

FY 2017 – 2021
Draft Tentative Five-Year
Transportation Facilities Construction
Program

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2017-2021 Tentative Program Discussion

- ▶ Background
- ▶ Overview of Asset Condition
- ▶ Tentative 5-Year Highway Delivery Program
- ▶ PAG; Tentative Program
- ▶ MAG; Tentative Program
- ▶ Airport Program
- ▶ Next Steps

Background

- ▶ Developed collaboratively with STB, ADOT (IDO, TSMO, FMS, MPD) and Regional Partners
- ▶ Demonstrates how federal and state dollars will be obligated over the next five years
- ▶ Approved annually
- ▶ Fiscal year starts each July 1
- ▶ Must be fiscally constrained

Overview of Asset Condition



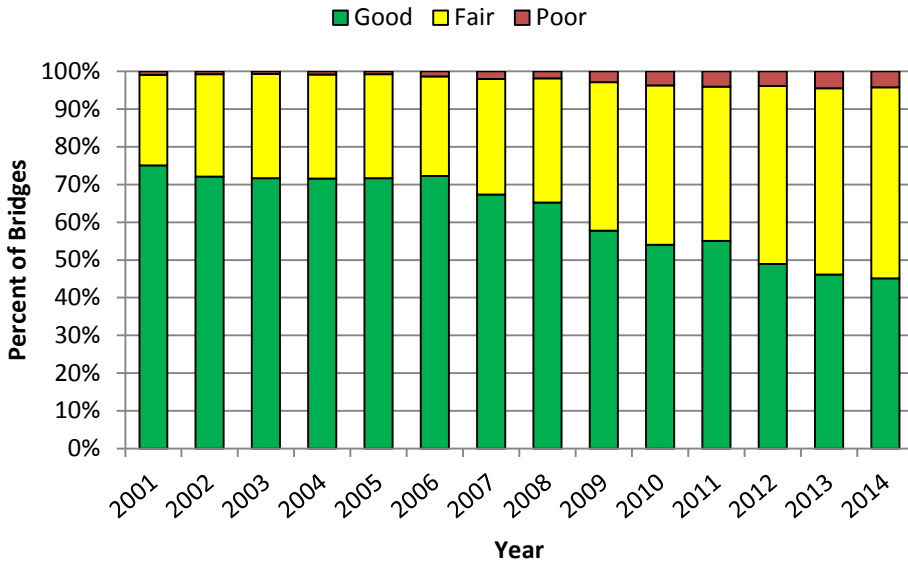
\$20.2 Billion = Value of State Highway System Infrastructure

\$20.2 Billion

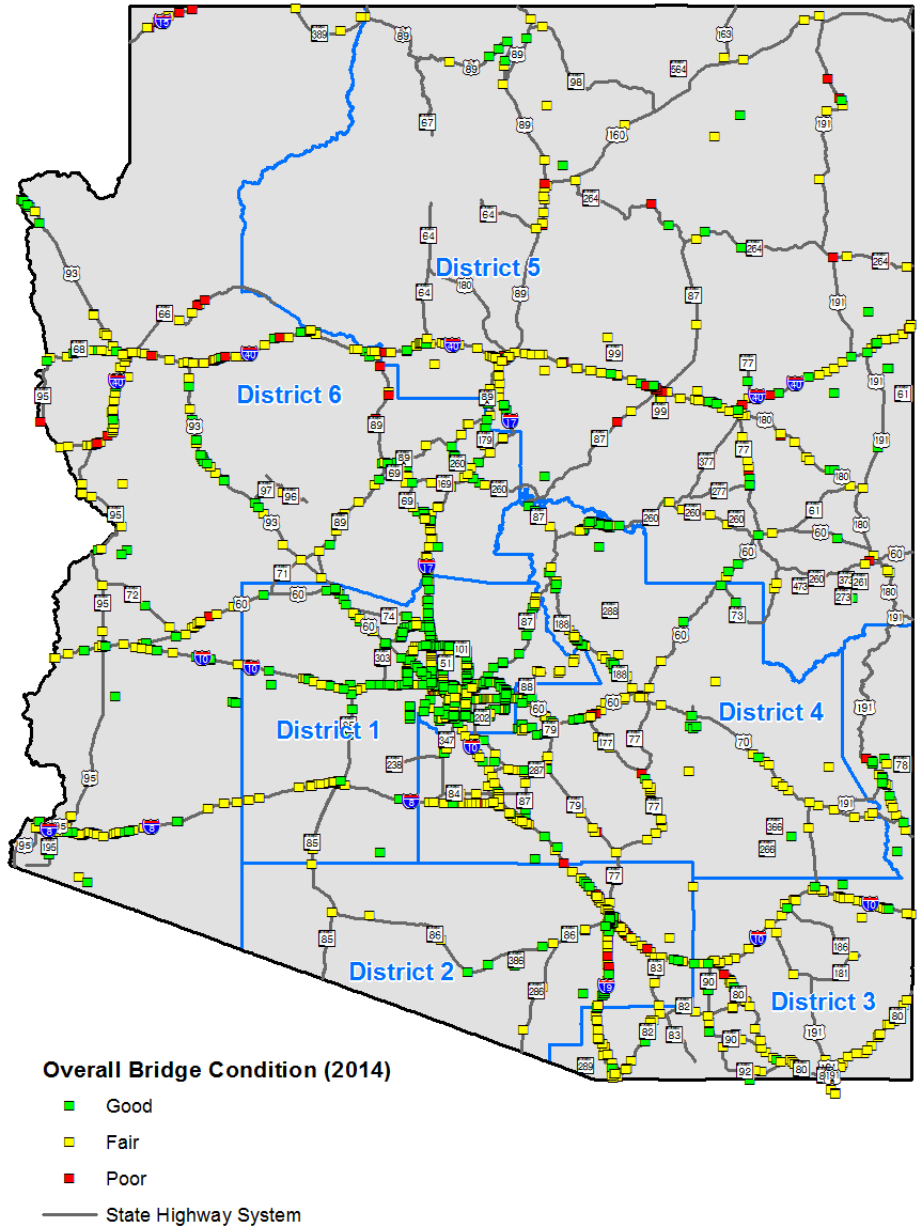
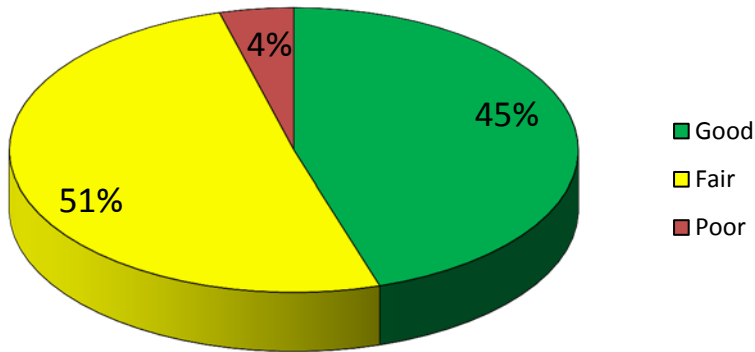


Without a commitment to preservation, the system would cost \$200 billion to replace.

