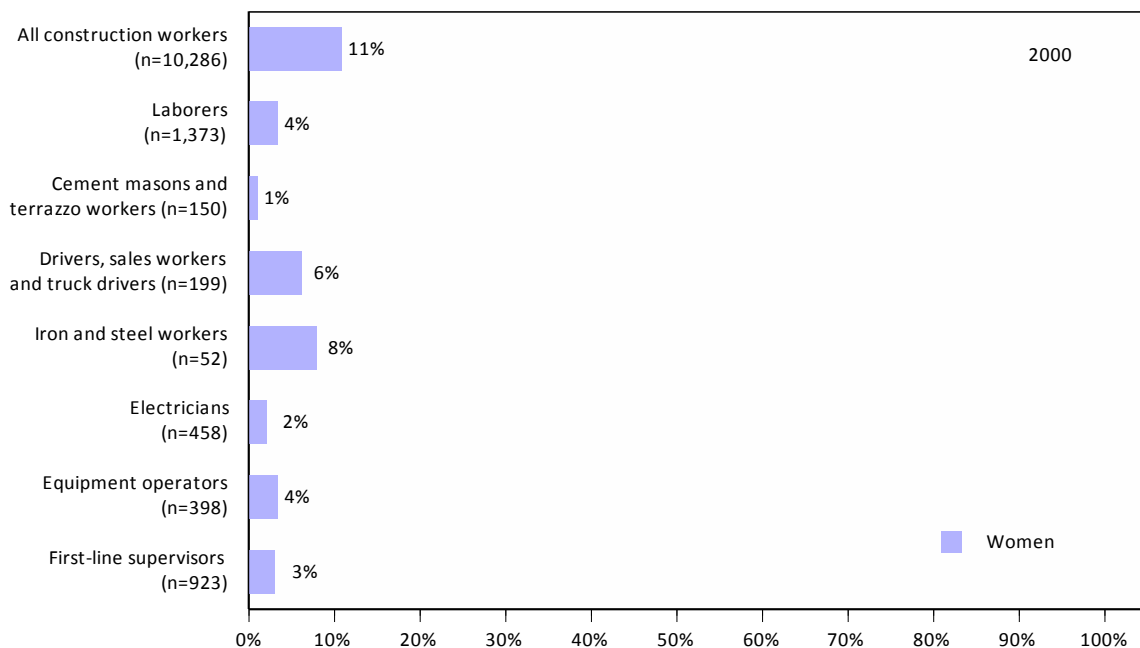
Representation of women in all trades either declined during this period or remained relatively unchanged.

In both 2000 and the 2008- 2012 time frame, women comprised no more than 4 percent of workers in the following trades:

- Laborers;
- Cement masons and terrazzo workers;
- Electricians; and
- Equipment operators.

**Figure E-6.**

**Women as a percentage of construction workers in selected occupations in Arizona, 2000**



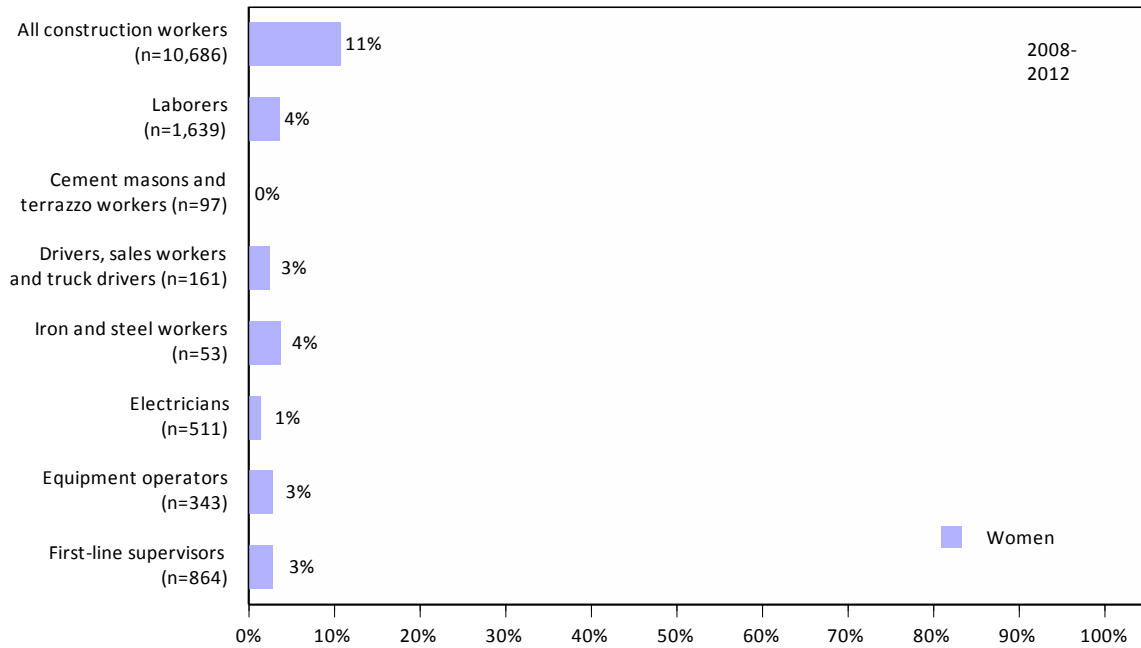
**Note:** Crane and tower operators, dredge, excavating and loading machine and dragline operators, paving, surfacing and tamping equipment operators and miscellaneous construction equipment operators were combined into the single category of equipment operators.

**Source:** Keen Independent Research from 2000 U.S. Census 5% sample Public Use Microdata samples. The 2000 Census raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

As shown in Figures E-6 and E-7, women comprised just 3 percent of first-line supervisors.

Figure E-7.

Women as a percentage of construction workers in selected occupations in Arizona, 2008-2012



Note: Crane and tower operators, dredge, excavating and loading machine and dragline operators, paving, surfacing and tamping equipment operators and miscellaneous construction equipment operators were combined into the single category of equipment operators.

Source: Keen Independent Research from 2008-2012 ACS Public Use Microdata samples. The 2008-2012 ACS raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

**Percentage of minorities and women who are managers.** To further assess advancement opportunities for minorities and women in the Arizona construction industry, Keen Independent examined the proportion of construction workers who reported being managers. Figure E-8 presents the percentage of construction employees who reported working as managers in 2000 and 2008-2012 for Arizona and the nation, by racial, ethnic and gender group.

Figure E-8.  
Percentage of construction workers who worked as a manager,  
2000 and 2008-2012

Arizona	2008-2012	2000
<b>Race/ethnicity</b>		
African American	4.1 % **	5.9 % **
Asian American	5.3 **	4.6 **
Hispanic American	2.8 **	1.9 **
Native American or other minority	1.9 **	2.2 **
Non-Hispanic white	11.5 %	10.5 %
<b>Gender</b>		
Female	4.4 % **	5.2 % **
Male	7.8	7.4
<b>All individuals</b>	<b>7.4 %</b>	<b>7.2 %</b>

Note: \*, \*\* Denote that the difference in proportions between the minority group and non-Hispanic whites (or between females and males) for the given Census/ACS year is statistically significant at the 90% or 95% confidence level, respectively.

Source: Keen Independent Research from 2000 U.S. Census 5% sample and 2008-2012 ACS Public Use Microdata samples. The 2000 Census and 2008-2012 ACS raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

**Racial/ethnic composition of managers.** In 2008-2012, about 12 percent of non-Hispanic whites in the Arizona construction industry were managers. A smaller percentage of minority workers were managers:

- About 4 percent of African Americans working in the Arizona construction industry were managers;
- About 5 percent of Asian Americans were managers;
- About 3 percent of Hispanic Americans were managers; and
- About 2 percent of Native American or other minorities were managers.

Although the percentages of minority construction workers working as managers increased from 2000 to the 2008-2012 time period, management representation among minority construction workers remains significantly less than the management representation among non-Hispanic white construction workers.

**Gender composition of managers.** In the Arizona construction industry, there was also a significant difference in the percentage of women and men that were managers (see Figure E-8). About 8 percent of male construction workers were managers in 2008-2012. Women working in construction were about one-half as likely to be managers.

## **Engineering Industry**

Keen Independent also examined how education and employment may influence the number of potential minority and female entrepreneurs working in the Arizona engineering industry.

**Education.** In contrast to the construction industry, lack of educational attainment may preclude workers' entry into the engineering industry. Many occupations require at least a four-year college degree and some require licensure. According to the 2008-2012 ACS, 55 percent of individuals age 25 years and older working in the Arizona engineering industry had at least a four-year college degree. Another 12 percent had an associate's degree. About 79 percent of civil engineers age 25 years and older had at least a four-year college degree. Therefore, any barriers to education can restrict employment opportunities, advancement opportunities, and, consequently, business ownership. Any disparities in business ownership rates in engineering-related work could have resulted from the lack of appropriate education for particular racial, ethnic and gender groups.<sup>30</sup>

**Race/ethnicity.** Figure E-9 presents the percentage of workers age 25 and older with at least a four-year college degree in Arizona. In Arizona, about 36 percent of all non-Hispanic white workers age 25 and older had at least a four-year degree in 2008-2012. For other racial/ethnic groups, the data for Arizona indicated that:

- About 27 percent of African Americans had at least a four-year college degree;
- Only 13 percent of Hispanic Americans had at least a four-year college degree; and
- About 14 percent of Native Americans had at least a four-year college degree.

The level of education necessary to work in the engineering industry may affect employment opportunities for those groups.

Some minority groups in Arizona were more likely than non-Hispanic whites to be college graduates — 47 percent of Asian-Pacific Americans and 83 percent of Subcontinent Asian Americans had at least a four-year college degree for the 2008-2012 time period.

---

<sup>30</sup> Feagin, Joe R. and Nikitah Imani. 1994. "Racial Barriers to African American Entrepreneurship: An Exploratory Study." *Social Problems*. 42 (4): 562-584.

All minority groups showed an increase between 2000 and 2008-2012 in the proportion of workers with a bachelor's degree.

**Gender.** Since 2000, the proportion of female workers in Arizona with at least a four-year college degree has surpassed that of men. Among workers in 2008-2012, about 31 percent of women and 29 percent of men age 25 and older had a bachelor's degree.

Figure E-9.

Percentage of all workers 25 and older with at least a four-year degree, 2000 and 2008-2012

Arizona	2008-2012	2000
<b>Race/ethnicity</b>		
African American	27.4 % **	23.2 % **
Asian-Pacific American	46.9 **	41.9 **
Subcontinent Asian American	82.7 **	77.5 **
Hispanic American	12.8 **	10.8 **
Native American	13.8 **	12.4 **
Other minority group	34.0	24.4 **
Non-Hispanic white	36.6 %	33.3 %
<b>Gender</b>		
Female	30.6 % **	27.6 % **
Male	29.4	28.7

Note: \*,\*\* Denote that the difference in proportions between the minority and non-Hispanic white groups (or female and male gender groups) for the given Census/ACS year is statistically significant at the 90% or 95% confidence level, respectively.

Source: Keen Independent Research from 2000 U.S. Census 5% sample and 2008-2012 ACS Public Use Microdata samples. The 2000 Census and 2008-2012 ACS raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

**Additional indices of educational attainment.** Other data sources showcase trends in post-secondary education among different racial/ethnic groups:

- **College participation.** The U.S. Department of Labor Bureau of Labor Statistics reported nearly 3 million students age 16 to 24 graduated high school in 2013 and about two-thirds enrolled in college, a rate unchanged from 2012.<sup>31</sup> The enrollment rate was highest for Asian American students (79%), followed by non-Hispanic white (67%), African American (59%) and Hispanic American (60%).

---

<sup>31</sup> College enrollment rates have remained relatively unchanged over the past 10 years, ranging from 66 to 70 percent.

Data published by the Arizona Minority Education Policy Analysis Center provide a demographic profile of Arizona resident students attending Arizona's public four-year institutions in 2010 as compared to 1991. The largest percentage of college students in 2010 were non-Hispanic whites (61%). This is a substantial decline from 1991, when 78 percent of college students were non-Hispanic whites. Hispanic American students now account for about 18 percent of the college population, a substantial increase from about 9 percent in 1991. The proportion of African American students has also doubled, from about 2 percent in 1991 to 4 percent in 2010. Asian American representation has increased from about 3 percent to 5 percent while the proportion of students who are Native American has remained unchanged at about 4 percent.

- **Engineering-related degrees.** Data from the National Science Foundation show approximately 4 percent of all bachelor's degrees in engineering fields awarded in the United States in 2010 were awarded to African American students. Asian Americans were awarded 12 percent of bachelor's degrees in engineering and Hispanic Americans were awarded 9 percent. Native Americans were awarded only 1 percent of engineering degrees in 2010.<sup>32</sup>

**Employment.** Figure E-10 compares the demographic composition of workers in the Arizona engineering industry to that of all workers in Arizona who are 25 years or older and have a college degree.

**Race/ethnicity.** In 2008-2012, about 18 percent of the workforce in the Arizona engineering industry was made up of minorities, as shown in Figure E-10. Of that workforce:

- About 2 percent was made up of African Americans;
- About 8 percent was made up of Asian Americans;
- About 9 percent was made up of Hispanic Americans; and
- About 1 percent was made up of Native Americans or other minorities.

In 2008-2012, all minorities considered together comprised about the same percentage of workers in engineering-related industries (24.2%) as workers 25 and older with at least a four-year college degree in other industries (23.5%). In engineering, African Americans accounted for 3 percent of workers with a four-year degree relative to about 4 percent of workers with a four-year degree in other industries. Asian Americans were about 5 percent of workers in engineering compared with 7 percent in all other industries. However, Hispanic American workers made up 15 percent of workers with a four-year college degree in engineering relative to 11 percent in of workers with a four-year degree in other industries. Native Americans and other minority groups accounted for about 2 percent of workers with college degrees for both engineering and other industries overall.

---

<sup>32</sup> The percentage of bachelor degrees in engineering awarded to non-Hispanic white students has remained relatively unchanged over the past ten years (71% in 2001 and 69% in 2010).

Non-Hispanic white Americans made up about 80 percent of engineering workers with a four-year degree relative to about 77 percent of workers in other industries with a four-year degree. Asian Americans made up 8 percent of engineering workers with a four-year degree relative to about 7 percent of similarly situated workers in other industries, though this difference was not statistically significant. Native Americans only made up about 1 percent of workers with four-year degrees in engineering and about 2 percent of workers with four-year degrees in other industries.

**Gender.** Compared to their representation among workers 25 and older with a college degree in all industries, relatively few women work in the engineering industry. In 2008-2012, women represented about 24 percent of engineering-related workers in Arizona with a four-year degree (among workers 25 and older) but 48 percent of workers in other industries with a four-year college degree.

Figure E-10.  
Demographic distribution of workers age 25 and older with a four-year college degree, engineering and all other industries, 2008-2012

Arizona	Engineering	All other industries
<b>Race/ethnicity</b>		
African American	2.6 % **	3.8 %
Asian American	4.7 **	6.8
Hispanic American	15.3 *	11.0
Native American or other minority	1.6	1.9
<b>Total minority</b>	<u>24.2 %</u>	<u>23.5 %</u>
Non-Hispanic white	75.8 **	76.5
<b>Total</b>	<u>100.0 %</u>	<u>100.0 %</u>
<b>Gender</b>		
Female	24.2 % **	47.7 %
Male	75.8 **	52.3
<b>Total</b>	<u>100.0 %</u>	<u>100.0 %</u>

Note: \*,\*\* Denote that the difference in proportions between engineers and workers in all other industries for the given Census/ACS year is statistically significant at the 90% or 95% confidence level, respectively. The engineering industry includes "architectural, engineering and related services."

Source: Keen Independent Research from 2000 U.S. Census 5% sample and 2008-2012 ACS Public Use Microdata samples. The 2000 Census and 2008-2012 ACS raw data extracts were obtained through the IPUMS program of the MN Population Center:  
<http://usa.ipums.org/usa/>.

**Civil engineers.** Keen Independent also examined the number of minorities and women among civil engineers in Arizona in 2008-2012 (see Figure E-11). Overall, in 2008-2012, the percentage of civil engineers who were minorities (24%) was about the same as the percentage of all Arizona workers with college degrees in other industries who were minorities (24%).

Only 14 percent of civil engineers in Arizona were women in 2008-2012, substantially less than the percentage of workers with college degrees in other industries who were women (48%).

**Figure E-11.**  
Demographics of workers age 25 and older with a college degree,  
civil engineering and all other industries, 2008-2012

Arizona	Civil engineering	All other industries
<b>Race/ethnicity</b>		
African American	2.9 % **	3.8 %
Asian American	9.0 **	6.8
Hispanic American	8.8 **	11.0
Native American or other minority	3.6 **	1.9
<b>Total minority</b>	<u>24.3 %</u>	<u>23.5 %</u>
Non-Hispanic white	<u>75.7</u> **	<u>76.5</u>
<b>Total</b>	100.0 %	100.0 %
<b>Gender</b>		
Female	13.5 % **	47.7 %
Male	<u>86.5</u> **	<u>52.3</u>
<b>Total</b>	100.0 %	100.0 %

Note: \*,\*\* Denote that the difference in proportions between civil engineers and workers in all other industries for the given Census/ACS year is statistically significant at the 90% or 95% confidence level, respectively.

Source: Keen Independent Research from 2000 U.S. Census 5% sample and 2008-2012 ACS Public Use Microdata samples. The 2000 Census and 2008-2012 ACS raw data extracts were obtained through the IPUMS program of the MN Population Center:  
<http://usa.ipums.org/usa/>.



## Summary

Keen Independent's analyses suggest that there are barriers to entry for certain minority groups and for women in the construction and engineering industries in Arizona, as summarized below.

- Fewer African Americans worked in the Arizona construction industry than what might be expected based on representation in the overall workforce and analysis of educational requirements in the industry.
- Fewer African Americans and Asian Americans worked in the Arizona engineering industry than what might be expected based on analyses of workers 25 and older with a four-year college degree.
- Women accounted for particularly few workers in the Arizona construction and engineering industries.

Any barriers to entry in construction and engineering might affect the relative number of minority and female business owners in these industries in Arizona.

Keen Independent also examined advancement in the Arizona construction industry.

- Representation of minorities and women was much lower in certain construction trades (including first-line supervisors) compared with other trades.
- Compared to non-Hispanic whites working in the construction industry, African Americans, Asian Americans, Hispanic Americans and Native Americans were less likely to be managers.

Any barriers to advancement in the Arizona construction industry may also affect the number of business owners among those groups.

Appendix F, which follows, examines rates of business ownership among individuals working in the Arizona construction and engineering industries.

## APPENDIX F.

### Business Ownership in the Arizona Construction and Engineering Industries

Almost one in five construction workers in Arizona was a self-employed business owner in 2008-2012. One in eight workers in the local engineering industry was a self-employed business owner. Focusing on construction and engineering, Keen Independent examined business ownership for different racial/ethnic and gender groups in Arizona using Public Use Microdata Samples (PUMS) from the 2000 Census and from the 2008-2012 American Community Survey (ACS). (Appendix F uses “self-employment” and “business ownership” interchangeably.)

#### Business Ownership Rates

Many studies have explored differences between minority and non-minority business ownership at the national level.<sup>1</sup> Although self-employment rates have increased for minorities and women over time, a number of studies indicate that race, ethnicity and gender continue to affect opportunities for business ownership. The extent to which such individual characteristics may limit business ownership opportunities differs across industries and from state to state.

**Construction industry.** Keen Independent classified workers as self-employed if they reported that they worked in their own unincorporated or incorporated business. In 2008-2012, 19 percent of workers in the Arizona construction industry were self-employed compared with 9 percent of workers across all industries.

Rates of self-employment in the Arizona construction industry vary by race, ethnicity and gender. Figure F-1 shows the percentage of workers who were self-employed in the construction industry by group for 2000 and 2008-2012 in Arizona.

---

<sup>1</sup> See, for example, Waldinger, Roger and Howard E. Aldrich. 1990. Ethnicity and Entrepreneurship. *Annual Review of Sociology*. 111-135.; Fairlie, Robert W. and Bruce D. Meyer. 1996. *Ethnic and Racial Self-Employment Differences and Possible Explanations*. The Journal of Human Resources, Volume 31, Issue 4, 757-793.; Fairlie, Robert W. and Alicia M. Robb. 2007. *Why are Black-Owned Businesses Less Successful than White-Owned Businesses? The Role of Families, Inheritances and Business Human Capital*. Journal of Labor Economics, 25(2), 289-323.; and Fairlie, Robert W. and Alicia M. Robb. 2006. *Race, Families and Business Success: A Comparison of African-American-, Asian-, and White-Owned Businesses*. Russell Sage Foundation.

Figure F-1.  
Percentage of workers in the construction industry who were self-employed,  
2008-2012 and 2000

Arizona	2008-2012	2000
<b>Race/ethnicity</b>		
African American	14.2 % **	9.6 % **
Asian American	18.4	16.0
Hispanic American	13.4 **	8.6 **
Native American or other minority	6.3 **	7.0 **
Non-Hispanic white	24.8	22.2
<b>Gender</b>		
Female	18.8 %	14.6 % **
Male	19.2	17.0
<b>All individuals</b>	<b>19.1 %</b>	<b>16.7 %</b>

Note: \*, \*\* Denote that the difference in proportions between the minority and non-Hispanic white groups (or female and male groups) for the given Census/ACS year is statistically significant at the 90% or 95% confidence level, respectively.

Source: Keen Independent Research from 2000 U.S. Census 5% sample and 2008-2012 ACS Public Use Microdata samples. The 2000 Census and 2008-2012 ACS raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

**Business ownership rates in 2000.** In 2000, 22 percent of non-Hispanic whites were self-employed. Business ownership rates were less than half of that rate for African Americans, Hispanic Americans and Native Americans (statistically significant differences).

- About 10 percent of African Americans working in the Arizona construction industry owned businesses.
- About 9 percent of Hispanic Americans in the construction industry owned businesses.
- The ownership rate of Native Americans and other minorities in the construction industry was 7 percent, one-third of the rate for non-Hispanic whites.

The Asian American self-employment rate in the construction industry was 16 percent. The difference between this rate and that of non-Hispanic whites in the Arizona construction industry was not statistically significant due to the small sample size for Asian American construction workers in Arizona.

In 2000, there were also differences in business ownership rates between men and women working in the industry. Seventeen percent of men in the Arizona construction industry owned businesses and about 15 percent of women owned businesses in 2000, a statistically significant difference.

**Business ownership in 2008-2012.** In 2008-2012, business ownership rates in the Arizona construction industry were higher among non-Hispanic whites and each minority group except for Native Americans. Women made gains in self-employment from 2000 to 2008-2012.

In 2008-2012, disparities in business ownership rates persisted between non-Hispanic whites (25%) and minority groups:

- Business ownership among Hispanic Americans in the construction industry increased to 13 percent in 2008-2012; the difference in ownership rates from non-Hispanic whites remained statistically significant.
- Business ownership among African Americans in the Arizona construction industry increased to 14 percent in 2008-2012 but remained statistically different compared with non-Hispanic whites.
- About 6 percent of Native Americans and other minorities in the construction industry in 2008-2012 were self-employed. The business ownership rate for this group was less than one-third of the rate for non-Hispanic whites (statistically significant difference).

The business ownership rate for women increased to about 19 percent for 2008-2012, on par with the rate for men (19%).

**Engineering industry.** Keen Independent also examined business ownership rates in the Arizona engineering industry. Figure F-2 presents the percentage of workers who were self-employed in the engineering industry in 2000 and 2008-2012.

Figure F-2.  
Percentage of workers in the engineering industry who were self-employed,  
2000 and 2008-2012

Arizona	2008-2012	2000
<b>Race/ethnicity</b>		
African American	0.0 % **	21.4 %
Asian American	7.6 **	8.7 *
Hispanic American	5.9 **	13.9
Native American or other minority	6.7	9.7
Non-Hispanic white	15.3	17.3
<b>Gender</b>		
Female	11.6 %	9.4 % **
Male	13.4	19.0
<b>All individuals</b>	13.0 %	16.6 %

Note: \*, \*\* Denote that the difference in proportions between the minority and non-Hispanic white groups (or female and male groups) for the given Census/ACS year is statistically significant at the 90% or 95% confidence level, respectively.

Source: Keen Independent Research from 2000 U.S. Census 5% sample and 2008-2012 ACS Public Use Microdata samples. The 2000 Census and 2008-2012 ACS raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

As shown in Figure F-2, business ownership for workers in the engineering industry declined from 2000 to 2008-2012. Business ownership rates decreased for each minority group as well as non-Hispanic whites. Women were the only group to recognize gains in self-employment during this period.

In the Arizona engineering industry in 2008-2012, there were statistically significant disparities for three minority groups, as discussed below:

- There were no self-employed African Americans in the sample data for the engineering industry in 2008-2012, so the calculated business ownership rate for that group was 0 percent.
- The business ownership rate for Hispanic Americans was about 6 percent, less than half the rate non-Hispanic whites (15%).
- The rate for Asian Americans was about 8 percent in 2008-2012. Asian Americans were self-employed at about half the rate of non-Hispanic whites.

Although Native Americans also had a low self-employment rate in this industry in 2008-2012 (7%), the difference in rates from non-Hispanic whites was not statistically significant. This may be due to the small number of this group in the sample of workers in the engineering industry in Arizona.

Figure F-2 also compares business ownership rates for women and men working in the Arizona engineering industry. For 2008 to 2012, about 12 percent of women in the engineering industry were self-employed while business ownership among men fell to 13 percent. This closing of the gap among men and women removed any statistical difference.

**Potential causes of differences in business ownership rates.** Nationally, researchers have examined whether there are disparities in business ownership rates after considering personal characteristics such as education and age. Several studies have found that disparities in business ownership still exist even after accounting for such factors.

- **Financial capital.** Some studies have concluded that access to financial capital is a strong determinant of business ownership. Researchers have consistently found a positive relationship between startup capital and business formation, expansion, and survival.<sup>2</sup> In addition, one study found that housing appreciation measured at the Metropolitan Statistical Area level is a positive determinant of becoming self-employed.<sup>3</sup> However, unexplained differences still exist when statistically controlling for those factors.<sup>4</sup> Access to capital is discussed in more detail in Appendix G.
- **Education.** Education has a positive effect on the probability of business ownership in most industries. However, results of multiple studies indicate that minorities are still less likely to own

---

<sup>2</sup> See Lofstrom, Magnus and Chunbei Wang. 2006. *Hispanic Self-Employment: A Dynamic Analysis of Business Ownership*. Working paper, Forschungsinstitut zur Zukunft der Arbeit (Institute for the Study of Labor).; and Fairlie, Robert W. and Alicia M. Robb. 2006. *Race, Families and Business Success: A Comparison of African-American-, Asian-, and White-Owned Businesses*. Russell Sage Foundation.

<sup>3</sup> Fairlie, Robert W. and Harry A. Krashinsky. 2006. *Liquidity Constraints, Household Wealth and Entrepreneurship Revisited*.

<sup>4</sup> Lofstrom, Magnus and Chunbei Wang. 2006. *Hispanic Self-Employment: A Dynamic Analysis of Business Ownership*. Working paper, Forschungsinstitut zur Zukunft der Arbeit (Institute for the Study of Labor).

a business than non-minorities with similar levels of education.<sup>5</sup> Recent research confirms a significant relationship between education and ability to obtain startup capital.<sup>6</sup>

- **Intergenerational links.** Intergenerational links affect one's likelihood of self-employment. One study found that experience working for a self-employed family member increases the likelihood of business ownership for minorities.<sup>7</sup>
- **Immigration to the United States.** Time since immigration and assimilation into American society are also important determinants of self-employment, but unexplained differences in business ownership between minorities and non-minorities still exist when accounting for those factors.<sup>8</sup>

## Business Ownership Regression Analysis

Race/ethnicity and gender can affect opportunities for business ownership, even when accounting for personal characteristics such as education, age, and familial status. Recent research using data from 2007 through 2010 indicates minorities (including African Americans and Hispanic Americans) face greater credit constraints at business startup and throughout business ownership than non-Hispanic whites even after controlling for other factors including credit score.<sup>9</sup>

To further examine business ownership, Keen Independent developed multivariate regression models to explore patterns of business ownership in Arizona. Those models estimate the effect of race/ethnicity and gender on the probability of business ownership while statistically controlling for other personal and family characteristics.

An extensive body of literature examines whether race- and gender-neutral personal factors such as access to financial capital, education, age, and family characteristics (e.g., marital status) help explain differences in business ownership. That subject has also been examined in other disparity studies. For example, prior studies in Minnesota and Illinois have used econometric analyses to investigate whether disparities in business ownership for minorities and women working in the construction and engineering industries persist after statistically controlling for race- and gender-neutral personal characteristics.<sup>10, 11</sup> Those studies have incorporated probit econometric models using PUMS data

---

<sup>5</sup> See Fairlie, Robert W. and Bruce D. Meyer. 1996. *Ethnic and Racial Self-Employment Differences and Possible Explanations*. The Journal of Human Resources, Volume 31, Issue 4, 757-793; and Butler, John Sibley and Cedric Herring. 1991. *Ethnicity and Entrepreneurship in America: Toward an Explanation of Racial and Ethnic Group Variations in Self-Employment*. Sociological Perspectives. 79-94.

<sup>6</sup> Robb, Alicia, Fairlie, Robert w. and Robinson, David T. 2009. "Capital Injections among New Black and White Business Ventures: Evidence from the Kauffman Firm Survey." Working Paper. Federal Reserve Bank of Cleveland.

<sup>7</sup> See Fairlie, Robert W. and Alicia M. Robb. 2006. *Race, Families and Business Success: A Comparison of African-American-, Asian-, and White-Owned Businesses*. Russell Sage Foundation; and Fairlie, Robert W. and Alicia M. Robb. 2007. *Why are Black-Owned Businesses Less Successful than White-Owned Businesses? The Role of Families, Inheritances and Business Human Capital*. Journal of Labor Economics, 25(2), 289-323.

<sup>8</sup> See Fairlie, Robert W. and Bruce D. Meyer. 1996. *Ethnic and Racial Self-Employment Differences and Possible Explanations*. The Journal of Human Resources, Volume 31, Issue 4, 757-793; and Butler, John Sibley and Cedric Herring. 1991. *Ethnicity and Entrepreneurship in America: Toward an Explanation of Racial and Ethnic Group Variations in Self-Employment*. Sociological Perspectives. 79-94.

<sup>9</sup> Robb, Alicia. 2012. "Access to Capital among Young Firms, Minority-owned Firms, Women-owned Firms and High-Tech Firms." Small Business Administration.

<sup>10</sup> National Economic Research Associates, Inc. 2000. *Disadvantaged Business Enterprise Availability Study*. Prepared for the Minnesota Department of Transportation.

from the 2000 Census and have been among the materials that agencies have submitted to courts in subsequent litigation concerning the implementation of the Federal DBE Program.

Keen Independent used similar probit regression models to predict business ownership from multiple independent or “explanatory” variables, such as:<sup>12</sup>

- Personal characteristics that are potentially linked to the likelihood of business ownership — age, age-squared, disability, marital status, number of children in the household, number of elderly people in the household, and English-speaking ability;
- Educational attainment;
- Measures and indicators related to personal financial resources and constraints — home ownership, home value, monthly mortgage payment, dividend and interest income, and additional household income from a spouse or unmarried partner; and
- Race, ethnicity and gender.

Keen Independent developed two probit regression models using PUMS data from the 2008-2012 ACS:

- A model for the Arizona construction industry that included 10,686 observations; and
- A model for the Arizona engineering industry that included 1,729 observations.

**Arizona construction industry in 2008-2012.** Figure F-3 presents the coefficients for the probit model for individuals working in the Arizona construction industry in 2008-2012. Several factors were important and statistically significant in predicting the probability of business ownership:

- Older workers were associated with a *higher* probability of business ownership;
- Higher home values were associated with a *higher* probability of business ownership;
- Greater interest and dividend income was associated with a *higher* probability of business ownership;
- Greater spousal or partner income was associated with a *lower* probability of business ownership;
- Speaking English well was associated with a *higher* likelihood of business ownership; and
- A higher level of educational attainment (advanced degree) was associated with a *higher* likelihood of business ownership.

---

<sup>11</sup> National Economic Research Associates, Inc. 2004. *Disadvantaged Business Enterprise Availability Study*. Prepared for the Illinois Department of Transportation.

<sup>12</sup> Probit models estimate the effects of multiple independent or “predictor” variables in terms of a single, dichotomous dependent or “outcome” variable — in this case, business ownership. The dependent variable is binary, coded as “1” for individuals in a particular industry who are self-employed and “0” for individuals who are not self-employed. The model enables estimation of the probability that workers in a given sample are self-employed, based on their individual characteristics. Keen Independent excluded observations where the Census Bureau had imputed values for the dependent variable (business ownership).

After statistically controlling for factors other than race and gender, there were statistically significant disparities in business ownership rates for African Americans, Hispanic Americans, Native Americans and women working in the Arizona construction industry. Members of these minority groups and women working in the Arizona construction industry were less likely to own construction businesses than similarly-situated non-minorities or men. The differences due to race, ethnicity or gender were greatest for African Americans and Native Americans and smaller for Hispanic Americans and women.

**Figure F-3.**  
Arizona construction industry  
business ownership model, 2008-  
2012

Note:

\*, \*\* Denote statistical significance at the 90% and 95% confidence levels, respectively.

Source:

Keen Independent Research from 2008-2012 ACS Public Use Microdata samples. The 2008-2012 ACS raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Variable	Coefficient
Constant	-2.6773 **
Age	0.0612 **
Age-squared	-0.0005 **
Married	0.0319
Disabled	0.0620
Number of children in household	0.0078
Number of people over 65 in household	-0.0115
Owns home	-0.0631
Home value (\$0,000s)	0.0007 **
Monthly mortgage payment (\$0,000s)	0.0190
Interest and dividend income (\$0,000s)	0.0067 **
Income of spouse or partner (\$0,000s)	-0.0018 **
Speaks English well	0.1504 **
Less than high school education	-0.0300
Some college	0.0611
Four-year degree	0.0028
Advanced degree	0.1860 *
African American	-0.3005 *
Asian-Pacific American	-0.0723
Subcontinent Asian American	-0.5522
Hispanic American	-0.2004 **
Native American	-0.7496 **
Other Minority	0.1907
Female	-0.1762 **



**Simulations of business ownership rates.** Probit modeling allows for further analysis of the disparities identified in business ownership rates for African Americans, Hispanic American, Native Americans and non-Hispanic white women. Keen Independent modeled business ownership rates for these groups as if they had the same probability of business ownership as similarly situated non-Hispanic white males. To conduct those simulations, Keen Independent took the following steps:

1. Keen Independent performed a probit regression analysis predicting business ownership using only non-Hispanic white male construction workers in the dataset.<sup>13</sup>
2. After obtaining the results from the non-Hispanic white male regression model, the study team coefficients from that model and the mean personal, financial, and educational characteristics of African American, Hispanic American, Native American and non-Hispanic white women working in the Arizona construction industry (i.e., indicators of educational attainment as well as indicators of personal financial resources and constraints) to estimate the probability of business ownership of each group.

Similar simulation approaches have been used in other disparity studies that courts have reviewed.

Figure F-4 presents the simulated business ownership rate (i.e., “benchmark” rate) for African Americans, Hispanic Americans Native Americans and non-Hispanic white women and compares it to the actual, observed mean probabilities of business ownership for that group. The disparity index was calculated by taking the actual business ownership rate for each group, dividing it by that group’s benchmark rate and then multiplying the result by 100. The disparity index expresses the presence of an ownership disparity, or lack thereof, in terms of what would be expected based on the simulated business ownership rates of similarly-situated non-Hispanic white male construction workers. Note that the “actual” self-employment rates are for the dataset used for these regression analyses and do not always exactly match results from the entire 2008-2012 data.

Results from these analyses show lower actual self-employment rates for African Americans, Native Americans and non-Hispanic white women than the simulated ownership rates for these groups:

- **African Americans.** The actual ownership rate for African American workers in the construction industry was 14.2 percent, less than the benchmark rate of 18.4 percent. Dividing 14.2 percent by 18.4 percent (and then multiplying by 100) gives a disparity index for African American business ownership of 77. Because the index is less than 100, the results indicate a disparity. Because it is less than 80, it indicates a “substantial” disparity (Appendix B has a discussion of the use of substantial disparity in court cases). In other words, African Americans owned businesses at about three-fourths the rate that would be expected based on simulated ownership rates of non-Hispanic white male construction workers.

---

<sup>13</sup> That version of the model excluded the race/ethnicity and gender indicator variables, because the value of all of those variables would be the same (i.e., 0).

- **Native Americans.** The actual business ownership rate for Native Americans was 5.7 percent, less than the benchmark rate of about 17 percent. The corresponding disparity index was 33, indicating Native Americans owned construction businesses at about one-third of the rate that would be expected based on simulated ownership rates of non-Hispanic white males. This indicates a substantial disparity in the business ownership rates for Native Americans working in the Arizona construction industry.
- **Women.** The benchmark ownership rate for non-Hispanic white women was 25 percent and the corresponding disparity index was 84, indicating business ownership for non-Hispanic white women in the construction industry was about 84 percent of the rate that would be expected based on simulated rates of non-Hispanic white males..

The benchmark ownership rate for Hispanic American workers in the construction industry was 11.5 percent compared to the actual rate of about 13 percent, indicating that the business ownership rate for Hispanic Americans was higher than the rate that would be expected based on simulated ownership rates of non-Hispanic white males.

There may be several reasons for this outcome for Hispanic Americans. Among the non-Hispanic white males in the construction industry sample, more than 99 percent spoke English well, compared to two-thirds of Hispanic Americans in the construction industry sample. Fourteen percent of the non-Hispanic white male construction workers in the sample had obtained a four-year degree or more while only 3 percent of Hispanic American construction workers in the sample had the same level of education. Further, almost half of the Hispanic American construction workers in the sample had not graduated from high school compared with 12 percent for non-Hispanic white male construction workers in the sample.

**Figure F-4.**  
Comparison of actual business ownership rates to simulated rates for  
Arizona construction workers, 2008-2012

Group	Self-employment rate		Disparity index (100 = parity)
	Actual	Benchmark	
African American	14.2%	18.4%	77
Hispanic American	13.4%	11.5%	116
Native American	5.7%	17.3%	33
Non-Hispanic white female	21.0%	25.0%	84

**Note:** As the benchmark figure can only be estimated for records with an observed (rather than imputed) dependent variable, comparison is made with only this subset of the sample. For this reason, actual self-employment rates may differ slightly from those in Figure F-1.

**Source:** Keen Independent Research from 2008-2012 ACS Public Use Microdata samples. The 2008-2012 ACS raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

**Arizona engineering industry in 2008 through 2012.** Keen Independent developed a separate business ownership model for the Arizona engineering industry using 2008-2012 ACS data. Figure F-5 presents the coefficients from that probit model.<sup>14</sup> After controlling for personal and family characteristics, there were statistically significant disparities in business ownership rates among people working in the Arizona engineering industry for:

- African Americans; and
- Hispanic Americans.

There were a few individuals identified as other minorities in the ACS data. There was a statistically significant disparity in business ownership rates for these individuals as well.

After statistically controlling certain other factors, gender did not appear to affect the likelihood of owning a business.

**Figure F-5.**  
Arizona engineering industry business ownership model, 2008-2018

Note:

\*, \*\* Denote statistical significance at the 90% and 95% confidence levels, respectively.

Source:

Keen Independent Research from 2008-2012 ACS Public Use Microdata samples. The 2008-2012 ACS raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Variable	Coefficient
Constant	-3.2468 **
Age	0.0499
Age-squared	-0.0001
Married	-0.1506
Disabled	-0.0608
Number of children in household	0.0743
Number of people over 65 in household	-0.0441
Owens home	-0.1489
Home value (\$0,000s)	0.0004
Monthly mortgage payment (\$0,000s)	0.0710
Interest and dividend income (\$0,000s)	0.0049 *
Income of spouse or partner (\$0,000s)	0.0011
Less than high school education	0.4113
Some college	-0.2168
Four-year degree	-0.0765
Advanced degree	-0.2901
African American	-4.3223 **
Asian-Pacific American	-0.3181
Subcontinent Asian American	-0.1042
Hispanic American	-0.3588 **
Native American	-0.3778
Other Minority	-4.0757 **
Female	-0.0346

<sup>14</sup> Speaking English well was excluded from the engineering industry model because nearly every individual in the dataset spoke English well.

**Simulations of business ownership rates.** Using the same approach as for the construction industry, the study team simulated business ownership rates in the Arizona engineering industry. Figure F-6 presents actual and simulated (“benchmark”) business ownership rates for African Americans and Hispanic Americans in the Arizona engineering industry. (The number of other minorities in the construction sample was too small to perform the analysis for that group.)

- **African Americans.** There were no African American business owners in the engineering worker 2008-2012 sample data. The benchmark business ownership rate for African Americans was about 4 percent based on similarly situated non-Hispanic white males.<sup>15</sup>
- **Hispanic Americans.** The self-employment rate of Hispanic American engineering workers from 2008-2012 was about 6 percent. The benchmark rate during this period was about 4 percent based on simulated ownership rates of non-Hispanic white males and the corresponding disparity index was 145, indicating Hispanic American business ownership in the Arizona engineering industry was higher than the rate that would be expected based on simulated rates of non-Hispanic white males. This result also occurred for the construction industry; some of the same explanations may also apply for Hispanic Americans in the engineering business ownership simulation.

Figure F-6.  
Comparison of actual business ownership rates to simulated rates for  
Arizona workers in the engineering industry, 2008-2012

Group	Self-employment rate		Disparity index (100 = parity)
	Actual	Benchmark	
African American	0.0%	3.7%	0
Hispanic American	5.9%	4.1%	145

Note: As the benchmark figure can only be estimated for records with an observed (rather than imputed) dependent variable, comparison is made with only this subset of the sample. For this reason, actual self-employment rates may differ slightly from those in Figure F-2.

Source: Keen Independent Research from 2008-2012 ACS Public Use Microdata samples. The 2008-2012 raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

---

<sup>15</sup> The calculation of the disparity index is applicable in this case.

## **Summary of Business Ownership in the Construction and Engineering Industries**

Disparities in business ownership were present in the Arizona construction industry:

- In both the 2000 and 2008-2012 time periods, business ownership rates for African Americans, Hispanic Americans and Native Americans were substantially lower than that of non-Hispanic whites. Business ownership rates were lower for women in 2000 but not in 2008-2012.
- After statistically controlling for a number of other factors affecting business ownership, statistically significant disparities in business ownership rates were identified for African Americans, Hispanic American, Native Americans and women working in the local construction industry in 2008-2012.

There were also disparities in business ownership in the Arizona engineering industry:

- Compared to non-Hispanic whites, business ownership rates were lower for African Americans, Asian Americans and Hispanic Americans in 2008-2012, and those differences were statistically significant.
- Using regression analysis to account for other personal characteristics, there were substantial disparities for African Americans and Hispanic Americans in 2008-2012.

Regression analysis indicated similar rates of business ownership for women and men in the Arizona engineering industry after controlling for other personal characteristics.

## APPENDIX G.

### Access to Capital for Business Formation and Success

Access to capital is one factor that researchers have examined when studying business formation and success. If race- or gender-based discrimination exists in capital markets, minorities and women may have difficulty acquiring the capital necessary to start, operate, or expand businesses.<sup>1, 2</sup> Researchers have also found that the amount of startup capital can affect long-term business success, and, on average, minority- and women-owned businesses appear to have less startup capital than non-Hispanic white-owned businesses and male-owned businesses.<sup>3</sup> For example:

- In 2007, 30 percent of majority-owned businesses that responded to a national U.S. Census Bureau survey indicated that they had startup capital of \$25,000 or more;<sup>4</sup>
- Only 17 percent of African American-owned businesses indicated a comparable amount of startup capital;
- Disparities in startup capital were identified for every other minority group except Asian Americans; and
- Nineteen percent of female-owned businesses reported startup capital of \$25,000 or more compared with 32 percent of male-owned businesses (not including businesses that were equally owned by men and women).

Similar research using longitudinal data from 2004 through 2006 found African American-owned firms received significantly lower levels of external startup capital, after controlling for owner and business characteristics, and relied more on owner equity funding. This finding persisted in subsequent years of business operation.<sup>5</sup>

Race- or gender-based discrimination in startup capital can have long-term consequences, as can discrimination in access to business loans after businesses have already been formed.<sup>6</sup>

Keen Independent examined access to capital in Arizona. Appendix G begins by presenting information about homeownership and mortgage lending as home equity can be an important source of capital to start and expand businesses. The appendix then presents information about business loans, assessing whether minorities and women experience any difficulties acquiring business capital.

---

<sup>1</sup> For example, see Mitchell, Karlyn and Douglas K. Pearce. 2005. "Availability of Financing to Small Firms Using the Survey of Small Business Finances." U.S. Small Business Administration, Office of Advocacy. 57.

<sup>2</sup> Fairlie, Robert W. and Alicia M. Robb. 2010. *Race and Entrepreneurial Success*. Cambridge: MIT Press.

<sup>3</sup> Ibid.

<sup>4</sup> Business owners were asked, "What was the total amount of capital used to start or acquire this business? (Capital includes savings, other assets, and borrowed funds of owner(s))." From U.S. Census Bureau, Statistics for All U.S. Firms by Total Amount of Capital Used to Start or Acquire the Business by Industry, Gender, Ethnicity, Race, and Veteran Status for the U.S.: 2007 Survey of Business Owners:

[http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=SBO\\_2007\\_00CSCB16&prodType=table](http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=SBO_2007_00CSCB16&prodType=table)

<sup>5</sup> Robb, Alicia, Fairlie, Robert w. and Robinson, David T. 2009. "Capital Injections among New Black and White Business Ventures: Evidence from the Kauffman Firm Survey." Working Paper. Federal Reserve Bank of Cleveland.

<sup>6</sup> Fairlie, Robert W. and Alicia M. Robb. 2010. *Race and Entrepreneurial Success*. Cambridge: MIT Press.

## Homeownership and Mortgage Lending

Keen Independent analyzed homeownership and the mortgage lending industry to explore differences across race/ethnicity and gender that may lead to disparities in access to capital.

**Homeownership.** Wealth created through homeownership can be an important source of capital to start or expand a business. In sum:

- A home is a tangible asset that provides borrowing power;<sup>7</sup>
- Wealth that accrues from housing equity and tax savings from homeownership contributes to capital formation;<sup>8</sup>
- Next to business loans, mortgage loans have traditionally been the second largest loan type for small businesses;<sup>9</sup> and
- Homeownership is associated with an estimated 30 percent reduction in the probability of loan denial for small businesses.<sup>10</sup>

Any barriers to homeownership and home equity growth for minorities and women can affect business opportunities by constraining their available funding. Similarly, any barriers to accessing home equity through home mortgages can also affect available capital for new or expanding businesses. Recent research confirms the importance of homeownership on the likelihood of starting a business, even when examined separately by recent work history (independently examining workers that recently experienced a job loss and those that did not). A strong relationship exists between increases in home equity and entry into self employment for both groups.<sup>11</sup> Keen Independent analyzed homeownership rates and home values before considering loan denial and subprime lending.

It is important to note that the Great Recession depressed homeownership rates, reduced home values and equity in homes, and changed the mortgage finance market. Nationally and in Arizona, lower (or negative) equity in a home and tighter lending standards during the Great Recession may have limited home equity as source of capital for many existing or potential business owners. Therefore, the following examination of homeownership and mortgage lending in Arizona considers conditions before and after the start of the Great Recession in 2007.

---

<sup>7</sup> Nevin, Allen. 2006. "Homeownership in California: A CBIA Economic Treatise." *California Building Industry Association*. 2.

<sup>8</sup> Jackman, Mary R. and Robert W. Jackman 1980. "Racial Inequalities in Home Ownership." *Social Forces*. 58. 1221-1234.

<sup>9</sup> Berger, Allen N. and Gregory F. Udell. 1998. "The Economics of Small Business Finance: The Roles of Private Equity and Debt Markets in the Financial Growth Cycle." *Journal of Banking and Finance*. 22.

<sup>10</sup> Cavalluzzo, Ken and John Wolken. 2005. "Small Business Loan Turndowns, Personal Wealth and Discrimination." *Journal of Business*. 78:2153-2178.

<sup>11</sup> Fairlie, Robert W. and Harry A. Krashinsky. 2012. "Liquidity Constraints, Household Wealth and Entrepreneurship Revisited." *Review of Income and Wealth*. 58(2).

**Homeownership rates.** Many studies have documented past discrimination in the national housing market. The United States has a history of restrictive real estate covenants and property laws that affect the ownership rights of minorities and women.<sup>12</sup> For example, in the past, a woman's participation in homeownership was secondary to that of her husband and parents.<sup>13</sup>

Figure G-1 presents the percentage of households in each racial/ethnic group in Arizona that were homeowners in 2000 (based on Census of Population data) and 2008 through 2012 (based on U.S. Bureau of the Census American Community Survey or "ACS" data).

From 2000 to 2008-2012, homeownership rates dropped for all groups with the exception of Asian-Pacific Americans. In 2000, 73 percent of households headed by non-Hispanic whites owned homes. Homeownership dropped to 70 percent for non-Hispanic whites in 2008-2012.<sup>14</sup> African Americans experienced the largest decline during this time period, from 44 percent homeownership in 2000 to 34 percent homeownership in 2008-2012.

Significantly fewer minorities owned homes in Arizona in 2000 and in 2008-2012 compared with non-Hispanic whites. Keen Independent identified statistically significant disparities in homeownership for African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Hispanic Americans and Native Americans for both time periods. For example, about one-third of African American households owned homes in 2008-2012, less than one-half the rate of homeownership of non-Hispanic whites.

The data for Arizona indicate that relatively fewer minorities than non-Hispanic whites have had access to equity in a home for starting or expanding a business.

---

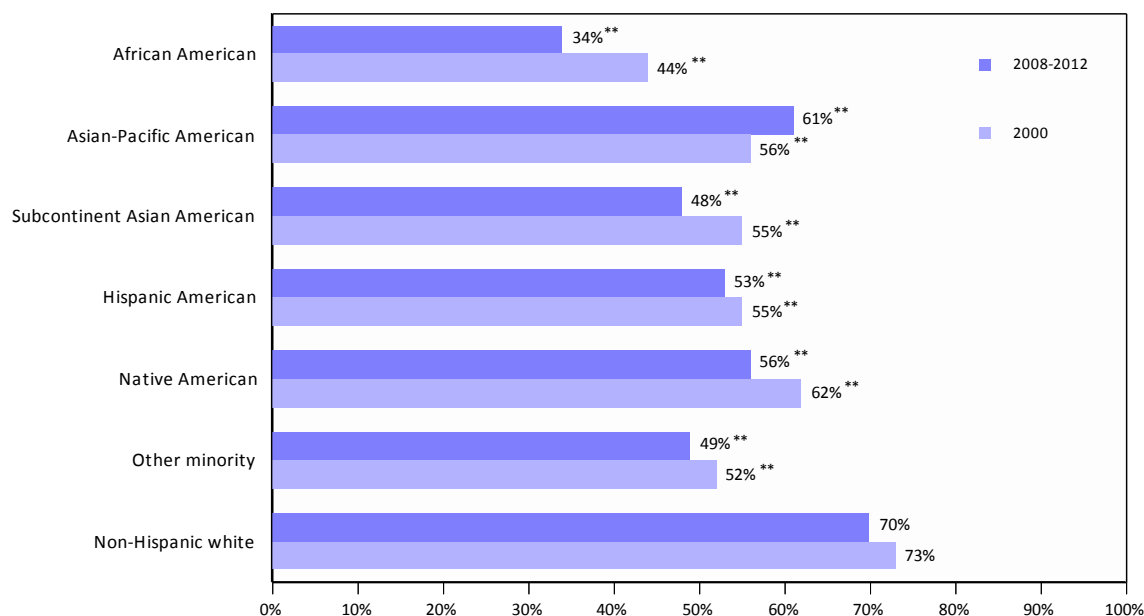
<sup>12</sup> Ladd, Helen F. 1982. "Equal Credit Opportunity: Women and Mortgage Credit." *The American Economic Review*. 72:166-170.

<sup>13</sup> Card, Emily. 1980. "Women, Housing Access, and Mortgage Credit." *Signs*. 5:215-219.

<sup>14</sup> These data are consistent with national homeownership trends. Data from the U.S. Census Bureau Social, Economic and Housing Statistics Division show U.S. homeownership peaked in the first quarter of 2005 at 69.2 percent. Homeownership for the first quarter of 2014 was 65 percent.



Figure G-1.  
Homeownership rates, 2000 and 2008-2012



Note: The sample universe is all households. \*, \*\* Denote that the difference in proportions from non-Hispanic white for the given year is statistically significant at the 90% or 95% confidence level, respectively.

Source: Keen Independent Research from 2000 U.S. Census 5% sample and 2010-2012 ACS Public Use Microdata samples. The 2000 Census and 2010-2012 ACS raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Lower rates of homeownership may reflect lower incomes for minorities. That relationship may be self-reinforcing, as low wealth puts individuals at a disadvantage in becoming homeowners, which has historically been a path to building wealth. An older study found that the probability of homeownership is considerably lower for African Americans than it is for comparable non-Hispanic whites throughout the United States.<sup>15</sup> Recent research shows that while African Americans narrowed the homeownership gap in the 90s, the first half of the following decade brought little change and the second half of the decade brought significant losses, resulting in a widening of the gap between African Americans and non-Hispanic whites.<sup>16</sup>

**Home values.** In addition to studying homeownership rates by gender and race/ethnicity, it is also important to consider the value of homes owned because the value represents an outside limit of accessible capital from the asset. Using 2000 Census data and 2008-2012 ACS data, Keen Independent compared median home values by racial/ethnic group in Arizona. The median value of homes owned by non-Hispanic whites was about \$110,000 in 2000 and \$170,000 in 2008-2012 (home prices rose in Arizona in the first half of the 2000s before declining during the Great Recession).

The median value of homes owned by Native Americans, Hispanic Americans and African Americans in Arizona was considerably less than homes owned by non-Hispanic whites in both 2000

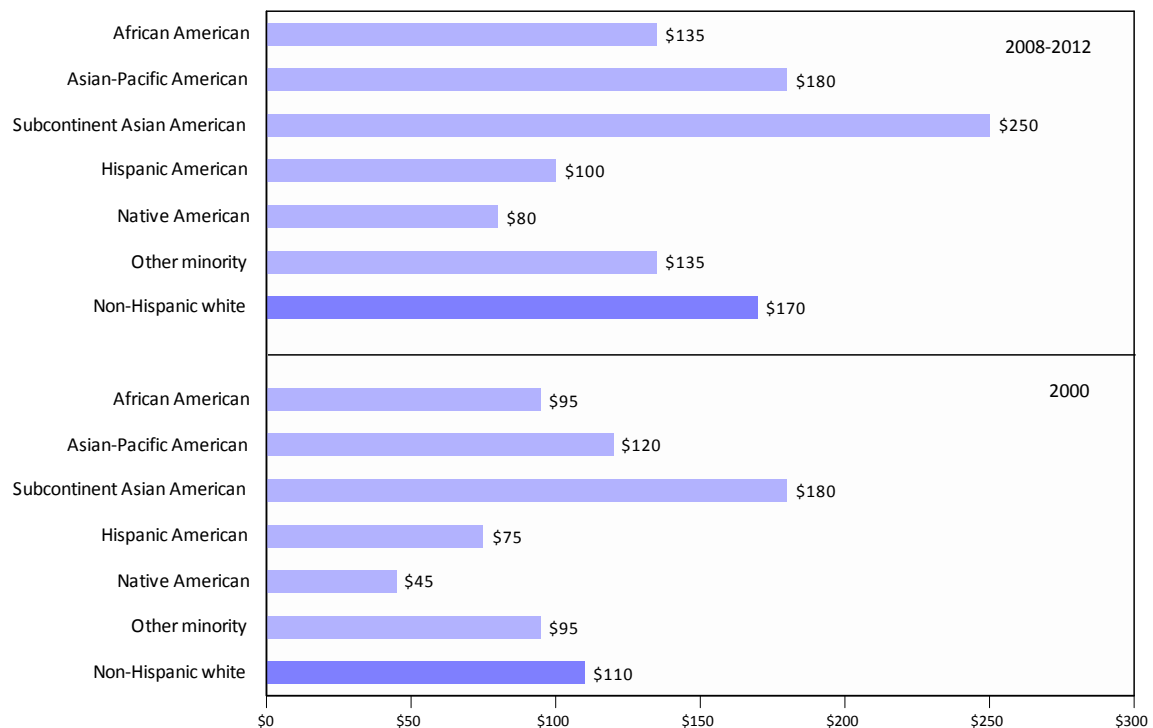
<sup>15</sup> Jackman. 1980. "Racial Inequalities in Home Ownership."

