

Every Day Counts (EDC) Arizona Local Public Agency Stakeholder Council Meeting Minutes

DATE: Thursday, June 13, 2019

TIME: 10:00AM - 2:00PM

LOCATION: Maricopa Association of Governments (MAG) – 302 N. 1st Ave, Phoenix, AZ 85003

WELCOME AND INTRODUCTIONS

- Purpose and intent of the EDC meetings by Mark Henige.
- Arizona Local Public Agency Stakeholder Council is helping local public agencies by finding solutions to issues impacting their cities/towns/counties/tribes. How can we work together to deliver projects efficiently.

RECAP AND SUMMARY OF JUNE 13, 2019 MEETING AND TOPICS – RECAP BY MARK HENIGE

- Mark reiterated that Matt Tolman from the ADOT Right-of-Way (ROW) section gave best and worst case schedule scenarios and how to manage them appropriately. Matt discussed scheduling tools, planning ahead and what planners and a Project Manager (PM) can do to better understand ROW.
- Steve Olmsted, NEPA Assignment Manager, ADOT Environmental Planning Group (EPG) gave a follow up discussion to his presentation. EPG is conducting a long term project development on water run-off. ADOT is using 2D modeling opportunities to better study conditions and what tools are most cost effective. ADOT is looking at user friendly integration with design engineering. EDC has a 2D hydraulics forum for webinars if you are more interested in the topic.
https://www.fhwa.dot.gov/innovation/everydaycounts/edc_5/change2.cfm
- General updates
 - ADOT completed the action items listed on the March 14, 2019 minutes.
 - Mark encourages topics discussed at EDC meetings to be shared and discussed at the Technical Advisory Committee (TAC) meetings. Also encouraged sharing information on EDC meeting dates and to invite TAC members to attend the next EDC meeting on September 12, 2019.

JUNE 2019 MEETING PRESENTATION – 3D DIGITAL DELIVERY MODEL BASED DESIGN CONSTRUCTION (MBDC)

Presentation by David Rutkowski, John Matern, and Ariel Froerer of Kimley-Horn (KH).

- With 3D digital delivery the user can provide data throughout the lifecycle of a project.
- UDOT has done or is currently working on 12 digital delivery projects. KH has been involved with 5 digital delivery projects to date.
- With 3D modeling the need for plan sheets diminishes as there is only a need for CAD files.
- SR 209 (9000 South) is a digital delivery case study that shows different software programs and design groups working together on the project.
- The software helps with coordinating 3rd parties such as municipalities, utilities and key stakeholders. Additional benefits include fewer change orders, automated machine guidance.
- Design cost is now comparable to a traditional plan sheet project. Lower design cost is expected in the future.

VIDEO OF THE MONTH – VIRTUAL PUBLIC INVOLVEMENT

https://www.fhwa.dot.gov/planning/public_involvement/vpi/

PUBLIC INVOLVEMENT PLAN (PIP)

Discussion led by Kim Noetzel, Assistant Communications Director, ADOT Community Relations.

- A handout discussed frequently asked questions about the ADOT Public Involvement Plan.
- The PIP discusses how ADOT will engage people of all races, cultures, disability status and income levels, as well as Limited English Proficient and Environmental Justice populations, during all phases of transportation project delivery.
- The PIP outlines specific strategies and tactics to ensure compliance with mandatory federal nondiscrimination regulations; the National Environmental Policy Act (NEPA) and the Code of Federal Regulations 23.
- The PIP must be used by all ADOT employees, all consultants, local governments and others who are engaging, informing or involving the public.
- It is important to know the demography of your audience and have materials that cater to their native language. Sometimes English and Spanish (which are usually standard) is not enough. Many communities are seeing a rise of Asian speaking residents.
- Must display Title VI language signage and brochures for public events, meetings or other instances when you are engaging the public or requesting input.
- Have Americans with Disabilities Act compliant meeting locations and make accommodations for vision and hearing impaired attendees.

LAKE COUNTY ROAD SAFETY VIDEO

<http://www.lakecountyil.gov/3936/Road-Safety>

SEPTEMBER MEETING TOPIC – BRIEF OVERVIEW

Mohamed Noun, ADOT Statewide Utility Engineer.

- Mohamed provided an overview of the Utilities and Railroad process, challenges and best practices. A full presentation will be made at the September meeting.

Steven Moore, ADOT Features Inventory Services Supervisor.

- Steven provided an overview of the Americans with Disabilities Act (ADA) Features Inventory Survey – Requirements for local agencies. A full presentation will be made at the September meeting.

VIDEO OF THE MONTH – PROJECT BUNDLING

<https://www.youtube.com/watch?v=txEJoGdvqjs&feature=youtu.be>

FEDERAL HIGHWAY ADMINISTRATION (FHWA) UPDATES:

Discussions lead by Susan Webber, FHWA

- U.S. Department of Transportation announced the recipients of \$321.4 million for Federal Lands and Tribal projects. Among them is the Salt River Pima Maricopa Indian Community for a project to make improvements to Pima Road. Widen and upgrade existing Pima Road near Salt River Pima Maricopa Indian Community to improve operations, and improve safety. When completed, this project will have addressed a road issue responsible for one in five community accidents, as well as replace some sections of pavement that are 50 years old.

