

Initiating Local Public Agency Projects

A Project Manager's Role: A High-Level Overview

Derek B. Boland, P.E.

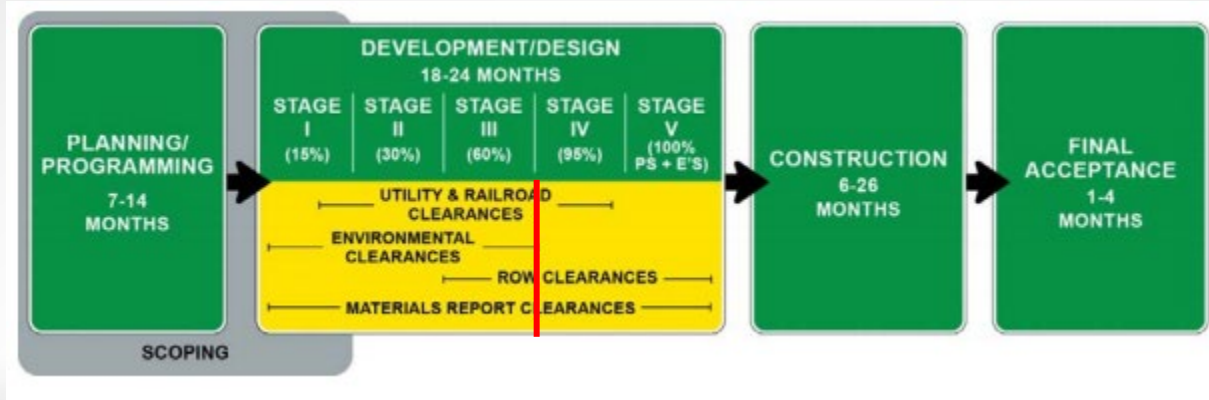
Project Management Group

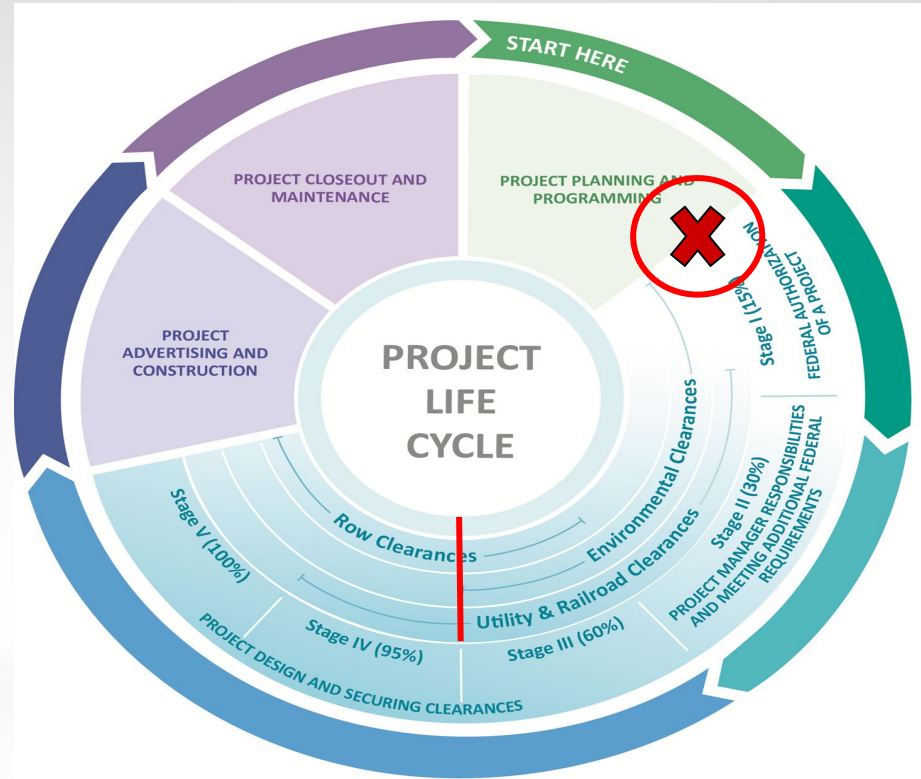


Initiating Local Public Agency Projects

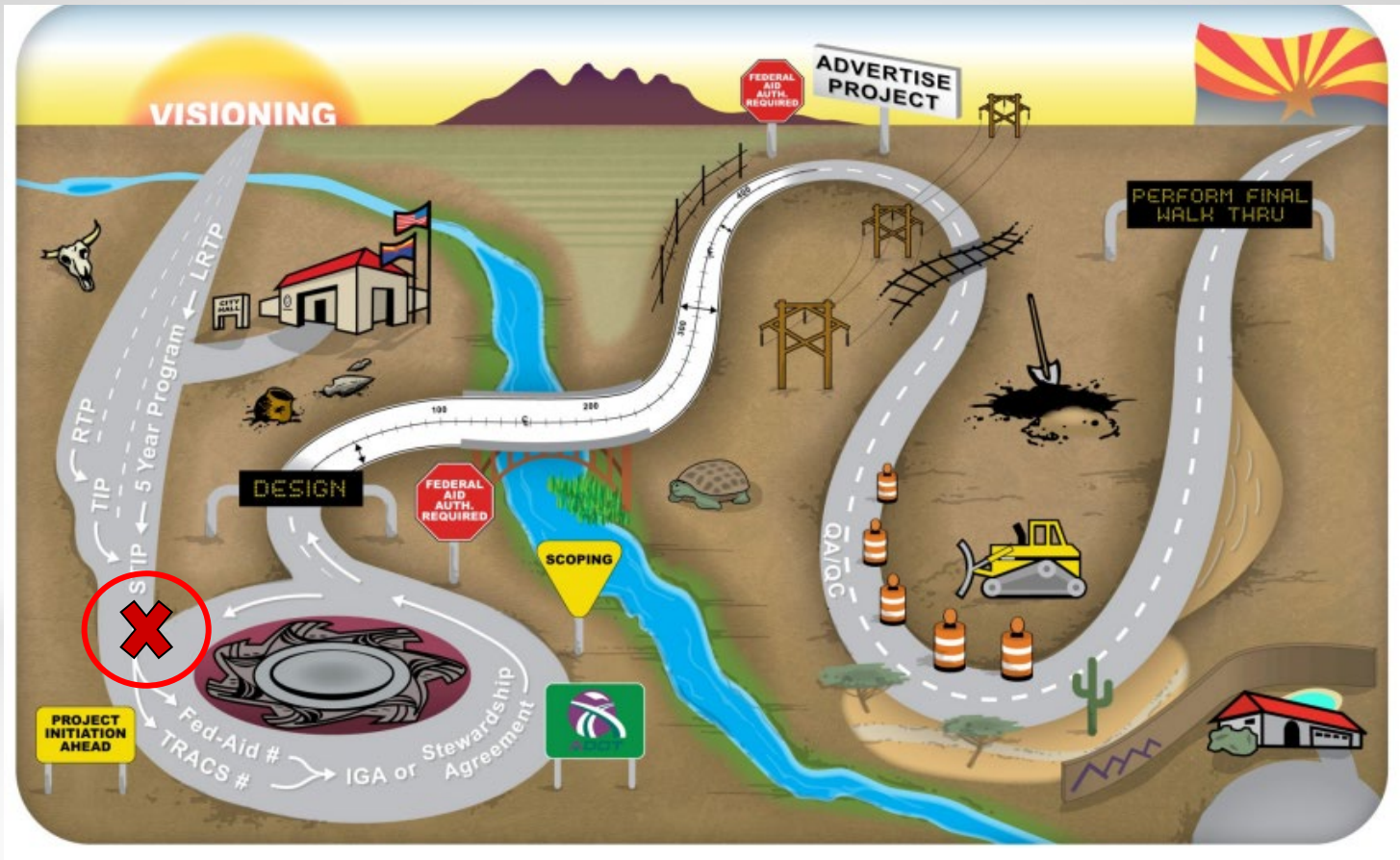
- Overview
- When PMG gets involved / role of the PM
- Establishing a project / Project Initiation
- Developing a scope/schedule/budget
- Overview of the development process
- Project Manager Role / Responsibilities
 - Which team members help manage the project/SMEs?
 - IGAs
- Proactively managing a project / tools
- Questions

Development Process Overview





15-024 upd 05-10-21



Resources

Project Initiation



Required Documents:

 [Project Initiation Sample Letter](#) Rev. 5/21

 [Project Initiation Form](#)  Rev. 04/21

- [ADOT Functional Classification Map](#)
- Project Location Map, showing beginning and ending termini - both maps are required
- A *legible* copy of the local MPO/COG TIP page, with the project highlighted and all phases of the project shown in a programmed year
- Supporting Documentation

Supporting Documentation:

Supporting documentation is a required part of the packet; however, the type of supporting documentation will depend on the type of project and available documentation.

