

PROJECT DELIVERY ACADEMY

MODULE 2

PROJECT DEVELOPMENT – PROJECT INITIATION AND SCOPING

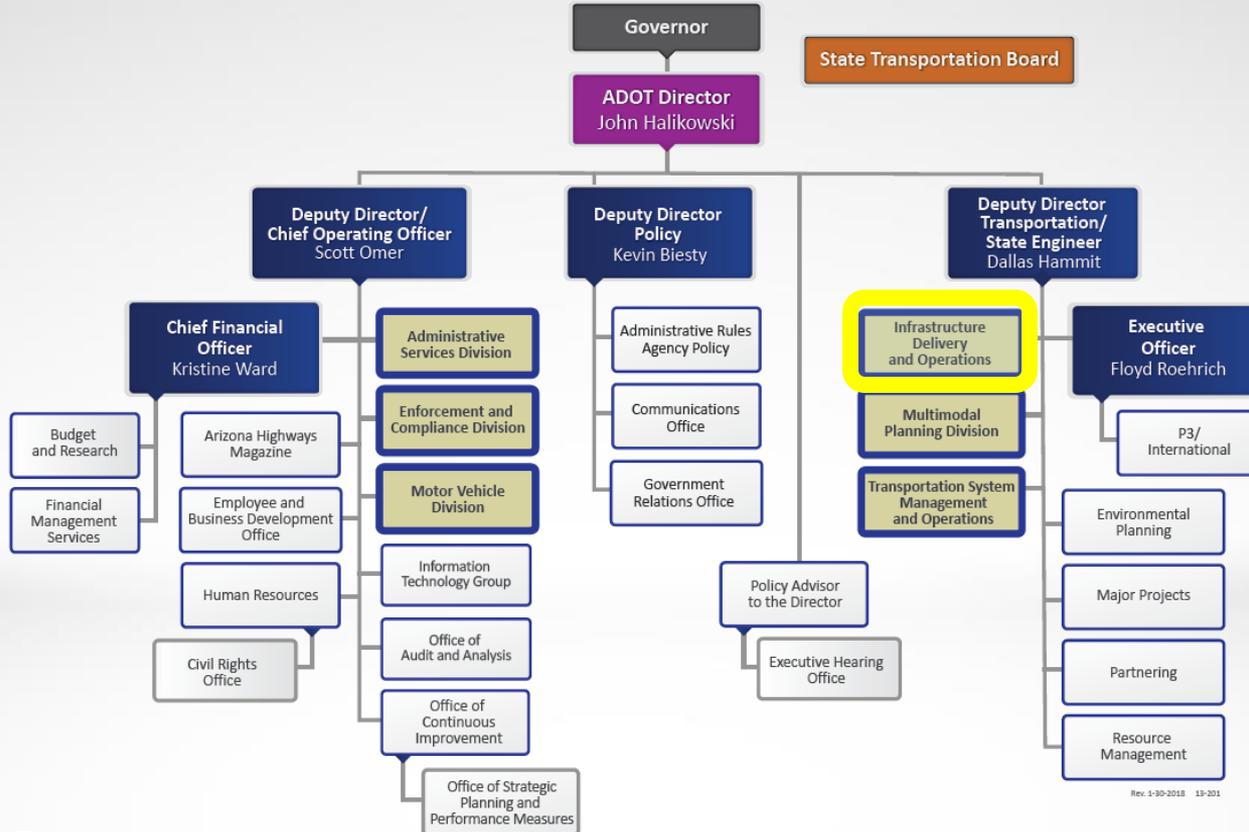
Jennifer Acuña, P.E.
Senior Project Manager
Project Management Group

OVERVIEW

- PROJECT MANAGEMENT GROUP (PMG) OVERVIEW
- PLANNING AND PROGRAMMING
- PROJECT DEVELOPMENT
- QUESTIONS??

