

For information and discussion.

# Interstate 10/ Interstate 17 Corridor Master Plan Update

Transportation Policy Committee  
September 16, 2015



Undercrossing Northern Avenue, Phoenix

# Regional Transportation Plan Program



- Interstate 10 between the I-17 Split and Loop 202 Pecos Stack.
- Interstate 17 between the I-10 Split and Loop 101 North Stack.
- About 40% of the region's daily freeway traffic.
- Total RTP Funding of **\$1.47 billion**.



# Path Forward Defined

OUTCOME OF JOINT MEETING – OCTOBER 31, 2012



- Immediate Needs addressing bottlenecks.
- Within ADOT Rights-of-Way (ROW).
- Near Term Construction.



- Joint Project Management.
- MAG Procurement.
- **Identify Corridor Operating Principles.**
- **Coordinate with Stakeholders.**
- Frame next environmental and design efforts.



- Joint Project Management.
- ADOT Procurement.
- **Multiple Studies and Efforts.**
- Consistent with Corridor Master Plan.



- Implementation.

# Near Term Improvement Strategy

## 10 Maricopa

**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

**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

**W ALAMEDA DR**  
Bicycle-Pedestrian Overcrossing

**GUADALUPE RD**  
Bicycle-Pedestrian Overcrossing

**PRELIMINARY SCHEDULE**  
INTERSTATE 10 – SR-143 TO SR-202L

- DCR/CE complete by early 2016.
- Final design or alternative delivery activities could begin in early to mid 2016.
- Construction could begin 12- to 16- months later.

## 17 Black Canyon

**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.

SPEED LIMIT 60, SPEED LIMIT 45, SPEED LIMIT 45, SPEED LIMIT 45, SPEED LIMIT 45, REDUCE SPEED

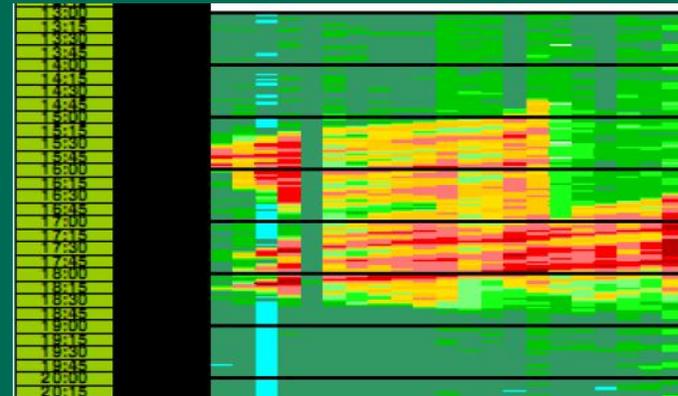
EXIT 163  
W Seattle Br  
Columbian Way  
EXIT ONLY

# Traffic Operations and ITS Enhancements

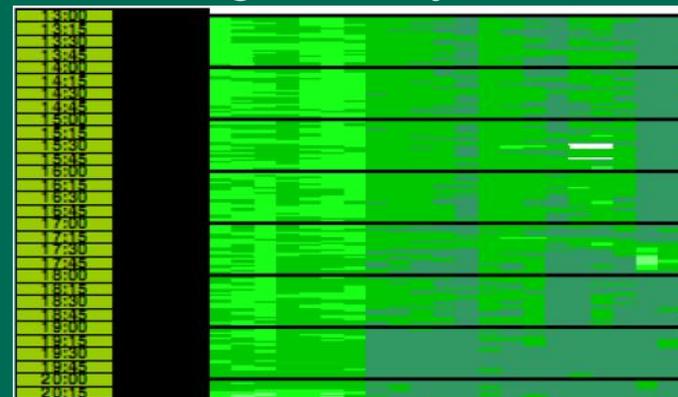
- Focus on Interstate 17 between Interstate 10 Stack and Loop 101 North Stack traffic interchanges.
- Active Traffic Management (ATM):**
  - Reducing potential for crashes when speed and conditions change.
  - Reducing congestion with variable speed limits, lane control, and adaptive ramp metering.
  - Improving reliability and enhancing information to motorists.
  - Providing meaningful traffic-flow benefits at a relatively low cost.
  - Coordinated with local communities.

