EXECUTIVE SUMMARY
Draft 2017 ADOT Availability Study
Keen Independent Research LLC

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 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 Aviation Administration (FAA) funds and (c) Federal Transit Administration (FTA) monies. Each overall goal is for three years, and is expressed as the percentage of contract dollars that will go to firms certified as DBEs.

FHWA funds represent most of the USDOT funds ADOT receives. In federal fiscal year 2017, ADOT had an overall DBE goal of 8.90 percent for FHWA-funded contracts. ADOT has met this goal or has been close to meeting it in recent years. The information in the 2017 Availability Study indicates a preliminary overall annual goal of 9.55 percent for FHWA-funded contracts for the three federal fiscal years beginning October 1, 2017.

Analysis of DBE availability for FAA-funded contracts suggests an overall DBE goal of 8.05 percent for the three years beginning October 1, 2018. A preliminary overall DBE goal for FTA-funded contracts is 2.79 percent, although ADOT should consider potential adjustments prior to submitting the goal to FTA based on the most current information on recent DBE participation it has in spring 2019.

The left column of Figure ES-1 shows the current DBE goals for FHWA-, FAA- and FTA-funded contracts and the right column presents preliminary overall goals for ADOT consideration.

Figure ES-1.
Current and potential future overall DBE goals for FHWA-, FAA- and FTA-funded contracts

<table>
<thead>
<tr>
<th></th>
<th>Current DBE goal</th>
<th>Potential future DBE goal</th>
<th>Years for future DBE goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>FHWA</td>
<td>8.90 %</td>
<td>9.55 %</td>
<td>FFY 2018 – FFY 2020</td>
</tr>
<tr>
<td>FAA</td>
<td>4.87 %</td>
<td>8.05 %</td>
<td>FFY 2019 – FFY 2021</td>
</tr>
<tr>
<td>FTA</td>
<td>7.25 %</td>
<td>2.79 %</td>
<td>FFY 2020 – FFY 2022</td>
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Development of the Overall DBE Goals

Federal regulations in 49 CFR Part 26 and other USDOT guidance direct how an agency sets its overall DBE goal. The process includes two steps: (1) developing a “base figure,” and (2) considering “step 2” adjustments. ADOT should consider all of the information in the 2017 Availability Study and the 2015 Disparity Study when setting its overall DBE goals.

Keen Independent Research (Keen Independent) conducted the 2017 Availability Study and examined possible overall DBE goals based on federal regulations and USDOT guidance. Keen Independent prepared the 2014 Availability Study and the 2015 Disparity Study for ADOT as well, and ADOT DBE goals developed as part of those studies were accepted by USDOT.

The availability analysis calculates the percentage of dollars in FHWA-, FAA- and FTA-funded contracts that might be expected to go to DBEs if there were a level playing field for firms to obtain these prime contracts and subcontracts. As with the 2014 and 2015 studies, Keen Independent examined what availability would have been on recent prime contracts and subcontracts to project future DBE participation. The availability analysis accounts for the type and size of a contract, its location in the state and whether it was a prime contract or subcontract. Keen Independent’s approach to examining DBE availability in the 2017 Availability Study was consistent with the 2014 and 2015 studies:

- The study team collected data on ADOT’s past FHWA-, FAA- and FTA-funded contracts, including subcontracts. The 2017 study examined contracts from July 2014 through June 2016.

- Keen Independent determined that Arizona was the relevant geographic market area for ADOT transportation contracts as more than 90 percent of contract dollars went to firms with locations in the state (true in both the past and the 2017 studies).

- In addition, the study team identified the 40 specific types of work performed on ADOT transportation contracts that accounted for more than 90 percent of ADOT’s prime contract and subcontract dollars. (The 2017 study confirmed that these 40 types of work still comprised a very large percentage of ADOT’s USDOT-funded contracts.)

- Based on data on available firms, Keen Independent calculated the total number of firms and the total number of DBEs available for each prime contract and subcontract from July 2014 through June 2016.

