

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

Michael Kies
Assistant Director for Multimodal Planning

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, and planned over the following 5 Years.
- ▶ Approved annually
- ▶ Fiscal year starts each July 1
- ▶ Must be fiscally constrained – STB Five Year Program
- ▶ Must be financially constrained – ADOT, Development Program

Overview of Asset Condition



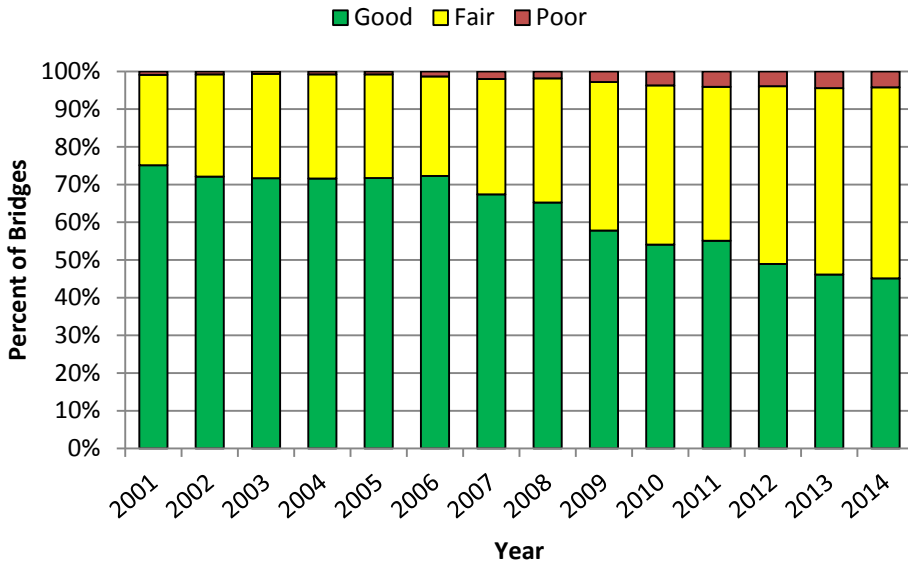
\$20.2 Billion = Value of State Highway System Infrastructure

\$20.2 Billion

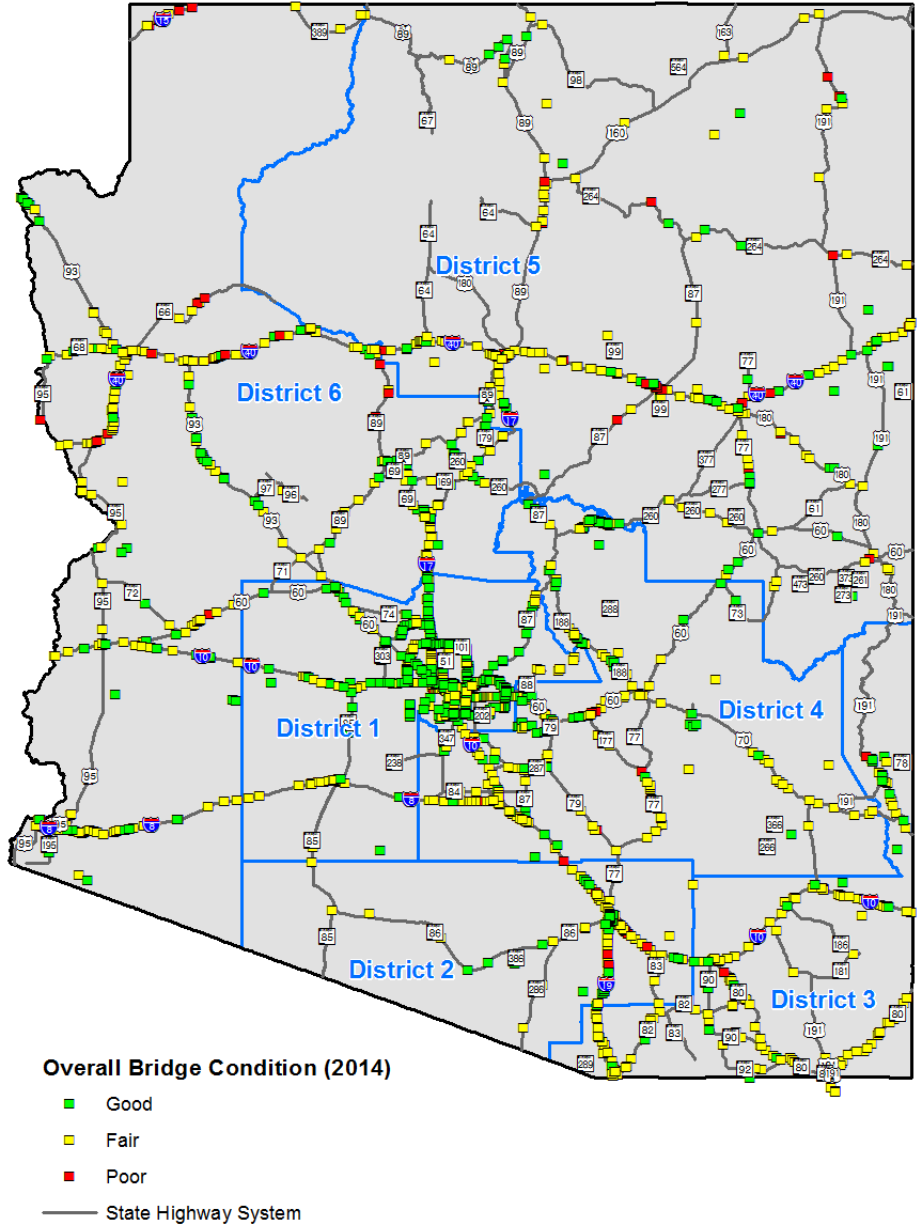
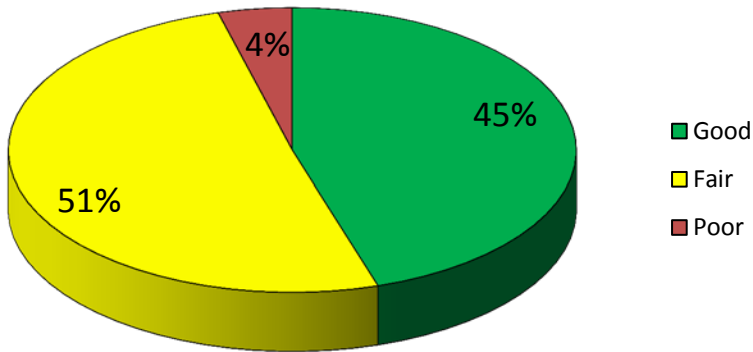


Without a commitment to preservation, the system would cost \$200 billion to replace.

