

PROJECT DELIVERY ACADEMY

MODULE 1: Planning and Programming

# MPD CORRIDOR PLANNING

Presented by:

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ADOT Multimodal Planning Division  
Corridor Planning Manager

# Overview:

- Planning Level Scoping (PLS)
- Corridor Environmental Planning Studies (NEPA)

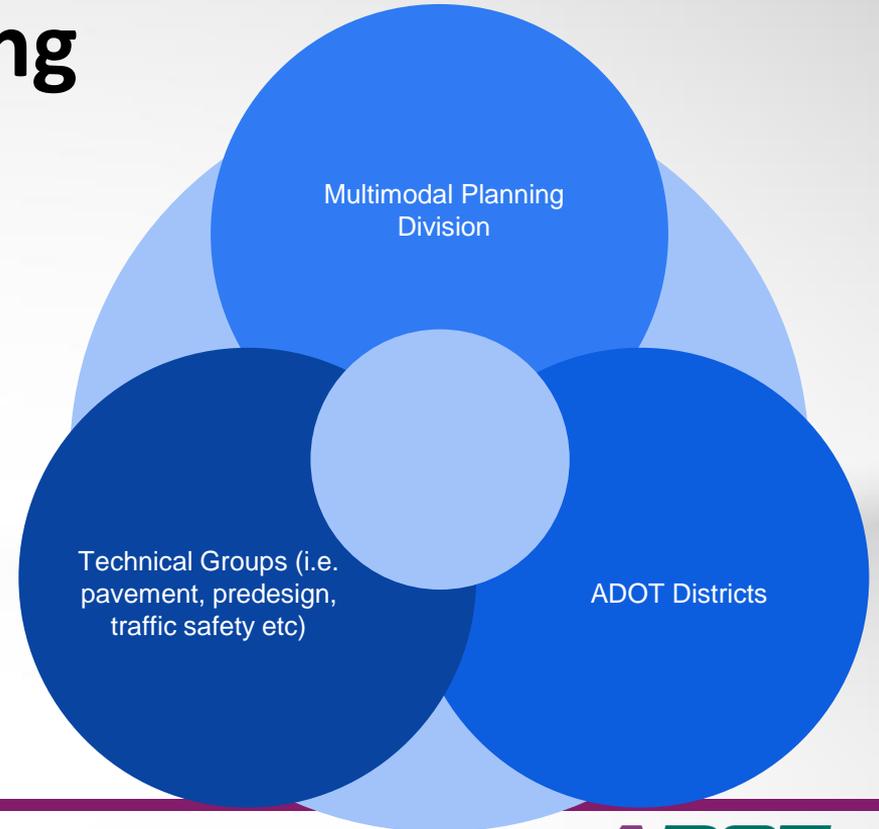
# Pavement Rehab Development Process



\*Scope prior to Programming

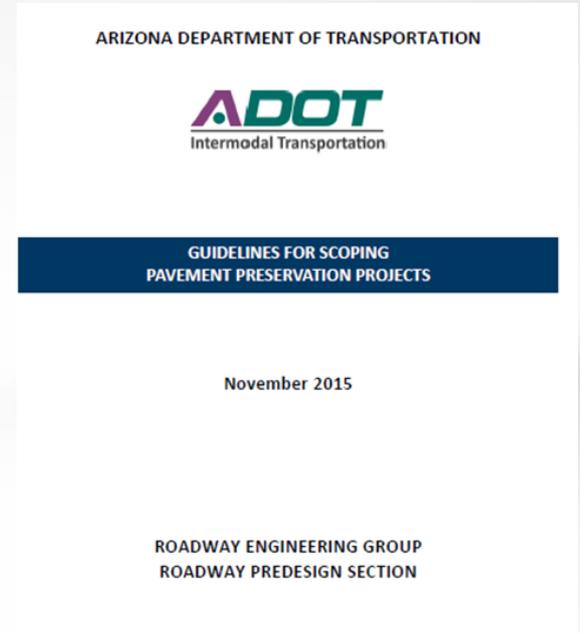
# Planning Level Scoping

Holistic approach to develop scopes of work on pavement preservation projects at the planning stage



