

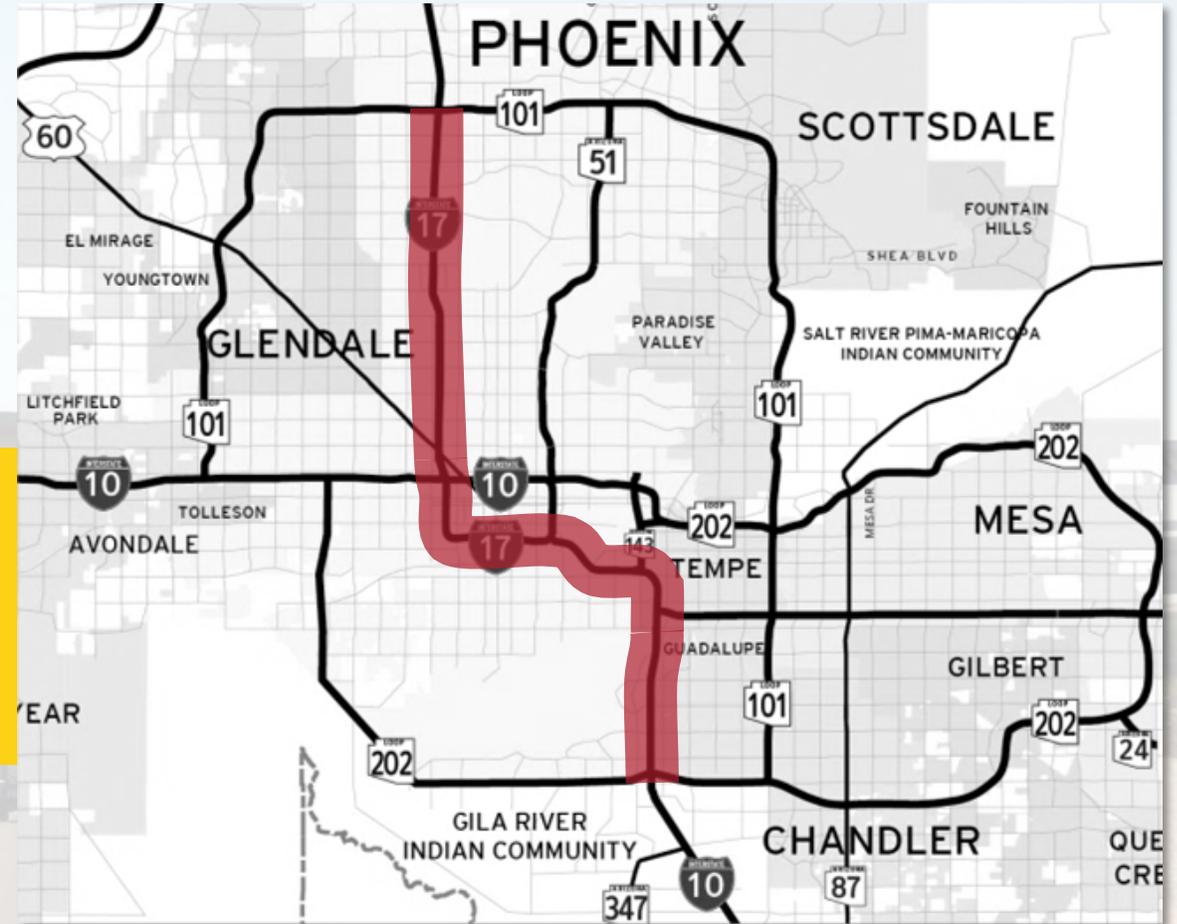
Near-Term Improvement Strategy for the Interstate 10/ Interstate 17 Corridor