## M1 Managed Motorway Speed Contour Plots (Evening Peak Period Monash Motorway Outbound)

### Before Managed Freeways (2007)



### After Managed Freeways (2010)



### Legend Speed Ranges (km/h)

BIN	Low	High	LEGEND	INDEX
1	1	10	001 - 010	17
2	11	20	011 - 020	18
3	21	30	021 - 030	19
4	31	40	031 - 040	20
5	41	50	041 - 050	21
6	51	60	051 - 060	22
7	61	70	061 - 070	23
8	71	80	071 - 080	24
9	81	90	081 - 090	25
10	91	100	091 - 100	26
11	101	110	101 - 110	27
12	111	999	111 - 999	28

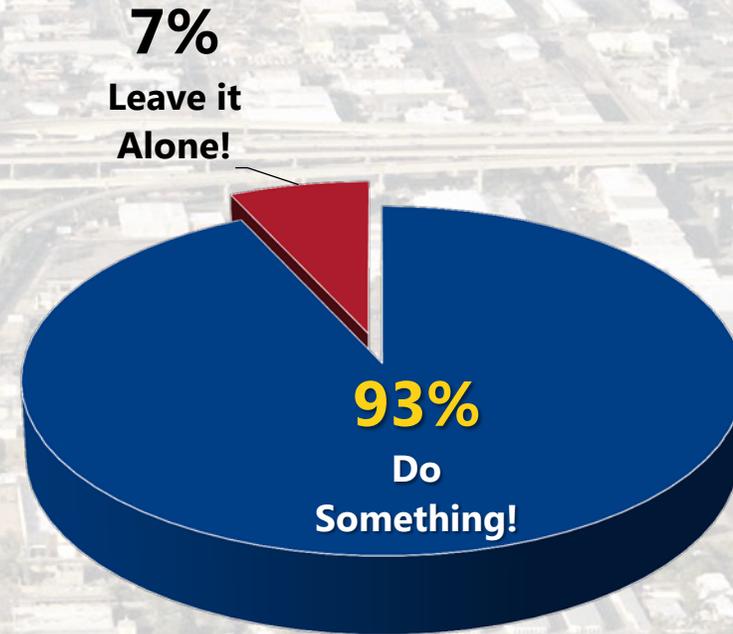
Source: VicRoads

# What should we do?

FROM PUBLIC INFORMATION MEETINGS ON-SITE AND ON-LINE



A screenshot of the survey website. At the top, it says "I-10/I-17 Corridor Master Plan - The Spine Study" with a progress bar. The main content area has a "WELCOME" sidebar, a "SPINE Corridor Master Plan" logo, and a section titled "Improving Mobility" with a "Click here to begin" button. A sidebar on the right lists "PRIORITIES", "POTENTIAL STRATEGIES", "SHOW US", and "ABOUT YOU". A text box at the bottom left states: "Maricopa County is projected to grow by 51% to 6.2 million people by 2040; traffic will continue to increase at a similar rate." There is also an "En Español" button.



# add vehicle lanes

add bicycle lanes/bicycle facilities



Corridor  
Master Plan

increase bus service

add pedestrian facilities

# dangerous merging/weaves

build more light rail

improve interchanges  
congestion from merging

entrance/exit ramp issues

create bike/ped crossing

# Guiding Principles for Alternatives

## WHAT THE PUBLIC MEETINGS AND SURVEYS TELL US



### OPTIMIZE

- Make use of what is available.
- Engage technology.

### EXPAND

- Provide more travel choices and alternate travel mode opportunities.

### PERFORM

- Meet travel demand between the I-10/I-17 travel markets.
- Focus on system reliability for all travel choices.

### IMPLEMENT

- Consider the variety of travel choices and bundle together deliverable and economical packages.