# Scoping Pavement Preservation Projects

Goal: Establish consistent approach of work items (safety) to be addressed within termini



# Safety Enhancements Include

- Shoulder Build up
- Pavement Marking and Striping
- Rumble Strips
- Guardrail Enhancement

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General

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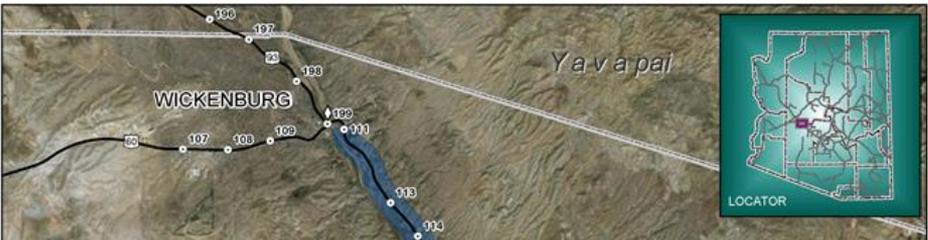
A B C D E F G H I J K L M N O P Q R S T

**PLANNING LEVEL SCOPING FOR PAVEMENT PRESERVATION PROJECTS**

<b>Project Manager:</b>		<b>ADOT MPD Corridor Planning Group</b>	<b>Contact Info:</b>	
<b>Date Initiated</b>		<b>Completion Date</b>		

<b>Project Name:</b>	S of Buckeye to SW of Buckeye	<b>Type of Work:</b>	Pavement Preservation	<b>Functional Classification:</b>	Principal Arterial (Classification Maps)
<b>Route:</b>	SR 85	<b>County:</b>	Maricopa	<b>Terrain:</b>	Level
<b>Project Limits:</b>	MP 142.00 - MP 149.11	<b>District:</b>	Southwest	<b>Urban:</b>	Rural:X
		<b>NHS System:</b>	Yes: X No:	<b>Project Elevation:</b>	815 feet

**Project Map**



# Conclusion: Planning Level Scoping

- ▶ Planning level scoping completed ahead of programming
- ▶ Final design builds on PLS
- ▶ Current PDCA to improve scoping process

# Corridor Environmental Planning Studies

- Overview (Future Interstate Corridors)
- Environmental Review Process
- Coordination and Collaboration

# Future Interstate Corridors

- Corridor 26: I-11 (AZ to Nevada)
- Corridor 83: Sonoran Corridor (I-19 to I-10)