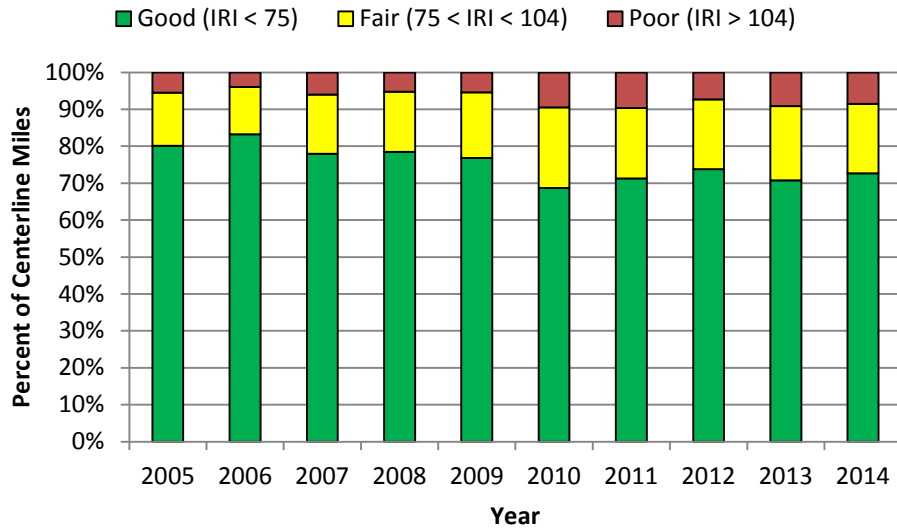
Overall Highway Bridge Condition



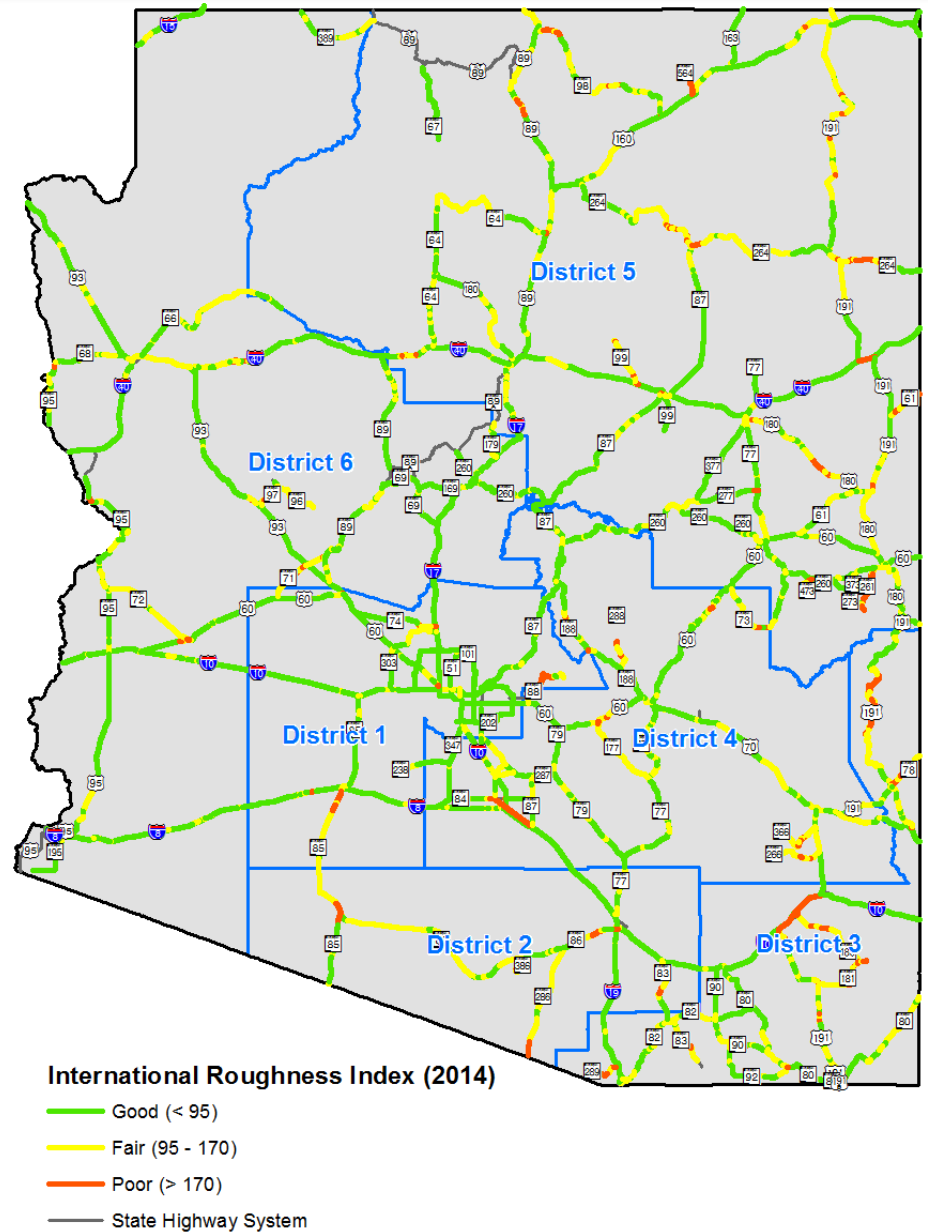
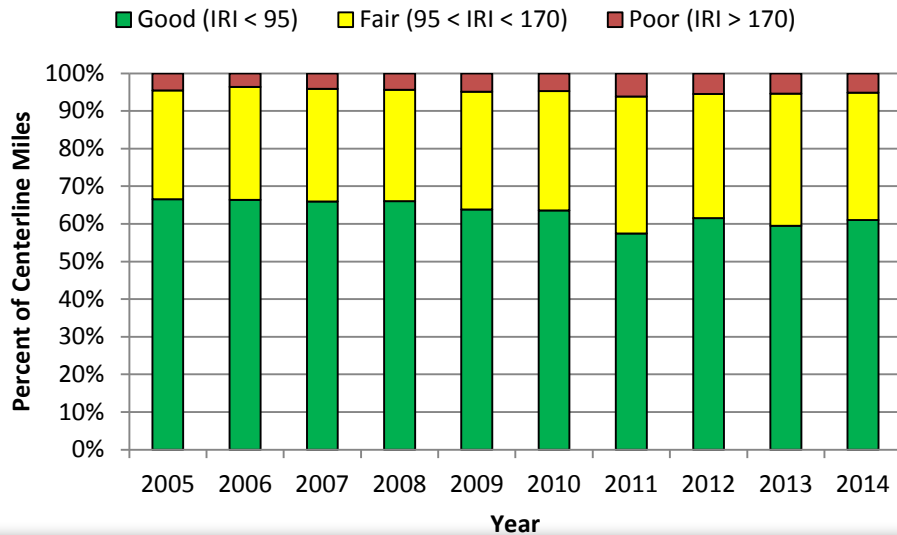
Overall Bridge Condition 2014



Overall Pavement Condition - Interstate



Overall Pavement Condition - Non-Interstate

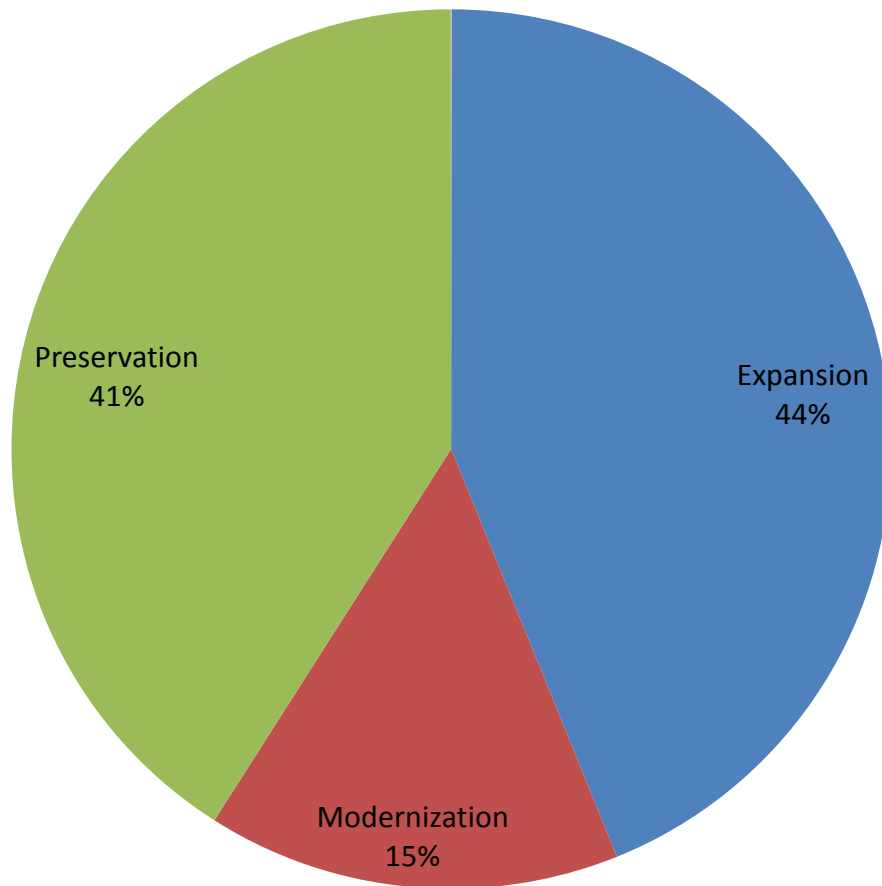
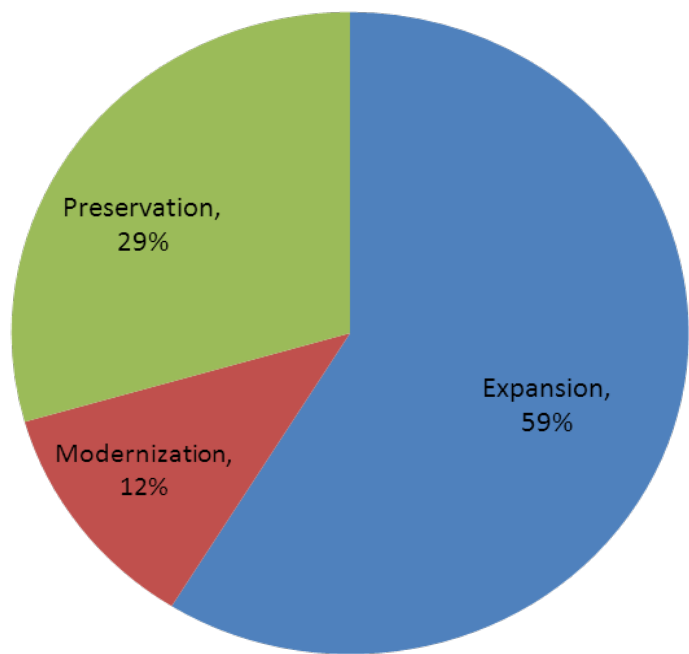