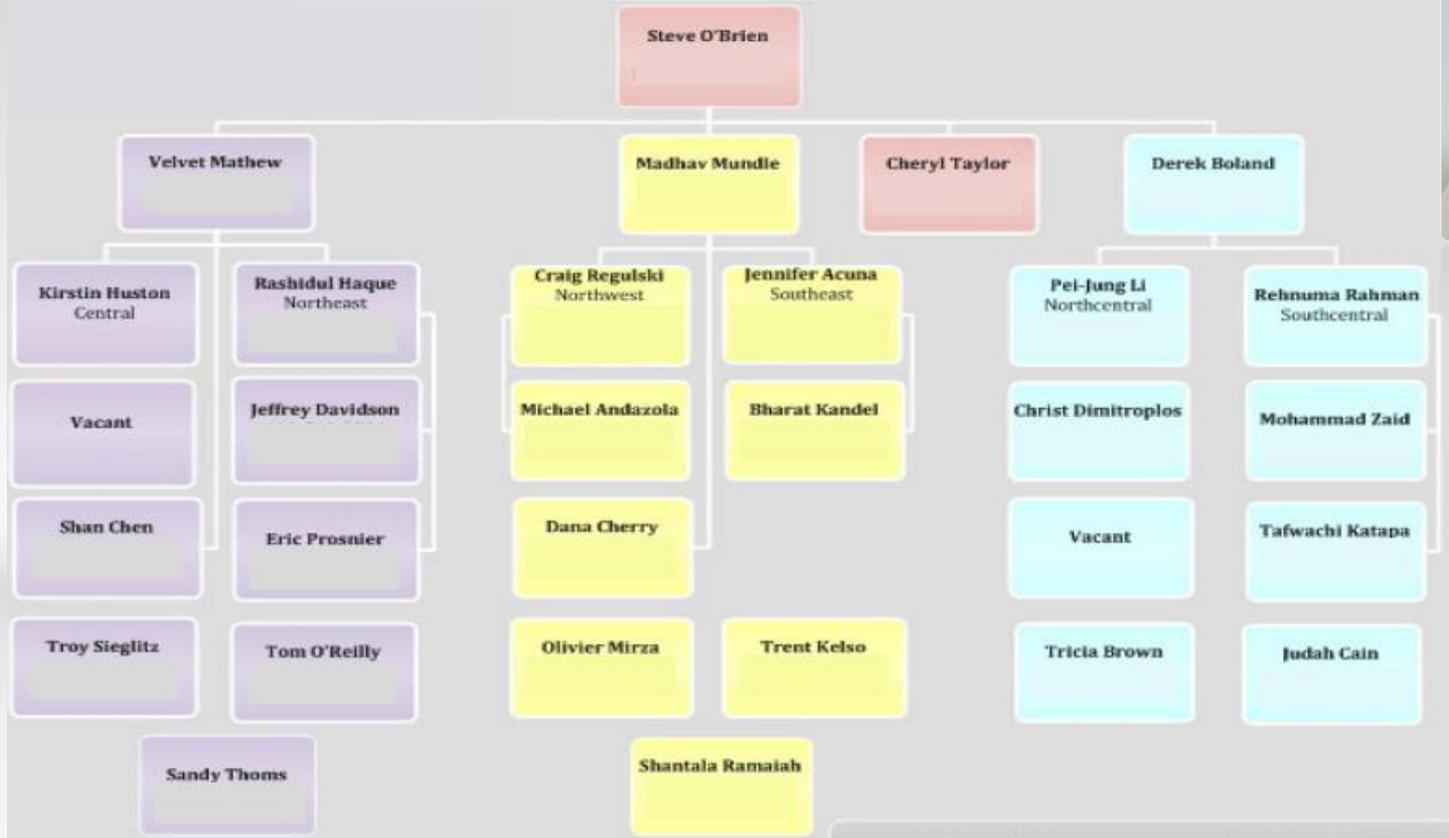


ADOT ORGANIZATION



Rev. 1-30-2018 13-201

PROJECT MANAGEMENT GROUP OVERVIEW



PROJECT MANAGEMENT GROUP OVERVIEW

- RESPONSIBLE FOR LEADING THE DEVELOPMENT OF ALL PROJECTS TO BE ADVERTISED FOR CONSTRUCTION BY ADOT C&S
- PERFORMANCE GOAL TO ADVERTISE AN EVEN AMOUNT OF PROJECTS EACH QUARTER
 - 20/30/30/20

PLANNING & PROGRAMMING

Project Sources

WHERE DO STATE PROJECTS COME FROM?

ADOT's Transportation
Improvement Plan (TIP):
(STIP, 5-year plan, the Program)

ADOT Multi-Modal Planning
Division (MPD) – responsible for
development of 5-year program



PLANNING & PROGRAMMING

Project Information

WHAT DOES THE PM KNOW ABOUT THE SCOPE OF A PROJECT?

Highway Projects

ItemNo/TRACS	Route	BMP	CO	Resource	District	Location	Type of Work	Length	Funding	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	Summary
17215 / D	I 19	43	PM	Tucson		DUVAL MINE RD TI TO PIMA MINE RD TI	Design	7	NH	\$320	\$0	\$0	\$0	\$0	\$320
13216 / Fxxx01C		111, PAVEMENT PRESERVATION - STATEWIDE				RR 4" AR ACFC			NHPP	\$0	\$0	\$16,033	\$0	\$0	\$16,033
\$16,353 (Estimate)										\$320	\$0	\$16,033	\$0	\$0	\$16,353
19616 / F000401C	I 19	45	PM	Southcentral		EL TORO ROAD OP, SB #1573 & NB #1572	Construct Bridge Rehabilitation	1	NHPP	\$0	\$0	\$5,000	\$0	\$0	\$5,000
\$5,000 (Estimate)										\$0	\$0	\$5,000	\$0	\$0	\$5,000
8368 / F013801D	I 19	46	PM	Southcentral		HELMET PEAK TI UP STR #1356	Design Bridge Rehabilitation	1	NHPP	\$500	\$0	\$0	\$0	\$0	\$500
8368 / F013801C		126, BRIDGE INSPECTION & INVENTORY				Construct Bridge Rehabilitation			NHPP	\$0	\$0	\$2,000	\$0	\$0	\$2,000
\$2,500 (Estimate)										\$500	\$0	\$2,000	\$0	\$0	\$2,500

Type of Work: Pavement Preservation

Location: Location (I-19) MP 43, 7 Miles of Improvement

Schedule: Design FY18| Construction FY20

Budget: Design: \$320,000

Construction: \$16,033,000

Funding: NH (Federal National Highway Funds)
NHPP (National Highway Performance Program)

PLANNING & PROGRAMMING

Fiscal Year

WHAT IS A FISCAL YEAR?

ADOT FISCAL YEAR (FY): JULY 1ST TO JUNE 30TH

WE'RE CURRENTLY 2 MONTHS INTO 1ST QTR FISCAL YEAR 2021

FY21 SNAP-SHOT:

PLANNING & PROGRAMMING

Fiscal Year

WHAT IS A FISCAL YEAR?

ADOT FISCAL YEAR (FY): JULY 1ST TO JUNE 30TH

WE'RE CURRENTLY 2 MONTHS INTO 1ST QTR FISCAL YEAR 2021

FY21 SNAP-SHOT:

- 50 PROJECTS PROGRAMMED (EXCLUDING MAJOR PROJECTS)
- TOTAL AMOUNT PROGRAMMED: \$588,268M

PLANNING & PROGRAMMING

Project Sources

WHERE DO LOCAL PROJECTS

COME FROM?

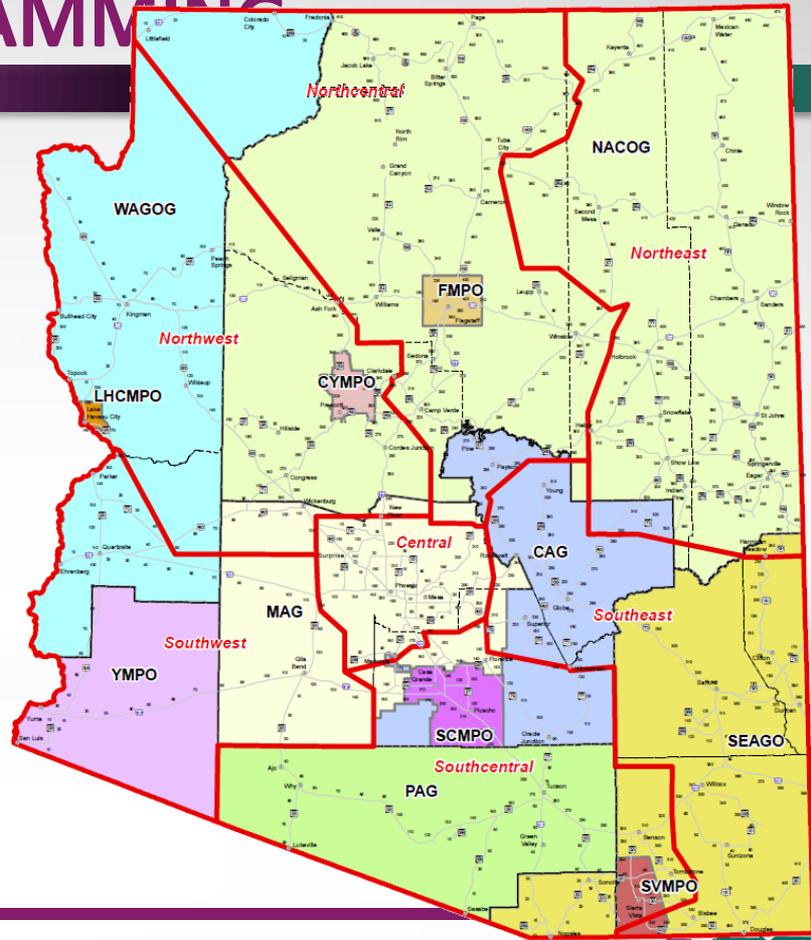
- Council of Governments (COGs)
- Metropolitan Planning Organization (MPO)

PLANNING & PROGRAMMING

Project Sources

WHERE DO LOCAL PROJECTS COME FROM?