Transportation Review Committee
September 25, 2014

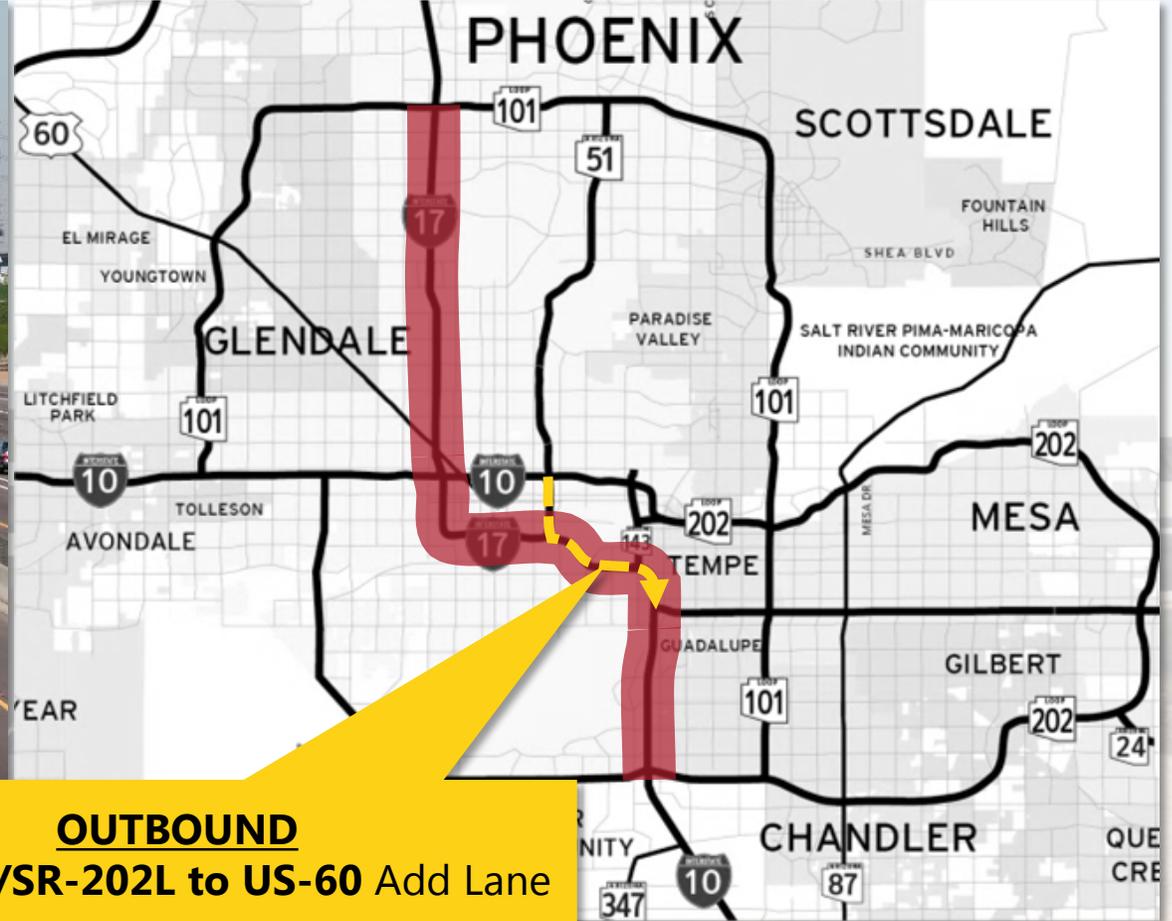


Near-Term Improvements

- Under **development and study by ADOT.**
- Multiple options under consideration including those targeting bottlenecks and enhancing traffic operations.
- Candidate projects must rapidly **meet environmental requirements** and a **near-term construction time-frame.**



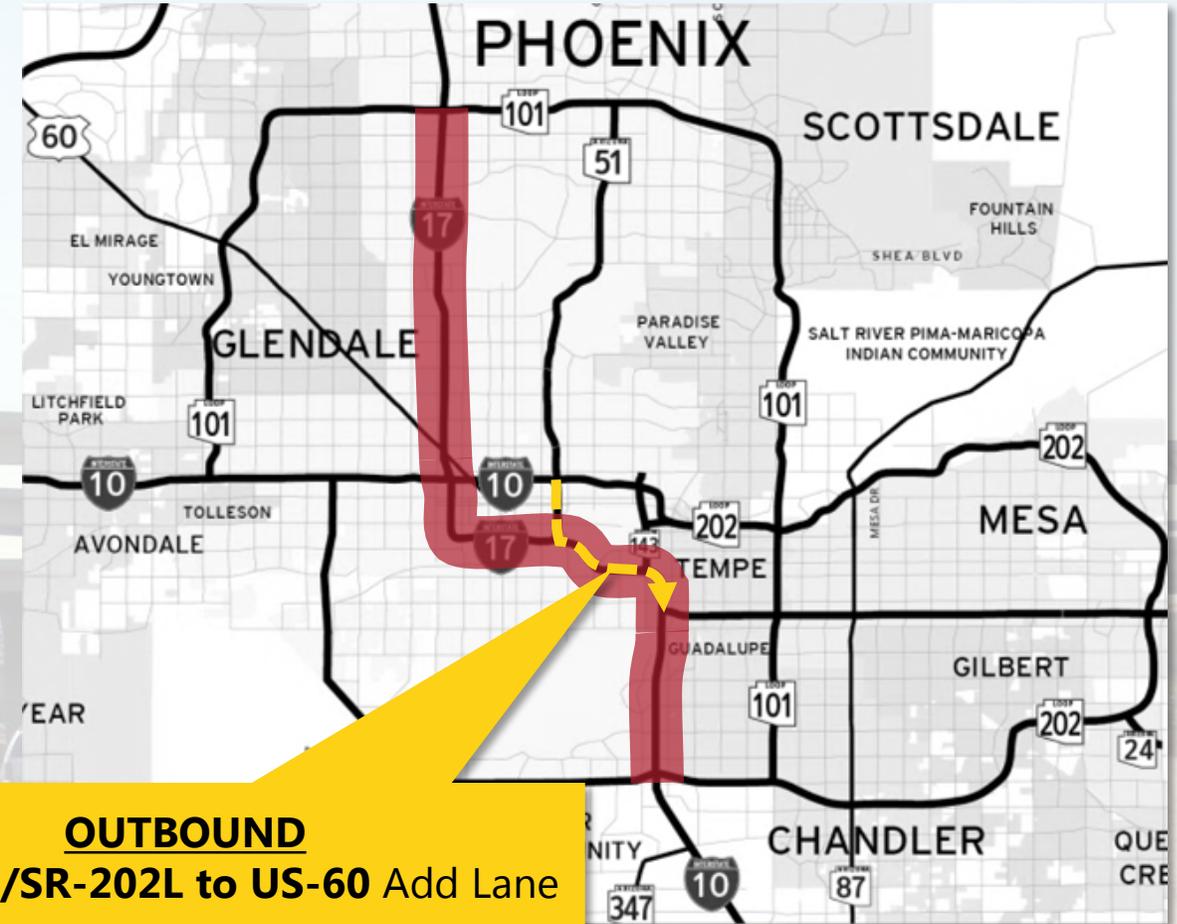
Interstate 10 – between SR-51/SR-202L and US-60



OUTBOUND
▪ SR-51/SR-202L to US-60 Add Lane

Interstate 10 – between SR-51/SR-202L and US-60

- Feasibility Study completed:
 - Additional lane will fit within existing pavement width.
 - Minimal new AASHTO design exceptions (perpetuates existing design exceptions).
 - Includes complete resurfacing of I-10 pavement.
 - Requires new sound wall for condo complex near 48th Street.
 - Categorical Exclusion.