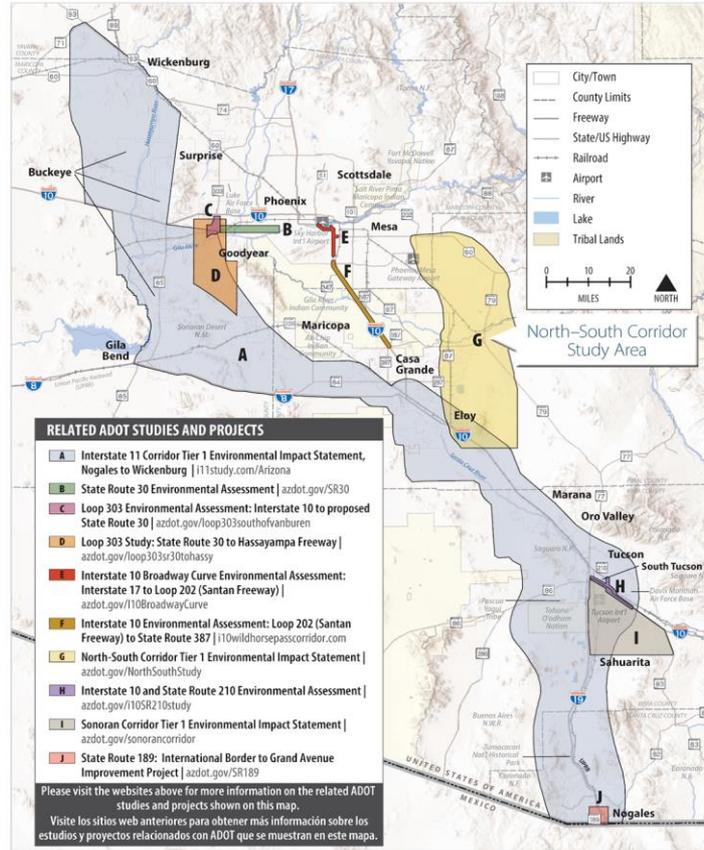


High Priority Corridors Designated as Future Interstates by Congress

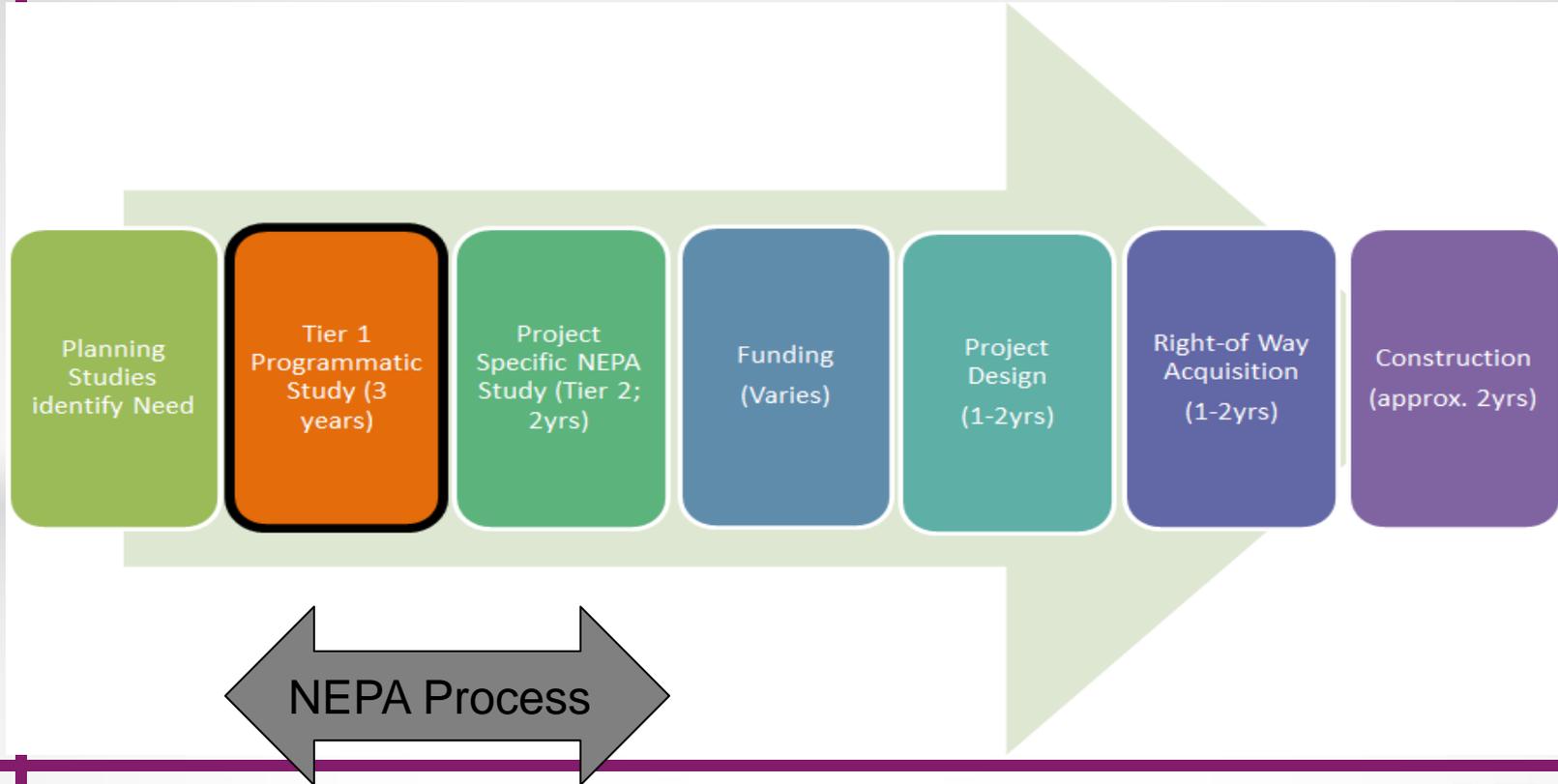


Notes:  
Colors are added for clarity only.  
Corridor numbers correspond to statutory listing in Section 1105(c) of ISTEA 1991, as amended.  
Some portions of the future interstates have been constructed to Interstate standards, open to traffic and signed as Interstates.  
Corridors based on information available as of December 20, 2019.

# RELATED ADOT STUDIES AND PROJECTS



# Project Development Process



# Purpose & Need

- Establishes the basis for the development of alternatives

## PURPOSE & NEED

### Improve access to future activity centers

The proposed corridor would benefit the study area's new activity and population centers and undeveloped lands identified for development that are in various stages of local or regional planning processes.



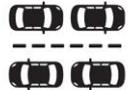
### Population and Employment Growth

Consistent with state, regional, and municipal planning initiatives, the proposed corridor would accommodate anticipated growth in the study area and across the larger region.



### Improve regional mobility

The proposed corridor would provide additional roadway capacity ahead of full development build-out to avoid congestion associated with anticipated growth.



### Improve north-to-south connectivity

The proposed corridor would connect eastern portions of the Phoenix metropolitan area with Pinal County and destinations to the south, including Tucson.



### Provide an alternative to avoid congestion on I-10

The proposed corridor would provide a continuous alternative to I-10 to reduce traffic delays at full development build-out.



### Integrate the region's transportation network

The proposed corridor would provide a critical link, currently missing, in the transportation network to provide regional connectivity.



# Alternatives Analysis

- Environmental Resources
- Avoidance Areas
- Design guidelines (interstate)
- Proposed Alternatives