Tentative 5-Year Highway Delivery Program



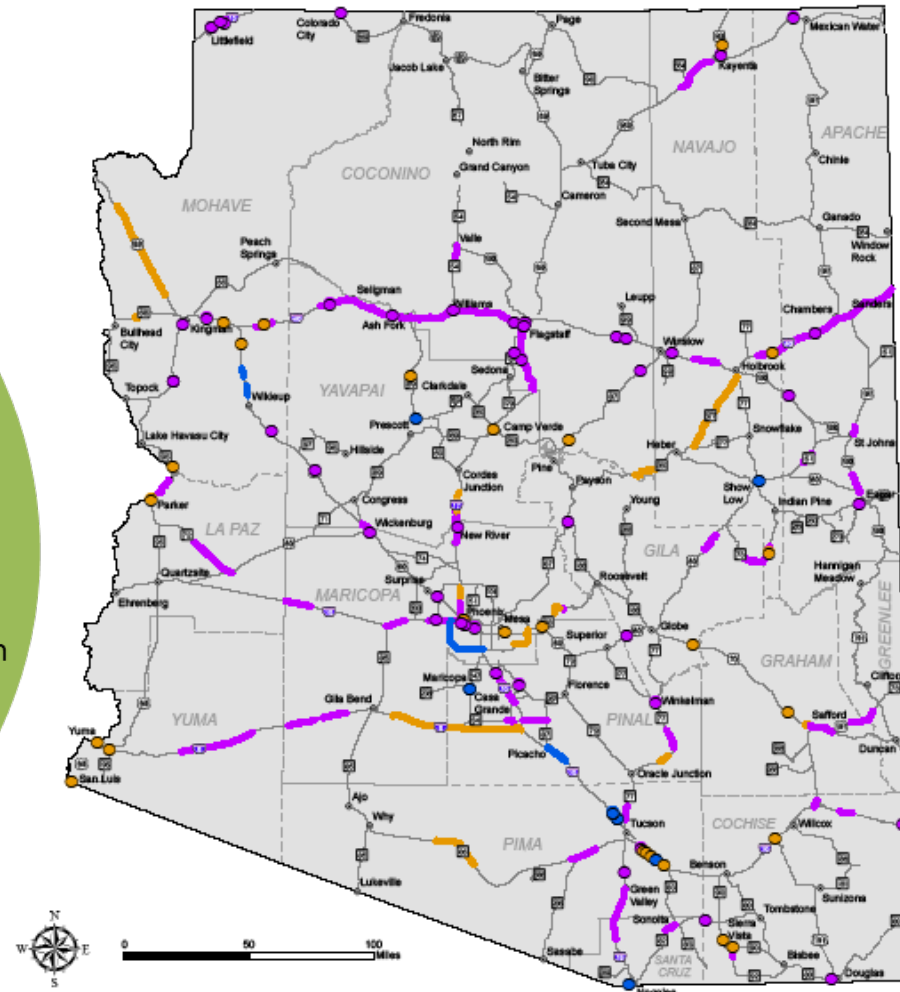
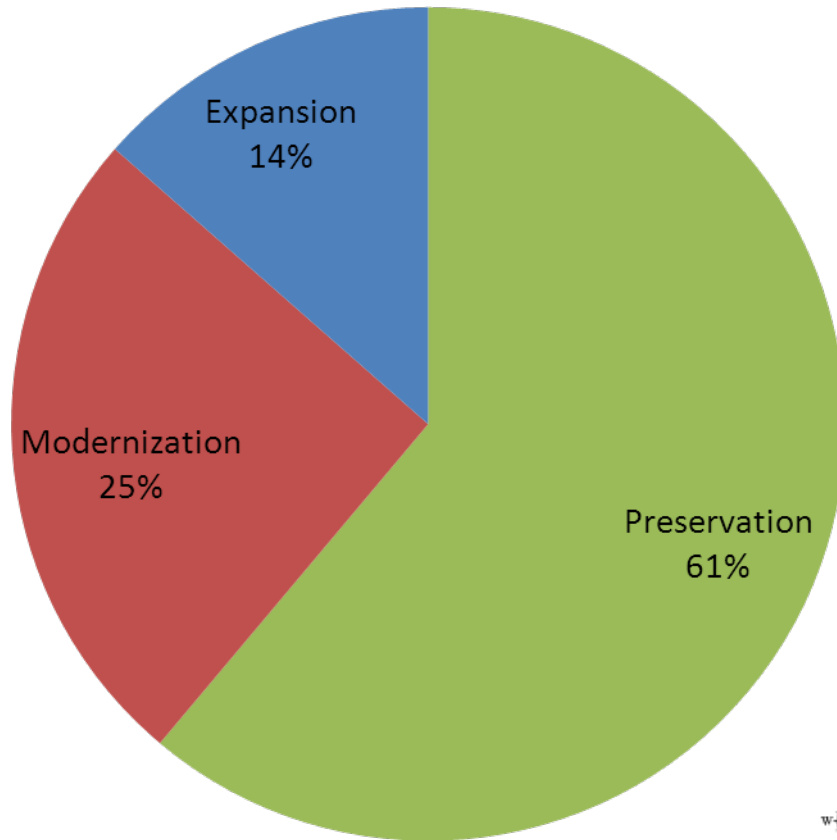
2017-2021 Tentative Facilities Construction Program

2016-2020 Facilities Construction Program

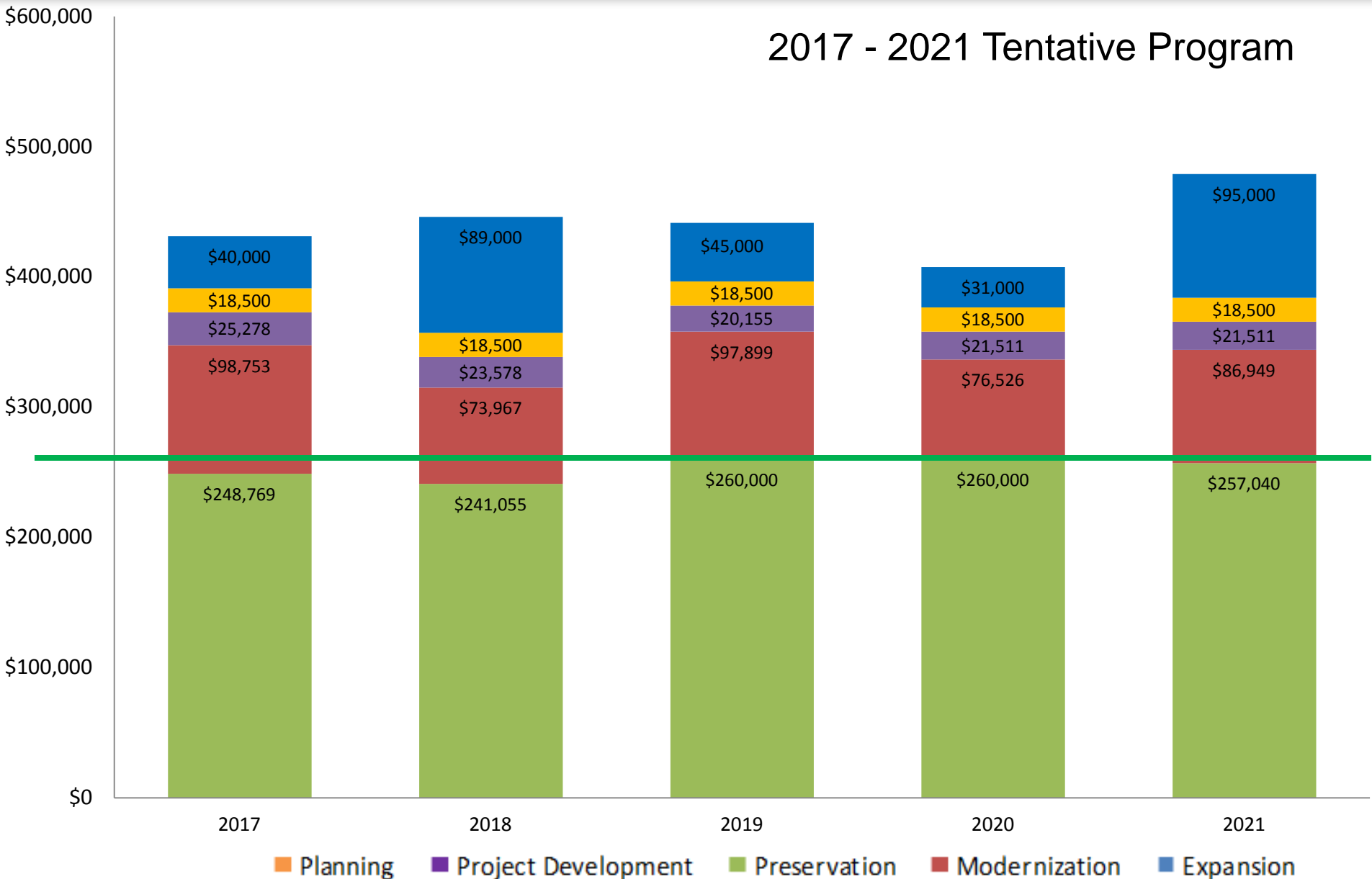


Includes MAG & PAG Funding

Greater Arizona Tentative 5-Year Highway Delivery Program(FY17-FY21)