<sup>16</sup> Rosebaum, E. 2012. "Home Ownership's Wild Ride, 2001-2011." U.S. 2010 Project, Census Brief. New York: Russell Sage Foundation.

and 2008-2012. The median value of homes owned by Subcontinent Asian Americans was higher than non-Hispanic whites in both time periods. Median home values for Asian-Pacific Americans were about the same as for non-Hispanic whites.

Much research has been conducted on the determinants of housing values. In addition to factors such as number of rooms, number of bathrooms and lot size, the availability of residential services may have as much or more of an impact on housing prices.<sup>17</sup> A 2005 study by researchers at Arizona State University examines the historical making of South Phoenix, a neighborhood that remains heavily populated by Hispanic and African American residents. The study reports that historic discriminatory practices in zoning, provision of public services such as sewage and electricity, location of transportation routes including highways, railways and Sky Harbor Airport and siting of hazardous waste and toxic industries continue to negatively affect housing values for this minority community.<sup>18</sup>

**Figure G-2.**  
Median home values, 2000 and 2008-2012, thousands



Note: The sample universe is all owner-occupied housing units.

Source: Keen Independent Research from 2000 U.S. Census 5% sample and 2010-2012 ACS Public Use Microdata samples. The 2000 Census and 2010-2012 ACS raw data extracts were obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

<sup>17</sup> Kain, John.F. and John M. Quigley. 1970. "Measuring the Value of Housing Quality." *Journal of the American Statistical Association*. 65: 532-548.

<sup>18</sup> Bolin, Bob, Sara Grineski and Timothy Collins. 2005. "The Geography of Despair: Environmental Racism and the Making of South Phoenix, Arizona, USA." *Human Ecological Review*. 12(2):156-168.

**Mortgage lending.** Minorities may be denied opportunities to own homes, to purchase more expensive homes, or to access equity in their homes if they are discriminated against when seeking home mortgages. Therefore, any such discrimination could have lasting effects. In a recent lawsuit, Bank of America paid \$335 million to settle allegations that its Countrywide Financial unit discriminated against African American and Hispanic American borrowers between 2004 and 2008. The case was brought by the Securities and Exchange Commission after finding evidence of “statistically significant disparities by race and ethnicity” among Countrywide Financial customers.<sup>19</sup>

Keen Independent explored market conditions for mortgage lending in Arizona. The best available source of information concerning mortgage lending is Home Mortgage Disclosure Act (HMDA) data, which contain information on mortgage loan applications that financial institutions, savings banks, credit unions, and some mortgage companies receive.<sup>20</sup> Those data include information about the location, dollar amount, and types of loans made, as well as race, ethnicity, income, and credit characteristics of all loan applicants. The data are available for home purchases, loan refinances and home improvement loans.

Keen Independent examined HMDA statistics provided by the Federal Financial Institutions Examination Council (FFIEC) for 2007 and 2012. Although 2012 provides the most current representation of the home mortgage market, the 2007 data represent a more complete data set from before the recent mortgage crisis. Many of the institutions that originated loans in 2007 were no longer in business by the 2012 reporting date for HMDA data.<sup>21</sup> For example, the 2007 HMDA data include information about 522,000 loan applications in Arizona that approximately 930 lenders processed. The 2012 HMDA data for Arizona include information about 213,000 loan applications that about 650 lenders processed. In addition, the percentage of government-insured loans, which Keen Independent did not include in its analysis, increased dramatically between 2007 and 2012, decreasing the proportion of total loans analyzed in the 2012 data.<sup>22</sup>

**Mortgage denials.** Keen Independent examined mortgage denial rates on conventional loan applications for high-income borrowers. Conventional loans are loans that are not insured by a government program. High-income borrowers are those households with 120 percent or more of the U.S. Department of Housing and Urban Development (HUD) area median family income.<sup>23</sup> Loan

---

<sup>19</sup> Savage, Charlie. December 22, 2011. “\$335 Million Settlement on Countywide Lending Bias.” *NYTimes.com*. Available online at: <http://www.nytimes.com/2011/12/22/business/us-settlement-reported-on-countrywide-lending.html>.

<sup>20</sup> Financial institutions were required to report 2011 HMDA data if they had assets of more than \$40 million (\$35 million for 2006), have a branch office in a metropolitan area, and originated at least one home purchase or refinance loan in the reporting calendar year. Mortgage companies are required to report HMDA data if they are for-profit institutions, had home purchase loan originations exceeding 10 percent of all loan obligations in the past year, are located in a Metropolitan Statistical Area (MSA; or originated five or more home purchase loans in an MSA) and either had more than \$10 million in assets or made at least 100 home purchase or refinance loans in the calendar year.

<sup>21</sup> According to an article by the Federal Reserve, the volume of reported loan applications and originations fell sharply from 2007 to 2008 after previously falling between 2006 and 2007. See Avery, Brevoort, and Canner, “The 2008 HMDA Data: The Mortgage Market during a Turbulent Year.” Available online: <http://www.federalreserve.gov/pubs/bulletin/2009/pdf/hmda08draft.pdf>.

<sup>22</sup> Loans insured by government programs have surged since 2006. In 2006, about 10 percent of first lien home loans were insured by a government program. More than half of home loans were insured by the government in 2009. Source: “The 2009 HMDA Data: The Mortgage Market in a Time of Low Interest Rates and Economic Distress,” *Federal Reserve Bulletin*. December 2010, pp A39-A77.

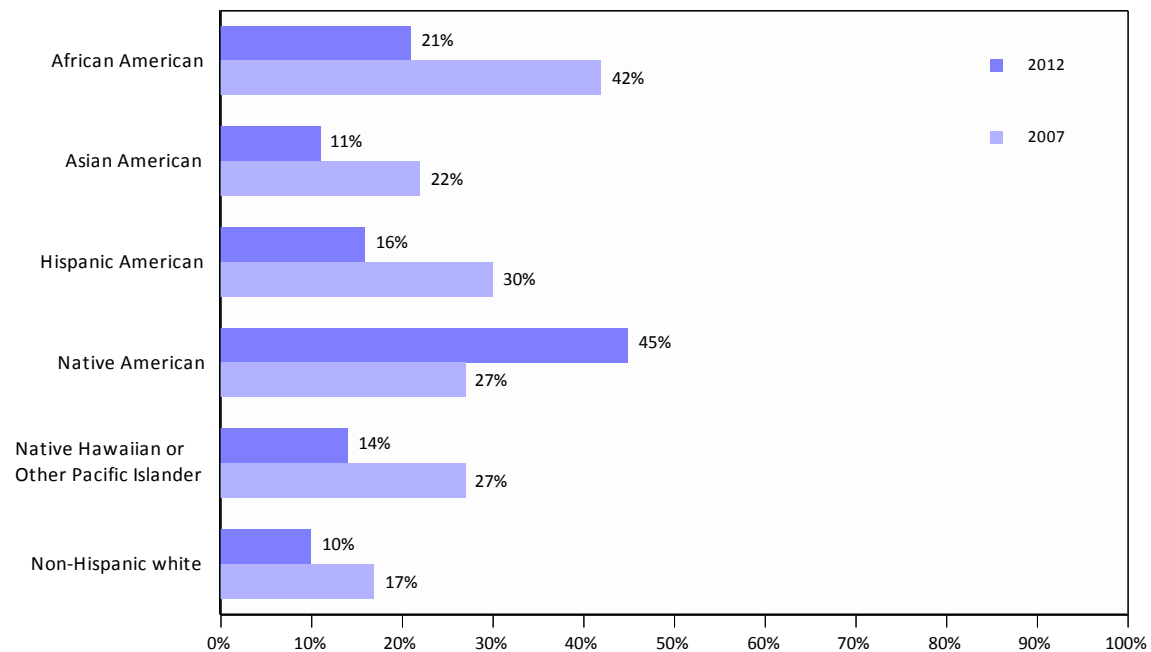
<sup>23</sup> The median family income in 2012 was about \$65,000 for the United States as a whole and \$61,600 for Arizona. Median family income for 2007 was about \$59,000 for the United States as a whole and \$54,400 for Arizona. Source: U.S. Department of Housing and Urban Development, FY 2007 Income Limits and FY 2012 Income Limits.

denial rates are calculated as the percentage of mortgage loan applications that were denied, excluding applications that the potential borrowers terminated and applications that were closed due to incompleteness.<sup>24</sup>

Figure G-3 presents loan denial results for high-income households in Arizona in 2007 and 2012. In 2007, African American, Asian American, Hispanic American, Native American and Native Hawaiian or other Pacific Islander high-income applicants all exhibited higher loan denial rates compared with high-income non-Hispanic white applicants.<sup>25</sup> The denial rate for high-income African Americans (42%) was more than twice the rate of high-income non-Hispanic white applicants (17%).

Even though mortgage loan denial rates for high-income households had fallen in Arizona by 2012 for most groups, each minority group except for Asian Americans had higher loan denial rates than non-Hispanic whites. The denial rate for high-income African American households remained twice that of high-income non-Hispanic white households. The denial rate for high-income Native Americans was more than four times that of high-income non-Hispanic whites in 2012.

**Figure G-3.**  
Denial rates of conventional purchase loans to high-income households,  
Arizona, 2007 and 2012



**Note:** High-income borrowers are those households with 120% or more than the HUD area median family income (MFI).

Loan denial rates are calculated as the percentage of mortgage loan applications that were denied, excluding applications that the potential borrowers terminated and applications that were closed due to incompleteness.

Source: FFIEC HMDA data 2007, and 2012.

<sup>24</sup> For this analysis, loan applications are considered to be applications for which a specific property was identified, thus excluding preapproval requests.

<sup>25</sup> HMDA data group Native Hawaiians and other Pacific Islanders into a single category. According to 49 CFR 26.5 Native Hawaiians are considered Native Americans but other Pacific Islanders are considered Asian. Since the HMDA racial group cannot be split nor accurately included in Native Americans or Asian Americans, it is shown as an individual racial category.

**Additional research.** Several national studies have examined disparities in loan denial rates and loan amounts for minorities in the presence of other influences. For example:

- A study by the Federal Reserve Bank of Boston is one of the most cited studies of mortgage lending discrimination.<sup>26</sup> It was conducted using the most comprehensive set of credit characteristics ever assembled for a study on mortgage discrimination.<sup>27</sup> The study provided persuasive evidence that lenders in the Boston area discriminated against minorities in 1990.<sup>28</sup>
- Using the Federal Reserve Board's 1983 Survey of Consumer Finances and the 1980 Census of Population and Housing data, analyses revealed that minority households were one-third as likely to receive conventional loans as non-Hispanic white households after taking into account financial and demographic variables.<sup>29</sup>
- Results of a Midwest study indicate a relationship between race and both the number and size of mortgage loans. Data matched on socioeconomic characteristics revealed that African American borrowers across 13 census tracts received significantly fewer loans and of smaller sizes compared to their white counterparts.<sup>30</sup>

However, other studies have found that differences in preferences for Federal Housing Administration (FHA) loans — mortgage loans that the government insures — versus conventional loans among racial and ethnic groups may partially explain disparities found in conventional loan approvals between minorities and non-minorities.<sup>31</sup> Several studies have found that, historically, minority borrowers are far more likely to seek FHA loans than comparable non-Hispanic white borrowers across different income and wealth levels. The insurance on FHA loans protects the lender, but the borrower can be disadvantaged by paying higher borrowing costs.<sup>32, 33</sup>

**Subprime lending.** Loan denial is only one of several ways minorities might be discriminated against in the home mortgage market. Mortgage lending discrimination can also occur through higher fees and interest rates. Subprime lending provides a unique example of such types of discrimination through fees associated with various loan types.

Until the Great Recession, one of the fastest growing segments of the home mortgage industry was subprime lending. From 1994 through 2003, subprime mortgage activity grew by 25 percent per year and accounted for \$330 billion of U.S. mortgages in 2003, up from \$35 billion a decade earlier. In 2006, subprime loans represented about one-fifth of all mortgages in the United States.<sup>34</sup> With higher interest rates than prime loans, subprime loans were historically marketed to customers with blemished or limited credit histories who would not typically qualify for prime loans. Subprime loans

---

<sup>26</sup> Munnell, Alicia H., Geoffrey Tootell, Lynn Browne and James McEneaney. 1996. "Mortgage Lending in Boston: Interpreting HMDA Data." *The American Economic Review*. 86: 25-53.

<sup>27</sup> Ladd, Helen F. 1998. "Evidence on Discrimination in Mortgage Lending." *The Journal of Economic Perspectives*. 12:41-62.

<sup>28</sup> Yinger, John. 1995. *Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination*. New York: Russell Sage Foundation, 71.

<sup>29</sup> Canner, Glenn B., Stuart A. Gabriel and J. Michael Woolley. 1991. "Race, Default Risk and Mortgage Lending: A Study of the FHA and Conventional Loan Markets." *Southern Economic Journal*. 58:249-262.

<sup>30</sup> Leahy, Peter J. 1985. "Are Racial Factors Important for the Allocation of Mortgage Money?: A Quasi-Experimental Approach to an Aspect of Discrimination." *American Journal of Economics and Sociology*. 44:185-196.

<sup>31</sup> Canner. 1991. "Race, Default Risk and Mortgage Lending: A Study of the FHA and Conventional Loan Markets."

<sup>32</sup> Yinger. 1995. *Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination*. 80.

<sup>33</sup> See definition of subprime loans discussed on the following page.

<sup>34</sup> Avery, Brevoort, and Canner, "The 2006 HMDA Data." Federal Reserve Bulletin, December 2007, pp. A73-A109.

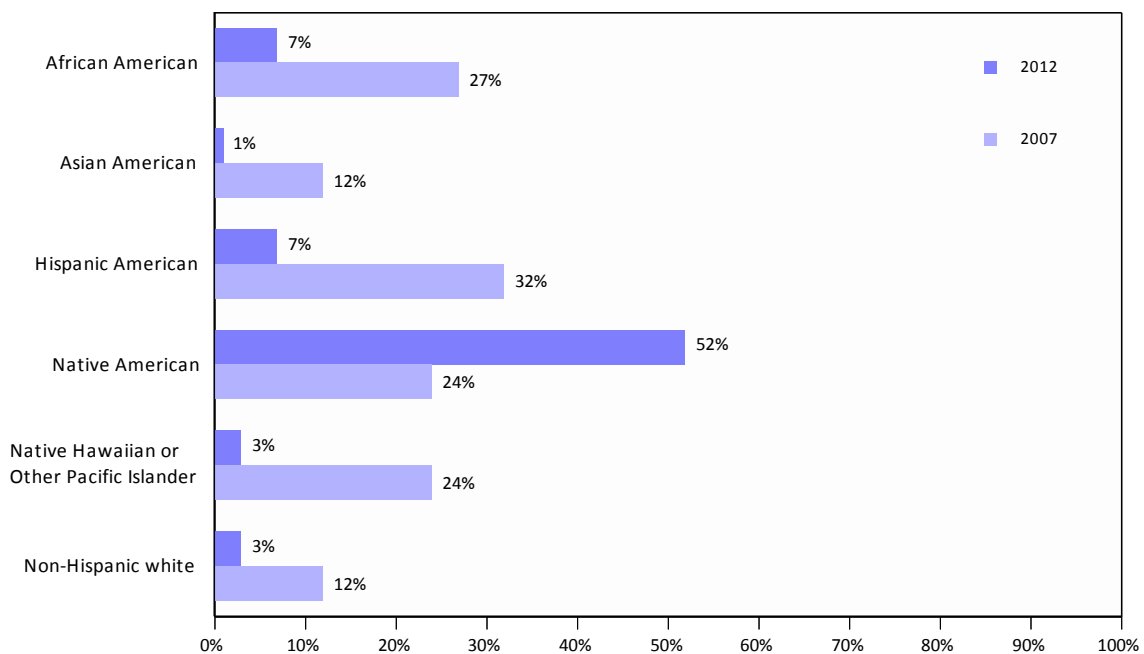
also became available to homeowners who did not want to or could not make a down payment, did not want to provide proof of income and assets, or wanted to purchase a home with a cost higher than what they would qualify for from a prime lender.<sup>35</sup> The higher interest rates and additional costs of subprime loans affected homeowners' ability to grow home equity and increased their risks of foreclosure.

There are several commonly-used approaches to defining a subprime loan and examining rates of subprime lending. Keen Independent used a "rate-spread method" in which subprime loans are identified as those loans with substantially above-average interest rates.<sup>36</sup> Because lending patterns and borrower motivations differ depending on the type of loan sought, Keen Independent separately considered home purchase loans and refinance loans. Patterns in subprime lending did not differ substantially between the different types of loans.

Figure G-4 presents the percentage of conventional home purchase loans that were subprime in Arizona based on 2007 and 2012 HMDA data. The share of conventional home purchase loans that were subprime declined with the collapse of the mortgage lending market in the late 2000s.

**Figure G-4.**

**Percent of conventional home purchase loans that were subprime, Arizona, 2007 and 2012**



Note: Calculated as the percentage of originated loans that were subprime.

Source: FFIEC HMDA data 2007 and 2012.

<sup>35</sup> Gerardi, Shapiro, and P. Willen. 2008. "Subprime Outcomes: Risky Mortgages, Homeownership Experiences, and Foreclosure." *Federal Reserve Bank of Boston*.

<sup>36</sup> Prior to October 2009, first lien loans were identified as subprime if they had an annual percentage rate (APR) that was 3.0 percentage points or greater than the federal treasury security rate of like maturity. As of October 2009, rate spreads in HMDA data were calculated as the difference between APR and Average Prime Offer Rate, with subprime loans defined as 1.5 percentage points of rate spread or more. Keen Independent identified subprime loans according to those measures in the corresponding time periods.

In Arizona in 2007, one-third of home purchase loans that were issued to Hispanic Americans were subprime, more than double the percentage for non-Hispanic whites (12%). Subprime loans also accounted for a relatively large portion of conventional home mortgages for African Americans, Native Americans, and Native Hawaiian and other Pacific Islander borrowers.

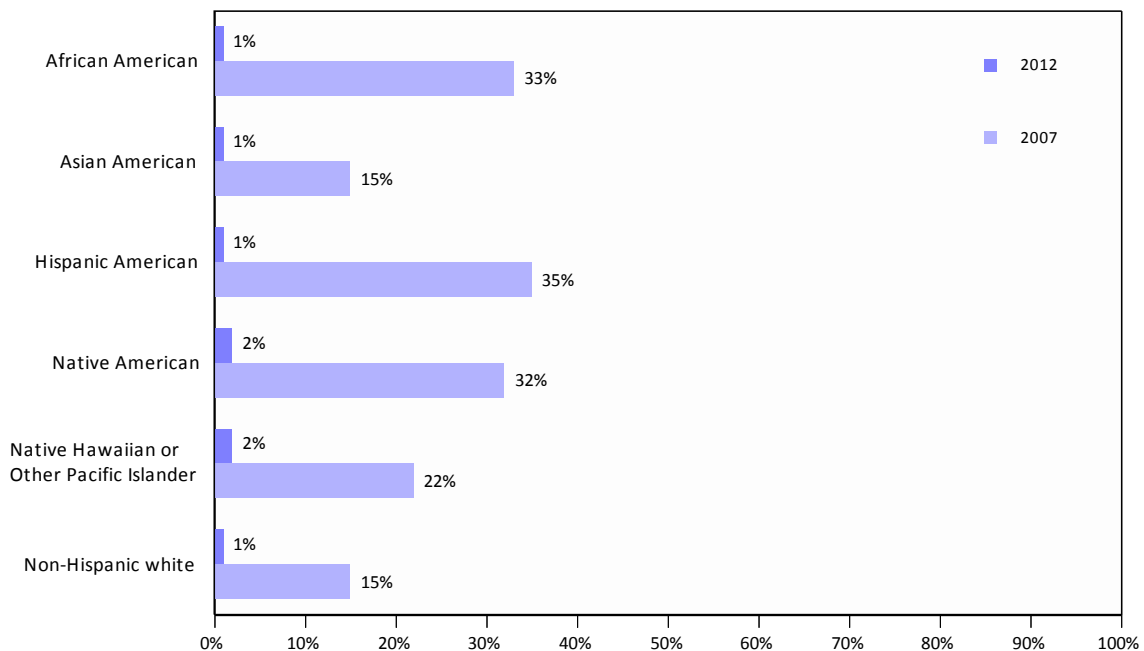
By 2012, subprime loans as a percentage of all conventional home purchase loans issued in Arizona that year dropped for each racial/ethnic group, with the exception of Native Americans. Subprime loans still accounted for a larger share of conventional home purchase loans for African Americans and Hispanic Americans than for non-Hispanic whites (7% for each group compared with 3%). The subprime rate for Native Americans in 2012 remained notably high at 52 percent.

Figure G-5 presents similar information for conventional home refinance loans in Arizona. In 2007, 15 percent of non-Hispanic white refinance borrowers in Arizona obtained subprime loans. Except for Asian Americans, subprime loans comprised a much larger share of refinance loans for minority borrowers (about one-third for African Americans, Hispanic Americans and Native Americans).

In 2012, the share of conventional refinance mortgages that were subprime in Arizona dropped to 1 to 2 percent for each racial/ethnic group.

Figure G-5.

Percent of conventional refinance loans that were subprime, Arizona, 2007 and 2012



Note: Calculated as the percentage of originated loans that were subprime.

Source: FFIEC HMDA data 2007 and 2012.

**Additional research.** Some evidence suggests that lenders sought out and offered subprime loans to individuals who often would not be able to pay off the loan, a form of “predatory lending.”<sup>37</sup> Furthermore, some research has found that many recipients of subprime loans could have qualified for prime loans.<sup>38</sup> Previous studies of subprime lending suggest that predatory lenders have disproportionately targeted minorities. A 2001 HUD study using 1998 HMDA data found that subprime loans were disproportionately concentrated in African American neighborhoods compared with white neighborhoods, even after controlling for income.<sup>39</sup> For example, borrowers in higher-income African American neighborhoods were six times more likely to refinance with subprime loans than borrowers in higher-income white neighborhoods. More recent analyses using 2006 HMDA data found that African American borrowers, going to the same lender and displaying similar financial characteristics, were significantly more likely to receive high-cost loans (those with an interest rate more than 3 percent higher than comparable U.S. Treasury instruments) compared to non-Hispanic whites.<sup>40</sup> More recent research using 2007 HMDA data analyzed differences between high-cost loans among borrowers of different racial and gender backgrounds at comparable income levels and found, on average, African American and Hispanic borrowers were about 1.7 to 2.8 times more likely to receive high-cost loans relative to similarly situated non-minority borrowers in both the Phoenix-Mesa-Scottsdale and Tucson metropolitan areas<sup>41,42</sup>.

**Implications of the recent mortgage lending crisis.** The turmoil in the housing market since late 2006 has been far-reaching, resulting in the loss of home equity, decreased demand for housing, and increased rates of foreclosure.<sup>43</sup> Much of the blame has been placed on risky practices in the mortgage industry including substantial increases in subprime lending. As discussed above, the number of subprime mortgages increased at an extraordinary rate between the mid-1990s and mid-2000s. Those high-cost, high-interest loans increased from 8 percent of originations in 2003 to 20 percent in 2005 and 2006.<sup>44</sup> The preponderance of subprime lending is important because households that were repaying subprime loans had a greater likelihood of delinquency or foreclosure. A 2008 study released from the Federal Reserve Bank of Boston found that, “homeownerships that begin with a subprime purchase mortgage end up in foreclosure almost 20 percent of the time, or more than six times as often as experiences that begin with prime purchase mortgages.”<sup>45</sup>

---

<sup>37</sup> Department of Housing and Urban Development (HUD) and the Department of Treasury. 2001. HUD-Treasury National Predatory Lending Task Force Report. *HUD*; Carr, J. and L. Kolluri. 2001. Predatory Lending: An Overview. *Fannie Mae Foundation*; and California Reinvestment Coalition, Community Reinvestment Association of North Carolina, Empire Justice Center, Massachusetts Affordable Housing Alliance, Neighborhood Economic Development Advocacy Project, Ohio Fair Lending Coalition and Woodstock Institute, 2008. “Paying More for the American Dream.”

<sup>38</sup> Freddie Mac. 1996, September. “Automated Underwriting: Making Mortgage Lending Simpler and Fairer for America’s Families.” *Freddie Mac*. (accessed February 5, 2007); and Lanzerotti. 2006. “Homeownership at High Cost: Foreclosure Risk and High Cost Loans in California.” *Federal Reserve Bank of San Francisco*.

<sup>39</sup> Department of Housing and Urban Development (HUD) and the Department of Treasury. 2001.

<sup>40</sup> Maya Sen. 2012. “Quantifying Discrimination: Exploring the Role of Race and Gender and the Awarding of Subprime Mortgage Loans.” Available at SSRN: <http://ssrn.com/abstract=1593183>.

<sup>41</sup> Rates varied between about 1.7 and 2.5 for African Americans and Hispanics by gender and income category as well as metropolitan area.

<sup>42</sup> National Council of Negro Women. 2009. “Income is No Shield, Part III-Assessing the Double Burden: Examining Racial and Gender Disparities in Mortgage Lending.”

<sup>43</sup> Joint Center for Housing Studies of Harvard University. 2008. “The State of the Nation’s Housing.”

<sup>44</sup> Ibid.

<sup>45</sup> Gerardi, Shapiro, and P. Willen. 2008. “Subprime Outcomes: Risky Mortgages, Homeownership Experiences, and Foreclosure.” *Federal Reserve Bank of Boston*.



Such problems substantially impact the ability of homeowners to secure capital through home mortgages to start or expand small businesses. That issue has been highlighted in statements made by members of the Board of Governors of the Federal Reserve System to the U.S. Senate and U.S. House of Representatives:

- On April 16, 2008, Frederic Mishkin informed the U.S. Senate Committee on Small Business and Entrepreneurship that “one of the most important concerns about the future prospects for small business access to credit is that many small businesses use real estate assets to secure their loans. Looking forward, continuing declines in the value of their real estate assets clearly have the potential to substantially affect the ability of those small businesses to borrow. Indeed, anecdotal stories to this effect have already appeared in the press.”<sup>46</sup>
- On November 20, 2008, Randall Kroszner told the U.S. House of Representatives Committee on Small Business that “small business and household finances are, in practice, very closely intertwined. [T]he most recent Survey of Small Business Finances (SSBF) indicated that about 15 percent of the total value of small business loans in 2003 was collateralized by ‘personal’ real estate. Because the condition of household balance sheets can be relevant to the ability of some small businesses to obtain credit, the fact that declining house prices have weakened household balance-sheet positions suggests that the housing market crisis has likely had an adverse impact on the volume and price of credit that small businesses are able to raise over and above the effects of the broader credit market turmoil.”<sup>47</sup>

Federal Reserve Chairman Ben Bernanke recognized the reality of those concerns in a speech titled “Restoring the Flow of Credit to Small Businesses” on July 12, 2010.<sup>48</sup> Bernanke indicated that small businesses have had difficulty accessing credit and pointed to the declining value of real estate as one of the primary obstacles.

Furthermore, the National Federation of Independent Business (NFIB) conducted a national survey of 751 small businesses in late-2009 to investigate how the recession impacted access to capital.<sup>49, 50</sup> NFIB concluded that “falling real estate values (residential and commercial) severely limit small business owner capacity to borrow and strains currently outstanding credit relationships.” Survey results indicated that 95 percent of small business employers owned real estate and 13 percent held “upside-down” property — that is, property for which the mortgage is worth more than its appraised value.

Another study analyzed the Survey of Consumer Finances to explore racial/ethnic disparities in wealth and how those disparities were impacted by the recession.<sup>51</sup> The study showed that there are

---

<sup>46</sup> Mishkin, Frederic. 2008. “Statement of Frederic S. Mishkin, Member, Board of Governors of the Federal Reserve System before the Committee on Small Business and Entrepreneurship, U.S. Senate on April 16.”

<sup>47</sup> Kroszner, Randall. 2008. “Effects of the financial crisis on small business.” Testimony before the Committee on Small Business, U.S. House of Representative on November 20.

<sup>48</sup> Bernanke, Ben. 2010. Restoring the Flow of Credit to Small Businesses. Presented at the Federal Reserve Meeting Series: Addressing the Financing Needs of Small Businesses on July 12.

<sup>49</sup> The study defined a small business as a business employing no less than one individual in addition to the owner(s) and no more than 250 individuals.

<sup>50</sup> National Federation of Independent Business (NFIB). 2010. Small Business Credit in a Deep Recession.

<sup>51</sup> McKernan, Signe-Mary, Caroline Ratcliffe, Eugene Steverle and Sisi Zhang. 2013. “Less Than Equal: Racial Disparities in Wealth Accumulation.” Urban Institute.

substantial wealth disparities between African Americans and whites as well as Hispanics and whites and that those wealth disparities worsened between 1983 and 2010. In addition to growing over time, the wealth disparity also grows with age — whites are on a higher accumulation curve than blacks or Hispanics. The study also reports that the 2007-2009 recession exacerbated wealth disparities, particularly for Hispanics.

Opportunities to obtain business capital through home mortgages appear to be limited especially for homeowners with little home equity. Furthermore, the increasing rates of default and foreclosure, especially for homeowners with subprime loans, reflect shrinking access to capital available through such loans. Those consequences are likely to have a disproportionate impact on minorities in terms of both homeownership and the ability to secure capital for business startup and growth.

**Redlining.** Redlining refers to mortgage lending discrimination against geographic areas associated with high lender risk. Those areas are often racially determined, such as African American or mixed-race neighborhoods.<sup>52</sup> That practice can perpetuate problems in already poor neighborhoods.<sup>53</sup> Most quantitative studies have failed to find strong evidence in support of geographic dimensions of lender decisions. Studies in Columbus, Ohio; Boston, Massachusetts; and Houston, Texas found that racial differences in loan denial had little to do with the racial composition of a neighborhood but rather with the individual characteristics of the borrower.<sup>54</sup> Some studies found that the race of an applicant — but not the racial makeup of the neighborhood — to be a factor in loan denials.

Studies of redlining have primarily focused on the geographic aspect of lender decisions. However, redlining can also include the practice of restricting credit flows to minority neighborhoods through procedures that are not observable in actual loan decisions. Examples include branch placement, advertising, and other pre-application procedures.<sup>55</sup> Such practices can deter minorities from starting businesses. Locations of financial institutions are important to small business startup, because local banking sectors often finance local businesses.<sup>56</sup> Redlining practices would deny that resource to minorities.

---

<sup>52</sup> Holloway, Steven R. 1998. "Exploring the Neighborhood Contingency of Race Discrimination in Mortgage Lending in Columbus, Ohio." *Annals of the Association of American Geographers*. 88:252-276.

<sup>53</sup> Ladd, Helen F. 1998. "Evidence on Discrimination in Mortgage Lending." *The Journal of Economic Perspectives*. 12:41-62.

<sup>54</sup> See Holloway. 1998. "Exploring the Neighborhood Contingency of Race Discrimination in Mortgage Lending in Columbus, Ohio."; Toottell. 1996. "Redlining in Boston: Do Mortgage Lenders Discriminate Against Neighborhoods?"; and Holmes, Andrew and Paul Horvitz. 1994. "Mortgage Redlining: Race, Risk, and Demand." *The Journal of Finance*. 49:81-99.

<sup>55</sup> Yinger, John. 1995. "Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination." Russell Sage Foundation. New York. 78-79.

<sup>56</sup> Holloway. 1998. "Exploring the Neighborhood Contingency of Race Discrimination in Mortgage Lending in Columbus, Ohio."

**Steering by real estate agents.** Historically, differences in the types of loans that are issued to minorities have also been attributed to “steering” by real estate agents, who serve as an information filter.<sup>57</sup> Despite the fact that steering has been prohibited by law for many decades, some studies claim that real estate brokers provide different levels of assistance and different information on loans to minorities than they do to non-minorities.<sup>58</sup> Such steering can affect the perception of minority borrowers about the availability of mortgage loans.

A 2000 HUD study focusing on selected metropolitan areas found differential treatment of potential Hispanic homebuyers in Tucson by real estate agents. Specifically, the study found that real estate agents showed Hispanic homebuyers fewer houses and were less likely to make follow-up arrangements.<sup>59</sup>

**Gender discrimination in mortgage lending.** Relatively little information is available on gender-based discrimination in mortgage lending markets. Historically, lending practices overtly discriminated against women by requiring information on marital and childbearing status. Perceived risks associated with granting loans to women of childbearing age and unmarried women resulted in “income discounting,” limiting the availability of loans to women.<sup>60</sup>

The Equal Credit Opportunity Act in 1973 suspended such discriminatory lending practices. However, certain barriers affecting women have persisted after 1973 in mortgage lending markets. For example, there is some past evidence that lenders under-appraised properties for female borrowers.<sup>61</sup>

## **Access to Business Capital**

Barriers to accessing capital can have substantial impacts on small business formation and expansion. In-depth interviews with business owners and managers in Arizona indicated a strong link between capital and the ability to start and grow a business. In addition, several studies have found evidence that startup capital is important for business profits, longevity and other outcomes. For example:

- The amount of startup capital is associated with small business sales and other outcomes;<sup>62</sup>
- Limited access to capital has affected the size of African American-owned businesses;<sup>63, 64</sup> and
- Weak financial capital was identified as a reason that more African American-owned businesses closed over a four-year period compared with non-Hispanic white-owned businesses.<sup>65</sup>

---

<sup>57</sup> Kantor, Amy C. and John D. Nystuen. 1982. “De Facto Redlining a Geographic View.” *Economic Geography*. 4:309-328.

<sup>58</sup> Yinger. 1995. Closed Doors, Opportunities Lost: The Continuing Costs of Housing Discrimination. 78–79.

<sup>59</sup> Turner, M.A., Ross, S.L., et al. 2002. “Discrimination in Metropolitan Housing Markets: National Results from Phase I HDS 2000.” U.S. Department of Housing and Urban Development.

<sup>60</sup> Card. 1980. “Women, Housing Access, and Mortgage Credit.”

<sup>61</sup> Ladd, Helen F. 1982. “Equal Credit Opportunity: Women and Mortgage Credit.” *The American Economic Review*. 72:166-170.

<sup>62</sup> See Fairlie, Robert W. and Harry A. Krashinsky. 2006. “Liquidity Constraints, Household Wealth, and Entrepreneurship Revisited”; and Grown. 1991. “Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies.”

<sup>63</sup> Grown, C. and Bates, T. 1992. “Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies.” *Journal of Urban Affairs*, 14: 25–41.

<sup>64</sup> Fairlie, Robert W. and Alicia M. Robb. 2010. *Race and Entrepreneurial Success*. Cambridge: MIT Press.

Bank loans are one of the largest sources of debt capital for small businesses.<sup>66</sup> Discrimination in the application and approval processes of those loans and other credit resources could be detrimental to the success of minority- and women-owned businesses. Previous studies have addressed racial/ethnic and gender discrimination in capital markets by evaluating:

- Loan denial rates;
- Loan values;
- Interest rates;
- Business owners' fears that loan applications will be rejected;
- Sources of capital; and
- Relationships between startup capital and business survival.

To examine the role of race/ethnicity and gender in capital markets, Keen Independent analyzed data from the Federal Reserve Board's 2003 Survey of Small Business Finances (SSBF) — the most comprehensive national source of credit characteristics of small businesses (those with fewer than 500 employees). The survey contains information on loan denial and interest rates as well as anecdotal information from businesses. The sample from 2003 contains records for 4,240 businesses. Keen Independent applied sample weights to provide representative estimates of loan denial and interest rates.

The SSBF records the geographic location of businesses by Census Division, not by city, county, or state. The Mountain Census Division ("Mountain region" throughout this report) includes Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah and Wyoming. The Mountain region is the level of geographic detail of SSBF data most specific to Arizona, and 2003 is the most recent information available from the SSBF as the survey was discontinued after that year.

**Loan denial rates.** Figure G-6 presents loan denial rates from the 2003 SSBF for the Mountain region and for the United States.<sup>67</sup> National SSBF data for 2003 reveal that the loan denial rate for African American-owned businesses (51%) in the United States was higher than for non-Hispanic white male-owned businesses (8%), a statistically significant difference. Denial rates were also higher for other minority groups and non-Hispanic white females but those differences were not statistically significant.

As shown in Figure G-6, about 13 percent of minority- and women-owned businesses in the Mountain region reported being denied loans in 2003, a larger percentage than the 10 percent of non-

---

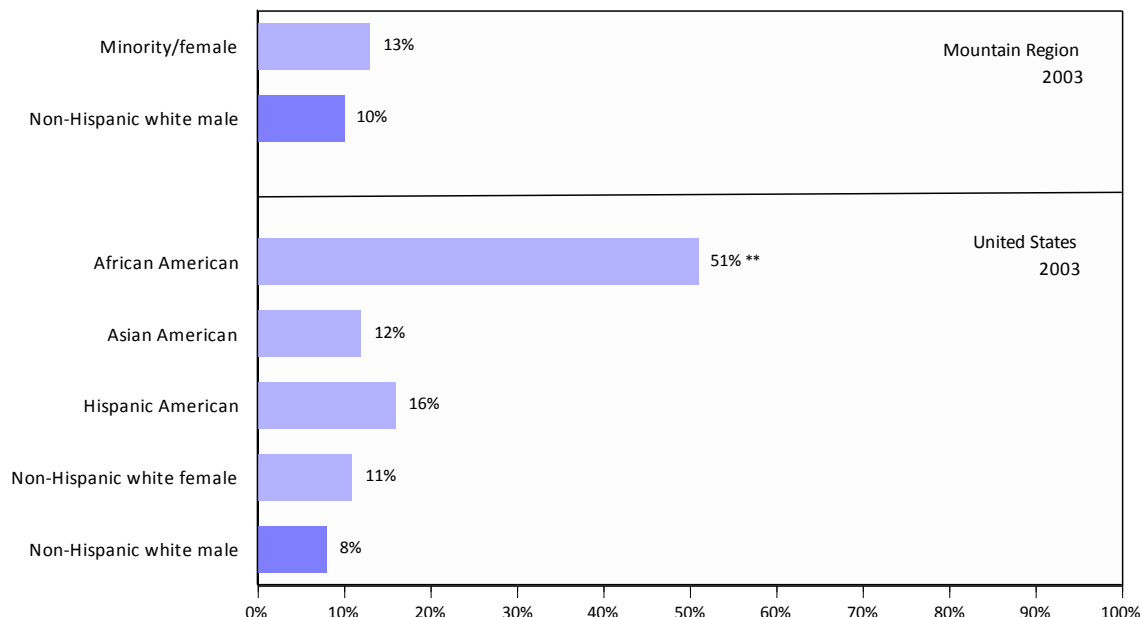
<sup>65</sup> Grown, C. and Bates, T. 1992. "Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies." *Journal of Urban Affairs*, 14: 25–41.

<sup>66</sup> Data from the 1998 SSBF indicate that 70 percent of loans to small business are from commercial banks. That result is present across all gender and racial/ethnic groups with the exception of African Americans, whose rate of lending from commercial banks is even greater than other minorities. See Blanchard, Lloyd, Bo Zhao and John Yinger. 2005. "Do Credit Market Barriers Exist for Minority and Woman Entrepreneurs?" *Center for Policy Research, Syracuse University*.

<sup>67</sup> The denial rates represent the proportion of business owners whose loan applications over the previous three years were always denied, compared to business owners whose loan applications were always approved or sometimes approved.

Hispanic white male-owned businesses that reported being denied loans. (Loan denial statistics on individual minority groups in the Mountain region are not reported in Figure G-6 due to relatively small sample sizes.)

**Figure G-6.**  
Business loan denial rates, 2003



Note: \*, \*\* Denote that the difference in proportions from non-Hispanic white for the given year is statistically significant at the 90% or 95% confidence level, respectively.

Source: Keen Independent Research from 2003 Survey of Small Business Finances.

**Other researchers' regression analyses of loan denial rates.** Several studies have investigated whether disparities in loan denial rates for different racial/ethnic and gender groups exist after controlling for other factors that affect loan approvals. Study results include the following:

- Commercial banks are less likely to loan to African American-owned businesses than to non-Hispanic white-owned businesses after statistically controlling for other factors.<sup>68</sup>
- African American, Asian American and Hispanic American men are more likely to be denied loans than non-Hispanic white men. However, African American borrowers are more likely to apply for loans.<sup>69</sup>
- Disparities in loan denial rates between African American-owned and non-Hispanic white-owned businesses tend to decrease with increasing competitiveness of lender markets. A similar phenomenon is observed when considering differences in loan denial rates between male- and female-owned businesses.<sup>70</sup>
- The probability of loan denial decreases with greater personal wealth. However, accounting for personal wealth does not account for the large differences in denial rates across African

<sup>68</sup> Cavalluzzo, Ken, Linda Cavalluzzo and John Wolken. 2002. "Competition, Small Business Financing and Discrimination: Evidence from a New Survey." *Journal of Business*. 75: 641-679.

<sup>69</sup> Coleman, Susan. 2002. "Characteristics and Borrowing Behavior of Small, Women-owned Firms: Evidence from the 1998 National Survey of Small Business Finances." *The Journal of Business and Entrepreneurship*. 151-166.

<sup>70</sup> Cavalluzzo, 2002. "Competition, Small Business Financing and Discrimination: Evidence from a New Survey."

American-, Hispanic American-, Asian American-, and non-Hispanic white-owned businesses. Specifically, information about personal wealth explained some differences between Hispanic- and Asian American-owned businesses and non-Hispanic white-owned businesses, but they explained almost none of the differences between African American-owned businesses and non-Hispanic white-owned businesses.<sup>71</sup>

- Loan denial rates are higher for African American-owned businesses than for non-Hispanic white-owned businesses after accounting for several factors such as creditworthiness and other characteristics. That result is largely insensitive to different model specifications. Consistent evidence on loan denial rates and other indicators of discrimination in credit markets was not found for other minorities or for women.<sup>72</sup>
- Women-owned businesses are no less likely to apply or to be approved for loans in comparison to male-owned businesses.<sup>73</sup>
- A recent study using Kauffman Firm Survey data found that black/Hispanic-owned firms had a lower probability of loan approval than non-Hispanic white-owned firms in 2007, 2008, 2009 and 2010 even after accounting for firm and owner characteristics. In 2010, Asian-owned firms were also less likely to be approved. Women-owned firms had a lower likelihood of loan approval than male-owned firms, but only for 2008.<sup>74</sup>

**Regression model for denial rates in the SSBF.** Keen Independent developed regression models to explore the relationships between loan denial and the race, ethnicity and gender of business owners while statistically controlling for other factors. As discussed above, there is extensive literature on business loan denials that provides the theoretical basis for the regression models. Many studies have used probit econometric models to investigate the effects of various owner, business, and loan characteristics on the likelihood of loan denial. They include three general categories of variables:

- Owners' demographic characteristics (including race and gender), credit, and resources (13 variables);
- Business characteristics and credit and financial health (26 variables); and
- The environment in which businesses and lenders operate and characteristics of the loans (19 variables).<sup>75</sup>

---

<sup>71</sup> Cavalluzzo, Ken and John Wolken. 2002. "Small Business Turndowns, Personal Wealth and Discrimination." *FEDS Working Paper No. 2002-35*.

<sup>72</sup> Blanchflower, David G., Phillip B. Levine and David J. Zimmerman. 2003. "Discrimination in the Small Business Credit Market." *The Review of Economics and Statistics*. 85:930-943.

<sup>73</sup> Coleman. 2002. "Characteristics and Borrowing Behavior of Small, Women-owned Firms: Evidence from the 1998 National Survey of Small Business Finances."

<sup>74</sup> Robb, Alicia. 2012. "Access to Capital among Young firms, Minority-owned Firms, Women-owned Firms, and High-tech Firms." U.S. Small Business Administration.

<sup>75</sup> See, for example, Blanchard, Lloyd; Zao, Bo and John Yinger. 2005. "Do Credit Barriers Exist for Minority and Women Entrepreneurs?" *Center for Policy Research, Syracuse University*.

After excluding observations where loan denial was imputed, businesses where no individual held at least 10 percent ownership and businesses where the largest shareholders were firms, the 2003 national sample included 1,854 businesses that had applied for a loan during the three years preceding the 2003 SSBF.

Given the relatively small sample size for the Mountain region (156 businesses) and the large number of variables in the model, Keen Independent included all U.S. businesses in the model and estimated any Mountain region effects by including regional control variables — an approach commonly used in other studies that analyze SSBF data.<sup>76</sup> The regional variables include an indicator variable for businesses located in the Mountain region and interaction variables that represent businesses owned by minorities or women that are located in the Mountain region.<sup>77</sup>

Figure G-7 on the following page presents the marginal effects from the probit model predicting loan denials. The dependent variable represented whether a company's loan applications over the past three years were always denied. The results from the model indicate that a number of race- and gender-neutral factors significantly affect the probability of loan denial.

The following characteristics were associated with a *higher* probably of loan denial:

- High-risk credit score for the business;
- Having one or more delinquent business transactions within the past 3 years; and
- Being in the transportation, communications and utilities industry.

The following characteristics were associated with a *lower* probably of loan denial:

- Being an inherited businesses or older businesses;
- Having an existing line of credit or savings account; and
- Applying for business mortgages and vehicle.

After statistically controlling for race- and gender-neutral influences, Keen Independent observed that businesses owned by African Americans were more likely to have their loans denied than other businesses.

The indicator variable for the Mountain region and the interaction terms for Mountain region and status as a minority- or female-owned business were not statistically significant. That result indicates that the probability of loan denials for minority- and women-owned businesses within the Mountain region is not significantly different from the U.S. as a whole after accounting for other factors.

---

<sup>76</sup> Blanchflower, David G.; Levine, Phillip B. and David J. Zimmerman. 2003. "Discrimination in the Small-Business Credit Market." *The Review of Economics and Statistics*. 85(4): 930-943; NERA Economic Consulting. 2008. "Race, Sex, and Business Enterprise: Evidence from the City of Austin." *Prepared for the City of Austin, Texas*; and CRA International. 2007. "Measuring Minority- and Woman-Owned Construction and Professional Service Firm Availability and Utilization. *Prepared for Santa Clara Valley Transportation Authority*.

<sup>77</sup> Keen Independent also considered an interaction variable to represent firms that are both minority and female but the term was not significant.

Figure G-7.

Likelihood of business loan denial (probit regression) in the U.S. in the 2003 SSBF,  
Dependent variable: loan denial

Variable	Marginal effect	Variable	Marginal effect	Variable	Marginal effect
<b>Race/ethnicity and gender</b>		<b>Firm's characteristics, credit and financial health</b>		<b>Firm and lender environment and loan characteristics</b>	
African American	0.068 **	D&B credit score = moderate risk	-0.012	Partnership	0.010
Asian American	-0.013	D&B credit score = average risk	0.030	S corporation	0.026
Hispanic American	-0.011	D&B credit score = significant risk	0.015	C corporation	0.027
Native American	0.032	D&B credit score = high risk	0.041 *	Construction industry	0.032
Other minority	0.031	Total employees	0.000	Manufacturing industry	0.025
Female	0.010	Percent of business owned by principal	0.000	Transportation, communications and utilities industry	0.093 **
Mountain region	-0.008	Family-owned business	-0.022	Finance, insurance and real estate industries	0.014
Minority in Mountain region	-0.005	Firm purchased	0.002	Engineering industry	0.015
Female in Mountain region	0.003	Firm inherited	-0.169 **	Other industry	0.022
<b>Owner's characteristics, credit and resources</b>		Firm age	-0.001	Herfindahl index = .10 to .18	0.019
Age	0.000	Firm has checking account	-0.031	Herfindahl index = .18 or above	0.034
Owner experience	0.001	Firm has savings account	-0.031 *	Located in MSA	0.031
Some college	0.005	Firm has line of credit	-0.089 **	Sales market local only	0.015
Four-year degree	0.008	Existing capital leases	-0.009	Loan amount	0.000
Advanced degree	-0.024	Existing mortgage for business	0.005	Capital lease application	-0.033
Log of Home Equity	0.001	Existing vehicle loans	0.016	Business mortgage application	-0.045 *
Owner has negative net worth	0.074	Existing equipment loans	-0.015	Vehicle loan application	-0.159 **
Bankruptcy in past 7 years	0.056	Existing loans from stockholders	0.025	Equipment loan application	-0.023
Judgement against in past 3 years	0.025	Other existing loans	0.024	Loan for other purposes	-0.019
Log of net worth excluding home	-0.001	Firm used trade credit in past year	-0.006		
		Log of total sales in prior year	0.005		
		Log of cost of doing business in prior year	-0.008		
		Log of total assets	-0.002		
		Log of total equity	-0.001		
		Firm bankruptcy in past 7 years	-0.066		
		Firm delinquency in business transactions	0.037 **		

Note: \* Statistically significant at 90% confidence level.

\*\* Statistically significant at 95% confidence level.

For ease of interpretation the marginal effects of the probit coefficients are displayed in the figure. Significance is calculated using chi-square test statistics from the probit coefficients associated with the marginal effects.

"Less than high school education," "Negative total assets," "Negative sales in prior year" and "Mining industry" perfectly predicted loan outcome and dropped out of the regression;

"Negative total equity" dropped because of collinearity.

Source: Keen Independent Research analysis of 2003 SSBF data.



Keen Independent simulated loan approval rates for African American-owned businesses by comparing observed approval rates with simulated approval rates. “Loan approval” means that a business owner always, or at least sometimes, had his or her business loan applications approved over the previous three years. “Rates” of loan approval means the percentage of businesses that received loan approvals (always or sometimes) during that time period. Approval rates were calculated by subtracting the denial rate from 100 (e.g., a denial rate of 40% would indicate an approval rate of 60%).

The probit modeling approach allowed for simulations of loan approval rates for African American-owned businesses as if they had the same probability of loan approval as similarly situated non-Hispanic white male-owned businesses. To conduct the simulation, Keen Independent took the following steps:

- Performed a probit regression analysis predicting loan approval using only non-Hispanic white male-owned businesses in the dataset.<sup>78</sup>
- Used the coefficients from that model and the mean characteristics of African American-owned businesses (including the effects of a business being in the Mountain region) to estimate the probability of loan approval of that group.

Based on 2003 SSBF data, the actual loan approval rate for African American-owned businesses was 49 percent. Model results showed that African American-owned businesses would have an approval rate of about 70 percent if they were approved for loans at the same rate as similarly-situated non-Hispanic white male-owned businesses (disparity index of 70). The index of 70 suggests a substantial disparity between the actual loan approval rate and the rate for African American-owned businesses that might be expected for similarly-situated non-Hispanic white male-owned businesses. Figure G-8 presents these results.

Figure G-8.  
Comparison of actual loan approval rates to simulated loan approval rates, 2003

Group	Loan approval rates		Disparity index (100 = parity)
	Actual	Benchmark	
African American	49.1%	69.8%	70

Note: Actual approval rates presented here may differ from denial rates in Figure G-6 because some observations were excluded from the probit regression.

“Loan approval” means that a business owner always or at least sometimes had his or her business loan applications approved over the previous three years.

Source: Keen Independent Research analysis of 2003 SSBF data.

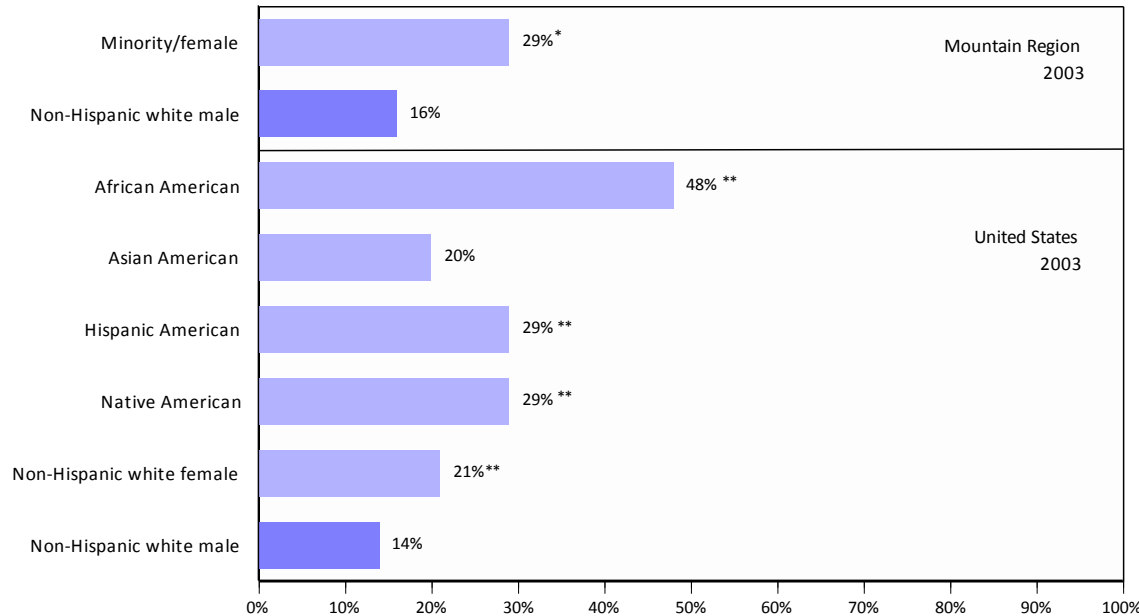
<sup>78</sup> That version of the model excluded the race/ethnicity and gender indicator variables, because the value of all of those variables would be the same (i.e., 0).

**Applying for loans.** Fear of loan denial can be a barrier to business credit in the same way that actual loan denial presents a barrier. The SSBF includes a question that gauges whether a business owner did not apply for a loan due to fear of loan denial. Using data from the 2003 SSBF, Figure G-9 presents the percentage of businesses that reported needing credit but did not apply for loans because of fears of denial.

In the Mountain region, minority- and women-owned businesses that reported needing loans were about twice as likely as non-Hispanic white-owned firms to say that they did not apply for those loans because of fear of loan denial (statistically significant difference).

The bottom portion of figure G-9 shows national results for fear of loan denial by race, ethnicity and gender of the business owners. Nationwide, African American, Hispanic American and Native American business owners were more likely to forgo applying for business loans due to a fear of denial compared to non-Hispanic white male-owned businesses (statistically significant differences). Non-Hispanic white women-owned businesses were also more likely to forgo applying for loans due to a fear of denial (also a statistically significant difference).

**Figure G-9.**  
**Businesses that needed loans but did not apply due to fear of denial, 2003**



Note: \*, \*\* Denote that the difference in proportions from non-Hispanic white male-owned businesses is statistically significant at the 90% or 95% confidence level, respectively.

Source: Keen Independent Research from 2003 Survey of Small Business Finances.

**Other researchers' regression analyses of fear of denial.** Other studies have identified factors that influence the decision to apply for a loan, such as business size, business age, owner age, and educational attainment. Accounting for those factors can help in determining whether race/ethnicity or gender of business owners explains whether owners did not apply for a loan due to fear of loan denial. Results indicate that:

- African American and Hispanic American business owners are significantly less likely to apply for loans due to fear of denial.<sup>79</sup>
- After statistically controlling for educational attainment, there were no differences in loan application rates between non-Hispanic white, African American, Hispanic American, and Asian American male business owners.<sup>80</sup>
- African American-owned businesses were more likely than other businesses to report being seriously concerned with credit markets and were less likely to apply for credit in fear of loan denial.<sup>81</sup>
- A Small Business Administration study found that African American- and Hispanic American-owned firms were less likely to apply for credit when needed for fear of having the loan application denied than non-Hispanic white-owned firms in 2007, 2008, 2009 and 2010 after accounting for firm and owner characteristics. Women-owned firms were less likely than male-owned firms to apply for loans for fear of denial in 2008, 2009 and 2010.<sup>82</sup>

**Regression model for fear of denial in the SSBF.** Keen Independent conducted its own econometric analysis of fear of denial by developing a model to explore the relationships between fear of denial and the race/ethnicity and gender of businesses owners while statistically controlling for other factors. The model was similar to the probit regression for likelihood of denial except that the fear of denial model included business owners who did not apply for a loan and excluded loan characteristics.