OUTBOUND

- **SR-51/SR-202L to US-60 Add Lane**

Interstate 10 - between SR-143 and US-60



OUTBOUND

- SR-51/SR-202L to US-60 Add Lane

OUTBOUND

- SR-143 to US-60 Follow CD Rd to existing ramp
- SR-143 to I-10 Follow CD Rd enter after US-60

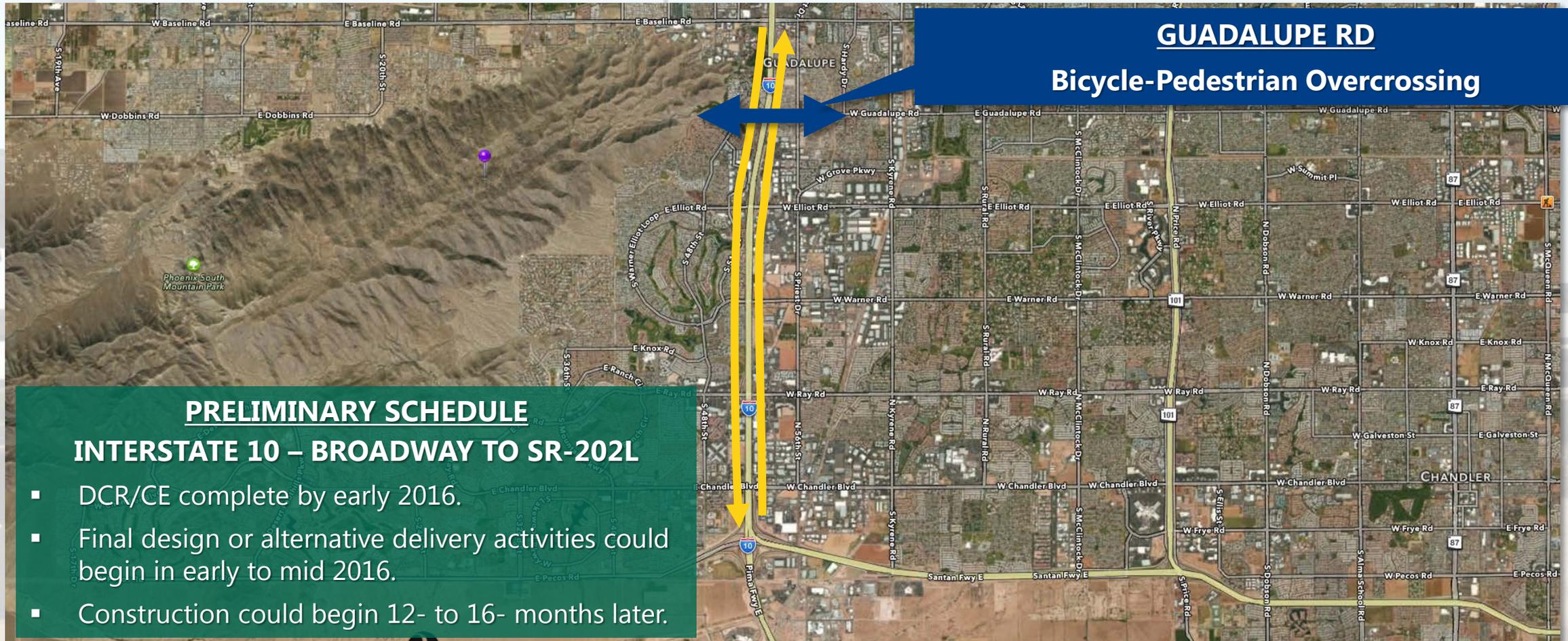
W ALAMEDA DR

Bicycle-Pedestrian Overcrossing

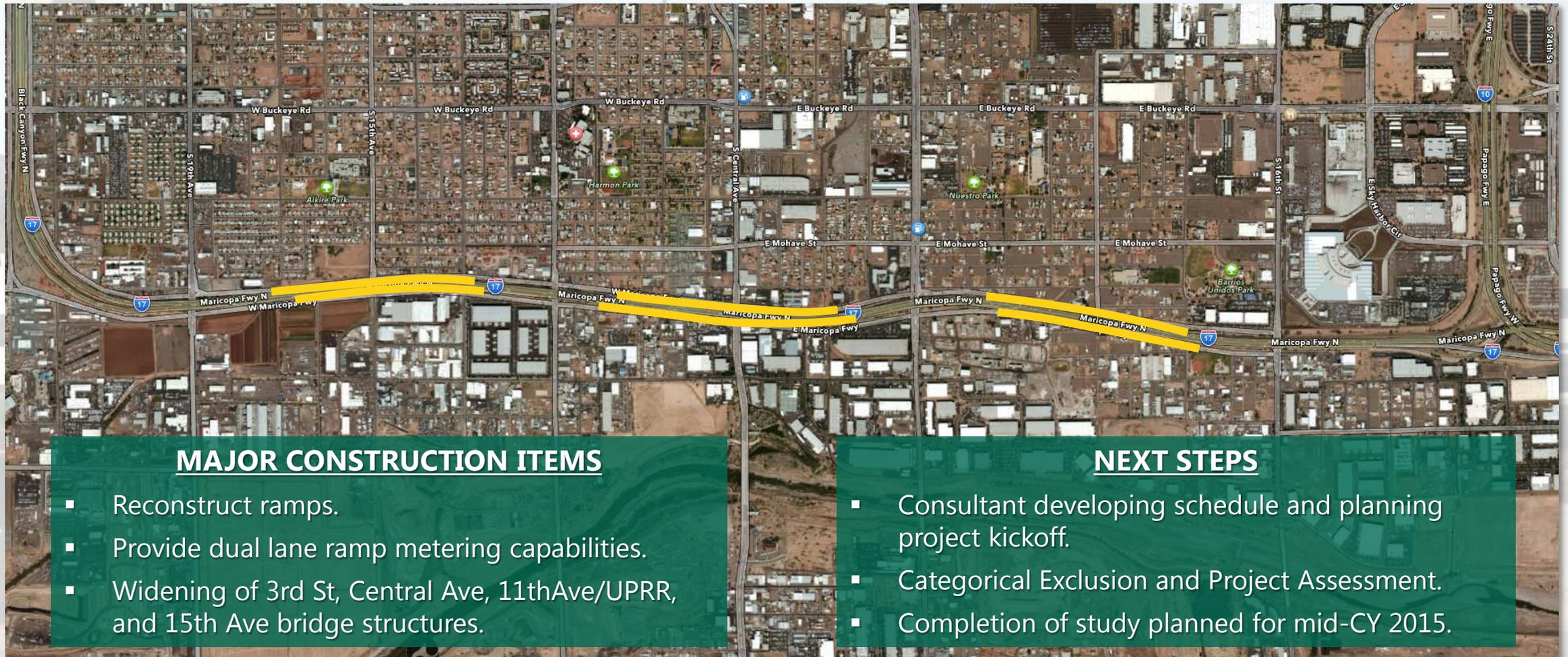
INBOUND

- I-10 to SR-143 Exit in advance of US-60 entrance
- US-60 to SR-143 Exit in advance of I-10 Entrance

Interstate 10 – between Baseline Rd and SR-202L



Interstate 17 – between 16th St and 19th Ave



MAJOR CONSTRUCTION ITEMS

- Reconstruct ramps.
- Provide dual lane ramp metering capabilities.
- Widening of 3rd St, Central Ave, 11th Ave/UPRR, and 15th Ave bridge structures.

