

FY 2020 – 2024 Five Year Program Study Session

January 29, 2019

Greg Byres, P.E.
Director for Multimodal Planning Division

2020-2024 Tentative Program Discussion

- ▶ Background
- ▶ Overview of Asset Condition
- ▶ P2P Process
- ▶ Tentative 5-Year Highway Delivery Program
- ▶ MAG; Tentative Program
- ▶ PAG; 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 – STB Five Year Program

Overview of Asset Condition



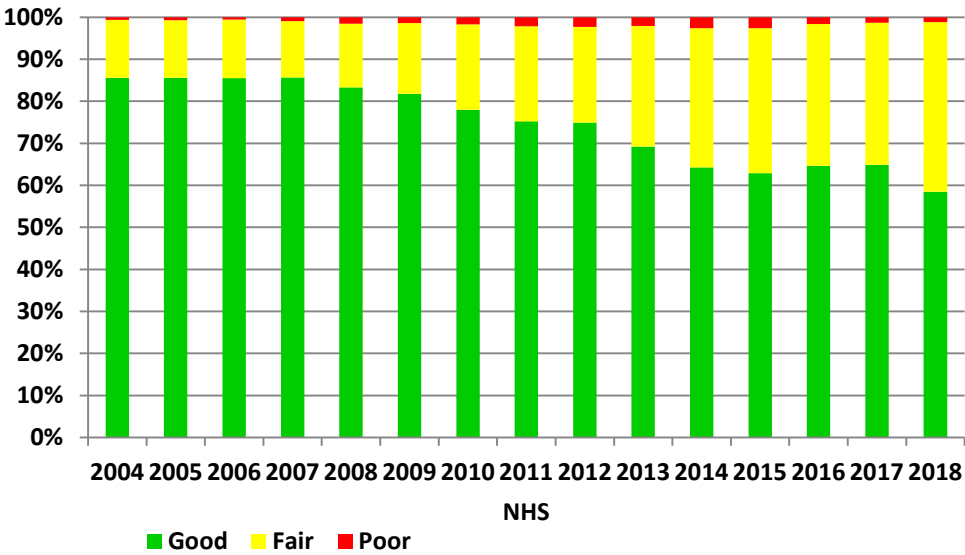
\$22.4 Billion = Value of State Highway System Infrastructure

\$22.4 Billion

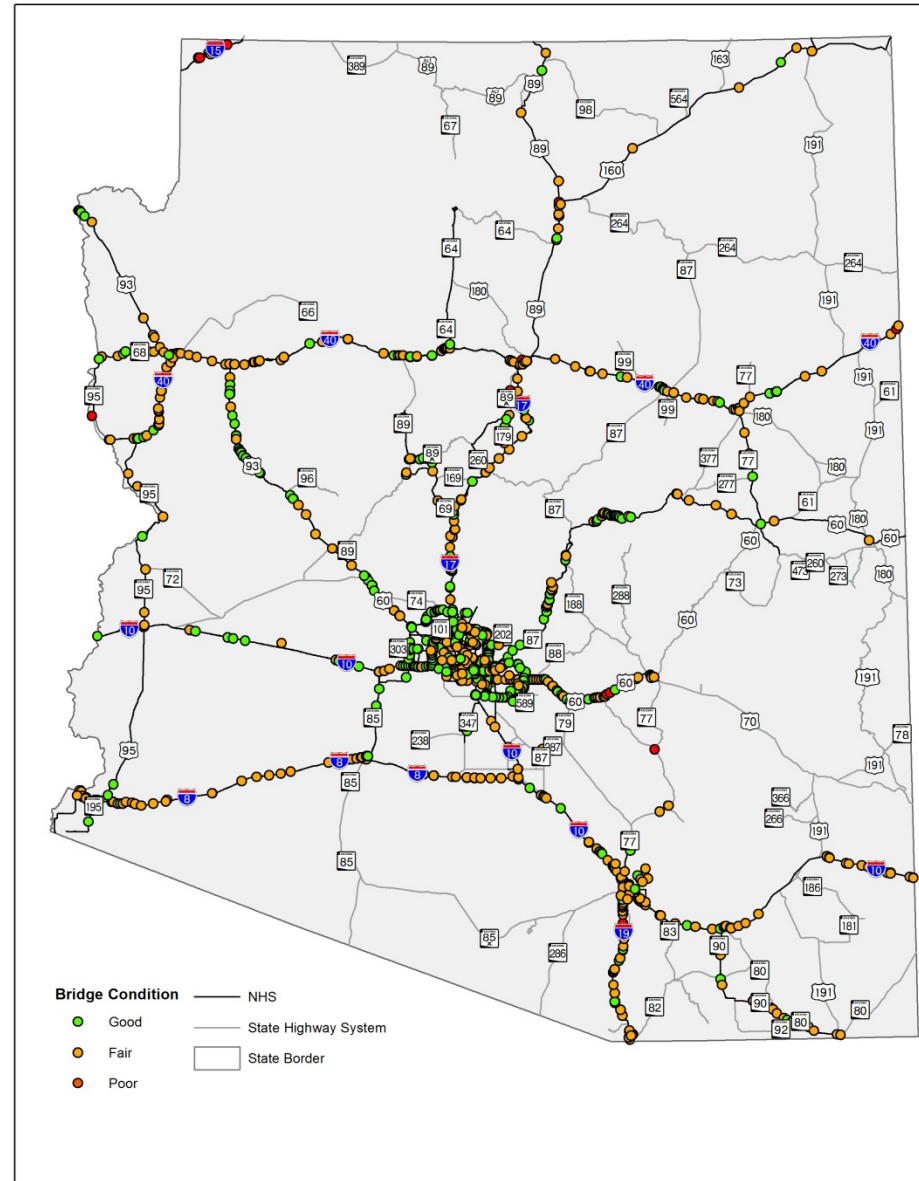
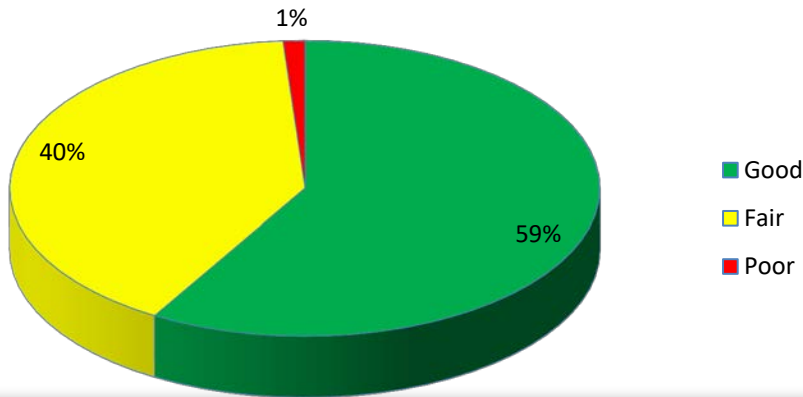


Without a commitment to preservation, the system would cost \$250 billion to replace.