After excluding observations where fear of denial was imputed, businesses where no individual held at least 10 percent ownership and businesses where the largest shareholders were firms, the 2003 national sample included 4, 173 businesses (321 of which were in the Mountain region). Similar to the likelihood of denial model, Mountain region effects are modeled using regional control variables in the national model.<sup>83</sup>

Figure G-10 presents the marginal effects from the probit model predicting the likelihood that a business needs credit but will not apply for a loan due to fear of denial. The results from the model indicate that a number of race- and gender-neutral factors significantly affect the probability of forgoing application for a loan due to fear of denial.

---

<sup>79</sup> Cavalluzzo, 2002. "Competition, Small Business Financing and Discrimination: Evidence from a New Survey."

<sup>80</sup> Coleman, Susan. 2004. "Access to Debt Capital for Small Women- and Minority-Owned Firms: Does Educational Attainment Have an Impact?" *Journal of Developmental Entrepreneurship*. 9:127-144.

<sup>81</sup> Blanchflower et al., 2003. Discrimination in the Small Business Credit Market.

<sup>82</sup> Robb, Alicia. 2012. "Access to Capital among Young firms, Minority-owned Firms, Women-owned Firms, and High-tech Firms." U.S. Small Business Administration.

<sup>83</sup> Again, Keen Independent considered an interaction variable to represent firms that are both minority and female but the term was not significant.

Factors that are associated with a *higher* likelihood of not applying for a loan due to fear of loan denial include:

- The business owner having had a judgment against the business in the past 3 years;
- The business having a significant or high risk credit score;
- A larger percentage of business owned by the principal owner;
- The business having an existing mortgage, existing vehicle loans, existing loans from stockholders or other existing loans;
- Having one or more delinquent business transactions (60 days or more) within the past 3 years; and
- Location in a metropolitan area.

Factors that are associated with a *lower* likelihood of not applying for a loan due to fear of loan denial include:

- The business owner being older and having either a four-year college degree or an advanced degree;
- More equity in the business owner's home — if he or she is a homeowner — and more business owner net worth (excluding the business owner's home);
- Being an older business;
- More sales in the prior year;
- Greater firm equity;
- Being in the transportation, communications and utilities industry; and
- Having a local (as opposed to regional, national or international) sales market.

After statistically controlling for race- and gender-neutral influences, African American-owned firms and female-owned businesses were more likely to forgo applying for a loan due to fear of denial. Results for minority- and women-owned businesses within the Mountain region were not significantly different from the U.S. as a whole after accounting for other factors.

Figure G-10.

Likelihood of forgoing a loan application due to fear of denial (probit regression) in the U.S. in the 2003 SSBF,  
Dependent variable: needed a loan but did not apply due to fear of denial

Variable	Marginal effect	Variable	Marginal effect	Variable	Marginal effect
<b>Race/ethnicity and gender</b>		<b>Firm's characteristics, credit and financial health</b>		<b>Firm and lender environment and loan characteristics</b>	
African American	0.118 **	D&B credit score = moderate risk	-0.004	Partnership	-0.012
Asian American	0.026	D&B credit score = average risk	0.027	S corporation	0.002
Hispanic American	0.042	D&B credit score = significant risk	0.041 *	C corporation	0.007
Native American	0.027	D&B credit score = high risk	0.079 **	Construction industry	0.018
Other minority	0.079	Total employees	0.000	Manufacturing industry	-0.010
Female	0.028 *	Percent of business owned by principal	0.001 **	Transportation, communications and utilities industry	-0.071 **
Mountain region	0.006	Family-owned business	-0.009	Finance, insurance and real estate industries	0.020
Minority in Mountain region	-0.055	Firm purchased	-0.009		
Female in Mountain region	0.014	Firm inherited	-0.037		
		Firm age	-0.002 **	Engineering industry	-0.010
<b>Owner's characteristics, credit and resources</b>		Firm has checking account	0.026	Other industry	0.005
Age	-0.003 **	Firm has savings account	0.013	Herfindahl index = .10 to .18	-0.009
Owner experience	0.001	Firm has line of credit	-0.008	Herfindahl index = .18 or above	0.015
Less than high school education	0.055	Existing capital leases	0.030	Located in MSA	0.049 **
Some college	0.002	Existing mortgage for business	0.042 **	Sales market local only	-0.045 **
Four-year degree	-0.037 **	Existing vehicle loans	0.032 **		
Advanced degree	-0.033 *	Existing equipment loans	0.020		
Log of home equity	-0.005 **	Existing loans from stockholders	0.058 **		
Owner has negative net worth	-0.007	Other existing loans	0.077 **		
Bankruptcy in past 7 years	0.153 **	Firm used trade credit in past year	0.012		
Judgement against in past 3 years	0.129 **	Log of total sales in prior year	-0.017 **		
Log of net worth excluding home	-0.009 **	Negative sales in prior year	-0.119		
		Log of cost of doing business in prior year	0.009		
		Log of total assets	0.000		
		Log of total equity	-0.004 **		
		Firm bankruptcy in past 7 years	0.093		
		Firm delinquency in business transactions	0.115 **		

Note: \* Statistically significant at 90% confidence level.

\*\* Statistically significant at 95% confidence level.

For ease of interpretation the marginal effects of the probit coefficients are displayed in the figure. Significance is calculated using chi-square statistics from the probit coefficients associated with the marginal effects.

"Mining industry" and "Negative total assets" perfectly predicted loan outcome and dropped out of the regression; "Negative total equity" dropped because of collinearity.

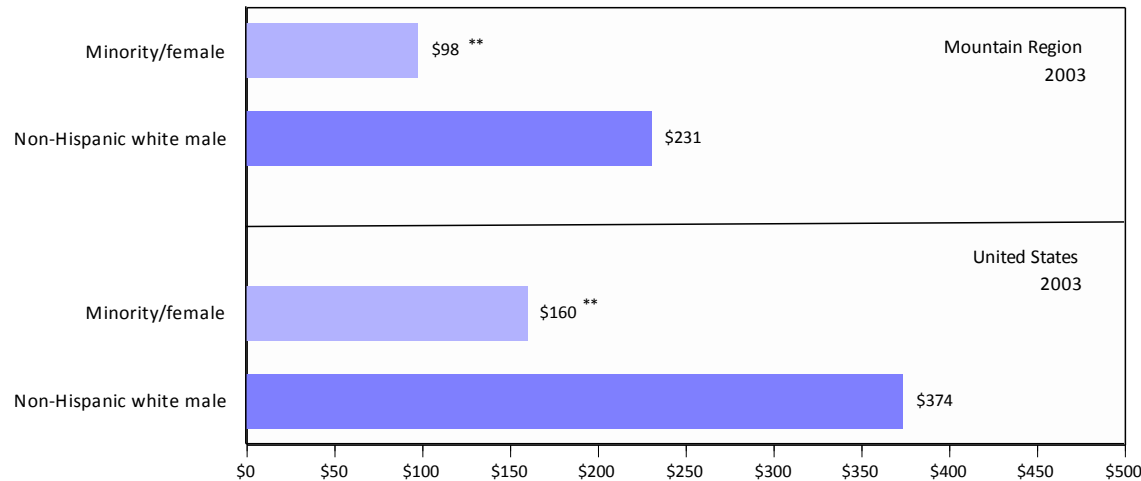
Source: Keen Independent Research analysis of 2003 SSBF data.

**Loan values.** Keen Independent also considered average loan values for businesses that received loans. Results from the 2003 SSBF for mean loan values issued to different racial/ethnic and gender groups are presented in Figure G-11.

Comparisons of loan amounts between non-Hispanic white male-owned businesses and minority- and women-owned businesses indicated the following:

- Among firms in the Mountain region that obtained loans, minority- and women-owned businesses received loans that averaged about \$98,000. Majority-owned firms received loans that averaged about \$231,000. In sum, minority- and women-owned firms received loans that, on average, were less than one-half the size of loans received by majority-owned firms.
- The disparity in average loan value for minority- and women-owned firms was also evident for the nation, as shown below.

**Figure G-11.**  
Mean value of approved business loans, in thousands, 2003



Note: \*, \*\* Denote that the difference in proportions from non-Hispanic white male-owned businesses is statistically significant at the 90% or 95% confidence level, respectively.

Source: Keen Independent Research from 2003 Survey of Small Business Finances.

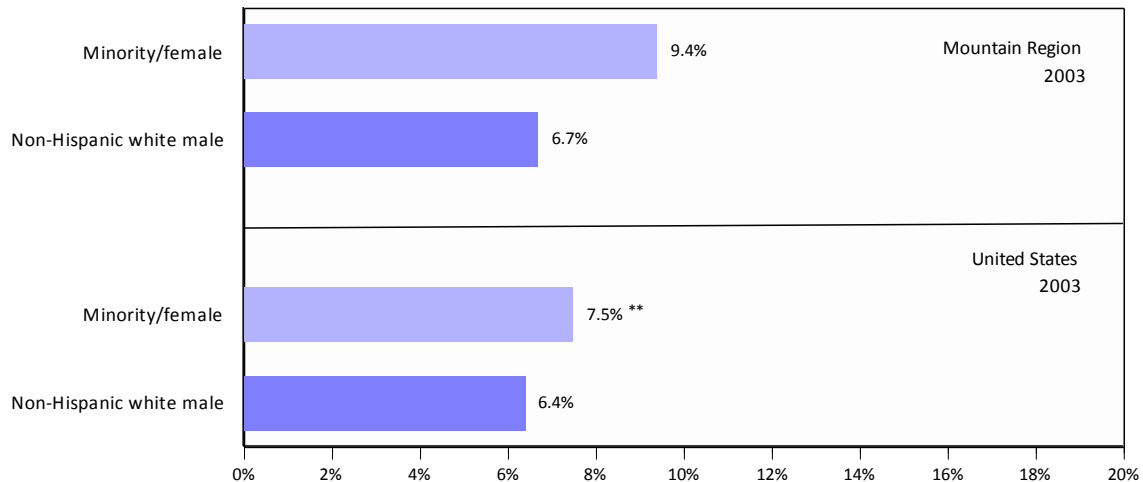
Previous national studies have found that African American-owned businesses are issued loans that are smaller than loans issued to non-Hispanic white-owned businesses with similar characteristics. Examination of construction companies in the United States have also revealed that African American-owned businesses are issued loans that are worth less than loans issued to businesses with otherwise identical characteristics.<sup>84</sup>

Keen Independent conducted further econometric analysis to explore the relationships between loan amounts and the race/ethnicity and gender of business owners while statistically controlling for other factors but the results were not conclusive.

<sup>84</sup> Grown. 1991. "Commercial Bank Lending Practices and the Development of Black-Owned Construction Companies."

**Interest rates.** Figure G-12 presents average interest rates on commercial loans received by the race/ethnicity of business owners, based on 2003 SSBF data. In 2003, the average interest rate on loans issued to minority- and women-owned businesses in the United States appeared to be higher (by 1.1 percentage points) than the mean interest rate of loans for non-Hispanic white male-owned businesses. A greater disparity is reflected in the Mountain region data (2.7 percentage points). Due to small sample size, the difference for businesses in the Mountain region was not statistically significant.

**Figure G-12.**  
Mean interest rate for business loans, 2003



Note: \*, \*\* Denote that the difference in proportions from non-Hispanic white male-owned businesses is statistically significant at the 90% or 95% confidence level, respectively.

Source: Keen Independent Research from 2003 Survey of Small Business Finances.

**Other researchers' regression analyses of interest rates.** Previous studies have investigated differences in interest rates across race/ethnicity and gender while statistically controlling for factors such as individual credit history, business credit history, and Dun and Bradstreet credit scores. Findings from those studies include the following:

- Hispanic American-owned businesses had significantly higher interest rates for lines of credit in places with less credit market competition. However, the study found no evidence that African American- or female-owned businesses received higher rates.<sup>85</sup>
- Among a sample of businesses with no past credit problems, African American-owned businesses had significantly higher interest rates on approved loans than other groups.<sup>86</sup>

**Regression model for interest rates in the SSBF.** Keen Independent conducted a regression analysis using data from the 2003 SSBF to explore the relationships between interest rates and the race, ethnicity and gender of business owners. The study team developed a linear regression model using the same control variables as the likelihood of denial model along with additional characteristics of the loan received, such as whether the loan was guaranteed, if collateral was required, the length of the loan, and whether the interest rate was fixed or variable.

<sup>85</sup> Cavalluzzo. 2002. "Competition, Small Business Financing and Discrimination: Evidence from a New Survey."

<sup>86</sup> Blanchflower. 2003. "Discrimination in the Small Business Credit Market."

The national sample for analysis of interest rates included 1,474 businesses that received a loan in the previous three years and the Mountain region included 120 such businesses.<sup>87</sup> Again, Mountain region effects were modeled using regional control variables.<sup>88</sup>

Figure G-13 presents the coefficients from the linear regression model. The results indicate that a number of race- and gender-neutral factors have a statistically significant effect on interest rates, including the following factors:

- Business owner having negative net worth is associated with a higher interest rate;
- High risk credit scores are associated with higher interest rates (by approximately 1 percentage point);
- Having existing vehicle loans is associated with higher interest rates;
- Being in the transportation, communications, and utilities industry is associated with higher interest rates;
- Vehicle loans and loans for purposes other than equipment, capital lease and business mortgage are associated with lower interest rates;
- Loans requiring a personal guarantee, cosigner or other guarantor are associated with lower interest rate;
- Collateral requirements are associated with lower interest rates;
- Longer loans are associated with lower interest rates; and
- Fixed rate loans are associated with higher interest rates than variable rate loans.

After statistically controlling for race- and gender-neutral influences, the study team observed that African American-owned businesses received loans with interest rates approximately 2 percentage points higher than non-Hispanic white-owned businesses. Hispanic American-owned businesses received loans with interest rates approximately 1 percentage point higher than non-Hispanic white-owned businesses. These differences were not statistically significant.

Being in the Mountain region did not have a statistically significant impact on interest rates.

---

<sup>87</sup> After excluding a small number of observations where the interest rate was imputed.

<sup>88</sup> Keen Independent considered an interaction variable to represent businesses that are both minority- and female-owned but the term was not significant.



Figure G-13.

Interest rate (linear regression) in the U.S. in the 2003 SSBF,  
Dependent variable: interest rate on most recent approved loan

Variable	Coefficient	Variable	Coefficient	Variable	Coefficient
<b>Race/ethnicity and gender</b>		<b>Firm's characteristics, credit and financial health</b>		<b>Firm and lender environment and loan characteristics</b>	
Constant	9.755 **	D&B credit score = moderate risk	0.249	Partnership	-0.197
African American	1.805	D&B credit score = average risk	0.132	S corporation	-0.152
Asian American	0.113	D&B credit score = significant risk	0.334	C corporation	-0.047
Hispanic American	0.781	D&B credit score = high risk	0.877 **	Mining industry	-0.014
Native American	-0.081	Total employees	-0.003	Construction industry	-0.501
Other minority	-1.225	Percent of business owned by principal	0.002	Manufacturing industry	-0.162
Female	-0.227	Family-owned business	-0.442	Transportation, communications and utilities industry	0.995 **
Mountain region	0.118	Firm purchased	0.000	Finance, insurance and real estate industries	-0.141
Minority in Mountain region	0.281	Firm inherited	0.210	Engineering industry	0.543
Female in Mountain region	1.007	Firm age	-0.007	Other industry	0.502 *
<b>Owner's characteristics, credit and resources</b>		Firm has checking account	0.220	Herfindahl index = .10 to .18	0.589
Age	-0.014	Firm has savings account	-0.002	Herfindahl index = .18 or above	0.859
Owner experience	-0.002	Firm has line of credit	-0.296	Located in MSA	-0.006
Less than high school education	0.734	Existing capital leases	0.214	Sales market local only	-0.101
Some college	0.373	Existing mortgage for business	0.070	Approved Loan amount	0.000
Four-year degree	-0.227	Existing vehicle loans	0.430 **	Capital lease application	1.061
Advanced degree	-0.337	Existing equipment loans	0.404	Business mortgage application	-0.256
Log of home equity	0.007	Existing loans from stockholders	0.039	Vehicle loan application	-1.720 **
Owner has negative net worth	5.505 **	Other existing loans	0.438	Equipment loan application	-0.439
Bankruptcy in past 7 years	0.684	Firm used trade credit in past year	0.203	Loan for other purposes	-1.204 **
Judgement against in past 3 years	-0.304	Log of total sales in prior year	-0.135	Loan guaranteed	-0.391 *
Log of net worth excluding home	0.019	Negative sales in prior year	-1.673	Collateral required	-0.791 **
		Log of cost of doing business in prior year	-0.132	Length of loan (months)	-0.003 *
		Log of total assets	-0.019	Fixed rate	1.385 **
		Log of total equity	0.000		
		Firm bankruptcy in past 7 years	-0.851		
		Firm delinquency in business transactions	-0.133		

Note: \* Statistically significant at 90% confidence level.

\*\* Statistically significant at 95% confidence level.

"Owner has negative net worth" and "Negative total assets" dropped out of the regression because of collinearity.

Source: Keen Independent Research analysis of 2003 SSBF data.

**Small business lending after the Great Recession.** The financial landscape has changed substantially since the beginning of the Great Recession. Bank lending fell significantly from the end of 2008 through 2010. Data from the Federal Reserve show commercial and industrial loans and leases peaked at \$1.6 trillion at the end of 2008 and fell to \$1.2 trillion by the end of 2010, a decline of about 25 percent.<sup>89</sup> Similar analyses show commercial and industrial loans and leases of less than \$1 million fell were down about 22 percent at the end of 2012 relative to second quarter of 2007.<sup>90</sup>

Bank tightening of lending standards has been greater for small businesses in recent years. While net tightening (percentage of banks tightening standards minus the percentage loosening standards) was positive for small and large loans in 2008 through 2010, in 2011 and 2012 positive net tightening existed only for small business loans. This tightening of the lending markets may have several effects on small businesses, including fewer startups as well as slower economic and employment growth for those already in existence. Longer term trends in small business financing may exacerbate recent economic disturbances. Data from the Federal Deposit Insurance Corporation (FDIC) show the share of all nonfarm, nonresidential loans of less than \$1 million has been declining since 1995.<sup>91</sup>

**Characteristics of small businesses loans after the Great Recession.** Research shows characteristics of small business loans have changed. The average small business loan has more than doubled since 2005, to about \$425,000. Qualitative research suggests this trend toward larger loans may be due to a greater push for profit maximization in the banking industry.<sup>92</sup> This may affect some minority business owners, particularly African American business owners. About 80 percent of African Americans that apply for SBA loans seek \$150,000 or less.<sup>93</sup>

**Characteristics of small businesses after the Great Recession.** Characteristics of small businesses have also changed considerably since 2007. Significantly fewer small businesses reported “good” cash flow in 2013 compared to 2007 (65 and 48 percent, respectively). Small business delinquencies have risen and consequently, more lending requires collateral. About 90 of small business lending in 2013 required some collateral, up from 84 percent in 2007. During this same period, the decline in housing prices nationwide has weakened owner net equity and made collateral requirements more difficult to meet.<sup>85</sup>

**Small business lending by race/ethnicity.** In fiscal year 2013, the U.S. Small Business Administration (SBA) administered about 23 billion in loans. Loans to African American business owners represented 382 million or 1.7 percent of the total, a substantial decline from 2008, when SBA allocated about 8 percent of total loan value to African American business owners. Hispanic American business owners received 4.7 percent of the loan total in 2013, relatively unchanged from 4.5 percent of the loan total in 2009.<sup>88</sup>

---

<sup>89</sup> U.S. Board of Governors of the Federal Reserve System. 2014. “H.8 Assets and Liabilities of Commercial Banks in the United States.” Accessed Jun 15, 2014 from FRASER, <http://fraser.stlouisfed.org/publication/>.

<sup>90</sup> Ann Marie Wiersch and Scott Shane. 2013. “Why Small Business Lending Isn’t What It Used to Be.” Economic Commentary. Federal Reserve Bank of Cleveland.

<sup>91</sup> Ibid.

<sup>92</sup> CIT Group, once SBA’s top lender, no longer administers SBA loans. Other banks, including Bank of America, have significantly reduced SBA lending.

<sup>93</sup> Ruth Simon and Tom McGinty. 2014. “Loan Rebound Misses Black Businesses.” *The Wall Street Journal*. 14 March 2014.

**Results from Keen Independent 2014 availability interviews with firms in the Arizona transportation contracting industry.** At the close of the 2014 availability interviews conducted as part of the ADOT disparity study, the study team asked questions regarding potential barriers or difficulties in the firm might have experienced in the Arizona marketplace. The series of questions was introduced with the following statement: “Finally, we’re interested in whether your company has experienced barriers or difficulties associated with starting or expanding a business in your industry or with obtaining work. Think about your experiences within the past seven years as you answer these questions.” Respondents were then asked about specific potential barriers or difficulties.

For each potential barrier, the study team examined whether responses differed between minority-, women- and majority-owned firms. Figure G-14 on the following page presents results for questions related to access to capital, bonding and insurance.

**Access to lines of credit and loans.** The first question was, “Has your company experienced any difficulties in obtaining lines of credit or loans?” As shown in Figure G-14, 39 percent of MBEs and 25 percent of WBEs reported difficulties in obtaining lines of credit or loans. Only 15 percent of majority-owned firms reported similar difficulties.

**Receiving timely payment.** Need for business credit is, in part, linked to whether firms are paid for their work in a timely manner. In the availability interviews, Keen Independent asked, “Has your company experienced any difficulties receiving payment in a timely manner?” Figure G-14 shows that, regardless of ownership, about four out of ten firms have experienced difficulties receiving payment in a timely manner with little difference between MBE, WBE and majority-owned firms.

### **Bonding and Insurance**

Bonding is closely related to access to capital. Some national studies have identified barriers regarding MBE/WBEs and access to surety bonds for public construction projects.<sup>94</sup>

High insurance requirements on public sector projects may also represent a barrier for certain construction and engineering-related firms attempting to do business with government agencies. Keen Independent examined this issue as well.

**Bonding.** To research whether bonding represented a barrier for Arizona businesses, Keen Independent asked firms completing availability interviews:

- “Has your company obtained or tried to obtain a bond for a project?”
- [and if so] “Has your company had any difficulties obtaining bonds needed for a project?”

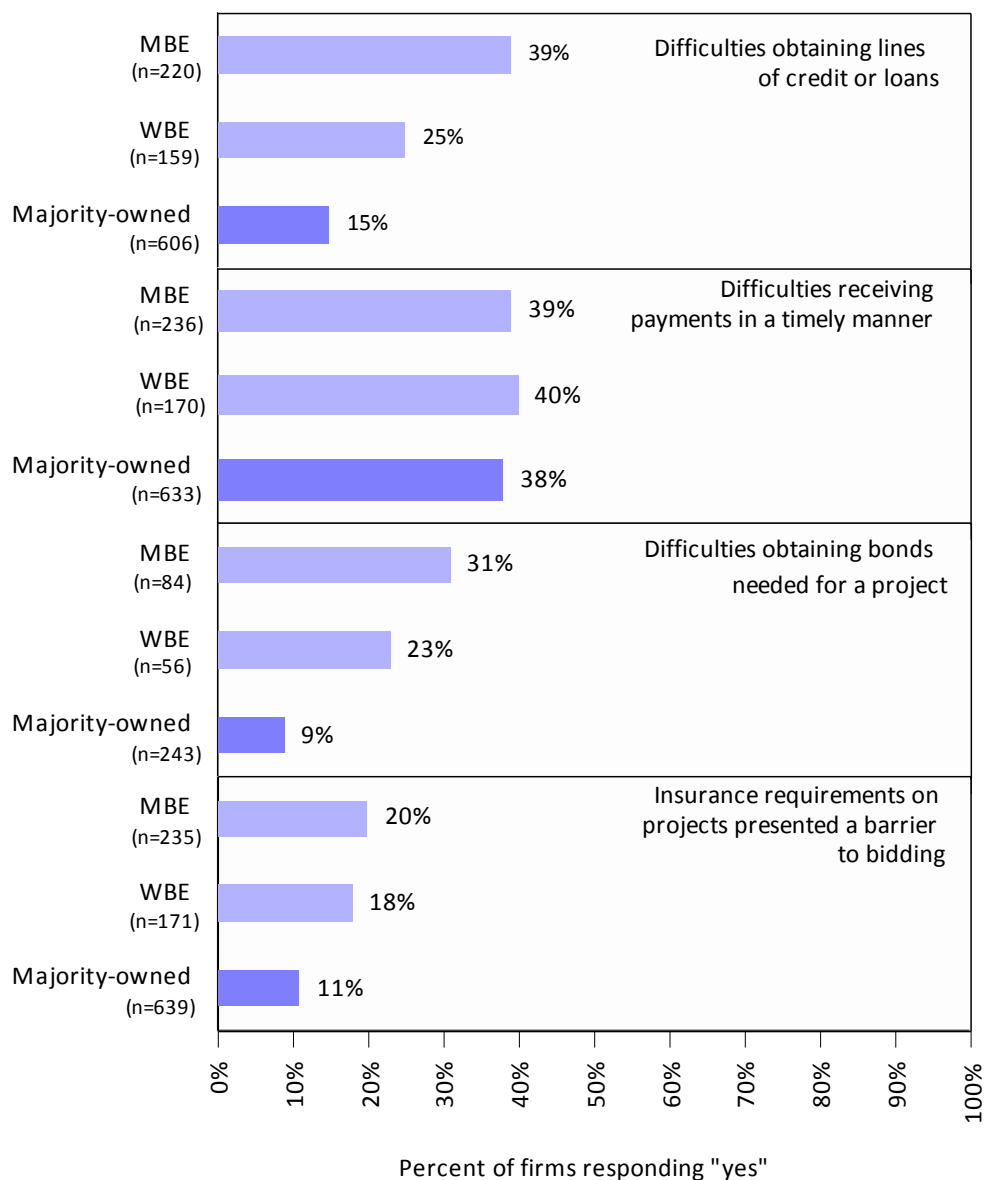
Figure G-14 presents these results from the 2014 availability interviews. About four in ten firms had obtained or tried to obtain a bond for a project, similar among MBEs, WBEs and majority-owned firms. Among those firms, 31 percent of MBEs and 23 percent of WBEs reported experiencing difficulties obtaining bonds needed for a project. Relatively fewer majority-owned firms (9%) reported difficulties obtaining the bonding needed for a project.

---

<sup>94</sup> For example, Enchautegui, Maria E. et al. 1997. “Do Minority-Owned Businesses Get a Fair Share of Government Contracts?” *The Urban Institute*: 1-117, p. 56.

Figure G-14.

Responses to 2014 availability interview questions concerning loans, timely payments, bonding and insurance, Arizona MBE, WBE and majority-owned firms



Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms.

Source: Keen Independent Research from 2014 Availability Interviews.

**Insurance.** The study team also examined whether minority- and women-owned firms were more likely than majority-owned firms within the study area to report that “insurance requirements represented a barrier to bidding” (see Figure G-14).

About 20 percent of MBEs and 18 percent of WBEs interviewed indicated that insurance requirements on projects have presented a barrier to bidding. Relatively fewer majority-owned firms (11%) reported that insurance requirements presented a barrier to bidding on projects.

## **Summary**

There is evidence that minorities and women face certain disadvantages in accessing capital that is necessary to start, operate, and expand businesses. Capital is required to start companies, so barriers accessing capital can affect the number of minorities and women who are able to start businesses. In addition, minorities and women start business with less capital. A number of studies have demonstrated that lower startup capital adversely affects prospects for those businesses. Key results included the following.

Home equity is an important source of funds for business startup and growth.

- Fewer African Americans, Asian-Pacific Americans, Subcontinent Asian Americans, Hispanic Americans and Native Americans in Arizona own homes compared with non-Hispanic whites. These differences in homeownership rates were present prior to the Great Recession and persisted in 2008 through 2012.
- Native Americans, African Americans and Hispanic Americans in Arizona who do own homes tend to have lower home values than non-Hispanic whites. These differences were evident before and after the Great Recession.
- In 2007, high-income African Americans, Hispanic Americans, Native Americans, Asian Americans, and Native Hawaiian and other Pacific Islanders applying for home mortgages in Arizona were more likely than high-income non-Hispanic whites to have their applications denied. Except for Asian Americans, these disparities were also evident in 2012.
- Compared with non-Hispanic whites, subprime loans represented a greater proportion of Arizona conventional home purchase loans issued in 2007 for African Americans, Hispanic Americans, Native Americans, and Native Hawaiians and other Pacific Islanders. Although subprime rates dropped by 2012, disparities persisted for African Americans, Hispanic Americans and Native Americans.
- Compared with non-Hispanic whites, subprime loans were also a greater proportion of conventional home refinance loans for Hispanic Americans, African Americans, Native Americans, and Native Hawaiians and other Pacific Islanders in 2007. (By 2012, very few conventional refinance loans for any group were subprime.)

- Based on 2003 Survey of Small Business Finances data for the Mountain region, more minority- and women-owned small businesses were denied loans than non-Hispanic male-owned small businesses. There is evidence that African American small business owners were more likely to have been denied business loan applications than similarly situated non-Hispanic whites (disparity index of 70).
- Among small business owners who reported needing business loans, minority and female business owners in the Mountain region were nearly twice as likely as non-Hispanic white men to report that they did not apply due to fear of denial. There is evidence that African Americans and women were more likely to forgo applying for loans due to fear of denial compared with similarly-situated non-minorities and men.
- The mean value of approved loans for minority- and female-owned businesses in the Mountain region was less than one-half that for non-Hispanic white male-owned firms.
- There is evidence that minority- and women-owned small businesses in the Mountain region paid higher interest rates on their business loans than non-minority male-owned small businesses.
- In the availability interviews conducted as part of this study, minority- and women-owned firms were more likely to report experiencing difficulties in obtaining lines of credit or loans relative to majority-owned firms.
- Minority- and women-owned firms were more likely than majority-owned firms to report difficulties obtaining bonding.
- Minority- and women-owned firms were also more likely to report that insurance requirements on projects represented a barrier to bidding.

## APPENDIX H.

### Success of Businesses in the Arizona Construction and Engineering Industries

Keen Independent examined the success of minority- and women-owned business enterprises (MBE/WBEs) in the Arizona construction and engineering industries. Keen Independent assessed whether business outcomes for MBEs and WBEs differ from those of non-Hispanic white male-owned businesses (i.e., majority-owned businesses).<sup>1</sup>

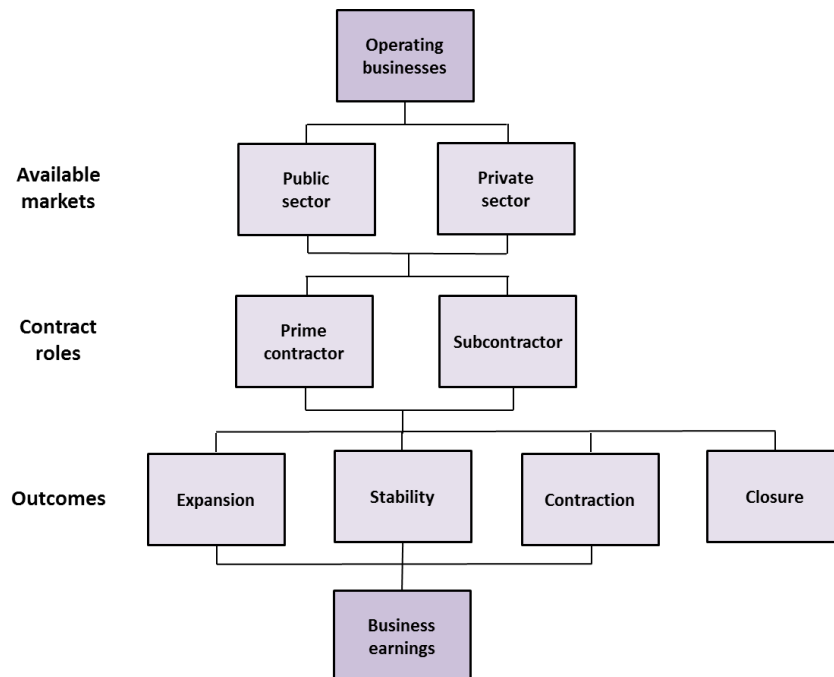
Keen Independent researched outcomes for MBE/WBEs and majority-owned businesses in terms of:

- Participation in public and private sector markets, including contractor roles and sizes of contracts bid on and performed;
- Business closures, expansions, and contractions;
- Business receipts and earnings; and
- Potential barriers to starting or expanding businesses.

Figure H-1 provides a framework for Keen Independent's analyses.

Figure H-1.  
Business  
outcomes

Source:  
Keen Independent  
Research



<sup>1</sup> Keen Independent uses the terms “MBEs” and “WBEs” to refer to businesses that are owned and controlled by minorities or women (definitions listed in Appendix A), regardless of whether they are certified or meet the revenue and net worth requirements for DBE certification and regardless of whether they are certified as MBEs or WBEs.

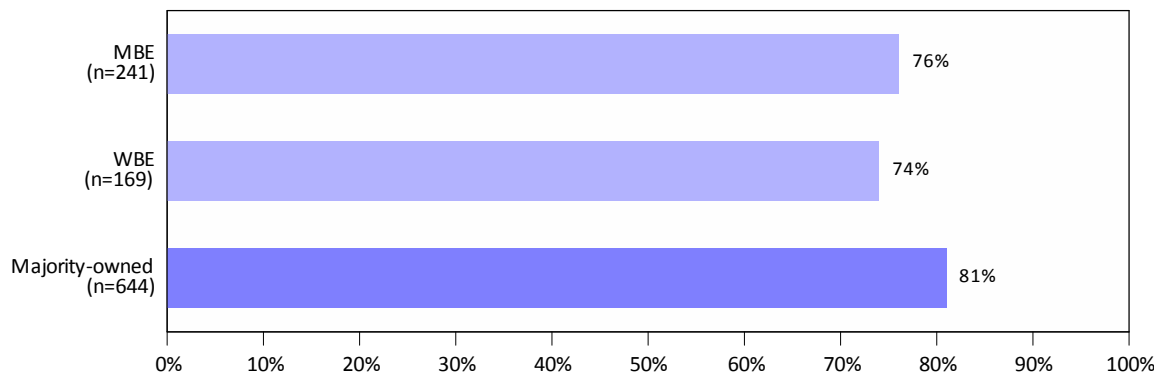
## Participation in Public and Private Sector Markets

Keen Independent used information collected as part of the availability analysis to examine whether transportation-related construction and engineering businesses bid on public sector and private sector work, and the extent to which firms work as prime contractors and subcontractors.

**Bidding on public sector projects.** In the availability interviews, the study team asked firms that reported that they performed transportation-related work whether they had bid on or worked on any part of a public sector project within Arizona in the past seven years.<sup>2</sup> As shown in Figure H-2, more than 80 percent of majority-owned firms reported that they had bid on or worked on public sector projects. Somewhat fewer MBEs (76%) and WBEs (74%) indicated that they had bid on or worked on public sector projects.

Figure H-2.

Percent of transportation-related businesses that reported bidding or working on a state or local government project in Arizona in the past seven years (any part of a project)



Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms.

Source: Keen Independent Research from 2014 Availability Interviews.

**Bidding on private sector projects.** Keen Independent also asked businesses involved in transportation work if they had bid on or worked on private sector work in Arizona in the past seven years (any part of a project).<sup>3</sup> About 83 percent of majority-owned firms indicated that they had. Relatively fewer MBEs (76%) and white women-owned firms (76%) reported that they had bid on private sector projects.

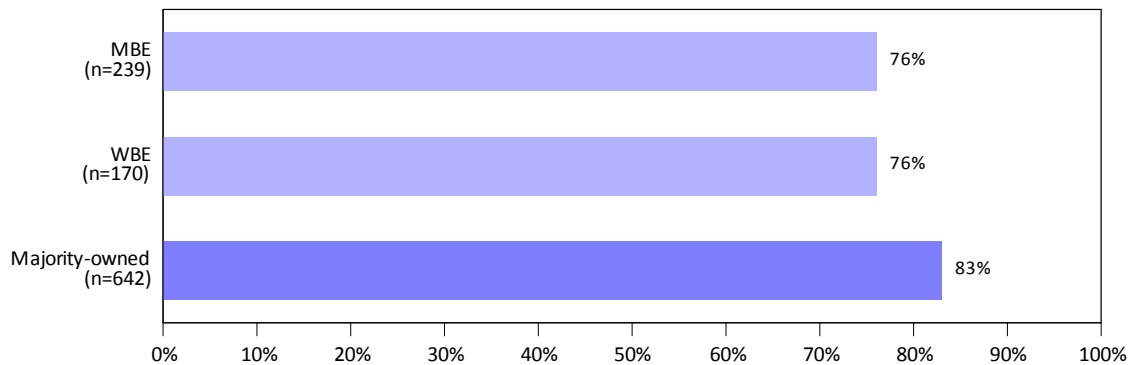
<sup>2</sup> Keen Independent deemed a business to have performed or bid on public sector work if it answered "yes" to either of the following questions in availability interviews: (a) "During the past seven years, has your company submitted a bid or a price quote for any part of a contract for a state or local government agency in Arizona?"; or (b) "During the past seven years, has your company worked on any part of a contract for a state or local government agency in Arizona?"

<sup>3</sup> Keen Independent deemed a business to have performed or bid on private sector work if it answered "yes" to either of the following questions in availability interviews: (a) "During the past seven years, has your company submitted a bid or a price quote for any part of a contract for a private sector organization in Arizona?"; or (b) "During the past seven years, has your company worked on any part of a contract for a private sector organization in Arizona?"



Figure H-3.

Percent of transportation-related businesses that reported bidding or working on a private sector project in Arizona in the past seven years (any part of a project)



Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms.

Source: Keen Independent Research from 2014 Availability Interviews.

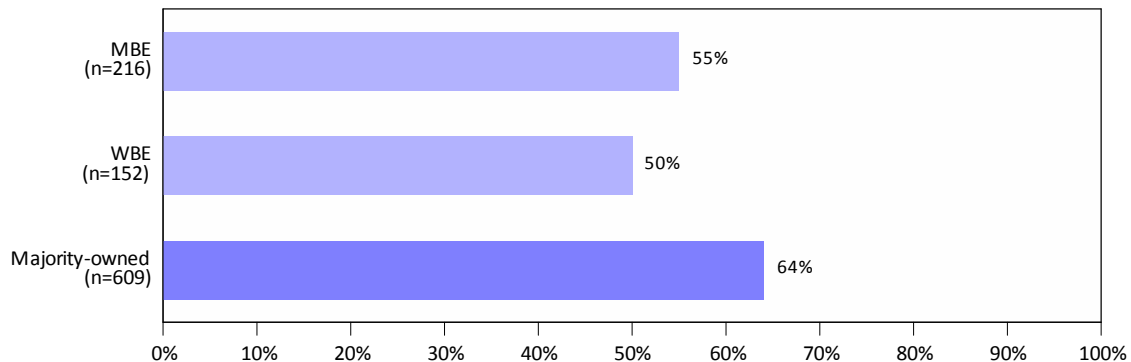
The above results indicate that most transportation-related firms in Arizona pursue both public and private sector work. As discussed in Chapter 4, the study team also conducted in-depth, personal interviews with businesses and trade associations in Arizona. Interviewees confirmed that companies performing transportation contracts in Arizona usually pursue both public and private sector work.

**Bidding as a prime contractor.** The study team also asked firms involved in transportation-related work whether they had bid as a prime contractor or prime consultant within Arizona in the past seven years. Nearly two-thirds (64%) of majority-owned firms reported bidding as a prime contractor, as presented in Figure H-4. Most of those firms also reported bidding as a subcontractor or supplier. About one-in-ten companies indicated that they only bid as prime contractors.

About one-half of MBEs (55%) and WBEs (50%) said that they had bid as prime contractors or prime consultants. Most of those businesses also bid as a subcontractor or supplier. As with majority-owned firms, few MBEs and WBEs only bid as prime contractors.

Figure H-4.

Percent of businesses that reported bidding or working as a prime contractor or prime consultant on a project in Arizona in the past seven years



Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms.

Source: Keen Independent Research from 2014 Availability Interviews.

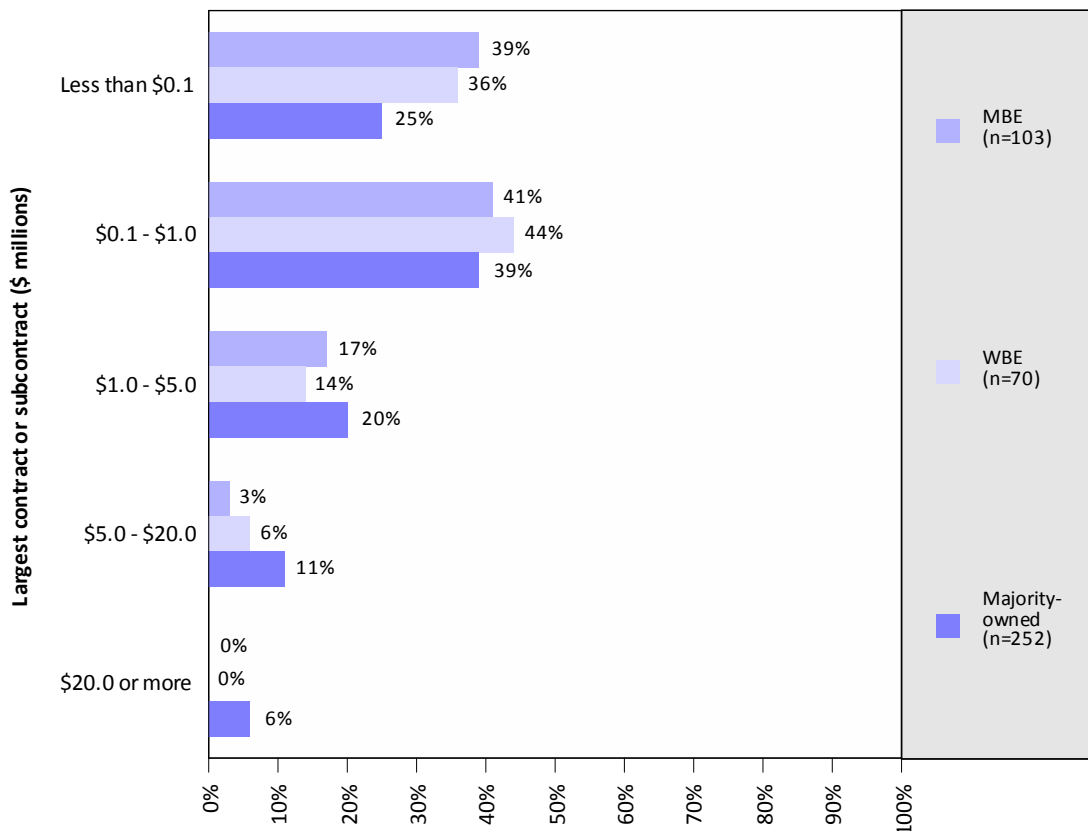
Availability interview results also indicate that firms working as prime contractors often also function as subcontractors (and vice versa). In-depth interviews with business owners confirmed that result.

**Largest contract in Arizona in the past seven years.** As part of the availability interviews, the study team asked businesses to identify the largest road and highway, transit or aviation-related contract or subcontract they were awarded in Arizona in the past seven years.

**Construction.** Figure H-5 examines transportation construction firms' responses to the question concerning the largest contract they had been awarded. Most MBE and WBE construction companies indicated that the largest contracts or subcontracts they had been awarded were less than \$100,000 or from \$100,000 to \$1 million. For example, 39 percent of MBE construction firms reported that their largest contract was less than \$100,000. None of the MBEs and WBEs interviewed indicated that they had received a contract of \$20 million or more in Arizona in the past seven years.

Combining the three largest size categories of contracts starting at \$1 million (\$1-5 million, \$5-20 million and \$20 million+), relatively fewer women- and minority-owned construction companies (20%) reported that the largest contract they received was worth \$1 million or more compared with majority-owned firms (37%).

Figure H-5.  
Largest road and highway, transit or aviation-related contract or subcontract that businesses received in Arizona in the past seven years, construction



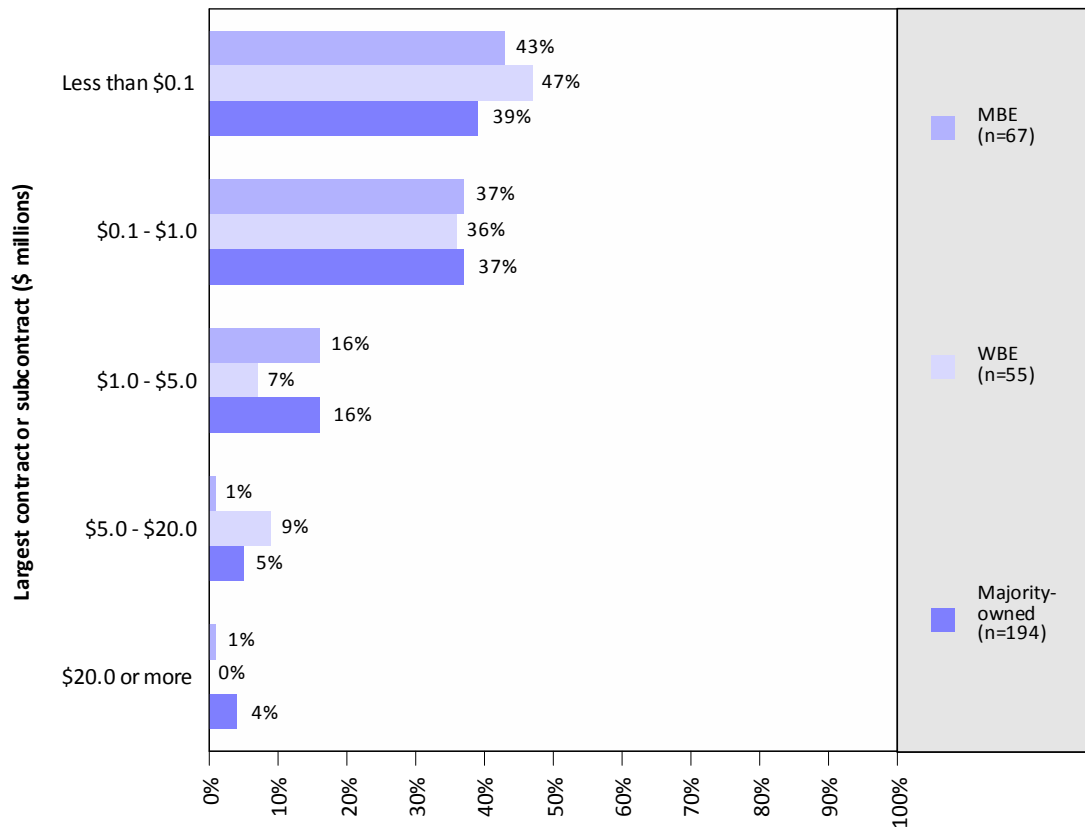
Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms. Total may not add to 100 due to rounding.

Source: Keen Independent Research from 2014 Availability Interviews.

**Engineering.** Figure H-6 analyzes the largest contracts that majority-, minority- and women-owned engineering-related businesses were awarded in the past seven years based on availability interview responses.

For most engineering businesses, the largest contract received was less than \$1 million. Combining the largest three categories of contracts starting at \$1 million, about 18 percent of MBEs and 16 percent of WBEs reported that the largest contract they had been awarded in the past seven years was worth \$1 million or more compared with 25 percent of majority-owned businesses.

**Figure H-6.**  
Largest road and highway, transit or aviation-related contract or subcontract that businesses received in Arizona in the past seven years, engineering



Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms.

Total may not add to 100 due to rounding.

Source: Keen Independent Research from 2014 Availability Interviews.

## Relative Bid Capacity

Some legal cases regarding race- and gender-conscious contracting programs have considered the importance of the “relative capacity” of businesses included in an availability analysis.<sup>4</sup> One approach to account for differing capacities among different types of businesses is to examine relatively small contracts, a technique noted in *Rothe Development Corp. v. U.S. Department of Defense*. In addition to examining size of contracts, Keen Independent directly measured bid capacity in its availability analysis.<sup>5</sup>

Through this analysis, Keen Independent was able to distinguish firms based on the largest contracts or subcontracts they had performed or bid on (i.e., “bid capacity” as used in this study). Although additional measures of capacity might be theoretically possible, the bid capacity concept can be articulated and quantified for individual firms for specific time periods.

**Measurement of bid capacity.** The availability analysis produced a database of more than 1,000 businesses potentially available for ADOT work. “Relative capacity” for a business is measured as the largest contract or subcontract that the business performed or reported that they had bid on within the seven years preceding when Keen Independent interviewed it.

Subindustries such as paving and general road construction tend to involve relatively large projects. Other subindustries, such as surveying, typically involve smaller projects. Figure H-7 reports the median relative bid capacity among Arizona transportation-related businesses in 27 subindustries. Results categorized companies according to their primary line of business (e.g., results for a firm that primarily performs excavation that also does trucking and hauling are included under excavation, grading and drainage).<sup>6</sup>

---

<sup>4</sup> For example, see the decision of the United States Court of appeals for the Federal Circuit in *Rothe Development Corp. v. U.S. Department of Defense*, 545 F.3d 1023 (Fed. Cir. 2008).

<sup>5</sup> See Appendix D for details about the availability interview process.

<sup>6</sup> Only subindustries with a minimum of three respondents in the availability interviews were analyzed.

Figure H-7.  
Median relative capacity by subindustry

Subindustry	Median bid capacity
<b>Construction</b>	
General road construction and widening	\$5 million to \$10 million
Portland cement concrete paving	\$2 million to \$5 million
Erosion control	\$2 million to \$5 million
Asphalt paving	\$1 million to \$2 million
Asphalt and concrete paving supply	\$1 million to \$2 million
Excavation, grading and drainage	\$1 million
Aggregate materials supply	\$500,000 to \$1 million
Structural concrete work	\$500,000 to \$1 million
Wrecking and demolition	\$500,000 to \$1 million
Steel work	\$500,000 to \$1 million
Concrete flatwork	\$100,000 to \$500,000
Concrete pumping	\$100,000 to \$500,000
Drilling and foundations	\$100,000 to \$500,000
Electrical work including lighting and signals	\$100,000 to \$500,000
Guardrail, signs or fencing	\$100,000 to \$500,000
Landscaping and related work	\$100,000 to \$500,000
Pavement surface treatment	\$100,000 to \$500,000
Striping or pavement parking	\$100,000 to \$500,000
Trucking and hauling	\$100,000 to \$500,000
Underground utilities	\$100,000 to \$500,000
Concrete cutting	\$100,000 or less
<b>Engineering-related</b>	
Construction management	\$2 million to \$5 million
Design engineering	\$100,000 to \$500,000
Soils and materials testing	\$100,000 to \$500,000
Surveying and mapping	\$100,000 to \$500,000
Transportation planning	\$100,000
Environmental consulting	\$100,000 or less

Source: Keen Independent Research from 2014 Availability Interviews.

#### Comparison of MBE/WBE and majority-owned bid capacity for transportation construction.

Keen Independent examined whether there were difference in the size of the largest contracts for MBEs, WBEs and majority-owned firms within the same subindustries.

- First, the study team determined for each company whether its largest contract or subcontract (awarded or bid on) was higher than the median for its primary line of business. For example, if the median bid capacity category for a subindustry was \$1-2 million, and a firm's largest contract was more than \$2 million, it was classified as having "above median bid capacity."

- Keen Independent then calculated the percentage of MBEs, WBEs and majority-owned firms that had above-median bid capacity for their subindustry. Figure H-8 reports results for construction subindustries and engineering-related subindustries.

For about one-in-three MBE construction businesses, the largest contract bid on or awarded was higher than the median for its subindustry. (This also means that for two-thirds of MBE construction businesses, the largest contract was in the same or lower size category as the median for their primary line of business or was lower.)

Relatively more majority-owned construction businesses (42%) reported largest contracts that were above the median for their subindustry.

Only 24 percent of WBEs reported largest contracts that were above the median for their subindustry.

**Figure H-8.**  
Proportion of firms with above-median bid capacity by ownership

Source:  
Keen Independent Research from 2014  
Availability Interviews.

Firm	Construction	Engineering
MBE	33 %	32 %
WBE	24	36
Majority-owned	42	41

**Engineering.** Figure H-8 also shows the percentage of engineering businesses that reported relative capacities that exceeded the median for their subindustries.

- For 32 percent of MBE engineering businesses, the largest contract bid on or received was higher than the median size category for their subindustry.
- 36 percent of WBEs had above-median bid capacity.
- 41 percent of majority-owned engineering businesses had above-median bid capacity.

**Further analysis.** The study team considered whether race- and gender-neutral factors could account for the disparities in bid capacity identified for MBEs and WBEs in construction and engineering. There were several variables from the availability interviews that may be related to relative bid capacity, such as annual revenue, number of employees and whether a business has multiple establishments in Arizona.

After considering business characteristics from the availability interviews, Keen Independent determined that age of business was the race- and gender-neutral factor that might best explain differences in relative capacity within a subindustry while also being external to capacity measures. Theoretically, the longer that companies are in business, the larger the contracts or subcontracts that they might pursue.

To test that hypothesis, the study team developed a logistic regression model to determine whether relative bid capacity could be at least partly explained by the age of businesses. The regression results are shown in Figure H-9. The analysis indicated the following:

- Business age was a statistically significant predictor of having above-median bid capacity. The older a business, the more likely it was to show above-median bid capacity;
- Minority ownership had a negative, though not significant, relationship to bid capacity after controlling for subindustry and age of firm; and
- Female ownership was negatively related to having above-median capacity. That effect was statistically significant at the 95 percent confidence level.

The regression model indicates that age of the business can account for the differences in bid capacity between MBEs and majority-owned firms in the same subindustries. There is indication from the regression analysis that white women-owned firms had lower bid capacity after controlling for primarily line of business and company age.

**Figure H-9.**  
Arizona transportation contracting  
industry bid capacity regression model

Note:

\*, \*\* Denote statistical significance at the 90% or 95% confidence level, respectively.

Source:

Keen Independent Research from 2014 Availability Interviews.

Variable	Coefficient	Chi-square statistic
Age of firm	0.03	39.04 **
Minority	-0.08	0.26
Female	-0.36	3.82 **

**Summary of markets, contracting roles and bid capacity.** Availability interview results show that most firms in the transportation contracting industry pursue both public and private sector work, although MBEs and WBEs are somewhat less likely to bid on or be awarded public sector contracts compared with majority-owned firms. About one-half of minority- and women-owned firms report pursuing work as a prime contractor, less than the 64 percent of majority-owned firms that have bid on or been awarded prime contracts. Compared with majority-owned companies, relatively few MBEs or WBEs have been awarded contracts or subcontracts of \$1 million or more in size.

Analysis of bid capacity indicated that the largest contracts or subcontracts MBEs and WBEs have bid on or been awarded was lower than majority-owned firms in the same subindustries. The fact that majority-owned firms tend to be older than MBEs and WBEs explains most of these differences.

### **Business Closures, Expansions, and Contractions**

A 2010 SBA report investigated business dynamics for the 2002 through 2006 time period for minority-owned and white-owned businesses. By matching data from business owners who responded to the 2002 U.S. Census Bureau Survey of Business Owners (SBO) to data from the Census Bureau's 1989-2006 Business Information Tracking Series, the SBA reported on business

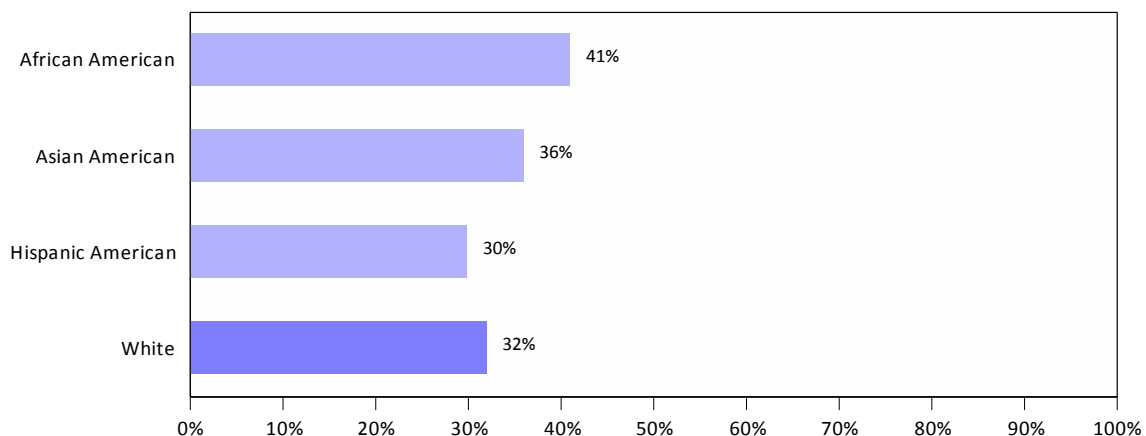
closures, expansions and contractions between 2002 and 2006 across different sectors of the economy.<sup>7,8</sup> The SBA examined differences in outcomes by race and ethnicity, but not gender.