Supporting documentation can include: A copy of the approved COG/MPO funding application or workbook, ADOT Sub-program eligibility letter and application (CMAQ, HSIP, etc.), Project Assessment (PA), Design Concept Report (DCR), or any other supporting documentation that gives details about the project.

ADOT LPA Section also has additional resources available that can be used as supporting documentation and to help with projecting schedules and estimated costs, including:

 [Sample Scoping Document](#) (.doc) Rev. 2/6/18

 [Project Scoping Document Guidelines](#)  (.pdf)

 [ADOT Cost Estimate Tool](#) (.xls) Rev. 4/10/19

- [Historical Bid Unit Prices E2C2](#) (apps.azdot.gov)

Additional Resources:

 [Project Initiation Flow Chart](#)  (.pdf)

Business

[ADOT Business Coach On Demand](#)

[Business Engagement and Compliance](#)

[Engineering and Construction](#)

[Contracts and Specifications](#)

[Project Management Services](#)

[Highway Maintenance](#)

[Procurement](#)

[Engineering Consultants](#)

[Programs and Partnerships](#)

[Adopt a Highway](#)

[Border Liaison Unit](#)

[Arizona Council for Transportation Innovation](#)

[Grand Canyon State Logo Sign Program](#)

[Joint Project Agreement](#)

[Local Public Agency](#)

[Home \(LPA\)](#)

[Certification Acceptance](#)

[Federal Aid Highway Programs](#)

➤ Project Initiation

[Resource Materials](#)

[Self-Administration \(SA\)](#)

[Trainings \(LPA\)](#)

[Communication Bulletins](#)

[Stakeholder Council](#)

[Contact Us](#)