2017 - 2021 Tentative Program



2017 - 2021 Tentative Program



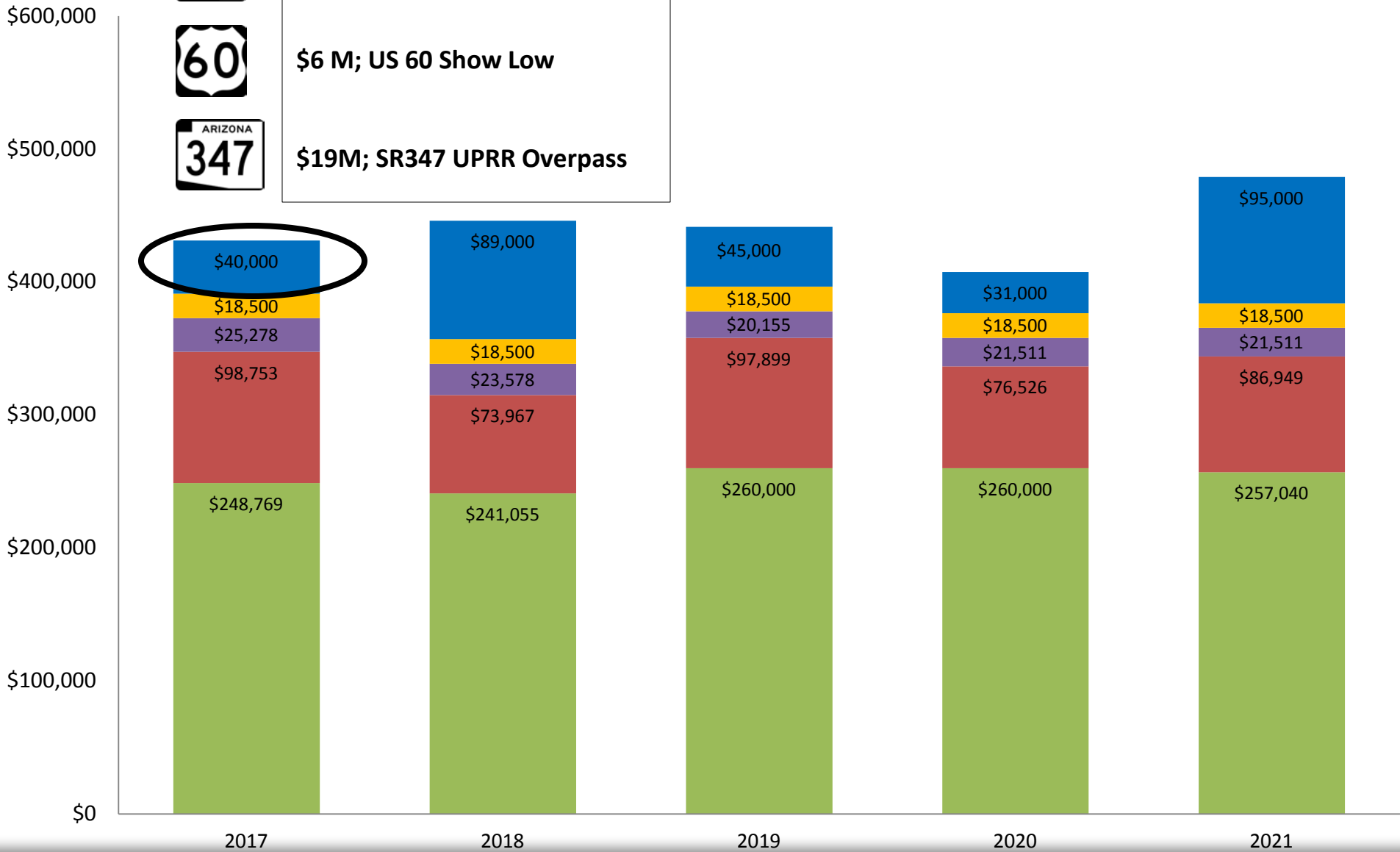
\$15 M; SR89 Deep Well Ranch



\$6 M; US 60 Show Low



\$19M; SR347 UPRR Overpass

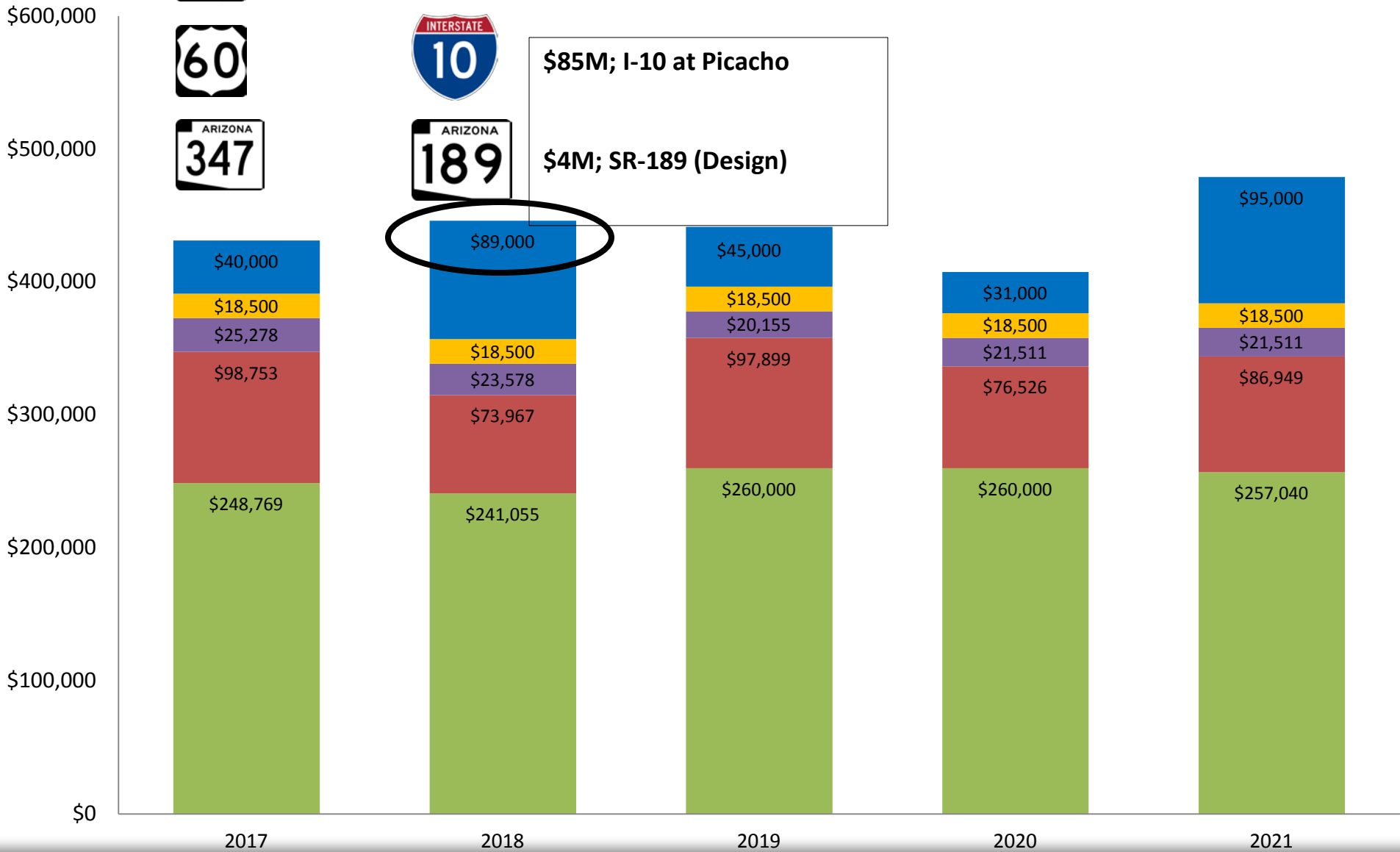


2017 - 2021 Tentative Program



\$85M; I-10 at Picacho

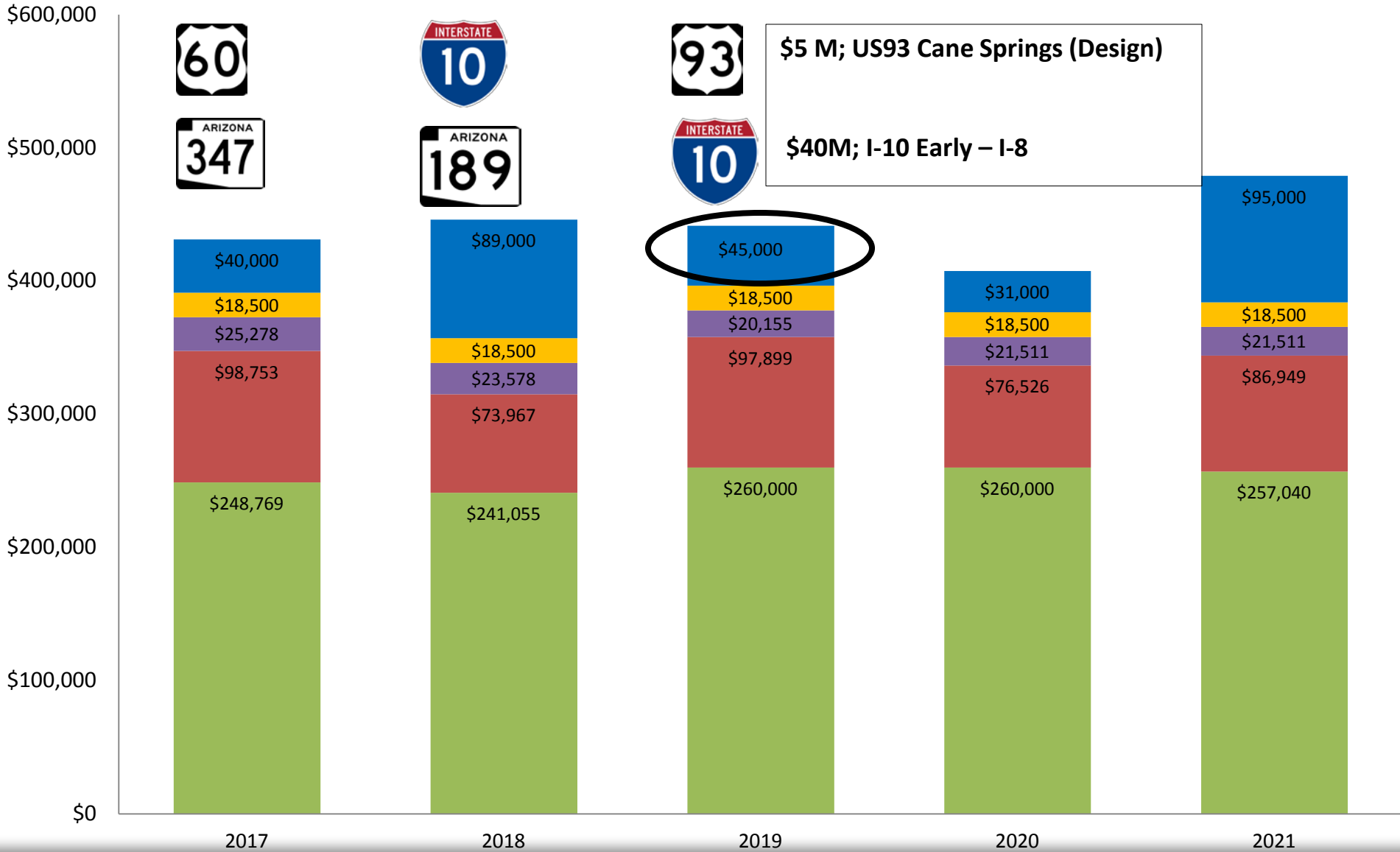
\$4M; SR-189 (Design)