- The most recent Better Utilizing Investments to Leverage Development (BUILD) Notice of Funding Opportunity (NOFO) has been posted on the USDOT website.
<https://www.transportation.gov/buildgrants/build-nofo>. Applications are due by July 15, 2019.
- The Infrastructure for Rebuilding America (INFRA) NOFO is expected soon. The website for INFRA Grant information is: <https://www.transportation.gov/buildamerica/infragrants>.
- FHWA has released their Transportation Performance Management website <https://www.fhwa.dot.gov/tpm/> Near the bottom of the webpage, under Transportation Performance, the viewer can click on “State Performance Dashboard and Reports” to get to a US map. Clicking on a State will take the viewer to the State Performance Dashboard, where one can then click on “Learn more about...” for each topic shown.
- The FHWA Arizona Division Office has recently seen change orders processed for updating the prevailing wages on projects. Because of the “10 day rule,” this shouldn’t be necessary. The 10 day rule states, “... an amendment, notice of which is published less than 10 days before the opening of bids, shall be effective unless the agency finds that there is not a reasonable time still available before bid opening to notify bidders of the modification” In other words, if a wage rate amendment is posted on the DOL website or is published in the Federal Register less than 10 days before a bid opening, and ADOT determines there isn’t enough time to notify bidders so that the bidders may adjust their bids accordingly, then the most recent wage rates before that amendment will be in effect for that contract. The wage rates should not be adjusted after the bids are opened.
- The US Department of Labor (USDOL) is transitioning the [WDOL.GOV](https://beta.sam.gov) website to <https://beta.sam.gov>. Registered users will be able to follow specific wage determinations and receive email alerts when changes or modifications are published. Tom Deitering added that this website is also where users can find out if a contractor has been suspended or debarred from doing work on any Federal-aid contracts.

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)

This presentation was cancelled as Larry Talley, ADOT HSIP Coordinator was unable to attend.

CONTRACTS AND SPECS

Discussion led by Sarkar Rahman, ADOT Contracts and Specs.

- Bid ready plans, specifications and estimates (PS&E) funding re-cap sheet. Process for requesting construction funds.
- Consult and determine public relations, construction engineering and post design services amounts with ADOT project manager at the initiation stage of the project.
- Be attentive to separate bid items (above the line) and non-bid items (below the line item).
- Use appropriate improvement codes (for both above the line and below the line items).
- Designate appropriate column to show funding types.
- Always make distinction in the detail recap among federal participation, 100% local fund but eligible for federal participation, 100% local fund and not eligible for federal fund.

PROJECT MANAGEMENT GROUP (PMG) UPDATES

Discussion led by Jennifer Acuna, PMG Project Manager.

- Steve Boschen gave an update regarding the Highway User Revenue Fund (HURF) Exchange. 16 projects are expected to rollover for FY 19/20. If possible utilize HURF Exchange.
- Revisited PMG Workplan.
- Recap 'fixed' Construction Engineering (CE) costs.
- Intersection Control Evaluation Guidance being prepared by ADOT.
- Intergovernmental Agreement (IGA) - set estimates for post design and CE costs. Instead of moving forward with a set 14% to 15% for Post Design Services & CE costs, an estimate will be prepared by the ADOT Resident Engineer (RE) and submitted for the LPA's approval. This is in an effort to better estimate the construction engineering efforts in the design phase. The amount will not be fixed, but if a bid comes in high, the amount will not increase as they did in the past due to it being a percentage.
- ADOT will no longer be splitting projects up into phases, if all phases are required to satisfy funding requirements. Please let your Project Manager know if a federal aid project will need to be split into phases, and advise as to when the remaining phases will be constructed. As a reminder, any project that receives federal funding must be constructed within the 10-year period...this includes any phases that are part of the connectivity of the project.

ROUNDTABLE:

No roundtable discussion.

ANNOUNCEMENTS - UPCOMING EDC MEETINGS

- September 12, 2019
- December 12, 2019

JUNE 13, 2019 MEETING – FOLLOW UP – ACTION ITEMS

Action Required by ADOT Staff:

- Can bridge structures be considered for HURF Exchange?
It would have to be an eligible use of STBGP funding, as that is what is being swapped. As an off-system bridge can be funded with STBGP this could be done with HURF exchange. But, this project has to be programmed within the COG/MPO TIP. They could not trade our Off System Bridge for HURF Exchange.

Action Required by EDC attendees:

- Share with member agencies:
 - 3D Digital Delivery Model Based Design Construction (MBDC)
 - Public Involvement Plan (PIP)
 - Contracts and Specs Discussion
- Invite member agencies to the September 2019 meeting. The meeting focus is:
 - Utilities and Railroad - Process, challenges and best practices.
 - Overview of the Americans with Disabilities Act (ADA) Features Inventory Survey.

ADJOURN

- June 13, 2019 at 1:45 pm

ATTACHMENTS

- Meeting Agenda
- Meeting Attendees
- Kimley-Horn Digital Delivery Handout
- Communications Presentation
- Communications Public Involvement Plan
- Virtual Public Involvement Factsheet
- ADOT Contracts and Specifications (C&S) Presentation
- Project Bundling Factsheet

Every Day Counts

Council ALPA Stakeholder Councils

ADOT Contracts and Specifications

Presentation by:

Sarker Rahman

ADOT, **Contracts and Specifications**

June 13, 2019

Every Day Counts

Council ALPA Stakeholder Councils

ADOT Contracts and Specifications

So, who are we?

Contracts and ADOT Specifications (C&S):

- Publish and manage Standard Specifications, Prequalify contractors, Administer the procedures of developing contracts documents, review PS&E and finalize estimate, submit DBE Goals request, submit fund authorization request, advertise and recommend award to the STB for contracts of construction projects.

