

# 2023 Project Delivery Academy

## MODULE 1: Planning and P2P Presentation

1/11/23

Presented by:

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# Regional Planning Topics

1. Regional Planning Overview
2. Funding Eligibility & Match
3. COG/MPO Required Documents
4. Functional Classification & Traffic Counts
5. Statewide Studies
6. P2P Process
7. Tribal Transportation
8. Resources & Contact Info

# Overview

## Metropolitan Planning Organization (MPO)

- 50k urbanized population
- 6 in AZ: CYMPO, FMPO, LHMPO, SCMPO, SVMPO, & YMPO

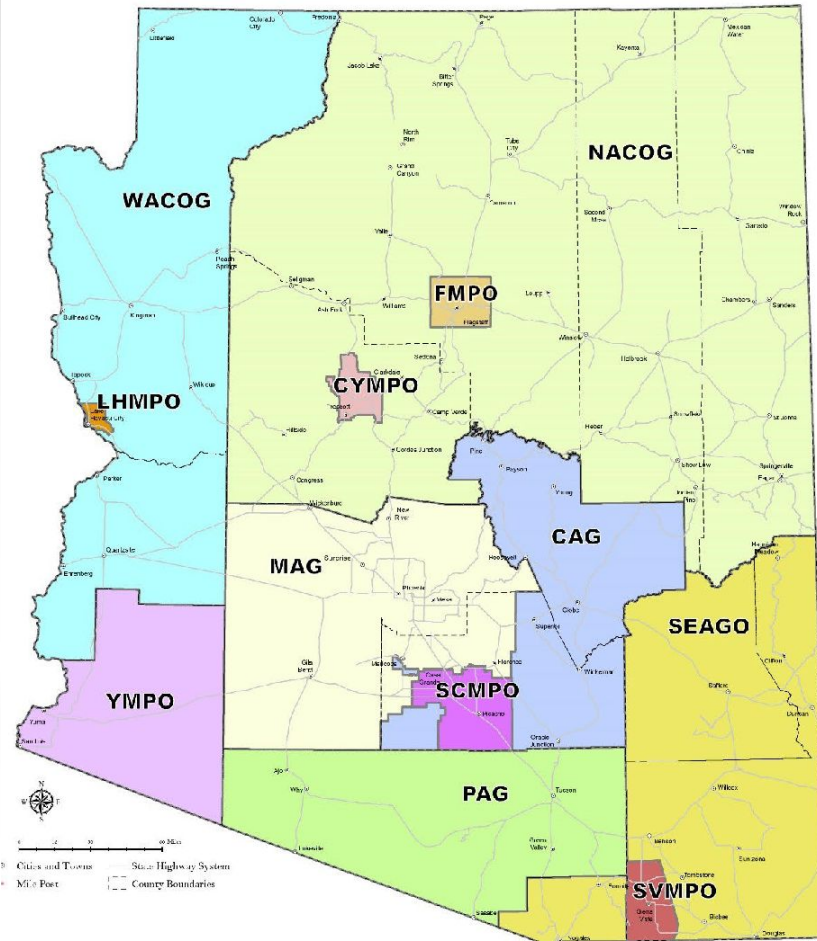
## Transportation Management Area (TMA)

- 200k urbanized population
- 2 in AZ: MAG & PAG

## Council of Government (COG)

- Rural areas
- 4 in AZ: CAG, NACOG, SEAGO, & WACOG

\*Every town, city, county, or tribe may participate in at least one COG, MPO, or TMA



# COG/MPO Oversight

- ADOT/MPD has oversight responsibilities as a direct recipient passing through Federal aid to a designated Council of Government (COG) and Metropolitan Planning Organization (MPO)
  - Two year grant agreement
  - Participate as voting members on COG/MPO committee's as a regional partner providing transportation planning and programming assistance
  - Review and approve COG/MPO federal aid reimbursement requests

# Regional Funding Opportunities

- Surface Transportation Block Grant Program (STBG)
- State Planning & Research (SPR)
- Consolidated Planning Grant (CPG) – includes...
  - *Metropolitan Planning (PL) and Transit Planning (5305d)*
- Congestion Mitigation and Air Quality (CMAQ)

