

**FY 2017 – 2021
Proposed Final Five-Year
Transportation Facilities Construction
Program
Study Session
May 31, 2016**

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Assistant Director for Multimodal Planning**

2017-2021 Proposed Final Program Discussion

- ▶ General Changes to Greater AZ
 - Project adjustments
- ▶ Proposed Expansion Projects in Delivery Program
- ▶ Development Program
 - Projects to consider
- ▶ PAG; Tentative Program (No Change)
- ▶ MAG; Tentative Program (Minor Change)
- ▶ Airport Program (Update)
- ▶ Next Steps

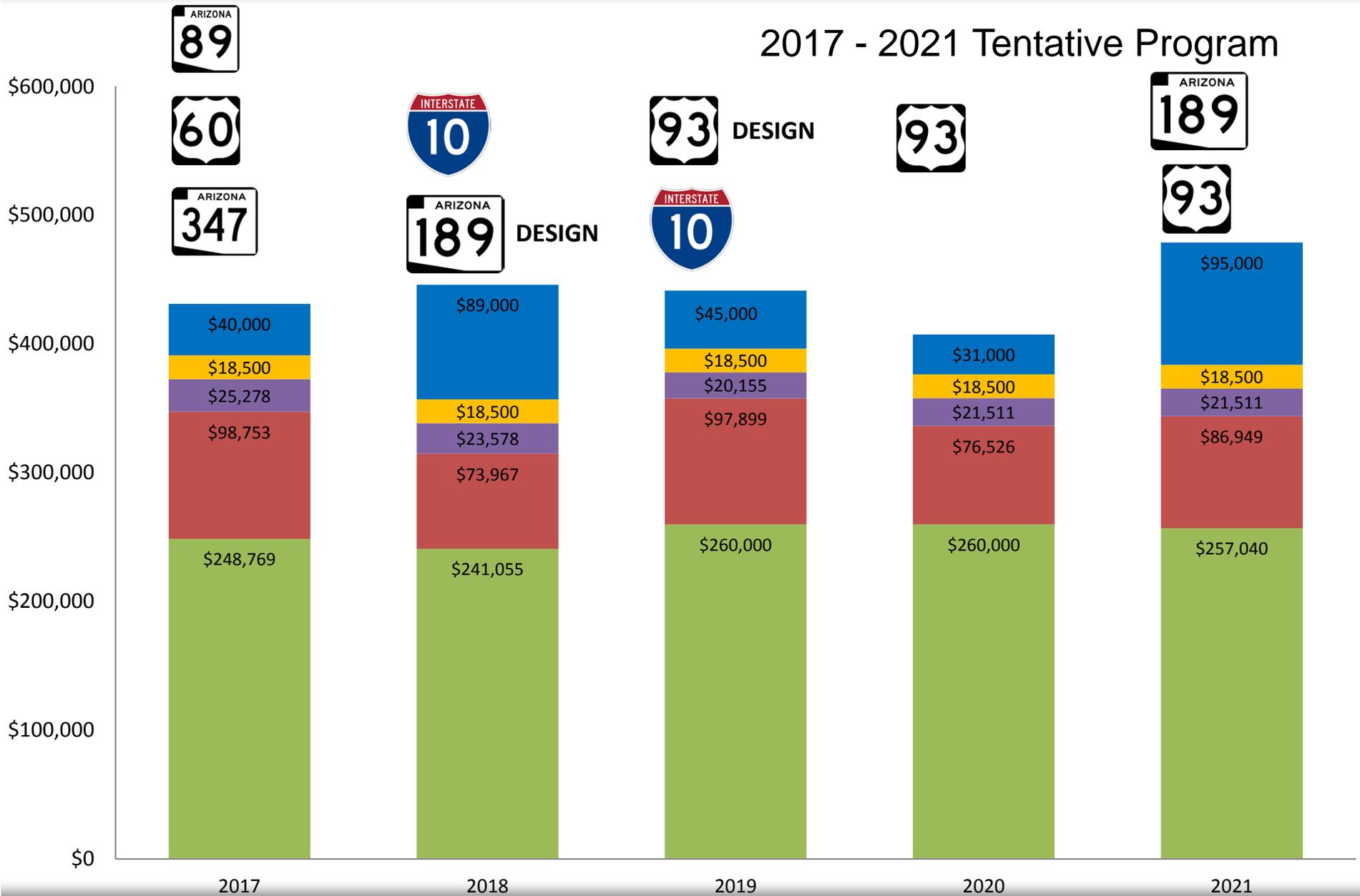
General Changes

- ▶ Total Number of Changes 110
- ▶ Reduced Budget on 10 Projects Totaling **\$(55,211,000)**
- ▶ Increased Budget on 15 Projects Totaling \$20,472,000
- ▶ Advanced 10 Projects to FY 2016 Totaling **\$(56,617,000)**
- ▶ Added 44 New Projects Totaling \$78,515,000

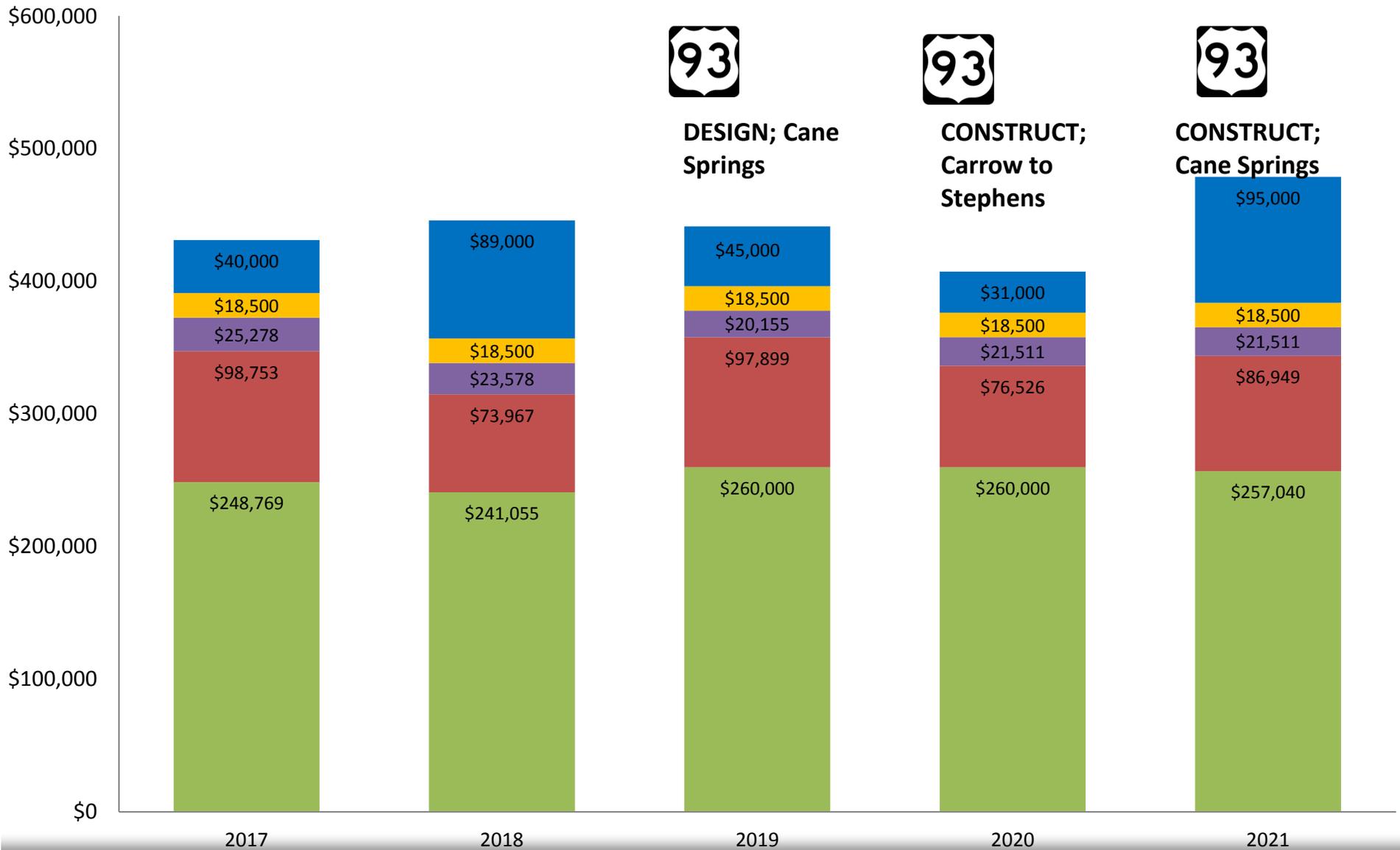
- ▶ Adjustments to Sub Programs \$12,841,000
- ▶ Net Change \$0

