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:

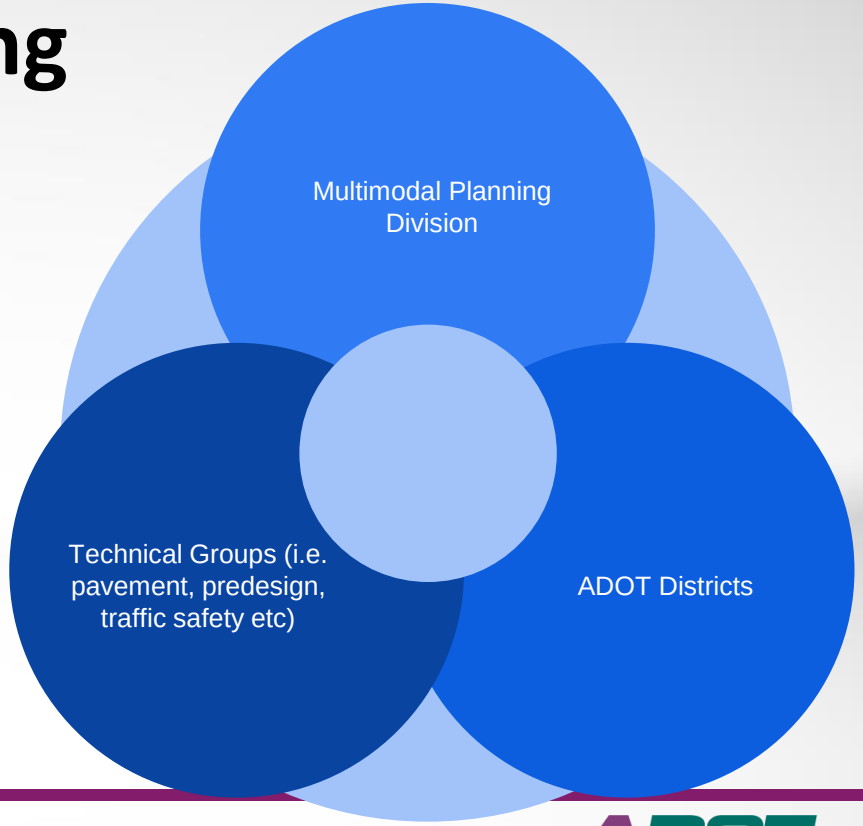
- Planning Level Scoping (PLS)
- Corridor Environmental Planning Studies (NEPA)

Pavement Rehab Development Process

*Scope prior to Programming

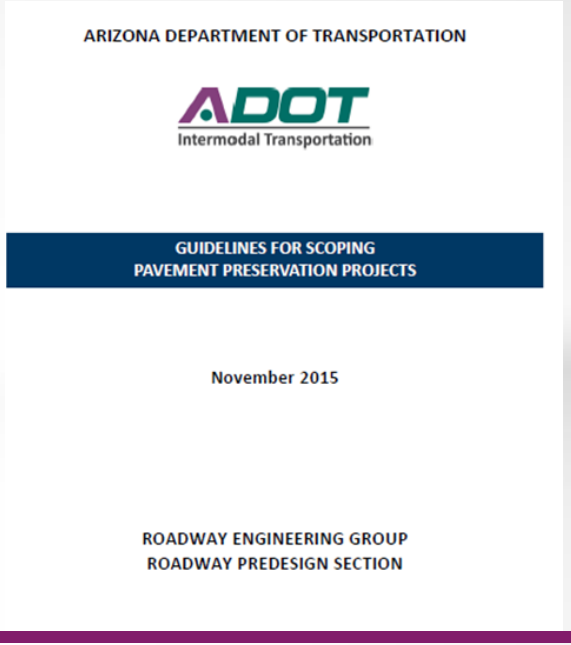
Planning Level Scoping

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


ARIZONA DEPARTMENT OF TRANSPORTATION

ADOT
Intermodal Transportation

GUIDELINES FOR SCOPING
PAVEMENT PRESERVATION PROJECTS

November 2015

ROADWAY ENGINEERING GROUP
ROADWAY PREDESIGN SECTION

Safety Enhancements Include

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

PLANNING LEVEL SCOPING FOR PAVEMENT PRESERVATION PROJECTS

Project Manager:		ADOT MPD Corridor Planning Group		Contact Info:	
Date Initiated		Completion Date			

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

Project Map

Project information | COST ESTIMATE | Project Background | MPD Data Group | Pavement Design and Geotech | Traffic Safety | Roadway Items | ADA | Roadway Drainage | Traffic D