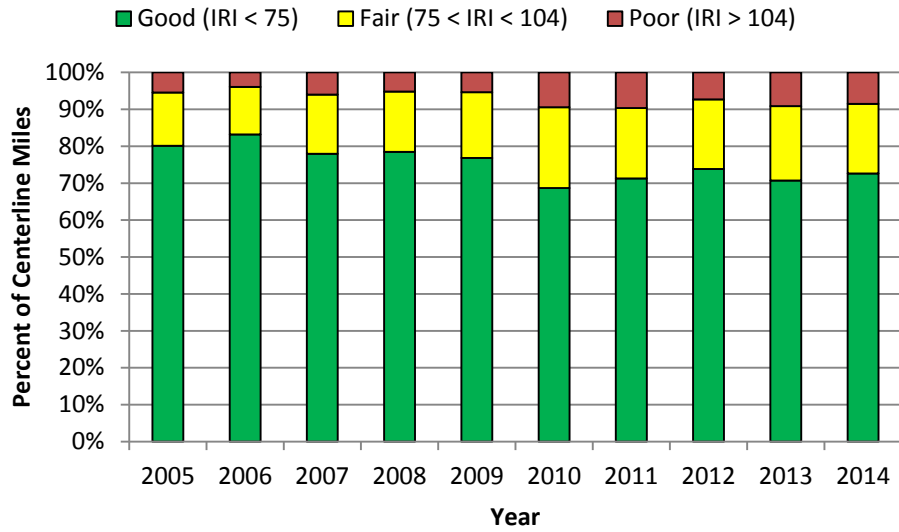
Overall Highway Bridge Condition



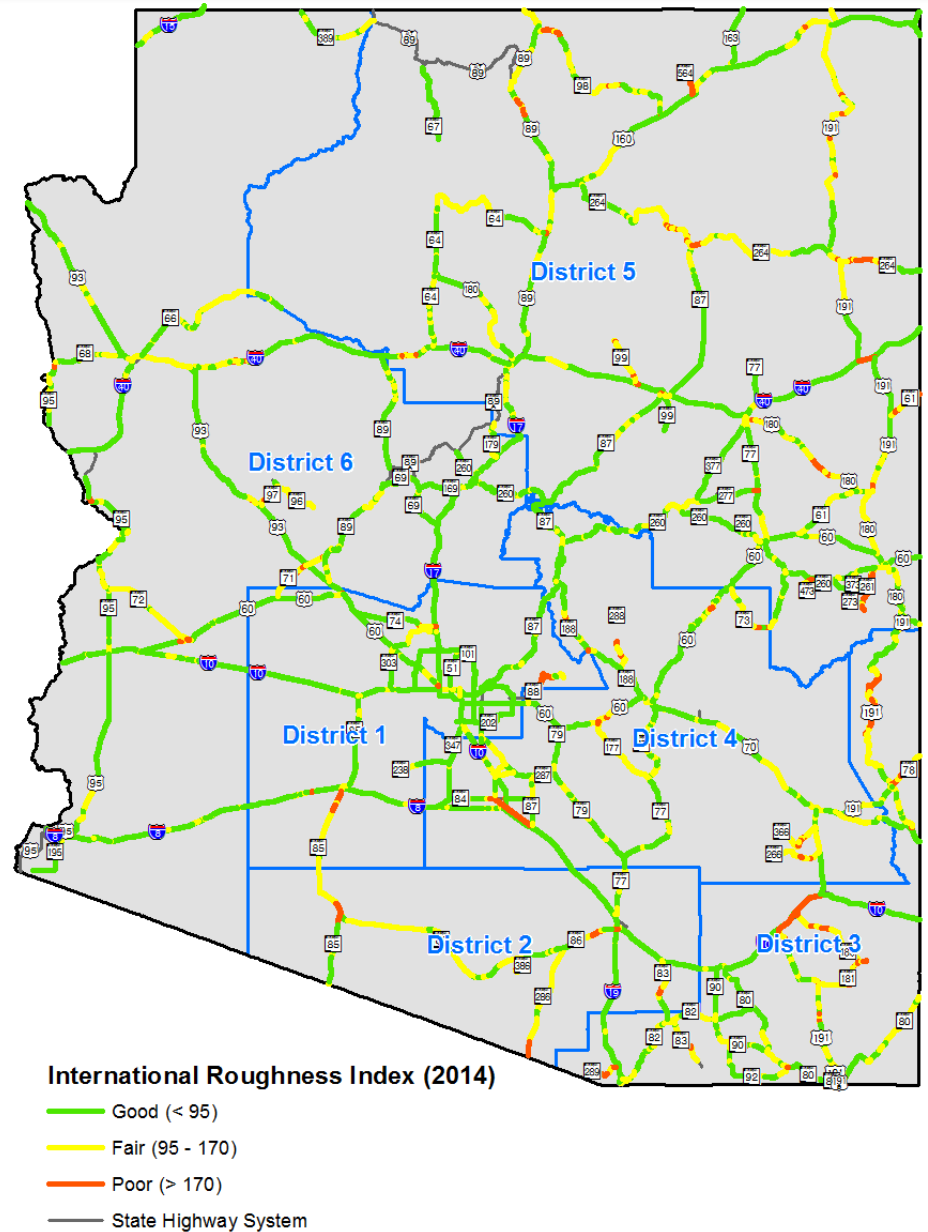
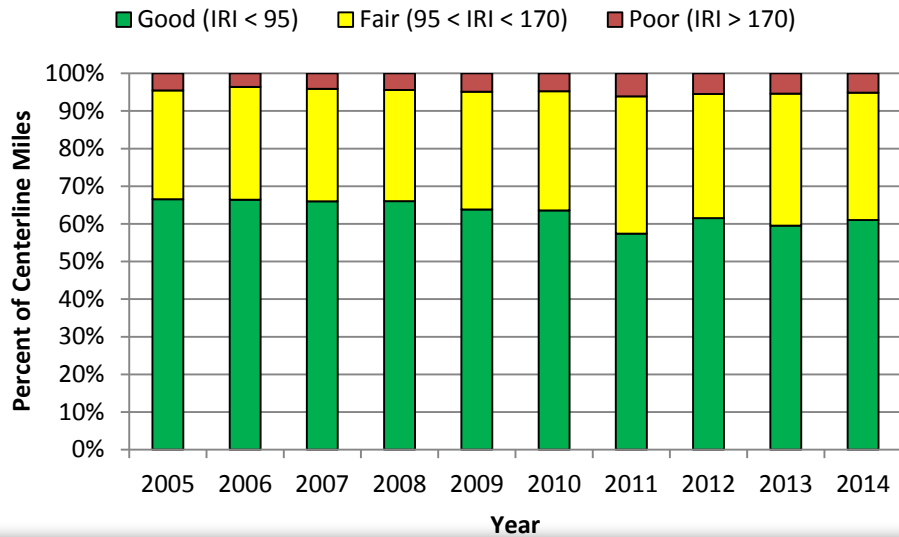
Overall Bridge Condition 2014



Overall Pavement Condition - Interstate



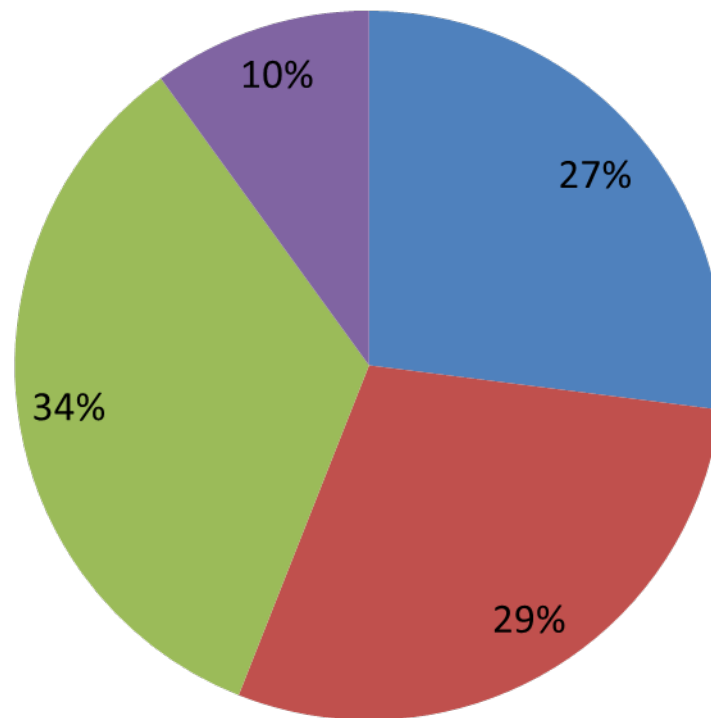
Overall Pavement Condition - Non-Interstate