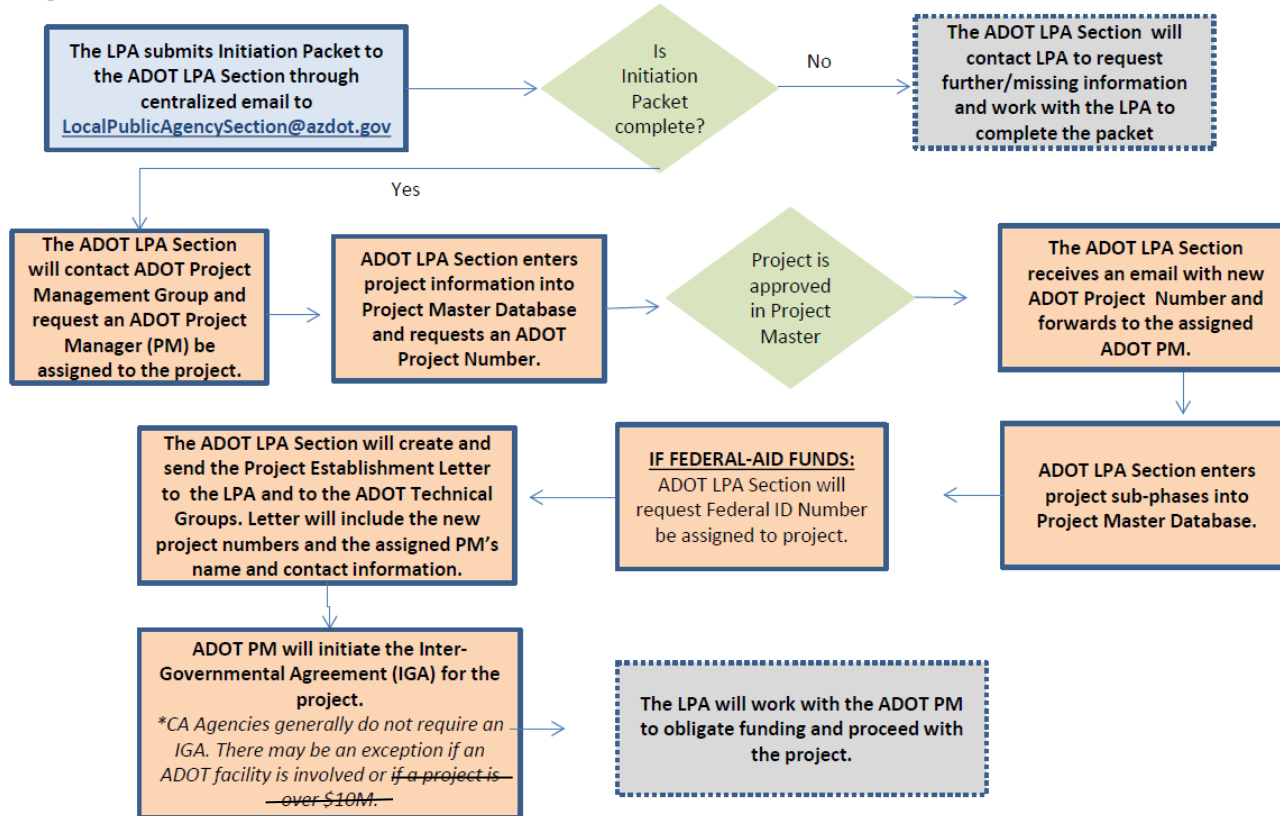
[P3 Initiatives](#)

[Partnering](#)

NOTES:

- Prior to requesting funding through ADOT, LPA Coordinator should have approval from their local COG/MPO and the project must be added to the COG/MPO's Transportation Improvement Plan (TIP)
- Project Initiation forms and documents can be found on the ADOT website at: <https://azdot.gov/node/14142>
- ADOT LPA Section will initiate the project within 30 days of receiving a **COMPLETED** Initiation Packet.

Project Initiation Process for Local Public Agencies



'for funding reasons.'

Revised on 12/17/18



ADOT
LPA PROJECT INITIATION FORM

Project Name:	<input type="text"/>	Sponsor Agency:	<input type="text"/>
Project Location:	<input type="text"/>	Functional Class:	<input type="text"/>
Sponsor Contact:	<input type="text"/>	Phone & Email:	<input type="text"/>
COG/MPO: Select One...	TIP ID: <input type="text"/>	Program FY: DESIGN <input type="text"/>	ROW <input type="text"/> CONST <input type="text"/>
Administered By:	<input type="radio"/> CA <input type="radio"/> SA (fed \$) <input type="radio"/> SA (loc \$) <input checked="" type="radio"/> ADOT	Design By:	<input type="radio"/> Local <input type="radio"/> Consultant

PROJECT SCOPE (DETAILED description of work being completed, including current status and beginning and end term)

Pre-Scoping/Project Assessment (PA) Completed? ☐ Yes ☐ No Public Outreach By: ☐ Local Sponsor ☐ ADOT

PROJECT FUNDING (COMPLETE AS APPLICABLE)				
Note: All costs below should match what is in the Regional TIP				
Item	Source	Federal \$	Local \$	Total \$
ADOT Review/PDA Fee (formerly PMDB)	Select One...			\$ 0.00
Design (\$4.8% Fed / 5.7% Local)	Select One...			\$ 0.00
Design Other (Local: 100%/Overmatch)	Select One...			\$ 0.00
Construction (\$4.3% Fed / 5.7% Local)	Select One...			\$ 0.00
Construction Other (Local: 100%/Overmatch)	Select One...			\$ 0.00
ROW Acquisition (\$4.2% Fed / 5.7% Local)	Select One...			\$ 0.00
ROW Acquisition (Local: 100%/Overmatch)	Select One...			\$ 0.00
Total Project Cost		\$ 0.00	\$ 0.00	\$ 0.00

Environmental Considerations (Identify scope and risks to delivery)

Class of Action (COA): ☐ CE ☐ EA ☐ EA Re-evaluation

Do not use N/A in this field. Please provide a brief description of the environmental considerations. An estimate of what type of work will be done to address environmental needs (i.e. NEPA, Historical, Cultural, CE only, EA, only, EA Re-evaluation).