Proposed Expansion Projects

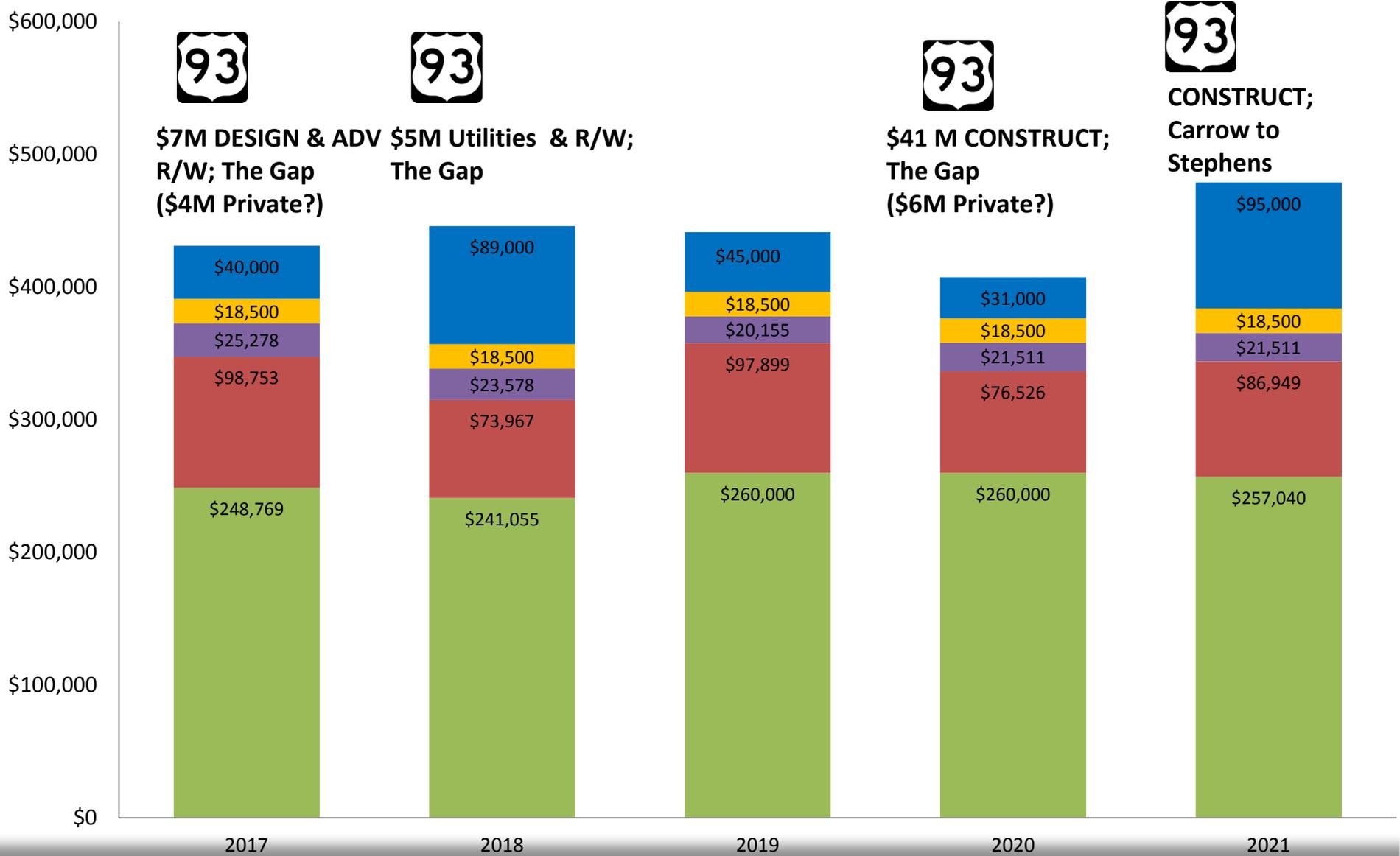
2017 - 2021 Tentative Program



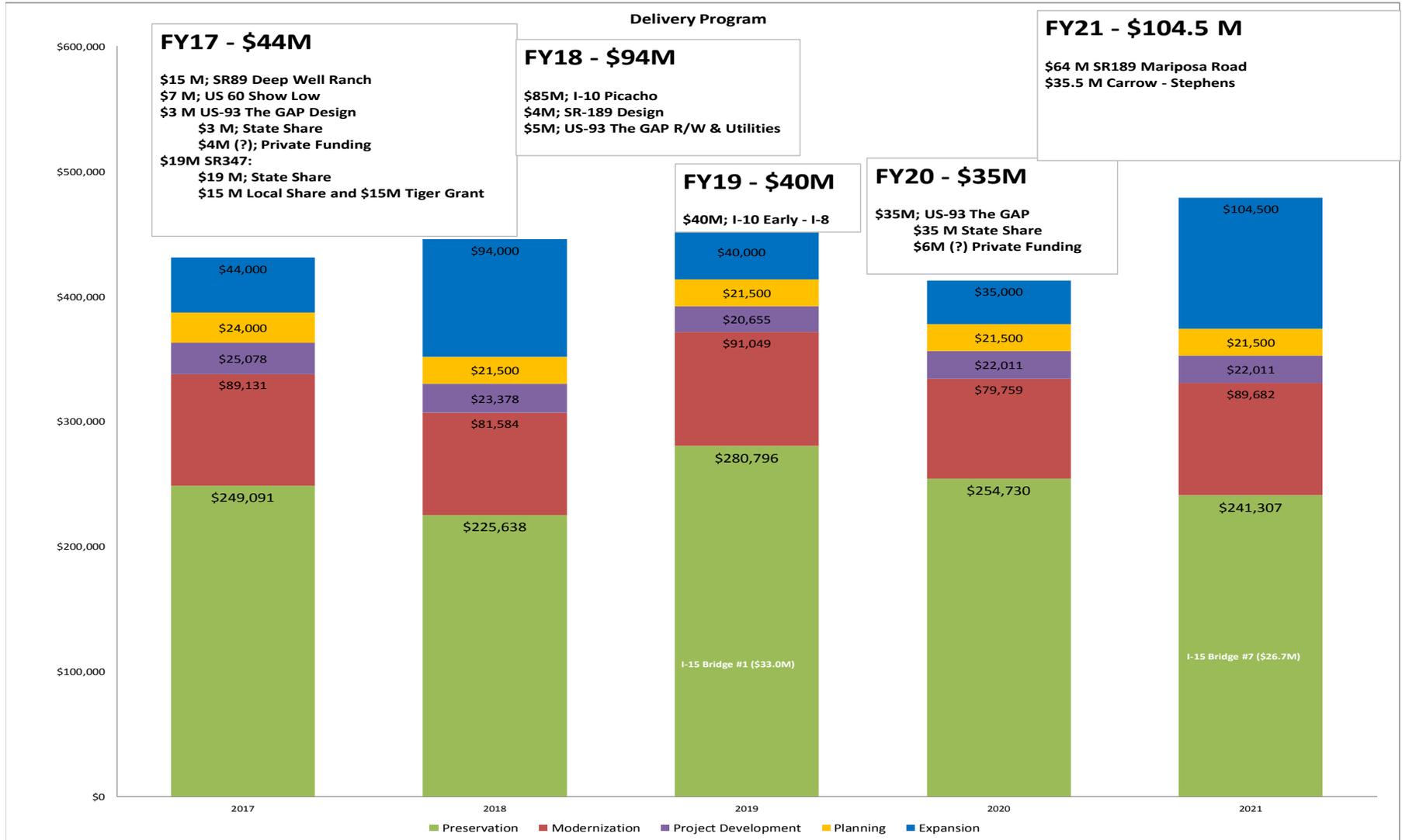
2017 - 2021 Tentative Program



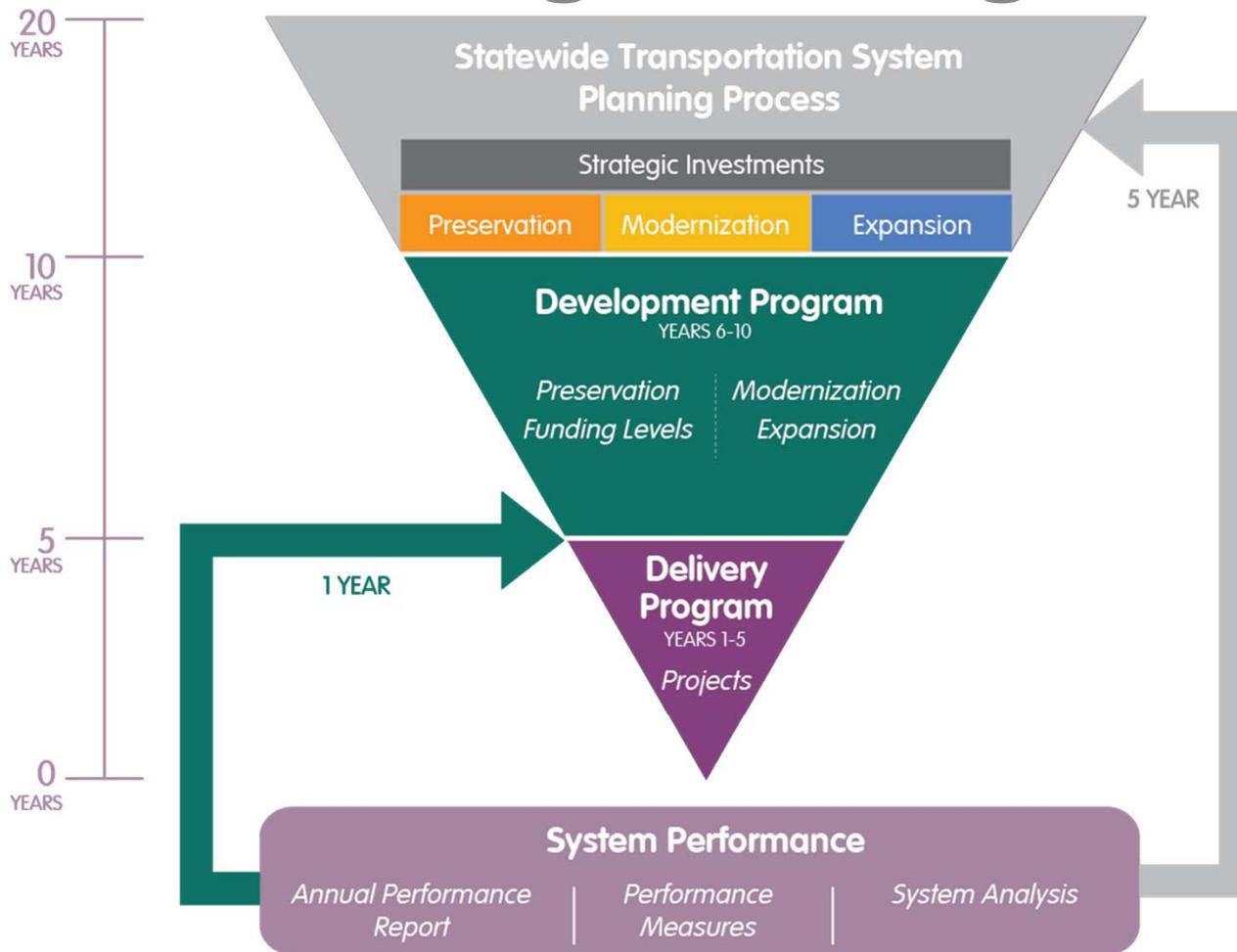
2017 - 2021 Tentative Program



Delivery Program



Linking Planning to Programming



DEVELOPMENT PROGRAM

Total Revenue = \$625M

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RAAC Distribution

\$(150M) MAG
\$(40M) PAG

Greater AZ Program = \$435M

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Greater AZ Program = \$435M

Preservation= \$260M

Modernization= \$ 85M

Planning and Development= \$ 50M

DEVELOPMENT PROGRAM

Total Revenue = \$625M

RAAC Distribution

\$(150M) MAG