2017 - 2021 Tentative Program



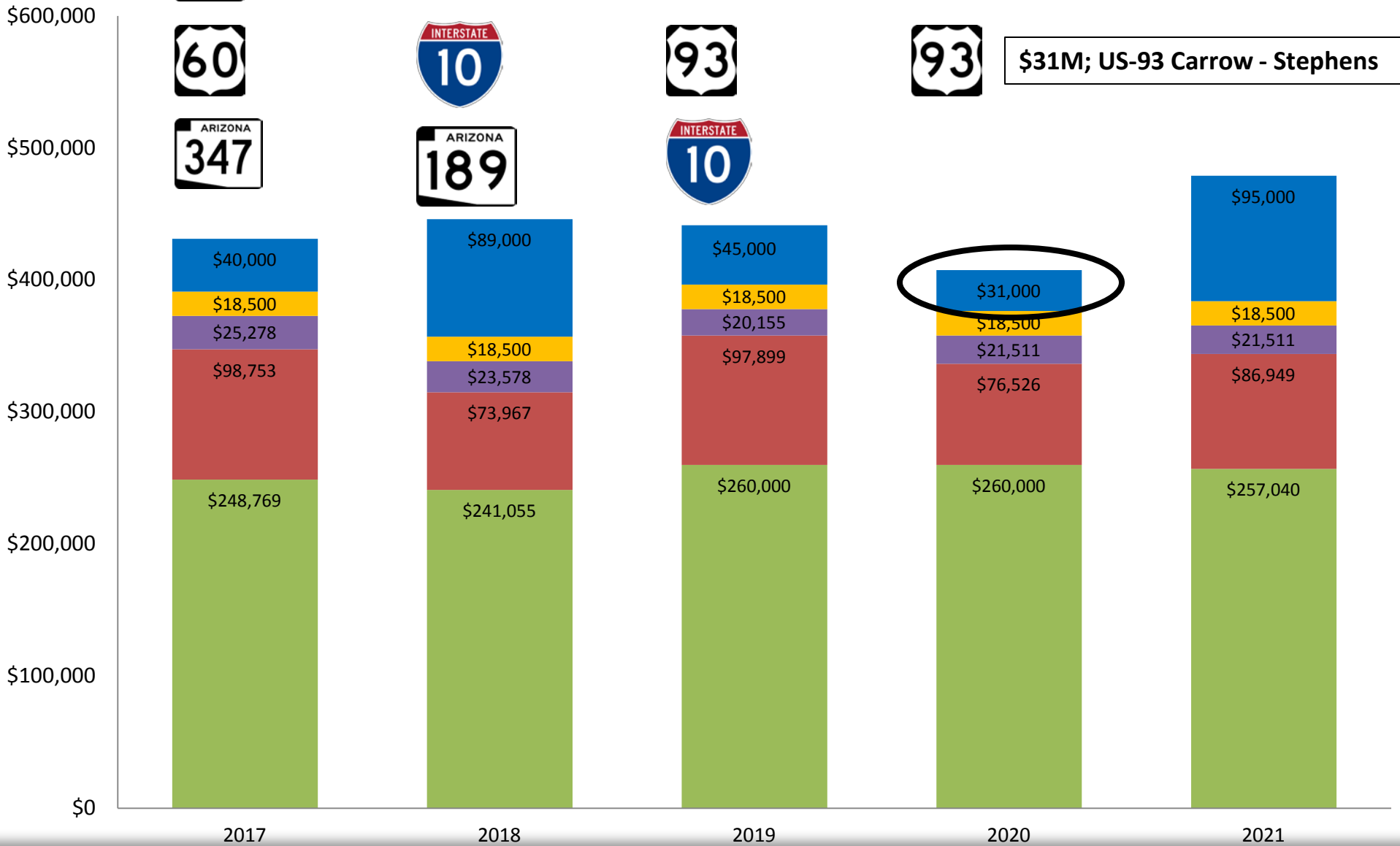
\$5 M; US93 Cane Springs (Design)
 \$40M; I-10 Early – I-8



2017 - 2021 Tentative Program



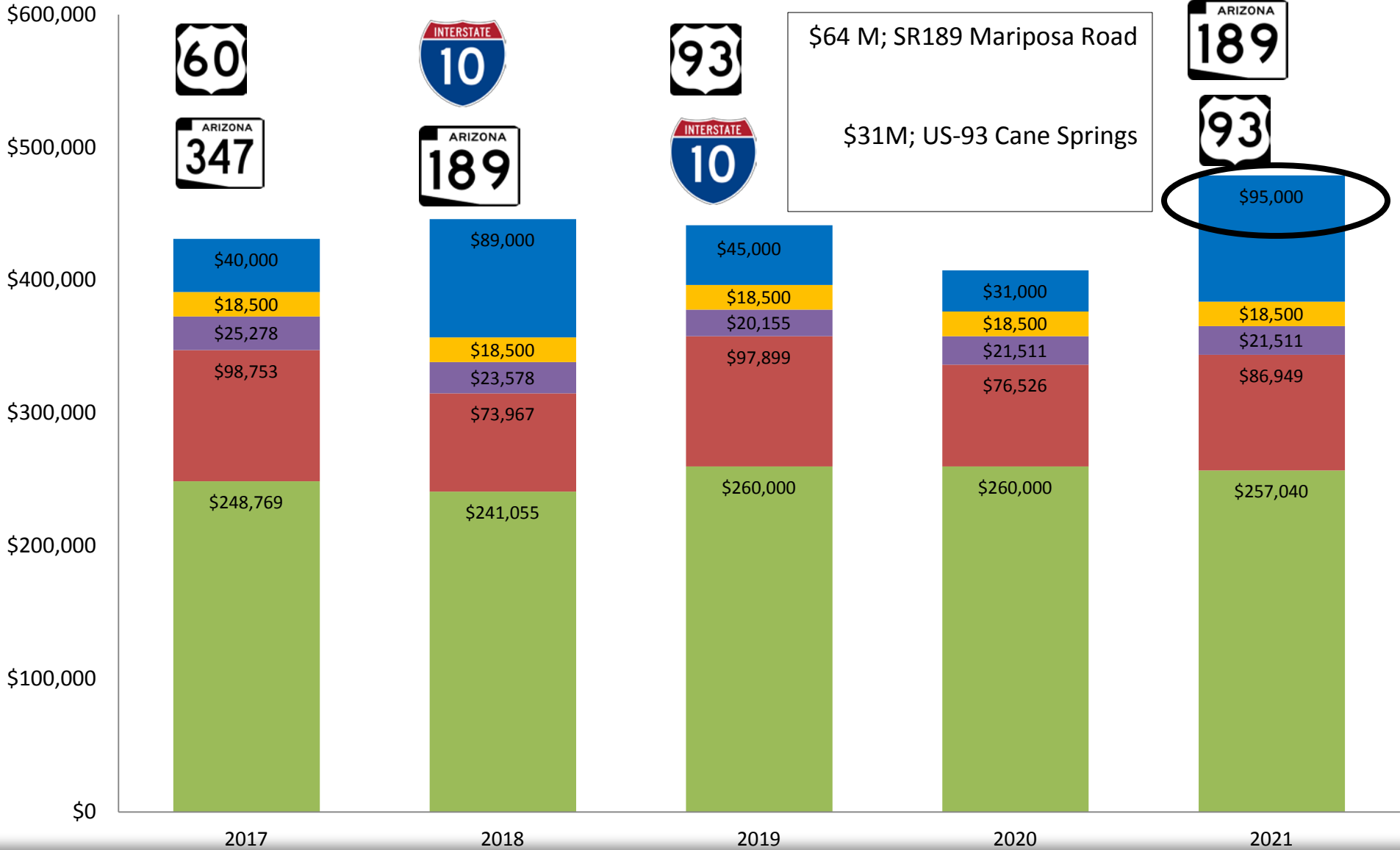
\$31M; US-93 Carrow - Stephens



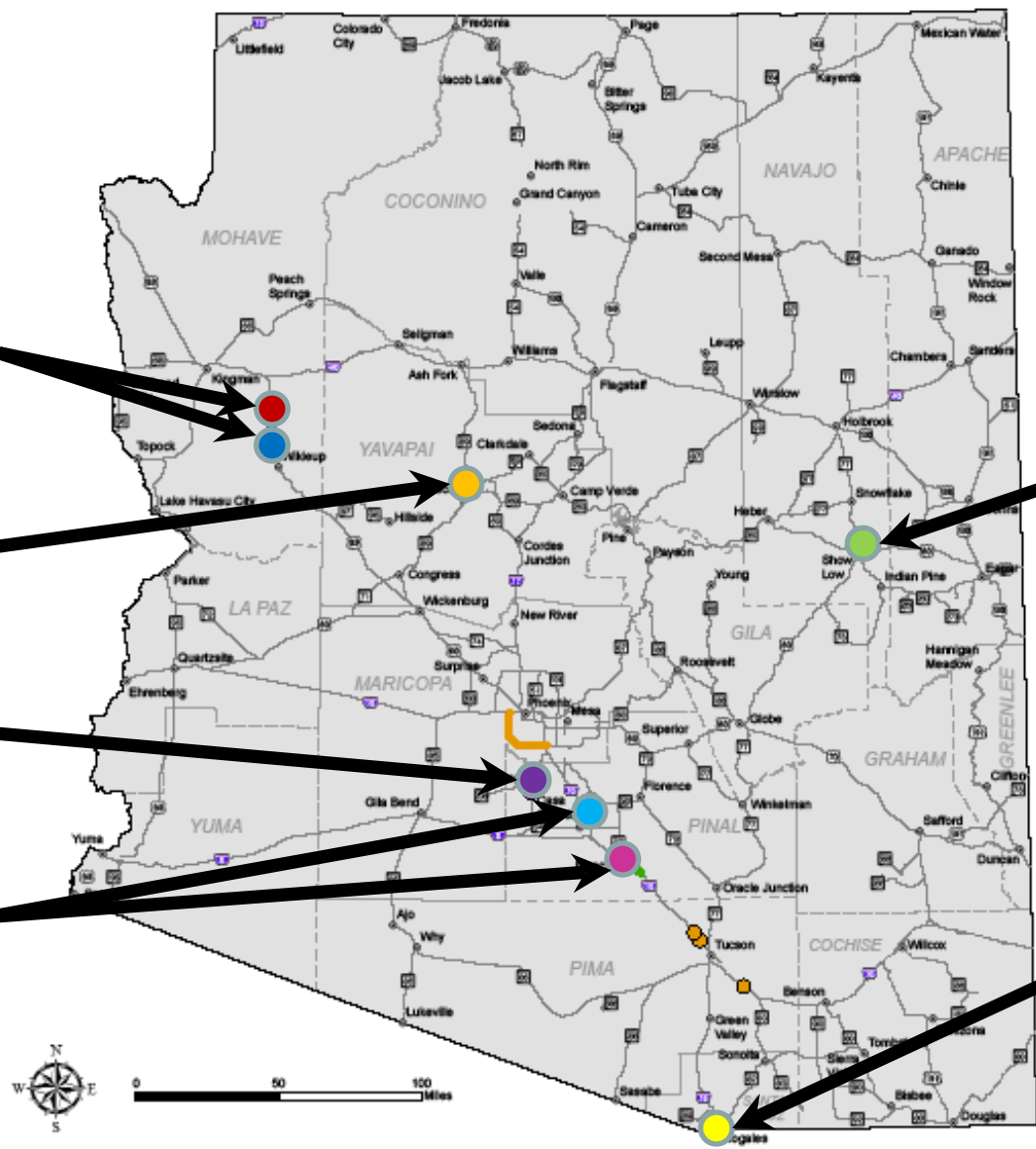
2017 - 2021 Tentative Program



\$64 M; SR189 Mariposa Road
 \$31M; US-93 Cane Springs



Expansion Program (FY17-FY21)