Ready

11:19 AM
6/28/2020

Conclusion: Planning Level Scoping

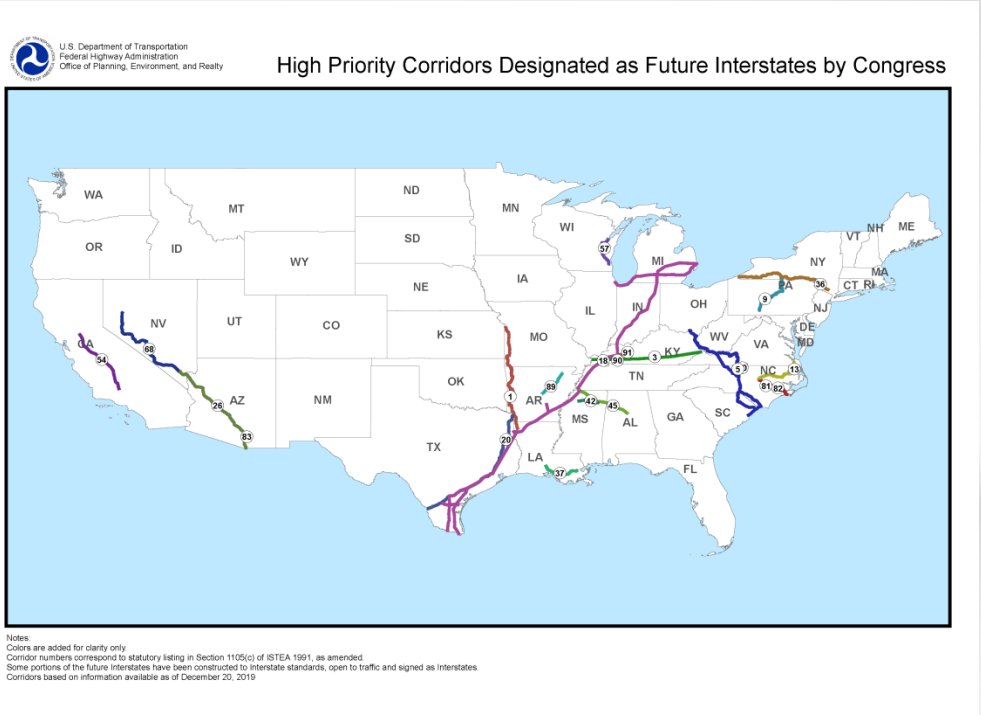
- Planning level scoping completed ahead of programming
- Final design builds on PLS
- Current PDCA to improve scoping process

Corridor Environmental Planning Studies

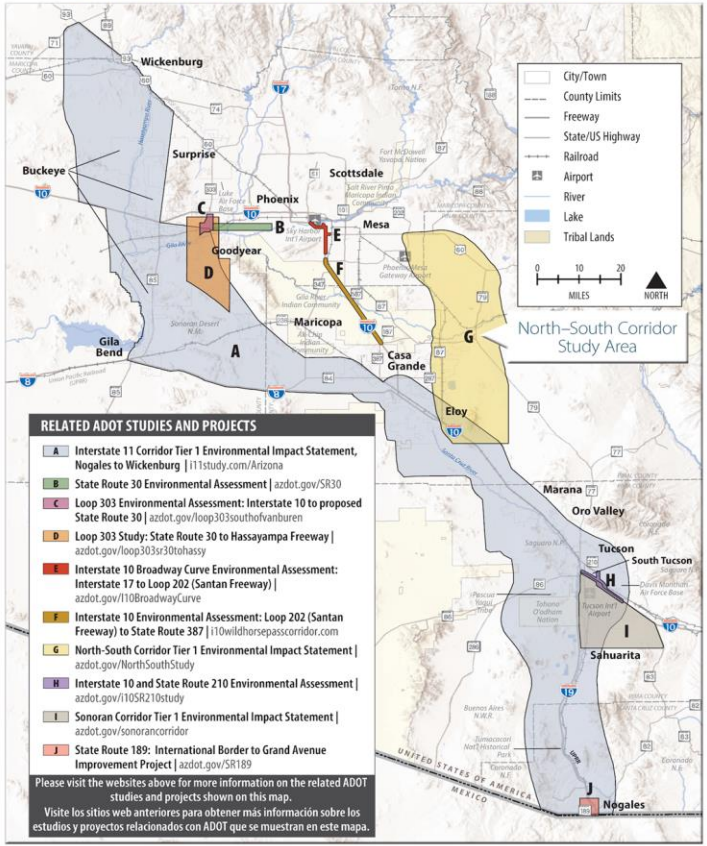
- Overview (Future Interstate Corridors)
- Environmental Review Process
- Coordination and Collaboration