# Alternatives!

## 341 Possibilities . . .

### SYSTEM-WIDE

#### Transit Bike Ped

Throughout  
35-mile  
Spine  
Corridor

Widenings/  
Managed  
Lanes

Traffic  
Interchange  
Fixes

Weaving  
Traffic  
Fixes

#### DHOVs

interlinked  
with Park  
and Ride  
Lots

#### Managed Motorways

Active Traffic  
Management

TSM&O

### SEGMENT SPECIFIC

Camelback  
Rd  
GCU

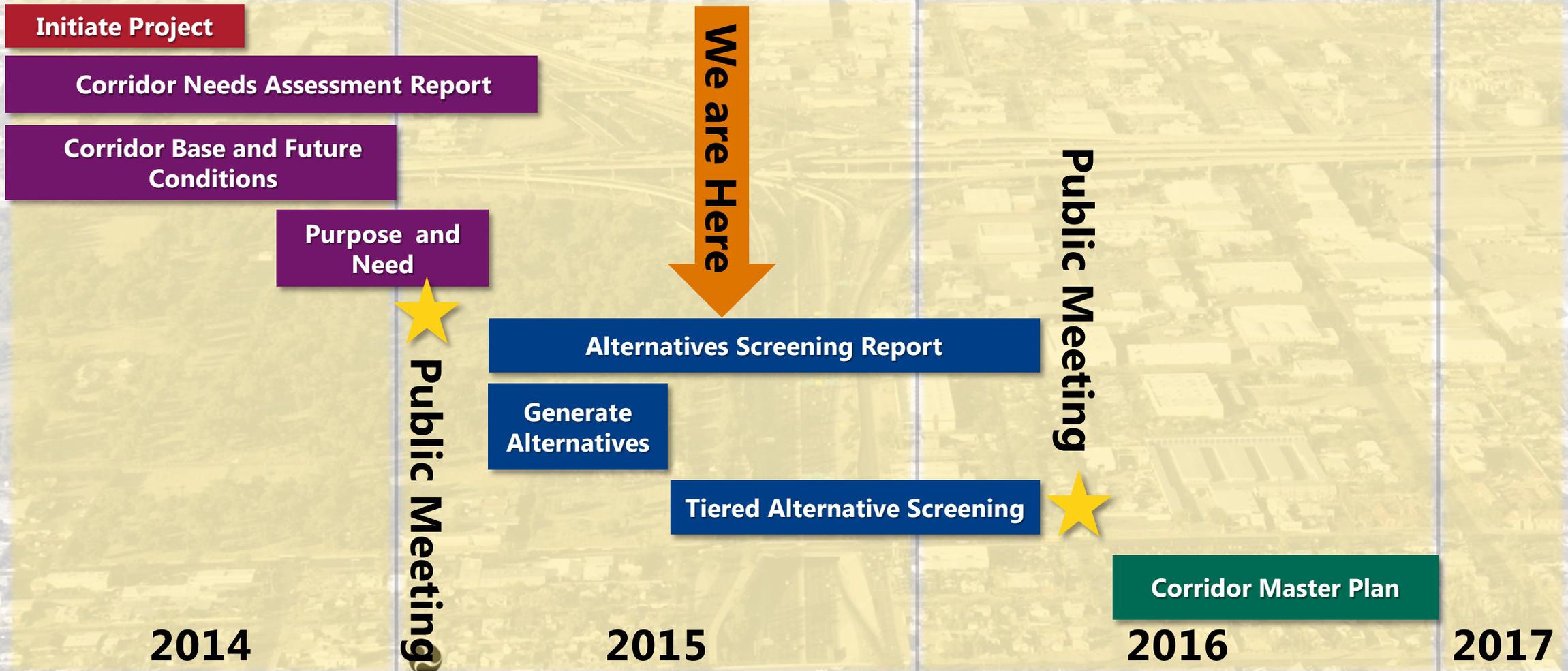


#### Freeway Relocation ???

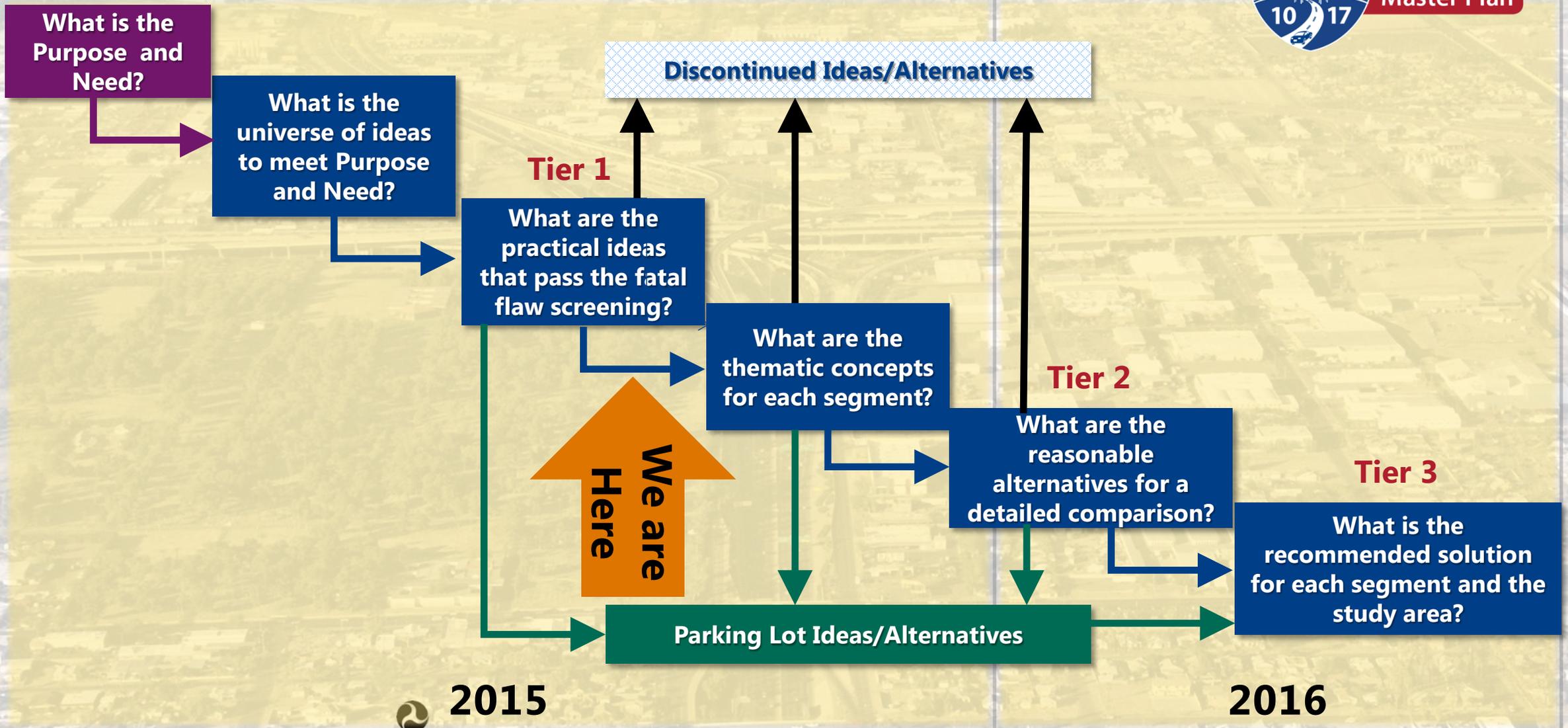
Central Ave  
Overcrossing  
and South  
Central LRT

Freight  
Connections  
between  
Durango  
Curve and  
40th St

# Spine Study Schedule



# Tiered Alternative Screening Process



# Next Steps



- Establish **project alternatives**.
- Conduct analyses and evaluate alternatives consistent with **guiding principles** and **Purpose and Need** statement.
- Report back to Transportation Policy Committee in **April 2016**.
- Complete project by **December 2016**.



 Approaching  Stack Interchange, Phoenix

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