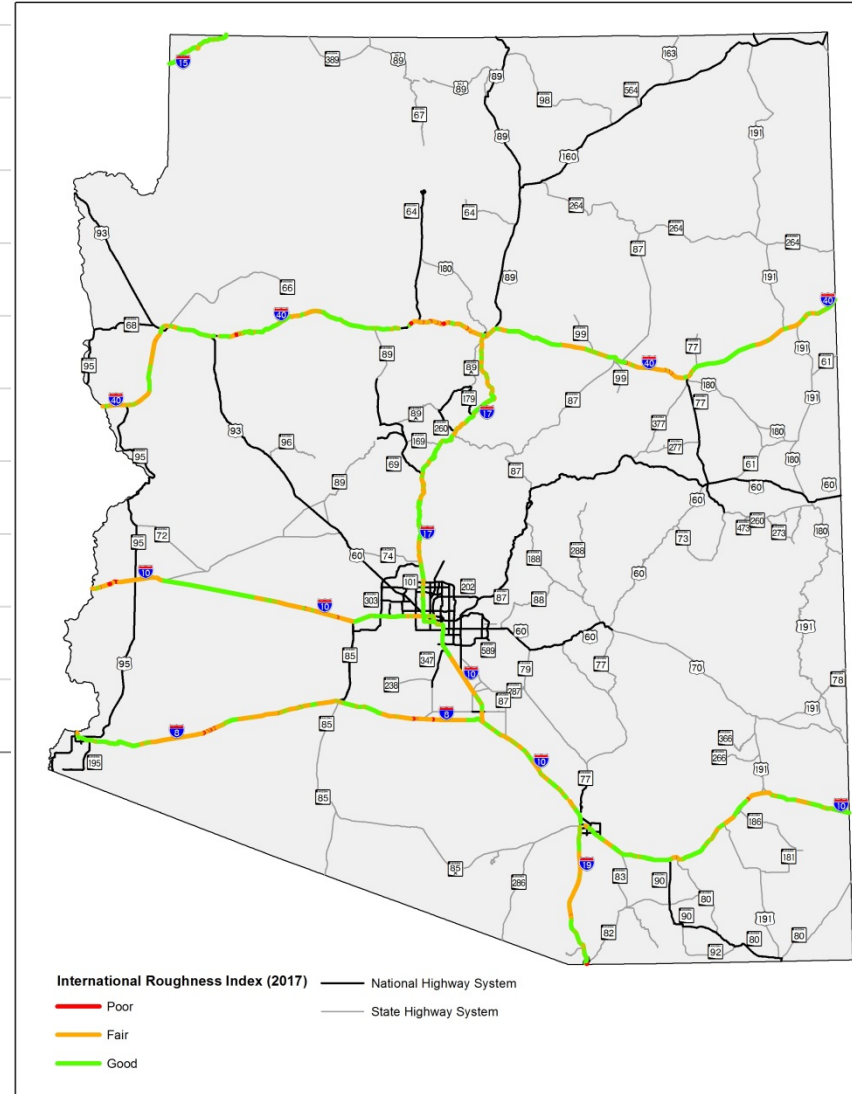
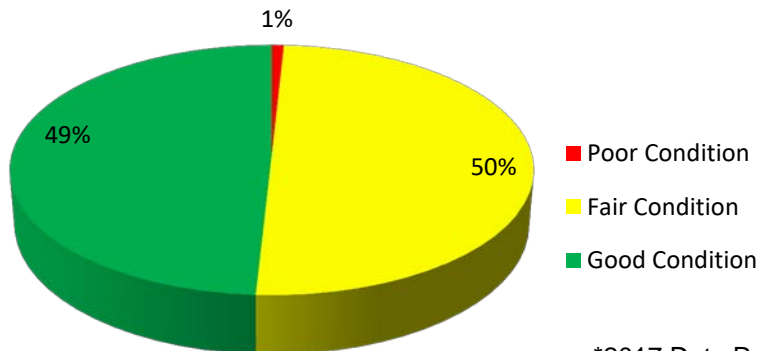
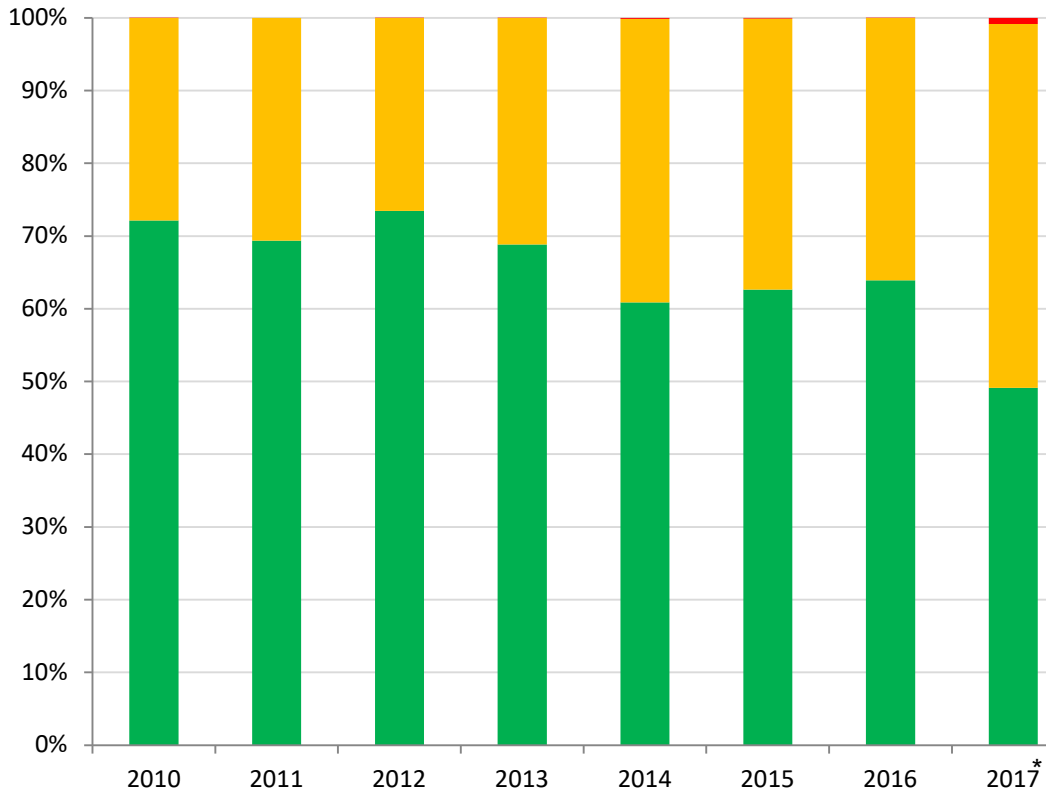
Bridge Condition



Overall Bridge Condition 2018

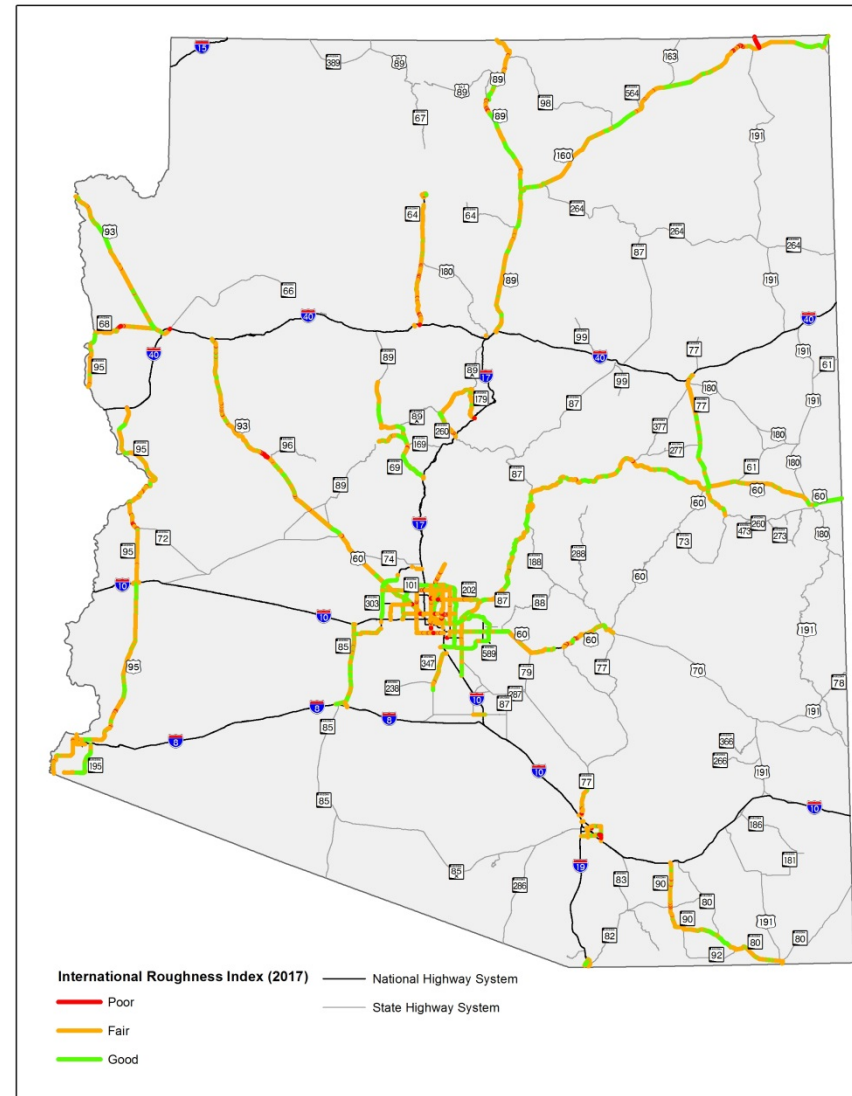
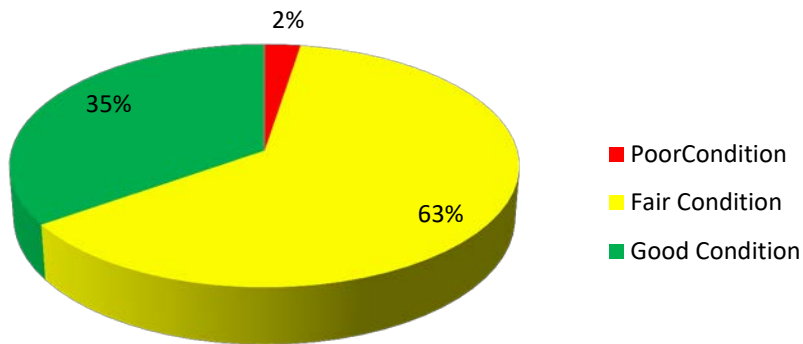
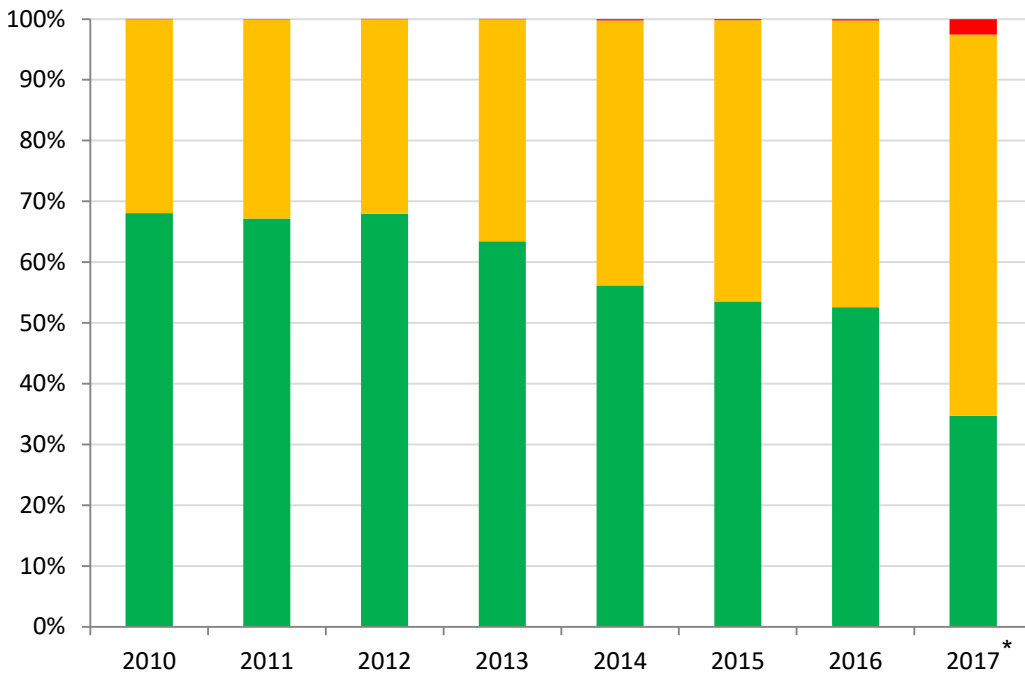