## ***ADOT Competitive Funding Opportunities***

- Enhanced Mobility of Seniors and Individuals with Disabilities (5310)
- Rural Public Transportation Program (5311)
- Highway Safety Improvement Program (HSIP)
- Off System Bridge (OSB) and AZ SMART Program

# Funding Eligibility

- **STBG** – Design & Construction (+ planning, studies, data collection, admin - *most flexible*)
- **SPR** – Planning, studies, data collection, admin
- **CPG (PL/5305d)** – Same as SPR (MPOs & TMAs only)
- **CMAQ** – Projects that improve air quality (MAG only)
- **5310** – Buses, equipment, & operations to support elderly & disabled mobility (private nonprofit also eligible)
- **5311** – Rural public transit capital, admin, & operations
- **HSIP** – Mitigate a safety issue

# Funding Local Match Rates

- **STBG** – 5.7%
- **SPR** – 20%
- **CPG (PL/5305d)** – 5.7%
- **CMAQ** – 0% to 5.7%
- **5310** – 0% to 20%
- **5311** – 0% to 20%
- **HSIP** – 0% to 5.7%

**Note:** Match can be both *Hard (cash)* or *Soft (in-kind)*

**Participating** in COG, MPO, or TMA activities **counts as *in-kind***... no cash out of your pocket

# Required Docs

*Other products & services...*

- ✓ Planning Studies
- ✓ Transportation Programs
- ✓ Transit Coordination
- ✓ Human Service Programs (COGs/TMAs)
- ✓ Education
- ✓ Training
- ✓ And more...

Product/ Document	Horizon	Contents	Updates	Agency		
				TMA	MPO	COG
M/RTP (Metropolitan/Regional Transportation Plan)	20 years (min.)	Policies, goals, and strategies	Every 5 years (4 years for non-attainment and maintenance areas)	✓	✓	
UPWP (Unified Planning Work Program)	2 years	Planning studies and tasks	Biennially	✓	✓	
WP (Work Program)	2 years	Planning studies and tasks	Biennially			✓
TIP (Transportation Improvement Program)	4-5 years	Transportation investments by fund type and funding year	At least every 4 years (period may occur more frequently)	✓	✓	✓
Public Participation Plan	N/A	Details of the MPO public involvement process	As needed (to stay in compliance with federal regulations)	✓	✓	✓
Title VI Plan	N/A	Actions taken to meet antidiscrimination laws	Annually	✓	✓	✓
Regional Coordination Plan	N/A	Transportation services for people with disabilities, low incomes, and older adults	Based on TIP and MTP (4 years for non-attainment and maintenance areas)	✓	✓	✓
Air Quality Regional Conformity	Based on TIP and MTP	Conformity links air quality and transportation planning to ensure transportation activities in non-attainment and maintenance areas are consistent with air quality goals	Based on TIP and MTP (4 years for non-attainment and maintenance areas)	✓	✓	
Congestion Management Plan	Ongoing	Provides demand reduction and operational management strategies	As needed	✓		



# Functional Classification

- Before a project goes in the TIP... the road must receive a ***Federal Functional Classification***

## Functional Classification:

Interstate

Principal Arterial

Minor Arterial

Major Collector

Minor Collector

Local Road (*not eligible for federal aid*)

## **Functional Classification Request Tool:**

<https://azgeo.az.gov/adot/WeLoveYourInput.aspx#ajax/FCmap.html>

OR

## **Contact**

Sage Donaldson

([sdonaldson@azdot.gov](mailto:sdonaldson@azdot.gov));

Jim Meyer ([jmeyer@azdot.gov](mailto:jmeyer@azdot.gov))

# Highway Performance Management System (HPMS)

Once a road receives Federal Functionally Classification, FHWA requires traffic data counts to comply with HPMS.