Every Day Counts

Council ALPA Stakeholder Councils

ADOT Contracts and Specifications

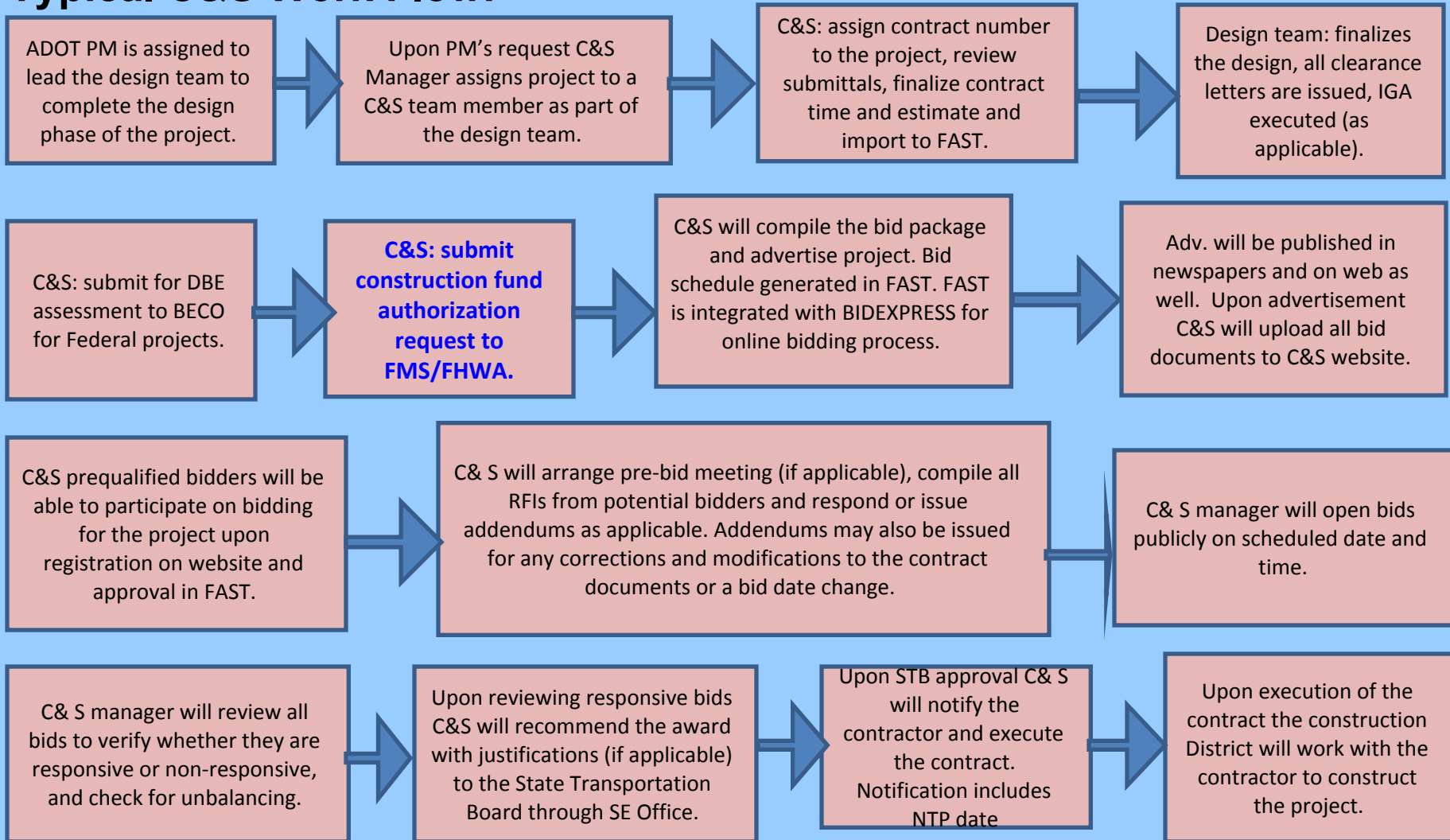
- **Briefly Major C&S Functions are:**
 - Review PS&E for Biddability, Awardability &, Constructability
 - Develop Project Estimate and Specifications
 - Submit - DBE Goal Request
 - **Initiate FHWA Authorization for Construction Funds**
 - Advertise & Recommend to Award/Rejection of Project

Every Day Counts

Council ALPA Stakeholder Councils



Typical C&S Work Flow:



Every Day Counts

Council ALPA Stakeholder Councils

ADOT - Contracts and Specifications

- **Prior FHWA Authorization:**
 - Finalize PS&E
 - Issue all the Clearance Letter
 - Approval of PIF/Design Exceptions
 - Approval of Program Amount (TIP)
 - Execution of all Agreements (IGA/JPA)
 - Complete DBE Goal Assessment
 - Receive Local Match & other Funds

Every Day Counts

Council ALPA Stakeholder Councils

ADOT Contracts and Specifications

- **Typical FHWA Authorization Package Includes:**
 - **Cover Letter**
 - **Detail Recapitulation**
 - **FMIS Form**
 - **Fund Obligation Request Form**
 - **Location Map**
 - **Copy of TIP Reference**
 - **Copy of PIF/Certification**
 - **Copy of Approved Design Exception Letter**

Every Day Counts

Council ALPA Stakeholder Councils

ADOT Contracts and Specifications

A Sample Detail Recap for LPA Project:

DETAILED ESTIMATE RECAPITULATION

0000 MA GLN T0069 01C

CMAQ-GLN-0(255)T

CITY OF GLENDALE; CAMELBACK ROAD – 79TH AVENUE TO 83RD AVENUE

CREATED: 03/06/18

REVISED:

ENGINEER: V RASHID

DESCRIPTION	FHWA CODE	ESTIMATED COST	FEDERAL PARTICIPATION	FEDERAL FUNDS	LOCAL FUNDS	LOCAL FUNDS	LENGTH IN MILES
				94.30%	5.70%	100.00%	
ROADWAY	28	250,000	227,250	214,297	12,953	22,750	0.530
STRUCTURES							
TRAINEES							
SUBTOTAL		250,000	227,250	214,297	12,953	22,750	0.530
CONSTRUCTION ENGINEERING	14%	35,000	31,815	30,002	1,813	3,185	
CONSULTANT SERVICES	1%	2,500	2,272	2,142	130	228	
CONSTRUCTION CONTINGENCY	5%	12,500	11,363	10,715	648	1,137	
PAVEMENT INCENTIVES							
AC SMOOTHNESS							
AC QUALITY LOT							
PCCP SMOOTHNESS							
PCC QUALITY LOT							
OTHER INCENTIVES							
FINAL RIGHT-OF-WAY MONUMENTATION							
FLAGGING SERVICES							
RAILROAD/OTHER							
PUBLIC RELATION							
OTHER							
PROJECT TOTAL:		300,000	272,700	257,156	15,544	27,300	0.530