Tentative 5-Year Highway Delivery Program



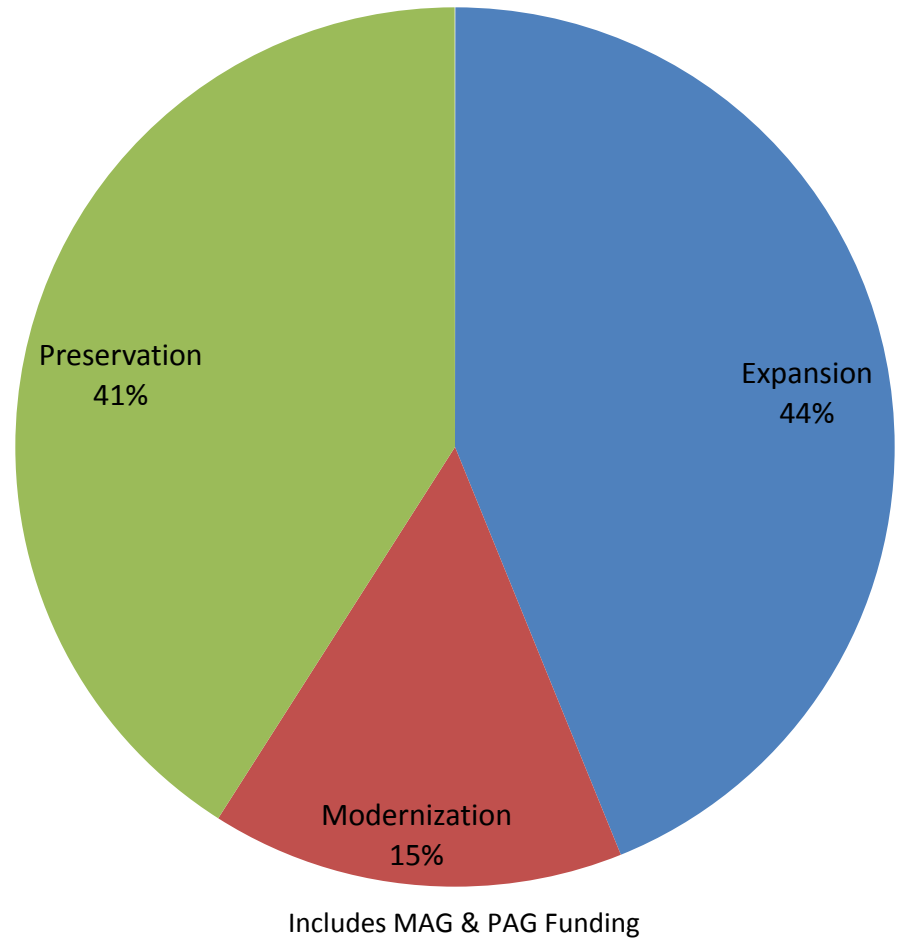
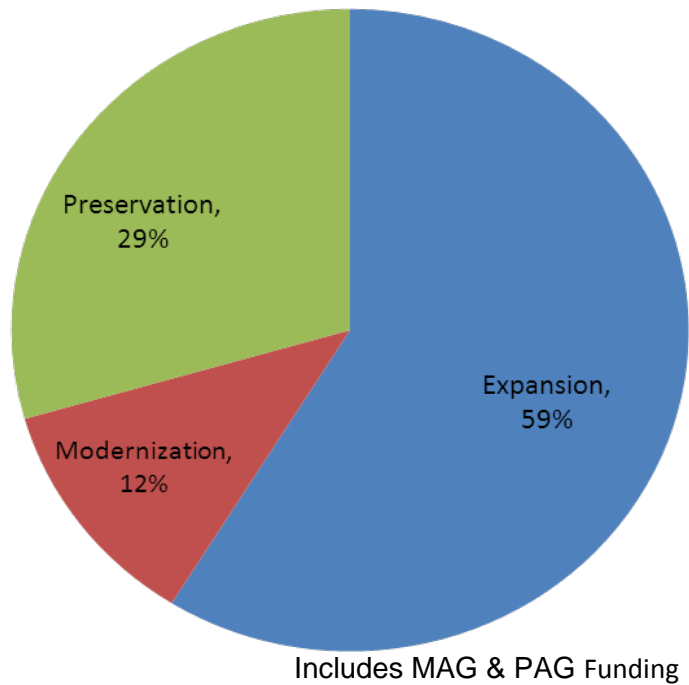
Recommended Investment Choice (RIC)



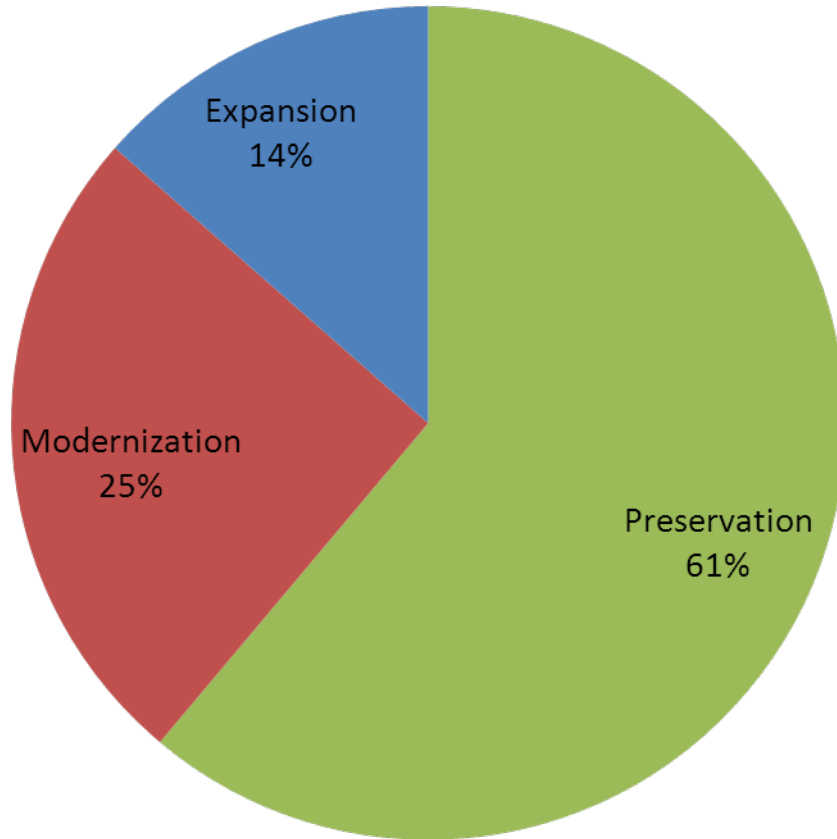
■ Expansion ■ Modernization ■ Preservation ■ Non-Highway

2017-2021 Tentative Facilities Construction Program

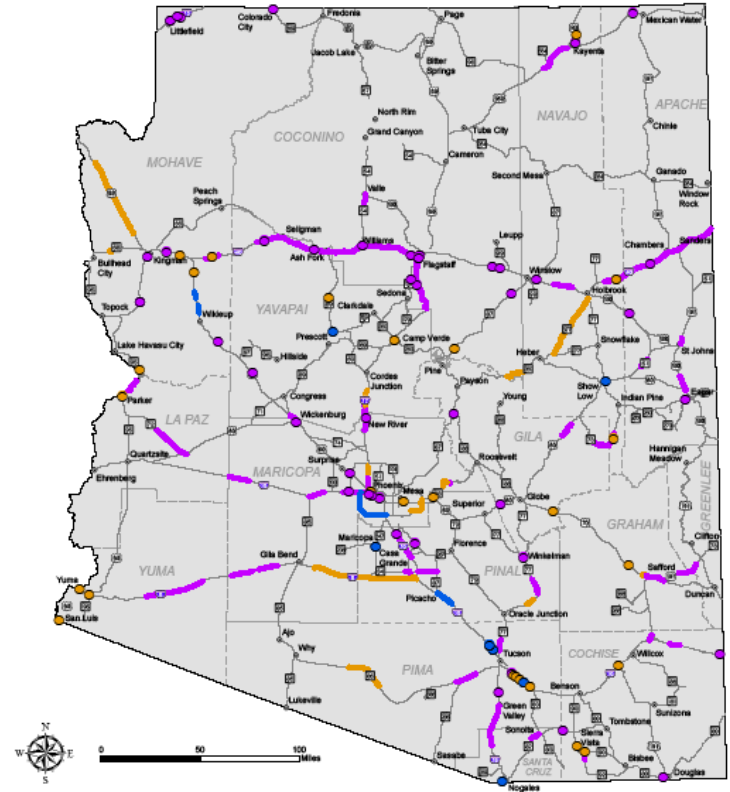
2016-2020 Facilities Construction Program