Future Interstate Corridors

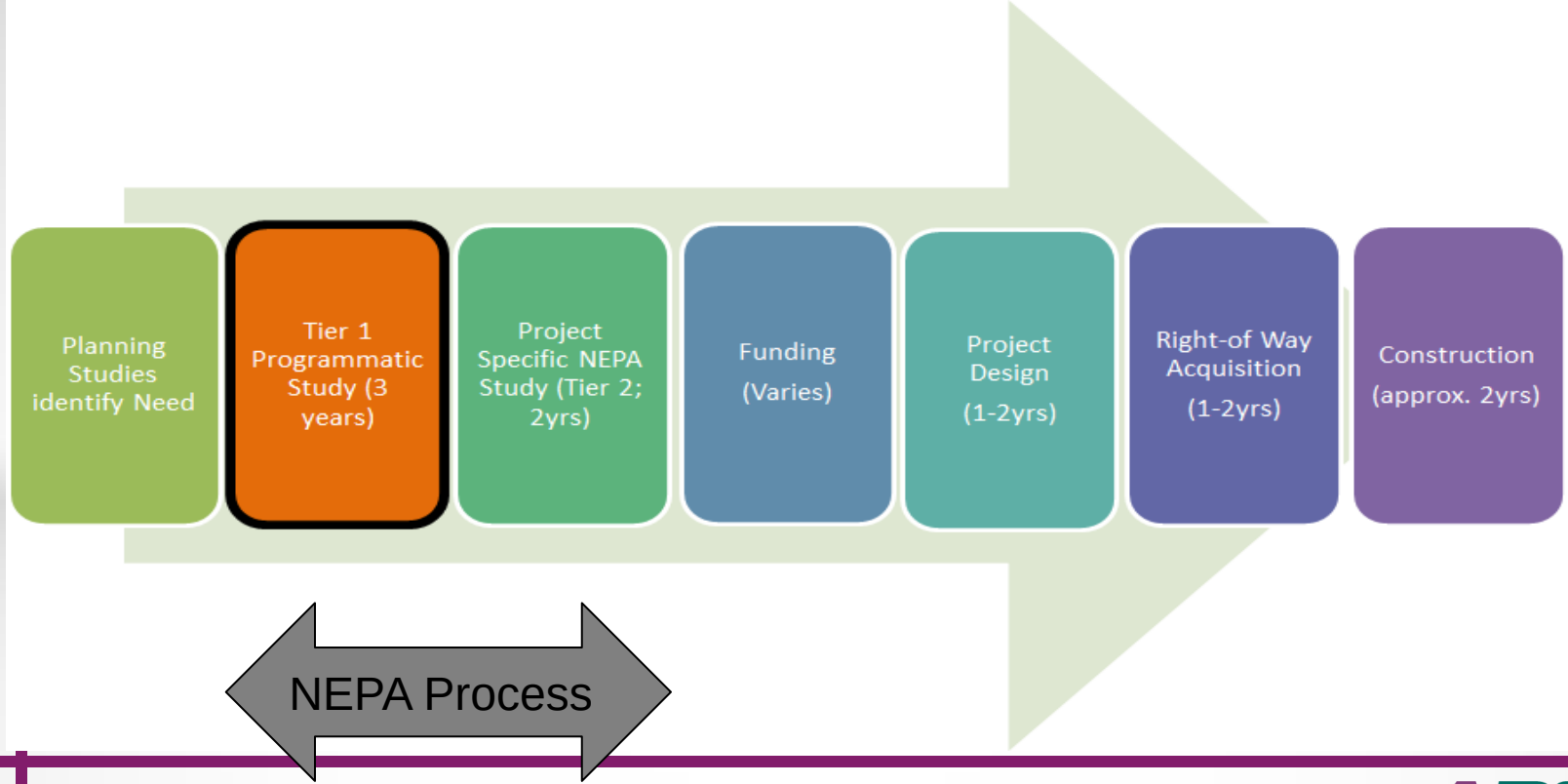
- Corridor 26: I-11 (AZ to Nevada)
- Corridor 83: Sonoran Corridor (I-19 to I-10)