Right of Way (Identify scope and major risks to delivery)

New ROW Required? ☐ Yes ☐ No

Do not use N/A in this field. Please provide an estimate of what type of work will be done to address ROW needs (i.e. purchase of # of properties will be required, or no new ROW will be required)

Utilities & Railroad (Identify scope and any major risks to delivery)

Do not use N/A in this field. Please provide an estimate of what type of work will be done to address URR needs (i.e. Type of Utility will need to be installed/moved or No URR impacts are anticipated)

ESTIMATED SCHEDULE	
Item	Completion Date
Project Initiation	<input type="text"/>
IGA Execution	<input type="text"/>
PE Authorization	<input type="text"/>
Kick-Off Meeting	<input type="text"/>
Stage I (15%)	<input type="text"/>
Stage II (30%)	<input type="text"/>
Env Clearance	<input type="text"/>
Stage III (60%)	<input type="text"/>
ROW Clearance	<input type="text"/>
Stage IV (95%)	<input type="text"/>
Utilities Clearance	<input type="text"/>
Bid Packet Ready	<input type="text"/>
Bid Advertisement	<input type="text"/>
Bid Award	<input type="text"/>
Construction Start	<input type="text"/>
Construction End	<input type="text"/>
Project End	<input type="text"/>

TOTAL DEVELOPMENT HOURS (ESTIMATE OF ADOT REVIEW HOURS)	
Item	Review Hours
Design Review	<input type="text"/>
Scoping/Pre-Design	<input type="text"/>
Final Design	<input type="text"/>
Right of Way	<input type="text"/>
Environmental	<input type="text"/>
Total	0

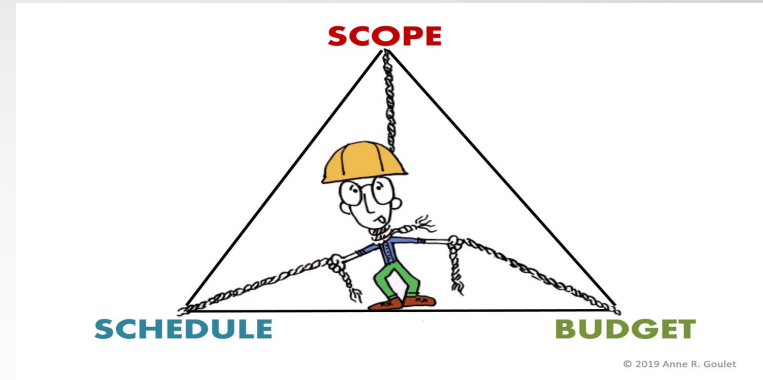
Rev. May 2021

Scoping



Scoping <=> Scheduling <=> Budget

- Current site characteristics
- Potential project footprint
- Major project components
- Potential design alternatives



- Environmental resource clearance requirements
- ROW clearance needs
- Utility and railroad coordination requirements
- Landownership
- Geotechnical investigation needs
- Hydrologic conditions
- Cost estimates

Scoping

Contract No. 00-00

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
PROJECT MANAGEMENT GROUP

PART B:
DICTIONARY
OF
STANDARDIZED WORK TASKS

Fiscal Year 2019

Scoping

ARIZONA DEPARTMENT OF TRANSPORTATION



**GUIDELINES FOR SCOPING
PAVEMENT PRESERVATION PROJECTS**

November 2015

ROADWAY ENGINEERING GROUP
ROADWAY PREDESIGN SECTION

Scoping

SUPPLIER	MILESTONE SUBMITTAL ITEMS	DCR-PA/ 15% STG I	30% STG II	60% STG III	95% STG IV	100% STG V
Survey, P&M	DTM, Mapping	F				
Survey, ROW	Survey Sectional Control, R/W Survey, and Results of Survey	P	F	S		
ROW	ROW Plans	I	P	F		S
ENV	Env. Document- E/A/EIS CE	P	F	F		
ENV	Noise Impact Analysis	F				
ENV	Environmental Permits			P	F	
Designers, ENV, U&RR, ROW	Project footprint File (KMZ)	I	P	F		
Communications	Public Involvement Plan	F				
ENV, Geotech	Geotech Drilling Env. Clearance	F				
Geotech	Field Investigation	P	P	F		
Geotech Design	Bridge Foundation Report		P	F	S	
Geotech Design	Geotechnical Report	I	P	F	S	
Roadway	Pavement Design Summary	I	P	F	S	
Roadway	Materials Design Report	I	P	F	S	
U&RR	Utility Base Map/Designating (SUE Ph I)	P	F		S	
U&RR	Utility Locating / Pot-holing (SUE Ph II)	I	P	F	S	
Util. Cos., U&RR	Conflict Determinations, Prior Rights	I	P	F	S	
U&RR	Utility Report		P	F	S	
Util. Cos., Rdwy., U&RR	Utility Relocation Plans, Details		P	P	F	S
Bridge	Initial Bridge Study (w/ geotech clearance footprint)	F				
Bridge	Structure Selection Report		P	F	S	
Bridge/Drainage	Hydraulics Report - NBI Structures		P	F	S	
Bridge	Wall Report		P	F	S	
Drainage	Drainage Report - Roadway		P	F	S	
Traffic	Traffic Analysis Report	P	F	S		
Traffic	Transportation Mgmt. Plan (TMP) Memo		I	P	F	
Roadway	Right-of-Way and TCE Requirements for Project-Project Footprint	P	F			
Roadway	Face Sheet	I	P	F	F	F
Roadway	List of Standard Drawings		P	F	F	F
Roadway	Design Sheet & Index		P	P	F	S
Roadway	Typical Roadway Sections	I	P	F	F	S
Roadway	Geometric Control Sheets		P	F	F	S
Rdwy., Designers	Summary Sheets			P	F	S
Rdwy., Designers	Special Detail Drawings			P	F	S
Roadway	Turnout & Driveway Details	I	P	P	F	S
Roadway, U&RR	Existing Conditions & Removal		P	F	F	S
Roadway, Traffic	Detour Plan and Profile Sheets		P	P	F	S
Roadway, Traffic	Parking Area Plans & Details		P	F	F	S
Roadway	Staking and Joint Layout Plans			P	F	S