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



Tentative 2017-2021 Five-Year Transportation Facilities Construction Program



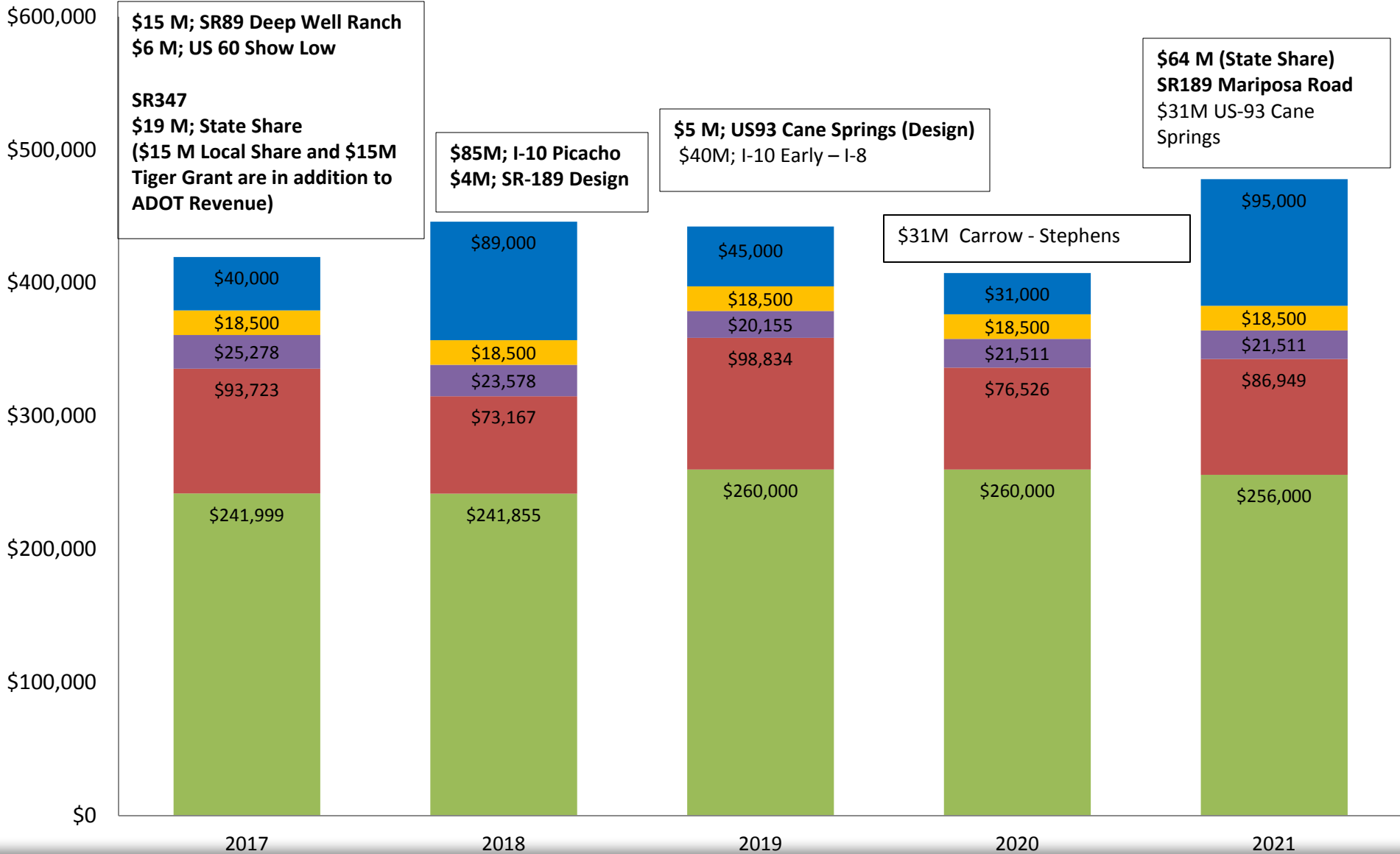
- Projects**
- Expansion
 - Modernization
 - Preservation
 - Expansion
 - Modernization
 - Preservation
 - Cities and Towns
 - State Highway System
 - - - County Boundary
 - ▭ State Boundary

Note: The State of Arizona makes no claims concerning the accuracy of this map nor assumes any liability resulting from the use of the information herein.

Prepared by:
Arizona Department of Transportation
Multimodal Planning Division
Transportation Analysis GIS Section
602.712.7335 January 2016



2017 - 2021 Tentative Program



\$15 M; SR89 Deep Well Ranch
\$6 M; US 60 Show Low

SR347
\$19 M; State Share
(\$15 M Local Share and \$15M Tiger Grant are in addition to ADOT Revenue)

\$85M; I-10 Picacho
\$4M; SR-189 Design

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

\$31M Carrow - Stephens

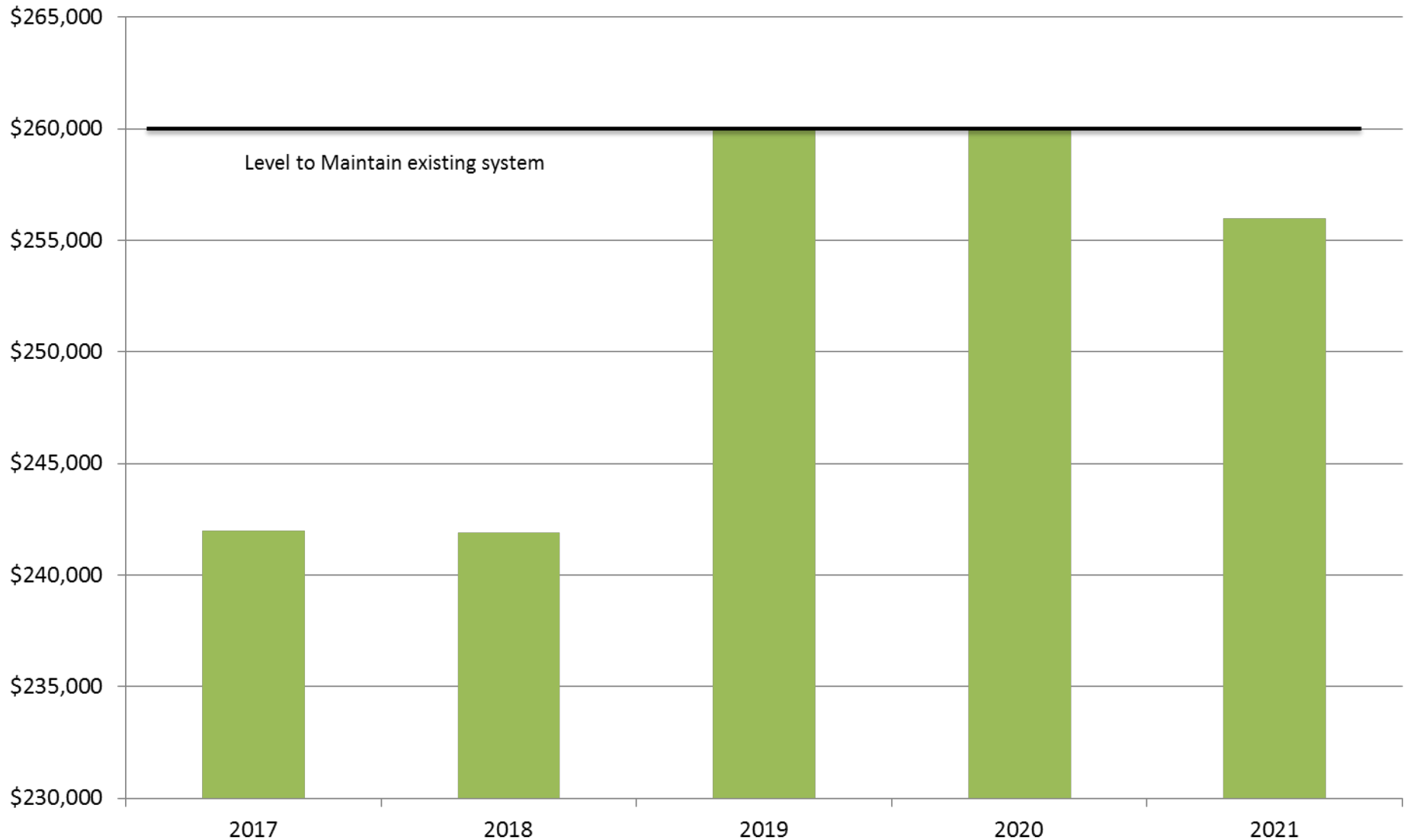
\$64 M (State Share)
SR189 Mariposa Road
\$31M US-93 Cane Springs