NEXT STEPS

- Consultant developing schedule and planning project kickoff.
- Categorical Exclusion and Project Assessment.
- Completion of study planned for mid-CY 2015.

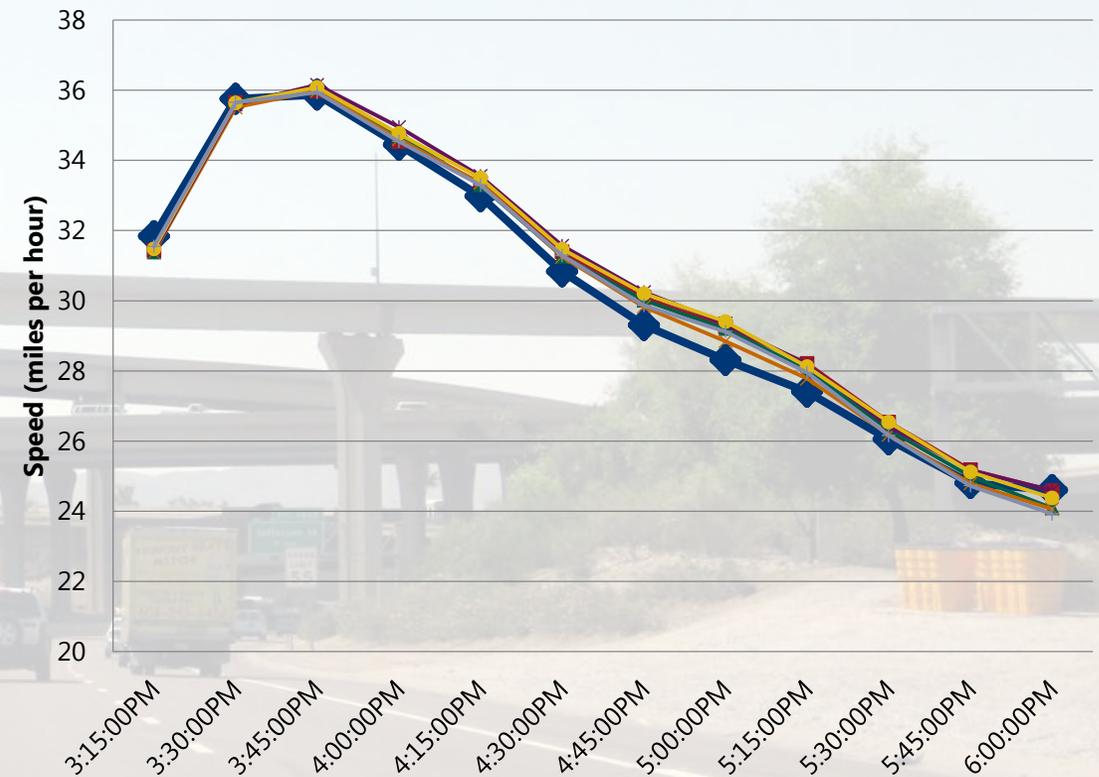
Travel Simulation Statistics

MICROSIMULATION AREA – ALL ROADWAYS WITHIN LOOP 101

Total Trips Simulated

Baseline Scenario	Inbound Ramp Braid	Outbound C-D Roads	Two HOV Lanes	Add GP and Aux Lanes	Add GP lanes only	I-17 Aux Lanes
1,082,011	1,144,548	1,130,044	1,132,634	1,145,311	1,145,129	1,137,262
Differences off Baseline	+62,537	+48,033	+50,623	+63,300	+63,118	+55,251

Average Trip Speeds



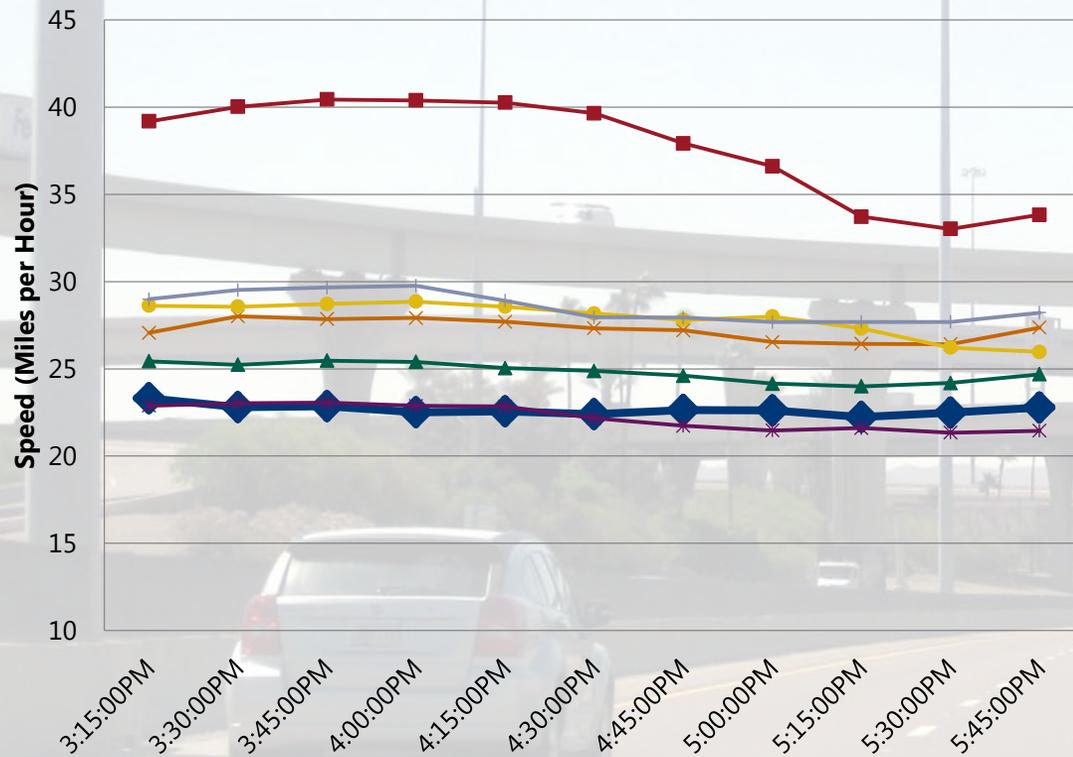
Key Point

The Near-Term Improvement Strategy **accommodates more traffic** on the regional network.