Pavement Condition: Interstate Highway System



*2017 Data Reflects a change in the method of collecting the pavement data

Pavement Condition: Non-Interstate NHS



*2017 Data Reflects a change in the method of collecting the pavement data

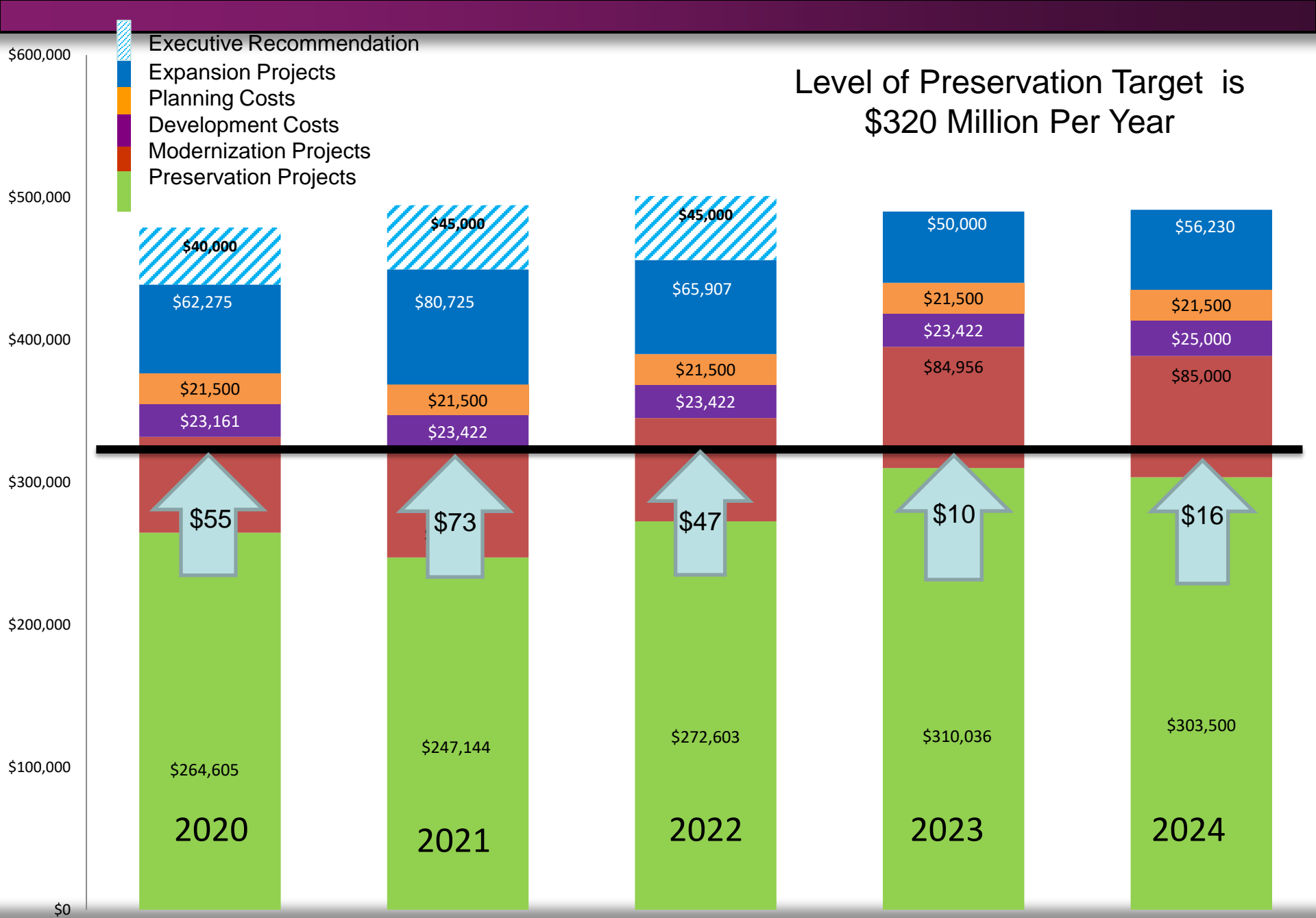
WMYA 2040

Categories of Highway Need/Investment



- ▶ ***Preservation:*** Investment to keep pavement smooth and maintain bridges
- ▶ ***Modernization:*** Non-capacity investment that improves safety & operations (e.g. adding shoulders or smart technology)
- ▶ ***Expansion:*** Investment that adds capacity to the highway system (e.g. new roads, added lanes or new interchanges)

PRESERVATION Activities that preserve infrastructure by sustaining asset condition or extending asset service life	MODERNIZATION Improvements that upgrade efficiency, functionality, and safety without adding capacity	EXPANSION Improvements that add capacity through the addition of new facilities and/or services
Eligible Work Types	Eligible Work Types	Eligible Work Types
Preservation Treatments <ul style="list-style-type: none"> • Surface Seal • Thin Overlay • Deck Joint • Deck Overlay Rehabilitation <ul style="list-style-type: none"> • Minor Mill & Fill • Major Overlays or Resurfacing • Substructure retrofitting Reconstruction <ul style="list-style-type: none"> • Major Rehabilitation at the end of pavement service life • Reconstructing bridges that are structurally deficient • Bridge Rehab/Replacement (NOT due to functional obsolescence) 	Widening existing lanes / shoulders Intersection and interchange reconfiguration Enhancements to address functional obsolescence Traffic control and management Safety modifications / enhancements ITS modifications / enhancements Bicycle lane improvements Rockfall Mitigation Stormwater Mitigation	New routes New lanes New rail New intersection / interchange Intersection / Interchange capacity enhancement
Policy Goal: Manage assets to reduce life cycle costs, set and manage preservation targets, and ensure safe, reliable operation of the transportation system	Policy Goal: Improve safety and reliability, reduce congestion, improve economic vitality, increase multimodal usage	Policy Goal: Provide capacity to improve mobility, reduce congestion, and support economic productivity



PLANNING TO PROGRAMING (P2P)

- Funding – Due to limited funding, projects must be prioritized to insure the limited funds are utilized on projects which provide the highest value and satisfy the greatest need.
- Performance Measures – Due to requirements mandated by the Federal Highway Administration, all programmed projects must provide an improvement in the performance measures which include; Safety, Infrastructure Condition, Congestion Reduction...
- Compliance with objectives and goals provided in the Long Range Transportation Plan.

P2P Scoring Breakdown

Technical Score

Prioritized By:

- Pavement, Bridge, Safety, ITS, Rest areas, POE, Geohazard, Freight, Bike & Ped, Corridor Profile Studies

Technical Score

35% of Overall P2P Score

P2P Policy Score Applied

- Economic Criteria
- Mobility Criteria

Policy Score

10% of Overall P2P Score

P2P Safety Score Applied

Prioritized By:

- Safety Analyst Level of Safety Service Score (LOSS)

Safety Analytics Score

25% of Overall P2P Score

District Score

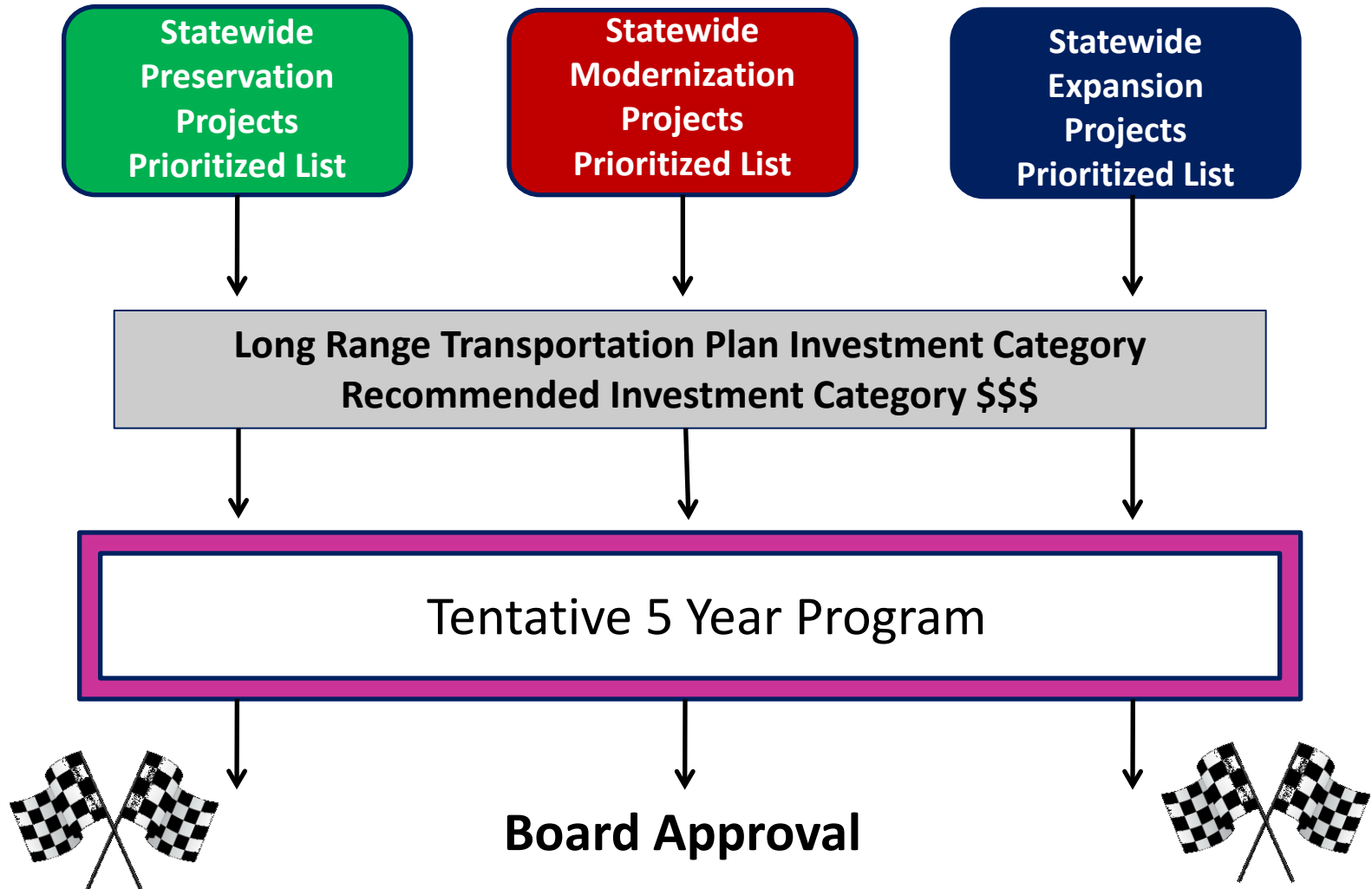
Prioritized By:

- Regional Needs
- Engineering Judgement

District Score

30% of Overall P2P Score

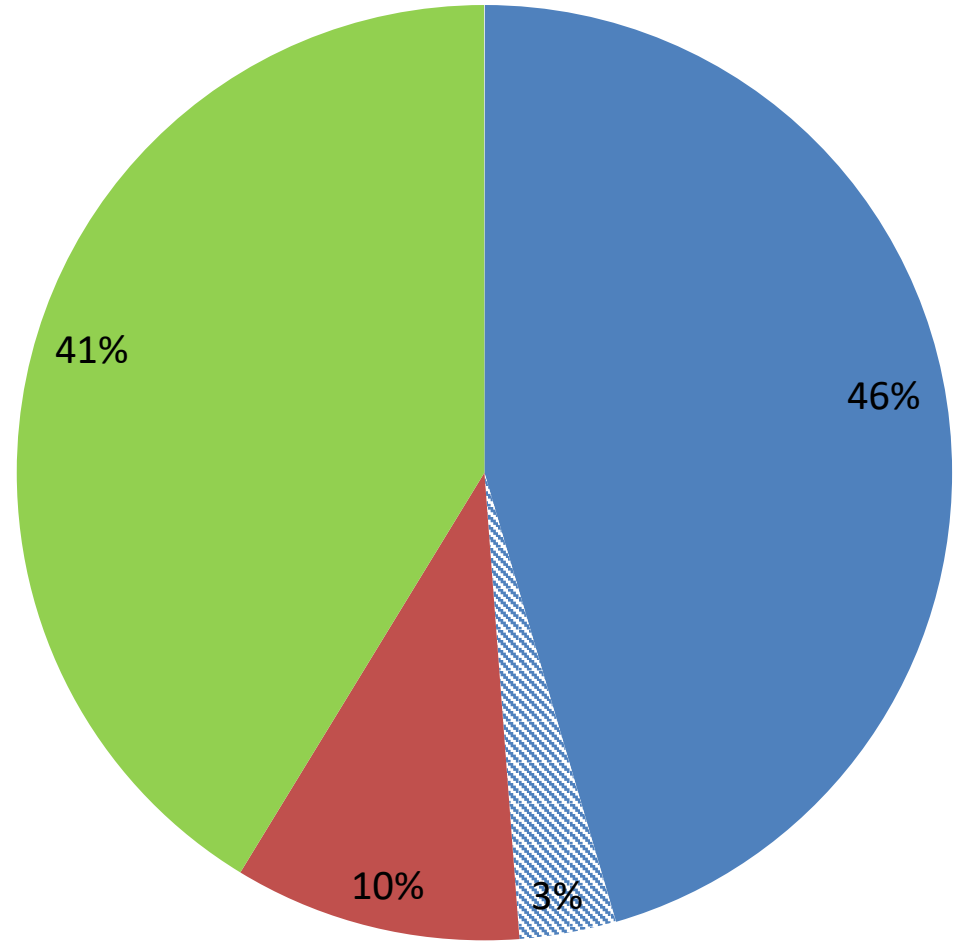
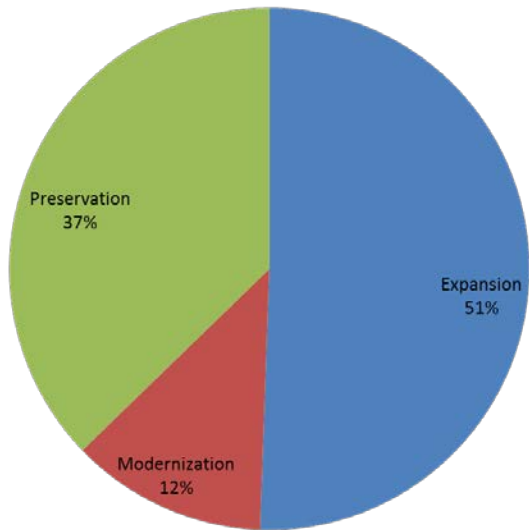
Develop Five Year Program



Includes MAG & PAG Funding

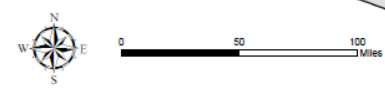
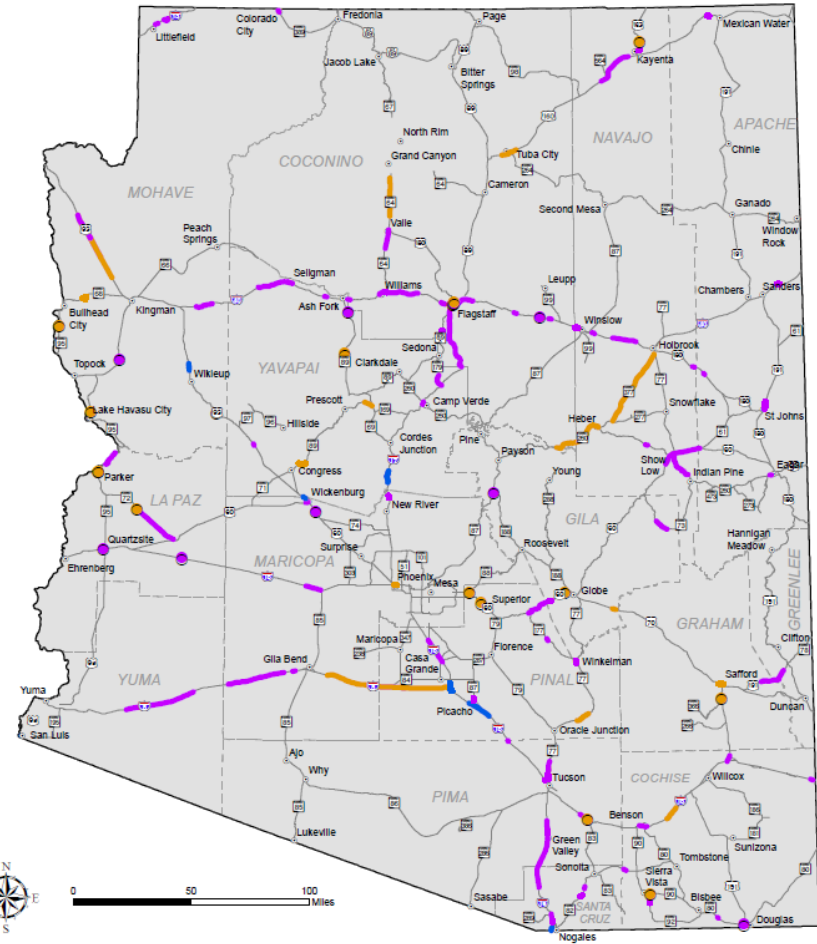
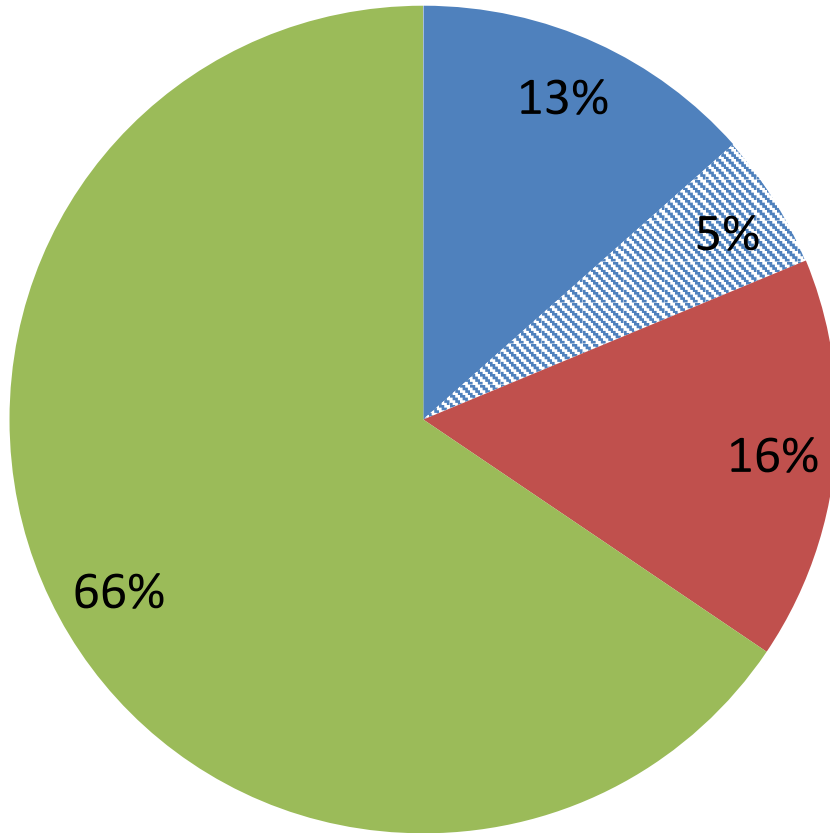
2020-2024 Tentative Facilities Construction Program