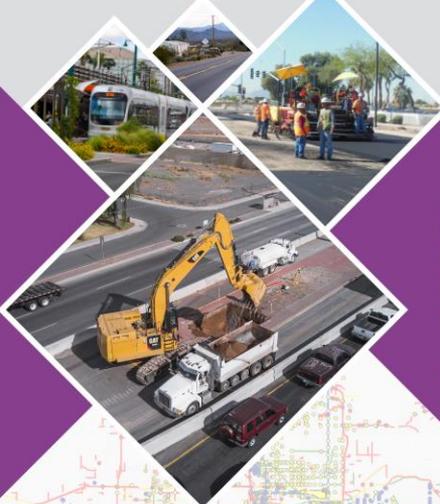
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PLANNING & PROGRAMMING

Project Sources

WHERE DO LOCAL PROJECTS COME FROM?



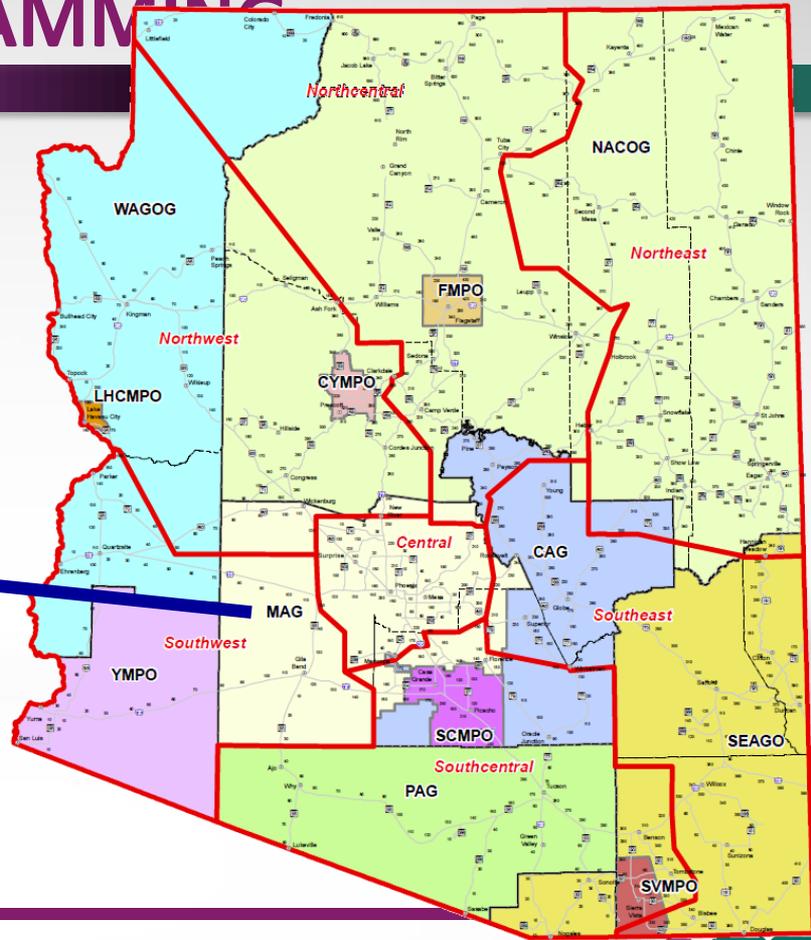
FY 2020-2024
MAG Transportation
Improvement
Program (TIP)

February 26, 2020

MARICOPA
ASSOCIATION of
GOVERNMENTS

ON THE MOVE
PARTNERS IN PROGRESS

gs)

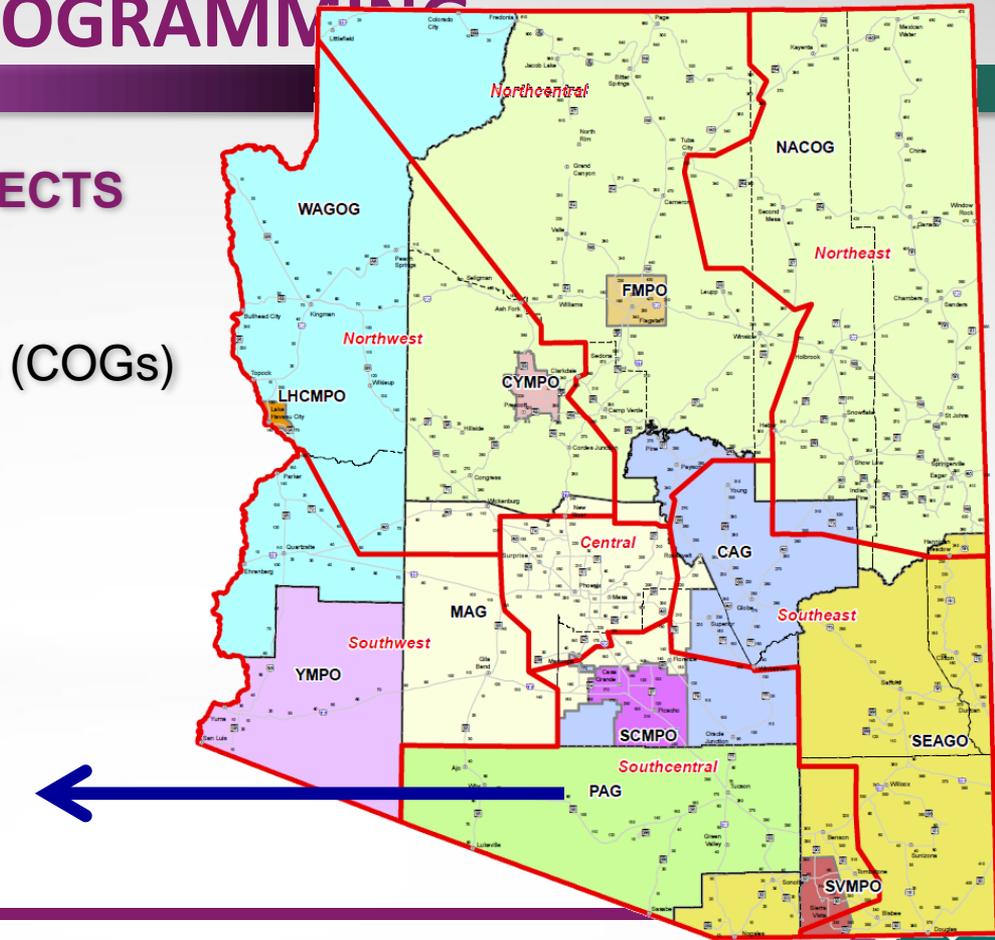
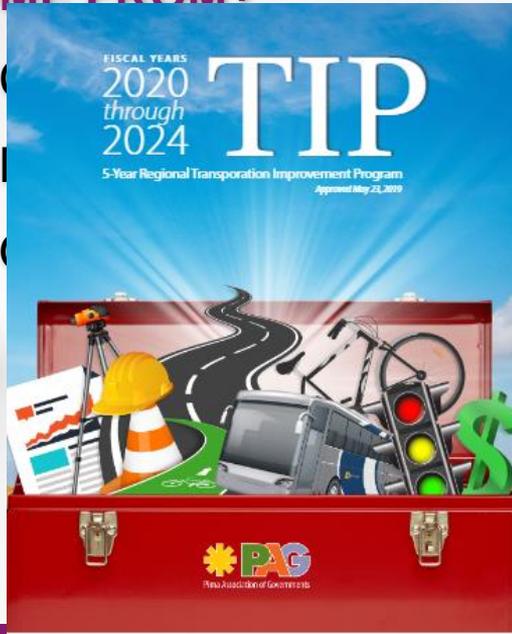