NOTE:

Every Day Counts

Council ALPA Stakeholder Councils

ADOT Contracts and Specifications

A Sample FMIS Form:

FHWA - ARIZONA DIVISION FMIS4 CODING FORM									
Federal Aid No.:				0000 GI GLB SZ15101C			Project No.:	STBG-GLB-0(207)T	
Project Type:	C	Project Description & Type of Work: Located in Gila County on Broad Street between Mesquite Street and Cottonwood Street, in the City of Globe. The work is pavement rehabilitation and upgrading the existing sidewalks and access ramps to meet current ADA accessibility guidelines.							
Standard Place Code:	26020		Inventory Rte No:						
Mile Point Number:	Begin:	NA	Ending:	NA	Est Constr Date:(mm/yyyy)			06/2019	
TIP / STIP Reference:	GLB 18-01C	STIP Year:	2018	Environmental Document:	2A	Env Doc Date:	10/11/2017		
County Name:	GI	Urbanized Area:	N/A	Urban/Rural:	U	Functional System:	L		
Fed Aid System:	Z	Congressional District(s) & %:			1	100%	%		
Toll Road? <input type="checkbox"/>	100% Safety? <input type="checkbox"/>	Temp Matching? <input type="checkbox"/>	Indian <input type="checkbox"/> Jv?	FTA? <input type="checkbox"/>	Construction? <input checked="" type="checkbox"/>	CMAR? <input type="checkbox"/>	Design-Build? <input type="checkbox"/>		
FHWA Area:	A2	Contracts and Specifications Engineer:				Sam Patton (602) 712-6261			
LINE ITEM	IMPROVEMENT TYPE	PROG CODE	FEDERAL AMT	OTHER SRC	OTHER AMT	TOTAL AMT	NBI #		
1	28		341,666	LOCAL	20,652	362,318			
2						-			
3						-			
4						-			
5						-			
19						-			
Environmental Monitoring Constr Engineering	17		49,036	LOCAL	2,964	52,000			
Consult Svs Constr Contingency	17		9,430	LOCAL	570	10,000			
Incentive Smoothness Incentive Quality	26		17,083	LOCAL	1,033	18,116			
						-			
						-			
Public Relations						-			
ICAP	44					-			
GRAND TOTAL:			417,215		25,219	442,434			

Every Day Counts

Council ALPA Stakeholder Councils

ADOT Contracts and Specifications



**Thank you for
Your time and Attention**

Every Day Counts

Council ALPA Stakeholder Councils

ADOT Contracts and Specifications



FREQUENTLY ASKED QUESTIONS ABOUT THE ARIZONA DEPARTMENT OF TRANSPORTATION PUBLIC INVOLVEMENT PLAN

What is the ADOT Public Involvement Plan?

ADOT's Public Involvement Plan (PIP) is a living document that provides guidance, techniques and examples for interacting with, informing and involving all members of the public throughout transportation planning, study, design, construction and maintenance/operations.

The PIP helps ensure that public outreach and public involvement efforts for federally funded and ADOT-administered studies and projects occur in accordance with federal requirements.

The Federal Highway Administration requires ADOT to develop, implement and follow the PIP; FHWA approved the current version of the ADOT PIP in February 2017.

Which federal requirements must be followed during public outreach and public involvement activities?

Nondiscrimination and Inclusion:

- Title VI of the Civil Rights Act of 1964
- The Americans with Disabilities Act of 1990
- Executive Order 12898 – Environmental Justice
- Executive Order 13166 – Limited English Proficiency (LEP)

Process:

- Code of Federal Regulations (CFR) Title 23
- The National Environmental Policy Act of 1969 (NEPA)

Who is required to follow the ADOT Public Involvement Plan?

All ADOT employees, consultants, local governments and others involved in public outreach and public involvement activities - including those not required by NEPA - for federally funded and ADOT-administered studies and projects are required to follow the PIP.

Where can I find the ADOT Public Involvement Plan?

The PIP is available on the ADOT website at azdot.gov/ADOTPIP. To receive a PDF version by email, please contact Kimberly Noetzel at KNoetzel@azdot.gov.

Who should I contact with questions about nondiscrimination federal requirements?

Call Jose Alarcon, ADOT Title VI program manager, at 602.712.2232, or the ADOT Civil Rights Office at 602.712.8946, or send an email to Civilrightsoffice@azdot.gov.

Who should I contact with questions about process-related federal requirements?

Call Kimberly Noetzel, ADOT assistant communications director for Community Relations, at 602.712.2122 or email KNoetzel@azdot.gov.