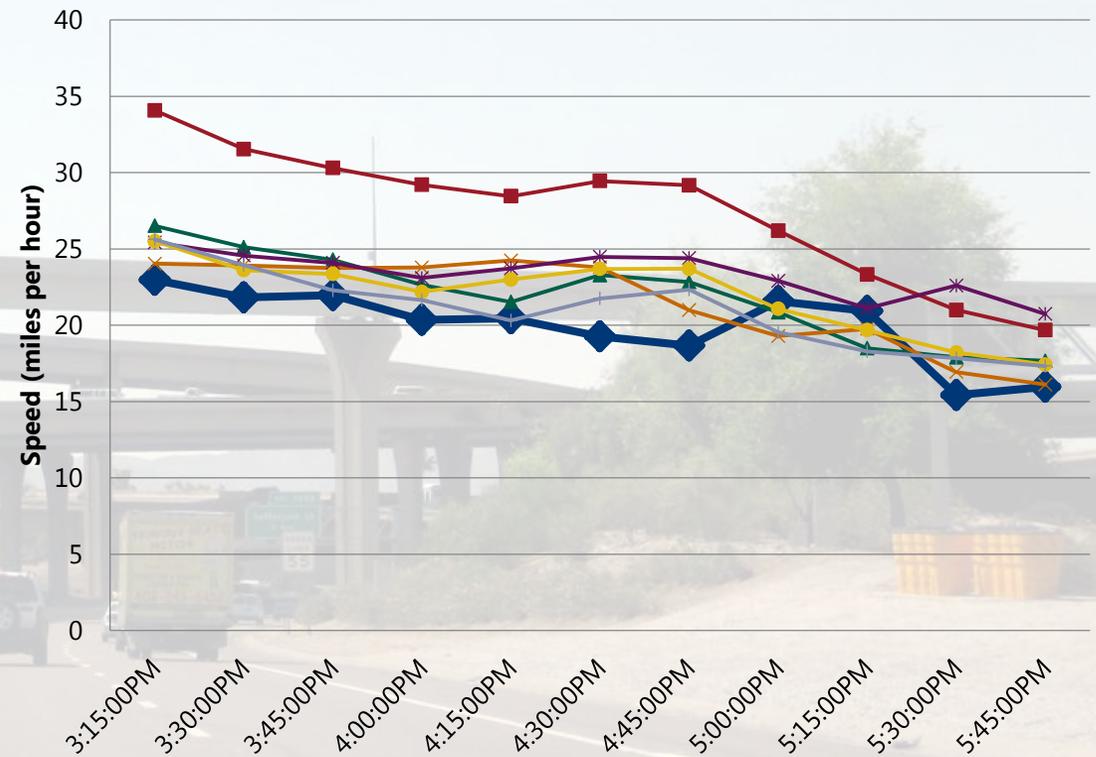
Travel Simulation Statistics

WITHIN THE INTERSTATE 10/INTERSTATE 17 CORRIDOR

Inbound Average Speed



Outbound Average Speed



Traffic Operations and ITS Enhancements

Strategies for:

- **ADOT – DPS**

- Incident Management

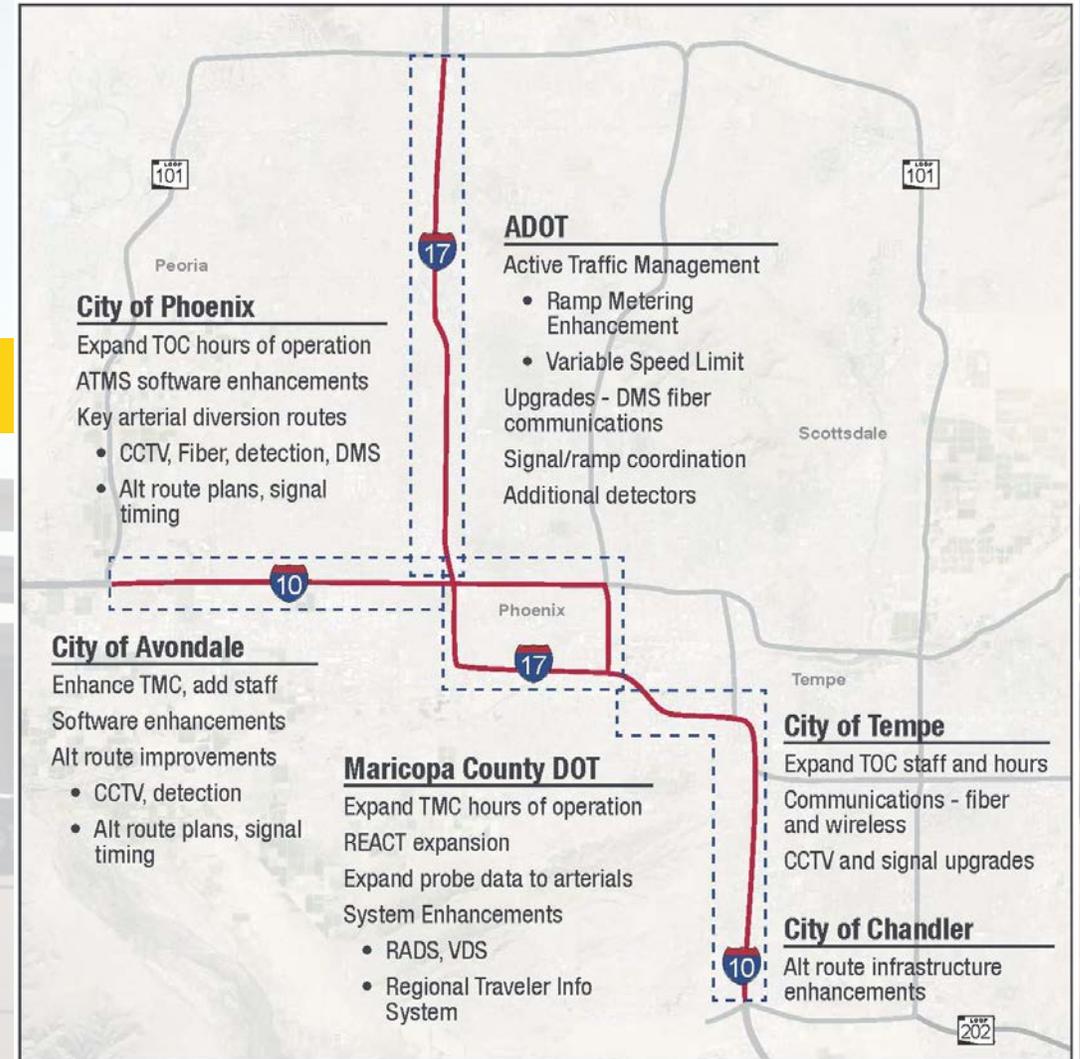
- **Ramp Metering Coordination**

- **Cities (Chandler, Phoenix, Tempe)**

- Arterial Infrastructure
- Supporting Corridor Operations

- **Maricopa County DOT**

- Traffic Video Sharing
- Maintenance Support



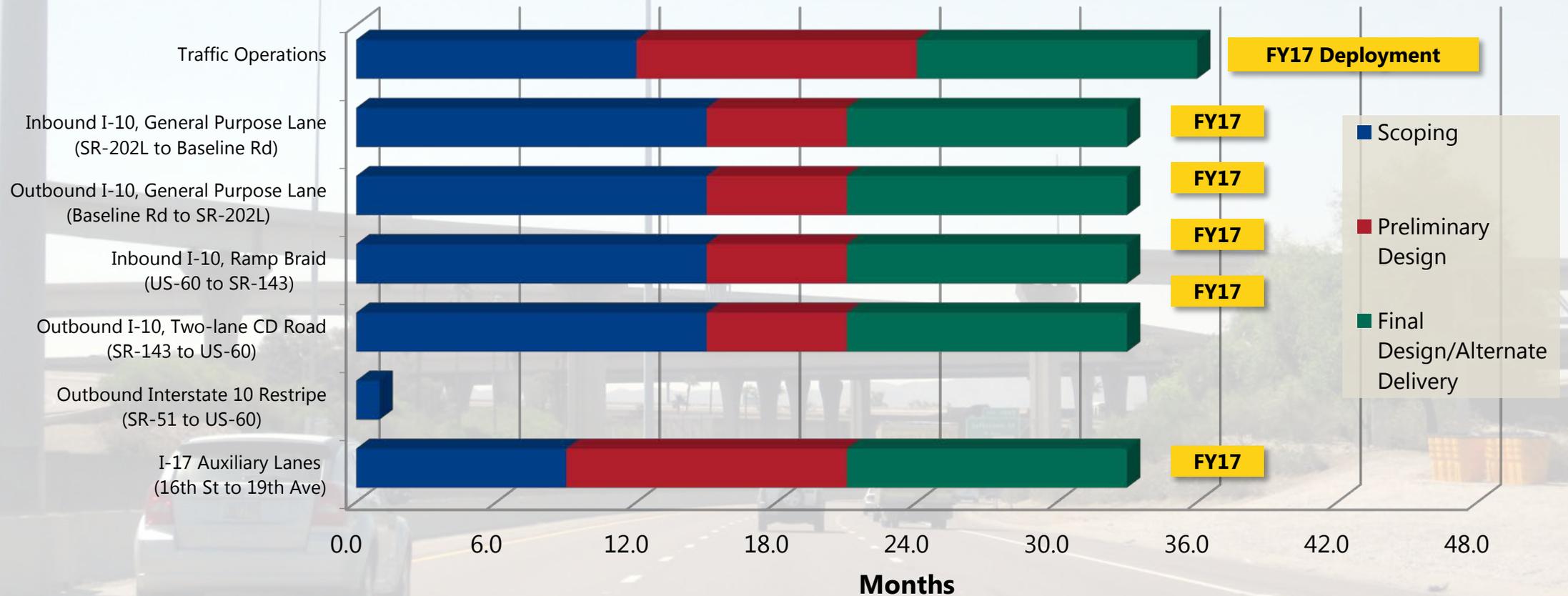
Near-Term Improvement Strategy

ESTIMATED PROGRAM AMOUNTS

Project	Length (miles)	Improvement Type	Compatibility with Ultimate	Environmental Effort	Total (Millions)
Interstate 17 Auxiliary Lanes, 16th St to 19th Ave	3.0	Operational/ Safety	No	CE	\$61.6
Outbound I-10, Restripe Additional Lane, SR-51 to US-60	6.0	Operational/ Multi-Modal	Yes	CE	\$8.4
Outbound I-10, Two-lane CD Road, SR-143 to Baseline Rd	2.0	Operational	Yes	CE	\$59.7
Inbound I-10, Ramp Braid	2.0	Operational	Yes	CE	\$49.5
Outbound I-10, GP Lane with Aux Lane, Baseline Rd to SR-202L	8.0	Operational	Yes	CE	\$36.6
Inbound I-10, GP Lane with Aux Lane, SR-202L to Baseline Rd	8.0	Operational	Yes	CE	\$23.4
Traffic Operations	Corridor-Wide	Operational	Yes	CE	\$48.5
					\$287.7