2019-2023 Facilities Construction Program



■ Expansion ■ Executive Recommendation ■ Modernization ■ Preservation

Greater Arizona Tentative 5-Year Highway Delivery Program (FY20-FY24)



- 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
602.712.7333 January 2017



- Expansion
- ▨ Executive Recommendation
- Modernization
- Preservation

FY20 Expansion Projects – \$77.3M

**\$10.2M 4th Street Bridge over I-40
Flagstaff Partnership Project 50/50
Share w/City of Flagstaff**



**\$10M; I-40/US93 West Kingman TI
(Phase I) RIGHT OF WAY**



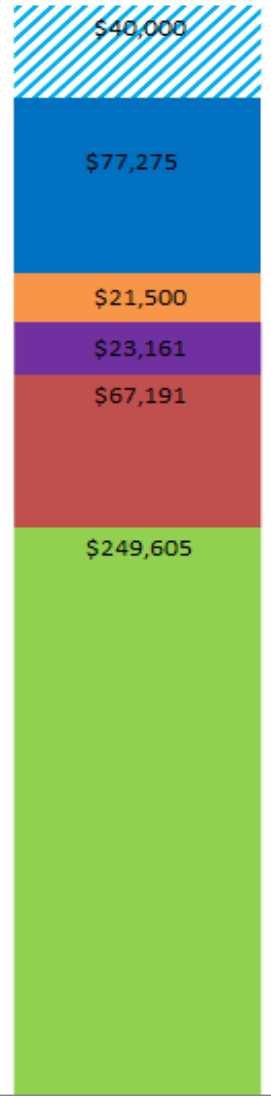
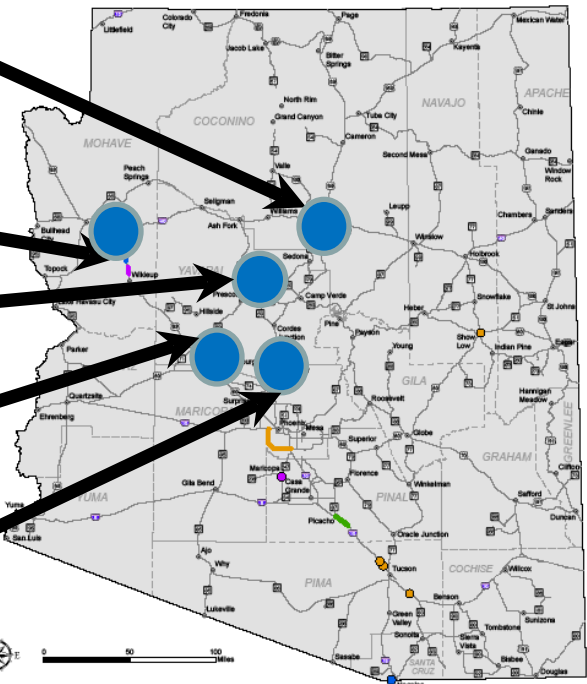
**FY 20 \$1.3; SR-69 Prescott
Lakes Parkway R/W**



\$41M; US93 The Gap



**\$15M; Design I-17 Anthem to Sunset Point
\$40M; Construct I-17 Anthem to Sunset Point
(Executive Recommendation)
\$50M; I-17 Widening North of Anthem (MAG FY20)**



- Expansion Projects
- Planning Costs
- Development Costs
- Modernization Projects
- Preservation Projects
- Executive Recommendation

2020

FY21 Expansion Projects – \$80.7M



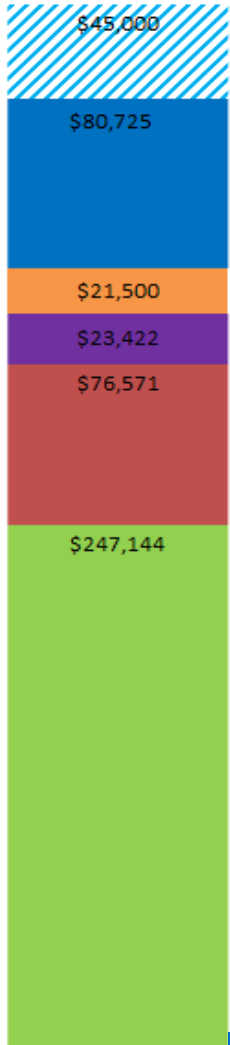
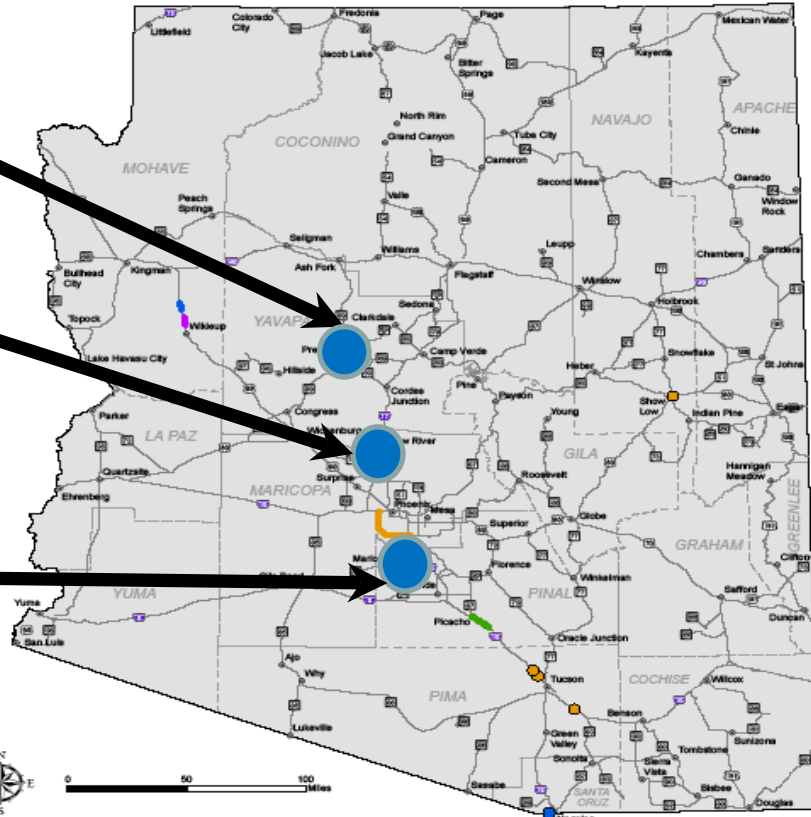
\$8.7M; SR-69 Prescott Lakes Parkway



**\$62M; I-17 Anthem to Sunset Point
(\$45M Executive Recommendation)**



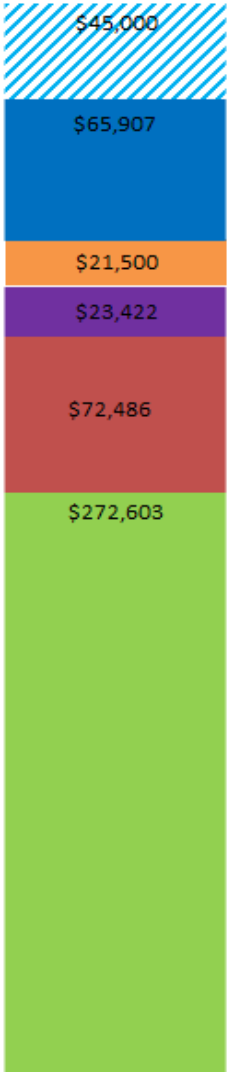
**\$10M; I-10 SR-202 to SR-387
Finish DCR, Scoping,
Environmental Assessment**



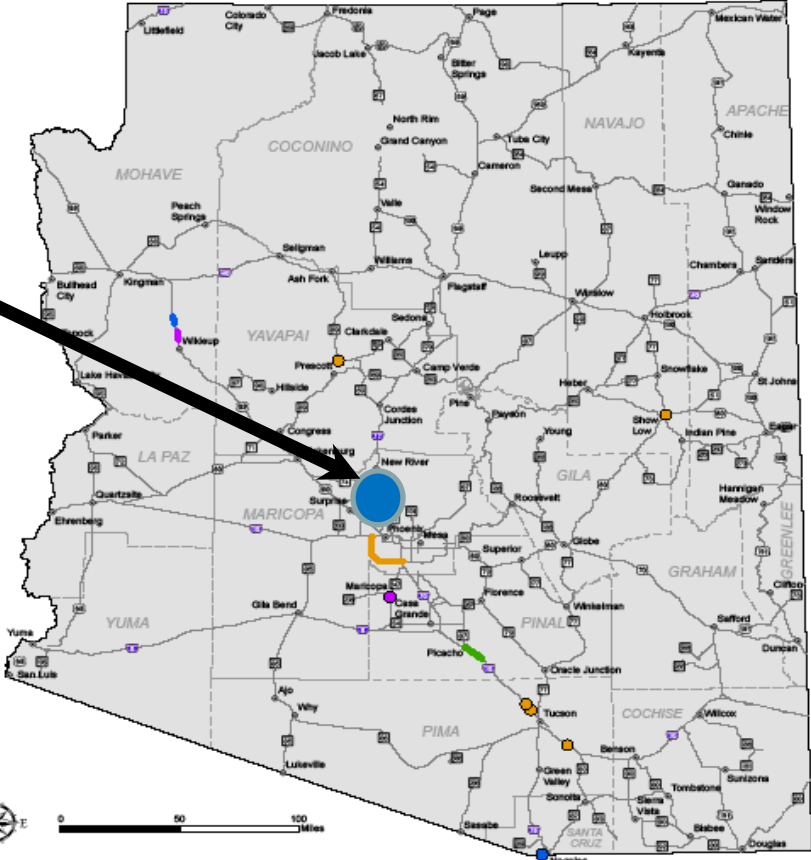
2021.