## Traffic Count Frequency:

<u>Interstate</u>	<u>3 years</u>
<u>Ramps</u>	<u>6 years</u>
<u>Principal Arterial</u>	<u>3 years</u>
<u>Minor Arterial</u>	<u>6 years</u>
<u>Major Collector</u>	<u>6 years</u>
<u>Minor Collector</u>	<u>6 years</u>
<u>Local Road</u>	<u>Not Required</u>

## Traffic Count Tool:

<https://arcg.is/050GK>

*OR*

## Contact

Sage Donaldson  
([sdonaldson@azdot.gov](mailto:sdonaldson@azdot.gov));  
Jim Meyer ([jmeyer@azdot.gov](mailto:jmeyer@azdot.gov))

# Statewide Studies Program

- What types of studies
  - Variety of topics to support ADOT technical groups, Districts and Federal Requirements. Examples include:
    - Rest Area Study
    - Port of Entry Study
    - Overhead Sign Structure Study
    - ITS Architecture
    - Wildlife-Vehicle Conflict Study
    - Long Range Transportation Plan
    - Corridor Studies
    - Freight Plan

# Statewide Studies Program

- Project Priorities
  - Project selection criteria considers date of last study and need for update, emphasis from ADOT leadership and any new requirements from transportation legislation, etc.
  - Two year Work Program
  - Annual budget approximately \$900K

# Statewide Studies Program

- Transportation Planning Process
  - A transportation study includes some or all of the following elements depending on project scope:
    - Vision, goals and objectives
    - Existing and future conditions
    - Needs assessment
    - Develop strategies to address needs
    - Project selection and prioritization
    - Funding and implementation
    - System performance monitoring

# ADOT Tribal Transportation

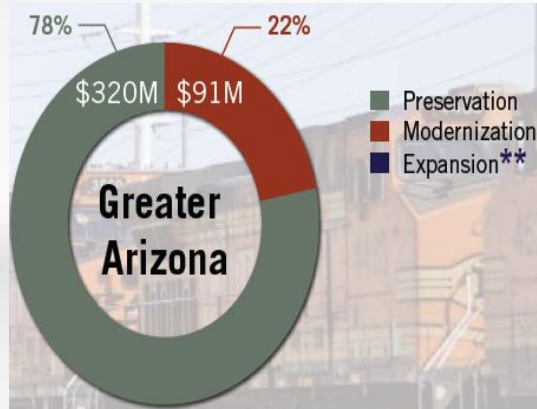
- 22 federally recognized Indian Tribes, Communities and Native Nations in Arizona with tribal land encompassing approximately 27,736,000 acres or 28% of the State land base.
- 14 Tribal airports and seven Tribal public transit systems situated within Tribal communities throughout Arizona.
- Both State and Tribal governments have the common goal of providing efficient transportation systems for the safety and welfare of the traveling public.
- Contacts:
  - Paula Brown - [pbrown@azdot.gov](mailto:pbrown@azdot.gov) (Northern Area)
  - Don Sneed – [dsneed@azdot.gov](mailto:dsneed@azdot.gov) (Southern Area)
  - Arizona Tribal Transportation website: <http://www.aztribaltransportation.org/>

# Resources/Contacts

- Myrna Bondoc - [mbondoc@azdot.gov](mailto:mbondoc@azdot.gov) (CYMPO, MetroPlan (Flagstaff), NACOG)
- Mark Hoffman – [mhoffman@azdot.gov](mailto:mhoffman@azdot.gov) (SEAGO, SVMPO, PAG, Yuma MPO)
- William Randolph – [wrandolph@azdot.gov](mailto:wrandolph@azdot.gov) (CAG, LHMPO, SCMPO, WACOG)
- ADOT MPO/COG Procedures Manual:  
<https://azdot.gov/planning/transportation-planning/tmas-mpos-and-cogs/adot-mpo-and-cog-guidelines-and-procedures>