PLANNING & PROGRAMMING

Project Sources

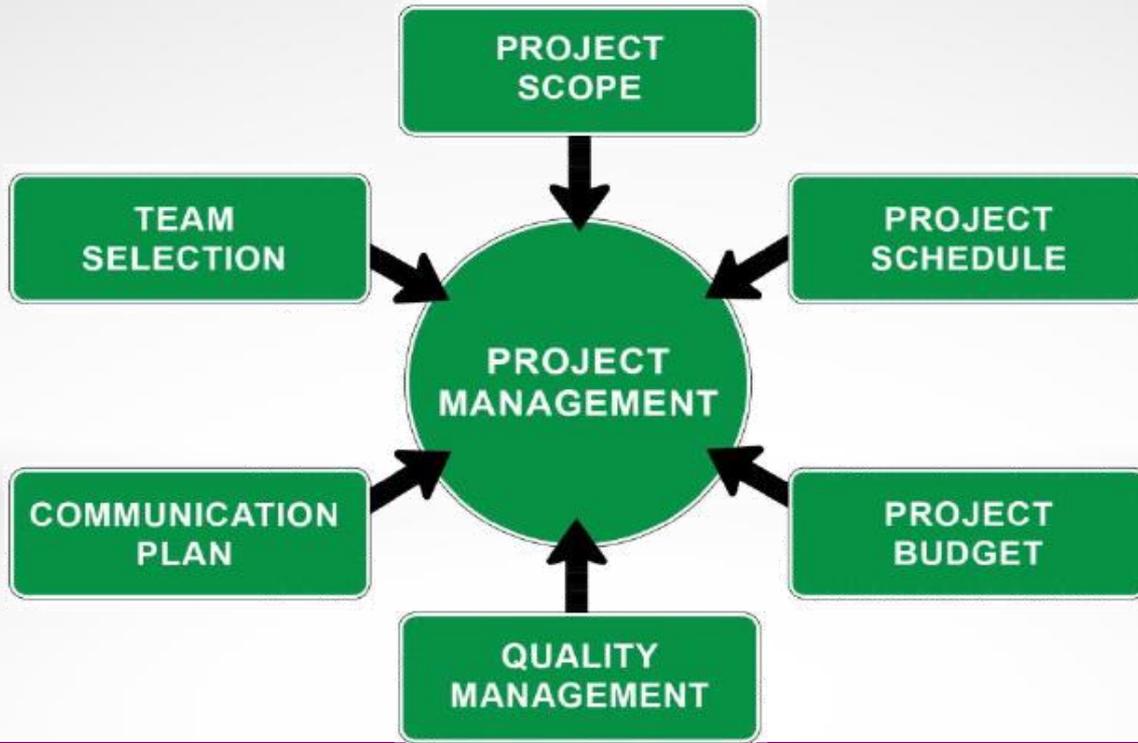
WHERE DO LOCAL PROJECTS COME FROM?