SR 347 Overpass; Recommended Programming

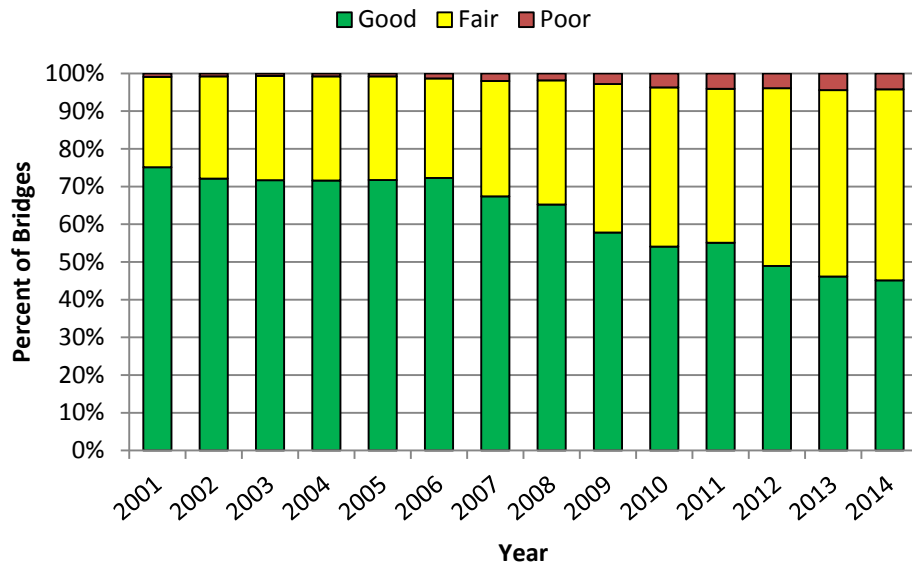
- Current Cost Estimate - \$55 Million
 - Design & Advance R/W
 - \$6M Obligated in FY16
 - Phase I; Relocate Amtrak Station
 - \$6M (Local Contribution)
 - Phase 2&3 (\$43M)
 - \$15M (Tiger Grant)
 - \$9M (Local Contribution)
 - \$19M (5-Year Program Funds; FY17)



Preservation funding proposed FY17-FY21

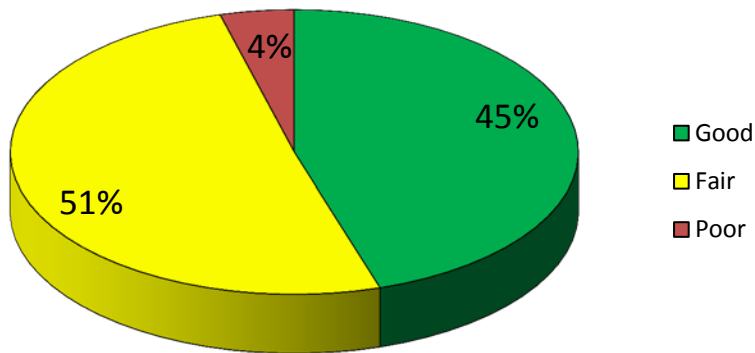


Overall Highway Bridge Condition

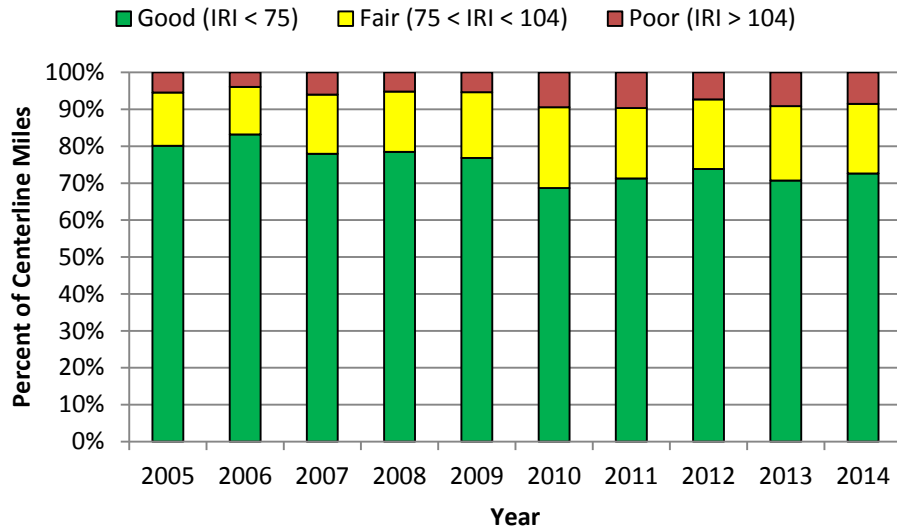


- ▶ Proposed 5-Year Program provides projects addressing nearly 20% of Bridges currently in Poor Condition