ADOT PUBLIC INVOLVEMENT PLAN

EVERY DAY COUNTS | ARIZONA LOCAL PUBLIC AGENCY
STAKEHOLDER COUNCIL

JUNE 13, 2019

PUBLIC INVOLVEMENT PHILOSOPHY

Include a **diversity of voices** and **viewpoints** from across the state that provide valuable insight to help inform the decision-making process



PUBLIC INVOLVEMENT PLAN

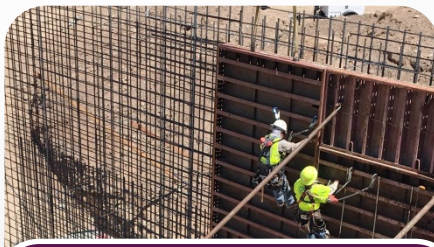
- Required by FHWA
- Approved by FHWA February 2017
- ADOT's first Public Involvement Plan in 20 years
- Provides direction, strategies and tactics to **inform** and **involve** the public during all phases of project delivery in accordance with **federal regulations** and **industry best practices**

PUBLIC INVOLVEMENT PLAN

- Demonstrates how ADOT will engage people of all **rac**es, **cultures** and **income levels** and **minority**, **disabled** and **Limited English Proficient** populations during the transportation decision-making process and project delivery
- For use by **ADOT + consultants + local governments + others** involved in **federally funded** studies and projects



FHWA
Federal Aid
Highway
Program



ADOT
Projects &
Studies



ADOT
must follow
federal
mandates

CONSEQUENCES FOR NOT COMPLYING?

- Study or project delays, additional costs
- Legal action
- Impact Record of Decision or other outcome
- Loss of federal funding
- Missed opportunities to gather useful, meaningful input from people who know their community the best

“Output always equals input.”

- Gen. James Van Fleet

WHEN DOES PUBLIC INVOLVEMENT OCCUR?

PLANNING



PROGRAMMING



PROJECT
DEVELOPMENT



CONSTRUCTION



OPERATIONS &
MAINTENANCE

- Proactively seek out public input
- Gather useful information to influence plan or project
- Assumes public/key stakeholders know their community the best
- Can make plan or project better

- Listen to input about impacts, such as noise, dust, MOT
- Solve problems
- Share helpful information in advance
- Manage expectations

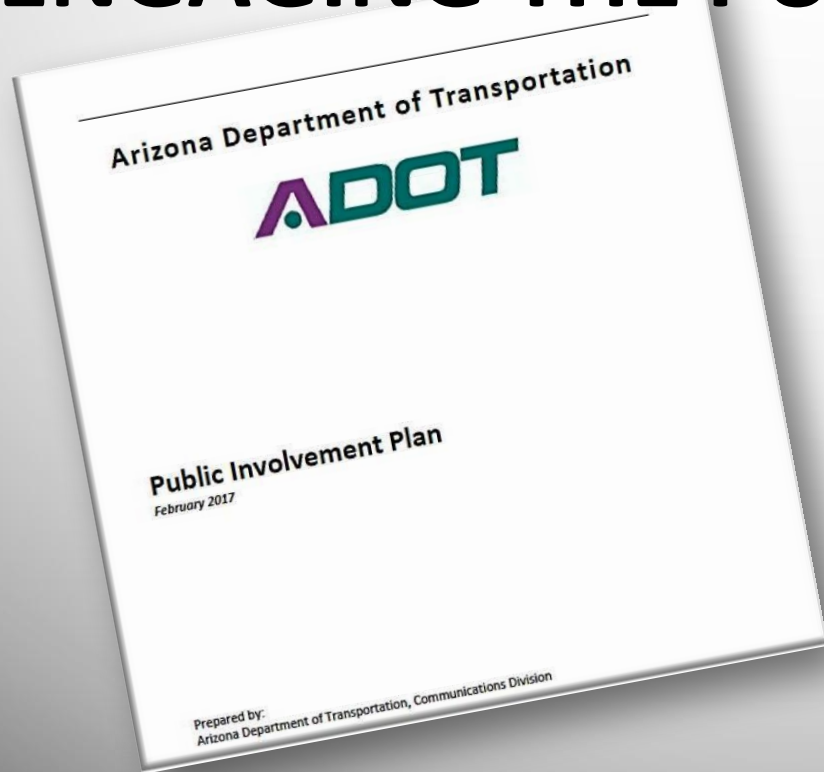
PUBLIC INVOLVEMENT INCLUDES:

- NEPA process activities
- All meetings – *even if not required by NEPA*
- Public Hearings
- Workshops and Open Houses
- Surveys – in person, online, email, mail
- Online tools
- Outreach and meetings during construction, operations and maintenance



**ANYTIME YOU ARE
ENGAGING THE
PUBLIC**

ENGAGING THE PUBLIC IN ANY WAY?



1. Read (and follow) the Public Involvement Plan
2. Consult ADOT Community Relations or Civil Rights Office with questions
3. Ensure your staff and consultants have **read, understand** and **follow** the Public Involvement Plan

FEDERAL REGULATIONS

```
graph TD; A[FEDERAL REGULATIONS] --> B[NONDISCRIMINATION & INCLUSION]; A --> C[PROCESSES]
```

**NONDISCRIMINATION
& INCLUSION**

PROCESSES

NONDISCRIMINATION

1. **Title VI of the Civil Rights Act**
2. **Americans with Disabilities Act**
3. **Executive Orders**
 - **E.O. 12898 on Environmental Justice:** Minority and low-income populations; traditionally underserved
 - **E.O. 131166 on Limited English Proficiency (LEP):** Persons who do not speak English or speak English “less than very well”

Title VI of the Civil Rights Act

- Must include ADOT Nondiscrimination Language on everything used to **promote, advertise and invite** the public to attend or participate in any way

Advertisements, post cards, fliers, emails, surveys, online tools

Title VI of the Civil Rights Act

- Must display Title VI language and brochures in English and Spanish at meetings/events and document with a photo
- Provide and collect Voluntary Self-Identification Survey cards
- Submit Title VI Meeting Summary to ADOT Civil Rights Office



Refer to pages 7-8 of ADOT PIP for compliance guidelines

Americans with Disabilities Act

- Select ADA-compliant meeting locations + accessible by ADA-compliant transit
- Locations should accommodate vision and/or hearing impairments
- Make reasonable accommodations on request (7 working days)
- **Consult ADOT Civil Rights Office with questions**