- (COGs)
-



PROJECT DEVELOPMENT

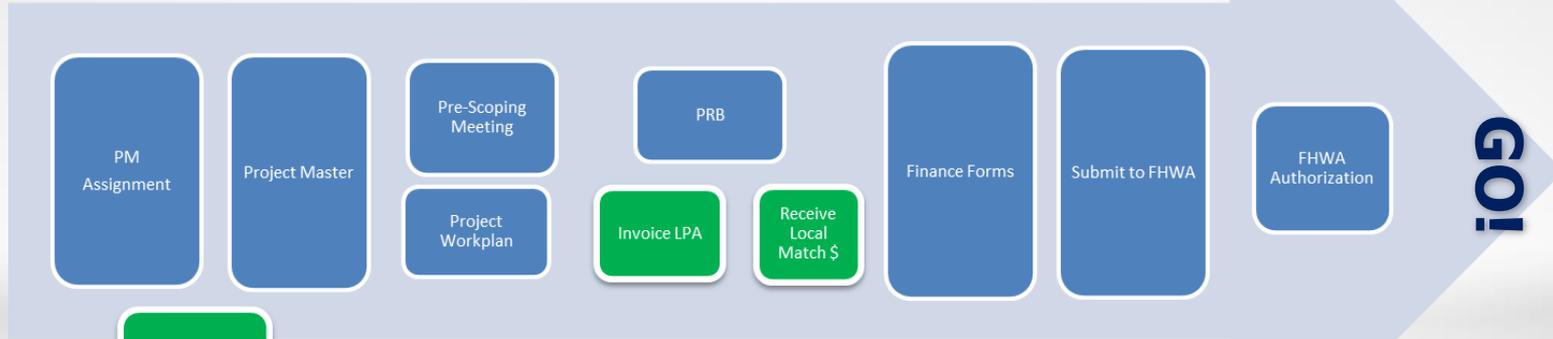
Project Management



PROJECT DEVELOPMENT

Project Set Up – Funding Authorization

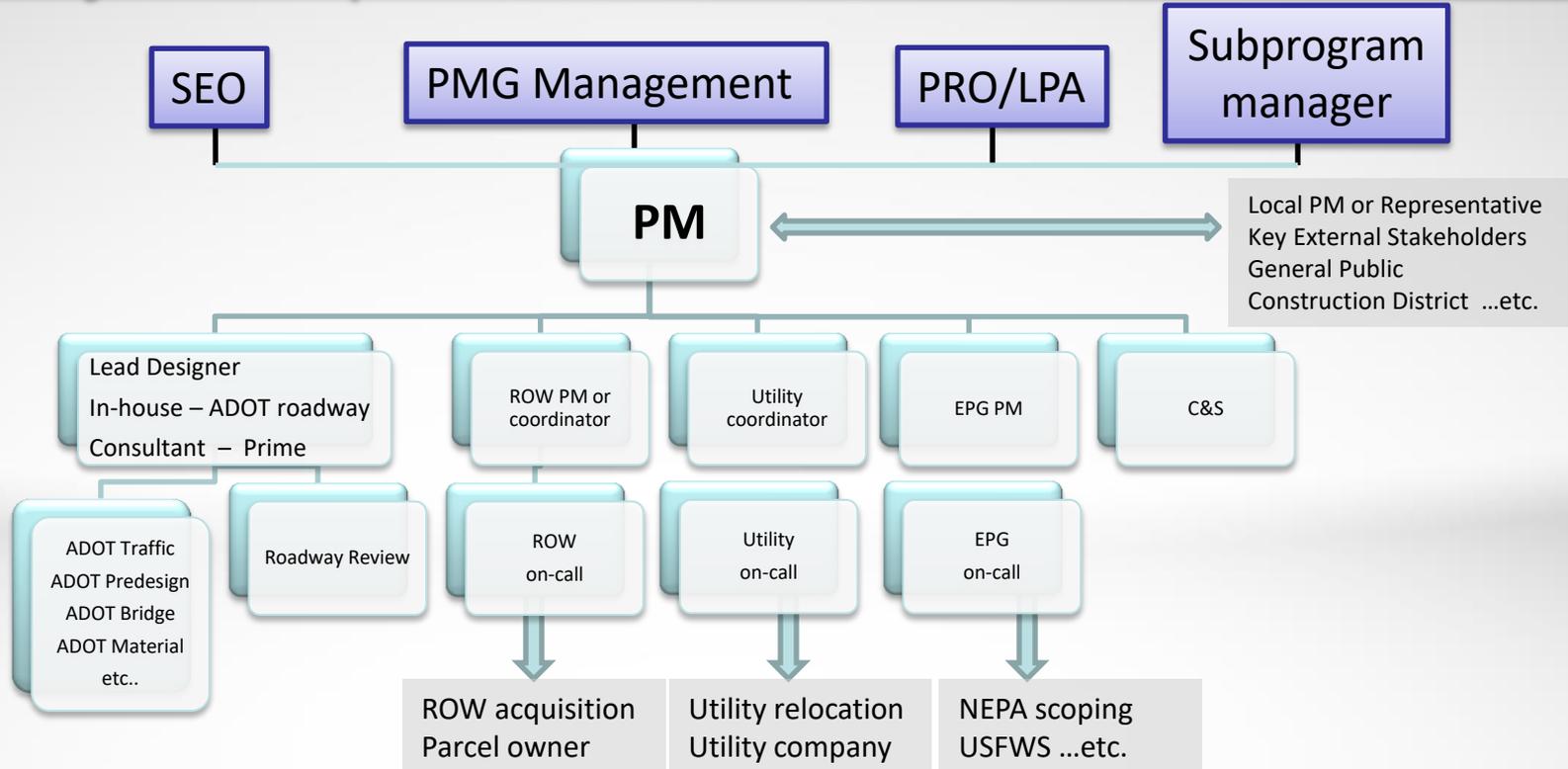
STATE PROJECT



LOCAL PROJECT

PROJECT DEVELOPMENT

Project Setup - Team Establishment



PROJECT DEVELOPMENT

Scope, Schedule, & Budget

PROJECT WORK PLAN WORKBOOK

THIS IS OUR PROJECT FOUNDATION

- Defines
 - Team
 - Communication Protocol
 - Design Criteria
 - Project Schedule/Budget
 - Project Risks/Risk Register
 - Project Quality Plan

Work Plan Short Form			
1. Enter the following information:			
a. Project Manager	Jennifer Acuna	j. Stakeholders	Flagstaff
b. Project Name	WINONA TI UNDERPASS STR # 1084	k. Project Number	F0108
c. Type of Work	Bridge Rehabilitation	l. TIP ID	8808
d. Route	I-40	m. JPA No.	N/A
e. Milepost Limits	210-212	n. Funding Amount - Design (\$)	578,000
f. Federal ID	040-D(237)T	o. Funding Amount - Construction (\$)	4,700,000
g. District	Northcentral	p. Advertisement (FY/Qtr)	FY20/2nd
h. Project Type (State, LPA)	State	q. Design By:	ADOT In-House
i. Local Agency(s)			
INSTRUCTIONS			
1. Enter the information above. It will autofill throughout the Workbook.			
2. Not all conditions apply to every project. If, in going through the checklist of questions, a condition does not apply, simply indicate "N/A".			
3. Use forms throughout project life cycle unless indicated			
4. Templates and Links to Project Documents Below:			
Link to Document or Reference	Item	Description	Version Date
TIP	TIP	Link to TIP, STIP	
Project Master	Project Master	New Project Number and Subphase Setup, View Finance Auth. Status, Search for Budget Item Numbers, Etc.	
Project Folder	Project Folder	New Project Folder Set-up	6/29/17
Project Initiation	Project Initiation Form	Project Contacts	9/21/18
JPA Agreements	JPA Initiation and Amendments	Initiation of JPA Agreement and Amendment Request Form	
Design Hour Estimate	Design Estimate	Design Estimate Worksheet	8/23/18
Invoice Request	Invoice Request	Request to Accounts Receivable for Local Match Invoices and other Local expenses	2/23/16
Contract Mod Checklist	Contract Modification Checklist	Contract Modification Checklist	6/15/17
Project Determination	Project Determination Form	Form for Scoping Document Concurrence	6/15/18
FARA & MPARA	FARA and MPARA	Federal Authorizations and Modifications	5/1/15
Stage Deliverables Checklists	Stage Deliverable Checklists	Stage Deliverable Checklists	6/8/16
Meeting Templates	Meeting Templates	Meeting Templates	
Comment Form	Comment Resolution Form	ADOT and Compliance Comment Form	10/5/18
iCAP Calc	iCAP Calculator	Calculates iCAP and Local Match Amounts	7/18/18
Project Status Form	Project Status Form	Monthly Status Updates	10/11/16
AIDW	AIDW	Project Submittal and Document Repository	
Systems Engineering Checklist	Systems Engineering Checklist	Filled out and Signed by ADOT ITS for all ITS Projects	1/8/18
Recap	Recapitulation Worksheet	Recapitulation Worksheet	3/5/18
CAG TIP	Central Arizona Governments TIP		
EMPO TIP	Flagstaff Metropolitan Planning Organization TIP		
LHMPO TIP	Lake Havasu Metropolitan Planning Organization TIP		
MAG TIP	Maricopa Association of Governments TIP		
NACOG TIP	Northern Arizona Council of Governments TIP		
PAG TIP	Pima Association of Governments TIP		
SCMPO TIP	Sun Corridor Metropolitan Planning Organization TIP		
SEAGO TIP	Southeastern Arizona Governments Organization TIP		
YMPO TIP	Yuma Metropolitan Planning Organization		