- Keen Independent then dollar-weighted results of each of the availability analyses for individual contracts to determine overall DBE availability for FHWA-, FAA- and FTA-funded contracts.

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1 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).
Collection of July 2014 through June 2016 data on FHWA-, FAA- and FTA-funded contracts.

In the 2017 Availability Study, Keen Independent examined availability of DBEs for USDOT-funded contracts awarded between July 2014 and June 2016, as these were the most recent contract data for completed state fiscal years at the start of the study. The study team compiled detailed information about prime contracts and subcontracts for more than 600 FHWA-, FAA- and FTA-funded contracts (and more than 4,000 subcontracts) from ADOT records. Keen Independent determined the location of the contract and coded the work performed based on one of 40 different types of highway construction, engineering or other work employed in the study.

Keen Independent also calculated the dollars retained by the prime contractor or consultant by deducting the dollars subcontracted from the total contract amount. In that way, the total dollars examined did not double-count any subcontracted portions.

Because the study team conducted a separate analysis of the South Mountain Freeway project, any contract dollars associated with the design-build team for July 2014 through June 2016 were excluded from the availability analysis for FHWA-funded contracts (explained on the following page).

Data on available firms. As part of the 2014 Availability Study and the 2015 Disparity Study, Keen Independent compiled data about availability of DBEs and other firms through interviews with 5,185 businesses in Arizona. The 1,419 businesses reporting qualifications and interest in ADOT and local agency transportation-related prime contracts and subcontracts were included in the final analyses. Because of the comprehensiveness and detail of the availability information, Keen Independent used these data for the 2017 Availability Study.

The 2014 and 2015 studies used information about DBE certification status of firms at the time of those studies. Keen Independent updated information about current DBE status among the 1,419 firms in the availability database. The study team determined that certain non-certified firms had obtained DBE certification and examined whether any firms had been denied DBE certification or grown too large to be DBE-certified based on ADOT information.

When examining availability for FHWA-funded contracts, the study team also used information collected by Donato Consulting in 2015 about firms that were not DBE-certified that might become certified if they applied for certification.

Calculation of the dollars of DBE participation expected for July 2014 through June 2016 contracts assuming a level playing field. For each prime contract and 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).

From this contract-by-contract analysis, the study team had availability estimates for more than 4,700 prime contracts and subcontracts for July 2014 through June 2016.

Keen Independent then dollar-weighted the percentage DBE availability results for each prime contract and subcontract to develop the overall availability figure. Small prime contracts or
subcontracts received the lowest weights and the largest contracts received the highest weights. This analysis produced estimates of the percentage of ADOT contract dollars that might be expected to go to DBEs if there had been a level playing field for firms available for ADOT contracts. Keen Independent separately conducted this analysis for FHWA-, FAA- and FTA-funded contracts.

**Availability results.** Establishing a “base figure” is the first step in calculating an overall goal for DBE participation.

Results of the above analyses provided the base figure availability for DBEs for FAA- and FTA-funded contracts assuming the future USDOT-funded contracts are similar to those in July 2014 through June 2016.

The analysis also provided the larger of the two components of the base figure for FHWA-funded contracts. It was then combined with results from a separate analysis of the South Mountain Freeway project. (Note that the FHWA base figure analysis includes currently-certified DBEs and “potential DBEs,” as explained in the full 2017 Availability Study report.)

The availability results are:

- 9.25 percent DBE availability for FHWA-funded contracts (including potential DBEs). This is one component of the base figure for FHWA-funded contracts.
- 8.05 percent DBE availability for FAA-funded contracts.
- 2.79 percent DBE availability for FTA-funded contracts.

**Consideration of South Mountain Freeway in the base figure for FHWA-funded contracts.**

The South Mountain Freeway is a unique project unlike other activity examined in the July 2014 through June 2016 time frame. About one-quarter of total ADOT FHWA-funded contract dollars expended in state fiscal years 2018, 2019 and 2020 will be associated with this project. For these reasons, Keen Independent separately examined DBE availability for this project based on the combined design and construction DBE contract goal established for this contract.