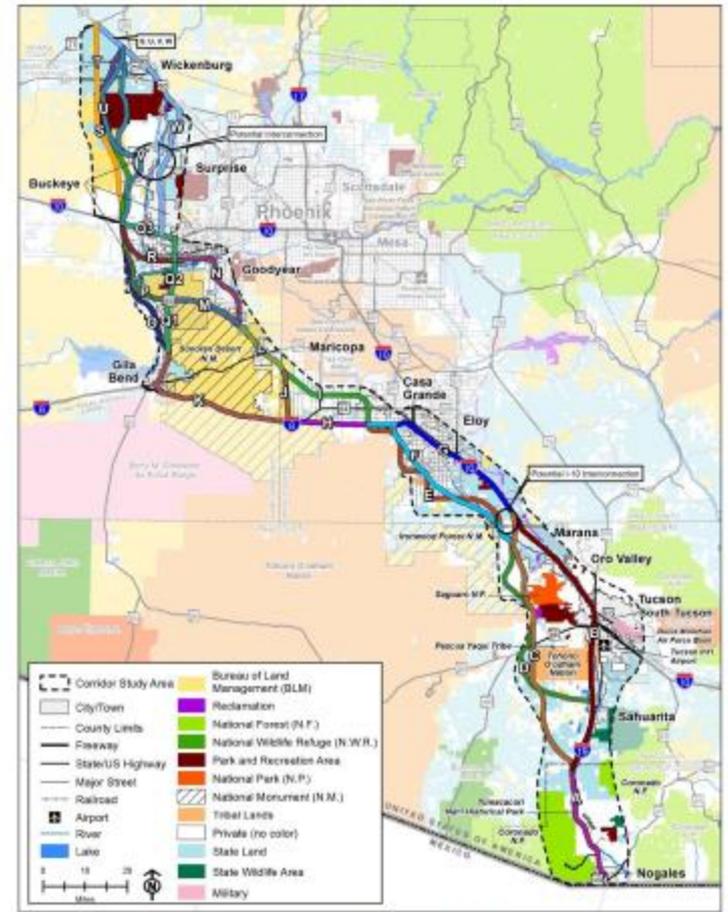


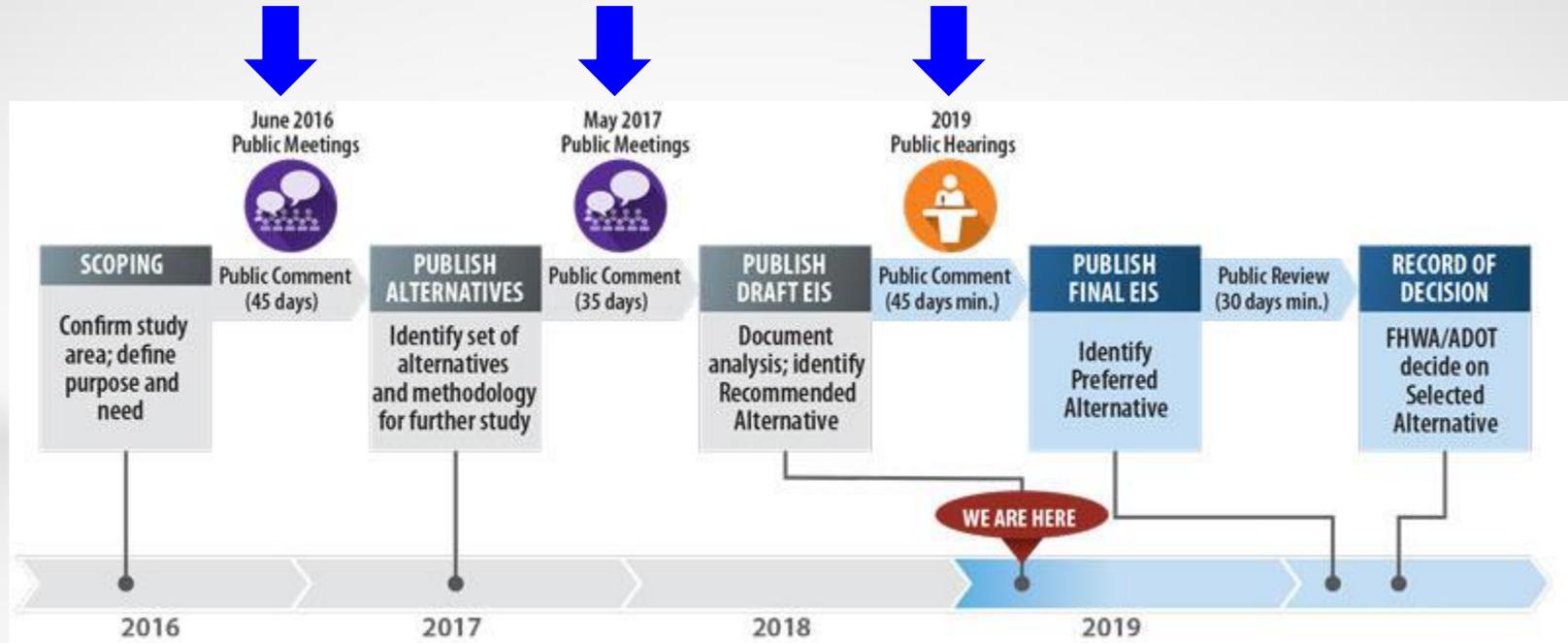
Figure 3-3 I-11 Corridor Options

# Evaluation Methodology

Table 4-1 Screening Criteria and Measures <sup>(1)</sup>

Criteria	Description	Evaluation Measure	Scale	Source
<b>Address Population and Employment Growth</b>				
Population Growth	Ability to connect the projected population increase (2015-2035) to the high-capacity, access-controlled transportation network.	Population growth (2015 to 2035) in traffic analysis zones (TAZs) that are located within 2 miles either side of corridor options	<ul style="list-style-type: none"> <li>○ Low new population growth within TAZs that intersect Study Area on 2 miles either side of the alternative</li> <li>● Moderate new population growth within TAZs that intersect Study Area on 2 miles either side of the alternative</li> <li>● High new population growth within TAZs that intersect Study Area on 2 miles either side of the alternative</li> </ul>	ADOT Statewide Travel Demand Model (based on growth projections established by the state Metropolitan Planning Organizations [MPOs] and Arizona State Demographer's office).
Employment Growth	Ability to connect the projected increase in jobs (2015-2035) to the high-capacity, access-controlled transportation network.	Employment growth (2015 to 2035) in TAZs that are located within 2 miles either side of corridor options	<ul style="list-style-type: none"> <li>○ Low new employment growth within TAZs that intersect Study Area on 2 miles either side of the alternative</li> <li>● Moderate new employment growth within TAZs that intersect Study Area on 2 miles either side of the alternative</li> <li>● High new employment growth within TAZs that intersect Study Area on 2 miles either side of the alternative</li> </ul>	ADOT Statewide Travel Demand Model (based on growth projections established by the state MPOs and Arizona State Demographer's office).
<b>Mitigate Congestion and Improve Travel Times</b>				