**Business closures.** High rates of business closures may reflect adverse business conditions for minority business owners.

**Overall rates of business closures in Arizona.** The 2010 SBA report analyzed business closure rates between 2002 and 2006 for minority- and white-owned firms in Arizona. Figure H-10 presents those data for African American-, Asian American- and Hispanic American-owned businesses as well as for white-owned businesses.

- About 41 percent of African American-owned businesses that were operating in Arizona in 2002 had closed by the end of 2006, a higher rate than for white-owned businesses (32%).
- Asian American-owned businesses also had closure rates higher than white-owned businesses.
- Closure rates for Hispanic American-owned businesses (30%) were similar to white-owned firms.

Figure H-10.  
Rates of business closure in Arizona, 2002 through 2006



Note: Data refer to non-publicly-held businesses. As sample sizes are not reported, statistical significance of these results cannot be determined; however, statistics are consistent with SBA data quality guidelines.

Source: Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

**Rates of business closures by industry.** Data for the construction and professional services industries were not available by state. The SBA analysis only reported industry-specific results for the nation as a whole. Based on national results, 43 percent of African American-owned construction businesses that were operating in 2002 had closed by 2006, higher than the rate for white-owned

<sup>7</sup> Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

<sup>8</sup> Businesses classifiable by race/ethnicity exclude publicly-traded companies. Keen Independent did not categorize racial groups by ethnicity. As a result, some Hispanic Americans may also be included in statistics for African Americans, Asian Americans and whites.



construction companies. Among professional, scientific, and technical services firms, relatively more African American-owned businesses closed than white-owned firms.

Hispanic American-owned businesses and Asian American-owned construction businesses that were operating in 2002 were also more likely than white-owned companies to have closed by 2006. This was also found the professional, scientific, and technical services industry.

**Unsuccessful closures.** Not all business closures can be interpreted as “unsuccessful closures.” Businesses may close when an owner retires or a more profitable business opportunity emerges, both of which represent “successful closures.” The 1992 Characteristics of Business Owners (CBO) Survey is one of the few Census Bureau sources to classify business closures into successful and unsuccessful subsets.<sup>9</sup> The 1992 CBO combines data from the 1992 Economic Census and a survey of business owners conducted in 1996. The survey portion of the 1992 CBO asked owners of businesses that had closed between 1992 and 1995, “Which item below describes the status of this business at the time the decision was made to cease operations?” Only the responses “successful” and “unsuccessful” were permitted. A firm that reported being unsuccessful at the time of closure was understood to have failed.

Keen Independent examined CBO data on the proportion of businesses that closed due to failure between 1992 and 1995 in construction; professional, scientific, and technical services; and all industries.<sup>10, 11</sup> According to CBO data, African American-owned businesses were the most likely to report being “unsuccessful” at the time their businesses closed. About 77 percent of African American-owned businesses in all industries reported an unsuccessful business closure between 1992 and 1995, compared with only 61 percent of non-Hispanic white male-owned businesses. Unsuccessful closure rates were also relatively high for Hispanic American-owned businesses (71%) and for businesses owned by “other minority groups” (73%). The rate of unsuccessful closures for women-owned businesses (61%) was similar to that of non-Hispanic white male-owned businesses.

In the construction industry, minority- and women-owned businesses were more likely to report unsuccessful business closures than non-Hispanic white male-owned businesses (58%). Those trends were similar in the professional services industry with one exception — women-owned businesses (52%) were less likely to report unsuccessful closures than non-Hispanic white male-owned businesses (59%).

---

<sup>9</sup> CBO data from the 1997 and 2002 Economic Censuses do not include statistics on successful and unsuccessful business closures. To date, the 1992 CBO is the only U.S. Census dataset that includes such statistics.

<sup>10</sup> All CBO data should be interpreted with caution as businesses that did not respond to the survey cannot be assumed to have the same characteristics of ones that did. Holmes, Thomas J. and James Schmitz. 1996. “Nonresponse Bias and Business Turnover Rates: The Case of the Characteristics of Business Owners Survey.” *Journal of Business & Economic Statistics*. 14(2): 231-241. This report did not include CBO data on overall business closure rates because businesses not responding to the survey were found to be much more likely to have closed than ones that did.

<sup>11</sup> This study includes CBO data on firm success because there is no compelling reason to believe that closed businesses responding to the survey would have reported different rates of success/failure than those closed businesses that did not respond to the survey. Headd, Brian. U.S. Small Business Administration, Office of Advocacy. 2000. *Business Success: Factors leading to surviving and closing successfully*. Washington D.C.: 12.

**Reasons for differences in unsuccessful closure rates.** Several researchers have offered explanations for higher rates of unsuccessful closures among minority- and women-owned businesses compared with non-Hispanic white-owned businesses:

- Unsuccessful business failures of minority-owned businesses are largely due to barriers in access to capital.<sup>12</sup> Regression analyses have identified initial capitalization as a significant factor in determining firm viability. Because minority-owned businesses secure smaller amounts of debt equity in the form of loans, they may be more liable to fail. Difficulty in accessing capital is found to be particularly acute for minority-owned businesses in the construction industry.<sup>13</sup>
- Prior work experience in a family member's business or similar experiences are found to be strong determinants of business viability. Because minority business owners are much less likely to have such experience, their businesses are less likely to survive.<sup>14</sup> Similar research has been conducted for women-owned businesses and found similar gender-based gaps in the likelihood of business survival.<sup>15</sup>
- Level of education is found to be a strong determinant of business survival. Educational attainment explains a substantial portion of the gap in business closure rates between African American-owned and non-minority-owned businesses.<sup>16</sup>
- Non-minority business owners have broader business opportunities, increasing their likelihood of closing successful businesses to pursue more profitable business alternatives. Minority business owners, especially those who do not speak English, have limited employment options and are less likely to close a successful business.<sup>17</sup>
- Possession of greater initial capital and generally higher levels of education among Asian Americans are related to the relatively high rate of survival of Asian American-owned businesses compared to other minority-owned businesses.<sup>18</sup>

**Expansions and contractions.** Comparing rates of expansion and contraction between minority-owned and white-owned businesses is also useful in assessing the success of minority-owned businesses. As with closure data, only some of the data on expansions and contractions that were available for the nation were also available at the state level.

---

<sup>12</sup> Access to capital is discussed in greater detail in Appendix G.

<sup>13</sup> Bates, Timothy and Caren Grown. 1991. "Commercial Lending Practices and the Development of Black-Owned Construction Companies." Center for Economic Studies, U.S. Census Bureau.

<sup>14</sup> Robb, A. and Fairlie, R. 2005. "Why are Black-Owned Businesses Less Successful than White-Owned Businesses? The Role of Families, Inheritances, and Business Human Capital." University of California, Santa Cruz.

<sup>15</sup> Fairlie, R. and A. Robb. 2009. "Gender Differences in Business Performance: Evidence from the Characteristics of Business Owners Survey." University of California, Santa Cruz.

<sup>16</sup> Ibid.

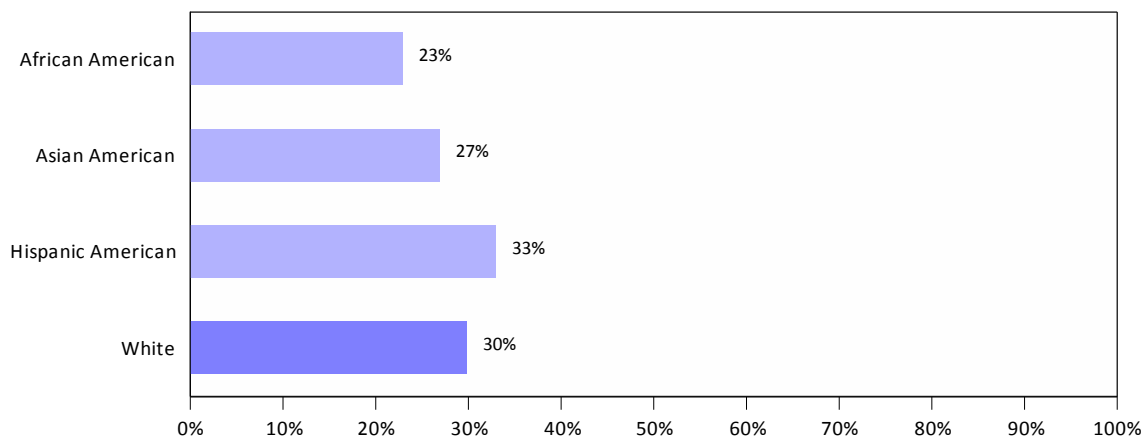
<sup>17</sup> Bates, Timothy. 2002. "Analysis of Young Small Businesses That Have Closed: Delineating Successful from Unsuccessful Closures." Center for Economic Studies, U.S. Census Bureau.

<sup>18</sup> Bates, Timothy. 1993. "Determinants of Survival and Profitability Among Asian Immigrant-Owned Small Businesses." Center for Economic Studies, U.S. Census Bureau.

**Expansions.** The 2010 SBA study of minority business dynamics from 2002 through 2006 examined the number of non-publicly-held Arizona businesses that expanded and contracted between 2002 and 2006. Figure H-11 presents the percentage of all Arizona businesses, by race/ethnicity of ownership, that increased their total employment between 2002 and 2006.

Results for Arizona from the SBA study indicate that a smaller percentage of African American-owned businesses (23%) expanded between 2002 and 2006 compared with white-owned businesses (30%). Relatively fewer Asian American-owned businesses expanded (27%) compared to white-owned businesses. One-third of Hispanic-owned businesses reported expansion, somewhat higher than the results for white-owned businesses.<sup>19</sup>

**Figure H-11.**  
Percentage of businesses in Arizona that expanded, 2002 through 2006



**Note:** Data refer to non-publicly-held businesses. As sample sizes are not reported, statistical significance of these results cannot be determined; however, statistics are consistent with SBA data quality guidelines.

**Source:** Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

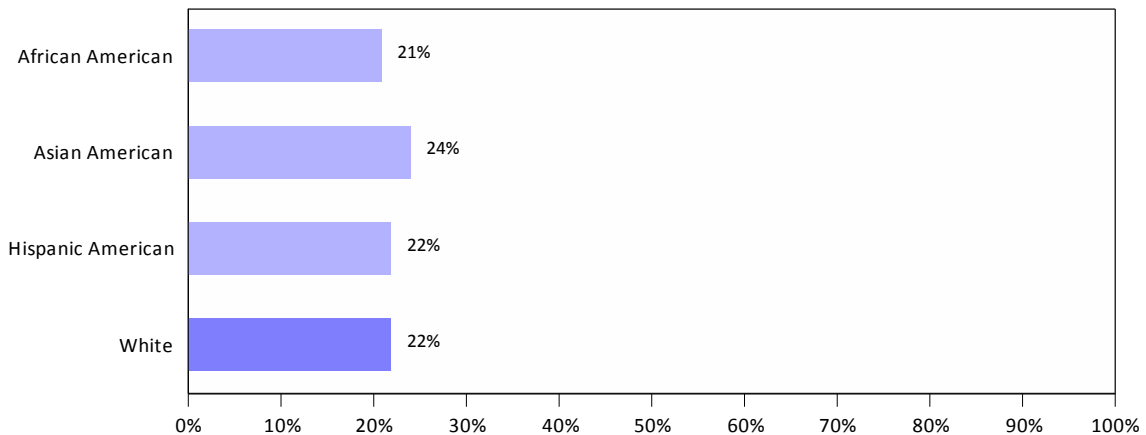
The 2010 SBA study did not report state-level results for individual industries. For the nation, African American-owned construction and professional, scientific, and technical services businesses were less likely than white-owned businesses to have expanded between 2002 and 2006. Hispanic American- and Asian American-owned companies in both construction and professional, scientific, and technical services were slightly more likely than white-owned businesses to have expanded between 2002 and 2006.

---

<sup>19</sup> Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

**Contractions.** Figure H-12 shows the percentage of businesses operating in 2002 that reduced their employment (i.e., contracted) between 2002 and 2006 in Arizona. About 22 percent of white-owned firms contracted employment during this period. Results were similar for minority-owned firms.

**Figure H-12.**  
Percentage of businesses in Arizona that contracted, 2002 through 2006



**Note:** Data refer to non-publicly-held businesses. As sample sizes are not reported, statistical significance of these results cannot be determined; however, statistics are consistent with SBA data quality guidelines.

**Source:** Lowrey, Ying. 2010. "Race/Ethnicity and Establishment Dynamics, 2002-2006." U.S. Small Business Administration Office of Advocacy. Washington D.C.

The SBA study did not report state-specific results relating to contractions in individual industries. Based on national data, a slightly smaller percentage of African American-, Hispanic American- and Asian American-owned construction and professional, scientific, and technical services businesses contracted between 2002 and 2006 compared to white-owned businesses.

**Summary of business closure, expansion and contraction.** The following conclusions can be made based on U.S. Small Business Administration analyses for 2002 to 2006 for Arizona:

- African American-owned businesses were more likely than white-owned businesses to close. African American-owned businesses were also less likely to expand than white-owned businesses.
- Asian American-owned businesses were more likely to close, less likely to expand and more likely to contract than white-owned businesses.
- Closure, expansion and contraction rates for Hispanic American-owned businesses were similar to white-owned firms for those years.

## Business Receipts and Earnings

Annual business receipts and earnings for business owners are also indicators of the success of businesses. Keen Independent used several different data sources, including:

- Business receipts data from the U.S. Census Bureau 2007 Survey of Business Owners;
- Business earnings data for business owners from the 2000 Census and 2008-2012 American Community Survey (ACS); and
- Annual revenue data for Arizona transportation construction and engineering businesses that the study team collected as part of availability interviews.

**Business receipts.** Keen Independent examined receipts for construction and professional, scientific and technical services businesses in Arizona using data from the 2007 Survey of Business Owners (SBO), conducted by the U.S. Census Bureau. The 2007 SBO reports business receipts separately for “employer” firms (i.e., those with paid employees other than the business owner and family members) and for all businesses.<sup>20</sup>

Figure H-13 presents mean annual receipts in 2007 (in thousands of dollars) for construction and for professional, scientific, and technical services businesses. The first column of results for “all firms” pertains to construction businesses, including employer firms and non-employer businesses. The second column presents results for professional, scientific and technical services firms in Arizona, including both employers and non-employers. The final two columns provide mean receipts for employer firms (companies with paid employees).

Figure H-13.

Mean annual receipts (thousands) for businesses in the construction and professional, scientific and technical services industries, by race/ethnicity and gender of owners, Arizona, 2007

	All firms		Employer firms	
	Construction	Professional, scientific and technical services	Construction	Professional, scientific and technical services
African American	\$59	\$79	\$401	\$332
Asian American	\$286	\$167	\$1,155	\$937
Hispanic American	\$299	\$94	\$1,372	\$493
American Indian and Alaska Native	\$225	\$45	\$1,362	\$353
Non-Hispanic white	\$903	\$181	\$2,578	\$705
Female	\$578	\$85	\$1,648	\$400
Male	\$919	\$235	\$3,163	\$895

Notes: Does not include publicly-traded companies or other businesses not classifiable by race/ethnicity and gender. As sample sizes are not reported, statistical significance of these results cannot be determined.

Source: 2007 Survey of Business Owners, part of the U.S. Census Bureau’s 2007 Economic Census.

---

<sup>20</sup> The data include incorporated and unincorporated businesses, but not publicly-traded companies or other businesses not classifiable by race/ethnicity and gender.

**Construction.** In the Arizona construction industry, average 2007 receipts for minority-owned businesses were lower than the average for non-Hispanic white-owned businesses (\$900,000). Results for all businesses (i.e., employer and non-employer businesses combined) indicate that:

- Average receipts of African American-owned construction businesses (\$59,000) were only 7 percent that of non-Hispanic white-owned Arizona construction businesses (\$903,000);
- Average receipts of Asian American-owned construction businesses (\$286,000) were about one-third that of non-Hispanic white-owned construction businesses in Arizona;
- Hispanic-owned construction businesses (\$299,000) had average revenue that was also about one-third of the average for non-Hispanic white-owned businesses;
- Average receipts of American Indian and Alaska Native-owned construction businesses (\$225,000) were about one-fourth that of non-Hispanic white-owned construction businesses; and
- Average receipts for women-owned construction businesses in Arizona (\$578,000) were 63 percent of the average for male-owned businesses (\$919,000).

Average receipts were higher for businesses with paid employees (the third and fourth columns of results in Figure H-13). Non-Hispanic white-owned construction employer businesses had average receipts of \$2.6 million. Minority-owned construction firms with paid employees had lower receipts:

- Average receipts of African American-owned construction employer businesses (\$401,000) were only 16 percent that of non-Hispanic white-owned Arizona construction employer businesses (\$2,578,000);
- Average receipts of Asian American-owned construction employer businesses (\$1.2 million) were about 45 percent that of non-Hispanic white-owned construction employer businesses in Arizona; and
- Hispanic- and American Indian and Alaska Native-owned construction employer businesses (\$1.4 million each) exhibited revenues that were 53 percent of the average of non-Hispanic white-owned employer businesses.
- Average receipts for women-owned construction employer businesses (\$1.6 million) were one-half the average of male-owned employer businesses (\$3.2 million).

**Professional, scientific, and technical services.** In the Arizona professional, scientific, and technical services industry, African American-, Asian American-, and Hispanic-owned businesses had lower average receipts than non-Hispanic white-owned businesses.

Results for all businesses (i.e., employer and non-employer businesses combined) in the professional, scientific, and technical services industry indicate that:

- Average receipts of African American-owned businesses (\$79,000) were 44 percent that of non-Hispanic white-owned businesses (\$181,000);
- Average receipts of Asian American-owned businesses (\$167,000) were 92 percent of non-Hispanic white-owned businesses;
- Average receipts of Hispanic American-owned companies (\$94,000) were 52 percent that of non-Hispanic white-owned businesses; and
- Average receipts of American Indian and Alaska Native-owned businesses (\$45,000) were only one-fourth the average receipts of non-Hispanic white-owned businesses.
- Average receipts of women-owned businesses in the Arizona professional, scientific, and technical services industry (\$85,000) were 36 percent that of male-owned businesses (\$235,000).

Examination of businesses with paid employees in professional, scientific, and technical services showed similar results, with the exception of Asian American-owned employer businesses. Average receipts of Asian American-owned employer businesses (\$937,000) exceeded those of non-Hispanic white-owned employer businesses (\$705,000) in this industry.

**Business earnings.** Keen Independent also examined U.S. Census data regarding earnings of business owners in Arizona. Data sources were the Public Use Microdata Series (PUMS) data from the 2000 U.S. Census of Population and the 2008-2012 American Community Survey (ACS). Keen Independent analyzed earnings of incorporated and unincorporated business owners age 16 and older who reported positive business earnings. Results are presented for the Arizona construction industry and the Arizona engineering industry.

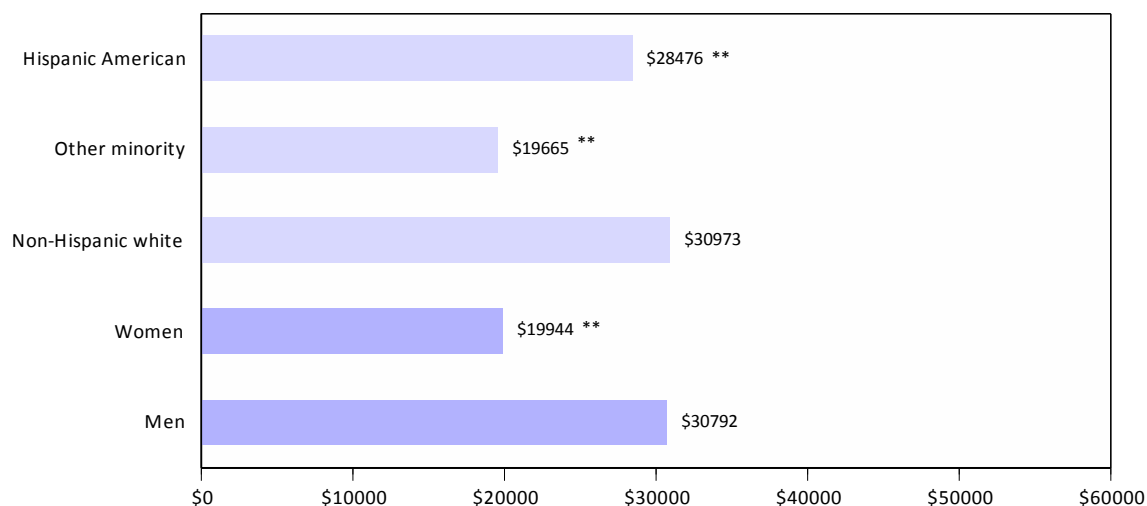
**Construction business owner earnings, 1999.** The 2000 Census of Population asked business owners about their business earnings in the previous year (1999). Figure H-14 shows average earnings in that year for business owners in the construction industry in Arizona. Due to small sample sizes for individual racial/ethnic groups, Keen Independent examined Hispanic Americans separately but grouped all other minorities into a single “other minority” category.

The top three bars of Figure H-14 present results for Hispanic Americans, other minorities and non-Hispanic whites. Results indicated that:

- On average, Hispanic American construction business owners in Arizona earned less (\$28,476) than non-Hispanic white construction business owners (\$30,973). This difference was statistically significant at the 95 percent confidence level.
- Other minority business owners earned significantly less (\$19,665) than non-Hispanic white business owners and that difference was also statistically significant at the 95 percent confidence level.

The bottom two bars of Figure H-14 compare business owner earnings for women and men who owned construction businesses in Arizona. With mean earnings of \$19,944, female construction business owners in Arizona earned considerably less than male construction business owners (\$30,792). This difference was statistically significant at the 95 percent confidence level.

**Figure H-14.**  
Mean annual business owner earnings in the construction industry in Arizona, 1999



Note: The sample universe is business owners age 16 and over who reported positive earnings. All amounts in 1999 dollars. \*, \*\* Denote statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 90% and 95% confidence level, respectively.

Source: Keen Independent Research from 2000 U.S. Census 5% sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

**Construction business owner earnings, 2007-2012.** The 2008-2012 ACS also reports business owner earnings. Because of the way that the U.S. Census Bureau conducts each year's ACS, earnings for business owners reported in the 2008 through 2012 sample were for the previous 12 months (2007-2012).<sup>21</sup> All dollar amounts are presented in 2012 dollars.

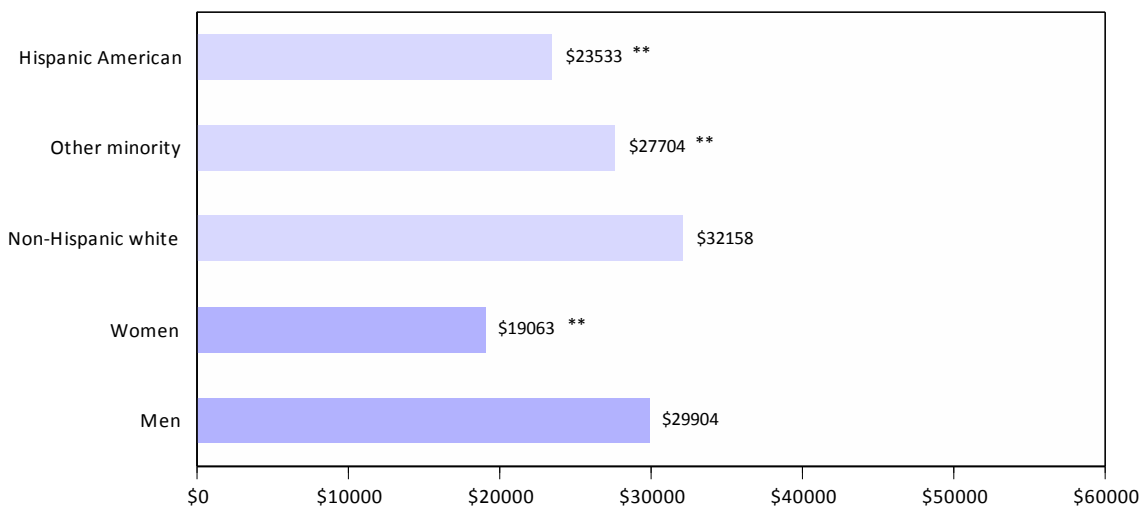
<sup>21</sup> For example, if a business owner completed the survey on January 1, 2009, the figures for the previous 12 months would reference January 1, 2008 to December 31, 2008. Similarly, a business owner completing the survey December 31, 2011 would reference amounts since January 1, 2011.



Figure H-15 shows earnings in 2007 through 2012 for business owners in the construction industry in Arizona. Again, due to small sample sizes for non-Hispanic minority groups, these groups were combined.

- On average, Hispanic American construction business owners in Arizona earned less in 2007-2012 (\$23,533) than non-Hispanic white construction business owners (\$32,158), a statistically significant difference at the 95 percent confidence level.
- Other minority-owned construction business owners also earned less (\$27,704) than non-Hispanic white construction business owners. This difference was significant at the 95 percent confidence level.
- Female construction business owners in Arizona earned substantially less, on average (\$19,063), than male construction business owners (\$29,904), a statistically significant difference at the 95 percent confidence level.

**Figure H-15.**  
Mean annual business owner earnings in the construction industry in Arizona, 2007 through 2012



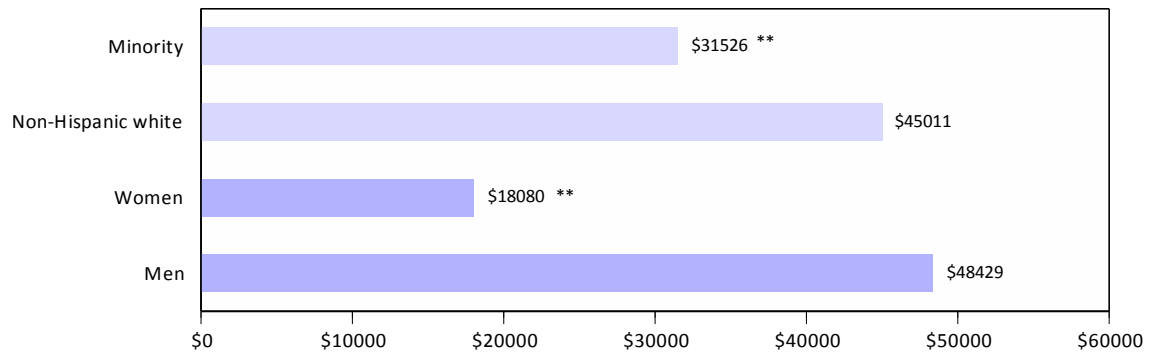
Note: The sample universe is business owners age 16 and over who reported positive earnings. All amounts in 2012 dollars. \*, \*\* Denote statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 90% and 95% confidence level, respectively.

Source: Keen Independent Research from 2008-2012 ACS. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

**Engineering business owner earnings, 1999.** Figure H-16 presents average earnings in 1999 for business owners in the engineering industry in Arizona based on the 2000 Census. Due to small sample sizes for individual groups, Keen Independent analyzed results for minority business owners combined.

- Minority engineering business owners in Arizona earned considerably less (\$31,526) than non-Hispanic whites in 1999 (\$45,011), a statistically significant difference.
- Female engineering business owners in Arizona also earned substantially less (\$18,080) than male business owners (\$48,429) in 1999 (statistically significant difference).

Figure H-16.  
Mean annual business owner earnings in the engineering industry in Arizona, 1999



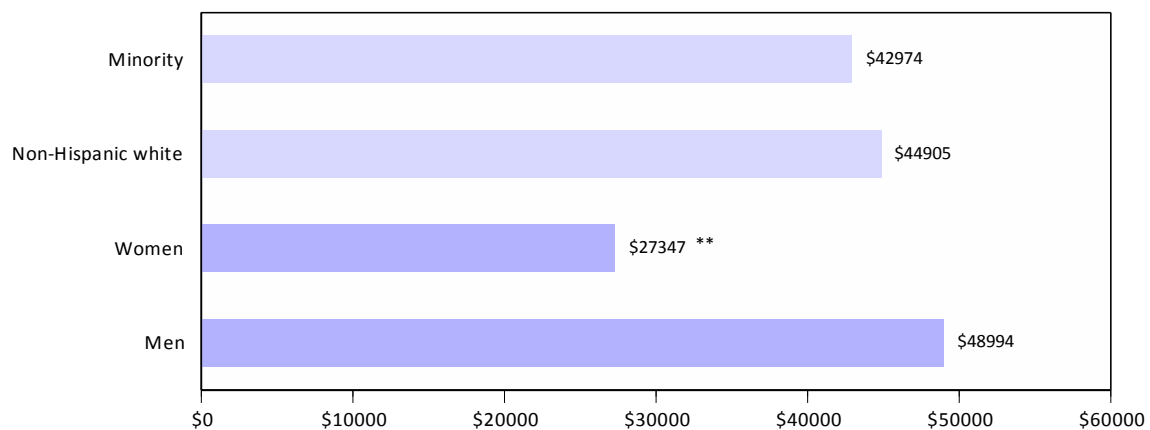
Note: The sample universe is business owners age 16 and over who reported positive earnings. All amounts in 1999 dollars.  
\*,\*\* Denote statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 90% and 95% confidence level, respectively.

Source: Keen Independent Research from 2000 U.S. Census 5% sample. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

**Engineering business owner earnings, 2007-2012.** As with earnings data for the construction industry, earnings for engineering business owners that were reported in the 2008-2012 ACS data were for the time period between 2007 and 2012. Again, due to small sample sizes, all minority business owners were combined into a single category. Results are for Arizona. Those results are displayed in Figure H-17.

- Minority business owners earned \$42,974, on average, which is about the same as non-minority business owners (about \$44,905) in Arizona.
- Average earnings for female engineering business owners (about \$27,347) were substantially lower than for male business owners (\$48,994) in Arizona, a statistically significant difference.

Figure H-17.  
Mean annual business owner earnings in the engineering industry in Arizona, 2007 through 2012



Note: The sample universe is business owners age 16 and over who reported positive earnings. All amounts in 2012 dollars.  
\*,\*\* Denote statistically significant differences from non-Hispanic whites (for minority groups) or from men (for women) at the 90% and 95% confidence level, respectively.

Source: Keen Independent Research from 2008-2012 ACS. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

**Regression analyses of business earnings.** Differences in business earnings among different racial/ethnic and gender groups may be at least partially attributable to race- and gender-neutral factors such as age, marital status, and educational attainment. Keen Independent performed regression analyses using 2008-2012 ACS data to examine whether there were differences in business earnings between minorities and non-Hispanic whites and between women and men after statistically controlling for certain race- and gender-neutral factors.

The study team applied an ordinary least squares regression model to the data that was very similar to models reviewed by courts after other disparity studies.<sup>22</sup> The dependent variable in the model was the natural logarithm of business earnings. Business owners that reported zero or negative business earnings were excluded, as were observations for which the U.S. Census Bureau had imputed values of business earnings. Along with variables for the race, ethnicity and gender of business owners, the model also included variables for characteristics considered likely to affect earnings, including age, age-squared, marital status, ability to speak English well, disability condition, and educational attainment.

Keen Independent created two regression models for Arizona, a model for business owner earnings in 2007 through 2012 for the construction industry that included 1,258 observations and a model for business owner earnings in 2007 through 2012 for the engineering industry that included 120 observations.

---

<sup>22</sup> For example, National Economic Research Associates, Inc. 2000. *Disadvantaged Business Enterprise Availability Study*. Prepared for the Minnesota Department of Transportation; and National Economic Research Associates, Inc. 2004. *Disadvantaged Business Enterprise Availability Study*. Prepared for the Illinois Department of Transportation.

**Construction industry in Arizona, 2007 through 2012.** Figure H-18 presents the results of the regression model for 2007 through 2012 business earnings in the Arizona construction industry. The model indicated that several race- and gender-neutral factors predicted earnings of business owners in the Arizona construction industry (and were statistically significant):

- Being older was associated with higher business earnings (with additional age having less of an effect for older individuals);
- Being married was associated with higher business earnings;
- Not being able to speak English well was associated with lower business earnings;
- Having a disability was associated with lower business earnings; and
- Having an education of less than a high school diploma was associated with lower business earnings.

After accounting for race- and gender neutral factors, results for race/ethnicity and gender were as follows:

- The model suggested that there were negative effects for minorities, but none were statistically significant; and
- Being female was associated with lower business earnings and that effect was statistically significant.

**Figure H-18.**  
Arizona construction business owner earnings model, 2007-2012

Note:

\*,\*\* Denote statistical significance at the 90% and 95% confidence level, respectively.

Source:

Keen Independent Research from 2008-2012 ACS. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

Variable	Coefficient
Constant	7.737 **
Age	0.109 **
Age-squared	-0.001 **
Married	0.305 **
Speaks English well	-0.311 **
Disabled	-0.601 *
Less than high school	-0.429 **
Some college	-0.117
Four-year degree	-0.022
Advanced degree	-0.338
Hispanic American	-0.124
Other minority	-0.235
Female	-0.574 **

**Engineering industry in Arizona, 2007 through 2012.** Figure H-19 presents the results of the regression model of business owner earnings in the Arizona engineering industry in 2007 through 2012. Having an advanced degree was associated with higher business earnings in the engineering industry. No other race- and gender-neutral factors were statistically significant.

After statistically controlling for race- and gender-neutral factors, Keen Independent observed that:

- Effects of race/ethnicity were not statistically significant; and
- Being female was associated with lower business earnings in the Arizona engineering industry (statistically significant).

**Figure H-19.**  
Arizona engineering industry business owner earnings model, 2007-2012

Note:

\*,\*\* Denote statistical significance at the 90% and 95% confidence level, respectively.

Source:

Keen Independent Research from 2008-2012 ACS. The raw data extract was obtained through the IPUMS program of the MN Population Center: <http://usa.ipums.org/usa/>.

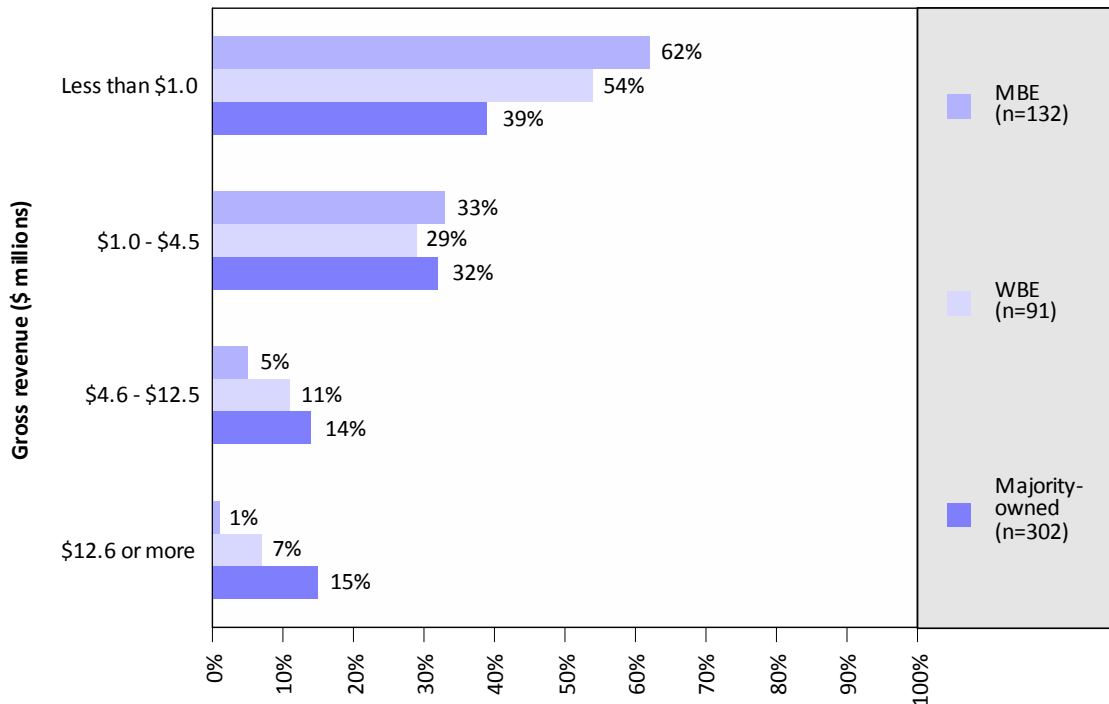
Variable	Coefficient
Constant	6.899 **
Age	0.114
Age-squared	-0.001
Married	0.430
Disabled	-0.522
Less than high school	-0.121
Some college	0.532
Four-year degree	0.398
Advanced degree	1.209 **
Hispanic American	0.190
Other minority	0.652
Female	-0.857 **

**Gross revenue of construction and engineering firms from availability interviews.** In the availability telephone interviews that Keen Independent conducted, firm owners and managers were asked to identify the size range of their average annual gross revenue in the previous three years.

**Construction.** Figure H-20 presents the reported annual revenue for MBEs, WBEs and majority-owned construction businesses.

- A larger percentage of MBEs (62%) and WBEs (54%) than majority-owned businesses (39%) reported average revenue of less than \$1 million per year.
- After combining the two highest revenue categories in Figure H-20, a relatively small proportion of MBEs and WBEs reported average revenue of \$4.6 million or more per year (6% of MBEs and 18% of WBEs) compared with majority-owned businesses (29%).

Figure H-20.  
Average annual gross revenue of company over previous three years, construction industry



Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms.

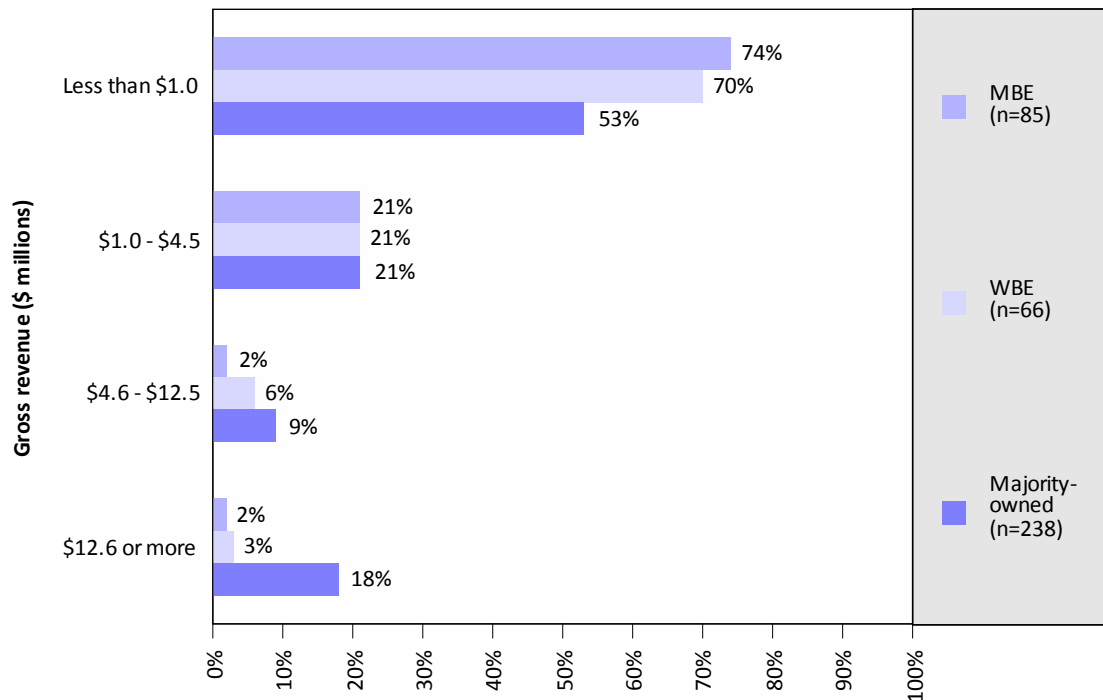
Source: Keen Independent Research from 2014 Availability Interviews.

**Engineering.** Engineering-related businesses were also asked to report average gross revenue over the previous three years. Figure H-21 presents those results.

- Relatively more MBEs (74%) and WBEs (70%) reported average revenue of less than \$1 million per year than majority-owned businesses (53%).
- The study team also examined the combined proportion of firms in the two highest revenue categories in Figure H-21. A substantially smaller proportion of MBEs (4%) and WBEs (9%) reported average revenue of at least \$4.6 million compared to majority-owned businesses (27%).

Figure H-21.

Annual gross revenue of company over previous three years, engineering industry



Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms.

Source: Keen Independent Research from 2014 Availability Interviews.

**Summary of analysis of business receipts and earnings.** Keen Independent examined business earnings data for Arizona construction and engineering-related industries from the U.S. Census Bureau and the 2014 availability interviews with Arizona businesses. The data from different data sets pertained to annual revenue in 1999, 2007-2012 and the three years before 2014. Across time periods and data sources, minority- and women-owned firms had lower revenue than majority-owned firms.

One of the data sets the study team examined included personal characteristics of the business owner. Regression analyses using these data indicated that female business owners had lower earnings than male owners after controlling for other factors.

## Availability Interview Results Concerning Potential Barriers

As part of the availability interviews conducted with Arizona businesses, the study team asked firm owners and managers if they had experienced barriers or difficulties associated with starting or expanding a business or with obtaining work. Appendix D explains the interview process and provides the interview questions. Appendix G presents results for questions concerning access to capital, bonding and insurance.

Results for other interview questions are examined here, including whether the firm had experienced difficulties learning about:

- Bid opportunities with ADOT;
- Bid opportunities with local governments;
- Bid opportunities in the private sector; and
- Subcontracting opportunities in Arizona.

**Learning about ADOT bid opportunities.** As shown in Figure H-22 on the following page, a greater percentage of minority- and women-owned firms indicated difficulties learning about bid opportunities, including ADOT opportunities, compared with majority-owned businesses. For example, the percentage of minority-owned businesses reporting that they experienced difficulties learning about ADOT bid opportunities (29%) was substantially higher than that for majority-owned firms (17%). About 23 percent of white women-owned firms indicated that they experienced difficulty learning about ADOT bid opportunities.

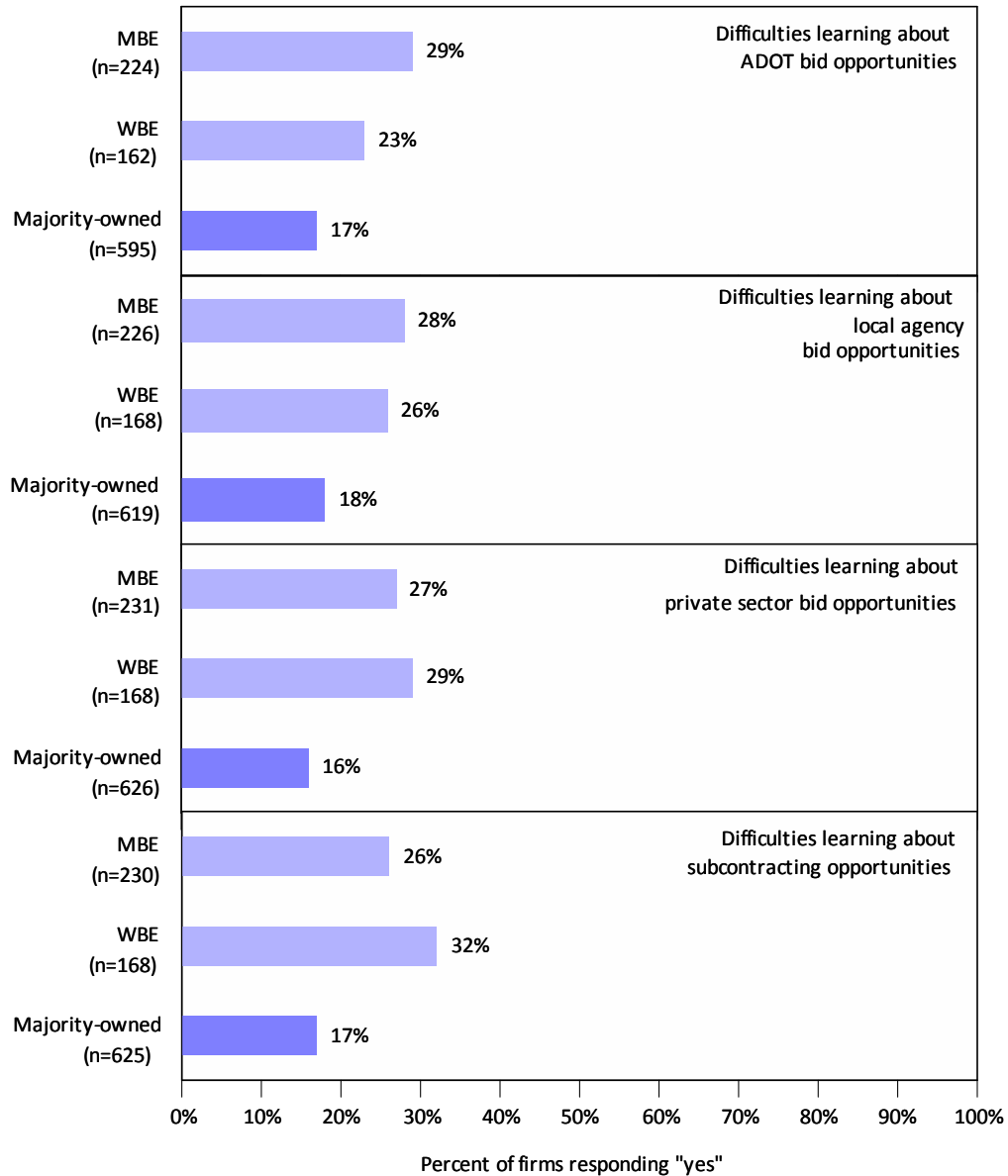
**Learning about local agency bid opportunities.** Results were similar for questions concerning learning about local government bid opportunities. Relatively more minority- and women-owned firms reported difficulties learning about local agency bid opportunities (28% and 26%, respectively) compared with 18 percent of majority-owned firms.

**Learning about private sector bid opportunities.** About 27 percent of MBEs and 29 percent of WBEs reported difficulties learning about private sector bid opportunities. Only 16 percent of majority-owned firms reported such difficulties.

**Learning about subcontracting opportunities.** MBEs and WBEs were also more likely than majority-owned firms to report difficulties learning about subcontracting opportunities. Twenty-six percent of minority-owned firms and 32 percent of white women-owned firms indicated such difficulties compared with 17 percent of majority-owned firms. The bottom portion of Figure H-22 presents these results.



Figure H-22.  
Responses to 2014 availability interview questions concerning learning about work,  
Arizona MBE, WBE and majority-owned firms



Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms.

Source: Keen Independent Research from 2014 Availability Interviews.

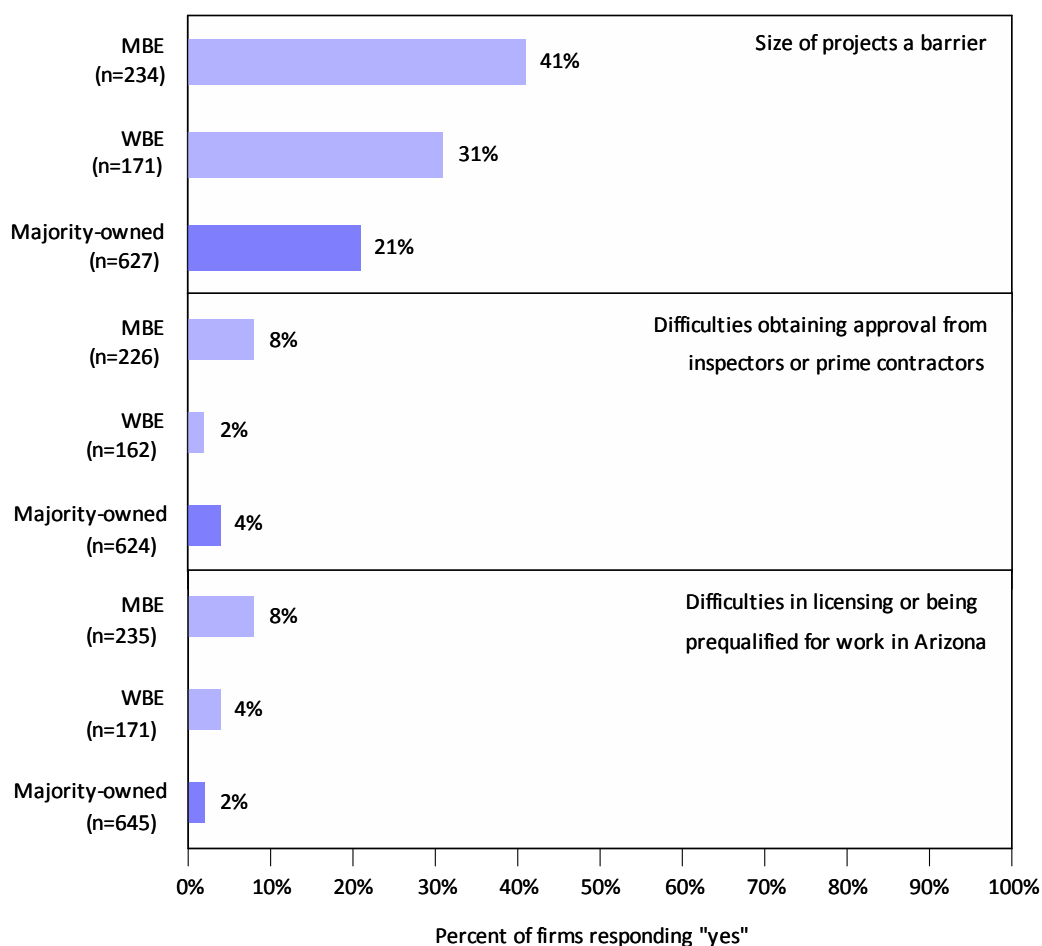
**Size of projects.** Interviewers also asked business owners and managers whether size of projects presented a barrier to bidding. About 21 percent of majority-owned firms reported that size of projects was a barrier. A greater percentage of MBEs (41%) and WBEs (31%) reported that size was a barrier to bidding. Figure H-23 shows these results.

**Obtaining final approval on work from inspectors or prime contractors.** Few firms indicated difficulties regarding inspections or approval of work (see Figure H-23).

**Licensing or prequalification for work in Arizona.** As shown in Figure H-23, very few firms reported difficulties in licensing or being prequalified for work in Arizona.

Figure H-23.

Responses to 2014 availability interview questions concerning size of projects, approval of work, and licensing and prequalification, Arizona MBE, WBE and majority-owned firms



Note: "WBE" represents white women-owned firms, "MBE" represents minority-owned firms and "Majority-owned" represents non-Hispanic white male-owned firms.

Source: Keen Independent Research from 2014 Availability Interviews.

**Summary of analysis of availability interview questions concerning barriers.** The availability interviews suggest that relatively more minority- and women-owned firms have difficulty learning about bid opportunities, including those at ADOT and local agencies. MBEs and WBEs are also more likely to indicate difficulty learning about subcontracting opportunities from prime contractors.

Relatively more minority- and women-owned firms than majority-owned firms reported that size of projects was a barrier to bidding.

Only a few firms said that they had difficulties obtaining final approval of work from inspectors or prime contractors. Just a few businesses indicated difficulties in licensing or being prequalified for work in Arizona.

## APPENDIX I.

### Description of Data Sources for Marketplace Analyses

To perform the marketplace analyses presented in Appendices E through H, Keen Independent used data from the following secondary data sources:

- Integrated Public Use Microdata Series (IPUMS) from the 2000 Decennial Census;
- Integrated Public Use Microdata Series (IPUMS) data from the 2008-2012 (five-year) American Community Survey (ACS);
- Integrated Public Use Microdata Series (IPUMS) data from the 2010-2012 (three-year) American Community Survey (ACS);
- Federal Reserve Board's 2003 Survey of Small Business Finances (SSBF);
- 2007 Survey of Business Owners (SBO) conducted by the U.S. Census Bureau;
- 2007 Home Mortgage Disclosure Act (HMDA) data provided by the Federal Financial Institutions Examination Council (FFIEC); and
- 2012 Home Mortgage Disclosure Act (HMDA) data provided by the Federal Financial Institutions Examination Council (FFIEC).

The following sections provide further detail on each data source, including how the study team used it in its quantitative marketplace analyses.

#### IPUMS Data

The Minnesota Population Center is home to the Integrated Public Use Microdata Series (IPUMS), the largest repository of national and international Census microdata for social and economic research. Researchers may access the IPUMS program and retrieve customized, accurate datasets.<sup>1</sup> The IPUMS-USA data consist of more than 50 samples of the American population. These samples are drawn from censuses (1850 to 2000) and from the ACS (2000-2012).

IPUMS data offer several features ideal for the analyses reported in this study, including historical cross-sectional data, stratified national and state-level samples, and large sample sizes that enable analysis with a high level of statistical confidence, even for subsets of the population (e.g., racial/ethnic and occupational groups). Because the design of these surveys has changed over time, they have a wide range of record layouts and coding schemes. The IPUMS data files are specifically formulated to standardize the U.S. Census Bureau Public Use Microdata Sample (PUMS) data from year to year. Variables that cannot be compared across years are removed from the dataset. In

---

<sup>1</sup> Steven Ruggles, J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and Matthew Sobek. *Integrated Public Use Microdata Series: Version 5.0* [Machine-readable database]. Minneapolis: University of Minnesota, 2011.

multiyear files, IPUMS inflates dollar values to the most recent year in the sample. IPUMS also provides some additional geographic and family interrelationship variables. Most importantly, IPUMS provides strata and cluster variables for survey samples prior to 2005, as well as replicate weights for survey samples since 2005, to account for the complexity of the sample design in the measurement of standard errors.

The study team obtained selected Decennial Census and ACS IPUMS data from the University of Minnesota Population Center.

Focusing on the construction and engineering industries, Keen Independent used IPUMS data to analyze workers and households in Arizona by examining:

- Demographic characteristics;
- Measures of financial resources;
- Educational attainment; and
- Self-employment (business ownership).

For the analyses contained in this report, the study team used the 2000 Census 5 percent samples and 2008-2012 ACS samples.

**2000 Census data.** The 2000 U.S. Census Arizona sub-sample contains 259,655 individual observations, weighted to represent 5,133,711 people.

**Categorizing individual race/ethnicity.** To define race/ethnicity for the 2000 Census dataset, the study team used the IPUMS race/ethnicity variables — RACED and HISPAN — to categorize individuals into one of seven groups:

- Non-Hispanic white;
- Hispanic American;
- African American;
- Asian-Pacific American;
- Subcontinent Asian American;
- Native American; and
- Other minority (unspecified).

An individual was considered “non-Hispanic white” if they did not report Hispanic ethnicity and indicated being white only — not in combination with any other race group. All self-identified Hispanics (based on the HISPAN variable) were considered Hispanic American, regardless of any other race or ethnicity identification. For the five other racial groups, an individual’s race/ethnicity was categorized by the first (or only) race group identified in each possible race-type combination.

The study team used a rank ordering methodology similar to that used in the 2000 Census data dictionary. An individual who identified multiple races was placed in the reported race category with the highest ranking in the study team's ordering. African American is first, followed by Native American, Asian-Pacific American, and then Subcontinent Asian American. For example, if an individual identified himself or herself as "Korean," that person was placed in the Asian-Pacific American category. If the individual identified himself or herself as "Korean" in combination with "Black," the individual was considered African American.