Analysis of the base figure for FHWA-funded contracts weights the results of the availability analysis for FHWA-funded contracts not including South Mountain (9.25%) and the DBE contract goal for the project. The calculation is as follows:

- Three quarters of the base figure for FHWA-funded contracts is based on the 9.25 percent DBE availability result from the analyses of July 2014 through June 2016 FHWA-funded contracts not including South Mountain Freeway.
- One quarter of the base figure for FHWA-funded contracts is based on the 11.85 percent combined DBE contract goal for the South Mountain Freeway project.
- The combined base figure for FHWA-funded contracts is 

\[(0.75 \times 9.25\%) + (0.25 \times 11.85\%) = 9.90\%\]

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2 From the ADOT 2017-2021 Five-Year Transportation Facilities Construction Program.
Potential step 2 adjustments. Per the Federal DBE Program, ADOT must consider potential step 2 adjustments to its base figures when it determines its overall annual DBE goals for FHWA-, FAA- and FTA-funded contracts. The factors are:

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.3

The information presented in the 2017 Availability Study provides results that ADOT should review when considering if it will make an adjustment. Some possibilities are provided below.

Downward step 2 adjustment for FHWA-funded contracts. 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). USDOT suggests that such data indicate current capacity of DBEs to perform work.

The median DBE participation ADOT reported for its FHWA-funded contracts for FFY 2014, FFY 2015 and FFY 2016 (based on payments) was 9.20 percent.

USDOT “Tips for Goal-Setting” suggests taking one-half of the difference between the base figure and the measure of current capacity to calculate the step 2 adjustment for that factor. One-half of difference between the 9.90 percent base figure and the 9.20 percent median past participation is 0.35 percentage points (9.90% - 9.20% = 0.71% and 0.71% ÷ 2 = 0.35% rounded). Subtracting that amount from 9.90 percent produces a proposed goal of 9.55 percent (9.90% - 0.35% = 9.55%).

No step 2 adjustment for FAA-funded contracts. There are relatively few FAA-funded contracts in any year, which makes it difficult to consider past DBE participation as an indicator of current capacity of DBEs to perform work on FAA-funded contracts. For example, for FFY 2014, ADOT reported that there were no payments on any FAA-funded contracts in that year.

When determining its current overall DBE goal of 4.87 percent for FAA-funded contracts, ADOT did not make any step 2 adjustments. ADOT might also decide not to make an adjustment for its future overall DBE goal for FAA-funded contracts. If so, its DBE goal for FFY 2019 through FFY 2021 would be 8.05 percent, as presented in the discussion of the base figure.

Future consideration of step 2 adjustment for FTA-funded contracts. The DBE participation indicated in ADOT’s Uniform Reports for FTA-funded contracts is considerably higher than the 2.79 percent base figure for two out of the past three federal fiscal years. Similar to the analysis above, ADOT might make an upward step 2 adjustment based on median past DBE participation for FTA-funded contracts in the most recent three fiscal years.

3 49 CFR Section 26.45.
Because ADOT does not need to introduce a new overall DBE goal for FTA-funded contracts until October 1, 2019, it might postpone consideration of a step 2 adjustment until it knows the DBE participation on FTA-funded contracts for FFY 2017 and FFY 2018. Keen Independent recommends that ADOT consider a step 2 adjustment based on data that incorporate those results.

The full Availability Study contains detailed information about these data, analytical methods and potential adjustment factors.

**Portion of the Overall DBE Goals to be Met through Neutral Measures**

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 (a) race- and gender-neutral means, and (b) 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.

**FHWA-funded contracts.** The first column of Figure ES-2 presents the neutral and race-conscious components of ADOT’s FFY 2015 through FFY 2017 overall DBE goal for FHWA-funded contracts. ADOT projected that it would achieve 5.00 percentage points of the 8.90 percent overall DBE goal using neutral measures. The remainder was projected to be achieved through race-conscious means such as DBE contract goals.