# What is P2P?

## Long Range Transportation Plan



## Five-Year Construction Program

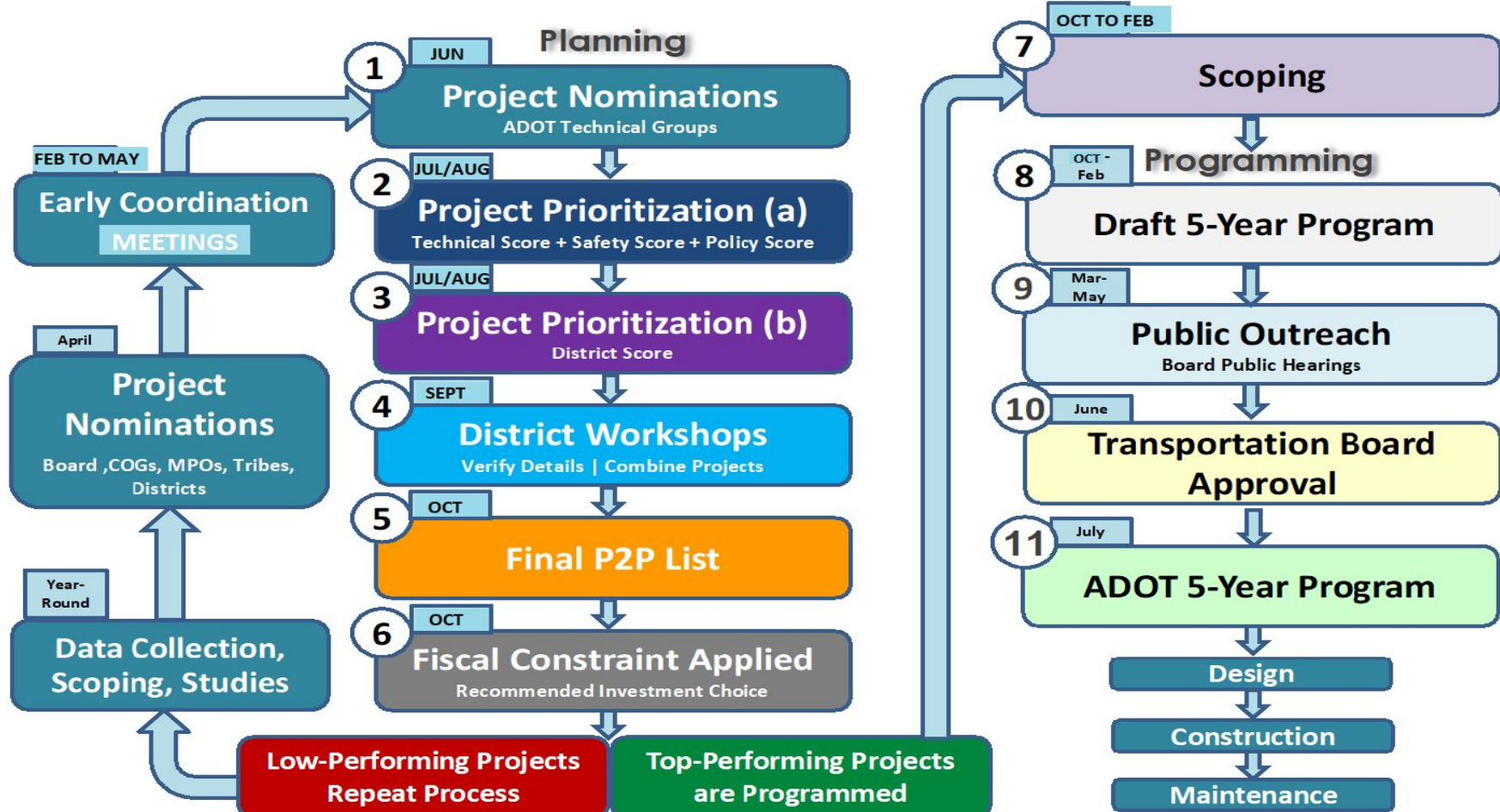




# Why P2P?

- ❑ **Performance-Based Planning to Programming is the Law**
- ❑ Federal Regulation (FAST Act)
  - 23 USC Section 135(d)(2), and 49 USC Section 5304(d)(2)
- ❑ State Statute
  - ARS Title 28, Chapter 2, Article 7 (§ 28-501 through § 28-507)
- ❑ **Financial Stewardship**
  - Maximize Use of Public Funds

# ADOT P2P Process Flowchart



# P2P Scoring Overview

## Pavement Preservation

Annual Investment

Target:  
\$260M

Scoring:

Technical = 51%

District = 45%

Policy = 4%

## Bridge Preservation

Annual Investment

Target:  
\$60M

Scoring:

Technical &

Safety = 60%

District = 30%

Policy = 10%

## Modernization

Annual Investment

Target:  
\$91M

Scoring:

Technical = 35%

District = 30%

Safety = 25%

Policy = 10%

## Expansion

Annual Investment

Target:  
\$0M

Scoring:

Technical = 50%

District = 25%

Safety = 15%

Policy = 10%

# P2P Scoring Breakdown

## Pavement Preservation

### PRESERVATION

#### (PAVEMENT)

Activities that improve or sustain the condition of the transportation facility to a state of good repair

### Work Types

#### Maintenance

- ∨ Concrete repair
- ∨ Flush shoulder /shoulder edge repair
- ∨ Leveling with premix
- ∨ Patching / blade laying
- ∨ Pothole repair
- ∨ Slide removal and rock patrol
- ∨ Spot filling cracks / crack seal
- ∨ Spot pavement profiling / AC grinding

#### Preservation

- ∨ AC grinding / milling
- ∨ Cape seal
- ∨ Chip seal
- ∨ Crack seal / fill
- ∨ Fog seal / flush
- ∨ Friction coarse (AR-ACFC / ACFC) / mill & fill or overlay of friction coarse
- ∨ Micro surface
- ∨ PCCP cross stitching
- ∨ PCCP dowel-bar retrofit (DBR)
- ∨ PCCP diamond grinding
- ∨ Slurry seal
- ∨ Spot repair
- ∨ Thin bonded overlay

#### Rehabilitation

- ∨ Major AC overlays
- ∨ Mill & fill (existing AC)

#### Reconstruction

- ∨ Removal and replacement of existing roadway section
- ∨ Spot reconstruction

	Performance Target	Measure	Weighting
<b>Technical (51%)</b>	% Interstate Good Condition = 44%	Pavement Condition: IRI, Cracking, & Rutting Deterioration Factors Lifecycle Factors	51%
	% Interstate Poor Condition = 2%		
	% Non-Interstate Good Condition = 28%		
	% Non-Interstate Poor Condition = 6%		
<b>Total Technical Score</b>			<b>51%</b>
	Performance Target	Measure	Weighting
<b>District (45%)</b>	N/A	District Engineer Evaluation	45%
<b>Total District Score</b>			<b>45%</b>
	Performance Target	Measure	Weighting
<b>Policy (4%)</b>	N/A	External Funding Contribution	1%
	N/A	Transportation Disadvantaged Communities	3%
<b>Total Policy Score</b>			<b>4%</b>
<b>*Subject to Change</b>			<b>100%</b>

# P2P Scoring Breakdown

## Bridge Preservation

### PRESERVATION (BRIDGE)

Activities that improve or sustain the condition of the transportation facility to a state of good repair

### Work Types

#### Maintenance

- ∨ Approach overlay
- ∨ Barrier repair
- ∨ Drainage / hydrovac
- ∨ Channel work
- ∨ Cleaning
- ∨ Minor crash repair
- ∨ Pipe / culvert repair
- ∨ Scour repair (existing)
- ∨ Spall / pothole repair
- ∨ Structure maintenance
- ∨ Washing

#### Preservation

- ∨ Cyclical Maintenance Activities
- ∨ Deck joint / seal replacement
- ∨ Deck overlay
- ∨ Deck seal
- ∨ Major channel repair
- ∨ Painting (steel)
- ∨ Scour retrofit
- ∨ Seismic retrofit
- ∨ Slab jacking

#### Rehabilitation

- ∨ Major bridge element rehab / replacement
- ∨ Major crash repair
- ∨ Superstructure replacement

#### Reconstruction

- ∨ Bridge / culvert (over 20') replacement

	Performance Target	Measure	Weighting
<b>Technical &amp; Safety (60%)</b>	% NHS Bridges Good Condition = 52%	Bridge Condition: Deck, Superstructure, Substructure, Culvert, Scour Lifecycle Factors	60%
	% NHS Bridges Poor Condition = 4%		
<b>Total Technical Score</b>			<b>60%</b>
	Performance Target	Measure	Weighting
<b>District (30%)</b>	N/A	District Engineer Evaluation	30%
	<b>Total District Score</b>		
	Performance Target	Measure	Weighting
<b>Policy (10%)</b>	Freight Reliability on Interstate = 1.35	Freight Percentage (T-Factor)	3%
	N/A	Functional Classification	3%
	N/A	External Funding Contribution	1%
	N/A	Transportation Disadvantaged Communities	3%
<b>Total Policy Score</b>			<b>10%</b>
<b>*Subject to Change</b>			<b>100%</b>