\$(40M) PAG

Greater AZ Program = \$435M

Preservation= \$260M

Modernization= \$ 85M

Planning and Development= \$ 50M

Expansion Program = **\$40M x5 = \$200M**

SR 189; Nogales To I-19
I-10: Earley Rd To Jct I-8
I-10; SR-87 To Town Of Picacho
SR89; Jct SR 89A - Deep Well Ranch Road
SR347; Union Pacific Rr Crossing
US60; Show Low To 40th Street
US93; Carrow To Stephens
US93; Tegner Drive - SR-89 "The Gap"
I-17; Black Canyon to Sunset Point
I-17; SR-179 TI
I-19; SR-189 TI Phase II Improvements
I-19; Rio Rico and Ruby Road TI Improvements
US-93; Cane Springs Section
US-93; Santa Maria to SR-71
SR-260; Lion Springs Section
SR-69; Widening in Prescott
I-40; 4th Street Bridge Widening
I-40; Twin Arrows TI (New)
US-95; MP 32-34
US-95; MP 35-39
US-95; MP 39-48

~~SR 189; Nogales To I-19~~
~~I-10; Earley Rd To Jct I-8~~
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Projects to Consider

Location	Route	Miles	Traffic Volume (ADT)	Freight Flow (%)	Corridor of Significance	Total Accidents	Total Fatalities	Crash Rate	Fatality Rate	Local/Private Funding	Cost
US-93 Cane Springs Section	US-93	6	7,116	17%	KCC	189	13	2.43	0.17	NO	\$35,000,000
US-93 Santa Maria to SR-71	US-93	21	10,944	17%	KCC	308	31	0.73	0.07	NO	\$90,000,000
I-17 Black Canyon to Sunset Point	I-17	9	28,369	11%	KCC	795	9	1.71	0.02	NO	\$125,000,000
I-19; SR-189 TI Phase II Improvements	I-19	1	19,856	9%	KCC	39	1	1.08	0.03	NO	\$65,000,000
SR-260 Lion Springs Section	SR-260	2	8,100	13%	Strategic	61	4	2.06	0.14	NO	\$40,000,000
I-17 SR-179 TI	I-17	2	5,396	11%	KCC	9	0	0.46	0.00	NO	\$30,000,000
I-19; Rio Rico and Ruby Road TI Improvements	I-19	3	25,098	9%	KCC	48	0	0.35	0.00	NO	\$25,000,000
I-40 Twin Arrows TI (New)	I-40	1	16,035	34%	KCC	63	4	2.15	0.14	NO	\$30,000,000
SR-95; MP 32-34	SR-95	2	10,710	8%	Strategic	71	0	1.82	0.00	NO	\$8,500,000
SR-69; Widening in Prescott	SR-69	1	36,739	12%	NHS	432	4	6.44	0.06	NO	\$8,500,000
SR-95; MP 35-39	SR-95	4	7,610	8%	Strategic	59	2	1.06	0.04	NO	\$19,000,000
SR-95; MP 39-48	SR-95	9	8,106	8%	Strategic	1	0	0.01	0.00	NO	\$36,000,000
I-40 4th Street Bridge Widening	I-40	2	1	0%	n/a	0	0	0.00	0.00	NO	\$10,000,000