- The Asian-Pacific American category included the following race/ethnicity groups: Bhutanese, Burmese, Cambodian, Chamorro, Chinese, Filipino, Guamanian, Hmong, Indonesian, Japanese, Korean, Laotian, Malaysian, Mongolian, Nepalese, Okinawan, Samoan, Tahitian, Taiwanese, Thai, Tongan, and Vietnamese. This category also included other Polynesian, Melanesian, and Micronesian races, as well as individuals identified as Pacific Islanders.
- The Subcontinent Asian American category included these race groups: Asian Indian (Hindu), Bangladeshi, Pakistani, and Sri Lankan. Individuals who identified themselves as "Asian," but were not clearly categorized as Subcontinent Asian were placed in the Asian-Pacific American group.
- American Indian, Alaska Native, Native Hawaiian and Latin American Indian groups were considered Native American.
- If an individual was identified with any of the above groups and an "other race" group, the individual was categorized into the known category. Individuals identified as "other race" or "white and other race" were categorized as "other minority."

For some analyses — those in which sample sizes were small — the study team combined minority groups.

**Business ownership.** Keen Independent used the Census "labor force status" variable (LABFORCE) and the detailed "class of worker" variable (CLASSWKD) to determine self-employment.<sup>2</sup> Individuals were classified into the following categories.

- Self-employed for a non-incorporated business;
- Self-employed for an incorporated business;
- Wage or salary employee for a private firm;
- Wage or salary employee for a non-profit organization;

---

<sup>2</sup> The labor force consists of the civilian labor force (employed and unemployed) as well as active duty members of the U.S. Armed Forces. Civilians 16 years and older who are not classified in the labor force include students, homemakers, retired workers, seasonal workers interviewed in an off season who were not seeking work, persons doing incidental unpaid family work of less than 15 hours and the institutionalized population (see [http://www.census.gov/acs/www/Downloads/data\\_documentation/SubjectDefinitions/2010\\_ACSSubjectDefinitions.pdf](http://www.census.gov/acs/www/Downloads/data_documentation/SubjectDefinitions/2010_ACSSubjectDefinitions.pdf) for more information).

- Employee of the Federal government;
- Employee of a State government;
- Employee of a local government; or
- Unpaid family worker.

The study team counted individuals who reported being self-employed — either for an incorporated or a non-incorporated business — as business owners.<sup>3</sup>

**Study industries.** The marketplace analyses focus on two study industries: construction and engineering-related services. Keen Independent used the IND variable to identify individuals as working in one or the other industry. The variable reports the industry in which a person performed an occupation and includes several hundred industry and subindustry categories. Figure I-1 identifies the IND codes used to define each study area for the 2000 Census and 2008-2012 ACS analyses.

**Figure I-1.**  
**2000 Census and 2008-2012 ACS industry codes used for construction and engineering-related services**

<b>Study industry</b>	<b>2000 Census/ 2008-2012 ACS IND codes</b>	<b>Description</b>
Construction	77/770	Construction industry
Engineering-related services	729/7290	Architectural, engineering and related services

Source: Keen Independent Research from the IPUMS program: <http://usa.ipums.org/usa/>.

---

<sup>3</sup> For the analysis of business ownership, the study team excluded active duty members of the U.S. Armed Forces and all other wage/salary workers.

**Industry occupations.** The study team also examined workers by occupation within the construction industry using the PUMS variable OCC. Figure I-2 summarizes the 2000 Census and 2008-2012 ACS OCC codes used in the study team's analyses.

**Figure I-2.**  
**2000 Census and 2008-2012 ACS occupation codes used to examine workers in construction**

<b>Census 2000/ 2008-2012 ACS occupational title and code</b>	<b>Job description</b>
Construction managers 22/220	Plan, direct, coordinate, or budget, usually through subordinate supervisory personnel, activities concerned with the construction and maintenance of structures, facilities, and systems. Participate in the conceptual development of a construction project and oversee its organization, scheduling, and implementation. Include specialized construction fields, such as carpentry or plumbing. Include general superintendents, project managers, and constructors who manage, coordinate, and supervise the construction process.
First-line supervisors/managers of construction trades and extraction workers 620/6200	Directly supervise and coordinate the activities of construction or extraction workers.
Brickmasons, blockmasons and stonemasons 622/6220	Lay and bind building materials, such as brick, structural tile, concrete block, cinder block, glass block, and terra-cotta block, construct or repair walls, partitions, arches, sewers, and other structures. Build stone structures, such as piers, walls, and abutments and lay walks, curbstones, or special types of masonry for vats, tanks, and floors.
Carpenters 623/6230	Construct, erect, install, or repair structures and fixtures made of wood, such as concrete forms, building frameworks including partitions, joists, studding, rafters, wood stairways, window and door frames, and hardwood floors.
Carpet, floor, and tile installers and finishers 624/6240	Apply shock-absorbing, sound-deadening, or decorative coverings to floors. Lay carpet on floors and install padding and trim flooring materials. Scrape and sand wooden floors to smooth surfaces, apply coats of finish. Apply hard tile, marble, wood tile, walls, floors, ceilings, and roof decks.



**Figure I-2 (continued).**

**2000 Census and 2008-2012 ACS occupation codes used to examine workers in construction**

<b>Census 2000 and 2008-2012 ACS occupational title and code</b>	<b>Job description</b>
Cement masons, concrete finishers and terrazzo workers 625/6250	Smooth and finish surfaces of poured concrete, such as floors, walks, sidewalks, or curbs using a variety of hand and power tools. Align forms for sidewalks, curbs or gutters; patch voids; use saws to cut expansion joints. Terrazzo workers apply a mixture of cement, sand, pigment or marble chips to floors, stairways, and cabinet fixtures.
Construction laborers 626/6260	Perform tasks involving physical labor at building, highway, and heavy construction projects, tunnel and shaft excavations, and demolition sites. May operate hand and power tools of all types: air hammers, earth tampers, cement mixers, small mechanical hoists, surveying and measuring equipment, and a variety of other equipment and instruments. May clean and prepare sites, dig trenches, set braces to support the sides of excavations, erect scaffolding, clean up rubble and debris, and remove asbestos, lead, and other hazardous waste materials. May assist other craft workers. Exclude construction laborers who primarily assist a particular craft worker, and classify them under "Helpers, Construction Trades."
Paving, surfacing and tamping equipment operators 630/6300	Operate equipment used for applying concrete, asphalt, or other materials to road beds, parking lots, or airport runways and taxiways, or equipment used for tamping gravel, dirt, or other materials. Include concrete and asphalt paving machine operators, form tampers, tamping machine operators, and stone spreader operators.
Miscellaneous construction equipment operators, including pile-driver operators 632/6320	Operate one or several types of power construction equipment, such as motor graders, bulldozers, scrapers, compressors, pumps, derricks, shovels, tractors, or front-end loaders to excavate, move, and grade earth, erect structures, or pour concrete or other hard surface pavement. Operate pile drivers mounted on skids, barges, crawler treads, or locomotive cranes to drive pilings for retaining walls, bulkheads, and foundations of structures, such as buildings, bridges, and piers.
Drywall installers, ceiling tile installers and tapers 633/6330	Apply plasterboard or other wallboard to ceilings or interior walls of buildings, mount acoustical tiles or blocks, strips, or sheets of shock-absorbing materials to ceilings and walls of buildings to reduce or reflect sound.
Electricians 635/6350,6355	Install, maintain, and repair electrical wiring, equipment, and fixtures. Ensure that work is in accordance with relevant codes. May install or service street lights, intercom systems, or electrical control systems. Exclude "Security and Fire Alarm Systems Installers." The 2000 category includes electrician apprentices.

**Figure I-2 (continued).**

**2000 Census and 2008-2012 ACS occupation codes used to examine workers in construction**

<b>Census 2000 and 2008-2012 ACS occupational title and code</b>	<b>Job description</b>
Glaziers 636/6360	Install glass in windows, skylights, store fronts, display cases, building fronts, interior walls, ceilings, and tabletops.
Painters, construction and maintenance 642/6420	Paint walls, equipment, buildings, bridges, and other structural surfaces using brushes, rollers, and spray guns. Remove old paint to prepare surfaces prior to painting and mix colors or oils to obtain desired color or consistency.
Pipelayers, plumbers, pipefitters and steamfitters 644/6440	Lay pipe for storm or sanitation sewers, drains, and water mains. Perform any combination of the following tasks: grade trenches or culverts, position pipe, or seal joints. Excludes "Welders, Cutters, Solderers, and Brazers." Assemble, install, alter, and repair pipelines or pipe systems that carry water, steam, air, or other liquids or gases. May install heating and cooling equipment and mechanical control systems. Includes sprinklerfitters.
Plasterers and stucco masons 646/6460	Apply interior or exterior plaster, cement, stucco, or similar materials and set ornamental plaster.
Roofers 651/6510,6515	Cover roofs of structures with shingles, slate, asphalt, aluminum, and wood. Spray roofs, sidings, and walls with material to bind, seal, insulate, or soundproof sections of structures.
Iron and steel workers, including reinforcing iron and rebar workers 653/6530	<i>Iron and steel workers</i> raise, place, and unite iron or steel girders, columns, and other structural members to form completed structures or structural frameworks. May erect metal storage tanks and assemble prefabricated metal buildings. <i>Reinforcing iron and rebar workers</i> position and secure steel bars or mesh in concrete forms in order to reinforce concrete. Use a variety of fasteners, rod-bending machines, blowtorches, and hand tools. Include rod busters.
Helpers, construction trades 660/6600	All construction trades helpers not listed separately.

**Figure I-2 (continued).**  
**2000 Census and 2008-2012 ACS occupation codes used to examine workers in construction**

Census 2000 and 2008-2012 ACS occupational title and code	Job description
Driver/sales workers and truck drivers 913/9130	<i>Driver/sales workers</i> drive trucks or other vehicles over established routes or within an established territory and sell goods, such as food products, including restaurant take-out items, or pick up and deliver items, such as laundry. May also take orders and collect payments. Include newspaper delivery drivers. <i>Truck drivers (heavy)</i> drive a tractor-trailer combination or a truck with a capacity of at least 26,000 GVW, to transport and deliver goods, livestock, or materials in liquid, loose, or packaged form. May be required to unload truck. May require use of automated routing equipment. Requires commercial drivers' license. <i>Truck drivers (light)</i> drive a truck or van with a capacity of under 26,000 GVW, primarily to deliver or pick up merchandise or to deliver packages within a specified area. May require use of automatic routing or location software. May load and unload truck. Exclude "Couriers and Messengers."
Crane and tower operators 951/9510	Operate mechanical boom and cable or tower and cable equipment to lift and move materials, machines, or products in many directions. Exclude "Excavating and Loading Machine and Dragline Operators."
Dredge, excavating and loading machine operators 952/9520	<i>Dredge operators</i> operate dredge to remove sand, gravel, or other materials from lakes, rivers, or streams; and to excavate and maintain navigable channels in waterways. <i>Excavating and loading machine and dragline operators</i> Operate or tend machinery equipped with scoops, shovels, or buckets, to excavate and load loose materials. <i>Loading machine operators, underground mining</i> , Operate underground loading machine to load coal, ore, or rock into shuttle or mine car or onto conveyors. Loading equipment may include power shovels, hoisting engines equipped with cable-drawn scraper or scoop, or machines equipped with gathering arms and conveyor.

Source: 2000 Census occupational titles and codes at <http://usa.ipums.org/usa/volii/00occup.shtml>. 2008-2012 ACS occupational titles and codes at <https://usa.ipums.org/usa/volii/c2soccup.shtml>.

**Education variables.** Keen Independent used the variable indicating respondents' highest level of educational attainment (EDUCD) to classify individuals into six categories:

- Less than high school;
- High school diploma or equivalent;
- Some college but no degree;
- Associate's degree;
- Bachelor's degree; and
- Advanced degree.

**Definition of workers.** The universe for the class of worker, industry, and occupation variables includes workers 16 years of age or older who are “gainfully employed” and those who are unemployed but seeking work. “Gainfully employed” means that the worker reported an occupation as defined by the Census code OCC.

**2008-2012 American Community Survey (ACS) data.** The study team also examined 2008-2012 ACS data from IPUMS. The U.S. Census Bureau conducts the ACS which uses monthly samples to produce annually updated data for the same small areas as the 2000 Census long-form.<sup>4</sup> Since 2005, the ACS has expanded to a roughly 1 percent sample of the population, based on a random sample of housing units in every county in the United States (including District of Columbia and Puerto Rico). The 2008-2012 ACS estimates represent the average characteristics over the five-year period of time.

There were 317,870 observations included in the Arizona sub-sample data; the 2008-2012 ACS dataset represents 6,477,128 people in Arizona.

**Changes in race/ethnicity categories between 2000 Census and 2008-2012 ACS data.** The 2000 Census 5 percent sample and the 2008-2012 ACS IPUMS data use essentially the same categories for the detailed race variable (RACED). However, in some cases, the numerical code assignment is different and the study team accounted for those differences. Categories for the Hispanic variable (HISPAN) remained consistent between the two datasets.

### **Survey of Small Business Finances (SSBF)**

The study team used the SSBF to analyze the availability and characteristics of small business loans. The Federal Reserve Board conducted the SSBG every five years through 2003, but stopped after that year.

The SSBF collects financial data from non-governmental for-profit firms with fewer than 500 employees. The survey uses a nationally representative sample, structured to allow for analysis of specific geographic regions, industry sectors, and racial and gender groups. The SSBF is unique as it provides detailed data on both firm and owner financial characteristics. For the purposes of this report, Keen Independent used the survey from 2003, which is available at the Federal Reserve Board website.<sup>5</sup>

**Categorizing owner race/ethnicity and gender.** In the 2003 SSBF, businesses were able to give responses on owner characteristics for up to three different owners. The data also included a fourth variable that is a weighted average of other answers provided for each question. In order to define race/ethnicity and gender variables, the study team used the final weighted average for variables on owner characteristics. Definition of race and ethnic groups in the 2003 SSBF are slightly different than the classifications used in the 2000 Census and 2008-2012 ACS.

---

<sup>4</sup> U.S. Census Bureau. *Design and Methodology: American Community Survey*. Washington D.C.: U.S. Government Printing 2009. Available at [http://www.census.gov/acs/www/SBasics/desgn\\_meth.htm](http://www.census.gov/acs/www/SBasics/desgn_meth.htm)

<sup>5</sup> The Federal Reserve Board. *Survey of Small Business Finances, 2003*. Available online at <http://www.federalreserve.gov/pubs/>.

The SSBF classified race and ethnicity of businesses according to the following five groups:

- Non-Hispanic white;
- Hispanic American;
- African American;
- Asian American;
- Native American; and
- Other (unspecified).

A business was considered Hispanic American-owned if more than 50 percent of the business was owned by Hispanic Americans, regardless of race. All businesses that reported 50 percent or less Hispanic American ownership were included in the racial group that owned more than half of the company. No firms reported the race/ethnicity of their owners as “other.”

Similar to race, firms were classified as female-owned if more than 50 percent of the firm was owned by women. Firms owned half by women and half by men were classified as male-owned.

**Defining selected industry sectors.** In the 2003 SSBF, each business was classified according to Standard Industrial Classification (SIC) code and placed into one of seven industry categories:

- Construction;
- Mining;
- Transportation, communications, and utilities;
- Finance, insurance, and real estate;
- Trade;
- Engineering; or
- Services (excluding engineering).

**Region variables.** The SSBF divides the United States into nine Census Divisions. Along with, Colorado, Idaho, Montana, New Mexico, Nevada, Utah and Wyoming, Arizona resides in the Mountain Census Division (referred to in marketplace appendices as the Mountain region).

**Loan denial variables.** In the 2003 survey, firm owners were asked if they have applied for a loan in the last three years and whether loan applications were always approved, always denied, or sometimes approved and sometimes denied. For the purposes of this study, only firms that were always denied were considered when analyzing loan denial.

**Data reporting.** Due to missing responses to survey questions in SSBF datasets, data were imputed to fill in missing values. The missing values in the 2003 dataset were imputed using a different method than in previous SSBF studies. In the 1998 survey data, the number of observations in the dataset matches the number of firms surveyed. However, the 2003 data includes five implicates, each with imputed values that have been filled in using a randomized regression model.<sup>6</sup> Thus, there are 21,200 observations in the 2003 data, five for each of the 4,240 firms surveyed. Across the five implicates, all non-missing values are identical, whereas imputed values may differ.

As discussed in a recent paper about the 2003 imputations by the Finance and Economics Discussion Series, missing survey values can lead to biased estimates and inaccurate variances and confidence intervals.<sup>7</sup> Those problems can be corrected through the use of multiple implicates. For summary statistics using 2003 SSBF data, Keen Independent utilized all five implicates and included observations with missing values in the analyses. For the probit regression models presented in Appendix G, the study team used the first implicate and did not include observations with imputed values for the dependent variables.

### **Survey of Business Owners (SBO)**

Keen Independent used data from the 2007 SBO to analyze mean annual firm receipts. The SBO is conducted every five years by the U.S. Census Bureau. Data for the most recent publication of the SBO were collected in 2007. (In 2014, the Census Bureau was still conducting research for the 2012 SBO.)

Response to the survey is mandatory, which ensures comprehensive economic and demographic information for business and business owners in the U.S. All tax-filing businesses and nonprofits were eligible to be surveyed, including firms with and without paid employees. In 2007, almost 8 million firms were surveyed. The study team examined SBO data relating to the number of firms, number of firms with paid employees, and total receipts. That information is available by geographic location, industry, gender and race/ethnicity.

The SBO uses the 2002 North American Industry Classification System (NAICS) to classify industries. The study team analyzed data for firms in all industries and for firms in selected industries that corresponded closely to construction and engineering-related services.

To categorize the business ownership of firms reported in the SBO, the Census Bureau uses standard definitions for women-owned and minority-owned businesses. A business is defined as female-owned if more than half of the ownership and control is by women. Firms with joint male-/female-ownership were tabulated as an independent gender category. A business is defined as minority-owned if more than half of the ownership and control is by African Americans, Asian Americans, Hispanic Americans, Native Americans, or by another minority group. Respondents had the option of selecting one or more racial groups when reporting business ownership.

---

<sup>6</sup> For a more detailed explanation of imputation methods, see the “Technical Codebook” for the *2003 Survey of Small Business Finances*.

<sup>7</sup> Lieu N. Hazelwood, Traci L. Mach and John D. Wolken. *Alternative Methods of Unit Nonresponse Weight Adjustments: An Application from the 2003 Survey of Small Businesses*. Finance and Economics Discussion Series Divisions of Research and Statistics and Monetary Affairs, Federal Reserve Board. Washington, D.C., 2007.  
<http://www.federalreserve.gov/pubs/feds/2007/200710/200710pap.pdf>

The study team reported business receipts for the following race/ethnicity and gender groups:

- African Americans;
- Asian Americans;
- Hispanic Americans;
- Native Americans;
- Non-Hispanic whites;
- Men; and
- Women.

### **Home Mortgage Disclosure Act (HMDA) Data**

Keen Independent analyzed mortgage lending in Arizona and nationwide using HMDA data that the Federal Financial Institutions Examination Council (FFIEC) provides. HMDA data provide information on mortgage loan applications that financial institutions, savings banks, credit unions and some mortgage companies receive. Those data include information about the location, dollar amount and types of loans made, as well as race/ethnicity, income and credit characteristics of loan applicants. Data are available for home purchase, home improvement, and refinance loans.

Financial institutions were required to report 2012 HMDA data if they had assets of more than \$41 million (\$35 million for 2007), had a branch office in a metropolitan area and originated at least one home purchase or refinance loan in the reporting calendar year. Mortgage companies were required to report HMDA if they are for-profit institutions, had home purchase loan originations exceeding 10 percent of all loan obligations in the past year, were located in an MSA (or originated five or more home purchase loans in an MSA), and either had more than \$10 million in assets or made at least 100 home purchase or refinance loans in the calendar year.

The study team used those data to examine loan denial rates and subprime lending rates for different racial and ethnic groups in 2007 and 2012. Note that the HMDA data represent the entirety of home mortgage loan applications reported by participating financial institutions in each year examined. Those data are not a sample. Appendix G provides a detailed explanation of the methodology that the study team used for measuring loan denial and subprime lending rates.

## **APPENDIX J.**

### **QUALITATIVE INFORMATION FROM IN-DEPTH PERSONAL INTERVIEWS, TELEPHONE INTERVIEWS, PUBLIC MEETINGS AND WRITTEN TESTIMONY**

Appendix J presents qualitative information that Keen Independent collected as part of the disparity study. More than 400 business and trade association representatives provided input analyzed for this Appendix. Appendix J is presented in eleven parts:

- A. Introduction and Background describes the process for gathering and analyzing the information summarized in Appendix J. (page 2)
- B. Background on the Transportation Contracting Industry in Arizona summarizes information about how businesses become established and how companies change over time. Part B also presents information about the effects of the economic downturn and business owners' experiences pursuing public and private sector work. (page 5)
- C. Doing Business as a Prime Contractor or as a Subcontractor summarizes information about the mix of businesses' prime contract and subcontract work and how they obtain that work. (page 25)
- D. Keys to Business Success summarizes information about certain barriers to doing business and keys to success, including access to financing, bonding, and insurance (page 32)
- E. Potential Barriers to Doing Business with Public Agencies presents information about potential barriers to doing work for public agencies, including ADOT. (page 50)
- F. Other Allegations of Unfair Treatment presents information about any experiences with unfair treatment such as bid shopping, treatment during performance of work, stereotypical attitudes about minorities and women and allegations of a "good ol' boy" network that adversely affects opportunities for MBE/WBEs and other experiences. (page 60)
- G. Insights Regarding Business Assistance Programs, Changes in Contracting Processes or Any Other Neutral Measures presents information about business assistance programs, efforts to open contracting processes and other steps to remove barriers to all businesses or small business. (page 71)
- H. Insights Regarding Race-/Ethnicity- or Gender-based Measures presents information about general comments about the Federal DBE Program, effects of discontinuing DBE contract goals in 2006, and any impacts of DBE contract goals on other businesses. (page 81)



- I. DBE Certification presents information about the DBE certification process. It also presents information about advantages and disadvantages that subcontractors experience because of their certification as a DBE or MBE/WBE/SBE. (page 92)
- J. Overall Comments about the Preliminary Proposed Overall DBE Goal for FHWA-funded Contracts and the 2014 Availability Study (page 97)
- K. Summary of 2015 Public Meeting Comments and other Input (page 99)

## **A. Introduction and Background**

The Keen Independent study team conducted in-depth personal interviews and availability interviews from May 2014 through April 2015. The study team held a listening session involving seven representatives of minority-, women- and majority-owned firms in Tucson in May 2014. ADOT held public meetings in August 2014 and also asked for written comments concerning the 2014 Availability Study and its proposed overall DBE goal for FHWA-funded contracts. ADOT held additional public meetings in July 2015 and solicited written comments concerning its proposed overall DBE three-year goals for contracts receiving FHWA, FTA and FAA funds and the draft 2015 Disparity Study.

In the in-depth personal interviews, availability interviews, listening session and public comment process, business owners and managers had the opportunity to discuss their experiences working in the local transportation contracting industry; experiences working with ADOT and other public agencies; perceptions of the Federal DBE Program and other topics important to them.

**In-depth personal interviews.** The study team conducted in-depth personal interviews with 66 Arizona businesses and trade associations. The interviews included discussions about interviewees' perceptions and anecdotes regarding the local transportation contracting industry; the Federal DBE Program; and the contracting and procurement policies, practices, and procedures of ADOT. Interviews were conducted by Keen Independent, Así Marketing, a Phoenix-based Hispanic female-owned consulting firm, Don Logan and Associates, a Phoenix-based African American-owned consulting firm, Gordley Group, a Tucson-based woman-owned consulting firm and Genesis Consulting group, a Phoenix-based Hispanic female-owned consulting firm.

Interviewees included individuals representing construction businesses, engineering firms and trade associations. The study team identified interview participants primarily from a random sample of businesses that was stratified by business type, location, and the race/ethnicity and gender of business owner. The study team conducted most of the interviews with the owner, president, chief executive officer, or other officer of the business or association. Of the businesses that the study team interviewed, some work exclusively or primarily as prime contractors or subcontractors, and some work as both. All of the businesses conducted work in Arizona. All interviewees are identified in Appendix J by random interviewee numbers (i.e., #1, #2, #3, etc.).

Interviewees were often quite specific in their comments. As a result, in many cases, the study team has reported them in more general form to minimize the chance that readers could identify interviewees or other individuals or businesses that were mentioned in the interviews. The study

team reports whether each interviewee represents a DBE-certified business and also reports the race/ethnicity and gender of the business owner.<sup>1</sup>

**Availability interviews.** The study team also asked firm owners and managers to provide comments at the end of the online or telephone interview. Businesses were asked: Do any other barriers come to mind? Do you have any general thoughts or insights on starting and expanding a business in your field or winning work as a prime or subcontractor in Arizona?

A total of 350 businesses provided comments. The study team analyzed responses to these questions and provided examples of different types of comments in Appendix J. Availability interview comments are referenced as “AI.”

**Listening session.** Keen Independent and Gordley Group held a listening session on May 27, 2014 in Tucson, Arizona. The seven participants recruited by Gordley Group included representatives from Tucson area minority- and women-owned firms and large majority contracting firms. Comments from the Tucson listening session are noted as “TLS.”

**2014 public meetings.** Beginning in July 2014, ADOT solicited comments concerning its proposed overall goal for DBE participation in FHWA-funded contracts for FFY 2015 through FFY 2017. It held meetings with the following stakeholder groups in July 2014:

- ADOT External Stakeholders Group on July 21, 2014;
- ADOT DBE Construction and Professional Services Task Forces on July 22, 2014; and
- Local Public Agency Meeting on July 29, 2014.

ADOT published its Goal and Methodology along with the Draft 2014 Availability Study on August 4, 2014 for public review and comment. ADOT made wide-ranging efforts to publicize the goal and opportunities for public input, including distribution of the information to more than 4,000 individuals and organizations throughout the state. For example, ADOT:

- Made documents available through its website and provided hard copy documents at ADOT’s Administration Building in Phoenix and District Offices in Yuma, Flagstaff and Tucson;
- Encouraged the public to provide written comments online, via email or by mail until the close of the public comment period on September 17, 2014 (45-day comment period): and

---

<sup>1</sup> Note that “male” or “white” are sometimes not included as identifiers to simplify the written descriptions of business owners.

- Invited the public to attend public hearings including a presentation and opportunity to ask questions, and then provide any verbal or written comments about the proposed overall DBE goal. Individuals from construction, engineering firms and chambers of commerce were in attendance.

These public meetings included the following Arizona locations:

- Yuma, on August 18, 2014;
- Tucson, on August 19, 2014;
- Flagstaff, on August 25, 2014; and
- Phoenix, on August 27, 2014.

The study team reviewed and analyzed comments from these meetings and provided examples in Appendix J. Public meeting comments are referenced as “PM.”

**2015 public meetings.** Beginning in May 2015 as part of the 2015 Disparity Study, ADOT solicited comments concerning its proposed revised overall DBE goal for FHWA-funded contracts and its overall three-year DBE goals for contracts receiving FTA and FAA funds. It also held meetings with the following stakeholder groups in May and June of 2015:

- ADOT External Stakeholders Group on May 18, 2015;
- ADOT DBE Construction and Professional Services Task Forces on May 26, 2015;
- Local Public Agency Meeting on May 28, 2015; and
- American Council of Engineering Companies (ACEC) on June 9, 2015.

ADOT published its Goal and Methodology documents along with the Draft 2015 Disparity Study in early June for public review and comment. ADOT made wide-ranging efforts to publicize the goals and opportunities for public input and made documents available through its website and at ADOT Business Engagement and Compliance Office. ADOT encouraged the public to provide written comments online, via email or by mail or fax through July 23, 2015 (45-day comment period). Finally, ADOT invited the public to attend public meetings to hear a presentation, ask questions and then provide any verbal or written comments about the proposed overall DBE goals.

The 2015 public meetings were held from 3:00 pm to 5:30 pm in:

- Flagstaff on July 8, 2015;
- Yuma on July 13, 2015;
- Tucson on July 14, 2015; and
- Phoenix on July 16, 2015.

Attendees signed in at each public meeting and court reporters transcribed the public comments portion of each public hearing.

The study team reviewed and analyzed comments from the 2015 meetings and summarized results under Part K at the end of Appendix J. Public meeting comments are referenced as “PM.”

**Written testimony.** Public comments were also received in 2014 and 2015 via email. These comments were analyzed by the study team and provided in Appendix J. Written testimony is referenced as “WT.”

This appendix organizes verbal and written comments by topic. It begins by listing some of the questions asked at the public hearings and a summary of the corresponding responses given by ADOT or Keen Independent at those hearings.

## **B. Background on the Transportation Contracting Industry in Arizona**

Part B summarizes information related to:

- How businesses become established (page 5);
- Challenges starting a business (page 6);
- Changes in types of work that businesses perform (page 9);
- Fluid employment size of businesses (page 10);
- Flexibility of businesses to perform different types and sizes of contracts in different parts of the state (page 12);
- Local effects of the economic downturn (page 14);
- Current economic conditions (page 18); and
- Business owners’ experiences pursuing public and private sector work (page 21).

**How businesses become established.** Most interviewees representing construction and engineering businesses reported that their companies were started (or purchased) by individuals with connections in their respective industries. [e.g., #6, #8, #9, #26, #27, #28, #39, #62]

**Many firm owners worked in the industry before starting their own businesses.** [e.g., #5, #55, #49] Examples from the in-depth interviews include the following:

- An African American business owner with MBE, SBE and DBE certifications reported that he grew up around construction in Texas. When it came time to start a business he looked to the construction industry. “So I moved out here [Arizona] and I was pretty much doing highway work, and then I saw that [specialty contracting] was a good loop in the business and that’s the one I decided to go with, which is basically doing streets and highways.” [#1]

- A Native American sole proprietor of an engineering firm commented that he had worked for two engineering consultants prior to starting his own business. [#63]
- The business partner of an engineering-related firm (seeking DBE certification) reported having worked in the field since 1977 [prior to launching his business in Arizona]. [#2]
- The vice president of a DBE-certified specialty contracting business reported, “Both [business] owners were involved as laborers and worked their way up to [equipment] operators through the boom of [specialty contracting] industry in the late ‘80s to early ‘90s. When that market dried up, they decided to buy the [equipment] capable of completing large enough jobs to support the family. That vision turned into what we have today, from one [piece of equipment] to ten ....” [#3]
- The female owner of a trucking firm reported that her partner had always been a truck driver. “[He] has always been a truck driver. He bought his first truck in 1975 and put it to work in 1979.” [#22]
- The female owner of a DBE-certified engineering firm reported that she started her business while on maternity leave from another firm. An existing client was unable to find the services she provided anywhere else. [#43]
- At a public hearing, a Hispanic American female construction business owner testified about how people got to be construction business owners. “We didn’t go to college to get into the construction business. My husband worked for another contractor and ... he got laid off and ‘bam!’ we were in business.” [PM#1]

**Challenges in starting, operating and growing a business.** Interviewees had wide-ranging comments about the challenges in starting, operating and growing a business.

For some, securing opportunities was particularly difficult, especially at start-up. For example:

- The vice president of an MBE- and DBE-certified specialty contracting business said that greatest challenge was getting the chance to perform work as a new business. [#3]
- A Native American business owner indicated that he had encountered start-up challenges because of his background and lack of opportunities. [#10]
- The challenge for a Hispanic American representative of a minority-owned remodeling business is “just trying to get [a] foot in the door.” [AI#340]
- A representative of a white woman-owned highway construction business reported, “With a small business, it is much more difficult to start and grow your business (especially in the construction field) ... it is difficult to gain access to a network.” [AI#200]

**Many reported a combination of challenges in starting, sustaining or growing their business.**

[e.g., #7, AI#16] Some businesses faced a number of barriers including time management, financing, job size, timely payment and other factors:

- The African American owner of a DBE-certified firm reported that financing was the number one challenge he faced. He added, “Challenge number two is the intimidation or the fear of what the size of work I want to do or what I wanted to do. So, I use the strategy of how I am going to start the business and how I am going to make this work.” [AI#1]

The same business owner reported a mental business plan at start-up; his not relying on a written business plan caused additional challenges over time. [AI#1]

- The representative of a white woman-owned specialty contracting firm reported, “You need to be able to get bonded; small companies have trouble getting bonded for large projects. The bonding is a major factor and getting my money on time instead of having to wait two months ... and also having to purchase a larger insurance package from larger companies when I have my own.” [AI#201]
- The business partner of an engineering-related firm (seeking DBE certification) faced a number of challenges including, time management, long hours, securing and managing finances, and getting paid in a timely manner. [AI#2]

For the same partner, job size was also a challenge indicating that some public sector jobs could be too large to handle. [AI#2]

- The African American representative of a minority-owned heavy construction firm identified “funding for bond[s] and being treat[ed] fairly and equally” as primary challenges. [AI#203]

**Many businesses faced financial barriers at start-up and beyond.** Some interviewed faced challenges securing access to working capital and other financing, and timely payments.

- A Hispanic American representative of a minority-owned engineering firm reported “access to start-up capital” as a barrier. [AI#222]
- The representative of a DBE-certified engineering firm indicated that the business ran out of money in its first year of operation, but has since grown from two to a staff of eleven .... Early financial challenges have since made the firm cautious about hiring. [AI#16]
- An SBE-certified specialty contracting firm encountered financial challenges. The owners tapped credit cards and family to keep the business afloat. [AI#8]
- For a DBE-certified engineering-related firm, slow payment is the biggest form of unfair treatment. The business owner reported submitting invoices and waiting up to 90 days for payment. [AI#17]

Some business owners and representatives interviewed reported a myriad of operational barriers to starting, sustaining and growing their business. For example, a number of businesses reported inexperience with business administration, long working hours and marketing:

- The female owner of a DBE-certified engineering firm stated that she faced many challenges at start-up. She reported being uneducated in business, and undercapitalized; although knowledgeable in engineering, she was inexperienced in the business sector. [#43]
- The leader of a minority trade association indicated, “The problem for small businesses is that they work for someone else for 10-20 years and then open their own business. They know how much labor and materials it takes to do the job; where they fall short is on the administrative side.” [#69]

The same CEO added that small businesses are “too busy working in the business instead of on the business.” [#69]

- The Hispanic American owner of a DBE-certified engineering firm reported challenges in marketing and securing certain types of insurance ... the first due to lack of knowledge, and the second due to prohibitive cost. [#13]
- The owner of an Asian-Pacific American-owned DBE-certified engineering firm reported few start-up challenges, but still had difficulties entering public sector. He added that small businesses often do not have the capabilities required to conduct ADOT projects, for example. [#19]

A number of businesses reported government “red tape” and regulations as barriers to starting, operating and growing their business. Examples include:

- For a white woman-owned trucking firm, barriers included “red tape on government [work] and taxes.” [AI#125]
- A Hispanic American owner of a woman- and minority-owned specialty contracting business said, “I wouldn’t start a construction company in Arizona again ever; the regulations and requirements are too cumbersome.” [AI#238]

Others reported competition from lesser qualified businesses and limited enforcement of regulations as a barrier to sustaining and growing their business. Comments include:

- A Hispanic male owner of a non-certified firm providing specialty contracting services said that the primary challenge is that many firms compromise standards to work cheap. He has not secured government work, because other firms do the work for half the price. He added that he refuses to compromise work quality to offer a competitive price. [#30]

- The representative of a white woman-owned specialty contracting firm reported competition from unlicensed contractors as a challenge. “If I had it to do over I wouldn’t, because of the lack of enforcement of [c]ontract laws. Unlicensed contractors are not prosecuted ... the total lack of enforcement of contract laws by local people. I don’t think they care, they don’t want to do their jobs.” [AI#66]

**Some reported surviving by turning the challenges they faced at start-up into opportunities for their businesses.** For example, the CEO of a DBE-certified design engineering firm reported, “Yes there was [challenge]. Because of the background we come from, and the [lack of] opportunities, but we’re determined to overcome them all and we still have that attitude today. And we don’t treat it as a hindrance; we treat it as a ‘niche’ to help us.” [#10]

**Some interviewees indicated that due to their previous experiences and contacts, there were little to no challenges in starting their business.** For example, as a connected Native American business owner, one interviewee indicated that he focused on tribal work. After the first few months in business, he reported he had no trouble getting work. [#63]

**Changes in types of work that businesses perform.** Interviewees discussed whether and why over time firms changed the types of work that they perform.

**Several interviewees indicated that their companies had changed or expanded their lines of work to respond to market conditions, or to fill an open niche.** For example:

- The CFO of an SBA-certified general contracting firm reported that the firm began in the 1970s as a materials supplier and now conducts general contracting in addition to supplying materials. [#12]
- A DBE-, MBE-, SBE-, and SBA 8(a)-certified engineering consultant reported expanding services to market a more complete package to primes. “Currently we have capabilities to perform surveys, technical, civil engineering, structural, transportation other than landscaping and ... we can pretty much provide any type of services to the primes.” [#9]
- A representative of a large construction firm commented, “We have migrated over the years; years ago we did a lot of work for developers. We transitioned from private work to [public sector] work for Phoenix, Scottsdale, and other cities and agencies throughout the Valley.”

He added, “We had become primarily an ADOT company over the last 15 years; and now we do other agencies work as well. The focus changed from private to public because the developer market diminished at the time .... The housing developer market dried up.” [#66]

- The representative of a WBE- and SBA-certified specialty contracting firm indicated that the firm began in 2000 with concrete, added HVAC in 2007 and plumbing after that. [#14]



- The representative of a DBE-certified engineering firm reported having worked in the same engineering field since start-up but has enhanced services by adding expanded engineering-related services. [#16]
- A partner in an Asian-Pacific American-owned DBE- and SBE-certified specialty contracting firm reported that the firm performs underground jobs in addition to their standard services. The firm expanded scope to include a variety of work. [#25]
- The representative of a majority-owned professional services firm stated that their strategic plan during the downturn was to “diversify.” He said, “[Additional services] were added to the firm.” [#34]

**One association leader explained the benefits of being adaptable.** The male president of a construction contractors association stated, “There are some businesses that pivoted from the private sector to public sector [that] were able to survive and for those who were not able to pivot, really lost it.” [#47]

**Fluid employment size of businesses.** The study team asked business owners about the number of people that they employed; and whether their employment size fluctuated.

**A number of companies reported that they expand and contract their employment size depending on work opportunities, season, or market conditions.** Comments include:

- A Native American in the civil engineering industry reported that the size of the firm grew with the economy, but when the economy went bad, the size of the company shrank. [#10]
- A Native American sole owner of an engineering firm indicated that he is able to bid and get larger jobs such as full size subdivisions because he has capability to hire more staff during good economic times. [#63]
- The CFO of an SBA-certified general contracting firm reported expanding and contracting staff. “It [firm size] usually stays around 30 or 35 employees. If we have a big highway construction job, it could go up to 50 employees for that project.” [#12]
- A Hispanic male owner of a non-certified firm providing specialty contracting business said that he usually has only two to three employees, but he sometimes hires more people temporarily for certain projects. [#30]
- The female owner of a DBE-certified specialty contracting company stated that the number of employees that the company has fluctuated over time. She currently has little work and has trouble keeping six employees. The work is seasonal and affected by budget patterns throughout the fiscal year. [#39]
- The female owner of a DBE-certified engineering firm reported that her business has 14 employees, both part-time and full-time. She used to have 18 employees, and then it went down to eight. The business has rebounded to 14 employees. [#43]

- The female owner of a firm described how her firm adapted during the recession. “We’re working on a project and not getting paid ... everyone [employees] had to go down to 32 hours, we did things like negative comp time and positive comp time ... you had a busy week so you had to take time off ... you had to look at every month and how we were going to survive and how do we keep everyone, we did have to layoff some. Five years ago you were able to just work, work, work, work, work; now there’s a lot of non-billable work getting done ... we can do our website now in-house.” [TLS]

Some interviewees said that they had reduced permanent staff because of the economic downturn and poor market conditions. For example:

- The representative of a WBE- and SBA-certified specialty contracting firm stated that the firm had dropped from a high of 80 employees pre-recession. “In the dark days we were probably down to 15 to 20 [employees]. We’ve picked up a couple of decent jobs so we are at the 30s now.” [#14]
- A DBE-, MBE-, SBE-, and SBA 8(a)-certified engineering consultant reported growing his business to a staff of 40, then dropping half of those employees during the downturn. [#9]
- A Hispanic DBE-certified general contractor indicated that his firm was forced to lay off 24 employees resulting from the economic downturn. [#50]
- The CEO of a DBE-certified Native American-owned design engineering firm reported a staff that grew with the good economy and shrank during the economic downturn. They planned to expand again during the recovery. [#10]
- A white male representative of a professional engineering association said employee numbers dropped “quite a bit in the last five or six years.” [#36]
- The Hispanic male owner of a specialty contracting firm reported, “The construction industry took a gigantic hit ... the firm had employed 80 to 90 people before the [economic] downturn, but employed only 47 at present.” [#44]
- The representative of a majority-owned professional services firm said, “During the downturn we lost near half of our staff. Then we were able to come back because during the downturn, we tried to be strategic on what to do and eventually we recovered.” [#34]
- An estimator for a majority specialty contracting firm reported, “It [the Great Recession] made everyone make tough decisions. We had to downsize. Competition has gotten fiercer; we have seen competitors that were not there before in the prerecession.” [#48]
- The female owner of a DBE- and SBE-certified engineering firm reporting dropping from a high of 15 employees to seven during the Great Recession. [#70]

**Flexibility of businesses to perform different types and sizes of contracts in different parts of the state and sometimes out-of-state.** Interviewees discussed types, locations, and sizes of contracts that their firms perform.

Many firm owners reported flexibility in the locations where their firms perform work. [e.g., #13, #14, #18, #22, #38, #58] Relevant comments included:

- An Arizona-based engineering-related business (minority-owned) reported to conduct mostly public sector assignments (90%), with 85 percent of the work out-of-state (New Mexico, Texas, Utah, Colorado and Nevada). [#5]
- The CEO and operations manager of a Native American-owned DBE design engineering firm reported holding licensing for certain engineering assignments in Arizona and New Mexico. This firm primarily performs design-build services in the public sector's "niche" Native American market (including federal jobs). [#10, #11]
- The representative of a small business-certified majority-owned construction firm indicated that they have a subsidiary company in New Mexico. [#20]
- The female owner of a DBE-certified specialty contracting firm stated that her company is based in a rural Arizona community. They travel all over Arizona and Nevada for work. She is also considering getting a contractor's license in New Mexico. [#39]
- The Hispanic female owner of a non-certified specialty supply company reported that her firm had recently expanded from a local supplier to statewide operations. [#40]
- The Hispanic male representative of a minority contracting association and public hearing participant reported that due to increased competition among contractors, "Some ... look for work outside of [the city]." [PM#4]
- The female owner of a DBE- and SBE-certified engineering firm reported working in California to get through the downturn. [#70]

Other companies said that they prefer to perform projects close to their businesses. For example:

- A representative of a majority-owned business indicated that they only do work within one hour of their location.[#26]
- The CFO of an SBA-certified general contracting firm indicated a preference for nearby work (typically within a 75-mile radius). The business does not pursue any out-of-state work. He said, "We have good relationships in both public and private sector. It's kind of unique that we don't go all over the state." [#12]

Some firm owners indicated that their companies perform both small and large contracts. [e.g., #19, #39] Comments include:

- Small projects and contracts up to \$12 million constitute the work reported by the CFO of an SBA-certified general contracting firm. The CFO explained that any public sector project larger than \$12 million is beyond the firm's capacity. [#12]
- The owner of a WBE-certified specialty contractor said, "At first a \$50,000 job was a big deal, but now a \$500,000 job is not enough and these jobs are few and far between." [#38]
- The Hispanic female owner of a non-certified specialty supply company reported that her firm handles both large and small contracts. [#40]
- A DBE-engineering firm that typically bids larger jobs reported, "I mean there are some projects that I stay away from, just because of the same kinds of comments that you get about DBEs not being able to perform on contracts, and you just kind of blow it off. Obviously the bigger firms have a lot of advantages over us personnel-wise, so a lot of people want to give us the small projects and the bigger ones the big projects." [#16]

Some firms reported setting a ceiling on project size, finding their comfort zone and sticking to it. Examples include:

- The minority owner of a specialty-contracting firm stated that no job is too small. She indicated that large projects presented an obstacle for the firm. [#8]
- The representative of an SBE-certified majority-owned construction firm limited the size of projects the firm performs. "If you try to bite off more than you can chew, it could be damaging to the company. We try to stay in our comfort zone, which is \$500,000 to about \$1.5 million." [#20]

Many firms reported that they work in several different fields, or that they had changed primary lines of work over time. Some of those comments include:

- The business owner of a minority-owned engineering-related business reported a broad range of expertise, "I think you have to be adaptable in this market. I think you have to be willing to get out of your comfort zone .... Otherwise we would have been a bankrupt business .... When people tell you 'no,' I think you have to go do it anyway." For example, "Just because I do not have a contract to do [specified] truck [work], doesn't mean I can't do the work. I have a truck sitting in front of my door." [#5]
- The president of a women's business organization remarked, "Businesses need to look at ways they can expand on the services they provide. They need to always think of their business as a retail business even in the service industry. They must commercialize the things they do." [#59]

- An estimator for a majority specialty contracting firm reported, “We pride ourselves on not being too proud of anything. We’ve gotten into landscaping businesses for a short time back in the early 2000s when the private work was going well in Phoenix.” [#48]

The same estimator added that at the start the firm was primarily a ‘dirt’ contractor and that shifted to paving from the 1990s to 2000s. In the last ten years, the company has added building bridges and [retaining] walls. [#48]

- The Hispanic female owner of a non-certified specialty supply company reported that the business began by selling signs, then added traffic control, then vests and other safety equipment. [#40]
- The female owner of a DBE-certified engineering firm said that as she has been getting more public sector work, the business diversified with a broader range of transportation planning and design engineering. The business added transit work over time. [#43]

**Local effects of the economic downturn.** Interviewees expressed many comments about the economic downturn.

Most interviewees indicated that market conditions since 2008 have made it difficult to stay in business. [e.g., #13, #24, #30, #38, #39, #58] For example:

- The female owner of a woman- and minority-owned professional services firm described the 2008 to 2009 construction-related business environment. She began indicating that the leadership among the contractors changed frequently and employees would bounce from one prime contractor to another. She said that during this time, “low bid was an understatement.” Firms were bidding lower than what the estimator would recommend and they saw many firms falling out of the market. [#73]

She went on to say that there were also many other firms entering the market. For example, residential construction contractors (i.e. earthmovers) saw the ADOT market as attractive because there were projects happening that were not in the residential industry. These new firms did not know what the government regulations looked like and they did not adjust their cost estimates to reflect the costs that exist with complying with the regulations. [#73]

- With only 5 percent of his work volume generated by private sector customers, the African American owner of a specialty contracting firm (MBE-, SBE- and DBE-certified) stated that his business “flat-lined” during the economic downturn. For example, he could not secure work with ADOT and received no invitations to bid from other sources. He stressed, “[The economic downturn was] horrible [but] you can’t break somebody that is already poor.” [#1]
- Referencing the economy, the female owner of a WBE-certified professional services firm said, “It has been an absolute struggle. I’ve used everything I have economically to stay in the marketplace. It’s been very, very difficult.” [#33]

- The CEO of a DBE-certified design engineering firm indicated that business dropped to nothing, as a result of the economic downfall, and has since been regenerated. [#10]
- A minority-owned engineering-related firm reported, “[During the recession] we had to look for places outside of normal avenues for getting work. We have been able to show expertise with regards to our construction and [have] been reported recently to the [SBA] 8(a) program for opportunities to find some work.” [#5]

In addition, the female senior vice president of the same firm stated that they observed other subcontractors going bankrupt. [#46, #47]

- The owner of a DBE-, MBE-, SBE- and SBA 8(a)-certified engineering firm reported, “Economy has taken its toll. We were almost 40 [staff] in 2010. Now we have 20 people ....” [#9]
- The owner of a DBE specialty contracting firm reported that the recession prompted fewer on-time payments, making staying in business a challenge then and now. [#8]
- The leader of a local small business association reported “complete collapse, downsizing and revised business models” within the local construction industry. [#56]
- The president of an engineering association commented that the economy appears to be improving; however, professionals in his industry have not yet recovered from the poor economy. He reported that engineering has seen less recovery than most other industries. He added that the public sector “may be doing a little better” than the private sector, but did not feel either sector was doing well. [# 57]
- A representative of a majority-owned materials supply firm said that he left the business in 2009 due to the economic downturn. By 2011, the business “was practically devastated.” The business is only recently recovering.[#26]
- For the female owner of a DBE- and SBE-certified engineering firm, effects of the Great Recession include impacts on long-term project planning making life for employees “a rollercoaster ride.” She added as a consequence that the firm is run as a cash-based business. [#70]

**Some reported that minority-owned firms were particularly hard hit during the Great Recession.**

A number of examples include:

- The Hispanic business representative of a DBE-certified firm witnessed a large number of minority-owned businesses going out of business, particularly those businesses that were newer or not well known. [#50]
- The Hispanic American owner of a DBE-certified engineering firm reported that the economic downturn created an “unfavorable work environment for a minority-owned business.” [#13]

- A Hispanic female business owner reported that the economic downturn had “absolutely” affected her company, reporting that her firm’s annual revenue dropped 70 percent. [#55]
- Many participants in the Tucson listening session knew of businesses that had gone out of business during the economic downturn including trucking and other DBE industries. A majority contractor reported that he knew of several minority-owned firms that had not survived. “I know there were several minority firms that had been in business for a long time went out of business. It was a combination of market or credit lines.” For example, one minority contractor he knew made the decision to shut his business because he feared the consequences of losing everything he owned at the age of 60.

**Many business owners and managers said they have seen much more competition during the economic downturn.** They reported that more competitors are going after a smaller number of contracts in specific fields, with substantial downward pressure on prices. Larger firms have been bidding on work that typically went to smaller firms. These trends affected construction and engineering companies. For example:

- The representative of a woman- and minority-owned specialty contracting firm reported an imbalance between number of businesses and available work. “Competition is a barrier, [there are] many more businesses now than in the past. If there is a lot of work to be done, there would be no problem in expanding if the work is available.” [AI#339]
- A representative of a large publically owned firm said, “The market is not as robust as it used to be. The work is far more competitive, it’s hard to keep people employed and stay alive.”[#66]
- For the representative of a woman-owned business, “The work is going very cheap.” [AI#321]
- A female representative of an SBA 8(a)-certified engineering firm commented that the work they have done with ADOT has primarily been design-bid-build; however, the business is trying to stay away from that work because of intense competition in the economy. She reported that the competition is “cutthroat” and people have hurt others and themselves over the competition. [#18]
- The representative of a woman-owned design and construction firm reported, “The general economy conditions are the primary barrier.” [AI#328]

**Some business owners described how the downturn in the economy affected the public and private sectors differently**

- The representative of a majority-owned professional services firm said, “At first, the private side was nonexistent and now the public side is harder. Public has funds that come in and they are programmed for five years; it tends to stay stronger longer than private side. So, the public agency stuff is the primary reason we survived the downturn

because that was our income earning work — the private side then was nonexistent. Now, the public agency work is probably at its lowest point since the downturn started and that is because they have not received any benefits in terms of programs from increased sale taxes and increased property values. We expect that we are not through at all; the public sector is going to be slow for a year or two.” [#34]

- One prime contractor in the Tucson listening session reported that as a result of the economic downturn, some firms jumped from one industry to another. For example, “Almost everyone in the subdivision business got into the public works business ... when the subdivision business went down all of a sudden instead of having four or five bidders in the public works sector you had eleven to twelve so the market became a no-profit market ... by the summer of '08 the market was full of people coming out of other areas. There was a long learning curve for some of them.” However, a minority- and women-owned business added despite those learning curves in her experience, “the firms that do move quickly do survive.”

**According to interviewees, a few businesses may have survived because they were well capitalized going into the economic downturn. For example:**

- A minority-owned engineering-related business owner reported an advantage because he had secured pre-downturn financing. “When the recession did hit, they were up to a point where they weren’t giving any loans. For me, I had the relationship to survive through that and I already established a liability that they couldn’t take away. We got a line of credit we could use to finance our day-to-day stuff.” [#5]
- The Hispanic female owner of a non-certified specialty supply company remarked that being a small business saved them when the economy faltered. She said that many larger companies went out of business at that time because of high overhead costs; her company, however, was able to weather the poor economy with low overhead costs. [#40]

**Several business owners said that DBE and other certifications helped them sustain their businesses during the economic downturn, or could help them improve their opportunities in the new economy. Comments include:**

- The Operations Manager of a DBE design engineering firm reported that they see more competition since the downturn, but certifications with ADOT [DBE] and SBA help them stay competitive. [ #11]
- For one engineering-related business owner, obtaining DBE certification would help diversify his business in the new economy. [#2]
- The female owner of a trucking firm reported not having turned a profit in the past eight years. She indicated that the firm is seeking DBE certification and that DBE certification could help her increase opportunities and grow the business. [#22]



A representative of a municipality reported how the struggling economy affected the DBE Program. “As the economy has continued to struggle, the DBE Program has seen more difficulties as prime contractors look to enhance their profits, and protect their firms from financial realities.” [WT#10]

Some businesses indicated that having had previous experience facing the challenge of intermittent work helped them survive the economic downturn. For example, a DBE-certified specialty contractor indicated an ability to weather downturns as the firm had previous experience with extended downtime between work opportunities. The firm planned slow growth over time to sustain itself, since 2007. [#8]

A few business owners and managers said that their companies did not see a decline in work during the economic downturn, or were experiencing slowdowns that are more recent. Examples include the following:

- A MBE- and DBE-certified specialty contracting business representative noted, “Because of our relationships, we were able to flourish during the ‘down’ economy. A lot of the smaller, one-drill, one-man, family operations didn’t survive in the downturn so that allowed us to create a market share.” However, he offered that to stay competitive, he lowered his pricing from a high during the “boom.” [#3]
- The CFO of an SBA-certified general contracting firm indicated having been busy during the downturn; but now slowing down. “We didn’t really experience it here. The past five years we have been really busy. We’ve had some of our better years actually the past three or four years. It has been slowing down now.” He explained, “I think a lot of it has to do with the mine here around the area. They seemed to keep busy during that time.” However of late, he reported a slowdown resulting from the City not having funds to conduct construction projects. [#12]

**Current economic conditions.** Many business owners and managers reported that economic conditions had not fully recovered.