# P2P Scoring Breakdown Modernization

## MODERNIZATION

Improvements that upgrade efficiency, functionality, and safety without adding capacity

### Work Types

- ADA / pedestrian
- Bicycle lane / shoulder
- Climbing / passing Lanes
- Drainage
- Fence (new / replacement)
- Guardrail (new / replacement)
- Intersection / interchange enhancement
  - New intersection
  - Reconfiguration
  - Roundabout
  - Ramp
  - Signal
  - Turn lanes
- Information Technology Systems (ITS)
- Pedestrian crossings
- Retrofit / correct functional obsolescence
- Rockfall mitigation
- Safety modifications / enhancements
- Tree removal / recovery area
- Traffic control and management
- Widening existing lanes / shoulders
- Wildlife crossings or mitigation

Modernization Scoring			
Technical (35%)	Performance Target	Measure	Weighting
	Varies	Technical Group Project Ranking (Statewide)	35%
Total Technical Score			<b>35%</b>
District (30%)	Performance Target	Measure	Weighting
	N/A	District Engineer Evaluation	30%
Total District Score			<b>30%</b>
Safety (25%)	Performance Target	Measure	Weighting
	Fatalities = 1% increase Fatality Rate = 0% increase Serious Injuries = 4% decrease Serious Injury Rate = 6% decrease Non-Motorized = 2% increase	Level of Safety Service	25%
Total Safety Score			<b>25%</b>
Policy (10%)	Performance Target	Measure	Weighting
	Freight Reliability on Interstate = 1.35	Freight Percentage (T-Factor)	3%
	N/A	Functional Classification	3%
	N/A	External Funding Contribution	1%
	N/A	Transportation Disadvantaged Communities	3%
Total Policy Score			<b>10%</b>
			<b>100%</b>

*\*Subject to Change*



# P2P Scoring Breakdown Expansion

**EXPANSION**

Improvements that add capacity by adding new facilities

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**Work Types**

- New grade-separated overpass / underpass (if adding lanes)
  - Railroad X-ing
  - Interchange
  - DHOV Ramp
- New lanes
- New rail
- New routes / bypass

Expansion Scoring			
Technical (50%)	Performance Target	Measure	Weighting
	N/A	Level of Service (LOS)	10%
	N/A	Average System Speed	5%
	Travel Time Reliability (TTR) Interstate = 85.8% TTR Non-Interstate NHS = 74.9%	System Reliability	10%
	Freight Reliability on Interstate = 1.35	System Reliability (freight)	10%
	N/A	Cost Effectiveness	10%
	N/A	New Permanent Jobs Created	5%
<b>Total Technical Score</b>			<b>50%</b>
District (25%)	Performance Target	Measure	Weighting
	N/A	District Engineer Evaluation	25%
<b>Total District Score</b>			<b>25%</b>
Safety (15%)	Performance Target	Measure	Weighting
	Fatalities = 1% increase Fatality Rate = 0% increase Serious Injuries = 4% decrease Serious Injury Rate = 6% decrease Non-Motorized = 2% increase	Level of Safety Service	15%
<b>Total Safety Score</b>			<b>15%</b>
Policy (10%)	Performance Target	Measure	Weighting
	Freight Reliability on Interstate = 1.35	Freight Percentage (T-Factor)	3%
	N/A	Functional Classification	3%
	N/A	External Funding Contribution	1%
	N/A	Transportation Disadvantaged Communities	3%
<b>Total Policy Score</b>			<b>10%</b>
<b>Total Score</b>			<b>100%</b>