SUPPLIER	MILESTONE SUBMITTAL ITEMS	DCR-PA/ 15% STG I	30% STG II	60% STG III	95% STG IV	100% STG V
Roadway	Fencing Plans			P	F	S
Bridge	Major Structural Plans, Details		I	P	F	S
Bridge	Retaining and Noise Wall Plans	I	P	P	F	S
Bridge	ABC Evaluation	I	F			
Drainage, Rdwy.	Roadway Drainage Plans & Details		P	P	F	S
Roadway	Roadway Plan & Profile Sheets	I	P	P	F	S
Roadway	Intersection Plans & Details		P	P	F	S
Roadway	Interchange Plans & Details		P	P	F	S
Roadway	Roadway Cross Sections	I	P	P	F	S
Traffic	Detour Route Established	P	F		P	F
Roadway/Traffic	Detour Plan and Profile Sheets			P	F	S
Traffic	Traffic Signal Plans, Details			P	F	S
Traffic	Traffic Control Plans, Details			P	F	S
Traffic	Signing & Pavement Marking Plans & Qty.			P	F	S
Traffic	Lighting Plans & Details			P	F	S
Traffic, Rdwy, District	Sequence of Construction	I	P	P	F	S
Designers, C&S, and District	Construction Schedule and Durations		I	P	F	F
District, Communications	CE Fix Cost Estimate				F	
Roadside	Aesthetics, Landscape Plans & Details	I	P	P	F	S
Roadside	Stormwater Pollution Prevention Control Plan - Erosion & Sediment Control			P	F	S
Roadside, Rdwy.	Top Soil Pitting Sheets			P	F	S
Environmental	EPIC			P	F	
C&S	Bidding Schedule			P	P	F
C&S	Recap Sheet				P	F
Designers, C&S	Estimate	I	P	P	F	S
Designers	Earthwork Summary	I	P	P	F	
Designers, C&S	Special Provisions, including stored specs, bid documents		I	P	F	S
Designers	Post Design Estimate				F	
PMG, Construction	Average User Delay Costs				F	
PMG, JPA, FMS	Maintenance and Financial Agreements - JPAs, IGAs, etc.	I	P	F		
Railroad, U&RR	Railroad Service Agreement			P	F	
Util. Cos., U&RR	Utility Relocation Agreement			P	F	
Util. Cos., U&RR	Utility Service Agreement			P	F	
ENV, RW and U&RR	Clearances - Environmental - Right of Way Utilities & Railroad		P I I	F P P	F F F	
Civil Rights*	- DBE Participation Goals/Trainees					F
C & S*	FHWA Submittals - PS&E, construction					F

SUPPLIER	MILESTONE SUBMITTAL ITEMS	DCR-PA/ 15% STG I	30% STG II	60% STG III	95% STG IV	100% STG V
	duration & clearances					
Designers	CADD Files (graphic, ascii, dtm, & etc.)					F

* Applies to federally funded projects only

LEGEND:

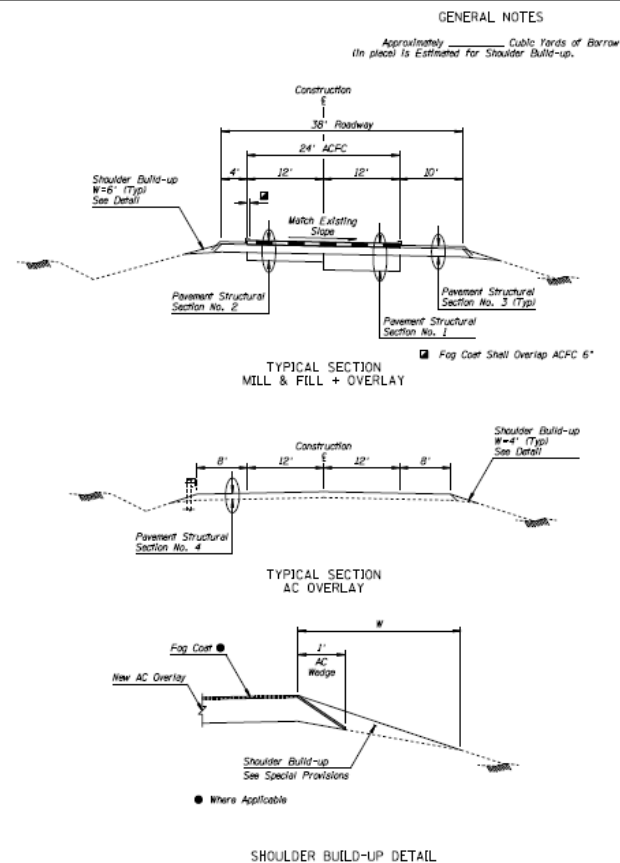
I = denotes initial concepts

P = denotes preliminary, unchecked, excluding minor details

F = denotes final, checked, all details and quantities

S = denotes sealed in accordance with technical registration requirements

Scoping



Scoping..