PROJECT DEVELOPMENT

Designer Assignment

WHO WILL DESIGN THE PROJECT?

ADOT (30% OF PROJECTS – NO LOCAL PROJECTS)

ADOT PM is the facilitator between the technical groups

ADOT technical teams perform design services, ADOT team members are assigned from the following disciplines:

Pre-Design	Roadside	Traffic	Geotech	Right of Way
Roadway	Drainage	Contracts & Specs	HSIP	Environmental
Pavement	Survey	Bridge	TSMO	Utility/RR

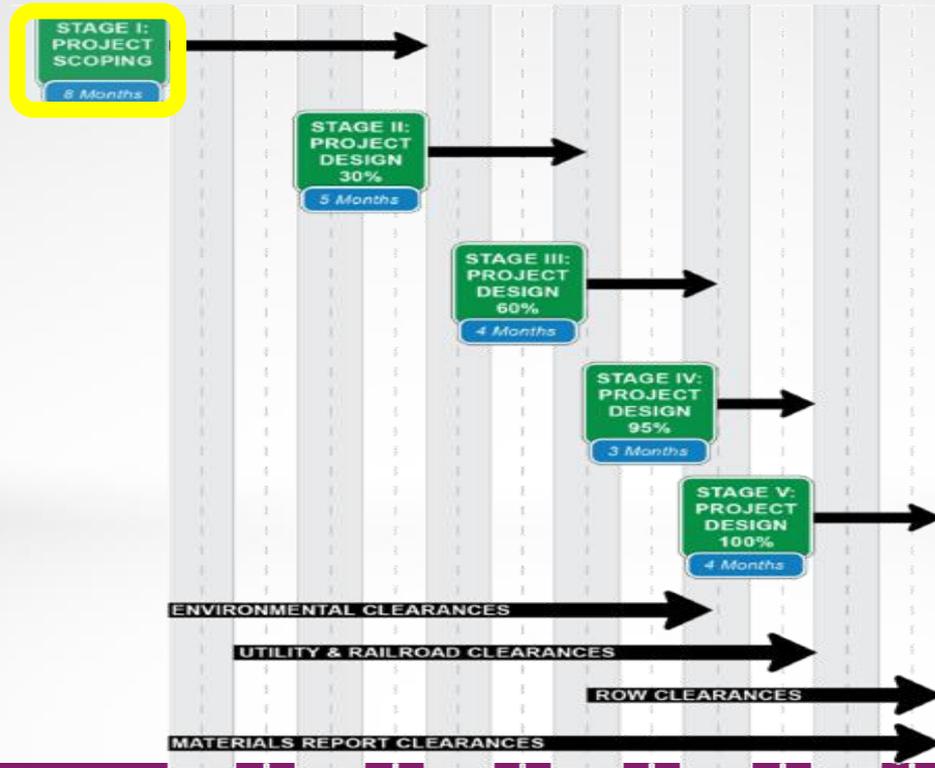
Consultant (70% OF ALL PROJECTS)

Prime Consultant performs all design disciplines and clearance documentation- internal staff or Subconsultants

- Need to use subconsultants to meet Disadvantaged Business Enterprise (DBE) Goal

PROJECT DEVELOPMENT

Stage I & Project Scoping



PROJECT DEVELOPMENT

Stage I & Project Scoping

WHAT IS DONE DURING STAGE I/SCOPING?

- KICK-OFF MEETING AND SITE VISIT
- GATHER PROJECT INFORMATION INCLUDING
 - SURVEY & MAPPING
 - STAKEHOLDER INTERESTS/CONCERNS
 - RECORD DRAWINGS, ETC.
- RECOMMEND AN APPROACH WHICH BEST FITS THE NEEDS OF THE PROJECT AND THE CONSENSUS OF THE STAKEHOLDERS.
- PREPARE AND FINALIZE SCOPING DOCUMENT

PROJECT DEVELOPMENT

Stage I & Project Scoping

WHAT IS A SCOPING DOCUMENT?

- Feasibility Studies
- Design Concept Reports
- Project Assessments
- Scoping Letters

Concurring Signatures from:

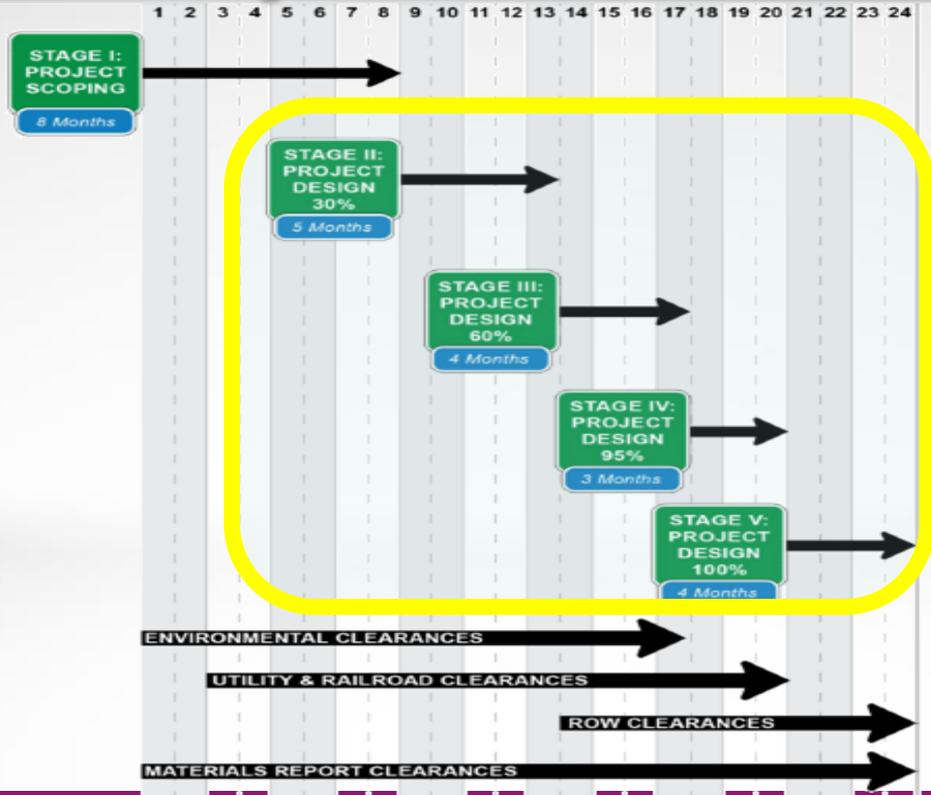
Pre-Design	Environmental
Project Management	Subprogram Manager
Deputy State Engineer	District Engineer