Traffic Volumes	Projected traffic to be carried on each corridor alternative, as well as diversions that may alleviate congestion throughout the existing network in 2035.	<p>Average weekday traffic volumes on each corridor option, 2035</p> <p>Average weekday traffic volumes on other major corridors in the network (I-10, SR 85, I-8, I-17 etc.), 2035</p> <p>Predicted traffic diversions from the existing transportation network</p>	<ul style="list-style-type: none"> <li>○ Lower traffic volumes including traffic diverted from more congested routes</li> <li>● Moderate traffic volumes including traffic diverted from more congested routes</li> <li>● Higher traffic volumes including traffic diverted from more congested routes</li> </ul>	ADOT Statewide Travel Demand Model
Level of Service	Level of Service (LOS) is a quantitative measurement of the operational characteristics of traffic and the perception of traffic conditions by both motorists and passengers. LOS measures impacts to traffic operations and access due to new connections with existing or planned regional facilities (freeway and state routes).	<p>LOS on each corridor option (traffic flow from A to F), 2035</p> <p>LOS on other major corridors in the network (I-10, SR 85, I-8, I-17 etc.) (traffic flow from A to F), 2035</p>	<ul style="list-style-type: none"> <li>○ LOS E or worse</li> <li>● LOS D</li> <li>● LOS C or better</li> </ul>	ADOT Statewide Travel Demand Model
Travel Times	Compares average travel times on corridor options; a lower average travel time indicates improved travel time relative to the other corridor options.	Average travel time (minutes) during peak (3 PM and 6 PM), 2035	<ul style="list-style-type: none"> <li>○ Slowest travel time</li> <li>● Average travel time</li> <li>● Fastest travel time</li> </ul>	ADOT Statewide Travel Demand Model
Average Speeds	Compares average travel speeds on corridor options; a higher average travel speed indicates improved travel speeds relative to the other corridor options.	Average travel speed (miles per hour [mph]) during peak (3 PM and 6 PM), 2035	<ul style="list-style-type: none"> <li>○ &lt; 55 mph</li> <li>● 55 to 65 mph</li> <li>● &gt; 65 mph</li> </ul>	ADOT Statewide Travel Demand Model

# Outreach and Coordination



# Takeaways

- Communicate early and often
  - Build partnerships
- Total Systems Thinking
- Proactive and document process

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**QUESTIONS?**

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**THANK YOU**