- ☐ Construction staging
- ☐ Road closures, lane restrictions, or both
- ☐ Temporary bridges
- ☐ Emergency access routes
- ☐ Intelligent Transportation Systems

Crash history

- ☐ Crash problems (by location, trends and patterns, or both)
- ☐ Traffic crash reports
- ☐ Sight distance

Typical section, design speed, and pavement needs

- ☐ Lane width versus design standards
- ☐ Roadway widening, leveling, and subgrade repair
- ☐ Pavement design

Shoulders and ditches

- ☐ Adequate width
- ☐ Slopes
- ☐ Shoulder rock
- ☐ Ditch work
- ☐ Safety edge

Road approaches and accesses

- ☐ Pavement or gravel
- ☐ Need for closures
- ☐ Sight-distance problems
- ☐ Alignment and spacing

Bridge-approach needs

- ☐ Impact panels
- ☐ Expansion joints

Bridge, retaining walls, and structure needs

- ☐ Number of spans proposed

- ☐ Bridge railing
- ☐ End treatments

Drainage needs

- ☐ Fish culverts
- ☐ Damaged or plugged culverts
- ☐ Culvert extensions, additions, or replacements
- ☐ Off-site drainage
- ☐ Flooding problems
- ☐ Catch basins
- ☐ Ditches

Illumination and signaling needs

- ☐ Illumination
- ☐ Traffic signals
- ☐ Historic or ornamental street lighting
- ☐ Permanent or temporary signals

Guardrail needs

- ☐ Repair, replacement, extension, addition, or removal
- ☐ Appropriate length of need
- ☐ End treatment type

Hydraulics considerations

- ☐ Scour
- ☐ Erosion
- ☐ Riprap and other control measures
- ☐ Federal Emergency Management Agency (FEMA) guidance

Geotechnical considerations

- ☐ Foundation
- ☐ Environmental clearances
- ☐ Geology
- ☐ pH and resistivity
- ☐ Drilling requirements
- ☐ Surcharge
- ☐ Bridge length and width (ft)
- ☐ Horizontal curvature (minimum radius) (ft)
- ☐ Vertical curvature (crest) (K value)

Geometric Design Standards

- ☐ Type of project
- ☐ Design standards
- ☐ Type of terrain

Traffic Data

- ☐ Functional classification
- ☐ Current and projected average annual daily traffic, as well as peak-hour traffic if applicable
- ☐ Crash history (injuries, fatalities, and trends)
- ☐ Crash location proximity (mile point)

Environmental Issues

Biological resource issues

Required land use actions

Signage and markings

- ☐ Signing requirements
- ☐ Pavement striping
- ☐ Other pavement markings
- ☐ Replacement, upgrade, or new installation
- ☐ Signing plans
- ☐ Delineators
- ☐ Striping plans
 - ☐ Durable stripe products
- ☐ Retroreflectivity
- ☐ Rumble strips

Special design features to be addressed

- ☐ Existing slopes versus design standards
- ☐ Horizontal and vertical alignment versus design standards

Design exceptions and concurrences

- ☐ Vertical and horizontal clearances
- ☐ Alignments
- ☐ Bridge widths and rail
- ☐ Shoulder and lane widths
- ☐ Side slopes
- ☐ Clear zone

Political or controversial issues

- ☐ Anything that could delay project
- ☐ Construction timing
- ☐ Railroad crossings
- ☐ Approved/planned development

ADA requirements (see Chapter 16, Civil Rights for more information)

- ☐ Curb and median ramps and blended transitions
- ☐ Sidewalks
- ☐ Pedestrian access routes
- ☐ Accessible crossings
- ☐ Detectable warning surfaces
- ☐ Accessible signals and push buttons

Miscellaneous items

- ☐ Mailbox needs
 - ☐ Replacement, relocation, or consolidation
- ☐ Fencing
- ☐ Gates
- ☐ Bollards (traffic-barrier posts)
- ☐ Landscaping
- ☐ Borrow pits

- ☐ Riprap
- ☐ Seeding and mulching
- ☐ Tree plantings
- ☐ Stormwater Pollution Prevention Plan
- ☐ Water quality issues or concerns
- ☐ Floodplain
- ☐ In-water work period
 - ☐ Identification of tributary to body of water or drainage outfall

Socioeconomic issues

- ☐ Analysis of adverse economic, social, and environmental effects on a community or group of people
- ☐ Relocation impacts
- ☐ Environmental justice and Title VI

Issues

Cost assessment

Location

Location includes but is not limited to the following:

- ☐ City limits
- ☐ State boundaries
- ☐ State start and end points

Notes

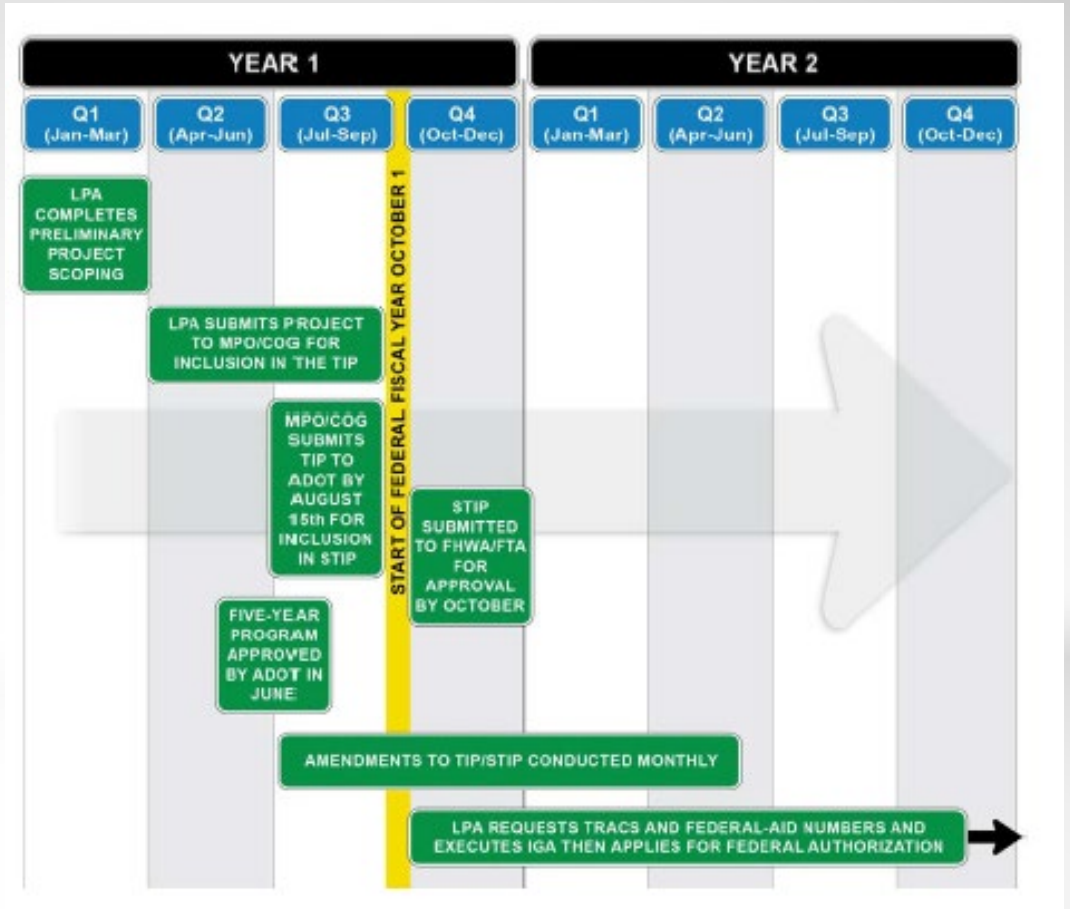
Issues

- ☐ State location
- ☐ Accessibility considerations

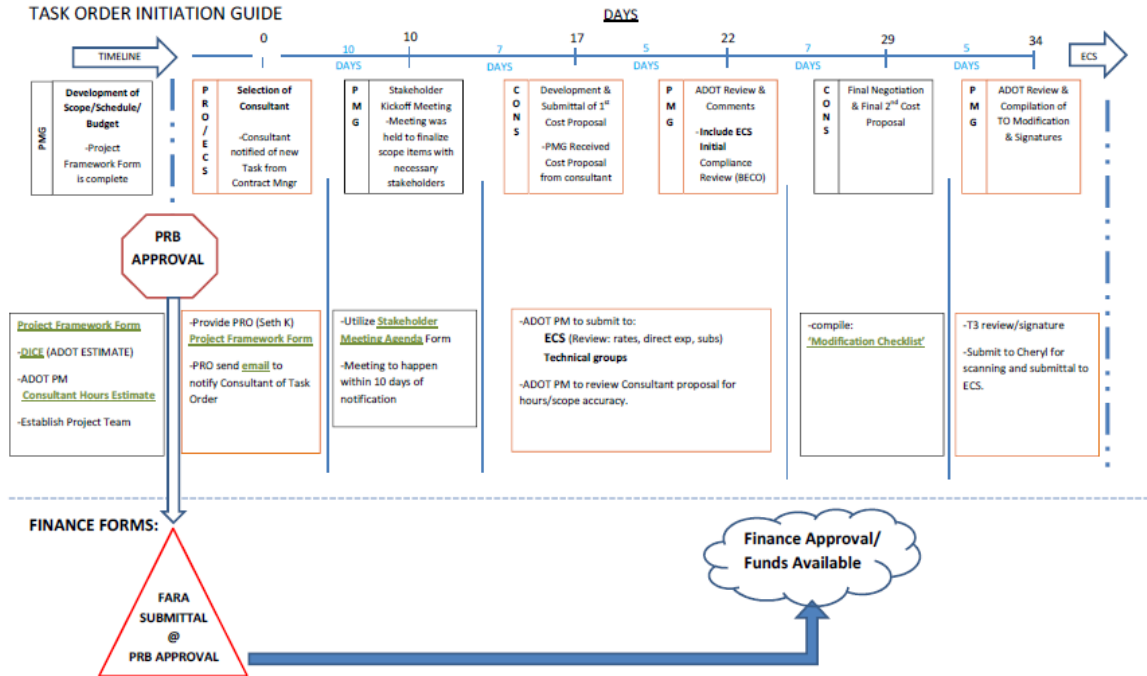
Other

Other be paid for? Prepare ROW descriptions and

Schedule(s)