SR 347 Overpass; Recommended Programming

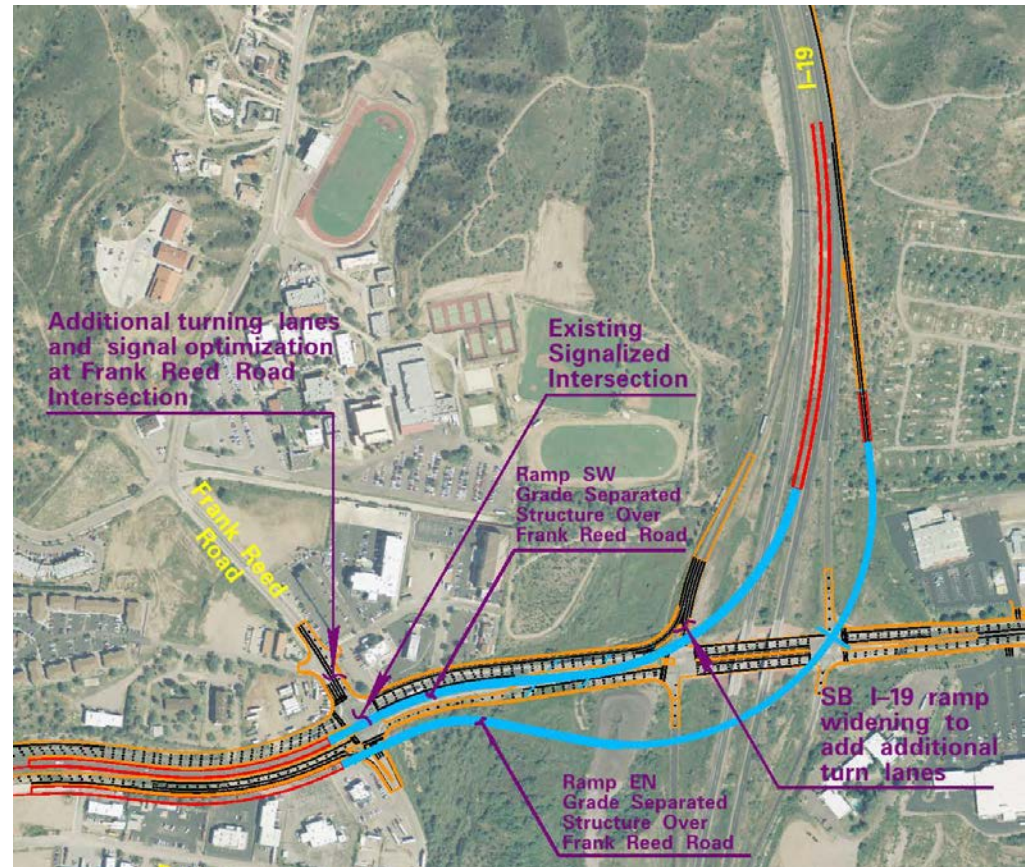
- Current Cost Estimate - \$55 Million
 - Design & Advance R/W
 - \$6M Obligated in FY16
 - Phase I; Relocate Amtrak Station
 - \$6M (Local Contribution)
 - Phase 2&3 (\$43M)
 - \$15M (Tiger Grant)
 - \$9M (Local Contribution)
 - \$19M (5-Year Program Funds; FY17)





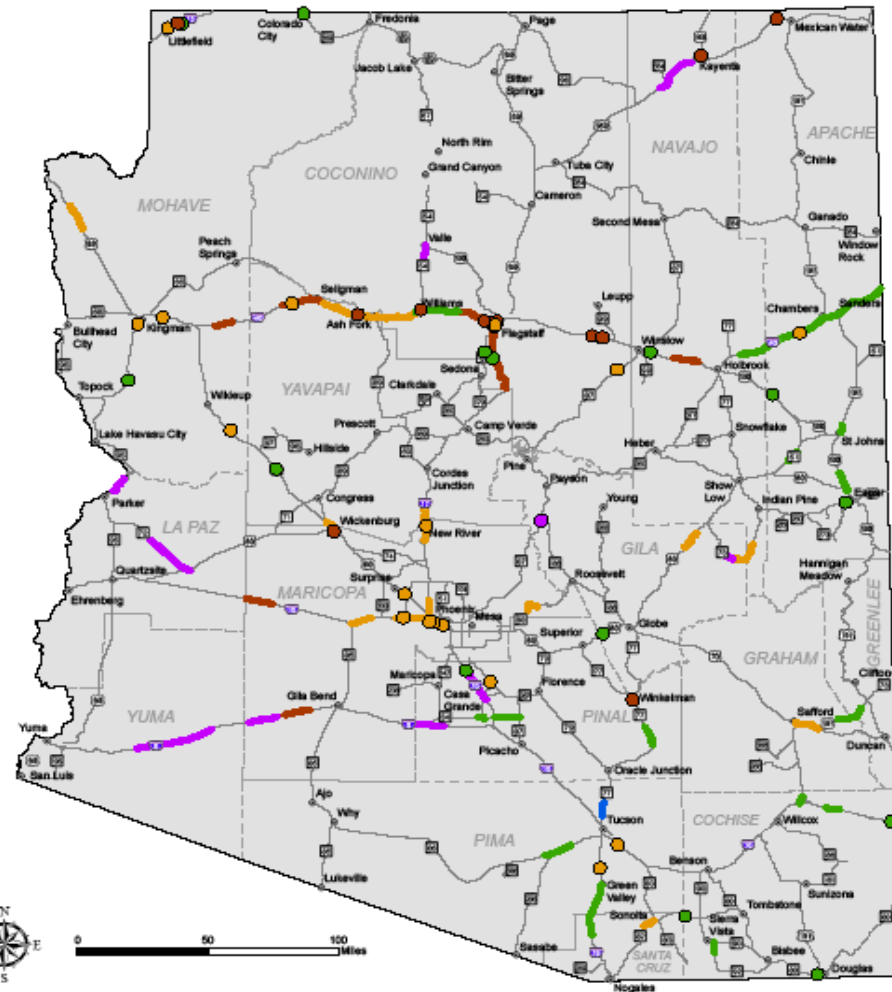
SR 189 Mariposa Road;

- Current Development Plan
 - DCR and EA
 - Spring 2016 – Ultimate Plan
 - 30% Design Plans
 - 2017 – Ultimate Plan
 - Final Design Plans
 - \$4M Fiscal Year 2018
 - Construction
 - \$64M Fiscal Year 2021



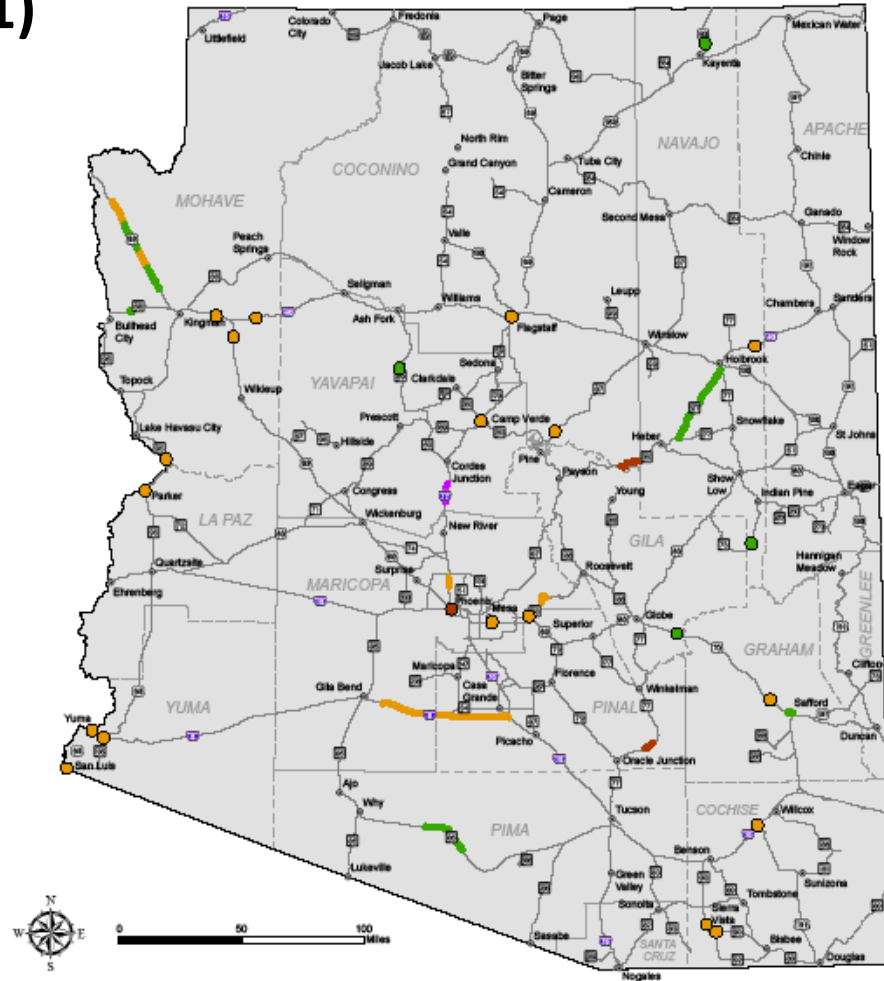
Preservation Program (FY17- FY21)