Overall Bridge Condition 2014

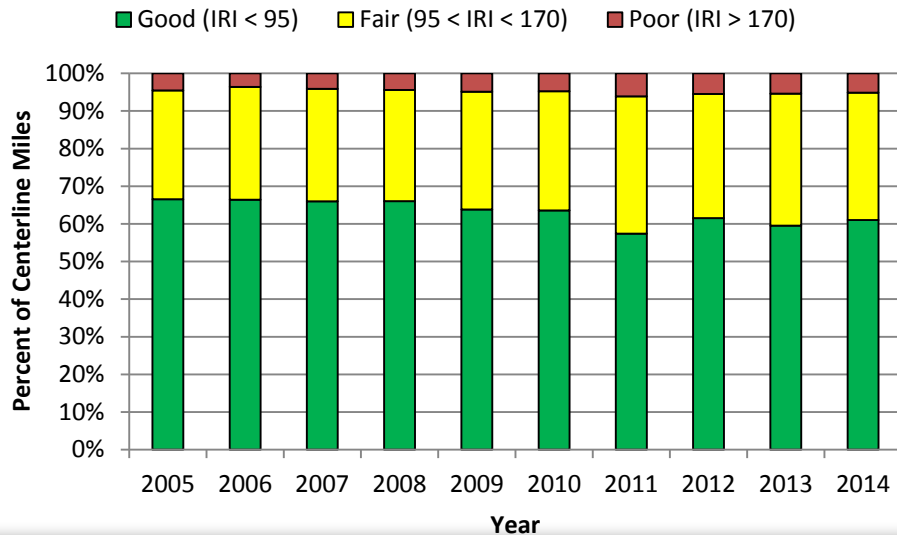


Overall Pavement Condition - Interstate



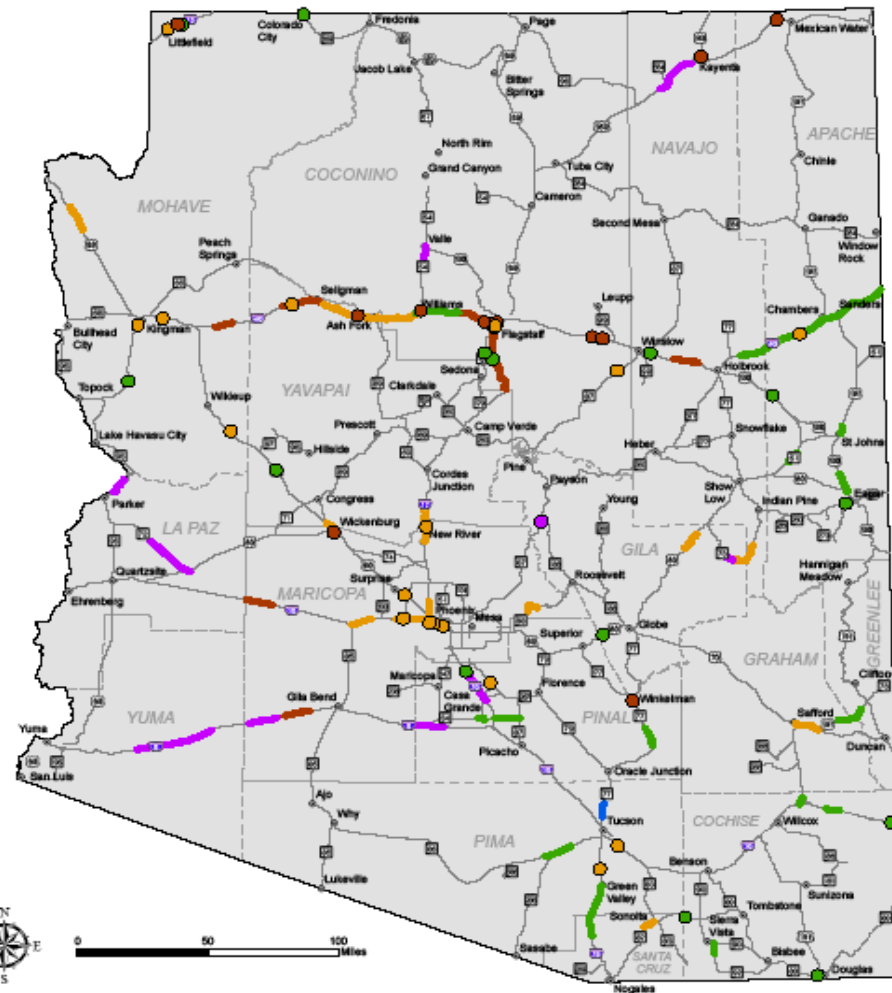
► Proposed 5-Year Program provides projects addressing over 30% of centerline miles currently in Fair of Poor condition

Overall Pavement Condition - Non-Interstate



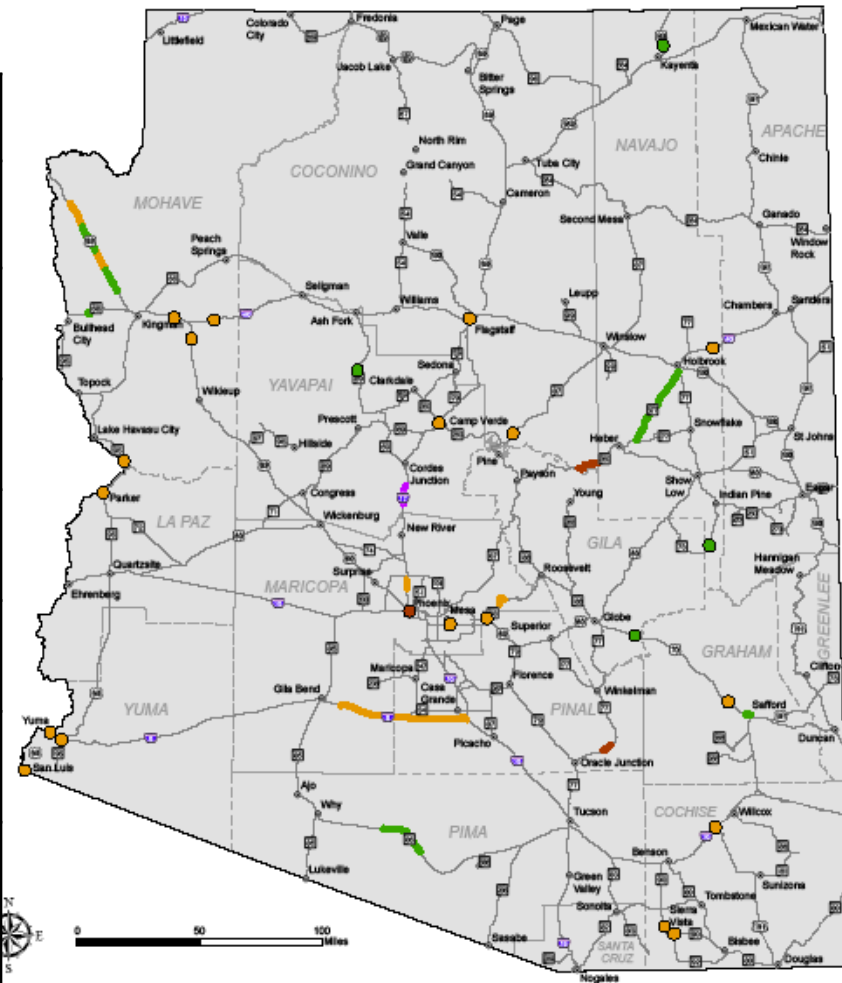
Preservation Program (FY17- FY21)

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	NW	Bridge Replacement	2017	\$8,000



Modernization Program (FY17- FY21)

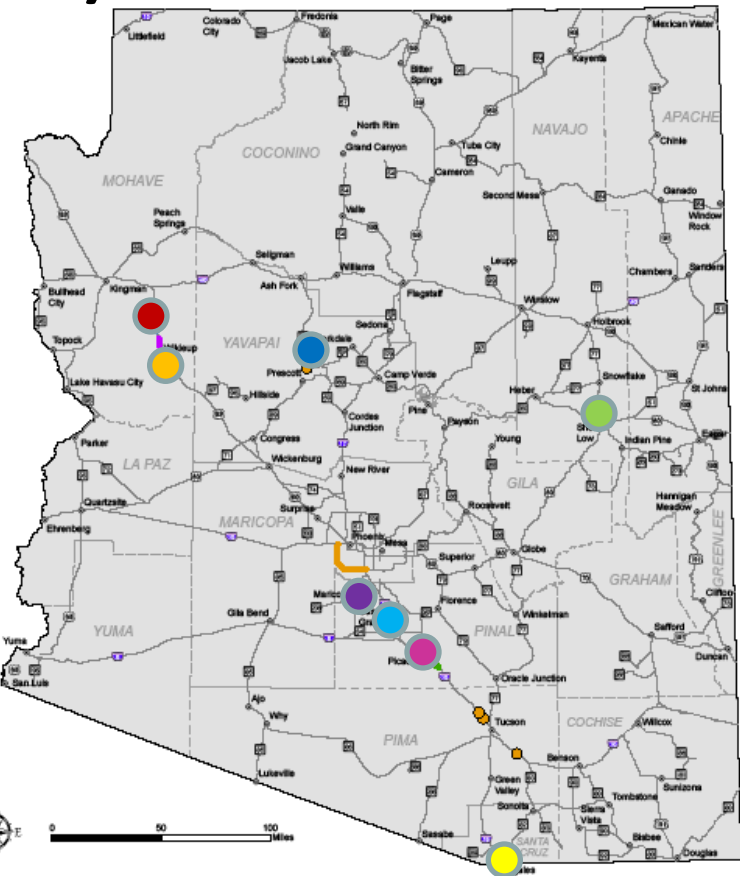
RT	LOCATION	D	TypeOfWork	CFY	COST (\$'000)
8	WB OFF RAMP & GISS PARKWAY INTERSECTION	Y	Intersection Improvements	2017	\$2,500
8	ARABY ROAD TI RECONSTRUCTION	Y	Construct Roundabouts	2017	\$8,045
10	COCHISE TI	S	Construct Improvements	2017	\$1,500
10	Deck Park Tunnel Lighting Upgrade	E	Design	2017	\$1,000
10	Deck Park Tunnel Lighting Upgrade	E	Upgrade Lighting	2019	\$12,000
17	VERDE RIVER BRIDGE STR# 1731 & 505	P	Scour Retrofit	2017	\$550
17	Cactus Rd, Thunderbird Rd, and Greenway Rd	M	Construct Pump Station Rehabilitation	2017	\$1,380
40	WILLOW SPRINGS	K	Rockfall Mitigation	2017	\$4,407
40	BLAKE RANCH ROAD TI	K	Construct TI Improvements	2017	\$1,300
40	ADAMANA TI	H	Design Drainage Improvements	2017	\$780