Schedule(s)



What is the Project Manager's Role

Initiating Local Public Agency Projects

- **Shepard the project though the Development Process**
- **Responsible for:**
 - **Project Schedule**
 - **Project Budget**
 - **Milestone Deliverables**
 - **Project Advertisement**
 - **Design Closeout**
 - **Post Design Services**
 - **DELIVERY**

LPA Training Module 2

Initiating Local Public Agency Projects

- **PM Role cont'd**
 - **Initiate IGA**
 - **Set Budget/Schedule/Risks**
 - **Consultant Design**
 - **HSIP / OSB**
 - **Project Review Board (PRB) => PPAC => STB**
 - **Design Authorization from FHWA**

LPA Training Module 2

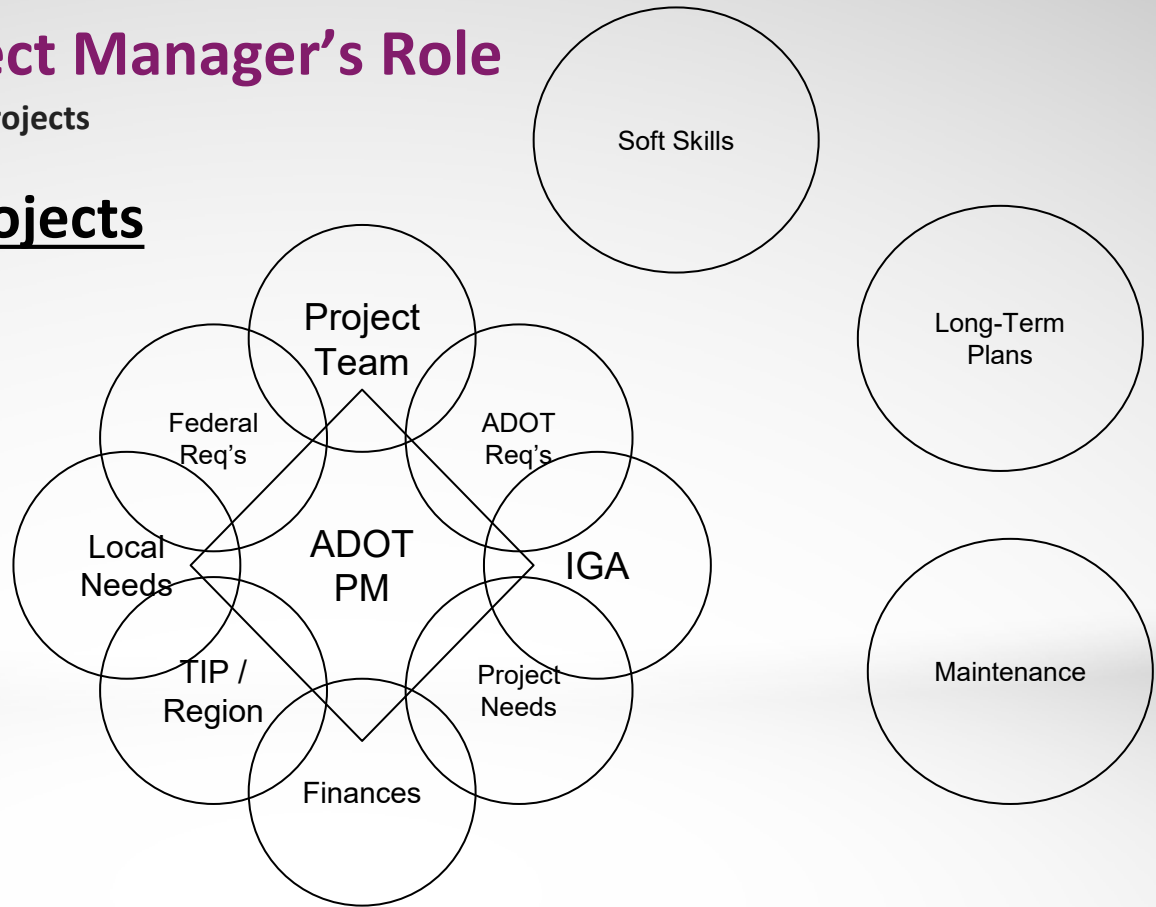
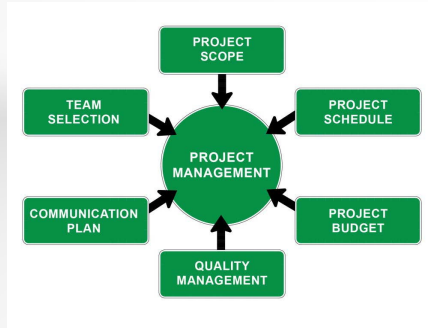
Initiating Local Public Agency Projects

- **Other Groups We Collaborate with on Projects**
 - **ADOT Technical Groups**
 - **C&S**
 - **Districts**
 - **FMS**
 - **Communications**
 - **FHWA**
 - **YOU!**

What is the Project Manager's Role

Initiating Local Public Agency Projects

- **Delivering Projects**



LPA Training Module 2

Initiating Local Public Agency Projects

- **Project Work Plan (Pre-plan Project)**
 - **Defines Team**
 - **Communication Protocol**
 - **Defines Design Criteria**
 - **Defines Project Schedule/Budget**
 - **Defines Project Quality Plan**
 - **Defines Project Risks/Risk Register**
- **Kick-Off/Field Review**
- **Workfront**



LPA Training Module 2

Initiating Local Public Agency Projects

