

An aerial photograph of a city, likely Phoenix, Arizona, showing a dense urban area with various buildings, roads, and green spaces. In the background, several mountain peaks are visible under a clear sky. The image is slightly faded to allow text to be overlaid.

What Moves You Arizona

ADOT TAC MEETING #3

JUNE 28TH, 2016

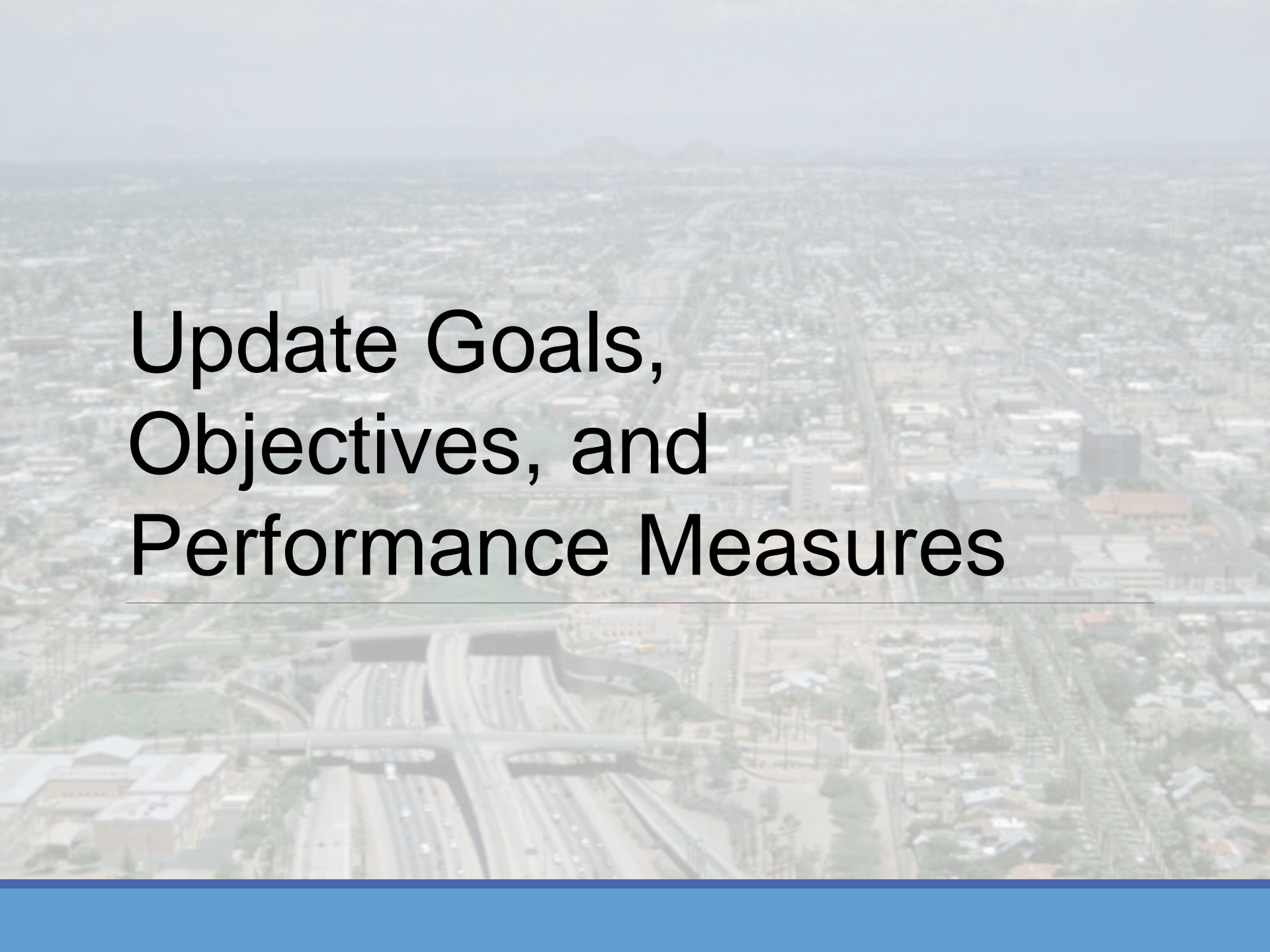
Agenda

Introductions

Update on Project Progress

Scenario Analysis “Dry Run”

Wrap-up/Next Steps



Update Goals, Objectives, and Performance Measures

Modifications to Goals and Objectives

Goal #1: Mobility, Reliability, and Accessibility – Key Commerce Corridors, urban free ways, and select rural highways, freight bottlenecks, and technology deployment.