Some interviewees said that they have not yet seen an upswing in market conditions, or that the recovery has not been what they had hoped it would be. [e.g., #15, #39] For example:

- The owner of an engineering-related minority-subcontracting business reported fewer opportunities to do business with primes. “When I started in 2005, during the boom, primes were more willing to share the projects with little companies because they were overwhelmed, but now the economy is in the downturn the primes aren’t willing as much to share the work little subs — especially little DBEs.” [#5]
- The female representative of an industry association described local marketplace conditions as, “Tight ... very cutthroat ... very price conscious.” For greatest effect, she reported that firms require, “Right pricing, right skill set, [and to be] effective at cost management, effective at time management, and core competencies ... must be competitive.” [#68]

- A Hispanic American female construction business owner commented on general marketplace conditions in a public hearing. “Coming from contracting, my husband and I have owned a business for 23 years, and ... it hasn’t been a recession for our business, it’s been a depression to the point where we’re about to lose it [our business] because it’s so bad.” [PM#1]
- For the representative of a white woman-owned specialty contracting firm, post-recession marketplace conditions have “made it difficult to grow” the business. [AI#144]
- A representative of a large publically held firm indicated the firm is still having trouble in the market today. The firm is still experiencing financial difficulties, so too, are his subcontractors. He added ADOT and local municipalities are not doing work. He notices this also in Chandler, Gilbert and Scottsdale.[#66]
- A representative of a minority business assistance organization remarked that the current economy is very slow and businesses are having a hard time. He also mentioned since there were relatively few large jobs available. In order to make enough money to keep afloat, large firms were taking many of the small jobs that would normally go to much smaller firms. This results in smaller firms struggling to find contracts. He said, “Simply, it’s tough out there.” [#53]
- The president of a women’s business organization said, “Although business is improving ...they are still running into challenges.” [#59]
- The representative of a woman- and minority-owned specialty contracting business reported that the firm’s “work has been slow since 2009.” [AI#345]
- The African American owner of a concrete subcontracting business stated that ADOT has plenty of work in his field, and the amount of work has increased. However even in good years, there were not a lot of bid opportunities. “Overall, jobs have increased but it does not balance the bad years.” [#1]
- The leader of a minority trade association reported, “It’s [the economy] still depressed, it’s time to make headway. We’re seeing a little margin now; we’re going in the right direction, but not as good as the past.” [#69]
- A female representative of a SBA-certified engineering firm reported, due to extremely competitive pricing, that the firm is not getting a lot of business in the present economy: sometimes busy and sometimes not working at all. This business representative predicted a grim outlook for the next two years. [#18]

She went on to say, “Recently, we found that there is some public work that we have gone after ... what they consider best value. You’re submitting qualifications and price. They look at your price first and if you’re low, then they open your qualifications. If the guys are technically-qualified, then the work is given to them.” She added that the firm

is stuck competing with businesses that price low, or larger firms that can secure bonding. (The firm cannot get bonded for larger projects.) [#18]

- As compared with his firm's pre-downturn revenues, an engineering-related business partner reported a disappointing recovery. "We hit a brick wall five years ago and we are no longer near where we were five years ago. In 2008, that is when construction really came to a halt." [#2]
- A Hispanic male owner of a non-certified firm providing electrical services said, "The whole year has been tough." He added that he gets more work now, but the prices are still a problem because of unrealistic pricing by his competitors. "I had to work for mediocre money with my high standards and I can't do it. So it's very tough," he said. [#30]
- The representative of a majority-owned professional services firm indicated a recent movement to complete projects, resulting in an overestimation of the economic recovery. "There has been a momentum in growth of building projects but that has been evening out. I predict that there could be another small downturn before it recovers." [#34]
- An owner of a WBE-certified specialty contracting business stated that she does not believe the economy is going to pick back up even though everyone else around her predicts that it will. Her profit margins are still very low. [#38]
- When reporting on [specified city] construction market conditions, a Hispanic American female construction business owner stated, "We're pretty hungry here right now. There's no work in [specified city]. When we have one job we're like 'piranhas,' you know, in a tank, everybody's killing each other because there's no work." [PM#1]
- The Hispanic male representative of a minority contracting association reported, "Some of the [local] contractors [are forced to] look for work outside of [specified city]." [PM#4]

**Others commented that they have started to see a slight upward trend in the market conditions. These businesses mostly reported cautious optimism:**

- The female executive director of a professional services association reported that the current economy has been a very tough time for any firm in Arizona. "The firms that are still here are hanging in there and they have noticed some slight improvement, but nothing to be excited about." [#42]
- An Asian American SBA-, SBE-, DBE-certified male environmental consulting business owner commented, "Economics affect our business a little after it affects the rest; currently things are looking up, but we will see." [#62]
- The female owner of a WBE-certified professional services firm stated that the economic conditions now are better but not by much. [#33]

One business owner reported opportunity to expand. A Hispanic woman business owner reported that things have turned around, and they have now opened another office in a different state. [#55]

**Business owners' experiences pursuing public and private sector work.** Interviewees discussed their experiences with the pursuit of public and private sector work. Most interviewees indicated that their firms conduct both public sector and private sector work. [e.g., #1, #2, #3, #4, #5, #7, #9, #10, #11, #12, #18, #19, #26, #27, #28, #30, #34, #39, #60, AI#298]

For example, when asked at one public hearing if local contractors do both public sector and private sector work, several participants reported that do both. [PM#1, PM#2]

**Some interviewees reported variability in where their work originates.** For example, the white male manager of a publically-traded construction supply firm reported significant fluctuation in where the firm's work originates. For example, he indicated that when private sector work is plentiful, there is limited public work and vice versa. [#21]

**A number of business owners reported differences between public and private sector work; and how those differences affected their firm's ability to pursue one business sector or the other.** Comments included:

- An Asian American DBE-certified small business owner indicated that private customers require less paperwork. He indicated that public projects typically have more "hoops and hurdles." His firm cannot afford the administrative time and personnel to do the [necessary] paperwork [to pursue public sector work]. [#62]
- A Hispanic woman who represents a professional contractors association commented that private sector bids are a lot easier, and take far less time than public sector bids to submit. [#35]
- A Native American-owned engineering firm business owner indicated that he primarily performs private sector work. He indicated experiencing barriers to being a small company bidding prime jobs; therefore, he primarily does subcontractor work. He added, "If we were to prime a large government project, it would take more time management, it would make us overloaded and it would impact our other projects." [#63]

**A number of interviewees noted that a slowdown in private sector work during the Great Recession resulted in more companies pursuing and competing for public sector work.** Examples of those comments include the following:

- The owner of a DBE-certified engineering firm indicated that work with private clients made up 50 percent of the firm's work in 2004. "During the leaner periods, starting in 2008 to 2012, we were leaning towards public [sector] work because there was hardly any private [sector] work. So you are talking about 80 to 85 percent [public work]." [#9]

- During the economic downturn, an Asian-Pacific American-owned DBE-certified engineering firm reported looking to small business set-asides for work with the [specified city]. [#19]

**Some interviewees reported that they preferred private sector work over public sector work.**

Some of the comments indicated that performing private sector contracts was easier, more profitable, and more straightforward than performing public sector contracts. For example:

- The representative of a WBE-, SBA- and SBE-certified specialty-contracting business reported a preference for private sector work because pricing is less competitive. “[We do] mostly private [sector] work because recently, most of the public [sector] work has been really ‘cutthroat.’ The last road job that we did for [a county], we lost our butts on it and we could barely beat out the next person.” [#14]
- The owner of a majority specialty-contracting firm preferred private sector work as it pays at job completion; whereas public sector pays up to 90 days post-completion. [#15]
- A Hispanic female representative of a professional contractor association said, “Working on government-owned jobs comes with more ‘red tape,’ so you have to pick someone who already has a lot of experience, unless you’re willing to hold their hand throughout the process.” She added, “It’s no secret —government jobs are a ‘pain in the butt.’”[#35]
- The male partner in a woman-owned specialty contracting firm reported no disadvantages to doing private sector work as compared with public sector work. For this firm, bonding made work with public agencies a challenge. [#24]
- A Hispanic owner of a trucking firm (non-certified) primarily works as a private sector prime contractor, as private sector provides ample work for his firm. [#52]

**Some interviewees said that current market conditions are such that there are more bidders on government contracts and that competitors sometimes submit low-ball bids on public sector work.** [e.g., #20] Examples include:

- The engineering-related business partner reported some evidence of low-balled bids among his competitors. “I would almost call it unfair competition. I have a small business, an office, a truck, and things like that. But there are [specialty services providers] who lost their jobs in the recession and they work from their homes — so there are no overhead costs — and they basically can undercut the price of labor.” However, he reported that low-balling could decline in his field with expanding work opportunities. [#2]

- The representative of a WBE- and SBA-certified specialty contracting business reported that she submitted a public sector subcontracting bid for \$3.2 million. A competitor undercut her bid by \$1.2 million. She recounted that, “We lost jobs with companies we had stable relationships with, with subcontractors who were desperate for cash flow who took jobs for the cost, materials and labor. There was no way they [the other subcontractor] could’ve added equipment in there [into the bid]; no way they could’ve added overhead; there was no way they could’ve had any profit.” As an outcome, she added that the winning prime replaced the sub [that submitted a low-balled bid]. [#14]
- A representative of a woman-owned specialty services provider reported low-balling as a barrier to doing work. “Competition has prices so low that it is nearly impossible to win bids, when equipment is bought [and owned] for \$30,000 and they are renting for a penny-a-day, it is impossible to compete.” [AI#27]

**Other interviewees preferred obtaining public sector contracts because they were more certain they would be paid.** Certainty of payment on public sector projects was a frequent comment among those business owners and managers. Examples include the following:

- A DBE-certified woman-business owner of a trucking firm prefers public sector work because the funds are more reliable than in the private sector. She commented, “You know the check is going to be good when it is coming from the government.”[#64]
- An estimator (male minority) of a majority-owned specialty contracting firm stated, “I think one of the reasons why we like public work is that we know we are going to get paid every month. We are going to be able to pay our bills and subcontractors.” [#48]

**Some interviewees said that they preferred public sector work because it is more profitable.** For example, the African American owner of a DBE-certified concrete subcontracting firm reported preferring public sector work as it pays better than private sector work. [#1]

**One interviewee said that pursuing private sector work was preferable because he has experienced discrimination in the public sector.** A Hispanic male owner of a non-certified firm providing specialty contracting business indicated that he primarily performs private sector work, because he has been unable to break into the public sector. He explained, “They look at me as a ‘Latino guy’ most of the time, and even though they say it’s not racism, it is. Because they look at me and they say, ‘this guy is not going to perform, and if he performs, he’s [going to] make a lot of money and we don’t want him to make that much money.’ They want to keep us down.” [#30]

**Some interviewees said that pursuing public sector work was more challenging because bonding is required.** For some, bonding made it difficult to pursue work with ADOT:

- The owner of a majority specialty contracting firm reported that when acting as a prime bonding is a challenge, particularly on ADOT projects. “Especially for ADOT when sometimes you have to have bonding, it can be hard on small businesses.” [#15]

- The partner in an Asian-Pacific American-owned DBE- and SBE-certified specialty contracting firm reported that bonding requirements prevented the firm from winning a contract with ADOT. He indicated that ADOT expects a lot from small businesses trying to submit bids and makes the bidding process too difficult. It only leaves a select few that can get their foot in the door. [#25]

**Some interviewees with experience in both the private and public sectors identified advantages and disadvantages of private sector and public sector work. Examples include the following:**

- The president of an engineering association said that members of his organization work as both prime and subcontractors. He commented that many agencies “do not understand the amount of work that a small business can do” and thus are often hesitant or unwilling to give a large contract to those businesses even though they are fully capable of delivering on such a contract. He admitted that he himself had been guilty of this while working at a small agency. [#57]
- A representative of a majority-owned firm said, “It is frightening sometimes working with ADOT.” The work for ADOT is much harder and is scrutinized much more; “It’s a headache I don’t much care for.” He added that he knows that if he messed up on an ADOT project, it would add to the stereotype that small-town businesses are unqualified. He also commented that his firm has trouble meeting ADOT’s specifications. [#27]
- The owner of a DBE-certified engineering firm compared public and private sector work saying, “Private sector, I don’t think they care if you are a DBE or not a DBE as long as you have the relationships and you perform well and give you the cheapest price. In terms of public [sector], the value is always the size of the projects.” [#9]
- The CFO of an SBA-certified general contracting firm compared public and private sector arenas. “With public [sector] work, you know ... you are going to do the job. Whereas with private [sector] work, by the time you are [get the work] your client might not have the funding and the work is canceled.” He also noted that public sector requires much more paperwork. [#12]
- Despite priming most private sector assignments, the Asian-Pacific American owner of a DBE-certified engineering firm reported working as a subcontractor when conducting projects with public agencies. The reported advantage of public sector projects included more paid hours than for the same work in private sector. [#19]
- The owner of a WBE-certified specialty contracting business stated that 25 percent of the firm’s work is private, but there are months where there is no private work at all. She reported that timely payment is a benefit of working in the private sector because she does not have to wait for the agency to pay the prime contractor before receiving payment. [#38]

- When evaluating methods for request for proposal, the representative of a female minority-owned engineering firm reported, “confusing and contradictory language; cumbersome preparation requirements; feeble scopes-of-work; short turnaround times for submittal” and “vastly different format requirements by each and every state and local agency” [AI#1]

### **C. Doing Business as a Prime Contractor or as a Subcontractor**

Business owners and managers discussed:

- Mix of prime contract and subcontract work (page 25);
- Prime contractors’ decisions to subcontract out work (page 27);
- Subcontractors’ preferences to do business with certain prime contractors and avoid others (page 31); and
- Subcontractors’ methods for obtaining work from prime contractors (page 31).

**Mix of prime contract and subcontract work.** Business owners described their experience as prime contractors and/or subcontractors.

Many firms that the study team interviewed reported that they work as both prime contractors and as subcontractors. [e.g., #7, #18]

- The owner of an Asian-Pacific American-owned DBE-certified engineering firm reported typically working as the prime for private sector work and as the subcontractor when working with public agencies. [#19]
- The leader of a minority trade association indicated, “80-90 percent of membership performs both private and public work, wherever they get the work.” [#69]
- The owner of a WBE-certified specialty contracting business reported primarily acting as a subcontractor in public sector work, but also doing work as a prime in the private sector. She said, “If I could get bonding [for public work], I would bid tomorrow!” [#38]
- The minority owner of an engineering firm reported making efforts to establish long-term relationships with his subcontractors so that when the time came, he could be their subcontractor. [#7]

Some business owners and managers said that they mostly work as subcontractors because they do not have the capacity to bid on the size and scope of the entire project, or find it difficult to compete as a prime. Examples include the following:

- The African American business owner of a DBE-certified concrete subcontracting firm said that he would need to establish a true office to consider pursuing prime contracting opportunities. [#1]



- For a WBE-, SBA- and SBE-certified specialty contracting firm, subcontracting means less paperwork and less competition. “Part of it has to do with the paperwork, and the other thing is if you don’t know somebody, the chances of being offered one is pretty slim. There are so many contractors out there who try to do a lot of stuff. There are ‘fly-by-night’ guys, they’re the guys who need work and are out there self-performing it. You can’t compete with those guys. I would consider going after a prime contract job, but once we look [to] whom we are competing against, it’s like we don’t want to get into an ethical battle.” [#14]
- The woman owner of a DBE-certified trucking firm commented that she experiences barriers in subcontractor work. She said, “Sometimes other trucking companies will come in and really lowball the rate ... You can’t make money at some of the rates. In Phoenix it’s an industry that is really bad about that, they work at a rate that’s cheap.” [#64]
- The female owner of a DBE-certified trucking firm reported conducting work primarily as a subcontractor, particularly when working with ADOT as the firm does not hold a contractor’s license. She added that the firm is typically a “lower-tiered” subcontractor; the firm lacks the capacity (including truck fleet size) needed to secure larger projects. [#23]
- The female owner of a WBE-certified professional services firm reported that she works as a subcontractor because her business is not large enough to work as a prime. She added that larger firms have been building capacity through continuous work, which helps them act as a prime. ADOT has certain requirements for primes regarding bonding, insurance and expertise, which are easier for larger firms to meet. [#33]
- The female owner of a DBE-certified specialty contracting firm said, “I’ve pulled the paperwork [to get prequalified with ADOT to act as a prime contractor], but it becomes a financial issue for me to be able to fulfill the requirements.” She does not have the extra cash flow to hire a CPA firm to audit her financial statements, which is an ADOT requirement for prime contractors. [#39]
- The representative of a majority-owned contracting firm indicated, “A small firm can’t handle large projects.” [AI#4]

The study team interviewed some firms that primarily work as subcontractors but on occasion also work as prime contractors. Some firms reported that they primarily work as subcontractors because doing so fits the types of work that they typically perform. For example, a DBE-certified specialty contracting business indicated that they act as a subcontractor. However, on rare occasions the same business acts as a prime when affordable project management and staffing is available. [#3]

Some other businesses reported being typecast as subcontractors or having difficulty breaking into the prime contracting arena, especially when conducting work for public agencies. For example:

- The minority owner of a DBE-certified engineering-related firm reported, “Because we almost always work directly with the general contractors, we’re a ‘subcontractor.’ That’s just ‘kinda’ what we’ve been dubbed as. It’d be nice to be able to change that, but I don’t necessarily know how to do that.” [#17]
- The Asian-Pacific American owner of a DBE-certified engineering business indicated that the firm rarely has opportunity to prime work conducted for public sector projects. The opportunities are limited to fulfilling “points” for other primes with awarded tasks being short-lived and intense with many late nights. [#19]
- The female owner of a DBE-certified specialty contracting firm stated that she works primarily as a subcontractor. When asked if this is by choice, she said that it is not, “We’re defined with ADOT to bid things with a prime contractor.” [#39]
- The male partner in a majority-owned trucking firm reported mostly subcontracting work, because trucking is typically designated as a piece of a larger job. [#61]
- When wanting to take advantage of prime contracting opportunities, an MBE- and DBE-certified specialty contracting firm reported challenges securing affordable staffing and project management to bid or conduct the job. [#3]
- The representative of a woman-owned engineering-related firm reported, “I do not have the financial strength to bid work as a prime because of bonding and cash flow requirements.” [AI#59]

**Prime contractors’ decisions to subcontract work.** The study team asked business owners whether and how they subcontract out work when they are the prime contractor.

Some prime contractors say that they usually perform all of the work or subcontract very little of a project. Examples of comments include:

- The CFO of a SBA-certified prime contractor reported preference for conducting most work in-house. “When we have a sub, it’s mainly because we cannot self-perform. Normally, if it is something we can self-perform, we would do it ourselves unless we are too busy and can’t get to it all then we will look for subs.” [#12]

The same prime added that with the 2010 reinstatement of DBE goals, he must use subcontractors whether he wants to or not. He reported, “It’s just frustrating when you are required to use a firm because they are a DBE instead of selecting who you think is going to perform the best.” He indicated that DBE goals could disadvantage small businesses that are not DBE-certified. [#12]

- The representative of a majority-owned construction firm (certified as a small business with ADOT and the City of Phoenix) reported typically self-performing unless required by contract to subcontract a portion of the work (e.g., ADOT). [#20]

Some prime contractors require subcontractors to prequalify to conduct work on their teams. A majority specialty contracting firm owner reported that many primes require subs to prequalify. Although his firm does not require subcontractors to provide financials, many primes make that a requirement. Instead, this specialty contracting firm limits prequalification requirements to bonding agency names, insurance and different bonding rates, if applicable. [#48]

Many prime contractors indicated that they use the subcontractors with which they have an existing relationship. Both majority-owned and MBE/WBE-certified firms that use subcontractors reported on their use of subcontractors.

- A engineering-related firm owner offered that, in his experience, choosing subs is difficult for both large and small firms. He reported that the large firm where he used to work chose the same subcontractors with proven track records. “Asking for something to be done and then work coming back with an error or the schedule falling through ... [to avoid these challenges, the firm] chooses the same sub for any work.” [#2]
- The representative of a majority-owned SBA 8(a)-certified engineering firm indicated that, when acting as prime, the firm selects the same subcontractor for its reliability and work quality. [#18]
- When priming projects, the Asian-Pacific American owner of a DBE-certified engineering firm uses subcontractors he has relationships with to perform work tasks that require specialized expertise. [#19]
- An estimator for a majority specialty contracting firm reported success from building relationships with DBEs and other subcontractors. “The internal goal is to give ourselves a competitive advantage by bringing in another set of resources that our competitors do not use. Our success for the past thirty years is our relationships and having repeat work with the DBEs and small businesses.” [#48]

Similarly, a number of subcontractors said that it was very difficult to solicit business from certain prime contractors because those contractors automatically use the subcontractors they already know, or do the work themselves. Those comments included the following examples:

- The vice president of a DBE-certified specialty contracting business reported bids trumped by a primes’ preference to work with subs that they already know. “So, he [the prime] gets your number but he doesn’t have a relationship with you, his relationship [is] with ‘Brand X.’” He added that under this scenario, “Brand X” gets the work even when there are lower bids. [#3]

- The CEO and operations manager of a DBE-certified design-engineering firm reported that subcontracting opportunities are relationship-based. They added that the common perception that DBEs are not qualified drives primes toward subcontractors that give them the confidence that the job will be done. [#10, #11]

They also indicated that primes meet goals parsing out smaller parts of projects, conducting in-house the more difficult tasks. This puts the firm at a disadvantage when seeking subcontracting assignments. [#10, #11]

- For the representative of a professional services woman-owned firm, “It is very difficult to get prime contractors to subcontract with small contractors.” [AI#82]

**One interviewee reported that primes use certain types of subcontractors, and not others.**

- The female owner of a woman- and minority-owned professional services firm reported that she sees primes proposing to meet DBE goals with very few DBE firms for several reasons. One is because the good faith efforts are not due for five days after the bid submittal but they did have to declare whether or not they were going to meet the goals at bid time. [#73]

She said that DBEs try to develop relationships with primes but primes may only use certain types of DBEs so, “it becomes an unattractive marketplace” to the DBE. She reported that the types of work that are subbed out are fence, rebar, guardrail, construction survey and layout and traffic control. She said that there are about ten construction DBEs and ten professional service DBEs that get the majority of the work. [#73]

**Some interviewees reported that prime contractors prefer to have a few large subcontracted packages of work rather than manage many small subcontracts.** This can negatively affect small subcontractors including MBE/WBEs and DBEs. Comments included:

- The Hispanic American owner of a DBE-certified engineering firm reported that breaking up large contracts into smaller pieces (unbundling) would help him. “It’d be nice to be part of a team to design a specific portion of design work for a highway project. But, like I said, most [prime] engineering firms already have that talent in-house, and they don’t really need someone like myself on the design side, not the consulting, not the construction side ....” He added, “So maybe that’s where the issue is. ADOT doesn’t have a specific requirement for prime contractors or big consulting firms to hire a subconsultant like myself for very specific design work.” [#13]
- The same engineer demonstrated how unbundling could improve opportunities for small businesses. “For civil engineering the design work can be broken up into very, very neat packages; and, in fact, internal to these large engineering companies they have their departments do pavement design, do drainage, do brick design, do river system analysis. Those sorts of things are very, very ‘packageable.’ You can take these aspects of the design process and package them into scopes of work for a department of a company or a firm like myself.” [#13]

- The male CEO of a majority-owned SBE engineering firm reported, “It’s better to have a piece of the pie than no piece of the pie.” [#71]
- The female owner of a WBE-certified professional services firm said that she has banded together with other subcontracting firms in order to create a larger subcontractor presence. She added that this is the only way to get the attention of potential primes and agencies, including ADOT. [#33]
- At one public hearing, a representative of a majority-owned engineering firm reported that ADOT sometimes limits the number of subcontractors a prime contractor could bring onto a project. [PM#5]

Some DBE contractors felt that prime contractors only used them when there was a DBE requirement on the job; limited their participation to the set goal; or, parsed out only bits and pieces of a project. Others reported little or no success in securing subcontracting opportunities as part of the DBE program, and their confusion as to why. For example:

- When there are DBE contract goals, the minority owner of a DBE-certified engineering-related firm reported that primes sometimes parse out minute portions of projects to DBEs rather than giving them a more complete subconsulting package. [#17]
- The Asian-Pacific American president of a DBE-certified professional services firm reported that primes only use DBEs when forced to do so. [#21]
- The Hispanic American owner of a DBE-certified engineering firm reported not securing work as part of the DBE program, “I have no idea. I’ve been on the list, I’ve had a couple calls, but nothing has ever led to any work.” When asked to elaborate he responded, “I really don’t know. The information on my company, who I am, is out there. My qualifications ... I have no idea why.” [#13]

The same engineer was asked if his lack of participation resulted from his not being knowledgeable of DBE opportunities, he responded, “I don’t think there’s enough motivation for large engineering companies to hire a DBE firm like myself and carve out part of the design work and hire me to do it.” [#13]

- A representative of a DBE-certified supplier reported facing barriers when trying to secure work with prime contractors. “What is the point of having the [DBE] certification ... if the general contractors don’t even acknowledge the importance of the certification?” [WT#5]

The same supplier added, “I am not asking for a ‘free ride,’ I am asking for an opportunity to provide quality [materials] at competitive prices.” [WT#5]

**Subcontractors' preferences to do business with certain prime contractors and avoid others.**

Many owners and managers of firms that sometimes work as subcontractors indicated that they preferred to work with certain prime contractors.

Interviewees frequently mentioned speed and reliability of payment as reasons to prefer certain prime contractors and avoid others. For example, the owner of a DBE-certified engineering-related firm reported the desire to avoid some prime contractors who pay only after 90 days. [#17]

In addition to prompt payment for their work, some firm owners and managers said that they preferred prime contractors that are organized and easy to deal with, and treat them fairly. For example, the owner of a WBE-certified specialty contracting business reported a preference for a prime contractor that is easy to deal with, "They ... let you get the job done." Conversely, she added that she avoids another prime contractor because of its demands for paperwork and micromanagement of her work. [#38]

**Subcontractors' methods for obtaining work from prime contractors.** Interviewees who worked as subcontractors had varying methods of marketing to prime contractors.

A number of business owners reported that they actively market to prime contractors. Those businesses reported that they sometimes identify prime contractors from bidders' lists, planholders lists, at pre-bid or pre-proposal conferences, or through outreach events.

- A representative from a Hispanic-owned general contracting firm commented, when working as a subcontractor, his firm learns about opportunities from the planholders lists released by ADOT. From that, he submits bids to the primes. If they do not hear back from prime contractors, he stated, "We know we are being played, which happens a lot." [#50]
- The minority owner of an engineering-related firm reported to actively market to prime contractors; however, marketing presented some challenges. "Over time you give people your business cards and you're on their email list and they will tell you about a conference ... DBE conferences, networking events, or whatever it may be. It costs money to go to those things and they do charge a fee. Some small businesses can't attend so we have to pick and choose to see which ones are beneficial." [#5]
- The female owner of a DBE-certified specialty contracting firm reported that often she will see a project on the ADOT website and contact the prime contractor directly to offer her [specialty contracting] bid. She indicated success getting subcontracting work using these methods. [#39]
- The owner of a WBE-certified specialty contracting business reported checking websites for upcoming projects combined with networking and receiving invitations to bid from others. [#38]

Some business owners reported routinely being solicited for bids from prime contractors. Comments include the following:

- For a DBE-certified specialty contracting business, “Nine out of ten [times] they [primes] are calling because they have to match the percentage and this [a certified subcontractor] is an easy fit for them to gain the percentage that they need.” [#3]

The same specialty contractor reported that the conferences through ADOT’s DBE Program has helped market their firm. [#3]

- The female owner of a DBE-certified specialty contracting firm who looks for subcontracting opportunities on ADOT’s website reported getting notification directly from ADOT when a prime contractor is looking to hire a DBE company to contract work. Sometimes prime contractors also contact her directly. [#39]

**Some businesses reported being solicited by primes for work, but not being given reasonable time to respond.** For example, the representative of a DBE-certified engineering firm reported that some primes do not provide ample amount of time [for subcontractors] to respond. He emphasized that they give very short notice. [#16]

**Marketing can be difficult for some small businesses.** For some, including the female owner of a DBE-certified engineering firm, the primary barrier to marketing is limited time. [#70]

#### **D. Keys to Business Success**

The study team asked firm owners and managers about barriers to doing business and about keys to business success. Topics that interviewers discussed with business owners and managers included:

- Relationship-building (page 32);
- Employees (page 34);
- Equipment and materials (page 36);
- Financing (page 38);
- Bonding (page 42);
- Insurance (page 45);
- Timely payment. (page 47);
- Licenses and permits (page 49).

**Relationship building.** Many business owners identified relationship building as a key component to the success of their businesses. [e.g., #66]

**Some businesses reported success, building relationships through quality work.** Many emphasized work quality as a key factor. For example:

- A minority design-engineering firm reported, “First we do good work. We have been able to respond and be agile to clients’ requests and get good quality products out.” [#4]
- A representative of a professional engineering association remarked, “Basically, you have to have a good engineering staff and be efficient in doing what you’re doing and be cost conscious and effective in working on a project. If you’ve got the cost and the schedule and the scope all down, then you’re going to be well-liked.”[#36]
- The representative of a WBE-, SBA- and SBE-certified specialty contracting firm reported placing high value on business relationships. For example, the firm replaced concrete three times to satisfy an architect. She noted that for that customer “... we are the first company that is asked for. He’s offered me some general contracting activities.” [#14]
- When asked about keys to success, a Hispanic American owner of a non-certified firm providing electrical services reported that he has many repeat clients because he does high-quality work and has established good relationships with his customers. [#30]
- The owner of a WBE-certified specialty contracting firm stated that the firm maintains good relationships with customers. She said, “Once you use us, you will ‘never’ not use us. We are small but are very good at what we do. We are fair and honest. Endurance is a wonderful thing. We have been around for a while.” [#38]
- The female owner of a DBE-certified specialty contracting firm said, “I believe that a lot of [success] has to do with the integrity of the business and the integrity of the work that you’re doing.” She also listed “the ability to work well with others.” Sometimes things get “heated” and there are disagreements with ADOT or prime contractors regarding the specifications of the job, but you have to be able to deal with disagreements and stand behind your work. [#39]
- The female owner of a DBE- and SBE-certified engineering firm stated, “Every project will get you the next project. A firm must do good work to be successful.” [#70]
- The Hispanic female owner of a non-certified specialty supply company stressed that having a strong relationship with customers was vital to her firm’s success. She added that dependability is part of what has allowed her business to thrive. She said, “If there’s an emergency, a customer knows they can contact us ... We like to stick to normal business hours, if we have to go past that, we do.” [#40]
- The Native American owner of a DBE-certified engineering firm indicated that quality was important to a qualifications-based industry, “In my industry, it is qualifications based. You’ve got to bend over backwards.” [#6]
- Providing quality construction and safety are the keys to success for a woman-owned SBA-certified heavy construction firm. [#18]



Expert communications also contributed to relationship building, for some interviewees.

Examples of comments include:

- The owner of a majority specialty contracting firm reported building business relationships through good communication. “You want to make sure you call them back.” [#15]
- The executive director of an engineering organization stated, “You have to build relationships; getting out there and letting people know who you are.”[#42]

He also stressed that a strong website is important because prospective clients are going to look at the businesses’ websites. [#42]

- An African American female representative of a woman- and minority-owned professional services firm reported that the key to getting information on “jobs in progress” is to “be diligent and build relationships.” She indicated, “It’s who you know as opposed to what you know.” [AI#211]

Some business owners reported difficulty building the relationships their businesses needed to succeed.

- For example, the partner in an Asian-Pacific American-owned DBE specialty contracting firm reported challenges to building the relationships needed to secure subcontracting work as a minority-owned business. The partner indicated difficulty “if you are not a popular company,” as primes looked to firms they already know or those who would “provide discounts under the table.” [#25]

**Employees.** Business owners and managers shared many comments about the importance of employees, and barriers they faced related to hiring and hiring protocols.

A number of interviewees indicated that high-quality workers are a key to business success, and for some hiring good employees is a struggle. [e.g., #36, #66, #49] For many, good employees are keys to business success including the following:

- A representative of a large majority-owned construction business said, “We hire ‘go-getters.’ We are large enough to afford some research tools like Gallup to prescreen employees. We know who is representing the business name.” [#41]
- A male representative of a transportation builders association remarked, “It comes down to reputation, the quality of work, the quality of workmanship, and what a company is willing to invest into their employees — not only to keep them safe but also to keep them engaged.”[#31]
- The female owner of a DBE- and SBE-certified engineering firm stated, “It comes down to good people.” [#70]

- A representative of a majority-owned materials supply firm commented their relationship with their employees is good. He commented they have a “mom and pop” type of business with most of their employees have worked for them for 10 to 20 years. He added that he often hires relatives of current employees. [#27]
- Hiring quality employees and paying well helps a minority-owned design-engineering firm retain committed employees. “We include a bonus off of a monthly basis to offset the guys’ insurance and things that they pay on for their wives or spouses. In order to get good quality people, we have to give them a good pay.” [#4]
- The male partner of a majority-owned trucking firm affirmed the need for good relationships with employees. “I treat our employees well. I am not going to hire somebody and then jerk them around. I have to make sure if I hire someone I can keep them around because I do not like laying people off.” [#61]
- For some small businesses participating in the Tucson listening session, keeping employees was also a barrier. For example, a minority female-owned engineering firm owner suggested that it was her experience that business owners grow from working first in that industry for many years. However, she allocated tremendous resources to train staff only to have them leave her small business for a larger, Fortune 500 firm. “Some want Fortune 500 companies! “

**Many business owners and managers said that developing and maintaining relationships with their employees was paramount to achieving success. For example:**

- Principals of a minority-owned design-engineering firm work in concert with their employees. “We have what is known as ‘working principals.’ We are owners of the company and we do day-to-day work. We aren’t just marketing all day; we actually are doing the work.” [#4]
- The CFO of an SBA-certified general contracting business reported, “We have a good [employer-employee] relationship. We are in the same community. We see each other outside of work too.” [#12]
- The minority owner of an engineering-related business said that relationship building implies a willingness to take risks. “As far of the employees right now, we have a longstanding relationship. They want to see an owner or boss that is willing to take risks and find opportunities that are outside of the norm if the norm isn’t working.” [#5]
- An estimator for a majority specialty contracting firm reported that he teaches and recruits young engineering college students with a goal of encouraging hard work, curiosity and motivation. [#48]

- The representative of a majority-owned professional services firm said, “Our business strives to provide opportunities to [those] who are really growing and succeeding in the market.” He commented that people who come in and work for the firm know that they have the opportunity to become an owner. “It helps retain workers and it helps with the transition of ownership,” he said. [#33]

Several interviews discussed barriers they faced to finding, keeping and training employees, which is sometimes difficult for smaller businesses. For example:

- For example, the engineering-related business owner predicted that down the road he would face the challenge of increased staff. However, as a small business owner, he said that he could not meet the demand of a larger payroll to retain those employees. “Now you would have a payroll, your margins are different. My income is not going to double, it is going to be [increased by] 20 to 25 percent. We are going to need more money if I have five employees.” [#2]
- The representative of a majority-owned materials supply firm added that as a small business in a rural area, they sometimes have trouble finding good, qualified employees as their workload increases. .[#26]
- A Native American business owner indicated that his relationship with his employees is good but when the firm is slow, he struggles to make payroll to keep them. [#63]
- A Hispanic female owner of a specialty contracting firm commented getting employees properly trained and “up to speed” was one issue she struggled with, particularly because the work is high risk, and the employees work in roadways. [#55]

A number of interviewees reported that economic conditions have reduced the pool of potential employees, as many have left the state. For example, the representative of a majority-owned construction firm (certified as a small business with ADOT and the City of Phoenix) reported difficulty finding employees as many moved out of Arizona during the downturn. [#20]

**Equipment and materials.** Business owners and managers discussed equipment and materials needs.

A number of businesses reported the importance of having the right equipment and materials for operating their businesses, and keeping it operational. For example:

- The female owner of a DBE-certified specialty contracting firm indicated that equipment is “pretty critical.” She reported a need for keeping her equipment running and in good condition to make the work easier for her employees. [#39]
- A male partner of a majority-owned trucking firm reported keeping trucks operational as a key part of his business. Mistreatment of equipment is a concern, “A loader can dump and make the whole truck bounce ... or he can lay that material in there, it’s just a matter of consideration.” [#61]

- The leader of a minority trade association indicated, “A business needs safe equipment capable of doing the job.” [#69]
- A representative of a large Hispanic construction firm indicated having good equipment allows the firm to control their own work. [#66]
- A male business owner of a small majority-owned engineering firm reported that faulty equipment leads to faulty work, “A man is only as good as his tools.” [#72]

**Some interviewees said that they own all their equipment. Examples include:**

- The vice president of a minority-owned specialty contracting business indicated that the first step for the firms’ owners was to buy its first piece of equipment critical for start-up. Overtime the business increased its assets from one piece of heavy equipment to ten, while being careful to avoid overextending themselves. [#3]
- The CFO of an SBA-certified general contracting firm stated, “We have our own trucks, dump trucks, loaders, construction equipment and paving equipment.” [#12]
- A Hispanic American female construction business owner reported, “All of my equipment is paid for ....” [PM#1]
- The principal of a design engineering firm reported investing in new desktops and laptops, and the latest AutoCAD software to run his business. [#4]
- The representative of a WBE-certified specialty contracting firm indicated that the firm mostly owns the equipment they need with the exception of equipment infrequently used. [#14]

**However, more business owners pointed to expensive equipment, or not having the equipment needed for their operation, as barriers. Some indicated cash reserves too low to purchase the equipment outright and limited access to financing. For example:**

- The Hispanic American owner of a specialty contracting business indicated, “Sometimes I don’t have the equipment [I need].” [AI#243]
- The representative of a white woman-owned specialty contracting firm reported not having the capital needed for more equipment, “I need more capital for equipment ... and we don’t get paid for 90 days so we need working capital.” [AI#96]
- A woman-owned DBE-certified trucking firm owner indicated that she did not have difficulties in the past, but recently has had to return trucks. She added that she only buys trucks with savings now so she does not have to seek financing. [#64]
- A woman-owned trucking firm that had not turned a profit in eight years reported not having the resources to acquire the trucks they needed to turn a profit. [#22]

- A majority-owned 8(a)-certified engineering firm reported that new businesses face disadvantages acquiring needed materials and that its years in business make it easy to secure the pricing and credit needed for materials. [#18]

Some interviewees stated that acquiring needed equipment is a barrier to doing business with ADOT or other public sector agencies. Comments include:

- The male partner in a woman-owned specialty contracting firm indicated that it is not “worth the risk” to purchase new equipment to meet some ADOT prequalification requirements. [#24]

Additionally, in absence of guaranteed “contract longevity,” the need to purchase new equipment is a barrier to bidding work with ADOT. [#24]

- A female representative of a local public agency reported the need to consider required equipment when setting a DBE contract goal. Some contracts where equipment purchase is required may limit opportunities for subcontractors. [WT#3]

**Financing.** Many interviewees discussed the importance of access to capital. As with other issues, interviewees’ perceptions of financing as a barrier depended on their experiences. To some it was a barrier, and to others it was not.

Many firm owners reported that obtaining financing was important in establishing and growing their businesses (including financing for working capital and for equipment), and surviving poor market conditions. For example:

- A Native American-owned engineering business indicated that financing and bonding topped the list, as his business could not survive without them. [#6]
- A public hearing participant (non-minority male) said that undercapitalized businesses are at a disadvantage. [PM#3]

Some business owners reported that they had tapped personal resources to finance their business operations, and the associated stress. For example:

- A representative of a woman-owned DBE-certified trucking company commented that she started her business with inheritance money. [#64]
- The minority owner of a engineering-related business reported having to “borrow from our [house and] line-the-credit card and put cash in the business to handle business operations.” [#5]
- A representative for a majority-owned specialty contracting firm reported knowing of small businesses that put their house or life insurance on the line to secure bonding. [#48]

- The Hispanic American female owner of a non-certified materials supply company reported “it’s really hard to get credit,” until you’re established, which generally takes three to four years, and up to seven. She noted that new businesses often have to get personal credit and loans, rather than getting them in the company’s name. [#40]
- The female owner of a DBE-certified trucking business reported tapping her homeowner’s mortgage to buy trucks, do truck repairs and meet payroll for the business. “Now the trucks are paid for, but the house is not.” [#23]
- The female owner of a DBE-certified specialty contracting firm said that access to credit was “very important” to the success of her business. However, she added that paying off her debts and her line of credit made a huge difference in lowering her “stress level.” She indicated that because of her family’s personal finances, she had little trouble obtaining a line of credit, “but it’s still scary to sign on the dotted line that you’re personally responsible.” [#39]

**Many interviewees said that obtaining financing was and continues to be a barrier for businesses.** Interviewees reported difficulty finding new financing, or having recently lost lines of credit that they had secured in the past.

- A DBE-certified Asian American consulting business owner found it hard to get a line of credit for operating his business. [#62]
- The president of a women’s business organization said, “The capital piece is interesting because many women-owned businesses don’t need as large of a loan [as other businesses] ... loans of the smaller size are harder to come by.” [#59]
- The Hispanic male business owner of a non-certified firm providing specialty services said, “I’d like to talk to somebody about financing assistance,” commenting that it is very difficult to find out about existing opportunities for financial assistance.
- A representative of a minority business organization indicated that the economy has been very challenging for its members, especially concerning access to capital. He commented that his members tend to have creative and innovative ideas; yet, if they have high overhead cost and no capital to support that cost, they struggle to stay in business. He reported that with increasingly stringent bank lending requirements, members continue to struggle with securing the necessary capital to advance and grow their businesses. [#67]
- When asked to describe the challenges, the African American owner of a DBE-certified firm reported financing as a challenge. “The biggest challenge, number one, is finance and not having a credit line even built up. So, that is challenge number one.” [#1]
- The representative of a white woman-owned transportation construction business reported having difficulty securing the level of financing she needed to expand. She stated, “I would like to expand, but the banks don’t help like they used to. The lines of credit are too small.” She explained that her firm needed larger loans. [AI#64]

- For the representative of a white woman-owned specialty contracting firm reported that the challenge for new firms is working capital. “Trying to get working capital is difficult.” [AI#182]
- An owner of a DBE-certified engineering-related firm reported difficulty in finding financing in absence of tangible forms of collateral; the firm’s assets include primarily intellectual property. [#17]
- The female owner of a WBE-certified professional services firm said, “I went through a whole series of things when we bought the office and it was like pulling teeth in Tucson. The bank that we had dealt with for years wouldn’t loan us an ‘SBA.’” [#33]
- A Hispanic American female construction business owner said that she never had a problem getting a loan up until 2009. “I never ever got turned down for a loan. After that [2009], I have not been able to get one loan. I can’t get a loan to save my life. All of my equipment is paid for, my house is paid for ... still can’t get a loan. The banks won’t touch me.”[PM#1]
- The principal of a design engineering firm reported losing his line of credit. “Another thing about financing is establishing a line of credit. We had a line of credit with a big bank and unexpectedly the bank, without announcing, closed our line credit ....” [#4]
- Some business owners and partners reported tapping supplemental income to finance their businesses. For example, the partner in an Asian-Pacific American-owned DBE specialty contracting firm reported that she kept her specialty contracting business running by cleaning houses on the side. [#25]
- A Hispanic American business owner said that when he tried to get a business loan through the SBA they never returned his call, because, he reported, “They don’t care about small businesses.” He added, “How am I going to turn into a million [dollar]-sized business if I can’t get the opportunity to get a decent job?” “The [financial] information is not publicized. They keep it within the closed doors of the people they know. It’s not available to everybody.”[#30]
- A male business owner of a small majority-owned engineering firm reported, “We all *are* experiencing an economic downturn .... A line of credit is tougher to obtain .... The banks are not lending money in particular to small businesses.” [#72]  
  
He added that a bank his firm did business with dropped the firm because they wanted portfolios of \$1 million or more as opposed to the firm’s \$400,000 portfolio. [#72]
- The leader of a minority contracting industry group and public hearing participant reported limited business financing available to startups. [PM#4]
- The leader of a local small business association indicated that it is almost impossible to gain financing without having a pre-existing financial history. [#56]

- The representative of a majority-owned small professional services firm reported that getting credit is a challenge because banks tend to be “suspicious of small businesses.” He said, “When you do a revolving line of credit or something similar, they really get into your business and how you manage it. They make you hit certain financial targets. We had credit lines originally but it became exceedingly difficult during the great recession to retain those. Now we have a financial mechanism that we use to establish a sufficient cash reserve where we don’t need a credit line to make ends meet.” [#34]
- A representative of a Hispanic trade organization remarked that since the economic downturn, large businesses are recovering well but small businesses are continuing to struggle, in part, due to limited access to capital. He added limited access to contracts and capital have had a strong negative effect on small businesses, and indicated that businesses in Arizona faced greater barriers than businesses in other parts of the country. [#51]

As a consequence, small businesses typically work as subcontractors on ADOT projects because the contracts are usually very big and have require large bonding and financial capabilities that small businesses have difficulty obtaining. [#51]

- The Hispanic American owner of a non-certified firm providing electrical services said that it is a challenge to access credit and he has difficulty getting bankers to return his calls. Additionally, the loans he receives are not enough to help his business grow, because banks tend to have little confidence in unproven companies and are more likely to lend money to more established companies. [#30]
- The female owner of a DBE-certified specialty contracting firm reported that all small businesses, whether they are minority- or women-owned or not, have difficulties with finances. [#39]
- A leader of a minority contracting industry group and public hearing participant said “there’s not a level playing field” regarding “the financial side of the house, trying to get loans and stuff that you need, lines of credit.” He reported, “That’s where a lot of people feel they don’t have that level playing field, because they can’t come up with that financing or credit that they need in order to bid those projects.” [PM#4]

He also said, “Banks were not lending for a long time, so some of these small companies had to turn to the factoring [selling accounts receivable to a third party at a discount] side of the house.” [PM#4]

- The president of a national women’s professional business organization said, “We are continuing to hear from our members that access to customers and capital are still challenging for them.” [#59]

**A few representatives of majority-owned firms reported that obtaining financing was not a barrier.** Firms reporting few barriers typically had established relationships with lenders or business longevity. For example:



- A representative of a majority-owned firm said that the firm has not had problems accessing credit in order to purchase more equipment. He also said that they have a relationship with two different banks to attain credit without trouble. [#28]
- A majority-owned SBA 8(a)-certified engineering firm reported that its “years in business” make it easy to secure financing for materials. [#18]

Some interviewees reported that avoiding financings the key to their success, or survival during the economic downturn. For example, some reported debt-free objectives:

- The Operations Manager of a DBE design-engineering firm (holding Small Business Administration 8A Certification, Self-Certified Veteran disabled, Veteran small business, and Priority One on the Navajo Reservation) indicated that the firm was loan- and debt-free using credit only when leasing equipment. [#11]
- The representative of a Hispanic-owned specialty business reported no particular issues obtaining financing, but highlighted the importance of conservative spending practices. He claimed that many of his competitors that purchased lots of new equipment while experiencing success went out of business when the economy slowed. On the contrary, his company survived by having limited long-term debt and using discretion when purchasing. He indicated that survival in the downturn is not having large debts. [#44]

**Bonding.** Public agencies in Arizona, including ADOT, typically require firms working as prime contractors on construction projects to provide bid, payment, and performance bonds on public construction contracts. Securing bonding was difficult for some, particularly newer, smaller and poorly capitalized businesses.

Many interviewees indicated that bonding requirements adversely affected small businesses and their opportunities to bid on public contracts. For example:

- The male partner in a woman-owned specialty contracting firm reported bonding as a barrier to working with public sector agencies. [#24]
- A representative of a specialty contracting white woman-owned firm reported, “It is difficult to get bonding for a small business.” [AI#89]
- The African American business owner of a DBE-certified subcontracting firm reported that bonding created opportunities for playing games. He said, “I don’t trust the contractors that I do business with to get a bond. If the contractor wanted a bonding job, I would be willing to do the job with him but there are too many games played with bonds.” [#1]
- The representative of a WBE-certified specialty-contracting firm reported more bonding challenges since the recession hit. “Because of the recession, bonding has been difficult when dealing with paperwork. You have a year where you are marginally profitable and then things are picking up but your past two years is what they are looking versus what you have now. That makes a difference. I have a project now where I pay 3 percent on a

bond, where before the recession we were [in] such good shape that they wouldn't even ask me for a bond." [#14]

- For an SBA-certified general contracting firm, bonding and insurance made conducting work as a small business challenging. [#12]
- For DBE-certified specialty contracting business, bonding requirements limited the company's ability to go after the largest contracts. [#3]
- With regard to bonding and insurance requirements, the female owner of a WBE-certified professional services firm said that it does not make sense to lay out more for these requirements than she gets paid for the job. [#33]
- The Hispanic American owner of a specialty contracting firm indicated that bonding is a big disadvantage when bidding public sector work. [#44]
- An estimator for a majority specialty contracting firm reported, "If you can't pay your bills, you can't get bonding. If you have unused lines of credit and all of a sudden you start pulling from [them] and companies are watching your billings and they see if it starts moving when they normally don't — you're accessing lines of credit when you shouldn't ... they pull your bonding." [#48]
- A representative of a local public agency indicated a need for re-assessing bonding requirement on public sector projects. [WT#3]
- For an SBA-certified general contracting firm, bonding and insurance requirements made conducting work as a small business challenging. [#12]
- A member of a minority trade association, who specializes in serving Native Americans, singled out bonding as the biggest financial barrier, saying that having to factor such large bonds into a bid makes it almost impossible to compete with a large company that already has the required bonding.[#53]

**A number of businesses reported issues connecting capital and financing to bonding.** For these interviewees, finances and bonding were intertwined (sometimes including personal assets).

- A Hispanic DBE general contractor expressed it can be difficult to obtain bonds without a healthy financial statement. However, getting a healthy financial statement requires contracts that a firm can get only if they have appropriate bonding. [#50]
- The minority owner of an engineering-related business saw bonding as a challenge. "The bonding companies basically own your life. They make you sign your life away, your wife's life away and they make you put cash in [to secure the bond]. It was difficult getting started ... you over extend yourself and now you have bonding, and money [borrowed from his mortgage and line of credit] just sits in the bank collecting dust and you're paying a bunch of interest elsewhere to keep your bond lined up ... there are some people who can't do that." [#5]

- A representative of a majority-owned specialty contracting firm reported, “Our government is not aware of some of the issues with getting bonding.” He added that he while at an ADOT vendor/mixer one of the ADOT officials reported that ADOT could help businesses obtain bonding. However, when asked how small businesses attain bonding, some businesses replied that they had to put their house or life insurance on the line. [#48]

**Some business owners further explained the connection between personal assets and the ability to secure bonding.** For example, the owner of a minority-owned engineering-related business reported the need to borrow from personal assets to secure bonding. He explained, “We had an unfortunate case. ‘Borrow from our [house] [and] line-the-credit card; put cash in the business, because that is what they want to see [to secure bonding].’” [#5]

**Several interviewees reported that bonding required by ADOT, prevented them from moving from bidding, or moving from subcontracting to the role of a prime.** Examples include the following:

- For the owner of a WBE-certified specialty contracting business, bonding posed a challenge. She cited an example of an ADOT job her firm bid on and won but later lost due to her lack of bonding. She said, “Most of the [industry-specific] specialty contracting jobs are anywhere from \$5,000 to \$10,000 tops. So why did they require this huge bond? I could have bonded each job individually with cash!” She later added, “If I could get bonding [for public work], I would bid tomorrow!” [#38]

This same owner added, “Nobody wants to bond. It’s like banks, they don’t want to lend—why would they? They rather charge you 19 percent on your credit card rather than take a risk on bonding.” [#38]

- The female representative of an industry association indicated, “Bonding capacity can limit a business’ ability to contract with ADOT as a prime. If you work as a subcontractor, your bonding requirements are a lot lower.” [#68]
- The representative of a majority-owned SBA 8(a)-certified engineering firm reported indicated that ADOT’s bonding requirements limited the firm’s ability to bid on certain big projects. When asked if there are any challenges in being an SBA, she responded, “Being too small, [to secure] a bond for a big project. ADOT puts out \$200 million projects.” [#18]

**Other interviewees reported little or no problem obtaining bonds, or that bonding was not required in their industry.** [e.g., #44, #45, #58] Comments include the following:

- A representative of a majority-owned firm indicated that they use the same bank to get bonds that they do to get credit. Consequently, they have not had any issues securing bonds. [#28]
- The owner of a DBE specialty-contracting business reported having secured approval for bonding up to \$300,000, but never having to bond. [#8]

- The Hispanic male owner of a non-certified firm providing electrical services said that he has not been required to get bonding because the general contractors have always had the bonds. [#30]
- The Hispanic female owner of a non-certified specialty supply company stated that, as a supplier, her firm is not required to have bonds. [#40]
- The representative of a majority-owned professional services firm stated that because the business does not do general contracting services, the business has never needed bonding. [#34]

**Insurance.** The study team asked business owners and managers whether insurance requirements and obtaining insurance presented barriers to business success.

Some interviewees identified challenges obtaining insurance when working with hazardous equipment or under other conditions.

- A minority-owned specialty contractor reported difficulty with securing insurance. “Insurance is a huge nut to cover — especially in our line of work ... [it] is hazardous to be in. It can be burdensome, especially when you have to come up with 25 percent down or 30 percent down in Arizona when it isn’t during the busy months.” [#3]
- The female owner of a trucking firm reported that although they had insurance, the firm found it difficult to meet some insurance specifications when hauling particularly expensive loads. [#22]
- For a white woman-owned transportation-related consulting firm, securing errors and omissions insurance is a barrier to doing business. [AI#73]
- The representative of professional services white woman-owned firm reported, “The insurance level required by ADOT” is a barrier to seeking work. [AI#156]
- The female owner of a WBE-certified professional services firm reported that many public agencies do not understand professional liability. In her line of work, there are small risks because the firm does not build anything that “could collapse later.” She said she did not know why she has to meet the same insurance requirements as another firm who may assume higher risk. [#33]

Many interviewees said that they could obtain insurance, but that the cost of obtaining it, especially for small businesses, was a barrier to sustaining their businesses or bidding certain projects. Comments include:

- A minority-owned engineering firm reported, “Insurance is a nasty element of overhead because my ... liability insurance, my workman’s comp insurance probably ran close to \$10,000 a year. As long as it is a requirement then you need to be prepared for that financially.” [#6]

- The representative of a DBE-certified engineering firm indicated that the high cost of professional liability insurance and that it kept increasing as the business expanded. He reported that professional liability is the firm's biggest expense. [#16]
- The female owner of a WBE-certified professional services firm stated that it is very difficult to obtain insurance as a small business. The upfront insurance costs for one job are too much and outweigh how much a business can earn for just one job. [#33]
- The female owner of a DBE-certified specialty contracting firm said that insurance and worker's compensation is an issue. She pays a high rate for licensing in the State of Nevada, and after the firm finished the large job in Nevada she tried to return to the worker's compensation company in Arizona, but they would not take her. She said that she had to stay at the high rate from the large job in Nevada. [#39]
- A white woman-owned professional services firm stated, "The insurance requirements are extraordinarily large for [a] small contractor. It is the single largest business expense I have and I must have, if I am a prime or sub." [AI#157]
- A minority-owned contractor reported that ADOT's requirements for insurance documentation make working for them difficult. He also noted that prime contractors often require even greater insurance documentation than ADOT. [TLS]

Some reported that although they carried insurance, they did not have the level of insurance required to conduct work on a public agency projects, or did not have access to the required coverage. For example:

- The Asian-Pacific American owner of a DBE-certified engineering firm did not have the level of insurance required to conduct work on a public agency project in Pima County. [#19]
- The Asian-Pacific American president of a DBE-certified professional services firm reported facing insurance coverage that his carrier did not offer, limiting his opportunities for work with public agencies. [#21]

He added that on design-build projects, "Our liability, as a design engineer, is not the same as the [prime] contractor. But because it is under the same contract, the designers have to have the same liability coverage ... we cannot afford it and it is unnecessary."

He indicated that as long as he meets ADOT's requirements, he does not need to meet the coverage required by prime contractor. [#21]

Some interviewees reported no instances in which insurance requirements or obtaining insurance were barriers. [e.g., #7, #8, #30, #34] For example, the Hispanic female owner of a non-certified specialty supply company reported that her firm needs certain specified insurance but that obtaining that insurance was not difficult. [#40]

**Timely payment by the customer or prime.** Full and timely payment by customers or prime contractors is critical to business success. Non-payment and slow payment by the customer or prime contractor was reported by some as a barrier in both public and private sector work. It can also exacerbate issues for small businesses related to access to capital.]