- Expansion Projects
- Planning Costs
- Development Costs
- Modernization Projects
- Preservation Projects
- Executive Recommendation

FY22 Expansion Project



\$65M; I-17 Anthem to Sunset Point
\$45M; (Executive Recommendation)

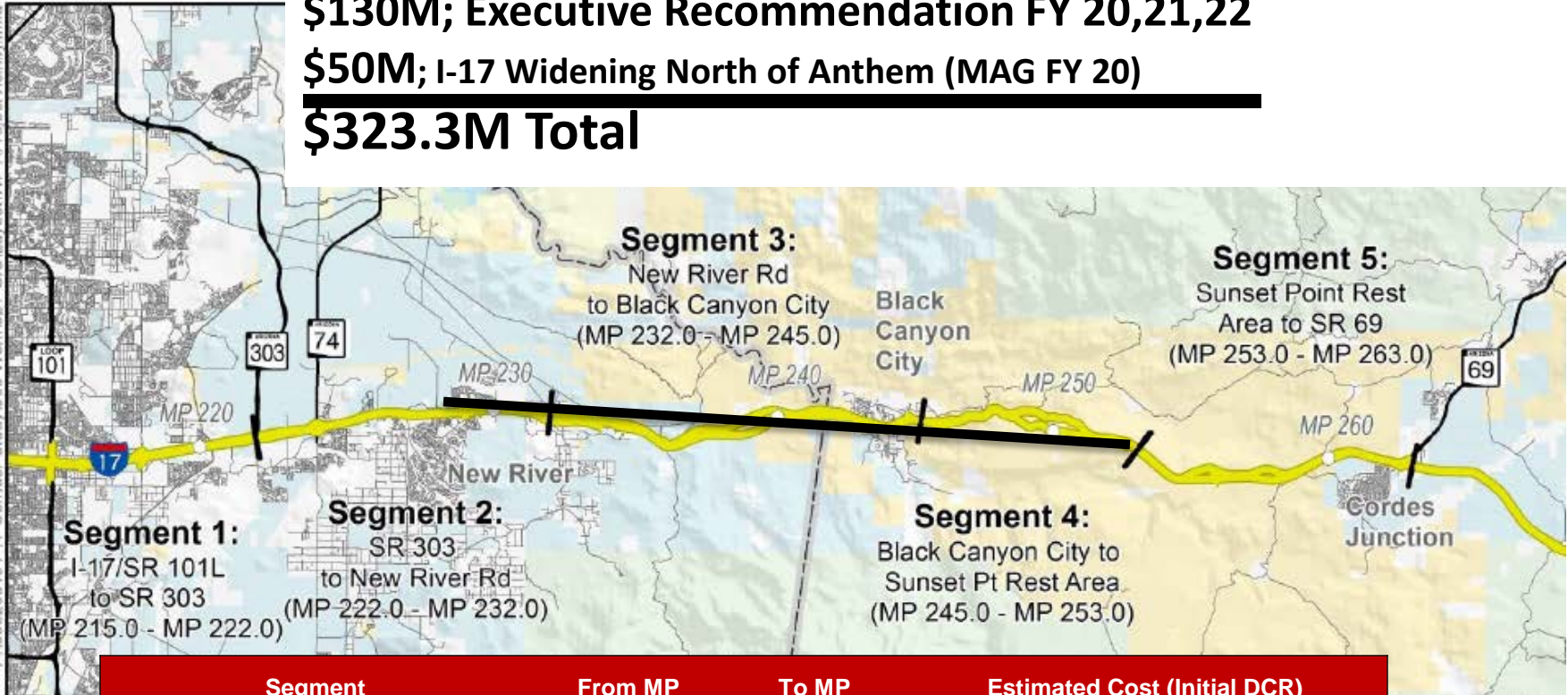


- Expansion Projects
- Planning Costs
- Development Costs
- Modernization Projects
- Preservation Projects
- Executive Recommendation



\$62.4M; I-17 Anthem to Sunset Point (5YR Program FY21)
\$65.9M; I-17 Anthem to Sunset Point (5YR Program FY22)
\$15M; I-17 Anthem to Sunset Point (5Yr Program FY 20) Design
\$130M; Executive Recommendation FY 20,21,22
\$50M; I-17 Widening North of Anthem (MAG FY 20)

\$323.3M Total



Segment	From MP	To MP	Estimated Cost (Initial DCR)
Design	229	252	\$ 34,200,000
Anthem to Black Canyon City	229	245	\$ 179,000,000
Black Canyon City to Sunset Pt	245	252	\$ 106,300,000
TOTAL			\$ 319,500,000

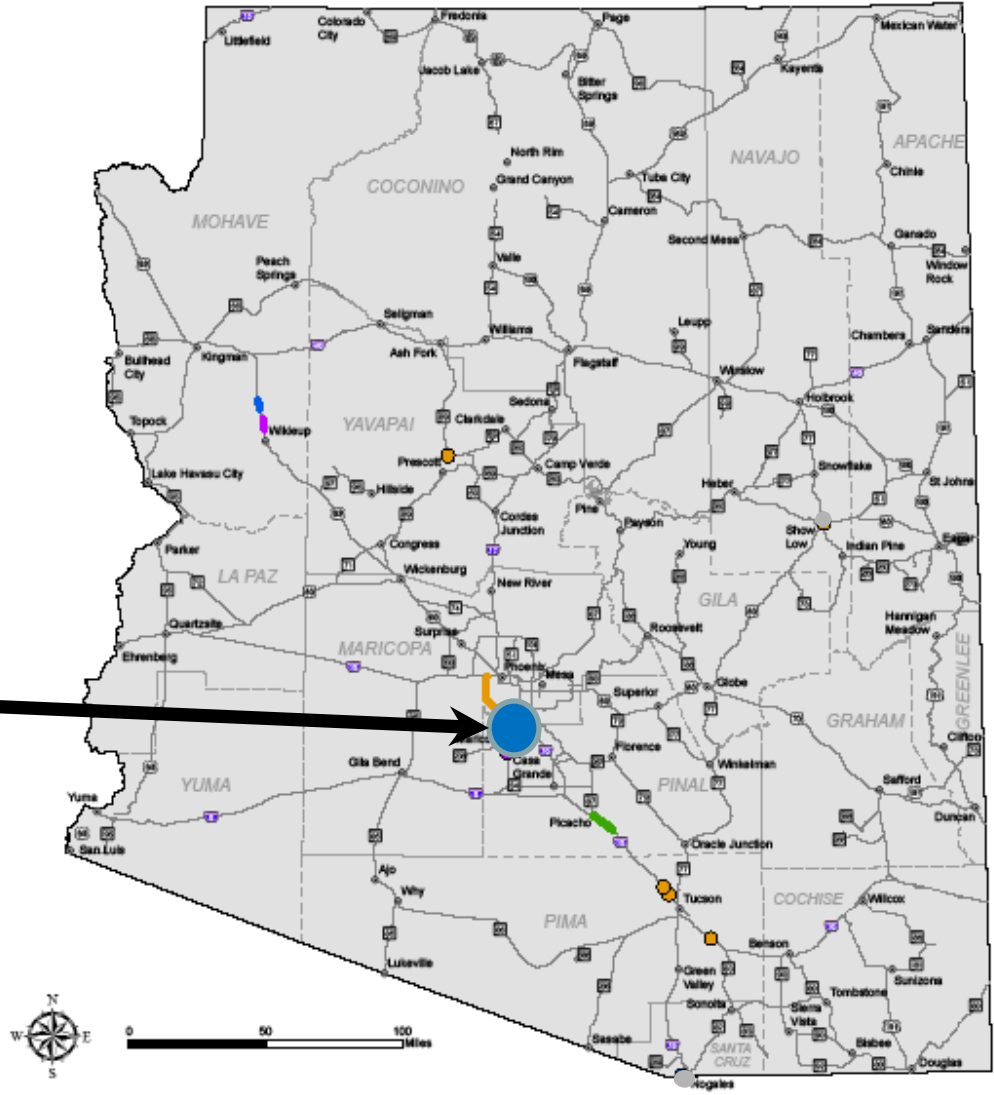
FY23 Expansion Project – \$50M



\$50M; I-10 First Segment

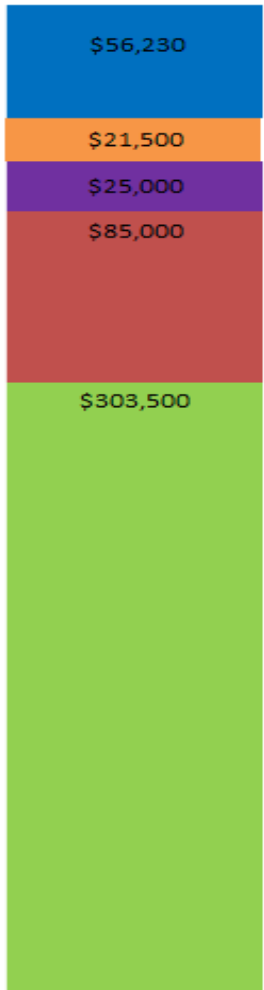


- Expansion Projects
- Planning Costs
- Development Costs
- Modernization Projects
- Preservation Projects