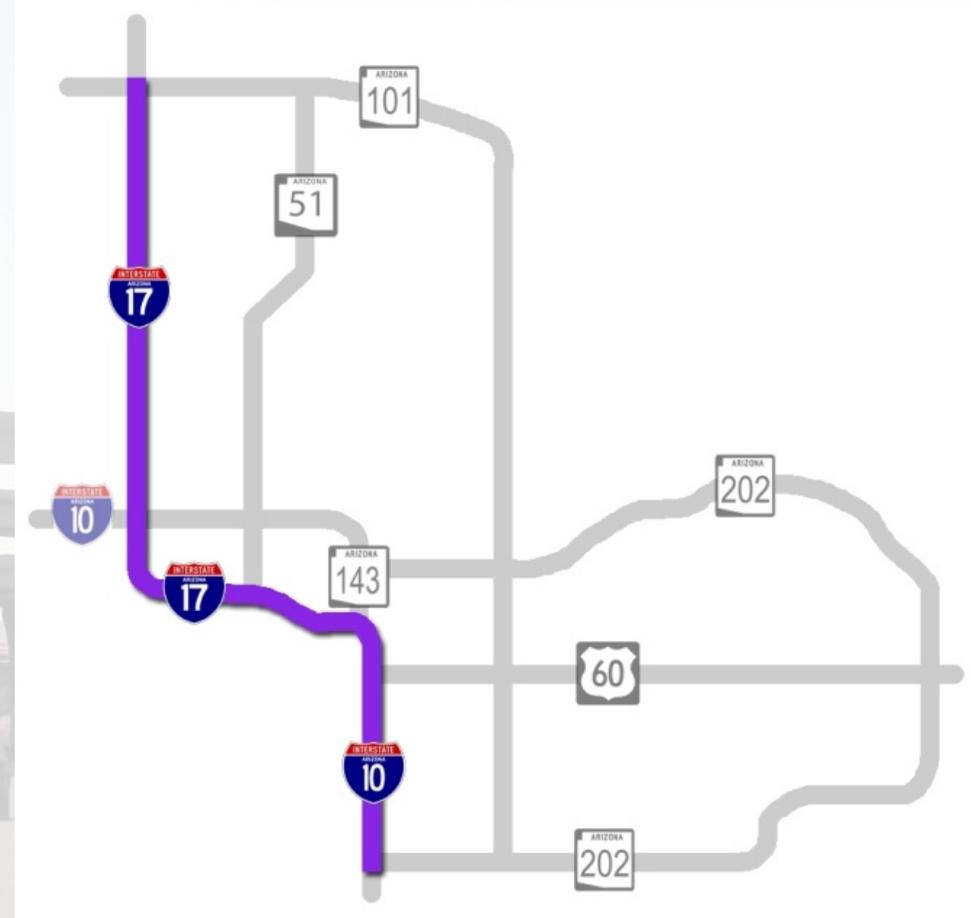
Near-Term Improvement Strategy

SCHEDULE RECOMMENDATION



Next Steps

- Prepare TIP amendments for Traffic Operations and Interstate 17 projects. Modify TIP Program for Interstate 10 projects.
- Begin educating the public on benefits of Traffic Operations/ITS-related enhancements.
- Contract with ITS consultant for development of capital improvements.
- Hold stakeholder kick-off meetings.



Corridor Master Plan Overview



Initiate Project

- Project Management Plan
- Public Involvement Plan
- Controlling Design Criteria and Design Exception/Variance Procedures.

Conduct Corridor Needs Assessment

- Existing Conditions
- PEL Checklist Part 1
- Future Conditions (No-Build)
- Agency and Public Outreach – Round 1
- Goals and Objectives

Develop Corridor Alternatives Screening

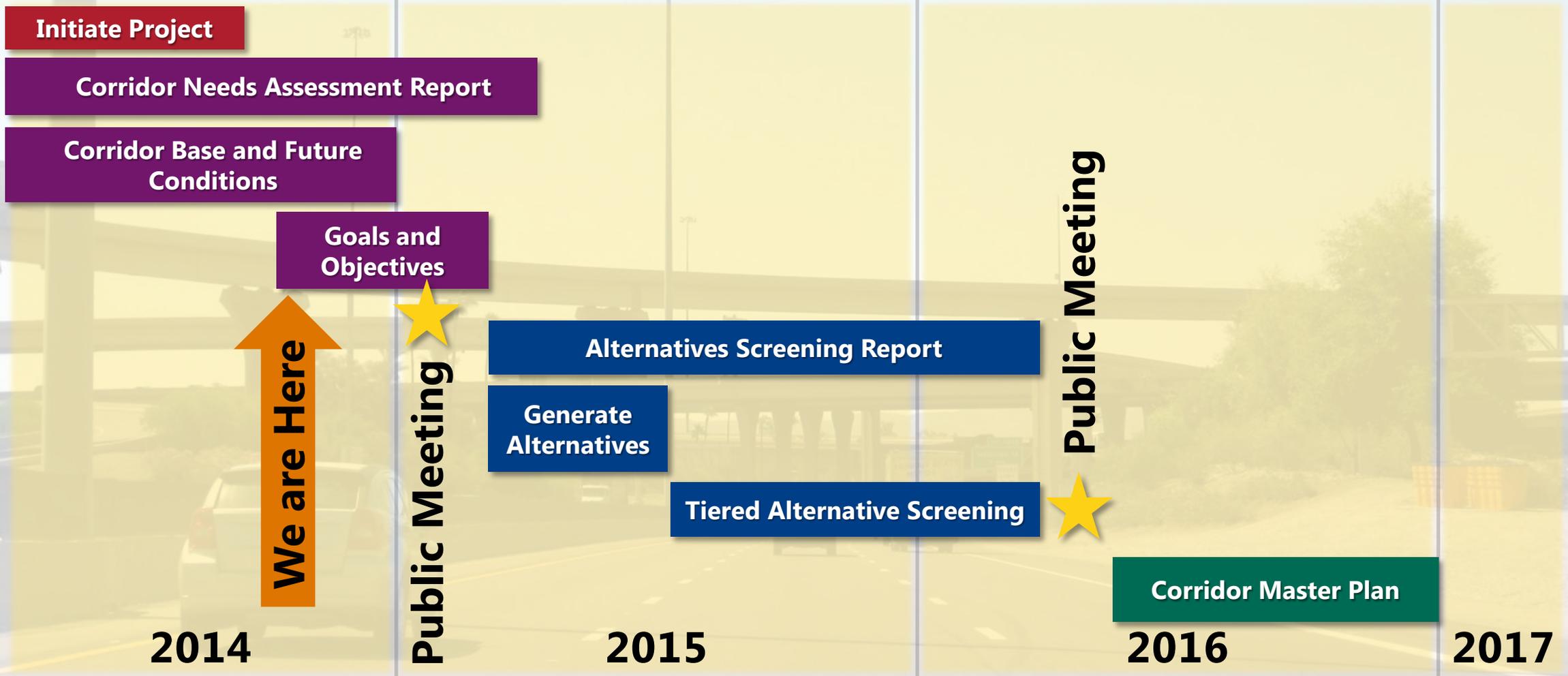
- Alternatives Workshop
- Categorize Alternatives
- Tier 1 Qualitative Screening
- Tier 2 Quantitative Screening
- System Bundles
- Tier 3 Quantitative Screening (Bundles)
- Agency and Public Outreach – Round 2
- Select Recommended Alternative