The 5.0 percent neutral projection was based on the actual participation of DBEs on FHWA- and state-funded contracts without DBE contract goals examined in the 2015 Disparity Study.

It appears that this projection remains the most accurate estimate of DBE participation in future FHWA-funded contracts if ADOT operated a solely neutral program. Using a 5.00 percentage point projection of neutral DBE participation for FFY 2018 through FFY 2020 contracts, ADOT would project that 4.55 percentage points of its overall goal would be achieved through race-conscious means. ADOT would continue to employ DBE contract goals for certain FHWA-funded contracts.

**Figure ES-2.**
Current ADOT overall DBE goal and example of overall goal and projections for FFY 2018 – FFY 2020

<table>
<thead>
<tr>
<th>Component of overall DBE goal for FHWA</th>
<th>FFY 2015-FFY 2017</th>
<th>FFY 2018-FFY 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall goal</td>
<td>8.90 %</td>
<td>9.55 %</td>
</tr>
<tr>
<td>Neutral projection</td>
<td>5.00 %</td>
<td>5.00 %</td>
</tr>
<tr>
<td>Race-conscious projection</td>
<td>3.90 %</td>
<td>4.55 %</td>
</tr>
</tbody>
</table>

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4 9.55% - 5.00% = 4.55%.
**FAA-funded contracts.** DBE participation based on payments in ADOT’s Uniform Reports for FAA-funded contracts was 10.97 percent in FFY 2015 and 1.65 percent in FFY 2016.\(^5\) If ADOT chooses an overall DBE goal of 8.05 percent for FAA-funded contracts, it might project that it will continue to meet 100 percent of its goal through neutral means.

**FTA-funded contracts.** In recent years, ADOT has been able to attain its overall DBE goal for FTA-funded contracts solely through neutral means. If these conditions continue, depending on what goal it chooses after considering a step 2 adjustment, ADOT might project that it will meet 100 percent of its goal through neutral means.

**Contents of the Availability Study**

The Availability Study report describes the methodology used to compile and analyze contract data and availability data, and the step-by-step results for developing overall DBE goals for FHWA-, FAA- and FTA-funded contracts.

Definition of terms, the legal framework for the Availability Study and a description of availability data are included as appendices.

**Public Comments Concerning the Draft Report**

ADOT has published a draft of this Availability Study on its website and has made a hard copy available at its Business Engagement and Compliance office located at 1801 West Jefferson, Suite 101, Phoenix AZ 85007. It has also published its Draft Proposed Preliminary Three-Year Overall DBE Goal & Methodology for its proposed overall DBE goals for FHWA-, FAA- and FTA-funded contracts. The public comment period for the report and proposed overall DBE goal will be open through June 22, 2017.

ADOT will hold public meetings concerning the 2017 Availability Study and ADOT’s proposed DBE goals:

- From 4 pm to 6 pm on Tuesday, June 13 at Ellie Towne Community Center, 1660 W. Ruthrauff Rd. Tucson, AZ 85705; and
- From 4 pm to 6 pm on Thursday, June 15 at ADOT’s BECO office 1801 W. Jefferson St, Suite 101 in Phoenix, AZ 85007.

The public will be able to give feedback at those meetings and provide written comments (a) in person at the hearings, (b) at the BECO website [http://azdot.gov/business/business-engagement-and-compliance](http://azdot.gov/business/business-engagement-and-compliance), (c) via email at info@keenindependent.com, (d) through regular mail at 1801 West Jefferson, Suite 101, Phoenix AZ 85007 or (e) via fax at 602-712-8429.

Keen Independent will review information from the public meetings and from written comments submitted before preparing a final Availability Study report. This process closely follows the approach for the 2014 Availability Study and 2015 Disparity Study.

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\(^5\) ADOT reported that there were no payments on any FAA-funded contracts in its Uniform Report for FFY 2014 (i.e., $0 utilization of any firms, DBE or non-DBE, in that year based on payments). Therefore, ADOT could not calculate a percentage DBE participation based on payments for that year.