Refer to pages 8-9 of ADOT PIP for compliance guidelines

Executive Orders

Executive Order 12898 – Environmental Justice

- Specific outreach activities to promote inclusion

Executive Order 131166 – LEP

- Four-Factor Analysis to determine language needs
- Requirements for translation, interpretation

Refer to page 9 of ADOT PIP for compliance guidelines

PROCESSES

1. 23 CFR Part 771 - Environmental Impact and Related Procedures
2. National Environmental Policy Act (NEPA)

NEPA *Public Involvement* **CFR**

23 CFR Part 771

Requires public involvement occur and establishes public involvement requirements for:

- Planning, advertising and holding public hearings
- Providing public hearing transcripts and other documentation to FHWA
- Creating opportunities and sufficient time for public review and comment

Refer to page 11 of ADOT PIP for compliance guidelines

National Environmental Policy Act (NEPA)

- Requires analysis of impacts to the natural and human environments prior to making decisions
- Classes of Action for studies: Environmental Impact Statements (EIS), Environmental Assessments (EA) and Categorical Exclusions

Refer to page 12 of ADOT PIP for compliance guidelines

INDUSTRY BEST PRACTICES

Tools, techniques and examples for:

- Assessing stakeholders
- Selecting outreach techniques based on your audience
- Planning, staffing and evaluating public meetings and public hearings
- Collecting and documenting public comments

. . . and more!

WHERE IS THE PUBLIC INVOLVEMENT PLAN?

Online:

azdot.gov/ADOTPIP

To receive a PDF version by email, contact:

KNoetzel@azdot.gov

Questions?



Thank you!



DIGITAL DELIVERY

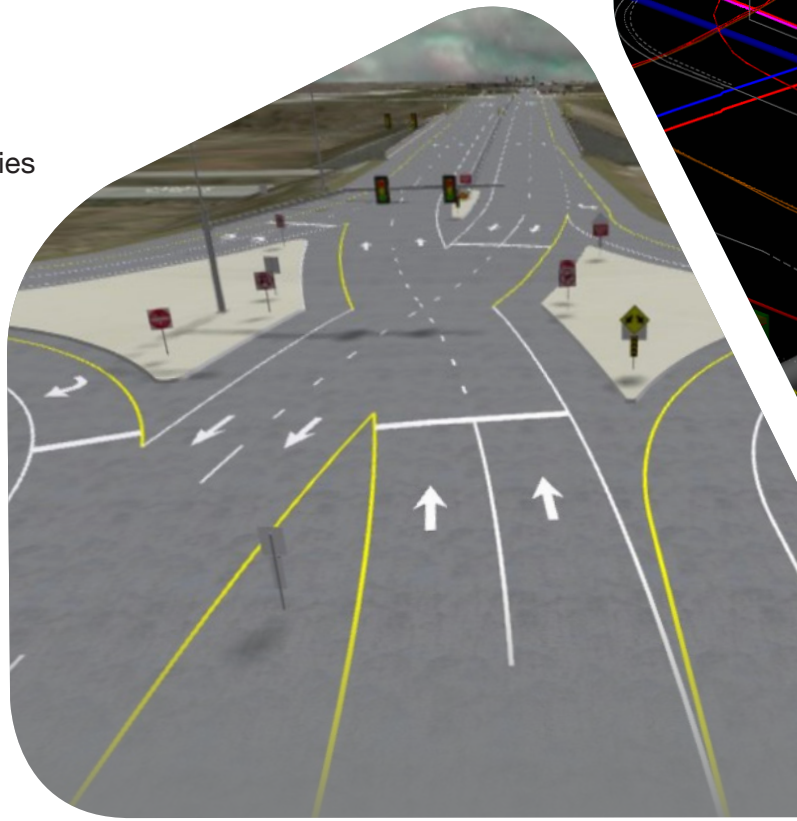
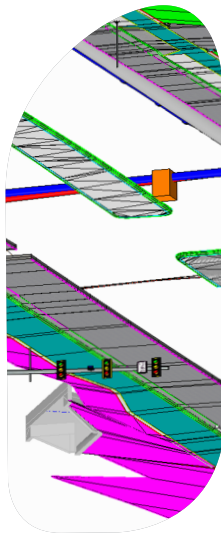
with Model Based Design and Construction (MBDC)

DIGITAL DELIVERY GOALS

- » Produce a more optimal design
- » Improve information transfer
- » Obtain and manage better digital data to improve decision making throughout a project's lifecycle
- » Improve efficiency

REALIZED BENEFITS

- » More data available vs. plan sheets
- » Fewer change orders in construction—more detailed/complete design
- » Automated Machine Guidance (AMG)
- » Better public involvement—visualization capabilities
- » Utility clash detection
- » More accurate field inspection—tracking of quantities
- » Easier reporting





How Can We Help You?



602.216.1271

david.rutkowski@kimley-horn.com

David Rutkowski, P.E.

- » 18+ years designing ADOT freeways
- » Served on ADOT's Every Day Counts Committee for 3D File Format and Structure
- » Design manager for I-10/SR 303L Phase 2 3D model, first ADOT 3D model provided to bidders
- » Urban freeway project experience including multiple Design Builds



801.623.0838

nicole.williams@kimley-horn.com

Nicole Williams, P.E.

- » 10+ years designing and managing UDOT projects
- » Project Manager on three Digital Delivery projects and Deputy Project Manager on one—together totaling over \$120M in construction fees
- » Serving on UDOT MBDC Roadway Design Steering Committee
- » Project Manager for UDOT Digital Delivery Process and Data Development



801.808.1951

john.matern@kimley-horn.com

John Matern, P.E.