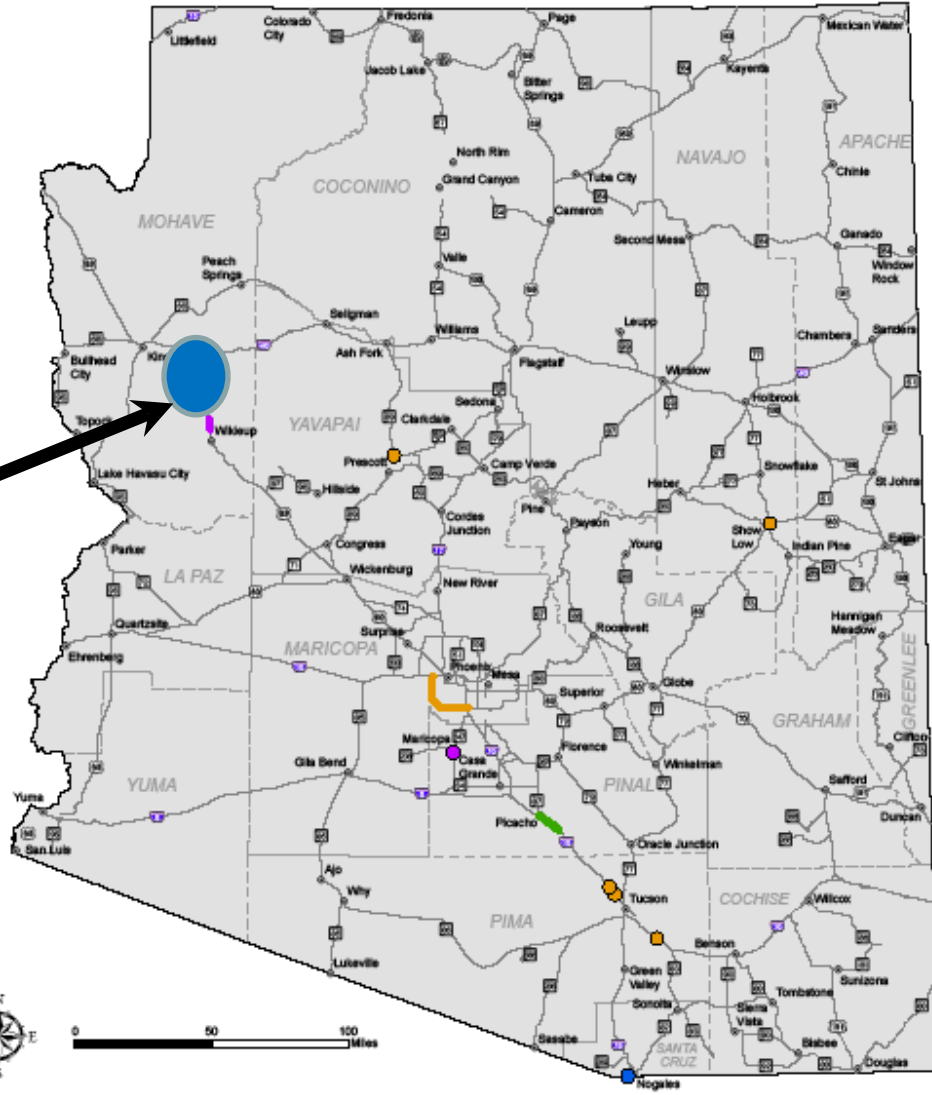


2023

FY24 Expansion Project – \$56.2M



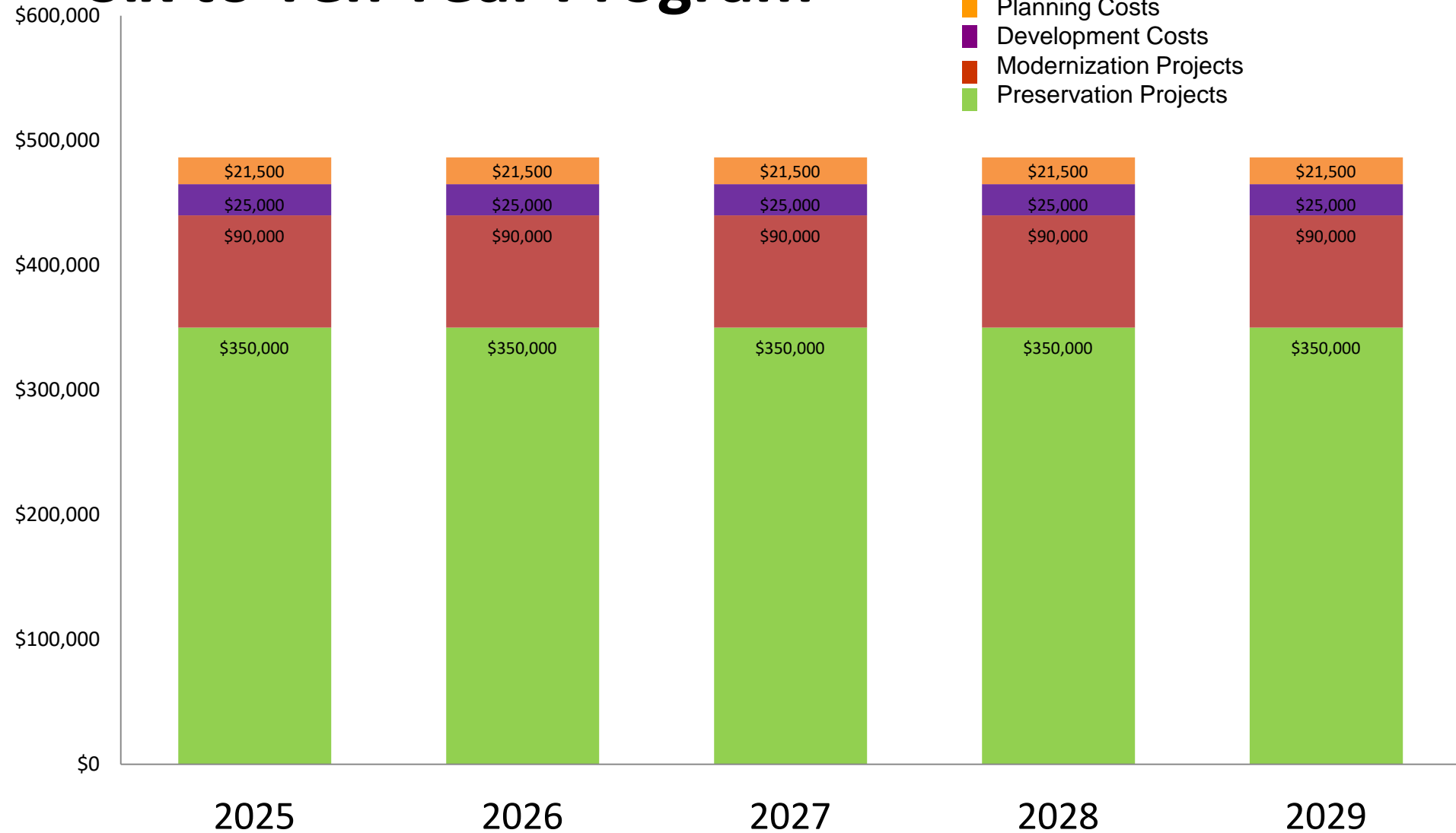
**\$56.2M; I-40/US93
West Kingman TI
(Phase I)**



- Expansion Projects
- Planning Costs
- Development Costs
- Modernization Projects
- Preservation Projects

Six to Ten Year Program

- Expansion Projects
- Planning Costs
- Development Costs
- Modernization Projects
- Preservation Projects



P2P Top 10



Project Name		Total Project Cost	P2P Rank
I-10; SR-202L – SR-51 Interchange (Mini Stack)	MAG	\$300,000,000	1
SR-347 Riggs Road Intersection	MAG	\$600,000	2
I-10; SR-202L to SR-387	MAG	\$189,000,000	3
US-60; SR-303L – to SR-202L	MAG	\$425,000,000	4
I-40; Loan Tree TI	GA	\$121,900,000	5
I-40/I-17 System Interchange Improvements	GA	\$82,000,000	6
I-10; SR-101L to SR-202L (San Tan Freeway)	MAG	\$775,000,000	7
I-19; Between I-10 and Valencia Road (South of Tucson)	PAG	\$625,000,000	8
I-40; I-17 to MP 202 Widen to 3 Lanes	GA	\$106,000,000	9
I-10; East of I-19 MP 260-MP274	GA	\$1,860,000,000	10
Total cost all Projects		\$4,484,500,000	