**A few business owners and managers said that their assurance of payment was better for public sector contracts than private sector work. Some had favorable comments about ADOT.**

Examples of such comments include the following:

- A representative of a majority-owned firm said that they always receive payment eventually for public sector work. They have much more difficulties with payment in the private sector. [#26]
- The Hispanic owner of a trucking firm reported payments of three to four months in arrears for private sector work. [#52]
- A representative of a DBE-certified minority-owned business remarked that payment on public projects is more reliable than private projects. [#29,#32]
- The vice president of an MBE- and DBE-certified specialty contracting business suggested that working in public sector reduces the risk of not getting paid and that payment is not a concern when working for ADOT. [#3]
- A Hispanic female business owner indicated that her firm is always paid in a timely fashion.[#55]
- The representative of a woman-owned engineering-related business indicated, “Working with ADOT prime contractors gives me assurance I will be paid.” [AI#59]
- The engineering-related business partner reported timely payment as more regular when doing public sector work; he used ADOT as an example. “They [ADOT] pay on time.” He added, “Overall, what I could observe, ADOT was always really fair. That’s why people are always working hard to maintain their contracts [with ADOT].” [#2]
- Regarding timely payment, the female owner of a DBE-certified specialty contractor said, “It has gotten so much better.” She added that ADOT recently started a system in which she receives a notification once a month that allows her to report whether or not she has been paid on time. She indicated that ADOT became aware that subcontractors were having a difficult time getting timely payments and they started this program. This system has been a huge benefit to her. [#39]

Some interviewees said that slow payment by the customer is an issue. Examples of such comments include the following:

- A Native American business owner stated his challenges with timely payments, “That’s one thing about working with Tribes is that we must meet certain milestones before they pay you therefore, we send an invoice every month. We may have finished 30 percent, and sometimes they want 60 percent or 90 percent and sometimes there is pressure. This is what we have been told by the architects we contract with, so the architect cannot pay us until they get paid.”[#63]
- The Hispanic American representative of a specialty contracting firm reported, “The hardest thing is not getting paid in a timely fashion in 90 percent of our job[s]. We are the lowest bid, but [still] we are the bank.” [AI#247]
- An estimator for a majority specialty contracting firm reported that “Some of their [ADOT’s] REs (Res Engineers) could use a refresher. The REs who are in charge of the project and [inspectors] do not understand how cash flow is important to the contractor.” [#48]

Many interviewees said that slow payment by the prime contractor is an issue and can be damaging to companies in the transportation contracting industry. Interviewees reported that payment issues may have a greater effect on small or poorly-capitalized businesses. Examples of such comments include the following:

- A representative of Hispanic trade organization highlighted the importance of timely payments to small businesses. He commented that small businesses often have limited financial assets, and therefore that delays between when a subcontractor pays for supplies and when the prime pays it for the work can cause substantial hardship. “There has to be an alignment between payables timing in order to be a win-win.”[#51]
- The representative of a WBE-certified specialty-contracting firm reported that many primes are slow payers. “I think a lot of contractors push the limits of the [Arizona] Prompt Pay Act.” [#14]
- “It is difficult to collect as a subconsultant until the prime is paid in full,” reported the representative of a white woman-owned engineering firm. [AI#76]
- The owner of an engineering-related firm reported that when working with some prime contractors it is a challenge as payment extends up to 90 days out. [#17]
- “It’s difficult to maintain work, when prime contractors string out [payment] 160 days. Your fuel costs are on a two-week, 30-day turnaround and extended to 165 days and it’s costing ... interest,” reported the representative of a white woman-owned trucking company. [AI#90]

- A minority-owned engineering firm reported, “There are prime contractors that sit on your money for over a year. When you try to get assistance from ADOT, it is not very helpful.” [#5]
- A female executive director of a professional services organization said she has knowledge of untimely payments, for example, “I heard from one of our member firms that they have ADOT contracts sitting there over a year old and they have not been paid a dime because the prime hasn’t been paid. It hurts them big time because he has already done all the work and paid his employees. He is still waiting.”[#42]
- The female owner of a WBE-certified professional services firm said, “I really find it amazing that they think that small firms can run 30, 60, 90 days without payment. Or, in the case of if they send the payment direct to the consultant/prime, that takes another 30 days, and they think that we can do that.” [#33]
- The owner of a WBE-certified specialty contractor reported that she is often waiting for the prime on a project to be paid before she receives payment, and that this can take over 30 days. She commented that this makes it difficult for her make payroll and pay taxes. She added, “The DBE is supposed to make that better, but if the GC has not been paid then they do not have to pay you.” [#38]
- The partner in an Asian-Pacific American-owned DBE specialty contracting firm provided an example of incomplete payment on an ADOT project. The prime contractor that this firm was conducting work for held out \$2,000 that the subcontractor never recovered. [#25]

**Licenses and permits.** Certain licensing or other approvals are required for both public and private sector projects.

Some business owners said that obtaining licensing or other approvals creates a barrier. For example:

- The owner of a majority-owned specialty-contracting firm reported that, although he works on a wide variety of jobs, licensing requirements precluded him from seeking certain opportunities. [#15]
- The female owner of a DBE-trucking firm identified requirements for ID badges (i.e., fingerprinting and background checks) as a barrier for doing airport work, for example. [#23]



A number of business owners and managers reported that licensing was not an issue for them. Examples of those comments include the following:

- A majority-owned specialty-contracting firm indicated that licensing is relatively simple. [#15]
- The owner of a WBE-certified specialty contracting firm stated that she has no problems with licensing. [#38]

## **E. Potential Barriers to Doing Business with Public Agencies**

In addition to barriers such as access to capital, bonding and insurance that may limit firms' ability to work with public agencies such as ADOT, interviewees discussed other issues related to working for public agencies. (Some appeared to be barriers and some were not.) Topics included:

- Learning about prime and subcontracting opportunities with public agencies (page 50);
- Prevailing wage requirements (page 52);
- Prequalification requirements (page 54);
- Other unnecessarily restrictive contract specifications (page 56);
- Advantages for larger firms in the bidding process (page 57);
- Experiences with ADOT regarding any barriers and recommendations for improving ADOT's bidding or other processes (page 59), and
- Improving other ADOT procedures (page 59).

**Learning about prime and subcontracting opportunities with public agencies.** Interviewees discussed opportunities for firm owners and managers to identify public sector work and other contract opportunities, and to market themselves.

Many business owners and managers identified straightforward ways to learn about public sector work. [e.g., #20, #39] For example:

- The principal of an engineering firm gave the example of ADOT. He reported although not receiving direct solicitations from ADOT; "I go on to the ADOT website probably at minimum twice a week and look at bid opportunities. You see what projects they have and once you go on there, there is a list of primes and they show who has looked at it." [#4]
- The female owner of a DBE-certified trucking business reported using ADOT and City of Phoenix websites and pre-bid meetings to learn about public sector work. [#23]
- Since obtaining certification, a minority-owned specialty contracting firm reported increased email solicitations (e.g., from City of Tucson). [#8]

- The owner of a DBE-certified engineering firm indicated that invitations sent to DBEs help present opportunities to market his firm (e.g., marketing events, conferences, open houses to showcase services and products, and professional gatherings). [#17]
- The representative of a majority-owned 8(a)-certified engineering firm reported constant networking, and meeting attendance at ADOT-sponsored meetings to keep on top of solicitations, but needed more time to conduct the background research required to respond to solicitations. [#18]
- The CEO and Operations Manager of a DBE-certified engineering firm indicated that the firm looks for prime and subcontracting opportunities through established business relationships, ADOT and federal websites, bid list subscriptions, industry associations, and direct marketing. [#10, #11]
- A female owner of an SBA-certified heavy construction firm reported that the firm just redid their website as a way to market the firm, which has been working well. [#18]
- A African American subcontracting firm owner noted that as a DBE “you are already marketed.” He added, “Primes and ADOT send you invitations to bid and tell you who is bidding.” [#1]
- The Asian-Pacific American president of a DBE-certified professional services firm indicated, “A lot of it is about finding out about [public sector] projects ahead of time, going to the primes who are pursuing the projects and convincing them the benefits of taking us on as a sub.” [#21]

**Several small business owners reported barriers when attempting to identify or secure certain contract opportunities with public agencies, including ADOT. For example:**

- A Hispanic female representative of a professional contractors association indicated that she believes learning about prime opportunities is a barrier to doing business with public agencies. She remarked the process is “time-consuming” and that “the average contractor will probably get a headache, because they know it’s going to be lots of red tape, lots of meetings you have to go to, and it’s just a pain. It’s not the same as dealing with the private sector.” [#35]
- A partner in a small engineering-related firm said that he would have no idea how to market to ADOT. However, he stated he would try to learn how if opportunities arose to work with public agencies. [#2]
- A Hispanic American female construction business owner said that her contractors association once got notice of many of the local bidding opportunities but now gets almost no information about those opportunities. [PM#1]

Some businesses reported challenges with marketing. For example:

- The business owner of a DBE-certified engineering-related firm indicated that a shortage of time gets in the way of marketing his business. He added that marketing is a challenge for small businesses (regardless of industry). [#17]
- The Hispanic American owner of a DBE-certified engineering firm reported challenges in marketing due to lack of “how-to” knowledge. [#13]

**Prevailing wage and other wage-related requirements.** Contractors discussed prevailing wage requirements that government agencies place on certain public contracts. They also discussed other wage-related issues.

Many business owners and representatives indicated that prevailing wage requirements present a barrier to working on public contracts. [e.g., #67]

- The partner in an Asian-Pacific American-owned DBE specialty contracting firm named prevailing wage requirements as one reason the firm stopped bidding government work. [#25]
- According to a representative of a Hispanic trade organization, prevailing wage requirements are challenging for some small businesses with an already “thin profit margin.”[#51]
- A Hispanic representative of a minority-owned DBE contracting business stated that they only had one or two jobs that required prevailing wages, but there were challenges. He said, “It was a little high [compared] to what we usually bid. It is extra work having to report the payments and also pay the correct amount to the workers.”[#29, #32]

A Hispanic female representative of the same business reported having a need for a mentor for managing prevailing wage issues. [#29]

- Prevailing wage requirements was a barrier for a African American-owned DBE-certified subcontracting firm. The business owner said, “Guys are getting overpaid for skills.” He also recommended the need to better define requirements, “Prevailing wage needs to be revised because there is not a clear definition of some of the things ... in the prevailing wage segment of the paperwork.” [#1]
- A female Hispanic representative of a professional contractors association stated that prevailing wages “create paperwork.” She added that although prevailing wages benefit workers, they rarely benefit firm owners and contractors because they have to deal with more paperwork and raise the prices of their bids to cover the higher wages. [#35]

- The representative of a WBE-, SBA- and SBE-certified specialty contracting firm reported challenges keeping staff happy when some, but not all, are assigned to a project with prevailing wage requirements. “When we have a prevailing wage project, it creates a lot of animosity inside our business because those who weren’t working on our job feel like they are getting stepped on. I can tell you that guys who have been working together for ten years, everybody else knows what everybody is making.” [#14]
- The owner of a WBE-certified specialty contractor reported that prevailing wages sometimes doubles payroll, which creates a significant burden. She said, “If it is a tight bid and you have problems, you are done.” [#38]

**Several firms said that complying with prevailing wage requirements was not a barrier when working on public projects. [#66]** For example:

- A Hispanic DBE general contractor stated prevailing wage requirements are not an issue, saying that requiring everyone to pay the same wages actually levels the playing field. [#50]
- The representative of a small business-certified majority-owned construction firm reported, “I seek out prevailing wage jobs. I think it evens the playing field. The people we employ, I think they are the best .... I think every job should be prevailing wage.” [#20]
- The leader of a DBE engineering firm indicated that the firm worked with prevailing wages “all the time” and found them to incentivize workers. [#10]

**A number of professional services firms reported no challenges to paying prevailing wages.** For example:

- The president of an Asian-Pacific American-owned DBE-certified professional services firm indicated that the business pays competitive salaries comparable to other national firms, so prevailing wage requirements present no challenge. [#21]

**Some businesses suggested that other labor and wage-related requirements present a barrier when working on public contracts.**

- For example, a minority specialty contractor reported that “the biggest challenge is the certified payroll and meeting the added requirements (payroll procedures, reporting) in working with public jobs.” [#3]

The same contractor spoke of his confusion around complying with the Tribal Employment and Rights Office (TERO). “It is another group that you go through. Does it mean I have to hire a tribal work force and how does that work with payroll or certified payroll? That can be intimidating to small businesses.” [#3]

**Prequalification requirements.** Public agencies, including ADOT, sometimes require construction contractors to prequalify in order to bid or propose on government contracts.

Some interviewees from construction firms reported that prequalification was difficult, cumbersome and confusing, or invasive, including ADOT's process. [e.g., #50] For example:

- At one public hearing, the Hispanic American male owner of a construction firm reported that ADOT prequalification is a barrier for minority- and women-owned firms to do business with ADOT. [PM#14]
- The male partner in a woman-owned specialty contracting firm indicated that prequalification required by ADOT stopped the firm from bidding some work. "It seemed like [prequalification was] too much and we couldn't do it." [#24]

The same specialty contractor added, "I just think they [ADOT] need to even the playing field as far as making the qualifications easier for smaller companies to get in the door, and make the contract longevity justified if equipment needs to be purchased." [#24]

- The female owner of a DBE-certified specialty contracting firm reiterated that she has financial difficulties meeting auditing requirements in order to be a prime contractor with ADOT. [#39]
- The female representative of a DBE-certified trucking firm called the prequalification process "cumbersome." [#58]
- ADOT prequalification has been a challenge for a representative of a majority-owned specialty contracting business. She said that ADOT has denied their subcontractor prequalification applications over several years, without much explanation. The firm has been unable to meet prime contractor qualifications because they do not perform all of the tasks associated with prime work. [#26]

This female representative of the majority-owned contracting firm added she spoke with an ADOT representative regarding the prequalification denial. She understood that she could go through a review process, but received no details on the process. [#26]

- Regarding difficulties related to prequalification requirements, the Hispanic female representative of a professional contractors association stated, "More paperwork." She added that prequalification creates barriers to workers that cannot speak English, since those workers cannot complete the tests that are mandated by prequalification. [#35]
- The owner of a specialty contracting firm reported not being comfortable submitting financial statements as a requirement for prequalification. [#8]
- For a Hispanic American representative of a woman- and minority-owned specialty contracting firm, prequalification is a barrier to bidding work. She said, "The prequalifying requirements prevent us from making bids." [AI#249]

- A minority-owned business owner said, “ADOT prequalification is almost impossible. You go through it, you have to do ‘X’ amount of paperwork and then they give you the littlest amount as possible. They don’t trust you to do the job, even though I am doing larger jobs out-of-state. I have proven references and history. They require a level of financial statements ... that my bonding company doesn’t even require.” [#5]

He added, “We have done projects from beginning to end and they [ADOT] only prequalified us in certain areas. [We had no explanation why] they would not give us construction prequalification.” [#5]

- The leader of a minority trade association commented, “I know that a lot of small businesses have trouble with prequalification because they don’t want you to know their finances. It’s all about pride.” [#69]

**Some representatives of engineering and other consulting firms were critical of prequalification processes in the public sector.** Some specifically mentioned barriers posed by ADOT’s process.

- The representative of a white woman-owned professional services firm seeking prequalification stated, “We don’t want to hire an accountant just to do the ADOT paperwork.” [AI#163]
- The owner of an engineering-related firm (DBE-certified) reported that prequalification requirements — geared more toward contractors than professional services — makes it difficult to respond. [#17]

This interviewee added that drug testing became a challenge, as a recent contract required all employees to be tested even though only one or two staff members worked on the project. [#17]

- For the Asian-Pacific American owner of a DBE-certified firm, prequalification software requirements (specifically MicroStation) prevented him from submitting bids on some projects. [#19]
- A member an engineering organization remarked prequalification requirements are minor for other areas and agencies, but the prequalification requirements from ADOT can be very difficult and time consuming. He noted that this is a relatively new problem, saying that up until a few years ago, prequalification requirements from ADOT were simple and straightforward. [#57]
- Bidding is a challenge for a majority-owned business because they have problems getting prequalified and therefore cannot bid projects that interests them. [#27]
- The Hispanic male owner of a non-certified firm providing specialty services said that prequalification requirements are impossible to meet because the city expects a certain amount of money ahead of time, in the form of a check. [#30]

However, some interviewees indicated that prequalification was not a barrier to pursuing public sector work. Examples of those comments include the following:

- The representative of a majority-owned professional services firm stated that there were no barriers with the prequalification requirements. [#34]
- The owner of a WBE-certified specialty contracting firm reported that she has not seen issues with the prequalification requirements. [#38]

Some described that primes often require their subcontractors or suppliers to prequalify, and reported on that protocol. For example:

- The estimator for a majority specialty contracting firm reported that primes require subs to prequalify. However, his firm tries to make the process less demanding. He reported, “Compared to companies our size, we have smaller prequalification requirements. We would like to know as much information [as reasonable], but we don’t need the subcontractors’ financials. We will ask for bonding agency names, insurance, different bonding rates, if applicable, and similar to our alternative delivery owners might ask us.”[#48]
- A representative of a white woman-owner supply company reported, “It is difficult to start business with new customers we prequalify with.” [AI#74]

**Other unnecessarily restrictive contract specifications.** The study team asked business owners and managers if contract specifications, particularly on public sector contracts (and ADOT), restrict opportunities to obtaining work.

Many owners and managers indicated that some specifications are overly restrictive and present barriers. It appears that some businesses choose not to bid due to what business owners and managers perceive to be overly restrictive contract requirements. Examples of those comments include the following:

- The female owner of a DBE-certified specialty contracting firm reported having had disagreements with ADOT over job specifications. [#39]
- A Hispanic female business owner of a materials supply firm stated they have run into issues with the material specifications. She said she does not understand the testing because sometimes one lab will give one result and another test will show a different result that impacts her business. [#65]
- A representative of a majority-owned firm said, “It is frightening sometimes working with ADOT.” He reported having trouble meeting ADOT’s specifications.[#27]

- The representative of a majority-owned professional services firm stated that the firm has to change the way they do business because, “The auditing in ADOT is obnoxious .... The requirements are not in the Federal Accounting Regulations (FAR). Nobody audits overhead cost but ADOT. It would be great if it was a simple audit that followed the rulebook. ADOT audit stated that they did not like the way we did our employment set up, and if we don’t change it, they would not count it but FAR only said it has to be performance based and an established mechanism.” [#34]
- A women-owned design firm reported the need for a full-time office manager just to manage ADOT requirements. Having a history of subcontracts on ADOT projects meant “lots of paperwork.” “Overhead analyzed and the audits just for ADOT work, we just can’t get over how much ADOT rules our lives. We’re typically subs to larger civil firms and we’re also finding that on ... these on-calls that are requested by the primes ... [we’re required to fill out] different paperwork [for each prime]. It’s difficult to have that consistency across the board, all the primes wanting ... similar pieces of information ... about typical overhead ... in different formats.” [TLS]
- The representative of a majority-owned professional services firm said, “In the local agencies, there was a trend to produce many indemnification terms. As a consultant community we actually had to make a bill pass to make these indemnification [terms] insurable because clients could do damage, but the company would be forced to pay for it. So in September they had a law pass to fix the indemnification term.” He also said that he does not see this problem much with ADOT. [#34]

Some businesses reported no barriers resulting from restrictive specifications. For example:

- As all contractors need to meet certain specifications, the owner of a majority specialty-contracting firm reported no barriers. “I don’t see how that is a barrier because everybody has to follow the same specifications whether you are a small business or a large business.” [#15]
- When asked if she believed contract specifications were difficult, the female owner of a WBE-certified professional services firm said that you usually know what you need to do and how to lay out the costs associated with it. [#33]

**Advantages for large firms in the bid process.** Interviewees shared a number of comments about bidding processes.

Many business owners said that bidding procedures presented a barrier to obtaining work, and put larger firms at an advantage.

- The African American female representative of a woman- and minority-owned professional services firm reported, “The challenge is larger firms. When submitting quotes, the larger firms are chosen first. Larger firms advertise principals even if they don’t use them. It’s hard to obtain work against larger firms.” [AI#210]



- “Most agencies prefer larger firms, and don’t want to deal with smaller ones like ours ... the same people keep getting the big jobs,” reported the representative of a white woman-owned professional services business. [AI#106]
- The female owner of a WBE-certified professional services firm said that it is difficult for her to market her firm to ADOT because they [ADOT] already have an on-call team. She no longer bids on those jobs because she figured out that the same two firms were getting the jobs. [#33]
- An engineering-related business partner reported a challenge for small businesses to prepare bids, when they do not know when and if they can expect a contract award. [#2]
- The representative of a professional contractors association commented that private bids are a lot easier and take less time [than public sector bids]. [#35]

**Amount of “paperwork” presenting a burden on small firms.** Some interviewees commented that the amount of ADOT and other public agencies’ “paperwork” presented a barrier to their firms.

- An Hispanic representative of a minority-owned DBE-certified business stated that when they are doing work with a public agency, there is so much paperwork, and at times they have been asked to fill out the paperwork more than once. [#32]
- A female Hispanic representative of a professional contractors association indicated she is aware of “red tape, paperwork, and lack of communication” as barriers to doing work with ADOT.[#35]
- For engineering-related business partner, “The amount of ‘paperwork’ is mind-boggling. Just to renew the contract with ADOT takes months of preparation. Just to make sure everything is in perfect order.” Timely submittal of required documents created an additional barrier for the business. [#2]

**Non-price factors public agencies or others use to make contract awards.** Public agencies select firms for some construction-related contracts and most professional services contracts based on qualifications and other non-price factors.

- For example, when bidding on an alternative-delivery project the representative of a majority-owned SBA 8(a)-certified engineering business felt unprepared for the process. She reported, “We read the specifications and the second half of the submittal ... technical and price. We were short-listed, which means you go to the next step. We submitted a price based on our experience. It was ‘us and another firm’ that bid really close together and the third firm that bid really low. The firm that bid really low won. We went in and talked to the client to find out how that could happen. We found out that we were not required to do those things in the bid when they wrote the specs in the RFQ. But we would not have known that unless we had a job with the client before. The guy that won knew that the client would not hold him to the specifications. That was unfair.” [#18]

- One individual commented, “Also set up contracting so only larger unionized firm can qualify... My experience is that agencies write the parameters for professional services selection so large multi discipline, multi license large budget home office gets the leg up on all selections.” [WT#1]

#### **Experience with ADOT regarding any barriers and recommendations for improving processes.**

In addition to factors common to contracting among public agencies in Arizona, interviewees had many comments specific to ADOT processes.

- The female owner of a DBE- and SBE-certified engineering firm reported that ADOT’s unclear design and review standards posed a challenge to the firm. [#70]

Some interviewees said that ADOT was as easy to pursue contracts with or work for as other public agencies. For example:

- A representative of a majority-owned specialty contracting firm reported that ADOT is very good at disseminating information, and allowing ample response time for bidding. [#48]

This same representative added, “We used to be a small business at one time, so we ask ourselves how we could help these [small] businesses. As far as the information that ADOT gives, we know that small businesses have access to the same thing. Except, we get feedback instantly from the projects that we bid on. For small businesses, lack of feedback is a barrier like finding out how their numbers work. What has helped is that ADOT posts the bid tabs electronically. I always tell our subs and DBEs to check the bid result on ADOT’s website.” [#48]

With regard to ADOT’s bidding process, the same representative added, “They [ADOT] give you a substantial time within the following week of the bid to get your DBE information in. They also take consideration of the contractor’s time that it takes to do those things.” [#48]

**Improving other ADOT procedures.** A number of business representatives and business owners commented on or made suggestions for improving other ADOT procedures. Many discussed a need for streamlining ADOT processes. For example:

- “They should have a website or a hotline to help small businesses through the [prequalification] process,” stated the representative of a white woman-owned professional services design firm seeking prequalification. “The negotiating process is very difficult, because we don’t have enough accounting information. We can’t understand what information they need — their requests are ‘too jargony’ ... at this time we are not prequalified.” [AI#163]
- Time commitment and lengthy bidding procedure is a challenge for the representative of professional services firm seeking work with ADOT. “On our most recent bid for ADOT, the process was lengthy ... it costs more money to prepare it ... and they decide to pull those bids and we end up losing.” [AI#117]

- The representative of a majority-owned specialty contracting firm indicated wanting “bid notification directly from ADOT” to make bidding opportunities easier. [AI#3]
- The female owner of a DBE-certified professional services firm stated, “As I have thought about the process of trying to get to ADOT jobs (as a prime or sub) and with other agencies. I remembered that several of the many small firms (in the southern Arizona Area) thought at one time that it would be good to have a certified list and for the agency to go straight down the list then start again when it comes to jobs. If in the case of archaeology someone already had a large job then you would go down the list to the next firm. Or the firm could be chosen randomly from a pool of firms that had not received work the last time. It is truly an on-call contract and it spreads the work out. If a firm has difficulties then ADOT has a mentoring program in place to help. This is one the ways you can build up small firms. [WT#2]

Otherwise, the process is the same old business as usual, and frankly you will have conducted all these interviews for naught. The same firms will continue to get the work because they have been able to develop their staff and corporate bases with the on-call contracts over four to eight years. It is comfortable for agency billing departments because they don't have to get used to smaller firms and the need for short billing cycles 30 to 60 days versus 90 to 120 days. Just a thought. It probably won't fly because most of the agencies are adverse to thinking outside the box, and the larger firms that have had the benefit of this system will probably lobby hard not to change the status.” [WT#2]

## F. Other Allegations of Unfair Treatment

Interviewees discussed potential areas of unfair treatment, including:

- Denial of opportunities to bid (page 60);
- Bid shopping and bid manipulation (page 61);
- Attitudes about minorities and women (or MBE/WBE/DBEs) and unfair treatment based on race, ethnicity or gender (page 65); and
- Any “good ol’ boy” network or other closed networks (page 68).

**Denial of opportunity to bid.** The interview team asked business owners and managers if they had ever been denied the opportunity to bid.

Some interviewees said that they had been denied the opportunity to bid on projects; some specifically attributed the denial to discrimination. [#23]

- At the start of his business, an engineering-related minority business owner reported an invitation to a prime’s office then denial of opportunity to conduct subcontracting work, once the prime contractor saw his skin color. [#5]

- A representative of an Hispanic trade organization stated the high bar that has been set in terms of prior experience, financial health, and bonding limits that are required to qualify to bid effectively deny most DBEs the opportunity to bid on most projects.[#51]
- The partner in an Asian-Pacific American-owned DBE specialty contracting firm reported being refused work because of being a small business. [#25]
- Despite its being “on point,” the female owner of a trucking firm indicated that denial of business opportunities was based on the limited number of trucks in their fleet. [#22]
- A representative of a DBE-certified supplier provided written testimony after attending the Phoenix public hearing. She reported that her company faced barriers to contacting other firms that would need the materials they supply. She was encouraged with the offers of assistance from general contractors at an ADOT DBE conference, but found the following barrier. “I came back and started to call the estimators which were in charge of several projects that were mentioned at the Conference. Some of them would not even supply a list of specialty contractors I could contact to attempt to partner with them. For those that supplied a list, I call the landscape contractors and I had no success.” [WT#5]

Many interviewees indicated that they had not ever been denied the opportunity to bid. For example, the owner of a WBE-certified specialty contracting business stated that the firm was never denied opportunities to bid. [#38]

**Bid shopping and bid manipulation.** Business owners and managers often reported being concerned about bid shopping and bid manipulation and the opportunity for unfair denial of contracts and subcontracts through that practice.

Many interviewees indicated that bid shopping and bid manipulation was prevalent in the Arizona construction industry. Examples of comments include the following:

- The owner of a DBE-certified engineering and construction firm commented, “Based on my experience, subs selected by general contractors are usually beaten down for a final contract price or a general will find a violation of their contract to hold back on the subs contract.” “I’m sure there are well meaning Generals out there, just haven’t found one.” [WT#6]
- The Hispanic male owner of a non-certified firm providing electrical services said, “They [primes] shop around a lot. Probably in the course of the first six months of the year, I bid close to \$3 million and I got nothing.” He added that he bid on a job for the National Guard but they wanted him to do it for half. He feels as though most of his issues have to do with firms not wanting to pay him as much as he deserves. [#30]

- The representative of a WBE-, SBA- and SBE-certified specialty contracting firm submitted bids on a streetcar project in Tucson two years ago. “I was told that I have great numbers, but they lowballed that and said they had to do [the work] in-house. When I submitted my numbers doing side work on the streetcar project, what I got back is that even though I was a low bidder they couldn’t afford it. You bid 16 jobs and they tell your numbers are good but they can’t afford [it].” [#14]
- In reference to bid shopping, a representative of a large majority-owned firm commented, “I cannot prove it, but wonder that it exists.” [#41]
- The female owner of a DBE-certified specialty contractor said that she often waits to bid on a project until the morning of, because she does not want anyone shopping her bid—unless she already has a good relationship with the prime. [#39]
- The leader of a minority trade association reported, “It happens where a company with a successful bid is later asked to reduce their bid. They are asked to cut now, but on the next job they can recoup it; that next job never comes.” [#69]
- The female representative of an industry association indicated, “It [bid shopping] happens everywhere.” [#68]
- The owner of a WBE-certified specialty contracting firm reported that bid shopping occurs. She said, “Sometimes we are so close and when someone comes out of the moon you have not heard of, it has to happen.” [#38]
- A public hearing participant (non-minority female public representative, said that she has a lot of family that are small business owners. “If they can help it, they don’t bid government jobs.” She added, “If I put in an honest bid, somebody else puts in a lower bid and they get the job and they can’t do the job for that bid, and they end up charging the same thing that I would have charged in the long run but my bid was correct to begin with.” [PM#2]
- A Hispanic American female construction business owner reported, “There was a lot of bid shopping going on by the bigger guys. You know, you’ll bid a job and I’ll bid a job, and then after the numbers are in they’ll shop that number, and they’re ruthless.” She went on to say that “that’s one of the reasons we’re thinking about getting out of the business; we’re tired of it.” [PM#1]

She added, “[My husband] spends two weeks bidding his job. He finally gets it done, he gives it ... to the general contractor, and she’s, like, ‘oh, hey, can you do that for one half of that?’ So, here, I just wasted two weeks of my time bidding on this job, lost money on this other job because I can’t supervise my guys, and that’s going on every day in this town. And it’s really frustrating.” [PM#1]

This business owner went on to report that bid shopping emerged with the recession and that “now, that goes on every day in this town.” [PM#1]

- The Hispanic male representative of a minority contracting association and public hearing participant agreed, reporting, “Yes, that [bid shopping] has happened and I’ve heard it from numerous different sources.” [PM#4]
- A representative of a Hispanic general contracting firm commented bid manipulation does occur, saying that on several occasions primes have encouraged his firm to lower their bid by claiming a competing firm had submitted a lower bid when he knew that the competing firm’s bid was in fact higher. “There needs to be better policing on ADOT’s part.” [#50]
- A male representative of a transportation builders association commented bid manipulation is much more common in horizontal work, while bid shopping is more common in vertical work. Both are barriers, but said that there’s no way of stopping it. [#31]

**Owners and managers of engineering firms also reported that bid shopping or bid manipulation affects them.** Some reported submitting bids, then being “undercut” by bid shopping, or not getting work when the job commences. Examples follow:

- The minority owner of an engineering-related firm reported that a prime accepted his bid for its proposal then bid-shopped after award to cut the price by 50 percent. [#5]
- The engineering-related business owner reported having heard, while employed at another firm, that a large firm underbid its competitors while planning to make add-ons throughout the course of its contract with ADOT. [#2]
- The owner of a DBE-certified professional services firm stated, “This is another problem, when [specialty contracting] is part of the bid, public contracts require listing only those [subcontractors] whose bid is over a certain percentage, the contractors often don’t list the [specialty contractor that has provided an estimate] and then go bid shopping after if the win the bid .... Specialties for which DBE/WBE/VBEs have submitted bids for should require listing on bid day. Bid shopping after awards is ‘illegal,’ but a very large practice in public works, and hard to prove.” [EM#1]
- A minority-owned design engineering firm principal reported having joined a team during bidding and award, only to be dropped post award because of cost. “I was part of their team and they have been selected to do the work. After the city council approved them, I submitted my numbers to them. About a week later they came back and said, ‘We are not going to go with you; we are going with someone else, they came in with \$200,000.’ The process was to submit a design fee to the owner. The owner says, ‘We accept your fee. Here is notice to proceed, keep going.’ Or the client comes back and says, ‘... your fee is a little high; let’s see if we can work this thing out.’ This process never happened.” [#4]

- The leader of a DBE-certified engineering firm reported, “You have to be careful when you’re a subcontractor. Some of the large companies will take advantage of you because they’ll promise everything during the bidding process; you’ll give them your price, and then at the ‘get-go’ they’ll go out and shop your price to try and get it lower.” [#10, #11]
- The representative of a DBE-certified engineering firm (with a Native American business owner) observed that in the Native American sector, projects not won by Native American-owned businesses sometimes resulted in certain Native American-owned businesses receiving a second “last look” opportunity to participate. [#16]

**Some interviewees reported other unfair “shut out” tactics to prevent them bidding and contracting opportunities.** For example:

- A Hispanic American female construction business owner (PM#1) was “shut out” of a job by a prime contractor. “I have a relationship with the owner but because the owner didn’t talk to me, he went to the general contractor, the general contractor capped me out of the job and gave it to their friend.”[PM#1]

The same business owner added that there was a contractor’s association meeting in [specified city] last year that included a number of large government agencies. “About 120 people came out. This room was full over there. I don’t think anybody came away with anything from that, because, I ... for myself ... I have contacted someone three and four times ... never returned my call.” [PM#1]

- A representative of a specialty contracting company reported in the Phoenix public hearing that the firm has difficulty receiving traffic control work from Phoenix area cities. “There is a stranglehold of the project by police departments and it seems that we cannot get any work.” [PM#23]

**Some interviewees reported strategies for avoiding bid-manipulation.** Some business owners and managers reported taking precautions to avoid falling victim to bid manipulation:

- The Asian-Pacific American president of a DBE-certified professional services firm reported no experience with bid shopping. When the firm teams with a prime, it secures a team agreement defining workscope, percentage of work to be performed and total cost. [#21]
- For a minority-owned specialty contractor, bid manipulation poses no threat. The Vice President reported that clear bidding defining deliverables prevents bid manipulation. [#3]

**Attitudes about minorities and women (or MBE/WBE/DBEs) and unfair treatment based on race, ethnicity or gender.** Several interviewees indicated that minorities, women, or MBE/WBE/DBEs are the subject of stereotyping or similar unfair treatment based on race, ethnicity or gender.

Many of the comments concerning presence of discrimination pertained to race and ethnicity.

- One interviewee said that pursuing private sector work was preferable because he has experienced discrimination in the public sector. This Hispanic male owner of a non-certified firm providing specialty services indicated that he works primarily in the private sector. He has been unable to break into the public sector. He explained, “They look at me as a Latino guy most of the time, and even though they say it’s not racism, it is. Because they look at me and they say, ‘This guy is not going to perform. And if he performs, he’s ‘gonna make a lot of money and we don’t want him to make that much money.’ They want to keep us down.” [#30]
- The Hispanic American representative of a minority-owned heavy construction business reported knowing of “a lot of discrimination against minorities [and] women.” He reported, “No place to go for help ... just blown off token service.” [AI#221]
- Stereotypical attitudes are a problem of perception which they [minority business owner] are “working to overcome” on a weekly basis according to a Hispanic representative of a trade organization. He added that that it was up to professional and governmental organizations to “change the tone” and work to include small minority-owned businesses in the contracting process.[#51]
- The vice president, non-owner of the minority-owned specialty contracting business considered stereotyping a problem for minority-owned business owners. Where he is employed, it is often assumed that the business owner (a minority) works for him (a non-minority). [#3]
- The Hispanic male owner of a specialty contracting firm reported, “The attitudes are a little harsher toward minorities.” He also stated that inspectors are more likely to assume minority contractors are going to have done something wrong. [#44]
- A minority owner of an engineering related firm reported difficulty getting a foot in the door. “Dealing with contractors was always difficult and as a different colored skin, not all doors are open for you. As a person of color, you can always feel discrimination.” [#5]
- The principal of a design-engineering firm mentioned ADOT, as an example. “In the fabric of the entities, there is an inherit resistance. ADOT had to give money back because they were not meeting DBE goals. It is a culture in ADOT where African Americans aren’t getting promoted to move up the ranks.” [#4]
- The Hispanic owner of a trucking firm (non-certified) reported unfair treatment and derogatory mannerisms from others. He explained, “It is what it is.” [#52]



- The African American owner of a DBE-certified firm described stereotypical attitudes that could lead to discrimination against MBE/WBEs: “White female owned businesses are going to be treated different. That is just the human nature of the business. A black man’s business will probably get treated a whole lot different and it isn’t going to be to his advantage.” He added, “I have seen everything from looks to gestures, hearing the ‘n-word’ and different things from Hispanics to whites.” [#1]

The same African American business owner reported differences in the way white and African American contractors are treated by building inspectors. For example, he reported that if an African American business owner asked the same question as a white business owner, an inspector would treat the African American business owner less favorably. He stated that inspectors seek the good ol’ boy network. “It is what inspectors seek. It is difficult to work with. When you [an African American business owner] have the same questions that a white contractor would have, you are ‘difficult to work with’ ... those types of things are detrimental to a minority-owned business.” [#1]

This African American business also owner reported unfavorable work environments for minorities and women. “Getting your truck sprayed, different things like tearing checks open [to] see what you make, or you are blocked off a job because you are the only woman or African American out there.” [#1]

- The leader of a minority trade association reported unfavorable treatment among minority laborers. “Yes, this [discrimination] is true for heavy labor and climate. Minorities are considered better to work in the heat without water.” [#69]
- A representative of a minority trade association who specializes in assisting Native Americans indicated there are, particularly in the public sector, certain projects that have created unfavorable work environments for minority and women-owned small businesses. [#53]
- A Native American owner of a DBE engineering firm reported distrust with regard to his certification. “It’s nothing you can prove. I don’t particular[ly] look like an ‘Indian.’ Being Native American, I have had different feedback. Because of stereotypical associations to Native Americans, well, ‘what’s an Indian?’ There seems to be one inference maybe that was one category within the DBE program that had some abuses in it.” He added, “When you go in and set up as a DBE it is an easy target for criticism.” [#6]
- The minority owner of a DBE-certified professional services firm reported being disadvantaged by the perception that “bigger is better.” He indicated that this puts DBEs at a disadvantage. [#17]

- An email participant wrote, “But I think the biggest issue is that staffs of public agencies intentionally recommend that projects be segregated in such a way as to claim DBE/WBE/VBE state and federal requirements don’t apply. I have spoken to staff and they said that although state and federal monies were comingled on projects, they did not require participation, I wrote to state congressmen and one project was delayed, however I did not make any friends. This is the quandary, if you speak up, it draws negative attention and you get blacklisted.” [WT#1]

There were also many examples of comments related to gender discrimination.

- The minority owner of an engineering-related firm noted that minority-owned businesses are under greater scrutiny than are non-minority-owned firms. “When it comes to dealing with people who are hesitant, until you prove yourself, you have to open up your book, license and personal financial statement. I think there is a lot more scrutiny to a person of color than anybody else.” [#5]
- The female owner of a trucking business indicated having experience with stereotypical attitudes regarding woman in the trucking business. She said, “There are times where I really have to bite my tongue.” [#22]
- Another owner of a woman-owned trucking firm (DBE-certified) indicated that in a male-dominated industry, she questions if men take her seriously. [#23]
- The female owner of a WBE-certified professional services firm reported that she has experienced unspoken discrimination. She said, “You know what, there isn’t really anything that you can point to. There’s nothing overt.” [#33]

She added that she often gets questions in the building community about whether or not she is going to do the work herself. She reported that in a male-dominated field, some find it difficult to believe she can get her hands dirty and do her line of work. This occurs in both the public and the private sectors. [#33]

- The owner of a WBE-certified specialty contractor reported that large firms often assume that DBE firms are not as competent because they are small. [#38]
- The female owner of a DBE-certified specialty contracting company said, “If I go to a meeting, like a pre-bid meeting, I will quite often be the only woman there. And I’ll get a lot of looks like, ‘What are you doing here?’ And it’s just looks that may be what I’m perceiving — no one says anything, usually — but if I’m asked, they’ll usually ask again—‘You own the company? You’re the majority partner?’ It’s that kind of comment that makes me realize over and over again that people are quite surprised that it’s a woman-owned company.” [#39]
- A female owner of a DBE-certified trucking business indicated she faces challenges as a woman in the industry, she said, “Just being a woman and dealing with some of the contractors, trying to get your foot in the door.”[#64]

- The leader of a minority trade association acknowledged also hearing derogatory comments about women. “I’ve heard she is a woman, she can’t do the job!” [#69]
- After 20 years in business, the representative of a white woman-owned specialty contracting firm reported barriers in comparison with male-owned firms stating, “... after 20 years you’d think it wouldn’t be so.” [AI#60]
- The woman owner of a trucking and hauling firm stated, “My husband and I are operators, and they don’t recognize me as an operator and they don’t recognize me as an owner.” [AI#109]

Some interviewees reported that race or gender discrimination did not affect them or the industry.

- When asked at a public hearing about whether there was a level playing field for minority- and women-owned firms in the transportation contracting industry, a Hispanic American female construction business owner (PM#1) said, “Me? Honestly, I don’t even think about the color of my skin. I’m sorry, to me it’s my work ethic that’s gonna get me the job. If I do show up and I do a good job, I’m counting on that. I’m not counting on what I look like.” She said that she rather not do “the whole women-owned and minority thing ... I want to be judged ... [by] my performance.” [PM#1]
- A young man representing a large majority-owned firm said, “My generation is intolerant of discrimination, I see it disappearing, at least I hope.” [#41]
- A representative of a majority construction industry organization commented regarding the need for gender-conscious programs or DBE contract goals, that in the contracting community, racism does not exist. “There is a need for quality and qualified subcontractors regardless of gender and race.” [#47]

**Any “Good ol’ boy” network or other closed networks.** Many interviewees had comments concerning the existence of a “good ol’ boy” network that affects business opportunities.

Those who reported the existence of a good ol’ boy network included minority, female, and white male interviewees. A number of interviewees thought that the “good ol’ boy” network negatively affected women- and minority-owned firms. [e.g., #49, #53] For example:

- A minority subcontractor stated, “If you are not part of the network, you don’t get work.” When asked to expand on any allegations of unfair treatment, he added, “Sometimes [ADOT] make[s] exceptions for certain people but not others.” [#5]
- An African American business owner reported differences in the way white and African American contractors are treated by building inspectors. He stated that inspectors seek the good ol’ boy network. “It is what inspectors seek. It is difficult to work with. When you [an African American business owner] have the same questions that a white contractor would have, you are ‘difficult to work with’ ... those types of things are detrimental to a minority-owned business.” [#1]

- The owner of a DBE-certified engineering-related firm indicated that reputation, size, and qualifications often play a role in getting work. He added that good ol' boy factors sometimes play a role as well. [#17]
- The female owner of a trucking business reported existence of a good ol' boy network in the trucking industry. She reported a willingness to fight with the “boys” to get work in the industry. [#22]
- Regarding good ol' boy network, the female owner of a DBE-certified specialty contracting firm said that she “feels it,” but second guesses those feelings, at times. [#39]
- A female representative of a professional engineering organization remarked she had a conversation with a woman who owned a large firm, and the woman talked about how there is a golfing team within ADOT, but it is all men. She said that she and the woman joked about creating an all-women’s golfing team. [#42]
- The female owner of a DBE-certified engineering firm stated, “I think the whole women-owned and minority thing is a challenge for Arizona. Our ethnic diversity is not right. There has always been a “good ol' boy” network. I have been able to interact and make relationships with people, but I just don’t get work there.” [#43]

The same female owner added that she has tried to hire people who have been in the [“good ol' boy”] network that can filter through the group [network] and find work for the business. [#43]

- Although “not quite as prevalent as it used to be,” the Hispanic male owner of a specialty contracting firm reported, “The good ol' boy network is alive and strong.” [#44]
- A Hispanic DBE general contractor said, “Oh God, yes!” when asked if the “good ol' boy” network still exists. [#50]
- A Hispanic member of a trade organization stated that the “good ol' boy” networks still exist, and unless decision-makers are cognizant of that and make a concerted and sustained push for inclusion of marginalized groups, they will continue indefinitely.[#51]
- Primes have refused to work with the firm because they’re a DBE and are not part of their “good ol' boy network” stated a male aggregate business owner. [#65]
- In some areas it is hard for an Asian American business owner, “to move up to a preferred vendor on the list since many time people prefer to rehire past subconsultants.”[#62]
- The female representative of an industry association indicated, “Arizona is famous for that [good ol' boy network].” [#68]

- The leader of a minority trade association said, “There are some primes, who for lack of a better word, are in the “good ol boy” network that would not provide opportunities for women or minorities .... It’s hard to break in; there are firms that only hire Anglos.” [#69]
- The female owner of a DBE- and SBE-certified engineering firm reported, once awarded a subcontract, losing it to the prime contractor’s “drinking buddy.” This “bit” her financially for years to come causing a \$150,000 loss in expected revenue. She said, “I was slapped ... maybe I should have played the game.” [#70]

Some interviewees acknowledged the “good ol’ boy” network, but suggested that its influence is not as strong today as in the past. For example:

- A representative of a large majority-owned construction firm said, “In my opinion its dwindling ... with my generation, I’m 31, I cannot see it [good ol’ boy network] working.[#41]
- The vice president of a minority specialty-contracting firm reported that the good ol’ boy network was common in the past but indicated that the industry had changed. “I think that there are so many companies buying companies. Some of the major companies that we have, there is no place for it [the good ol’ boy network] anymore.” [#3]

Some interviewees reported being part of good ol’ boy network. For example, the male president and female senior vice president of a construction organization both reported firms involved in the network. In defense, they suggested that firms in the “network” started out small and worked hard to get where they are. [#46, #47]

Some reported not being aware of a “good ol’ boy” network per se, but rather acknowledged subjectivity in selection of contractors and subcontractors. For example, the Asian-Pacific American president of a DBE-certified professional services firm stated, “Our business is based on qualification. By that nature there is some subjectivity in selection — maybe one firm is better than the other.” [#25]

## **G. Insights Regarding Business Assistance Programs, Changes in Contracting Processes or Any Other Neutral Measures**

The study team asked business owners and managers about their views of potential race- and gender-neutral measures that might help all small businesses, or all businesses, obtain work in the transportation contracting industry. Interviewees discussed various types of potential measures and, in many cases, made recommendations for specific programs and program topics. The following pages of this Appendix review comments pertaining to:

- Technical assistance and support services (page 71);
- Mentor-protégé relationships (page 73);
- Joint venture relationships (page 74);
- Bonding assistance (page 74);
- Assistance in obtaining business insurance (page 75);
- Assistance in using emerging technology (page 75);
- Information on public agency contracting procedures and bidding opportunities (page 75);
- On-line registration with a public agency as a potential bidder (page 76);
- Hard copy or electronic directory of potential subcontractors (page 76);
- Pre-bid conferences where subcontractors can meet prime contractors (page 76);
- Distribution of lists of planholders or other lists of possible prime bidders to potential subcontractors (page 76);
- Other agency outreach such as vendor fairs and events (page 77);
- Breaking up large contracts into smaller pieces (page 77);
- Small business set-asides (page 79);
- Mandatory subcontracting minimums (page 79);
- Small business subcontracting goals (page 80); and
- Formal complaint and grievance procedures (page 80).

**Technical assistance and support services.** The study team discussed different types of technical assistance and other business support programs.

The majority of business owners, whether aware or not aware of technical assistance and support services, reported that most services named in the bullet list above would be helpful. [e.g., #1, #15, #19, #21, #25, #29, #30, #32, #33, #38, #40, #52] Examples include:

- The leader of a DBE-certified Native American-owned engineering firm reported advantages to many supportive services including assistance with financing, bonding, emerging technologies (particularly new software training), on-line registration and others. They also reported attending pre-bids and vendor fairs, when possible. However, for engineers, mentor-protégé relationships were reportedly more relevant than on-the-job training opportunities. [#10, #11]
- Industry-specific technical support services and on-the-job training are very important according to a Hispanic member of a trade organization. Technical support helps build a stronger supply chain over the long term. “Industry specific support and training can help DBE’s help build a stronger supply chain.” [#51]

Some business owners and managers reported being aware of technical assistance and support services programs and having used them, but may or may not have had successful experiences. Examples of such comments include the following:

- The representative of a WBE-, SBA- and SBE-certified specialty-contracting firm reported success. “The systems I had in the past year. That was how I got my WOSBE [Women Owned Small Business Enterprise certification through the Small Business Administration]. I got 80 percent through the paperwork, went downtown and met with them, figured out how to fill the rest of the blanks. My application was the first one approved for the program. I submitted four months after I started and I was still the first one to make it through. The fact that I went downtown and spent two hours on it made a huge difference.” [#14]
- The representative of a DBE-certified engineering firm successfully participated in training sessions. “We would use that [technical and supportive services]. The National Highway Institute (sometimes through ADOT) puts on training sessions and we’ve used them ... it’s for all the consultants. That is a very good program.” [#16]
- The same principal participated in the City of Phoenix Management Technical Assistance Program (MTA) with greater success. “The thing with the City of Phoenix program is that within two years, they want you to hire someone if you use the program. We hired a young lady and she helped us with our QuickBooks.” [#4]

Some business owners who found several technical and support services helpful reported frustration with some other technical assistance services offered, saying that although some appear on the surface to be helpful, as currently implemented they are not. For example:

- A minority-owned design engineering business principal told of an unsuccessful attempt to secure technical services for website development through ADOT. He said that although the service was advertised, it never materialized for him. “At the time they didn’t have the funding to support the consultants.” [#4]
- A majority specialty-contracting firm owner favored assistance with start-up, financing, joint ventures, contracting and bidding, and other operational assistance. However, he reported that mandatory subcontracting minimums would be too limiting, and added, “I don’t think the public agency should set a goal for using subcontractors. You could help small businesses to be established, but I don’t think the public agency should control all of that.” [#15]

Some had positive experiences to report about ADOT supportive services. For example, the partner in an Asian-Pacific American-owned DBE specialty contracting firm reported being informed as a result of attending many ADOT classes. [#25]

**Mentor-protégé relationships.** Many interviewees commented on mentor-protégé programs. A number of business owners said that they had informal mentor relationships.

- A Hispanic woman representative of a minority-owned materials supply business remarked that she would have appreciated a mentor for certain business operations such as managing prevailing wage issues. [#29]
- The representative of a DBE-certified engineering firm experienced informal mentor-protégé relationships, “... firms that take us under their wings that we’ve worked with over the years.” [#16]
- A representative of a large majority-owned construction firm said their firm has a large internship program. He added, “People are proud to be part of our team.” [#37]
- The partner in an Asian-Pacific American-owned DBE specialty contracting firm indicated that the firm could have benefitted from a mentor-protégé relationship with a general contractor. “I don’t think I would be going out of business if there were a ‘GC’ [general contractor] out there that would mentor me. I think I would be one of the successful companies, but I have a lack of help.” [#25]
- The owner of a WBE-certified specialty contracting business said, “I’d love a big general contractor to be my mentor, that’d be great.” [#38]
- The representative of a white woman-owned commercial building company performing mostly federal jobs recommended, “Find a good mentor.” [AI#307]



- An Hispanic male member of a trade organization commented that mentor-protégé relationships were key and very beneficial to the supply chain overall by identifying “up-and-coming” minority-owned businesses and matching them with successful companies that can help teach skills and best practices. [#51]
- The Hispanic male owner of a non-certified firm providing specialty services said that he has considered participating in a mentor-protégé relationship, but the opportunity never presented itself. [#30]
- An owner of a DBE- and SBE-certified engineering firm indicated interest in mentor-protégé relationships. [#70]

**Joint venture relationships.** Interviewees also discussed joint venture relationships.

- The owner of a woman-owned trucking business reported that joint venture relationships provide future-oriented stability and a safety net for businesses. [#22]
- The Hispanic male owner of a non-certified firm providing specialty services said that he has never been a part of a joint venture, but he would be interested in doing it. [#30]
- The owner of a WBE-certified specialty contractor stated that joint venture relationships are helpful and she participated in such a relationship. [#38]

**Bonding assistance.** The study team asked business owners and managers about bonding assistance.

- For the Hispanic American representative of a minority-owned commercial construction firm indicated a need for “assistance” with securing bonding. “Bonding is the only issue we have had. We are positioning ourselves to do government work. Any assistance we can get would be advantageous.” [AI#338]
- The owner of a WBE-certified specialty contractor suggested for ADOT to advance small businesses, they need to have a program that would help small businesses obtain bonding. “Base it on their commercial insurance, for example. If it is good, why not offer them bonding? If they have good credit, or even average credit, if they have capital, help them out!” [#38]
- The Hispanic American representative of a general contracting and engineering firm reported needing assistance obtaining performance bonds. “The performance bonds are very difficult to obtain. This is the reason I do not have a lot of work right now.” [AI#343]
- The owner of a WBE-certified specialty contracting business stated that, to advance, small businesses require bonding assistance and suggested that ADOT establish a bonding program to assist small businesses. [#38]

**Assistance in obtaining business insurance.** Some business owners and managers interviewed said that assistance obtaining business insurance was a need. [e.g., #15, #38] For example:

- The minority co-owner of a general contracting and procurement firm said, “Help in obtaining business insurance would be fantastic.” [#15]
- For the representative of a woman-owned general contracting firm, “insurance requirements are the biggest obstacles.” [AI#321]

**Assistance in using emerging technology.** Some business owners said that assistance using emerging technology would be helpful. [For example, the female owner of a WBE-certified professional services firm reported that although she’s fairly tech savvy, there are still things she has trouble with. She would like the assistance. [#33]

**Information on public agency contracting procedures and bidding opportunities.** Most interviewees indicated that more information on public agency contracting procedures and bidding opportunities would be helpful. [#33, #38, #40] For example:

- For the representative of a woman-owned general contracting firm, finding information is a challenge. “It would be nice to have a centralized place where people could come together and find work. To get government contracts is very difficult to understand. You almost have to pay someone to walk you through it and is another cost.” [AI#321]
- The representative of a majority-owned specialty contracting firm reported wanting direct notification of bidding opportunities from ADOT “to make it easier to bid.” [AI#5]
- For a white woman-owned construction business, education on bidding procedures for public agencies would be helpful. “I just need to be better educated, I don’t have time as an owner to spend days on a bid I need to have. A one-on-one briefing on how to go about it ... to make bidding a little more convenient.” [AI#62]
- The representative of a minority-owned specialty contracting company wanted increased dissemination of information on bidding. “It’s tough getting bids and I have difficulties know what’s going on. I need more information.” [AI#271]
- The representative of a white woman-owned vendor wanted access to assistance “to find out how to bid on ADOT and state government contracts.” [AI#196]

Some business owners and managers reported that they were already receiving information on bidding opportunities or knew how to search for them. For example, the representative of a majority-owned professional services firm reported that that ADOT makes a solid effort on providing information. [#34]

**On-line registration with a public agency as a potential bidder.** Most owners and managers of construction companies said that online registration with public agencies would be helpful.

- A number of interviewees said their companies were already participating in on-line bidder registration systems.
- However, a minority-owned engineering firm principal reported that online registration was more relevant for prime contractors than for subcontractors. “The online registration with a public agency as a potential bidder is normally a benefit to prime consultants, not as much as subconsultants.” [#4]

**Hard copy or electronic directory of potential subcontractors.** Most interviewees said that hard copy or electronic lists of potential subcontractors would be helpful.

**Pre-bid conferences where subs can meet primes.** Many business owners and managers supported holding pre-bid conferences. [for example, #11, #16, #18, #33, #38, #40]

A few interviewees did not think that pre-bid meetings were useful.

- For example, the representative of a majority-owned professional services firm reported that most of the small businesses know who the primes are and had already formed good relationships with primes. He said, “Maybe some small businesses would want to meet more primes but in our case it would not be helpful.” [#34]
- The owner of an MBE, SBE and DBE specialty contracting firm called pre-bid conferences, where subcontractors can meet prime contractors, “a joke.” He said, “It is a joke because they [primes] don’t send people with any inquiries. The prime would send someone with no authority or certificate.” [#1]

**Distribution of lists of planholders or other lists of possible prime bidders to potential subcontractors.** Most of the business owners and managers interviewed supported the distribution of planholders lists. Examples of comments in support of distribution of planholders lists include:

- The Hispanic male owner of a non-certified firm providing electrical services said that it would be helpful if a list of plan holders or other lists of possible prime bidders was distributed to potential subcontractors. [#30]
- The owner of a WBE-certified specialty contractor stated that distribution of lists of plan holders or other lists of possible prime bidders to potential subcontractors would be helpful. She added that it is good to know who has the plans. [#38]

**Other agency outreach such as vendor fairs and events.** Some business owners and managers reported that outreach such as vendor fairs and events were useful. Others no longer regularly attend those events.

Examples of positive comments about agency outreach events include the following:

- A Hispanic male owner of a DBE-certified materials supply firm indicated that he is aware of vendor fairs and events but he has never attended them. [#32]
- The Hispanic male owner of a non-certified firm providing electrical services said that if he knew about agency outreach such as vendor fairs and events he would absolutely attend them. [#30]
- When asked about the benefits of agency outreach programs like meetings and workshops, the Hispanic female owner of a non-certified materials supply company said, “I think that it’s important that you meet other people in the industry that you’re in, so I think they’re a great idea.” [#40]

A number of business owners and managers indicated that outreach events were not useful.

- For example, the female owner of a WBE-certified professional services firm said, “I attend a lot of those. Some of them are really good and some of them are a waste of time. The last one they had at Starr Pass was so expensive I couldn’t afford to do it. And then there were workshops, and yes I would’ve liked to have gone to the workshops, but at this point in time, I need to go to workshops like I need a hole in the head. I need to get some work. But when you figure that the cost was going to be over \$2,000 at Starr Pass...” [#33]

**Breaking up large contracts into smaller pieces.** The size of contracts and unbundling of contracts were topics of interest to many interviewees.