- » 10+ years designing UDOT projects
- » Design Lead on four Digital Delivery projects totaling over \$100M in construction fees
- » Drafted UDOT MBDC Guidelines Document
- » CADD Lead for UDOT Digital Delivery Process and Data Development



385.420.0045

ariel.froerer@kimley-horn.com

Ariel Froerer

- » Lead roadway designer on UDOT's \$90M Digital Delivery 5600 West project (segment 1)
- » Design and CADD Support on UDOT's I-80 and 9000 South Digital Delivery Projects
- » Assisting in developing UDOT's ORD Workspace

KIMLEY-HORN BY THE NUMBERS

Celebrating 12 years as one of
FORTUNE MAGAZINE'S

100 BEST COMPANIES
TO WORK FOR



TOP 500
U.S. DESIGN FIRMS
by Engineering News-Record



Kimley»Horn

Visit www.kimley-horn.com

Awarding a single contract for several preservation, rehabilitation, or replacement projects helps agencies reduce costs and achieve program goals.



A bridge repair and paving project were two of nine projects successfully bundled by the Pueblo of Acoma Tribe in New Mexico.

Project bundling offers a comprehensive and accelerated delivery solution for addressing strategic program goals. It streamlines design, contracting, and construction; allows agencies to capitalize on economies of scale to increase efficiency; and supports greater collaboration during project delivery and construction.

BUNDLING PROJECTS SAVES TIME AND COST

The U.S. transportation system is aging, with many transportation agencies seeing an ever-increasing number of highways and bridges that need more immediate attention. As a result, system performance is reduced, leading to potentially adverse impacts to quality of life, mobility, travel time, freight movements, and emergency response times. Often the most pressing needs are on the local systems, as evidenced by bridges that are being posted for reduced loads.

Project bundling is a proven practice that draws upon efficiencies found through project delivery streamlining, as well as benefits from alternative and traditional contracting methods. A bundled contract could cover a single county, district, or State, and it may be tiered to allow a combination of work types (design, preservation, rehabilitation, or complete replacement). Bundling design and construction contracts saves procurement time, leverages design expertise, and builds momentum toward keeping critical assets in a state of good repair.

BENEFITS

- ▶ **Expedited Project Delivery.** Project bundling delivers strategic program solutions by streamlining various project delivery requirements such as environmental agreements and standardized designs.
- ▶ **Reduced Cost.** Bundling projects with shared features leverages design expertise and achieves economies of scale.
- ▶ **Contracting Efficiency.** Using a single contract award for several similar projects streamlines design and construction and saves procurement time.

STATE OF THE PRACTICE

Project bundling efforts by State departments of transportation (DOTs), local agencies, and tribal governments have reduced costs and streamlined design and construction. Bundling allowed them to take advantage of funding opportunities and quickly address critical bridge and road projects.

Examples of successful project bundling include:

- ▶ Delaware DOT uses a series of bundling contracts to address preservation issues on bridges and culverts. The Bridge Management Section prioritizes the work and the Maintenance Districts administer the contracts. Scopes include deck sealing, bridge painting, deck patching, joint repair, and culvert replacement.



Photo Sources: Accessible Curb Ramp, U.S. Access Board; Culverts, Delaware DOT

Bundling similar projects can produce cost savings due to economies of scale. Repeatable details and similar designs can save both design and construction time, and bundling multiple projects can lower the unit cost for materials.

- ▶ Pennsylvania DOT (PennDOT) conducted a three-county pilot project that rebuilt, replaced, or removed 41 county-owned structures for \$25 million, resulting in a 25–50 percent savings on design and a 5–15 percent savings on construction. PennDOT followed up on this success by pursuing a statewide, 558-bridge bundling contract.
- ▶ Ohio DOT's Bridge Partnership Program is replacing or rehabilitating 220 county bridges over 3 years funded through \$120 million in Grant Anticipation Revenue Vehicles (GARVEE bonds).
- ▶ Georgia DOT's Design-Build Bridge Replacement Program, which began in 2016, will replace 25 local bridges over 1,095 calendar days through new revenue available under the State's Transportation Funding Act of 2015.
- ▶ Oregon DOT's \$1.3 billion State Bridge Delivery Program replaced or repaired 271 bridges using 87 project bundles.

- ▶ Missouri DOT's \$685 million Safe & Sound Bridge Improvement Program replaced or rehabilitated 802 State bridges over 3.5 years, including 554 bridges replaced through a single design-build contract.
- ▶ FHWA's Central Federal Lands Division used bundling on a \$49 million emergency contract to repair and replace 10 miles of roadway and 12 bridges. The procurement used a design-bid-build best value, single award task order contract.
- ▶ The Pueblo of Acoma Tribe bundled nine projects in a construction manager/general contractor contract. The projects ranged from a retaining wall repair to full-depth roadway reconstruction.

RESOURCES

FHWA EDC-5 Project Bundling

https://www.fhwa.dot.gov/innovation/everydaycounts/edc_5/project_bundling.cfm

FHWA Bundled Facilities Overview

https://www.fhwa.dot.gov/ipd/alternative_project_delivery/defined/bundled_facilities/default.aspx

FHWA TechBrief: Alternative Contracting Method Performance in U.S. Highway Construction

<https://www.fhwa.dot.gov/publications/research/infrastructure/17100/17100.pdf>

Signing Updates Traffic Bottlenecks Bridge Deficiencies
Alternative Contracting
 Reduced Staff Time Safety Hot Spots
High Risk Rural Roads
 Funding Strategies Innovation
 ADA Programs Smoother Pavements

Project bundling offers strategic program solutions to rapidly improve system performance measures.