RELATED ADOT STUDIES AND PROJECTS

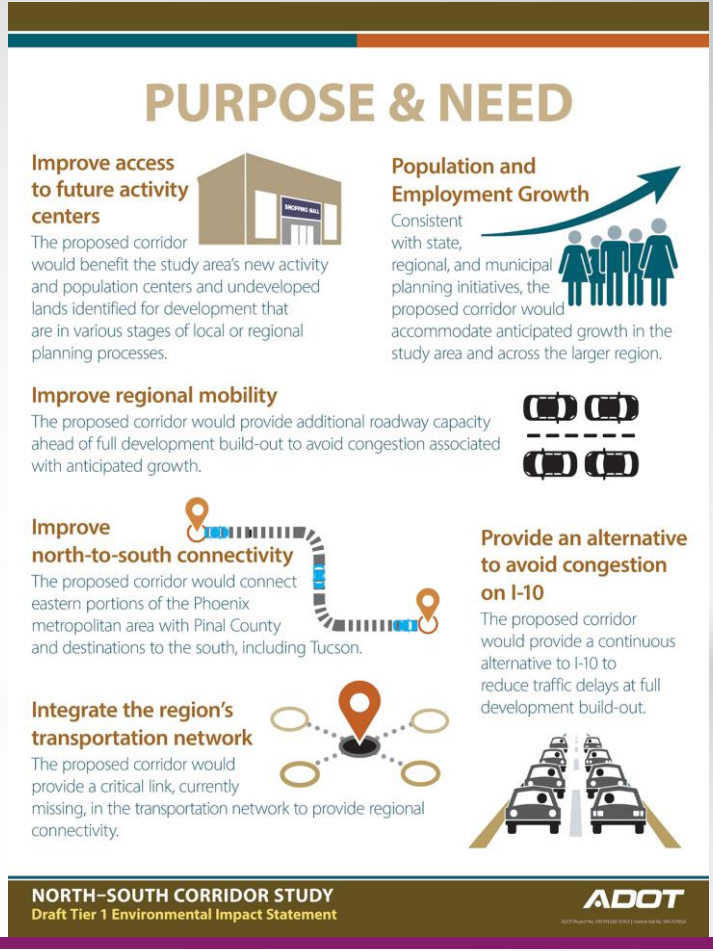


Project Development Process



Purpose & Need

- Establishes the basis for the development of alternatives



ADOT

Alternatives Analysis

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

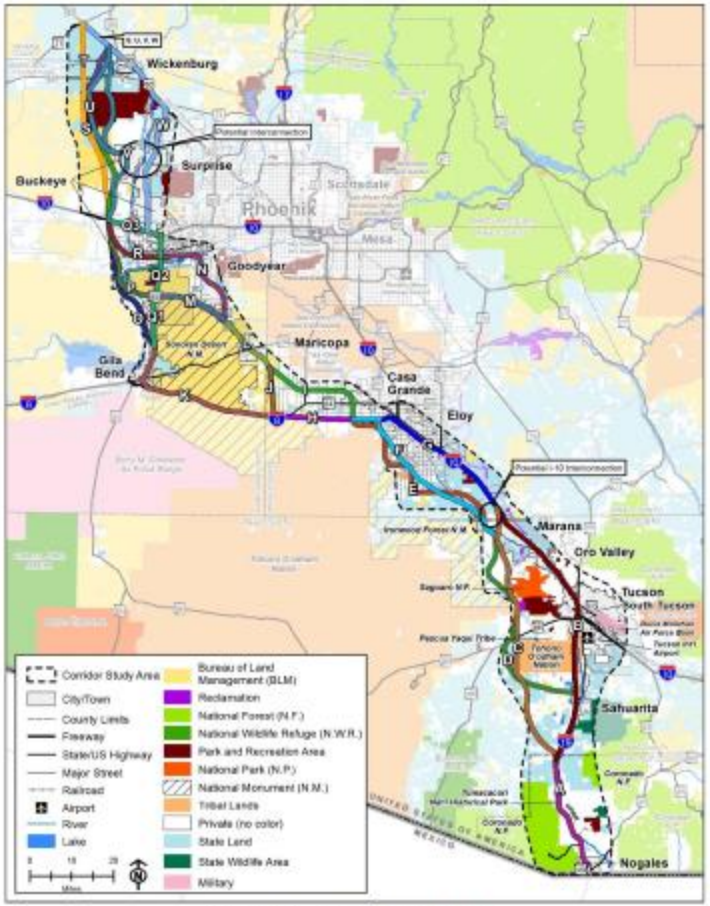


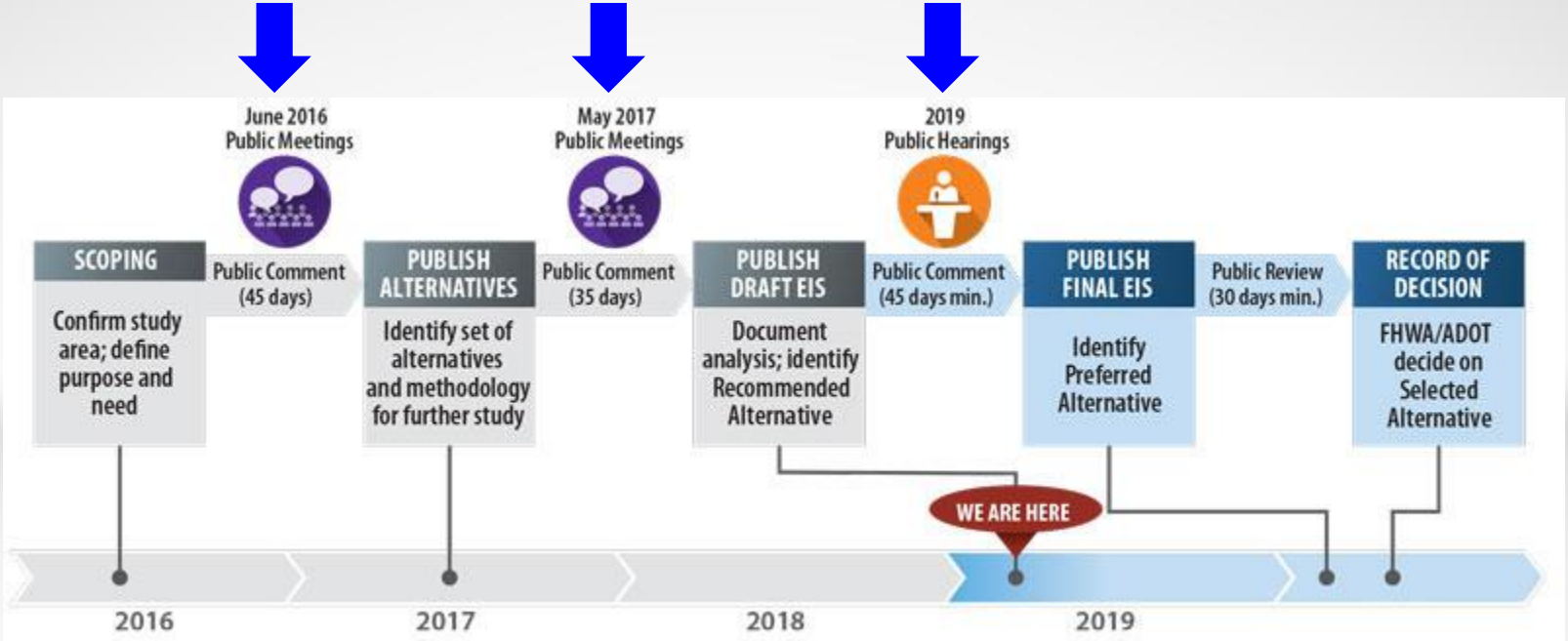
Figure 3-3 I-11 Corridor Options

Evaluation Methodology

Table 4-1 Screening Criteria and Measures [1]

Criteria	Description	Evaluation Measure	Scale	Source
Address Population and Employment Growth				
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	○ Low new population growth within TAZs that intersect Study Area on 2 miles either side of the alternative ◒ Moderate new population growth within TAZs that intersect Study Area on 2 miles either side of the alternative ● High new population growth within TAZs that intersect Study Area on 2 miles either side of the alternative	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	○ Low new employment growth within TAZs that intersect Study Area on 2 miles either side of the alternative ◒ Moderate new employment growth within TAZs that intersect Study Area on 2 miles either side of the alternative ● High new employment growth within TAZs that intersect Study Area on 2 miles either side of the alternative	ADOT Statewide Travel Demand Model (based on growth projections established by the state MPOs and Arizona State Demographer's office).
Mitigate Congestion and Improve Travel Times				
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.	Average weekday traffic volumes on each corridor option, 2035 Average weekday traffic volumes on other major corridors in the network (I-10, SR 85, I-8, I-17 etc.), 2035 Predicted traffic diversions from the existing transportation network	○ Lower traffic volumes including traffic diverted from more congested routes ◒ Moderate traffic volumes including traffic diverted from more congested routes ● Higher traffic volumes including traffic diverted from more congested routes	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).	LOS on each corridor option (traffic flow from A to F), 2035 LOS on other major corridors in the network (I-10, SR 85, I-8, I-17 etc.) (traffic flow from A to F), 2035	○ LOS E or worse ◒ LOS D ● LOS C or better	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	○ Slowest travel time ◒ Average travel time ● Fastest travel time	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	○ < 55 mph ◒ 55 to 65 mph ● > 65 mph	ADOT Statewide Travel Demand Model

Outreach and Coordination



Takeaways

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

QUESTIONS?

THANK YOU