Most business owners and managers interviewed indicated that breaking up large contracts into smaller components would be helpful. [e.g., #10, #11, #33, #34, #36] Examples of comments include:

- The Hispanic American owner of a DBE-certified engineering firm reported that breaking up large contracts into smaller pieces (unbundling) would help him. “It’d be nice to be part of a team to design a specific portion of design work for a highway project. But, like I said, most [prime] engineering firms already have that talent in-house, and they don’t really need someone like myself on the design side, not the consulting, not the construction side ....” He added, “So maybe that’s where the issue is. ADOT doesn’t have a specific requirement for prime contractors or big consulting firms to hire a sub consultant like myself for very specific design work.” [#13]

The same engineer demonstrated how unbundling could improve opportunities for small businesses. “For civil engineering the design work can be broken up into very, very neat packages; and, in fact, internal to these large engineering companies they have their departments do pavement design, do drainage, do brick design, do river system analysis. Those sorts of things are very, very ‘package-able.’ You can take these aspects of the design process and package them into scopes of work for a department of a company or a firm like myself.” [#13]

- One of the greatest barriers to small businesses is the way contracts are packaged, according to a representative of a Hispanic trade organization. This individual reported that contracts from public agencies are often bundled so only the largest companies have the capability to handle them.[#51]
- The representative of an SBE-certified majority-owned construction firm reported that although the firm performs some larger projects, unbundling would increase the firm’s ability to qualify for public sector work (overcoming limitations resulting from not having DBE-certification). [#20]
- The Hispanic male owner of a non-certified firm providing specialty services said that he would like to see contracts broken up, because most prime contractors already have their own electricians, and it is common for contractors to use their own people when there is an opportunity to subcontract. [#30]
- The owner of a WBE-certified specialty contractor stated that breaking up large contracts into smaller pieces (unbundling) would be helpful. She commented that breaking it up and gives everyone a chance at the work. [#38]
- For minority- and women-owned businesses, project size can be a barrier to taking on the role of a prime contractor. As a small engineering firm, “a project can be really big ... in designing something we just may not have the manpower on that level ... we could ... design one substation ... the work that we would currently do for ADOT we would work as a sub.” A women-owned design firm also reported that she is always a subcontractor on ADOT projects as those assignments are typically bundled. [TLS]
- For a white woman-owned engineering design firm, bundling limits business opportunities for her. “The bundling of projects into large, supersized projects prevents small firms from priming and often the primes do not want to subcontract unless there is a DBE goal.” [AI#143]

**A few business owners saw both positive and negative aspects of unbundling contracts.** For example, a Hispanic DBE-certified business owner finds negativity in unbundling. He said, “Primes hire subcontractors without unbundling requirements. Breaking up the contracts won’t work. You are trying to cut your own throat and underbid the other bidders. We need people who make money. I do not mind giving the primes 30-40 percent. If they are making money, I have a job. If you break the contracts, no one is making money.” [#32]

**Small business set-asides.** The study team discussed the concept of small business set-asides with business owners and managers. That type of program would limit bidding for certain contracts to firms qualifying as small businesses.

**Most business owners and managers supported small business set-asides.** Examples of those comments include the following:

- The owner of an MBE, SBE and DBE specialty contracting firm who reported small business set-asides as a “a blessing.” [#1]
- The Hispanic male owner of a non-certified firm providing electrical services said that small business set-asides would be a good idea. [#30]
- The representative of a majority-owned professional services firm reported that small business set-asides would be helpful. [#34]
- The owner of a WBE-certified specialty contractor stated that small business set-asides are helpful, because primes will not use small businesses unless they are forced to. [#38]
- This representative of a Hispanic trade organization commented small business set-asides would be helpful, and said they are “sorely missed in the Arizona market.” He continued, saying that the lack of set-asides puts Arizona at a disadvantage compared to markets that have aggressive integration programs. [#51]
- The owner of a DBE-certified engineering-related firm reported that his small firm is at a disadvantage when competing for ADOT contracts designed for larger firms. [#17]

**Mandatory subcontracting minimums.** Some business owners and managers supported requiring a minimum level of subcontracting on projects. Some interviewees did not.

Examples of comments in support of a mandatory subcontracting minimum program include the following:

- The Hispanic male owner of a non-certified firm providing electrical services said that small businesses should always be utilized. [#30]
- A representative of a majority specialty contracting firm reported that ADOT should increase the DBE goal and challenge contractors to meet those goals by looking at the procurement processes. For example he added, “It seems like the alternative delivery, the goal is not as high as a hard-bid projects and job order contracts, there are no goals established.” [#48]
- A representative of an engineering association said, “I’m not opposed to that as long as the minimums aren’t so high.” He added that, in Arizona, “the prime is responsible for 51 percent of the work. If we weren’t bound by that there would be more opportunities to hire more subs to do the work.” Also commented based on one observation, ADOT DBE requirements were 5 or 6 percent for contractors and soon after that the engineering firms’ goals doubled so ADOT was meeting their goals. [#57]

Some interviewees did not like the idea of mandatory subcontracting minimums or did not think it would be effective. For example:

- A male business owner of a small majority-owned engineering firm reported that primes have problems with the word “mandatory.” He indicated that primes want to use in-house staff not subcontractors. [#72]
- Regarding subcontracting minimums, a majority-owned business representative said, “it sounds restricting.”[#26]
- The owner of a WBE-certified specialty contractor stated that the idea is scary because a general contractor might want to break the work up more than the minimum. [#38]
- A majority specialty-contracting firm owner favored assistance with start-up, financing, joint ventures, contracting and bidding, and other operational assistance. However, he reported that mandatory subcontracting minimums would be too limiting, and added, “I don’t think the public agency should set a goal for using subcontractors. You could help small businesses to be established, but I don’t think the public agency should control all of that.” [#15]

**Small business subcontracting goals.** Interviewees discussed the concept of setting contract goals for small business participation.

Many business owners and managers indicated that small business subcontracting goals would be helpful. [e.g., #30, #33, #38] For example:

- The representative of a majority-owned professional services firm reported that small business subcontracting goals would be helpful rather than just having a DBE goal. [#34]

**Formal complaint/grievance procedures.** The study team discussed procedures for making complaints or outlining grievances. There were a number of wide-ranging comments.

- For example, the representative of a majority-owned construction firm spoke favorably about ADOT’s grievance procedure. “The greatest thing with ADOT’s grievance procedure is that they have an escalation chain [Escalation Ladder] .... Every time I worked with ADOT, they want to help you succeed; they do not want to bankrupt anyone. We would never have to go to mediation or anything like that.” [#20]
- A female business owner of an aggregate firm commented, “We had a bad experience with a company ... that was very poorly managed. We had an ADOT contract and they were buying the [materials] from us but didn’t want to listen to anyone and lost the whole project, they walked out on us and we didn’t get paid.” She remarked they inquired about the grievance process through their attorneys but didn’t go through the ADOT grievance procedure.” [#65]

- The representative of a majority-owned professional services firm stated that formal complaint and grievance procedures would not be helpful unless the complaints are reviewed by an independent entity, rather than the ADOT auditors, that would state whether or not the appeal meets the Federal Accounting Regulations or not. [#34]

## **H. Insights Regarding DBE Program or any other Race-/Ethnicity- or Gender-based Measures**

Interviewees, participants in public hearings, and other individuals made a number of comments about race- and gender-based measures that public agencies use, including DBE contract goals, including comments regarding:

- ADOT or other public agency DBE subcontracting goals programs (page 81);
- Any other ADOT or other public agency programs (page 85);
- Any issues regarding ADOT monitoring and enforcement of its programs, including any false DBE reporting or abuse of “good faith efforts” processes (page 85);
- Any effects from discontinuing DBE contract goals in 2006 or reinstating goals program in recent years (page 88);
- MBE/WBE/DBE fronts or fraud (page 89);
- False reporting of DBE participation or falsifying good faith efforts (page 90); and
- Effects of DBE contract goals on other businesses (page 91).

**ADOT or other DBE subcontracting goals programs.** There were comments in favor of the Federal DBE Program, including DBE contract goals.]

Many reported benefitting from DBE contract goals, or expecting to benefit. A number of businesses described their experiences:

- The Asian-Pacific American president of a DBE-certified professional services firm reported, “For example, other cities don’t have a DBE requirement. We find it more difficult to get work in those situations because the type of work we do, most of the primes have those services.” [#21]
- The representative of a woman-owned engineering-related firm reported, “Qualifying as a DBE ... will help expand my horizon with ADOT.” [AI#59]



- All three subcontracting firms participating in the Tucson listening session reported that ADOT's DBE Program presented expanded opportunities for work for their firm. For example, a women-owned design firm reported a lot more opportunity because of the DBE Program. As proof after her firm recently merged with another company, she reported that primes consistently inquired if the merger had affected the firm's DBE status. From this she concluded, "So for what it's worth [the DBE Program] has actually created better opportunities for us ... [we get repeat work requests] they [primes] typically are trying to meet the goal and ask us to be on their team and we do the work." [TLS]

The minority- and women-owned engineering firm owner agreed. "DBE creates opportunities for us. We work for companies that we have worked for before just because of the DBE. However she added, then if you perform to expectations they have other jobs [not having DBE goals]." [TLS]

A minority-owned firm added, "I would agree with that, also that at the beginning there was more [DBE] opportunity but now a days most of my customers care less about the DBE based on [our] quality work." [TLS]

A prime consultant agreed that hiring a DBE as a subcontractor can result in a long-term relationship. "If they do really good work ... let's put them on even if there is no DBE requirement. We'll bring them on regardless just because they do good work." [TLS]

- A level playing field for one minority- and women-owned business meant knowing about the program, and using it to get a foot in the door. "The DBE Program gives you an opportunity to get through the door ... It's difficult to do something if you don't know how to start ... the Program is important because it provides the [first] opportunity for a small business or minority business ... but you have to know about the Program ... not all businesses may know about the Program." [TLS]
- Another women-owned firm added, "It allows for a more diverse workforce, it's allowed a more white-male dominated field to be more diverse ... helps get a foot in the door." [TLS]
- A minority-owned business owner believes that over the course of time, there is a more level field for his DBE business. He suggested that after his first jobs work quality has become the key to his success. However he suggested that for others there could be a perceived disadvantage to DBE-certification. He offered, "Some people don't want the government looking at your books and I can totally understand that." [TLS]
- The CEO of a majority-owned SBE engineering firm remarked, "If ADOT has a goal, it's part of doing the work and playing by the rules. If that is what ADOT needs to do to get federal funding, we will support the program." [#71]

Some interviewees had negative experiences and said that race- and gender-based programs should be better monitored, substantially changed or discontinued. For example:

- Representatives of a majority construction industry organization commented regarding the need for gender-conscious programs or DBE contract goals, that in the contracting community, racism does not exist. “There is a need for quality and qualified subcontractors regardless of gender and race.” [#46, #47]
- The representative of a majority-owned professional services firm said, “I appreciate all the effort that is helping DBE businesses, but it always throws me the wrong way when the project is called ‘race’ conscious. To me, it just sounds like a ‘racist’ conscious. To me, I do not see any disparity with respect to DBE because the industry is fiercely competitive; you really do not care where they come from. All you want is someone to help you win a job.” He added that there should be great small business goals, not just DBE goals. [#34]
- One prime contractor suggested that many minority firms are surviving without being DBE-certified with some becoming certified and entering fields where they are not qualified. [TLS]
- One Tucson listening session participant from a large majority-owned contracting firm spoke about the period during which ADOT had no DBE goals. He questioned if and how that period differed from periods when goals were mandated, and if similarities and differences were tracked. He stated, “Market forces tend to drive how contracting happens. There are various instances where goals get set inordinately high and you are forced to go out to invent participation opportunities. But by and large, it seems like market forces kind of drive it in a great way.... Was that tracked?”[TLS]
- Another prime contractor at the Tucson listening session reported difficulty locating minority- and women-owned subs when goals were required. He suggested that in the past 15 years minority- and women-owned subs had become scarcer due to firm buy-outs, closures and other consequences of the Great Recession.

To meet DBE contracting goals, he reported to typically include DBE-certified trucking firms or the only minority-owned guardrail firm in Tucson (when those services were required). He concluded that DBE contracting goals unfairly impacted small businesses by restricting competition among them. “All you’re going to do is overlay and overlay a job: they put a goal on it, it becomes almost impossible to [comply] unless they invent something like putting guardrail improvements on the same job. Then what they do is limit the competition — when you have to have a minority goal and there are four guardrail subs out there [with only one being minority-owned] — they tell the three others don’t even bother, falsely generating work by setting goals putting other small businesses out of business.” [TLS]

- Another majority contractor at the Tucson listening session added, “Don’t forget getting your minority barricade contractor to ... put his stickers on your equipment ... people do that kind of stuff just to meet goals.”

The same contractor explained that in some instances, contractors seek out DBE-certified businesses in other fields to set them up to perform work outside their typical scope of services. “It’s probably a hardship. It takes people out of what we might call a normal realm of operating. It’s definitely not something where a person is interested in doing contracting work [and] has this DBE opportunity because goals were set properly. I call it somewhat ‘contrived’ to meet a goal, an unnatural goal on a project.” [TLS]

- Another majority contractor in the Tucson listening session clarified that in his experience encouraging subcontractors to work outside their specialty area is not common, and has never been a practice at his firm. “[Firm name] has never had to do that. It makes it sound as if that is a prevalent practice ... we’ve never done it.” Yet later in the discussion, it was suggested that working outside the typical scope could be an advantage for a small business. [TLS]
- According to contractors in the Tucson listening session, overall, DBE contracting goals were typically met through trucking, traffic control, guardrail and [sometimes] milling. One majority contractor added that meeting those goals was more difficult in rural areas where access to subcontractors was limited. “When jobs are in the middle of nowhere, it’s hard to get those traffic controls guys to go there, they want to work in town.”
- A large majority contractor suggested that ADOT goals were, for the most part, attainable. However, local jurisdictions could be more difficult to meet. “The ADOT goals in general, there might be specific instances where there are exceptions, but in general the [ADOT] goals are reasonable and attainable. [However] we found in some of the local jurisdiction work — City of Tucson, Pima County — where they have 20 percent requirements that those aren’t realistic or really achievable.” [TLS]
- Another majority contractor suggested that local jurisdictions set goals that often result in the same minority contractors getting repeat work forcing larger firms to lay off workers having higher wages and benefits packages. “And again, [in] more of the local jurisdictions what happens is that if there are several areas that historically, by goal setting, get the same work to the same people over and over again — say like curb and gutter, sidewalk, maybe piping. What happens is — all these smaller contractors, whether they’re small business or minorities, most of them don’t carry any kind of benefits packages for their people — we lay people off at higher wages with benefits so that you can generate a job for a minority ... All you’re doing is promoting ... the small businessman or minority business person [not offering employee benefits] making the level of the workforce go down.
- However, a small minority-owned firm in the Tucson listening session argued that the described “no-benefits, minority-owned” business model did not hold true for all minority-owned firms. For example, his firm provided benefits (health, dental, vision and 401K) similar to larger contracting firms. “We offer benefits and will continue to offer them.”

**Any other ADOT or public agency programs.** Interviewees had comments regarding other public agency programs they had experienced. For example:

- The representative of a WBE-, SBA and SBE-certified specialty-contracting firm stated, “The City of Tucson kind of washed all the women-owned businesses in with the minority-owned businesses. The minority-owned businesses get priority over the women-owned businesses. There was supposed to be set-asides for WOSB, which is why I chased that through the Feds, but they really haven’t done much with that. I’ve tried to get certified with ADOT, but because the owner doesn’t know how to run a backhoe and pour concrete, we don’t qualify.” [#14]

The same representative added who reported being denied work by ADOT, “I qualify with the City, I qualify with the Fed, why can’t I qualify for the State?” [#14]

- The female owner of a WBE-certified professional services firm said that there’s a diversity program for Southwest Gas, which she is registered with. This program, however, has not gone anywhere. She stated that she went to their meetings and went through the registration process, but was told by the program that they just don’t have anything right now. This business owner said that she doesn’t know if there just isn’t any work or if the work is someplace else other than the Tucson area, or if they’ve gotten comfortable with the same three subcontractors. [#33]

**ADOT monitoring and enforcement of its programs.** Some interviewees had comments regarding the implementation of the DBE Program, including any false DBE reporting by primes or abuse of “good faith efforts” processes.

**Some interviewees were critical about key aspects of the implementation of the Federal DBE Program.** For example:

- A Hispanic DBE general contractor commented that so far, the DBE programs have been largely unhelpful for the most part because the people running the programs are not committed to them and do not make the effort necessary to help participating businesses succeed. In his view, the programs funnel money to minority-owned businesses due to DBE goals, but fail to provide firms with the training and support they require to be successful without depending on money designated for DBEs. [#50]
- The female minority owner of a professional services firm reported that some firms do not believe ADOT work is profitable and that there are some certified DBEs that are doing federal work that will not do ADOT work because it is not attractive; it’s too competitive. “But that might change if the goals were higher,” she said. [#73]

The same female business owner explained that the general perception from primes is that if they propose greater than the goal, and then do not meet what they propose, they will be penalized. [#73]

- The female representative of a local public agency commented, “As a [representative of a public agency], I am not in support of DBE programs, in general. I suspect that DBE programs rules and requirements are abused – with company heads that are only placeholders to “fill” the DBE requirements, to obtain an additional advantage, without basis. If anything, DBE programs may be aggravating image problems of DBEs in the industry. Plus, to get a more accurate picture of potential disparity of minority- and women-owned businesses, you should also consider the associated census data for the focus population, as well as, for example, the percentage of female engineers registered in the state. The real battle for equality begins in the family, and in the elementary schools.” [WT#4]

**Some firm owners and managers provided recommendations for the ADOT DBE program or advice for other DBEs. For example:**

- The female owner of a trucking business gave examples of why improved communications between ADOT and those seeking DBE certification were needed. “More communications between ADOT and their businesses. An email that says ‘do not reply’ tends to make me say ‘fine, I don’t need it then.’ And as of now I’m still going through the hoops. And to go back to that technical support, it’d be nice to say ‘hey, now what do I do?’” [#22]
- The representative of a DBE-certified engineering firm recommended that ADOT consider ways to streamline bidding through contract negotiations. “I think the speed — it takes forever to go through contract negotiations.” He suggested that current practices cause confusion. [#16]
- The principal of a minority-owned design engineering firm stated, “I don’t have time for ADOT because there is nothing there for me. I have experienced this. You go to these events; you know the scripts, the usual folks — the prime consultants sitting there. You just want to get it over with and they tell you, ‘You need to come out!’ They have a new person in there now; it has been five or six years. The new person they bring in will tell you, ‘You need to come in this meeting and you need to be a part of this.’ What you don’t know is the last person told me the same thing and I did it and nothing came out of it.” [#4]
- A female business owner reported wanting ADOT staff available to DBEs. She said, “It is helpful to have a relationship with someone at ADOT. Phoenix has been able to set up a program for small contracts, but ADOT has not been able to do that. You can’t prepare to be a prime if you don’t know the process.” [#43]
- A female representative of a professional engineering organization recommended that ADOT do more small businesses contracts and less in-house work. [#42]

- The Hispanic American owner of a DBE-certified engineering firm recommended that ADOT provide incentives to primes for using DBEs. “Make it more advantageous for large engineering companies to use DBE firms. There’s an RFP process, and in the process ADOT can possibly mandate certain portions of contracts to be set-aside for DBE design firms like myself. It would be hiring me as a subconsultant to perform a specific task within the design process.” [#13]
- The female owner of a DBE-certified trucking firm reported that extensive documentation presents a barrier to encouraging DBE participation, particularly on the prime contracting side. “For the prime it could be a lot of paperwork, especially when they hire an SBE or DBE. That could be why they do not hire DBEs as sub consultants. Filling out the document is a problem for them and for us, but for us it is worth it and for them it is not.” [#23]

She also reported being limited by the firm’s newest DBE-certification. “The new one [DBE-certificate] I have been getting — and I have asked ADOT several times — says [the firm offers one service] and that is all. So when these people [primes] look at it, they think all I can do is [that single service] and I do not like that.” [#23]

- A minority owner of an engineering-related business reported frustration with DBE classification codes. “One thing I have found difficult is the DBE [program] people and what they classify you under, their codes. If you go to my website, we perform over thirty [job types]. If you go on DBE [directory], I am only certified in three. That doesn’t help me open doors .... They [primes] will contact me, but the services they want me to perform I am not certified with DBE. With DBE, I could only be certified in a few things. The prime would send out a generic email with 2,000 subcontractors and trying to get your foot in the door is difficult.” [#5]
- The CEO and operations manager of a DBE-certified engineering firm recommended, “Arizona is a state where you have predominantly Native American communities all across it and a state like that should incorporate something into their programs something like the Department of Defense has — an Indian Incentive Program where you get 10 percent credit for promoting that ... like they do for the veterans.”
- A representative of an Hispanic trade organization remarked that Arizona trails behind other markets as it relates to programs that help promote the success of small minority and women-owned businesses.[#51]
- The Asian-Pacific American president of a DBE-certified professional services firm indicated that the firm’s partners strive to graduate from the DBE Program. However, they find graduation difficult to achieve. He recommended that ADOT develop initiatives that help DBE-certified firms compete on the same level as larger companies so that graduation is attainable. [#21]
- The female owner of a DBE-certified engineering firm indicated that the DBE Program was supposed to help businesses flourish and graduate from the program, but it is hard for DBEs to do that when they are struggling to find work.

- A large majority-owned contractor noted that his firm makes every effort to meet a DBE goal. His rationale was that evaluation of the evidence demonstrating good faith efforts is subjective and could be judged unfairly. “Our general attitude is we’re going to meet the goal on ADOT work, on local work there is a different attitude. In general, we’ve found that we can meet the ADOT goals; they’re attainable. And, there is some work in administering good faith efforts, there’s always the question. I think our perspective is that even if we go through it and provide the evidence the jurisdiction may not evaluate it fairly.” [TLS]
- A representative of a majority-owned contractor spoke of work in another state where his firm had to stretch to meet a 10 percent DBE goal. “We had real clinkers there, who we’d just basically write a check to get off our projects because they were causing more harm than good.” He then told about working in a state that did not have DBE goals but required a detailed presentation of good faith efforts. “Which one I like better, it’s hard to choose. I’m here [in Tucson] and have to meet goals ... it’s hard to find a sub.” [TLS]
- Another majority contractor noted that those firms that try to meet the DBE goal through good faith efforts “historically have not been granted it ... so it’s mainly saying it exists, but if anybody makes the goal on the project ... they say [anyone trying to demonstrate good faith efforts] should have worked harder at it.” [TLS]
- Furthermore, a Hispanic subcontracting firm reported that evaluation of good faith efforts “is subjective, that keeps a lot of people from wanting to be in that position.” [TLS]
- The owner of a DBE-certified professional services firm asked, “Is it legal for local governments to co-mingle state and federal funds for local projects then claim it is a local project not requiring DBEs? Also, then segregate out service contracts on state funded projects to avoid DBE requirements?” [WT#1]

**Effects from discontinuing DBE contract goals in 2006 or reinstating contract goals program in 2010.** Owners and managers of interviewed firms about the changes in ADOT operation of the DBE Program in 2006 and reinstated the Program in 2010. A number of businesses described the changes they observed:

- The leader of a DBE engineering firm reported benefitting from the DBE Program when goals were in place and that the business experienced a large disparity when ADOT discontinued DBE contract goals in 2006. [#10]
- The president of an Asian-Pacific-American-owned DBE-certified engineering firm reported that primes stopped using DBEs when no DBE contract goals were in place. [#21]

- The principal of a minority-owned design engineering firm stated, “When they discontinued [the DBE goals], the percentage of small/minority-owned firms getting businesses was really low — almost zero. Since they went and instituted the Program, the numbers have gone up. A couple of years ago it went up by 3 percent, which is terribly low.” “I know a guy (African American) that is an employee at ADOT in meetings who [would] say, ‘Look, it is a federal-funded project. You must have DBE participation,’ and people above him would say, ‘We do not need to have DBE participation.’ The project went out without DBE participation.” [#4]

The same principal reported increased usage of DBEs after reinstatement of the DBE Program, “Since they went and instituted the Program, the numbers have gone up.” [#4]

- The owner of a WBE-certified specialty contractor stated that she had no work for a long time until the program reinstated in 2010. She said, “It was huge. I could tell right away.” [#38]
- The owner of a majority specialty-contracting firm indicated, “With ADOT, they used to make it difficult as a prime contractor to bid a job when they had those mandatory goals. They had a big job and can’t find a qualified business.” He added that when ADOT removed goals, it made it easier to find qualified subcontractors. [#15]

The same majority contractor clarified, “Actually when they removed those (DBE goals), it made it easier. They say a small business and a disadvantaged business are two different things but in reality they are the same thing. ADOT says, ‘Our goal is 7 percent minority- or women-owned’ and if you are a minority- or woman-owned business, then you are part of the small company.” [#15]

**MBE/WBE/DBE fronts or fraud.** Interviewees from a diverse range of experiences and opinions commented on fronts or fraud. Some gave first-person accounts of instances they witnessed, whereas others spoke of less-specific instances or those of which they had no first-hand knowledge. For example:

- There is need to effectively “police” the DBE Program to prevent abuse and ensure that only legitimate minority-owned businesses receive DBE certification, according to a Hispanic DBE-certified general contractor. He added while there are many people in DBE Programs that are reliable and do good work, there are also many that abuse the programs or act as fronts. [#50]
- A female representative of a professional engineering organization commented, “For many, many years, a firm had a wife who became the “owner” and it was a minority-owned business. I think that the rules have tightened so there is less of that.” [#42]
- The owner of a minority-owned engineering-related firm reported opportunity for abuse. “There are guys that are ‘blonde hair, blue eyes’ and put 51 percent of their businesses in their wives’ name. They say that they are DBE and their wives don’t do anything nor do they know what’s going on [in] the day-to-day basis.” [#5]



The same business owner noted, “I think there are firms that have affiliations, you know, that have multiple firms and would exceed the net worth, as well as the revenue dollars, but they bypass that as well by splitting it into three companies and different owners. I think there are two engineering firms that abuse that quite a bit.” He added, “The part that gets to me is that ADOT supports them. You complain about it and they do nothing.” [#5]

- The male partner in a woman-owned specialty contracting business reported that he knew of a colleague who named his daughter as the business owner to be a woman-owned business. [#24]
- The representative of a WBE-certified specialty-contracting firm stated, “There are companies in this town that I know for a fact that the woman is basically not involved but it is her husband, but she is on there because she is a woman.” [#14]
- A representative of a minority business organization said he is aware of fronts, where WBE- certified businesses were operating under the guise of woman-owned businesses when in reality, their husbands (white males) were actually responsible for managing the businesses. [#67]
- The owner of a majority-owned specialty contracting firm indicated that he has seen a lot of front firms where a man’s wife claims to own 51 percent of the firm. He also has seen minority- or woman-owned businesses where they do not have the control of the company. [#15]
- The female owner of a DBE-certified engineering firm reported hearing of firms that “abuse certifications.” [#43]
- The representative of a majority-owned 8(a)-certified engineering firm reported that sales of some 8(a)-certified firms (that have worked through the program) from mom and pop to sons and daughters create opportunity for that firm to start the 8(a)-certification process over again. [#18]
- The female owner of a WBE-certified professional services firm said that some of the larger firms that get the work are female-owned, and some masquerade as female-owned. [#33]
- A male business owner of a small majority-owned engineering firm reported, “There has been abuse at ADOT,” indicating that there are certified firms that are not disadvantaged. [#72]

**False reporting of DBE participation or falsifying good faith efforts.** Some public agencies in Arizona (including ADOT) set DBE contract goals on certain projects. Prime contractors can meet the goals through subcontracting commitments or show good faith efforts to do so. The study team asked business owners and managers if they know of any false reporting of DBE participation, or falsification of good faith efforts submissions.

Some business owners reported widespread abuse of the DBE Program through false reporting of DBE participation or falsifying good faith efforts. For example:

- The owner of a majority-owned specialty contracting firm indicated that to comply with the goal, some primes list subs on the bid but perform the work in-house. He added that some may even pay subs for work they did not perform. [#15]
- The owner of a minority-business stated that good faith efforts give prime contractors an opportunity to put themselves first. “I think that exists. I think a lot of the primes show that they are ‘trying.’ At the end of the day, it may be what is best for their business.” [#5]
- The representative of a DBE- and SBE-certified trucking firm acknowledged some abuse of the “good faith efforts” process, noting that sometimes she will receive a bid request from a prime so that the prime can say it looked for bids. [#58]
- The owner of a DBE-certified engineering firm reported, “If the goal is 6 percent, then they want to make sure that your goal is limited to 6 percent. Sometimes you don’t get meaningful roles on the projects. The things they don’t want to do, they just pass it on to the subs.” [#9]

DBE subcontractors reported having been included in a prime’s winning bid, but not receiving any work from that prime.

- For example, when there are DBE requirements, the African American-owned DBE specialty- contracting firm described a barrier he called “sub-busting.” “Primes and ADOT send you invitations to bid and tell you who is bidding ... then they put on my record that I have been solicited.” Furthermore, he explained that subcontractors included in a prime contractor’s winning bid may not be given any portion of the work. [#1]
- In the Phoenix public hearing, the female owner of a contracting firm reported that her firm had been used by a prime contractor to meet a DBE contract goal and that she was dropped from the project. She indicated that she notified ADOT but that ADOT did not do anything about it. [PM#17]

**Effects of DBE contract goals on other businesses.** Some business owners and managers provided insights on the impact of DBE project goals on non-certified firms.

- For example, the female owner of a WBE-certified professional services firm said, “I’ve gotten some negative feedback from some of the smaller engineering firms directed at the programs and the fact that I’m in the program and they can’t be in the program. They think it’s affecting [them].” She added that these businesses believe the program is unfair. [#33]

## I. DBE Certification

Business owners and managers discussed the process for DBE certification and other certifications, including comments related to:

- Knowledge of certification opportunities (page 92);
- Ease or difficulty of becoming certified (page 92); and
- Advantages and disadvantages of DBE certification (page 94).

**Knowledge of certification opportunities.** Some interviewees discussed their level of understanding about how certifications.

- For example, the representative of white woman-owned specialty contracting firm indicated needing more understanding of WBE/SBE certifications and how they are differentiated. [AI#184]

**Ease or difficulty of becoming certified.** A number of interviewees commented on how easy or difficult it was to become certified.

**Many interviewees reported difficulties with the DBE certification process.** Several interviewees reported incidents in which state officials seemed too quick to make a judgment that the company applying for certification was a front. Some interviewees indicated that the certification process was time consuming or difficult. Comments included:

- A Hispanic representative of a DBE-certified minority-owned business reported that the certification process takes a lot of time and they always ask for the same thing. [#32]
- The female representative of an industry association described the certification process saying, “It’s an extremely difficult process.” [#68]
- The representative of a woman-owned professional services consulting firm reported that her “ADOT” certification has not been completed in seven months.” [AI#57]
- The Asian Pacific American representative of an engineering firm identified “definition of net worth” and its “unreasonable financial limits” as barriers to achieving DBE status. [AI#220]
- A minority-owned engineering firm stated, “It [certification] was not an easy path, it was the lack of knowledge [that] was the main thing. We had to look for assistance and I think that was one of our struggles.” [#7]
- The Hispanic American owner of a DBE-certified engineering firm reported the challenge that his name was not recognized as a Hispanic surname, when applying for certification. [#13]

- For the owner of a woman-owned DBE-certified trucking firm, DBE certification required 40 hours of paperwork that spread across two weeks (as the required paperwork had to be fit in between competing work responsibilities). [#23]
- A representative of a white woman-owned specialty service provider indicated not being able to qualify for certification through ADOT. "... we are not qualified as a small business as far as ADOT is concerned and they also have a barrier for personal assets; the qualifications should be reviewed and updated." [AI#190]
- A minority-owned design engineering firm suggested that the time it takes to certify is a barrier for some businesses. "For us [it] is that time is money, nobody is going to take time to mess with that [DBE certification] if there isn't any return on it." [#4]
- The business owner of a minority-owned engineering-related firm reported his frustration regarding obtaining certification. "... it [the DBE certification process] seems like you are guilty first and then you have to prove that you're innocent. You have all this paperwork, financial statements and tax returns. They definitely get into your life. I think that is challenging from a paperwork standpoint .... I have a general engineering license and [PE] license that says I can do 'A to Z.' But ADOT [for example] only says that you can only do 'A, B and C.'" [#5]
- The female owner of a trucking business found the DBE certification process to be "long, tedious and difficult." She reported not getting helpful assistance from ADOT throughout the process. Instead, she hired a firm to help walk her through the process that "stalled a little" adding additional challenges. [#22]

The same owner later added that she could not see any firm going through the certification process without having outside assistance. [#22]

- The owner of a WBE-certified specialty contractor stated that it was a hassle to be certified because of the paperwork. It took her two years to get the paperwork done. [#38]
- The female owner of a DBE-certified specialty contracting firm reported that it was difficult for her to become certified because she was buying into an existing company, and she had to show that it was "real" and not just "on paper." [#39]
- An owner of a DBE- and SBE-certified engineering firm indicated, "There is lots of paperwork every year." [#70]
- The African American representative of a minority-owned professional services provider reported not to find "a defined space or category in the ADOT system for a certified DBE that provides [their type of service]." This representative added, "We feel that we can be a vital piece in helping prime contractors meet their DBE goals by providing [that service] for their projects." [AI#212]

- At the Phoenix public hearing, the minority female co-owner of a staffing firm (PM#18) asked about ADOT's outreach plans to bring back DBEs into the program. "What incentives are you creating for the primes to go outside of the box in terms of not always using the same folks to do business with? That would attract some of the DBEs that have applied in the past and are no longer interested in being DBEs because they never got any business." [PM#18]
- The principal of a minority-owned design engineering firm recommended streamlining certification paperwork for DBEs. He suggested that ADOT could offer certification renewal every other year rather than requiring annual reviews. [#21]
- The representative of a WBE-, SBA and SBE-certified specialty contracting firm reported that certain constraints got in the way of working for ADOT. "... After we got our SBE, ADOT was soliciting new contracts. I filled out the paperwork; and, I was 'flat out' told by someone from ADOT that our owner did not come up through the trades and didn't do the physical work so we weren't qualified." [#14]
- A Hispanic female business owner said she had never obtained DBE certification for her firm "just because of the hassle." She claimed that she had attempted to get DBE certification through ADOT last year, but had given up because of the amount of paperwork required. She recommended simplifying the DBE certification process, saying that the current process has "too many loop holes" and is "complex" and "unnecessary." [#55]
- The leader of a local small business association reported that small businesses are wary of pursuing DBE certification because the process requires so much paperwork. [#56]

Some interviewees said that the DBE certification process was reasonable.

- For example, the representative of a DBE-certified engineering firm valued a somewhat rigorous DBE certification process. He stated, "I think you can't make it [DBE certification] too easy because things need to be verified, so I think that it's very important that that's kept that way." [#16]

**Advantages and disadvantages of DBE certification.** Interviews included broad discussion of whether and how DBE certification helped subcontractors obtain work from prime contractors.

Many of the owners and managers of DBE-certified firms interviewed indicated that certification helped their business get an initial opportunity to work with a prime contractor. [e.g., #53, #54]

- A Hispanic representative of a DBE-certified firm stated that because of the DBE requirement, his firm was able to get jobs. He stated, "It gave us a chance to do a little work and show others that we can do the work." [#32]
- A Hispanic DBE-certified general contractor felt that there will always be some people who resent DBE programs, and that as long as those people have any power or influence there will be disadvantages to having a DBE certification. [#50]

- The Asian-Pacific American president of a DBE-certified professional services firm reported having more difficulty getting work in cities that do not have a DBE Program. [#21]
- The owner of a WBE-certified specialty contractor reported that the WBE, SBE and DBE programs have helped her get her foot in the door by making connections and getting jobs. [#38]
- A Hispanic- and woman-owned firm in particular commented that certification would open new doors. [#40]
- When asked about the advantages of being certified, the female owner of a DBE-certified specialty contracting firm said, “I think there’s an opportunity to bid things because I’m being notified of ADOT of what’s coming up and the other huge thing is, on the job that I’ve already got, I get payment, and I know that I’m going to get payment every month. I have that knowledge that payment is coming in every month. I don’t have to worry about being 60 or 90 days out without getting paid.” [#39]
- Remarks from a representative of a professional engineering organization were, “The impression that I got from some of our members is that [certification] can be complicated and it takes a lot of paperwork. Once they get it done, they tend to be happy campers because once they were certified through ADOT; the firms are accepted through the City of Phoenix and other cities.” She added that one of the minority-firm members in the organization saw that her work increased following certification. [#42]
- A representative of a minority business organization indicated many of his small business members perceived the certification designation as a “hand-me-down.” He tries to convince businesses to pursue certification regardless of their pride and concern that others feel they have an unfair advantage. [#67]

Some interviews indicated that there are limited advantages, or even disadvantages, to being DBE-certified, or to having other certifications. For example:

- The African American representative of a minority-owned design engineering firm reported, “It takes time to get our minority qualification and we have not gotten any work. We spent 70 to 80 hours and we have not gotten anything but email about bidding. I have bid many times and have not gotten any answers.” [AI#205]
- Since acquiring DBE-certification, the owner of a woman-owned DBE-certified trucking firm reported that certification has not helped the firm secure the larger projects the owner desired. [#23]
- The owner of a minority design-engineering firm suggested that goal setting presents a challenge for DBEs. He reported that in his experience goal setting sets a ceiling; once the goal is met the prime stops seeking additional subcontractors. “We want to use you but we have this environmental firm [for meeting the goal], which is a service that most ADOT jobs are going to require.” [#4]

- The female owner of a WBE-certified professional services firm reported that there is a lot of paperwork to keep the certification. She has considered “dumping” the certification because she did not see any advantages to keeping it. However, one of the representatives from the city told her she should just keep the certification because she will not be able to regain the status easily. She added, “And so every year, I jump the hoops, give them my personal finances, give them the company’s finances, [I’ve] done all of the things that they’ve wanted done. It’s given me the opportunity to at least bid with them — we didn’t win anything — but it gave you the opportunity to at least bid.” [#33]

When asked if she had seen any disadvantage to certification, she stated, “No, I mean it opens a few more doors. It doesn’t mean that you’re going to get anything.” [#33]

- A minority-owned engineering-related firm reported some disadvantages of DBE certification. “I have had it since 2007 and I don’t know how much it has helped me. Use me as a DBE then I have more paperwork to fill out forms and participation things, how much it is subcontracted, and it is more of a headache. Use me as not a DBE and I get more work.” [#5]
- The female owner of a DBE-certified engineering firm reported, “We do projects in Arizona, we are a staff of 14; we would compete against firms who have 50 offices across the nation. We always try to point out in our proposals that we are woman-owned and DBE; but I don’t know if people read that as a benefit or not. Size is definitely what they look at, so I don’t know how we would compete against that.” [#43]

Some businesses expressed that there is a negative stigma associated with being a DBE, minority- or women-owned firm or small business. For example:

- A minority-owned design-engineering firm reported, “There is a stigma associated with DBE, WBE, MBE, etc. There is a negative connotation .... It is as if someone is making the prime consultants have to use the individual.” [#4]
- The representative of a DBE-certified engineering firm reported apprehension among primes about doing work with DBEs. [#16]
- The owner of a minority-owned DBE firm reported the stigma of “lower quality work” that surrounds minority-owned firms. [#17]

## **J. Overall Comments about the Preliminary Proposed Overall DBE Goal for FHWA-funded Contracts and the 2014 Availability Study**

Many of the verbal and written comments received during the public comment period for the 2014 Availability Study pertained to the level of the overall DBE goal ADOT has proposed.

### **Some public input supported a higher goal than the proposed overall DBE goal of 9.38 percent.**

Many providing verbal comments at the public hearings and written comments recommended that ADOT set an overall DBE goal for FHWA-funded contracts that was higher than the 9.38 percent proposed preliminary goal.

- The owner of an SBE- and DBE-certified service and supply firm reported, “The DBE goals should be raised into the teens or equivalent to the highest percentage of another state instead of only the 9.38% as proposed. Raising it to the highest possible percentage only give more opportunity to more DBE firms to participate.” [WT#7]
- The representative of a minority contracting association commented, “The [Association] recommends that ADOT utilize an overall DBE goal of 18.61 percent with 4.19 percent being race neutral and 14.42 percent as race conscious. This will result in increased business opportunities for DBE firms and will stimulate growth of existing businesses and the State’s economy.” The representative wrote, “Higher goals create business opportunities for the DBE companies to grow their business and succeed in the ADOT marketplace. A larger DBE goal incentivizes non-certified firms to apply for ADOT certification. While the existing goal has assisted DBEs with opportunities that would not have been there otherwise, the goals are so low that the cost of doing business with ADOT is more than the opportunity offered.” “From 2008 through 2010 we learned that a race neutral environment in the state of Arizona produced less than 1 percent of all work procured by the State to DBEs. From 2011 through 2013 we learned that implementing a race conscious goal increased the percentage of ADOT work performed by DBEs. [WT#9]
- The representative of a group of DBE-certified firms wrote, “The ADOT DBE Professional Services Task Force is recommending ADOT take aggressive measures to level the playing field for small, minority, and women-owned businesses and to remove barriers for DBE participation in federally-assisted projects by adopting an overall FHWA DBE goal of 18.61 percent. Moreover, the Task Force recommends a goal comprised of 4.19 percent race-neutral and 14.42 percent race-conscious components.”

The written testimony gave a number of points supporting this recommendation including, “Without a strong race conscious element, DBE participation will remain well below the actual levels of DBE availability. The DBE Proposed Goal and Methodology for Federal Fiscal Years 2015-2017 shows that DBE utilization measured by payments reaches just over 4 percent whether or not race-conscious measures exist. For these reasons, we recommend a higher overall goal and higher race-conscious goal to create a business environment that results in DBE utilization commensurate with availability.”



- The author also pointed out, “In Arizona, a small minority of DBEs are repeatedly used to achieve contract goals. The goals assessed for projects have been so low that only one or two trade areas at most are needed to meet goals. This results in minimal opportunity for other trades, representing the vast majority of DBE firms, to participate. Increasing goals to reflect actual availability creates an environment where the work is spread around, even within the DBE community itself.”

The written testimony also indicates, “A larger DBE goal incentivizes uncertified firms to apply for certification. While the existing goal has provided limited opportunities, the contract goals are so low that the cost of doing business on federal aid contracts is more than the opportunity offered.” In addition, the author reports that “for many years, ADOT DBE utilization has been significantly less than the proposed goal” and that “current utilization of DBE firms is substantially lower than the availability.” [WT#11]

- A representative of a group of DBE-certified firms made these same points. [WT#14]
- At the Tucson public hearing, the Subcontinent Asian American owner of an engineering firm (PM#12) said that he thought the race- and gender-conscious projection for ADOT’s proposed overall DBE goal was too low. He also recommended that ADOT select the upper end of the possible range of an overall DBE goal (18%) or use something in the middle of the range. [PM#12]
- A representative of a Hispanic American-owned engineering firm (PM#6) indicated that at the Tucson public hearing there was relatively high DBE availability for engineering, “What you really want is to be able to get some of the concrete people to work and some of the landscaping and other people that can be minority contractors that still have a chance to work with the times, but a goal like 9.3 percent ... is just too low to allow that to happen.” He urged ADOT to use an 18.3 percent overall DBE goal and adjust downward in the future, if it not supported. [PM#6]
- A female owner of a landscape architecture firm (PM#8) said at the Tucson public hearing that ADOT’s current and proposed overall DBE goal is low compared with states such as Oregon and Wisconsin. [PM#8]
- The Subcontinent Asian American owner of an engineering firm (PM#12) reported at the Tucson public hearing that ADOT needs to work to get more firms DBE-certified. He also urged ADOT to set a higher DBE goal. He indicated that a higher DBE goal would provide more incentive for potential DBEs to become certified. [PM#12]

- The Hispanic American male owner of an engineering firm (PM#14) testified at a one public hearing, “[ADOT’s DBE] goals are so low that a lot of firms do not enter the ADOT market.” He went on to recommend that ADOT select an overall DBE goal of 18.61 percent. “By utilizing that goal I think we can attract more small businesses to ADOT.” He further explained that promotion of small businesses has overall employment benefits to the overall economy. He also recommended a split between the race-neutral and race-conscious projections for this goal that was higher for the race-conscious portion. [PM#14]
- At one public hearing, the Hispanic male representative of a minority contracting association (PM#4) supported a higher DBE goal “I think it incentivizes some of these small business that used to be part of the program and dropped out [when ADOT went to a 100 percent neutral program]. If they see that the goals are coming back and the possibility that they have an opportunity to be able to do some work for ADOT, it will incentivize them to be recertified again.” He went on to say, “We have to get more of these potential DBEs that are out there to be certified as DBEs in order to increase the goals.” He urged ADOT to set the goal at the 18.61 percent level and adjust it downward if it is not working at that level. The minority male owner of a construction firm (PM#14) agreed with this approach. [PM#4]

Some participants in the public comment process raised questions as to whether the proposed 9.38 percent overall DBE goal for FHWA-funded contracts might be too high.

- The representative of a local public agency commented, “It is my understanding that these goals were developed from data collected from firms who appeared could someday become a DBE. Will you have a cut- off date for the final goal in 2015 for determining how many of these firms became DBE’s?” [WT#3]
- At the Tucson public hearing, a representative of a majority-owned engineering firm asked whether the analysis of potential DBEs considered whether firms would “dive into the ADOT pool.” [PM#5]

## **K. Summary of 2015 Public Meeting Comments and other Input**

Verbal and written comments solicited as part of additional stakeholder meetings in May and June of 2015 and as part of the 45-day public comment period in summer of 2015 ranged from input on ADOT’s proposed overall DBE goals to comments on bidding and delays in payment.

Public meetings held in Flagstaff, Yuma, Tucson and Phoenix provided opportunities for public meeting participants to hear a presentation about the Disparity Study and ADOT’s proposed overall DBE goals, as well as about other topics. Each participant was offered the opportunity to provide public comments during these meetings. Additional written testimony was received via email.

Public comments and written testimony included a number of topics.

- Discussion of ADOT's proposed overall DBE goals (page 100);
- Impact of higher overall goal and DBE contract goals (page 100);
- Continued inclusion of white women-owned DBEs as eligible to meet DBE contract goals (page 101);
- Impact of DBE contract goals on non-DBE firms (page 102);
- SDVOSB qualifying as a DBE (page 103);
- ADOT's technical assistance, paperwork and regulations (page 103);
- Bidding process for construction contracts (page 103);
- Existence of a "good ol' boy" network (page 103);
- Unfair bidding (page 104);
- Insurance requirements that prime contractors apply to subcontractors (page 104);
- Prompt payment (page 104); and
- Overall comments on the disparity study (page 104).

**Discussion of ADOT's proposed overall DBE goals.** Some public meeting attendees commented on ADOT's proposed overall DBE goals.

- A representative of an airport commented on ADOT's proposed overall DBE goals: "Their goals are lower than ours." [PM#28]
- A Principal in a DBE-certified engineering firm asked whether the goal is to "encourage utilization to be close to availability" or whether "there is a direct goal of trying to get more availability ... directly affect more DBEs entering the availability pool." [PM#32] [A team representative answered that the Federal DBE Program encourages both.]
- The minority female owner of a professional services firm reported, "Historically we have not had prime contractors regularly submit good-faith efforts when bidding .... Higher goals that reflect DBE availability absent the effect of discrimination would provide real time information on DBE availability and capacity. I would support a goal that reflects the actual DBE availability absent the effects of discrimination." [PM#45]

**Impact of higher overall goal and DBE contract goals.** The owner of a DBE-certified minority-owned general contracting and engineering company provided written comments indicating that, although his company has been in business for many years, "It is only until recently that companies have made the effort and have awarded us bids as DBE. Why? because the percentage has gone up."

He strongly recommended that the DBE percentage remain higher and that a mentor-protégé and a set-aside program be implemented. [WT#15]

**Continued inclusion of white women-owned DBEs as eligible to meet DBE contract goals.**

Several comments pertained to ADOT's proposal to not change the DBE groups eligible to meet DBE contract goals.

- The female owner an engineering-related firm said that she was in support of ADOT's decision to have white women-owned DBEs count toward DBE contract goals. "We really appreciate that ADOT made that decision." [PM#33]
- A Principal of a DBE-certified engineering firm provided written comments supporting ADOT's proposal that white women-owned firms remain eligible to meet DBE contract goals. "Thank you for the presentation on the disparity analysis that ADOT is currently undergoing for Disadvantaged Business Enterprises. As I understand it, the women owned business enterprise that provide engineering design and construction services exceed the 80% [disparity index] threshold for being considered as a DBE, but ADOT has chosen to still consider these businesses as DBE's [eligible to meet DBE contract goals]. I am in support of this decision. Furthermore, it is my understanding the disparity analysis groups together women owned business enterprises that provide engineering planning/design and construction services. The revenue differential between planning/design and construction services is significant, and it appears that the planning/design portion [consider alone] falls well below the threshold. If this is the case, I would like to suggest that the planning/design portion of this group be considered separately from the construction services in determining if the group meets the required threshold limits. Thank you for your consideration." [WT#17]
- The female president of an engineering firm also wrote in support of ADOT's proposal that white women-owned DBEs remain eligible to meet DBE contract goals. "It has come to our attention that ADOT continues to support WBE's in its DBE certification and goal setting program even though the Disparity Study found a 95% utilization rate [disparity index] for WBE's in FHWA governed contracts. We at [our company] fully support this decision. We understand that these findings were based on combining WBE construction contracts with design/planning contracts. The study specifies that on ADOT engineering related contracts only 3% WBEs were able to propose and their success rate as was at 0%. These findings show that WBEs utilization rate is not uniform through all disciplines. The group experiences severe disparity and substantial disadvantage in important work categories related to ADOT contracts and therefore deserves the continued protection of the DBE program." [WT#18]

She went on to write, "For future disparity studies, we would like to suggest that the design/planning consulting portion of WBE's be studied separately from the construction WBE's as the revenue differential is significant between design/planning projects and construction projects. Thank you again for your support of WBE within the DBE certification program." [WT#18]

- The president of a minority business trade association submitted written comments on behalf of his board of directors and members in support of ADOT's proposed inclusion of white women-owned firms as eligible to meet DBE contract goals. "It was noted in the findings of the Disparity Study performed by Keen Independent Research there was a utilization rate [disparity index] of Woman Business owners who are DBEs at 123%. This would show there is no disparity for women owned businesses. The over utilization was due to one company Coffman Specialties who received considerable large contracts that accounted for the over utilization. Further research showed Coffman Specialties was not eligible and denied DBE Certification. Removal of Coffman Specialties numbers from the study brought the utilization to around 90 percent utilization [disparity index] of Women DBEs showing there still is disparity." [WT#19]

"[The organization] strongly encourages that the Arizona Department of Transportation not pursue a waiver from the Federal Highway Administration to exclude Women DBEs from the DBE Program. Women DBEs are a vital part of the DBE Program and we feel it would be an injustice to them as well as degrade the program as a whole." [WT#19]

**Impact of DBE contract goals on non-DBE firms.** Two public meeting attendees commented on the impact of DBE contract goals on non-DBE firms.

- A representative of a non-DBE trucking firm reported that his company had done a lot of ADOT work over the years, but "in about 2014 or the end of '14, the DBE rates [goals] have been raised. And the unintended consequence of that is that, in fact, our firm has not gotten on ADOT job, paving job, this year in 2015, and we've always done quite a bit of ADOT work." [PM#38]

"I'd like to comment that we have not always been the lowest bid. I mean, I recognize that, but I've been told often enough that 'I can't give you the work because I have to meet my DBE goals.' And this falls into ... the inordinate amount of weight going to one specific industry or another. It's happening now ... and it's happening to a great extent." "I think we need to continue to look at this overweighting, the easy way to achieve the DBE goal by going to trucking, because we can't continue to survive without bring it upward." [PM#38]

"One of the contributing factors to this disparity is the fact that a lot of the ADOT work now that's come up in the past year or two is what we call 'pave and preservation,' which is just 'mill and fill.' And you've got a stripper guy out there and you've got a guy that does milling, and so where else are you going to get your [DBE] participation ... you have to get trucking." [PM#38]

- After listening to this comment, the president of a minority business association observed, "Looking back at this gentleman's issue, I would look at it that DBE firms are stepping up their game and meeting the requirements necessary to go and do that work and compete with non-DBE firms." [PM#40]

- The representative of a non-DBE trucking firm responded, “DBE firms have overloaded themselves. They can’t perform the work. I’m getting called to numerous jobs, ‘please come bail us out, we need trucks, we can’t get the trucks, these guys have overcommitted, they can’t get it done.’ So we are going back up there to try and help out as best we can.” [PM#38]

**SDVOSB qualifying as a DBE.** One individual who made a written comment stated, “If ADOT follows the Federal guidelines how come SDVOSBs [service-disabled veteran-owned small business concerns] aren’t recognized as DBE?” [WT#14]

**ADOT’s technical assistance, paperwork and regulations.** A Principal in a DBE-certified engineering firm said, “The assistance that ADOT gives, from our experience with our company ... the assistance that ADOT gives in terms of dealing with the paperwork and the compliance and the regulations is very beneficial. It doesn’t reduce the amount of it, though, and that’s still a barrier to entry for small businesses.” [PM#32]

**Bidding process for construction contracts.** Some commented on the bidding process for construction contracts.

- A State Senator reported that she has constituents who are owners of companies who do highway projects. “I want to know ... it seems like, down here in Yuma County ... [that projects] are done by companies out of Maricopa County. We are large enough now in Yuma County to be able to handle large projects, and have the businesses that can do them and would like to be considered for ones that are designated for Yuma County.” [PM#29] In response, an ADOT representative went through the low bid process typically used by local governments for construction contracts.
- A City of Yuma staff member also reported how bids were advertised, “We posted through AZPurchasing which posts our bids as well as pretty much everywhere in Arizona. And then any company that is registered through that website or that will see it in the newspaper, they would go in, download all the documents for the bid, and then they will have to meet our, you know, insurance requirements. That’s one of the big ones.” She went on to report that bonding was required and that contractor qualifications to do the job are reviewed. [PM#27]

**Existence of a “good ol’ boy” network.** The minority female co-founder of a services firm commented on the existence of a “good ol’ boy” network. She said, “Well, the good old boy network as it stands ... and was one of those who believed that unless you are part of that group that have been doing business with the same people all the time, the opportunity to bring new minority women-owned business are very slim.” She went on to say, “The amount of work that we have received is very minimal ....” “So it isn’t like people don’t know who you are. It’s more that whoever they have been doing business with and they’re comfortable with, that’s who they stick with. So my suggestion was that there’s got to be a way to establish some kind of incentive to the primes that will give an opportunity to those companies that they have not used in the past; otherwise, they will continue to work with those people who they’re comfortable with.” [PM#43]

**Unfair bidding.** One individual submitting written comments reported that there were unfair bidding practices regarding supplies on a large ADOT project. It appeared, according to the commenter, that a supplier underbid certain items in order to get other parts of the entire bid where it had distributorship advantages. He reported, “This is unfair to other suppliers who only offer one or two items and can[t] compete with the million \$ Corp. This is been going on for quite a while with ADOT knowing of the problem but don’t want to fix it because [these] are the same companies who have deep pockets and pay for golf outings, sponsor out of town conferences, etc.” [WT#14]

**Insurance requirements that prime contractors apply to subcontractors.** The owner of a DBE-certified minority-owned construction-related business reported unfair treatment by prime contractors that require excessive insurance coverage by subcontractors. “Well I don’t have a problem meeting the ADOT requirements. It’s the contractor requirements that I have a problem with ... the contracts that I get make me the prime insurer of the project, basically, and I can’t keep them.” [PM#31]

**Prompt payment.** The owner of a DBE-certified minority-owned general contracting and engineering company wrote, “... we have also experienced what are considered discriminatory practices by not being paid under the prompt payment act and the General Contractors withholding a retention .... Further, that guidelines be placed to prevent General Contractors from withholding payment and arbitrarily accusing DBE of delay of job.” [WT#15]

**Overall comments on the disparity study.** A representative of a local public agency provided a written comment indicating that “the presentation and the methodology look thorough” and went on to provide some suggestions about how to organize it so that it is easier to follow. [WT#16] Others added:

- A State Senator reported [PM#29] said that “All I have to say is that the work that you did was enormous.”
- A representative of an airport [PM#30] said, “This is extremely valuable for us because we have the same requirement to do the same document that you guys have just produced ....”