Expansion Program (FY17- FY21)

Tentative 2017-2021 Five-Year Transportation Facilities Construction Program Expansion Projects

RT	LOCATION	D	TypeOfWork	CFY	COST(\$000)
60	SHOW LOW TO 40TH STREET	G	Widen Roadway	2017	\$6,000
89	JCT SR 89A - DEEP WELL RANCH ROAD	P	Widen corridor	2017	\$15,000
93	CANE SPRINGS	K	Design	2019	\$5,000
189	NOGALES TO I-19	T	Design	2018	\$4,000
347	UNION PACIFIC RR CROSSING	T	Right of Way	2017	\$7,300
347	UNION PACIFIC RR CROSSING	T	Construction	2020	\$36,200
10	SR-87 to Picacho Peek	T	Widen to 4 Lanes	2018	\$85,000
189	NOGALES TO I-19	T	CONSTRUCTION	2021	\$64,000
93	CANE SPRINGS	K	CONSTRUCTION	2021	\$31,000
93	Carrow - Stephens	K	CONSTRUCTION	2020	\$31,000
10	Early - I-8	T	Widen to 4 Lanes	2019	\$40,000



Expansion Projects

- 2017 (orange circle)
- 2018 (green circle)
- 2019 (purple circle)
- 2020 (red circle)
- 2021 (blue circle)

• Cities and Towns
 — State Highway System
 □ County Boundary
 □ State Boundary

Note:
The State of Arizona makes no claims concerning the accuracy of this map nor assumes any liability resulting from the use of the information herein.

Prepared by:
Arizona Department of Transportation
Multimodal Planning Division
Transportation Analysts GIS Section
902.712.7333 January 2016



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 SR-189 Preliminary Design Phase in FY 2018
- ▶ 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

I-10; Ina Road TI

2017 / 2019

I-10; Houghton Road TI

2017 / 2018

I-10; Ruthrauff TI

2018 / 2019 / 2020

I-10; Country Club Rd TI

2018 / 2021

I-10; Kino Rd TI (Design & R/W)

2020

I-10; Park Ave TI (Design Only)

2018

I-19; Ajo Way TI, Phase II

2021 / 2022

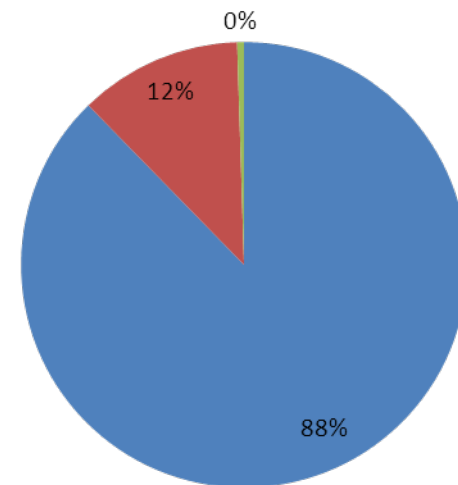
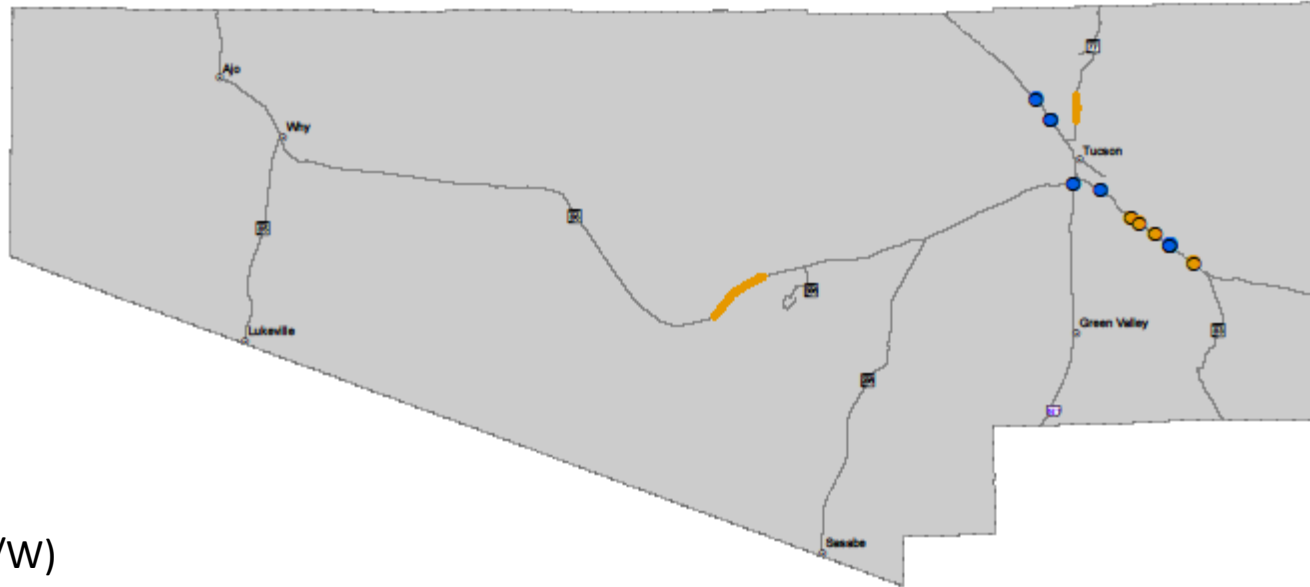
I-19; Irvington Road TI (Design & R/W)

2019 / 2021

SR-77; River Road – Suffolk Drive

2018

SR86; Fresnal – MP 123.9



PAG Tentative Program(FY17- FY21)

RT	LOCATION	D	TypeOfWork	CFY	COST(\$000)
10	INA RD TI	T	Reconstruct TI & Mainline	2017	\$29,849
10	KINO PARKWAY TI	T	Design traffic interchange	2018	\$4,009
10	COUNTRY CLUB ROAD TI	T	Environmental, Right of Way and Utility Phase	2019	\$5,000
10	RUTHRAUFF RD TI	T	Reconstruct TI & Mainline	2018	\$51,883
10	RUTHRAUFF RD TI	T	Reconstruct TI & Mainline	2018	\$34,600
10	RUTHRAUFF RD TI	T	Right-of-Way, Utility & Environmental	2017	\$1,500
10	RUTHRAUFF RD TI	T	Right-of-Way, Utility & Environmental	2017	\$16,500
19	AJO WAY TI (JCT SR 86), PHASE 2	T	Reconstruct TI	2018	\$21,500
86	FRESNAL - MP 123.9	T	Widen Shoulders & Culvert Extensions	2018	\$9,300
19	IRVINGTON RD TI	T	Design TI	2021	\$4,000
10	COUNTRY CLUB ROAD TI	T	Design Traffic Interchange	2018	\$1,700
10	HOUGHTON ROAD TI	T	Construct Signal	2017	\$400
10	HOUGHTON ROAD TI	T	Construction of Traffic Interchange	2019	\$30,000
86	FRESNAL - MP 123.9	T	Widen Shoulders & Culvert Extensions	2018	\$700
10	HOUGHTON ROAD TI	T	Environmental, Right of Way and Utilities	2017	\$6,250
10	COUNTRY CLUB ROAD TI	T	Scoping and Design of Traffic Interchange	2018	\$3,250
77	RIVER RD - SUFFOLK DR	T	Construct Sidewalk and Pavement	2019	\$12,432
10	PARK AVE TI	T	Design TI	2020	\$5,000
10	KINO PARKWAY TI	T	Environmental, Right of Way, and Utility Phase for Traffic Interchange	2020	\$6,000
10	COUNTRY CLUB ROAD TI	T	Environmental, Right of Way, and Utility Work for Traffic Interchange	2020	\$10,725
10	COUNTRY CLUB ROAD TI	T	Construct Traffic Interchange	2020	\$56,000