Goal #2: Preservation – Minor changes

Goal #3: Safety & Security – Implementation of evacuation plans

Goal #4: Strengthen Partnerships – Minor changes

Goal #5: Program Delivery – Added transparency and protection of natural environment to goal definition

Goal #6: Effective Decision-making – Emphasize “balanced” investment

An aerial photograph of a city, likely Phoenix, Arizona, showing a complex highway interchange in the foreground and middle ground. The city is densely packed with buildings and streets. In the far distance, several mountain peaks are visible under a clear sky. The text "Updated Needs" is overlaid in the center of the image.

Updated Needs

Highway System Needs (2016-2040)

Refined the preservation need based on reviews

Refined the new roadways, interchanges, ITS, and maintenance needs based on information from MPOs

Total highway needs revised from \$70B to \$71B

Refined bicycle and pedestrian and urban transit needs based on information from MPOs

Refined passenger rail needs based on additional information.

Total non-highway needs adjusted slightly upward (<\$100M)

An aerial photograph of a city, likely Phoenix, Arizona, showing a complex multi-level highway interchange in the foreground. The city extends to the horizon with various buildings and greenery. In the far distance, several mountain peaks are visible under a clear sky. The text 'Scenario Planning Exercise' is overlaid in the center of the image.

Scenario Planning Exercise

Today's Purpose

Introduce overall methodology

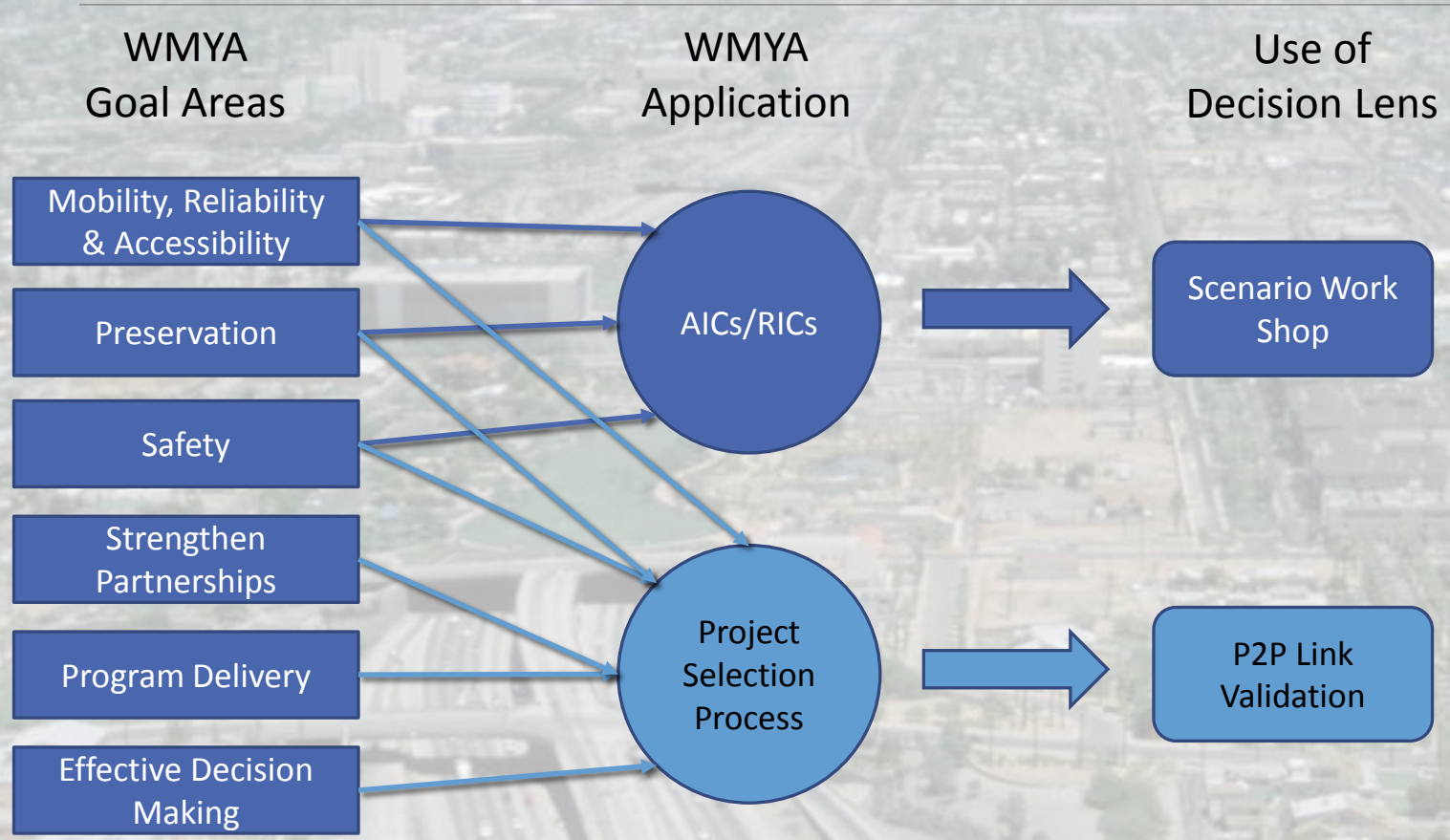
Demonstrate pair-wise approach to weighting