RT	LOCATION	D	TypeOfWork	CFY	COST (\$000)
8	MP 96 - PALOMA ROAD	SW	Pavement Preservation	2018	\$16,500
10	SR 101L / I-10 RAMP #2201 AND RAMP SE #2202	C	Construct Bridge Rehabilitation	2017	\$500
10	DYSART ROAD - BLACK CANYON HWY	C	Pavement Preservation	2017	\$26,500
10	SR 85 - VERRADO (WB)	C	Pavement Preservation	2017	\$6,022
10	CRAYCROFT TIOP AND WILMOT ROAD TIOP, STR #594 - #597	SC	Construct Bridge Deck Rehabilitation	2017	\$9,000
10	WEST BOWIE TI - EAST BOWIE TI	SE	Pavement Preservation	2018	\$11,500
10	ISLAND WASH BRIDGE #210	SE	Construct Scour Retrofit	2018	\$300
10	WEST OF SR 587	C	Pavement Preservation	2018	\$4,102
10	COUNTY LINE TO SALOME ROAD	SW	Pavement Preservation	2018	\$20,875
10	UNIVERSITY DRIVE TI UNDERPASS, STR #2004	C	Construct Bridge Rehabilitation	2017	\$300
15	VIRGIN RIVER BRIDGE NUMBER 1 STR #1089	NC	Construct Bridge Replacement	2019	\$33,000
15	VIRGIN RIVER BRIDGE NUMBER 1 STR #1089	NC	Design Bridge Replacement	2017	\$2,500
15	VIRGIN RIVER BRIDGE NUMBER 2 STR #1614	NC	Construct Bridge Deck Rehabilitation	2019	\$2,500
17	19TH AVE TI OP, STR #717	C	Construct Bridge Rehabilitation	2017	\$650
17	JEFFERSON STREET UNDERPASS STR #554	C	Construct Bridge Rehabilitation	2017	\$400
17	MOORES GULCH BR SB, STR #339	N W	Bridge Replacement	2017	\$8,000



Modernization Program (FY17- FY21)

- Example Project Types
 - Passing and Climbing Lanes
 - Intersection Improvements
 - Traffic Signals
 - Roundabouts
 - Shoulder Widening
 - Intelligent Transportation Systems



Summary of the Tentative Program FY17-21

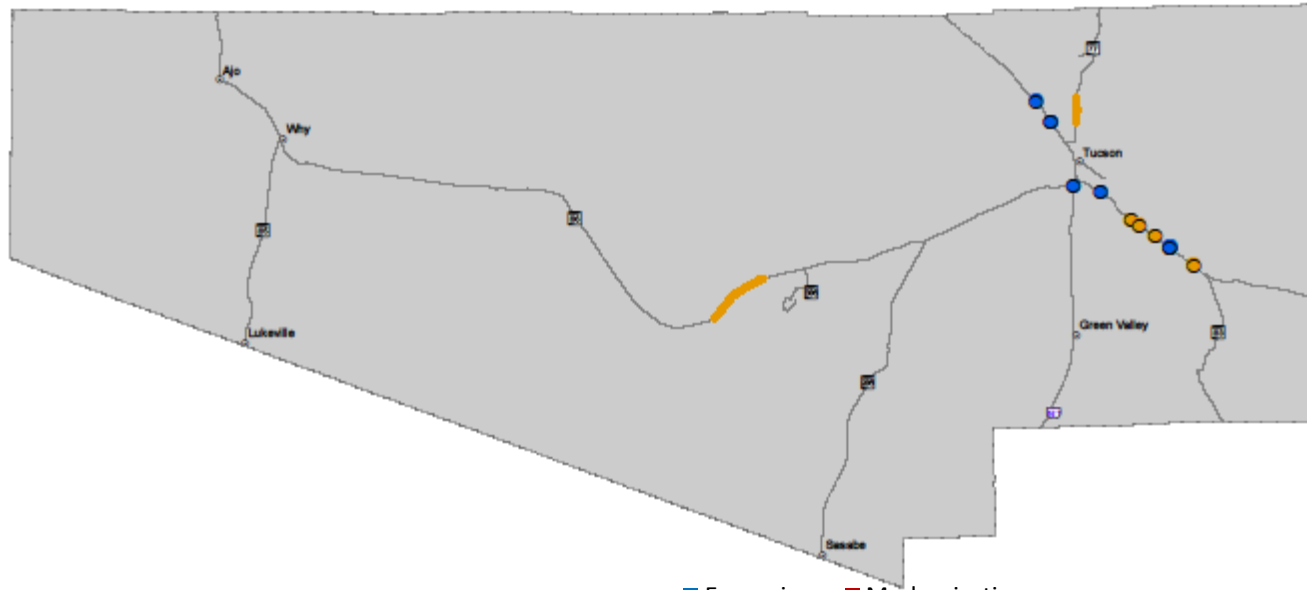
- Expansion projects from previous 5-Year program remain
 - SR-89; Deep Well Ranch Road to SR-89A in FY 2017
 - US-60 Show Low to Little Mormon Lake in FY 2017
 - SR-347 UPRR Overpass accelerated to FY18
- Increase Preservation Funding near goal of \$260M in the later years
- Funding increases due to TIGER Grant and FAST act have allowed for Expansion Projects that enhance Freight movements to be included in this 5-Year Program



PAG; Tentative Program (FY17-21)



PAG Tentative Program (FY17- FY21)



2017/2018

I-10; Ina Road TI

2017/ 2020/2021

I-10; Houghton Road TI

2017/ 2018/2019/2020

I-10; Ruthrauff TI

2019/ 2020/2021

I-10; Country Club Rd TI

2018/2019/2020/2021

I-10; Kino Rd TI

2020

I-10; Park Ave TI (Design Only)

2018/2019

I-19; Ajo Way TI, Phase II

2021

I-19; Irvington Road TI (Design Only)

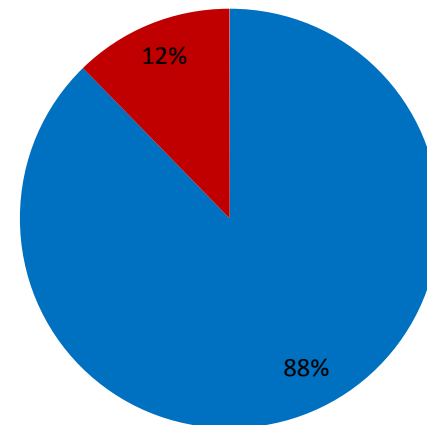
2019

SR-77; River Road – Suffolk Drive

2018

SR-86; Fresnal – MP 123.9

■ Expansion ■ Modernization



MAG Area Regional Transportation Plan Freeway Program



MAG Area Freeway Program (FY17- FY21)

Construction Projects only

2017-2019

SR 202L; South Mountain - \$973 M

2018

SR85; Warner St. Bridge - \$5.3 M

2019-2021

I-10; SR-202L Santan – Riggs Rd - \$73.7

I-10; 32nd St to SR 202L - \$324 M

2020

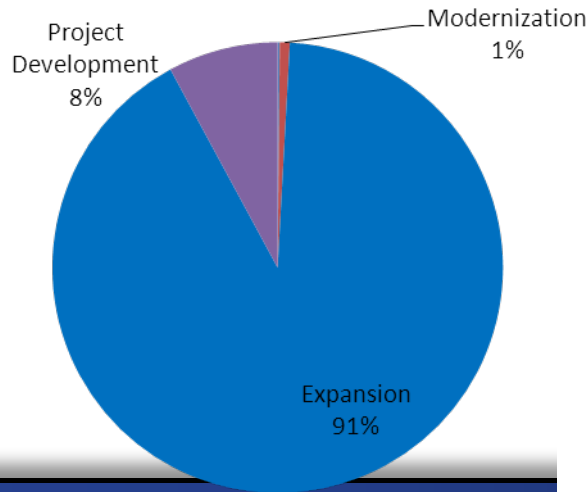
US-60; Crismon Rd – Meridian Rd \$26.5 M

2021

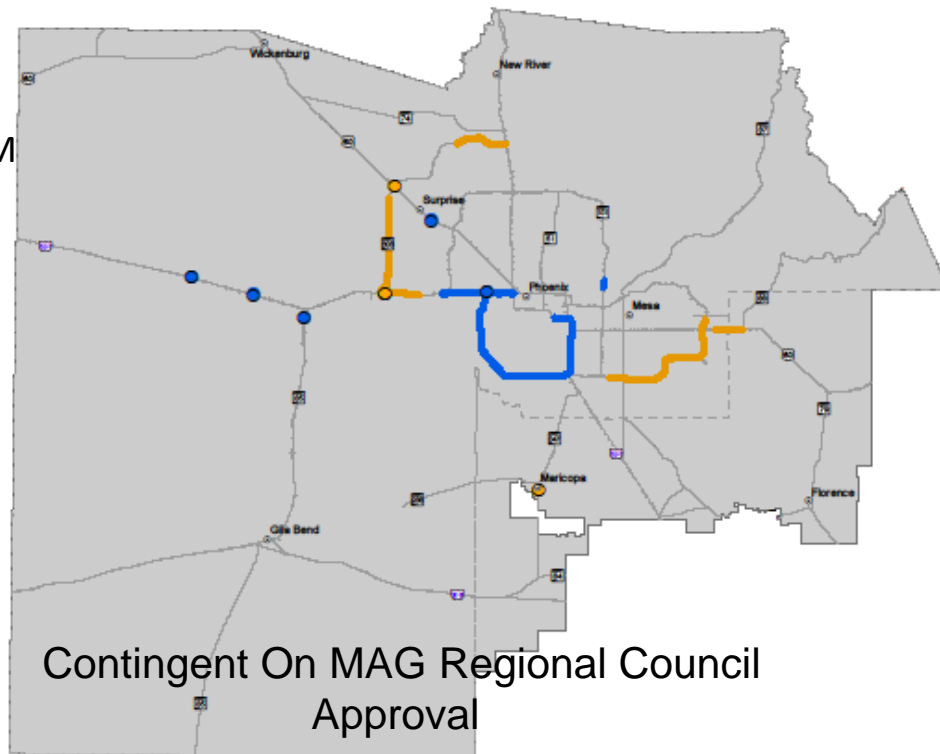
I-17; SR-101L – I-10/I-17 \$60.5M

SR-101L; SR-51 to Princess Dr \$61.1M

SR-101L; Princess Dr – Shea Blvd \$52.7M



Tentative 2017-2021 Five-Year
Transportation Facilities Construction Program
MAG RTP Freeway Program