MAG Area Regional Transportation Plan Freeway Program



MAG Area Freeway Program (FY17- FY21)

2017-2020 Contingent On MAG Regional Council Approval

SR 202L; South Mountain - \$1.48 B

2018

SR85; Warner St. Bridge - \$5.3 M

2019-2021

SR 303L; I-10 Interchange, Phase II - \$26.7 M

SR 303L: Van Buren St – MC85 - \$11.5 M

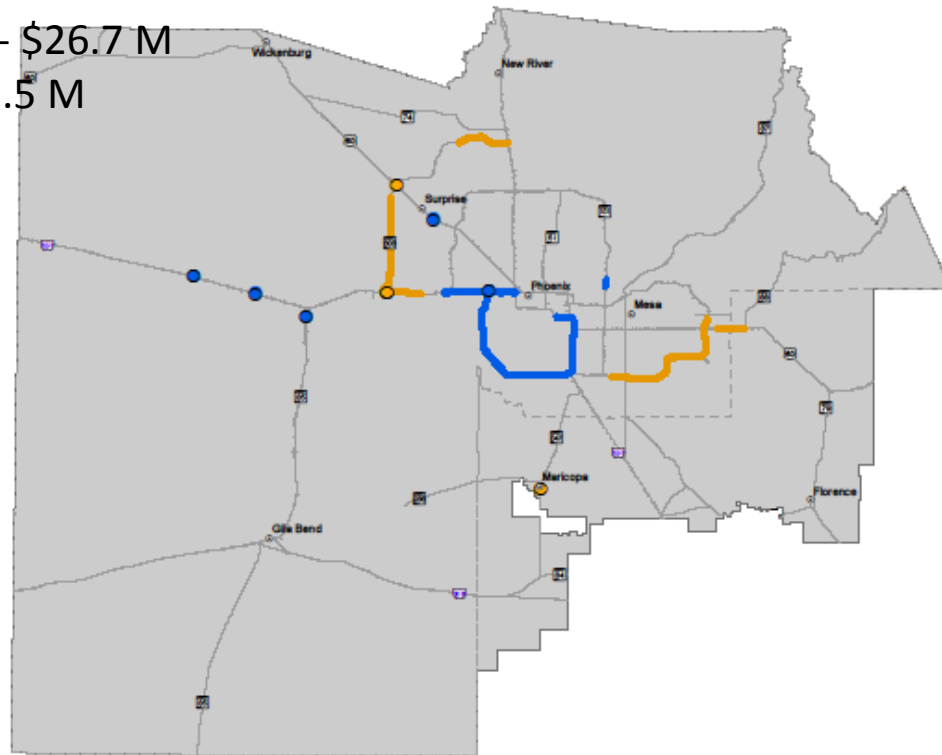
2019-2021

SR-202; Santan – Riggs Rd - \$73.7

Chandler Heights TI \$1.3 M

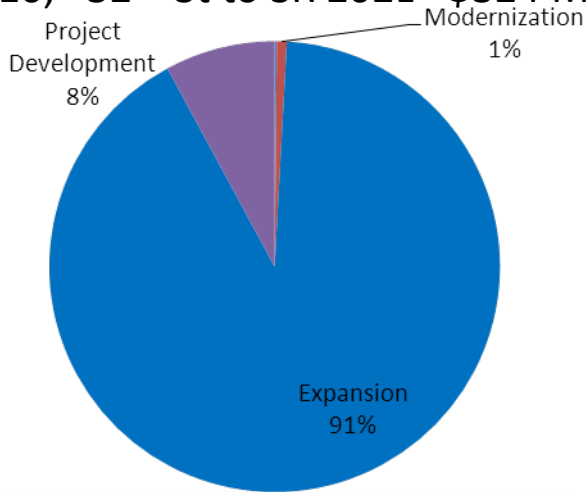
I-10; 32nd St to SR 202L - \$324 M

Tentative 2016-2020 Five-Year
Transportation Facilities Construction Program
MAG RTP Freeway Program



Projects

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



MAG Tentative Program(FY17- FY21)

RT	LOCATION	TypeOfWork	CFY	COST(\$000)
60	CRISMON RD - MERIDIAN RD	Design HOV/GPL	2018	\$1,900
60	CRISMON RD - MERIDIAN RD	Construct HOV/GPL	2020	\$26,500
60	CRISMON RD - IDAHO RD	Construct FMS	2020	\$3,500
303	I-10 / SR 303L TI, PHASE II	Design Landscape	2017	\$500
303	VAN BUREN ST - MC 85	Design	2019	\$11,500
10	32ND ST - SR 202L, SANTAN, PHASE 3	Design Widening	2019	\$9,400
10	32ND ST - SR 202L, SANTAN, PHASE 1	Construction	2019	\$130,000
10	32ND ST - SR 202L, SANTAN, PHASE 1	Construction	2019	\$13,970
10	32ND ST - SR 202L, SANTAN, PHASE 2	Construct Widening	2020	\$114,000
10	SR 202L (SANTAN) TO RIGGS RD	Design HOV and General Purpose Lane	2020	\$4,800
17	SR 101L TO I-10 / I-17	Design Widening	2020	\$6,000
101	PRINCESS DR - SHEA BLVD	Design General Purpose Lane	2020	\$3,700
101	SR 51 TO PRINCESS DR	Design General Purpose Lane	2020	\$5,100
202	I-10 MARICOPA, MP 54 - I-10 PAPAGO, MP 76	Conversion for Advanced Preliminary Engineering	2017	\$2,700
202	I-10 MARICOPA, MP 54 - I-10 PAPAGO, MP 76	Conversion for Advanced Preliminary Engineering	2017	\$2,300
202	I-10 MARICOPA, MP 54 - I-10 PAPAGO, MP 76	Conversion for Advanced Preliminary Engineering	2017	\$2,700
202	I-10 MARICOPA, MP 54 - I-10 PAPAGO, MP 76	Conversion for Advanced Design, Construction, and Maintenance	2017	\$249,463
202	I-10 MARICOPA, MP 54 - I-10 PAPAGO, MP 76	Conversion for Advanced Design, Construction, and Maintenance	2017	\$144,657
202	I-10 MARICOPA, MP 54 - I-10 PAPAGO, MP 76	Conversion for Advanced Right of Way	2017	\$46,876
202	I-10 MARICOPA, MP 54 - I-10 PAPAGO, MP 76	Conversion for Advanced Preliminary Engineering	2018	\$2,300
202	I-10 MARICOPA, MP 54 - I-10 PAPAGO, MP 76	Conversion for Advanced Design, Construction, and Maintenance	2018	\$242,031
202	I-10 MARICOPA, MP 54 - I-10 PAPAGO, MP 76	Conversion for Advanced Design, Construction, and Maintenance	2018	\$143,635
202	I-10 MARICOPA, MP 54 - I-10 PAPAGO, MP 76	Conversion for Advanced Design, Construction, and Maintenance	2019	\$126,325

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 2134.00.
- ▶
- ▶ 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 – I-8

US-93 Carrow - Stephens

SR-189 Mariposa Road

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.