U.S. Department of Transportation
Federal Highway Administration

For additional
 information,
 please contact:

Romeo Garcia
 FHWA Office of Infrastructure
 (202) 366-1342
Romeo.Garcia@dot.gov

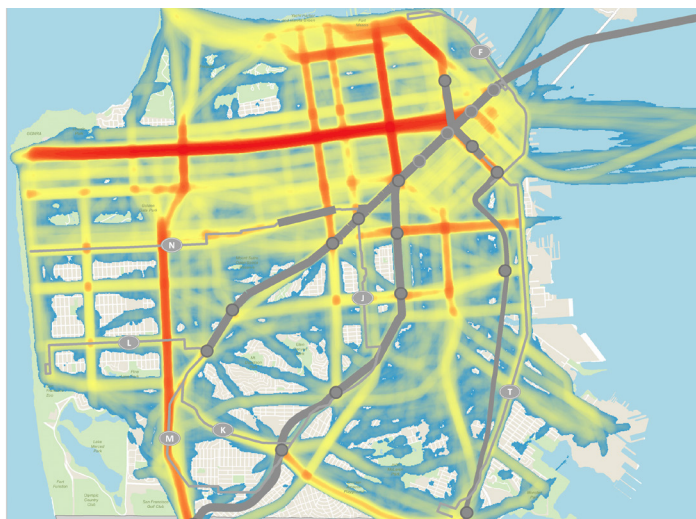
David Unkefer
 FHWA Resource Center
 (404) 764-7498
David.Unkefer@dot.gov

Virtual public involvement supports agencies' efforts to engage the public more effectively by supplementing face-to-face information sharing with technology.

Innovative virtual public involvement techniques provide State departments of transportation (DOTs), transit agencies, metropolitan planning organizations (MPOs), and rural transportation planning organizations (RTPOs) with a platform to inform the public and receive feedback. These strategies create efficiencies in how information is disseminated and how input is collected and considered, which can potentially accelerate planning and project development processes.

ENCOURAGING PUBLIC ENGAGEMENT

Public involvement is a critical component in the transportation decision-making process, allowing for meaningful consideration and input from interested individuals. As daily users of the transportation system, the public has useful opinions, insights, and observations to share with their State DOT, MPOs, and local agencies on the performance and needs of the transportation system or on specific projects. Timely and strong public engagement has the potential to accelerate project delivery by helping identify and address public concerns early in the planning process, thereby reducing delays from previously unknown interests late in the project delivery process.



A heat map illustrates responses from citizens when they were asked where future subways should be built.

Source: San Francisco Municipal Transportation Authority



Virtual public involvement tools include online surveys, visualization, and telephone town halls.

Nearly all State DOTs and most MPOs and local agencies use websites to post information about their activities. With the increased use of social media tools and mobile applications, the public can access user-friendly features such as online videos, podcasts, crowdsourced maps, and other interactive forums to receive information and provide input.

These new opportunities for information sharing and public involvement in the transportation planning, programming, and project development process include, but are not limited to, telephone town halls, online meetings, pop-up outreach, social meetings/meeting-in-a box kits, story maps, quick videos, crowdsourcing, survey tools, real-time polling tools, social media following, visualization, and working with bloggers.

BENEFITS

- **Efficiency and Low Cost.** Virtual tools and platforms can efficiently be made accessible to communities, many at a lower cost than traditional public engagement methods.
- **Accelerated Project Delivery.** Robust public engagement helps identify issues early in the project planning process, which reduces the need to revisit decisions.



Virtual Public Involvement

- ▶ **Communication and Collaboration.** Virtual public involvement can aid in establishing a common vision for transportation and ensure the opinions and needs of the public are understood and considered during transportation planning and project development.
- ▶ **Expanded Engagement.** Virtual tools include stakeholders who do not participate in traditional approaches to public involvement. Greater engagement can improve project quality.

STATE OF THE PRACTICE

Virtual public involvement provides State DOTs, MPOs, and local agencies throughout the country with a platform of innovative tools and strategies for making public involvement more accessible, thus providing a better understanding of the public's concerns regarding transportation system performance and needs. The following are examples of successful virtual public involvement techniques:

- ▶ Colorado DOT held telephone town halls to conduct large-scale outreach while developing a long-range statewide transportation plan, including one town hall for each MPO and RTPO region in the State.
- ▶ Minnesota DOT targeted limited English proficiency (LEP) populations while updating the Statewide Multi-modal Transportation Plan by using tablet-based surveys in multiple languages. The tablet-based surveys allowed Minnesota DOT staff to visit LEP communities and solicit stakeholders to easily point, click, and respond.
- ▶ The City of Richmond, VA, used targeted stakeholder meetings, a "wikimap," and innovative data collection via a cloud-based data-gathering tool to gather field observations and specific information from people with first-hand experience biking and walking along Richmond's streets.

The North Carolina DOT used public involvement software to guide the development of its 2018-2027 State Transportation Improvement Program (STIP).

- ▶ Delaware DOT created a mobile app that assembles project information, provides real-time traffic alerts, notifies users of project-related upcoming public meetings, and provides a way for stakeholders to contact DelDOT when issues arise.
- ▶ North Jersey Transportation Planning Authority is using real-time polling as part of live meetings and webinars.
- ▶ Texas' Alamo Area MPO is using low-cost videos in posts on social media.
- ▶ Florida DOT holds virtual public hearings for median alterations. These online meetings have improved participation, reduced costs, and elicited useful project feedback.

RESOURCES

FHWA EDC-5 Virtual Public Involvement

https://www.fhwa.dot.gov/innovation/everydaycounts/edc_5/virtual_public_involvement.cfm



U.S. Department of Transportation
Federal Highway Administration

Scott Allen
FHWA Office of Planning,
Environment, and Realty
(202) 366-2650
Scott.Allen@dot.gov

Jody McCullough
FHWA Office of Planning,
Environment, and Realty
(202) 366-5001
Jody.McCullough@dot.gov

Harold Peaks
FHWA Office of Planning,
Environment, and Realty
(202) 366-1598
Harold.Peaks@dot.gov