*\*Expansion prioritized on a Five-Year Cycle, concurrent with*

*\*Subject to Change*

# Project Review – Northwest District

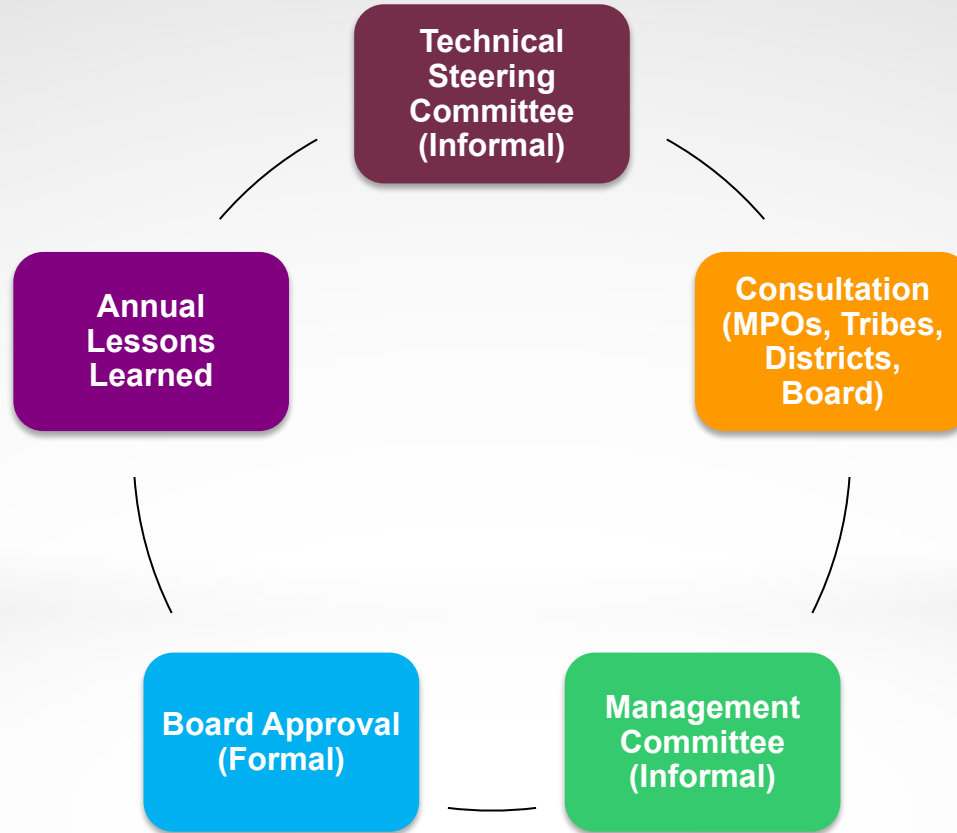
District Rank	PAVEMENT		BRIDGE		MODERNIZATION	
1	22.044	US 93- Silver Spring Road	B20.30	Lake Havasu TI UP#1586	MO001	I-17 Superelevation Corrections
2	22.039	Markham Wash to Seligman TI (EB)	B21.58	Ramp N-N Over I-17 #2938	MH090	US 93 SB: MP165 - MP172
3	22.097	Seligman TI-MP 132	B21.53	Dugas Rd TI OP SB #1080	MV078	US 93 Michigan U Couplet - West Tony Avenue
4	22.030	US 93 - MP 92 to MP 101	B22.03	SR 89 TI WHIPPLE OP #2802	MO006	I-40 Superelevation Correction
5	22.014	US 93 - MP 156 to MP 172	B22.01	Black Rock Wash Br WB #848	MJ196	Joshua Tree Freight Improvements Option B
6	22.002	US 93 - MP 130 to MP 138.1	B22.02	E Kingman SFRR OP WB #1360		
7	22.015	US 93 - MP 138.1 to MP 144	B21.57	Willow Creek Br #6 WB #1769		
8	22.251	Weigh Station to Ash Fork	B20.09	Drake AT&SF RR OP#400		
9	22.162	MP 256-SR 69				
10	22.123	Lake Havasu TI to Illavar Wash				



# Project Review – Northwest District

District Rank	EXPANSION	
1	E038	US 93 Big Jim Wash, MP 161-166
2	E039	Joshua Tree Freight Improvements Option A
3	E086	Cane Springs
4	E040	Vista Royale Safety Improvements Option A
5	E036	P5 Old Highway 89 & Frontier Road

# Continuous Improvement



# Questions

Jason James

Regional Planning Manager

ADOT MPD

602-712-6166

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