TIER 1

I-17;	Black Canyon to Sunset Point	\$125M
US-93;	Cane Springs Section	\$35M
US-93;	Santa Maria to SR-71	\$90M

TIER 2

I-19;	SR-189 TI Phase II Improvements	\$65M	
I-19;	Rio Rico and Ruby Road TI Improvements		\$25M
SR-260;	Lion Springs Section	\$40M	
SR-69;	Widening in Prescott	\$8.5M	

TIER 3

I-40;	4th Street Bridge Widening	\$10M
I-40;	Twin Arrows TI (New)	\$30M
US-95;	MP 32-34	\$8.5M
US-95;	MP 35-39	\$19M
US-95;	MP 39-48	\$36M

Proposed MAG Changes to the Tentative Five Year Program:

1. SR30, SR303L – SR202L, South Mountain: Need to advance this project such that EA can be signed
Advance design project from FY26 to FY18 for \$8,300,000, use RARF funds
Advance R/W Preservation project from FY26 to FY18 for \$10,000,000, use RARF funds
 2. MAG Region wide, FMS Rehabilitation, Phase 2 Construction: Decrease project cost by \$1,820,000 to \$2,500,000.
 3. SR202L (Santan), Broadway Rd – Ray Rd, FMS Construction: Increase project cost by \$1,820,000 to \$6,220,000.
- ▶ Please note that the net cost change between Item #2 and #3 are zero. The cash flow was approved by the Financial Management Services

Next Steps

- ▶ Public Hearings
 - March 18 Oro Valley
 - April 15 Phoenix
 - May 20 Flagstaff
- ▶ Study Session May 31 in Phoenix
- ▶ ADOT Staff to add Design/Development Phases for 6-10 Program
- ▶ Present Final Program to STB; June 17th Holbrook
- ▶ Program must be signed by Governor by June 30th
- ▶ FY 17 begins July 1st, 2016

Score of Projects to Consider

Location	Route	Miles	Cost	Traffic Score	Freight Score	Corridor Score	Crash Score	Fatal Score	Local Funding	Score
US-93 Cane Springs Section	US-93	6	\$35,000,000	10	9	45	7.28	15	0	86
I-40 Twin Arrows TI (New)	I-40	1	\$30,000,000	10	9	45	6.46	15	0	85
US-93 Santa Maria to SR-71	US-93	21	\$90,000,000	10	9	45	2.20	10	0	76
I-17 Black Canyon to Sunset Point	I-17	9	\$125,000,000	15	6	45	5.12	5	0	76
I-19; Rio Rico and Ruby Road TI Improvements	I-19	3	\$25,000,000	15	6	45	1.05	5	0	72
I-19; SR-189 TI Phase II Improvements	I-19	1	\$65,000,000	10	6	45	3.23	5	0	69
I-17 SR-179 TI	I-17	2	\$30,000,000	10	6	45	1.37	5	0	67
SR-260 Lion Springs Section	SR-260	2	\$40,000,000	10	6	30	6.19	15	0	67
SR-95; MP 32-34	SR-95	2	\$8,500,000	10	6	30	5.45	5	0	56
SR-69; Widening in Prescott	SR-69	1	\$8,500,000	15	6	15	9.00	10	0	55
SR-95; MP 35-39	SR-95	4	\$19,000,000	10	6	30	3.19	5	0	54
SR-95; MP 39-48	SR-95	9	\$36,000,000	10	6	30	0.02	5	0	51
I-40 4th Street Bridge Widening	I-40	2	\$10,000,000	5	3	0	0.00	5	0	13

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.

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- ▶ **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.