Show integration of performance metrics

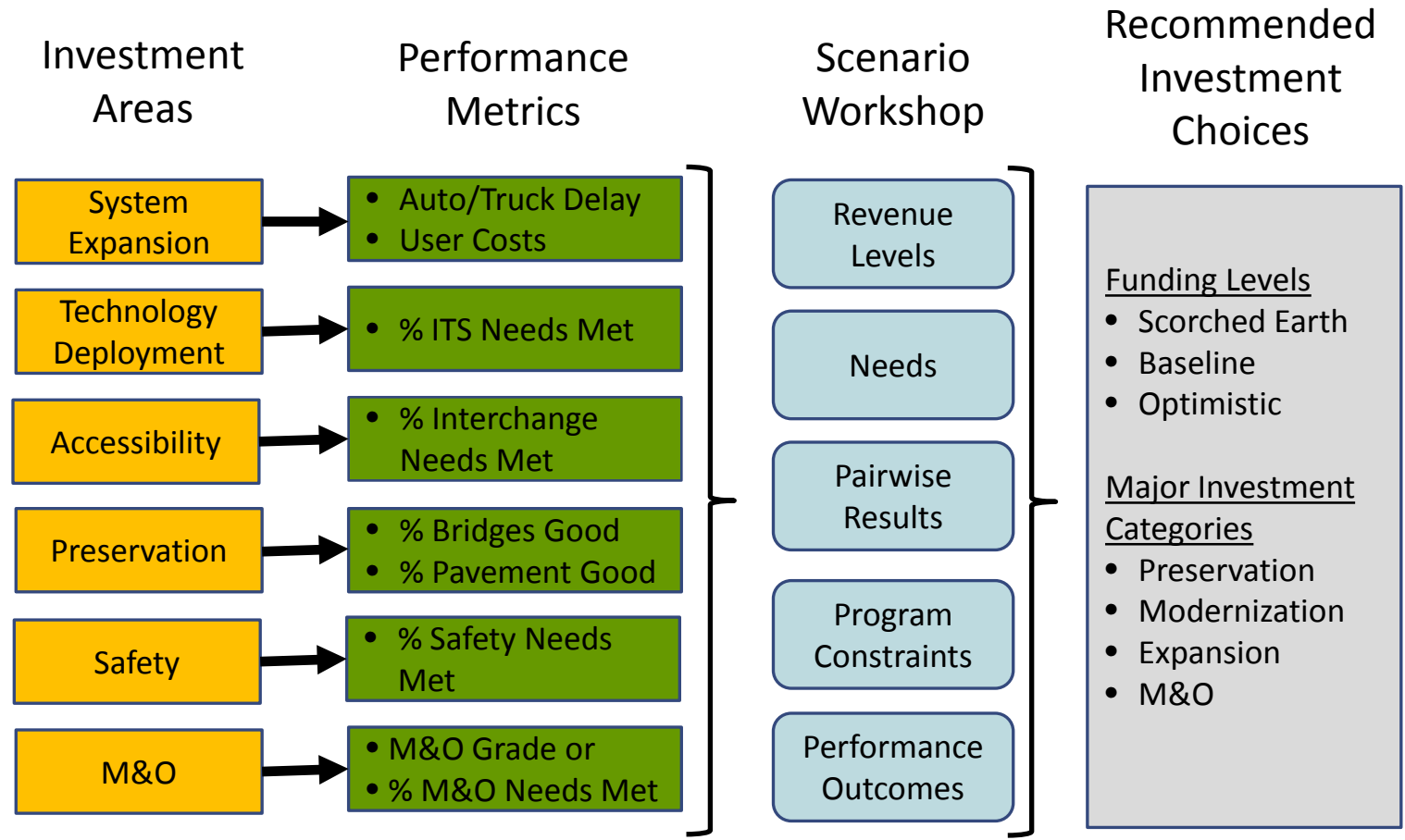
Present illustrative resource allocation outputs