Establish Corridor Master Plan

- Completed PEL
- Priority Resource Impacts Evaluation
- Mitigation Strategy
- Implementation Plan
- Design Exceptions
- Incorporate into MAG Policies
- Purpose and Need guidance for future projects

**DECEMBER
2016**

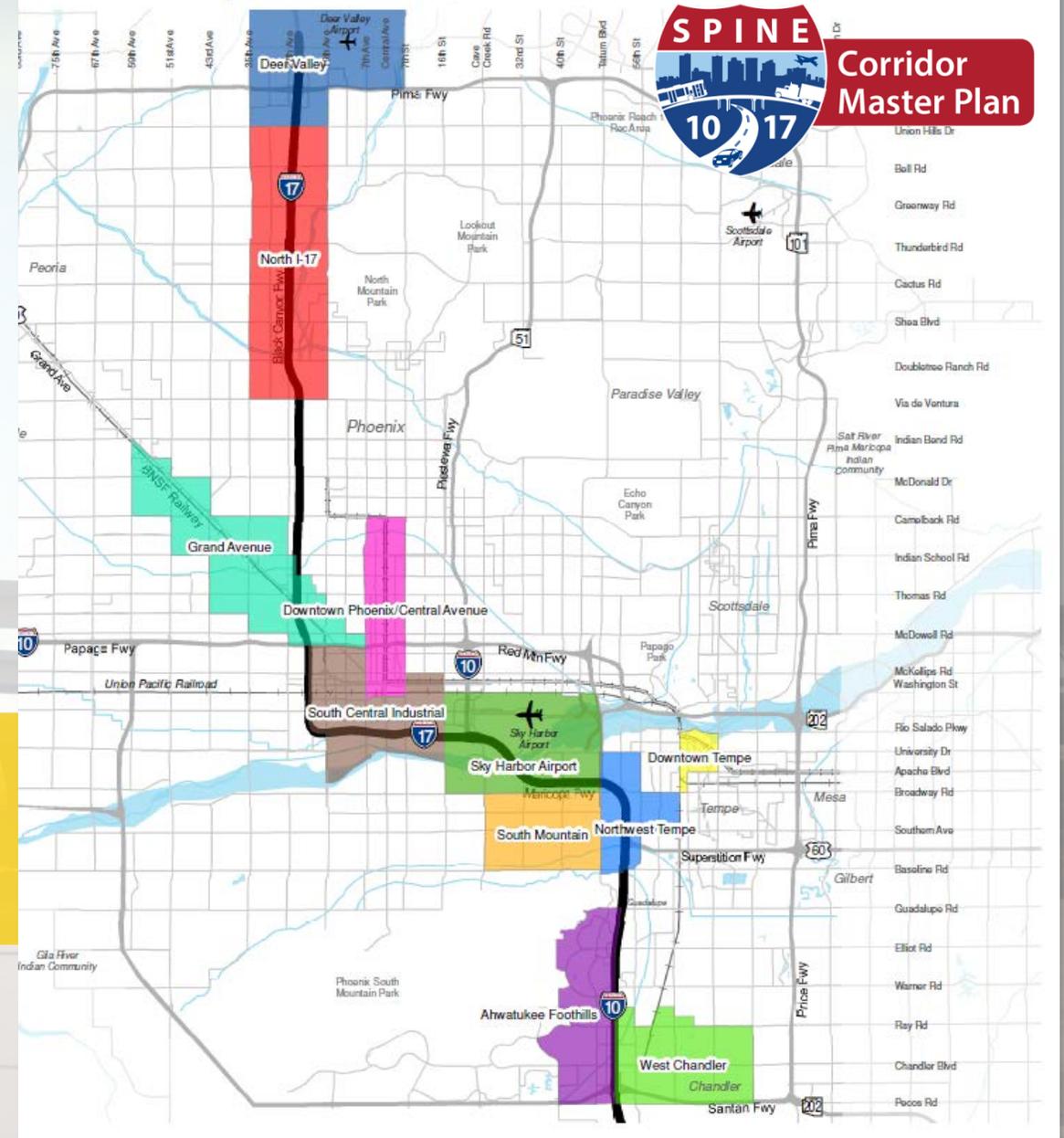
Spine Study Schedule



2014 and 2040 Employment Analysis

- Corridor jobs make up 1/3 of all jobs in Maricopa County.
- Corridor represents 2% of land area in the county.
- Jobs create demand (traffic) in the study area.
- Distinct **travel markets** meaning **multiple destinations and activity centers**.

Year 2014 to Year 2040 Job Center Employment Growth Spine Corridor Master Plan



Communications Needs

HOW MUCH CONGESTION IS TOLERABLE?



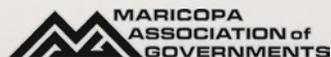
Where does reducing congestion rank compared to:

- Speed?
- Access?
- Reliability?
- Connectivity?
- Business preservation?
- Neighborhood preservation/livability?
- Environmental impacts?
- Economic development (i.e. jobs, strong economy, etc.)?
- What are their priorities?
- What does the public value and care about in the study area?
- Where are there areas of improvement and what modes should be considered?



Near-Term Improvement Strategy for the Interstate 10/ Interstate 17 Corridor

Bob Hazlett
bhazlett@azmag.gov
602 254-6300



U.S. Department
of Transportation
Federal Highway
Administration