PROJECT DETERMINATION FORM			
Project Number 260 NA 302 F003B 01C 260-B(222)T	County and ADOT District Navajo County Northeast District	Project Name and Highway Mainline Rd – Overgaard SR 260	Final Project Assessment Date June 4, 2018
Project Description Pavement Preservation	Construction Fiscal Year		
Existing Program Yes No X	Program Year 2019	Programmed Budget Not programmed PA Construction Cost Estimate \$4,259,000	Operating Partnership Category S F T D Z N/A X
	Public Hearing: In the Highway Development Process, at least one public hearing or the opportunity for a hearing will be offered for any project that:		
Requires a significant amount of new right-of-way: Substantially changes the layout or function of connecting roadway or the facility being improved; Has a significant adverse impact on abutting real property;	Otherwise has a significant social, economic, environmental or other effect is controversial on environmental grounds; Or has significant floodplain encroachment X None of the above conditions apply		
Recommendations: Yes: No:	Environmental Category Class I Class II Class III		
DocuSigned by: Reed Henry Manager Roadway Predesign Section 605 E Date 6/6/2018	DocuSigned by: Paul O'Brien Manager Environmental Planning Group EM02 Date 6/6/2018		
DocuSigned by: Kirstin Tvedten Project Manager Statewide Project Management Group 614E Date 6/6/2018	DocuSigned by: Kevin Robertson Manager Pavement Management Section 068R Date 6/6/2018		
Approved: Michael DenBleyker Deputy State Roadway Engineer Roadway Engineering Group 605 E Date 6/6/2018	DocuSigned by: Lynn Johnson District Engineer Northeast District Date 6/6/2018		



PROJECT DEVELOPMENT

Stage II – Stage V



PROJECT DEVELOPMENT

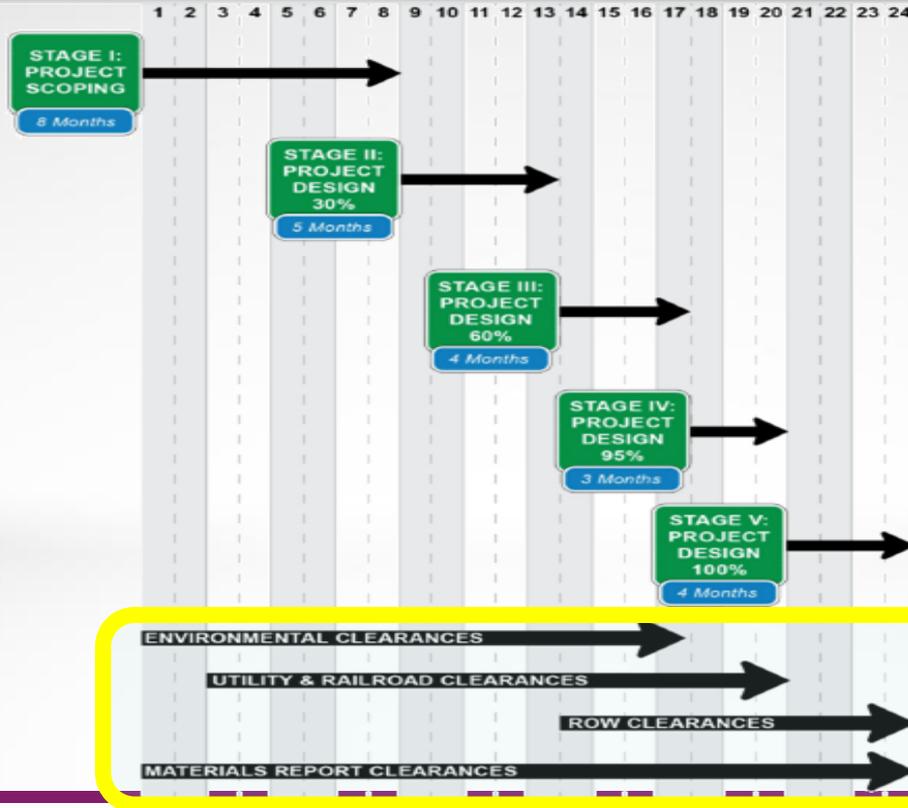
Change Approval Process

HOW ARE PROJECT CHANGES APPROVED AND DOCUMENTED?

- CHANGES IN PROJECT SCOPE, SCHEDULE, OR BUDGET REQUIRE FORMAL APPROVAL FROM ADOT BOARDS/COMMITTEES
- 3 TIERED PROCESS –
 - PROJECT REVIEW BOARD (PRB) – MEETS EVERY TUESDAY AT 9:00 AM
 - PRIORITY PLANNING ADVISORY COMMITTEE (PPAC) – MEETS ONCE A MONTH
 - STATE TRANSPORTATION BOARD – MEETS ONCE A MONTH

PROJECT DEVELOPMENT

Clearances



PROJECT DEVELOPMENT

Environmental Clearance

- National Environmental Policy Act (NEPA)
- Clean Water Act (CWA)
- Clean Air Act
- Endangered Species Act
- Migratory Bird Act
- Section 106 of the National Historic Preservation Act (NHPA)
- Section 4(f) of the U.S. Department of Transportation Act
- Procedures for Abatement of Highway Traffic Noise and Construction Noise
- Resource Conservation and Recovery Act