Gain input on approach and workshop

How this Ties Together



Scenario Development



Caveats & Considerations

Pair-wise and output results are only for illustrative purposes

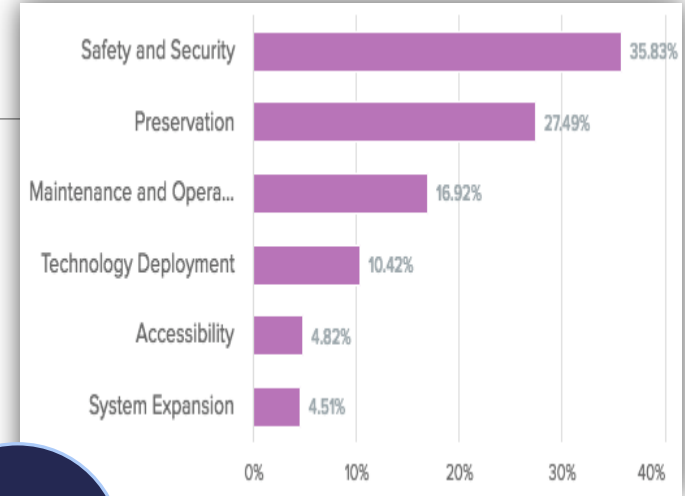
Some performance curves are still in development – there are places where we use placeholders or proxies

Even when fully built-out, there will be some weaknesses

Decision Lens: Collect Data & React to Shifting Priorities

Alternatives

ORDER	NAME	DESCRIPTION	PROJECT TYPE	PROJECT PLAN YEAR	CORRIDOR	REGION	MEASURED BHI	AADT
1	Polymer Overlay for 1F 454	1F 454: I-15 NB over ...	Preservation	2017	I-15	3	83,011	27
2	Polymer Overlay for 3F 454	3F 454: I-15 SB over ...	Preservation	2017	I-15	3	88,699	27
3	Polymer Overlay for 1F 433	1F 433: I-15 NB over ...	Preservation	2017	I-15	3	95,01	27
4	Polymer Overlay for 3F 433	3F 433: I-15 SB over S...	Preservation	2017	I-15	3	73,947	27
5	Polymer Overlay for 1F 453	1F 453: I-15 NB over ...	Preservation	2017	I-15	3	86,035	27
6	Polymer Overlay for 3F 453	3F 453: I-15 SB over L...	Preservation	2017	I-15	3	79,550	27
7	Polymer Overlay for 1F 437	1F 437: I-15 NB over ...	Preservation	2017	I-15	3	82,043	27
8	Polymer Overlay for 3F 437	3F 437: I-15 SB over ...	Preservation	2017	I-15	3	82,182	27
9	Polymer Overlay for 1F 434	1F 434: I-15 NB over ...	Preservation	2017	I-15	3	75,058	27
10	Polymer Overlay for 3F 434	3F 434: I-15 SB over Y...	Preservation	2017	I-15	3	77,464	27
11	Replace TBPO with TBPO for ...	1F 429: I-15 NB over ...	Preservation	2017	I-15	3	81,145	27
12	Replace TBPO with TBPO for ...	3F 429: I-15 SB over ...	Preservation	2017	I-15	3	81,145	27
13	3" Concrete and Polymer Over ...	1F 440: I-15 NB over ...	Preservation	2017	I-15	3	81,145	27