Contingent On MAG Regional Council Approval

Projects

- Expansion
- Modernization
- Expansion
- Modernization
- Cities and Towns
- State Highway System
- County Boundary
- MAG Boundary



Note:
The State
concerns
nor assum
the use of

Prepared
Arizona D
MultiMod
Transport
602.712.7

Airport Program

Yuma International Airport
2017-2021 Tentative AICP

Arizona Revised Statutes

- Title 28 – Transportation, Chapter 25 - Aviation
 - ARS 28 - 8202 State Aviation Fund
 - “C. The department shall administer monies that are appropriated by the legislature from the state aviation fund.”
 - “D. The board shall distribute monies appropriated to the department from the state aviation fund...The board shall distribute these monies according to the needs for these facilities as determined by the board.”

Airport Capital Improvement Program (ACIP)

Five-Year Development Program - Fiscal Year 2017

Next Steps

- ▶ Public Hearings
 - March 18 Oro Valley
 - April 15 Phoenix
 - May 20 Flagstaff
- ▶ Study Session May 31 in Phoenix
- ▶ Present Final Program to STB; June 17th Holbrook
- ▶ Program must be signed by Governor by June 30th
- ▶ FY 17 begins July 1st, 2016

Expansion Project Updates

US-60 Show Low project

- ▶ FY 2017,
- ▶ \$6,000,000
- ▶
- ▶ **SCOPE:**
- ▶ Work includes roadway widening (MP 342.1 – MP 343.4)
- ▶ Box culvert extension
- ▶ And intersection improvements @ US 60 and SR 77
- ▶
- ▶ **STAGE:**
- ▶ Currently developing Stage III (60%) / construction estimate = \$5.9M)
- ▶
- ▶ **RISK TO DELIVERY:**
- ▶ Utility companies mobilizing to perform relocations of their existing facilities prior to advertising this project for construction

SR 89A – Deep Well Ranch Road

- ▶ FY 2017
- ▶ \$15,000,000
- ▶ Scope of work: Continuation of SR89 project to the north. Widen existing 2 lane segment to 4 lane divided urban section (Deep Well Ranch Rd to SR89A) with median and 1 roundabout at Perkins Drive/ James Lane plus connector via James Lane to Willow Creek (Re-aligned).
- ▶ What stage is the project in: Stage III submittal Planned for 4/16/16.
- ▶ Current Construction estimate: \$15 Million – includes R/W acquisition and Utility relocation.
- ▶ Risk to delivery: Golf course is 4(f) property with a need for small amount of r/w (anticipate a De-minimus finding). Scheduled FY 17 (start construction May 2017) – City of Prescott project (Willow Creek Re-alignment) scheduled to complete in December 2016, will use new alignment as detour for project. Need to negotiate 1 access for multiple properties at the north end of project. Turn back to City of Prescott upon completion of project.

I-10 to Picacho

- ▶ The project is located in Pinal County on Interstate I-10 between MP 209.59 and MP 213.00.
- ▶ Scope:
 - ▶ The work includes realignment of I-10, reconstruction of SR87 TI including the construction of four ramps and the westbound frontage road. The project will construct two new bridges along SR87 over UPRR and interstate 10 with the removal of six existing bridges. Other work elements include earthwork, pavement removal, furnishing and placing aggregate base, asphalt concrete, PCCP, culverts, signing and marking and a waterline.
- ▶ Stage: 100% Project On-Shelf since 2012 waiting for construction funding.
- ▶ Budget: The project cost estimate: 85M (Based on 2012 dollars)
- ▶ Risk to delivery: Union Pacific Railroad(CM agreement executed), coordination with private irrigation owner & Private Waterline Construction.

I-10, Early Road to Junction I-8

- ▶ The project is located in Pinal County
- ▶ on Interstate I-10 between MP 196.42 and MP 199.34.
- ▶ Scope:
- ▶ The proposed work includes widening Interstate 10 from four lanes to six lanes including two new bridges over Jimmie Kerr Boulevard and UPRR. The work consists of earthwork, pavement removal, furnishing and placing aggregate base, asphalt concrete, concrete barrier, pipe lining, guardrail, land form graphics, culverts, signing and marking and a granite mulch.
- ▶ Stage:
- ▶ At 60% Design. Waiting to submit 95% design plans once environmental clearance is completed. (February /March 2016)
- ▶ Budget: The project cost estimate: \$40M
- ▶
- ▶ Risk to delivery: Union Pacific Railroad(CM agreement), SRP 12kv power line relocation (2 miles), Century Link relocation and private waterline construction (included with construction project).

US-93 Carrow - Stephens

- ▶ **US 93, Carrow - Stephens:**

- ▶ Carrow - Stephens is the 8th project in the US 93 corridor between the Town of Wikieup and Interstate 40 (I-40). It was last programmed for \$22M of design in FY16 for the FY13-FY17 Program. It has since disappeared from the Program. There are no corresponding construction monies illustrated in the current Five Year Program.

- ▶ **Scope:**

- ▶ The project is a complete reconstruction of the existing two (2) lane highway to a four (4) lane divided configuration. The project limits extend from approximately MP 115.7 to approximately MP 120. It includes bridges at Gun Sight Canyon (165' +/-). These bridges will also provide wildlife connectivity from one side of the highway to the other. The design criteria will be set to minimize rework necessary for interstate shields to be installed on this corridor in the future. The ROW has already been acquired consistent with the preliminary design in the July, 2001 L/DCR (H4423 01L). Design work will include: survey, geotechnical investigation, environmental evaluation, ROW verification, utility relocation, drainage, structures, traffic elements, landscaping, plans, specifications, estimates, and coordination with various local, state and federal agencies.

- ▶ **Schedule:**

- ▶ This project is currently under Consultant Contract. Design has been slowly advancing since the 01C monies were removed from the Program. The project's next major submittal will be the Stg III (60%) Plans. If the Program reflects construction monies, development may be expedited to Advertise as early March, 2017.

- ▶ **Budget:**

- ▶ The cost data in the 2001 L/DCR indicate construction costs are \$21.4M and \$100K for utility relocation. Again, the ROW has already been acquired consistent with the design illustrated in the L/DCR. The Stg II (30%) estimate from 8/16/2013 reflects a construction value of \$30.9M. I would suggest some inflation, but with oil coming down there is some mitigating effects to prices, say \$33M for construction.

- ▶ **Risks:**

- ▶ Changes to personnel, policies, procedures, lists of endangered species and species of concern since the publishing of the 2001 L/DCR may have impacts on the design and construction elements of this project. Additional scoping, mitigation and costs may be realized in final design.

SR-189 Mariposa Road

- ▶ Deliverables and (Schedule):
- ▶ Public Hearing (late Spring 2016)
- ▶ Environmental Assessment (Summer 2016)
- ▶ Design Concept Report with 15% design plans (Summer 2016)
- ▶ 30% plans anticipated in early 2017

- ▶ Cost Estimates
- ▶ Ultimate Plan: \$120M to \$180M (**graphic attached**)
- ▶ \$64M improvement plan also developed to meet travel demand needs; (consistent with FY 2021 planned funding)

- ▶ Funding
- ▶ FY 2016: \$2M preliminary engineering and environmental
- ▶ FY 2018: \$4M design
- ▶ FY 2021: \$64 construction (planned)

US 93, Cane Springs

- ▶ Cane Springs is the 9th project in the US 93 corridor between the Town of Wikieup and Interstate 40 (I-40). It is currently programmed with \$5M of design in FY19. There are no corresponding construction monies illustrated in the current Five Year Program.
- ▶ Scope:
- ▶ The project is a complete reconstruction of the existing two (2) lane highway to a four (4) lane divided configuration. The project limits extend from approximately MP 106 to approximately MP 109.4. It includes bridges at Canes Springs Wash (400' +/-). These bridges will also provide wildlife connectivity from one side of the highway to the other. The design criteria will be set to minimize rework necessary for interstate shields to be installed on this corridor in the future. The ROW has already been acquired consistent with the preliminary design in the July, 2001 L/DCR (H4423 01L). Design work will include: survey, geotechnical investigation, environmental evaluation, ROW verification, utility relocation, drainage, structures, traffic elements, landscaping, plans, specifications, estimates, and coordination with various local, state and federal agencies.
- ▶
- ▶ Schedule:
- ▶ Assuming this project is a consultant design, a **design duration of 18 months** is suggested. It is also suggested Consultant **selection and negotiations may take 6 months +/-**.
- ▶
- ▶ Budget:
- ▶ The cost data in the 2001 L/DCR indicate construction costs are \$20M and \$100K for utility relocation. Again, the ROW has already been acquired consistent with the design illustrated in the L/DCR.
- ▶
- ▶ Risks:
- ▶ Changes to personnel, policies, procedures, lists of endangered species and species of concern since the publishing of the 2001 L/DCR may have impacts on the design and construction elements of this project. Additional scoping, mitigation and costs may be realized in final design.