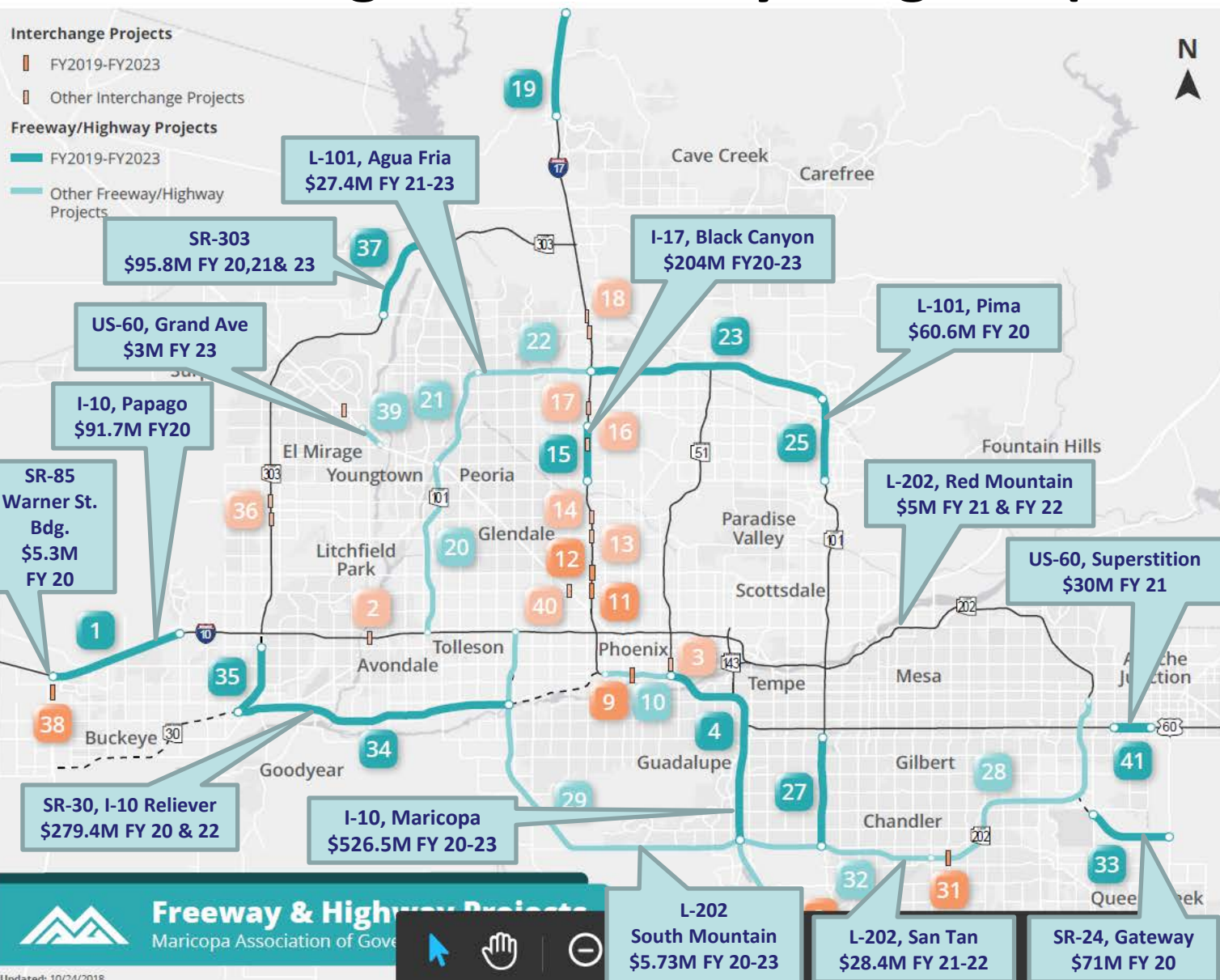
MAG Regional Freeway Program (FY20- FY24)

Interchange Projects

-  FY2019-FY2023
-  Other Interchange Projects

Freeway/Highway Projects

-  FY2019-FY2023
-  Other Freeway/Highway Projects



ID Project Location

- 1 I-10, SR-85 to Verrado Way
- 2 I-10/Fairway Dr
- 3 I-10/Sky Harbor West Airport Access
- 4 I-10, I-17 Split to SR-202L
- 7 I-10, SR-202L to Riggs Rd
- 8 I-10/Chandler Heights Rd
- 9 I-17/Central Ave Bridge
- 10 I-17, I-10 Split to 19th Ave
- 11 I-17/Indian School Road
- 12 I-17/Camelback Road
- 13 I-17/Glendale Avenue
- 14 I-17/Northern Avenue
- 15 I-17, Peoria Avenue to Greenway Road
- 16 I-17/Thunderbird Avenue
- 17 I-17/Bell Road
- 18 I-17-/Happy Valley Rd and I-17/Pinnacle Peak
- 19 I-17, Anthem Way to Yavapai County Line
- 20 SR-101L, I-10 to US-60
- 21 SR-101L, US-60 to 75th Avenue
- 22 SR-101L, 75th Avenue to I-17
- 23 SR-101L, I-17 to Pima Road
- 25 SR-101L, Pima Road to Shea Boulevard
- 26 SR-101L Pima Road Extension (JPA) (NOT ON MAP)
- 27 SR-101L, Baseline Road to SR-202L
- 28 SR-202L, Broadway Road to Gilbert Road
- 29 SR-202L (South Mountain): I-10 (Maricopa) - I-10 (Papago) Maintenance
- 31 SR-202L/Lindsay Road
- 32 SR-202, Gilbert Road to I-10
- 33 SR-24, Ellsworth Road to Ironwood Road
- 34 SR-30, SR-303L to SR-202L
- 35 SR-303L, MC-85 to Van Buren Street
- 36 SR-303L, Northern Avenue to Olive Avenue
- 37 SR-303L, Happy Valley Parkway to Lake Pleasant Parkway
- 38 SR-85/Warner Street Bridge
- 39 US-60, Greenway Road - Thompson Ranch Road
- 40 US-60/35th Avenue/Indian School Road
- US-60/Bell Road
- 41 US-60, Crismon Road to Meridian Road

 Freeway & Highway Projects
Maricopa Association of Governments

Updated: 10/24/2018

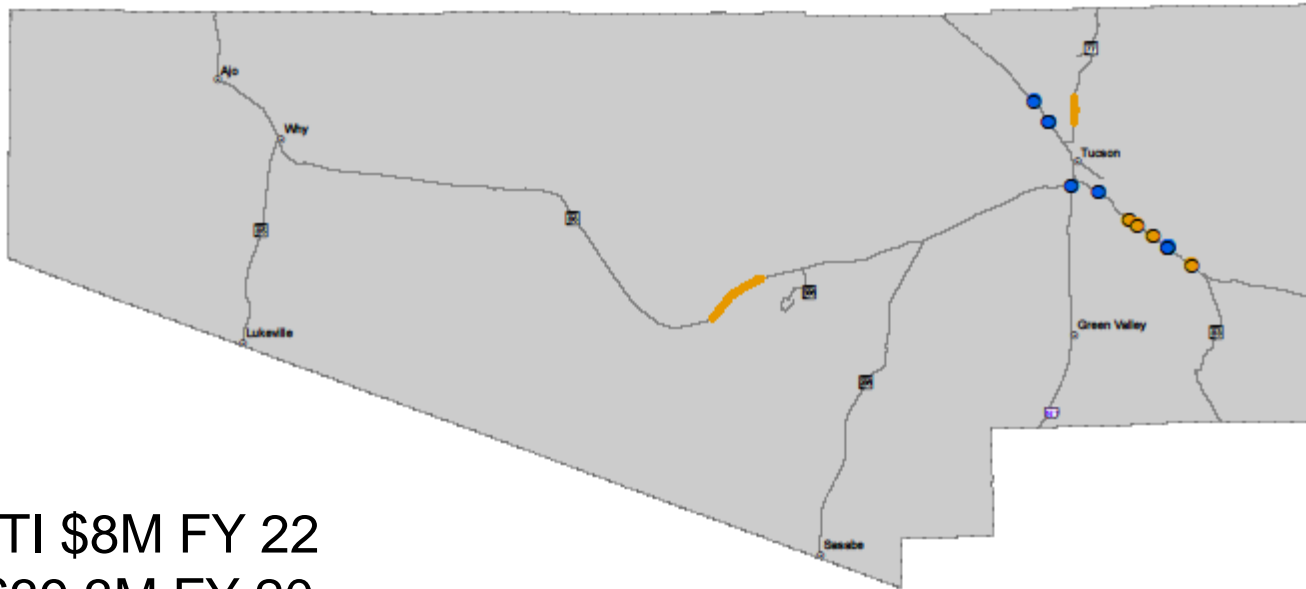


L-202
South Mountain
\$5.73M FY 20-23

L-202, San Tan
\$28.4M FY 21-22

SR-24, Gateway
\$71M FY 20

PAG Tentative Program (FY20- FY24)



- I-10 Country Club Rd TI \$8M FY 22
- I-10 Houghton Rd TI \$39.3M FY 20
- I-10 Ina to Ruthrauff \$109.2M FY 20-22
- I-10 Kino Pkwy TI \$8M FY 21
- I-10 Ruthrauff TI \$101.8M FY21
- I-19 Irvington TI \$10M FY 21&22
- SR-77 I-10 – River \$1M FY 21
- SR-77 River – Calle Concordia \$12.4M FY20
- SR-210 / I-10 TI \$20M FY 22



2020-2024

Five-Year Transportation Facilities Construction Program

TENTATIVE

Airport Capital Improvement Program



Mesa Falcon Field Airport of the Year

Airport Capital Improvement Program (ACIP)

Five-Year Development Program – Fiscal Year 2019

Program	Amount
Federal/State/Local match (FSL)	\$5,000,000
State/Local (SL)	\$0
Airport Pavement Preservation (APMS)	\$5,000,000
Airport Development Loans	\$0
Grand Canyon Airport	\$785,000
State Planning Services	\$800,000
Total Airport Capital Improvement Program	\$11,588,000

Airport Capital Improvement Program (ACIP)

Five-Year Development Program - Fiscal Year 2020

• Federal Match Grants (FSL)	\$5,000,000
• State-Local Grants (SL)	\$9,000,000
• Airport Pavement Management Preservation (APMS)	\$5,500,000
• Grand Canyon National Park Airport(GCN)	\$4,500,000
• ADOT Airport Development Group Projects(AERO)	\$ 900,000
Total Program	\$24,900,000

Next Steps

- ▶ Public Hearings
 - March 15 Tucson
 - April 12 Flagstaff
 - May 17 Phoenix
- ▶ Study Session June 4 in Phoenix
- ▶ Present Final Program to STB; June 21st Pinetop-Lakeside
- ▶ Program must be delivered to Governor by June 30th
- ▶ FY 20 begins July 1st, 2019