PROJECT DEVELOPMENT

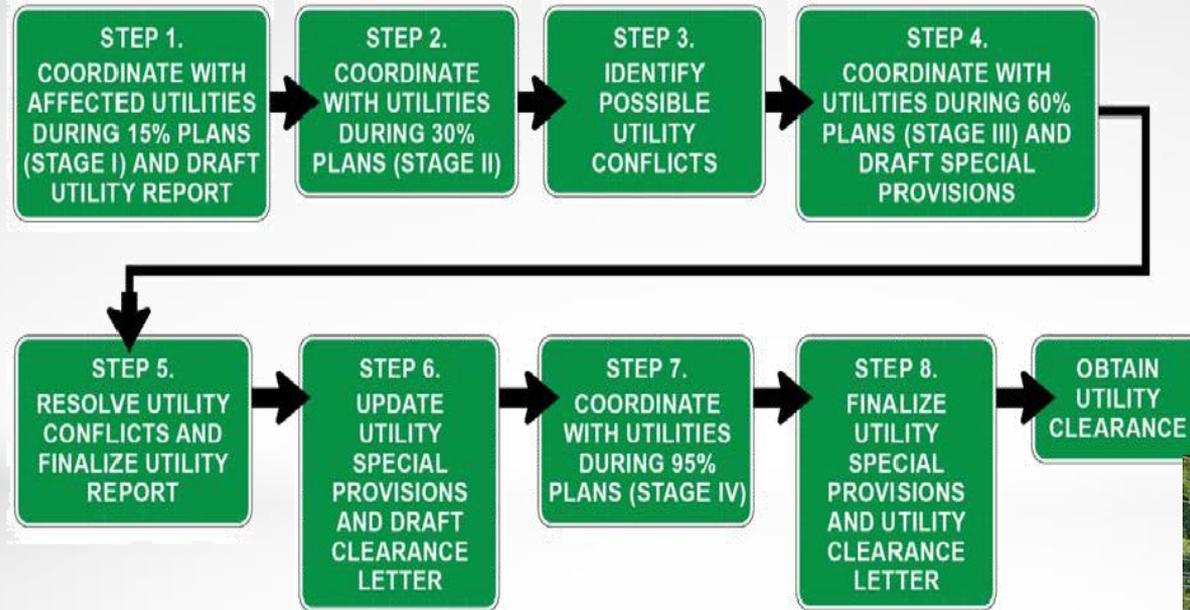
Environmental Clearance

Visualize all engineering alternatives



PROJECT DEVELOPMENT

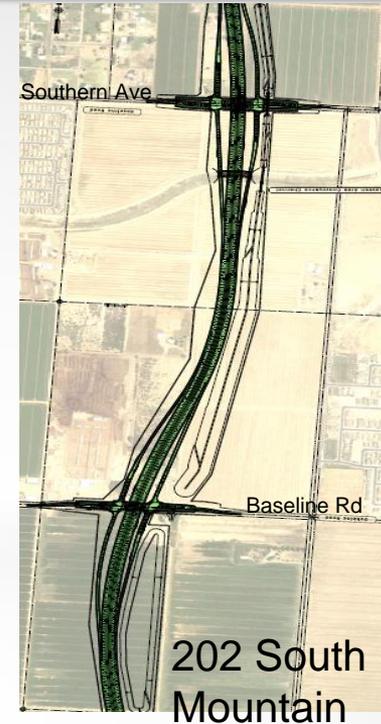
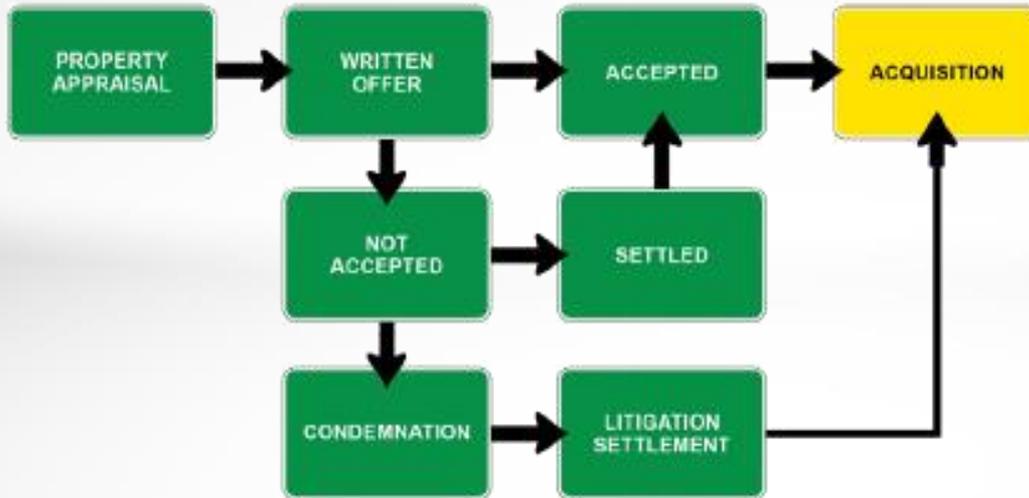
Utility Clearance



PROJECT DEVELOPMENT

Right of Way Clearance

- ROW Clearance process starts after Stage III/60% Submittal
- New ROW can take 6 months or much, much longer:



PROJECT DEVELOPMENT

Bid Ready

WHEN IS THE PROJECT BID READY?

- ALL CLEARANCES HAVE BEEN OBTAINED
- ALL REVIEW COMMENTS HAVE BEEN ADDRESSED
- CONTRACTS & SPECIFICATIONS HAS REVIEWED AND APPROVED SPECIFICATIONS AND ENGINEER'S ESTIMATE
- PLANS, SPECS, & ESTIMATE COMPLETE AND SEALED

PROJECT DEVELOPMENT

Advertisement for Construction

WHEN WILL THE PROJECT ADVERTISE?

- C&S submits Federal Authorization Request to FMS
- FMS submits to FHWA
- 2 to 3 weeks later – FHWA gives Federal Authorization
- C&S Advertises!

PROJECT DEVELOPMENT

Advertisement for Construction



subscribe for updates

ADOT Business Coach On Demand

Engineering and Construction

Contracts and Specifications

Current Advertisements

Advertised Alternative Delivery Projects

Advertised Demolition Projects

As-Read Bid Results

Bid Tabulations

Future Projects

Electronic Bidding

Prequalified Contractors

Contracts and Specifications

Current Advertisements

The **Project Documents** (including Proposal Pamphlet, Project Plan, Addendum, etc.) are available to download in **Portable Document Format (PDF)** format, which will require Adobe Acrobat Reader to view.

Register	PlanHolders	Project Documents	Route County Milepost	TRACS #	Project #	Bid Opening	Plans Status	Add
Register			093 MO 028	H865701C	093-A-(205) T	8/24/2018	Available	1
Register			999 UN 999	F005501C	999-A-(518) T	8/31/2018	Available	1

PROJECT DELIVERY ACADEMY MODULE 2(A)

Project Development – Initiation and Design

QUESTIONS???

COMMENTS???

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- Jennifer Acuña, P.E.  JAcuna@azdot.gov  602-712-8336
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ADOT Project Management Group