Sensitivity Analysis

Criteria

Name	Value
Measured BHI	16.67%
AADT	16.67%
Detour Length	16.67%
Deck Area	16.67%
*Service Life Extension	16.67%
*Percent Good Bridges	16.67%

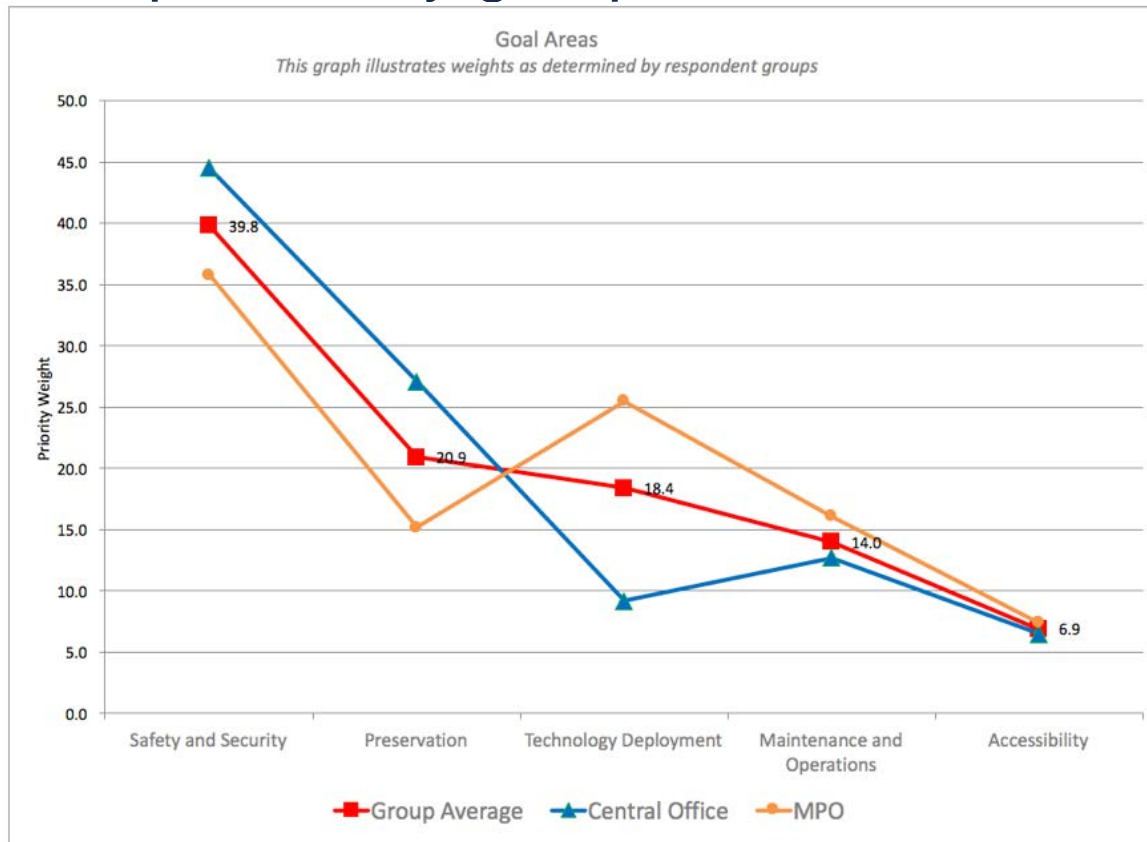


Decision Lens: Overview

- General review of DL
- Review sample Arizona DOT Priorities by Charla and team

Workshop Priorities Activity

- Gather Priorities from individuals
- Show comparison by groups



DL Dashboard: Understanding Policy Implications

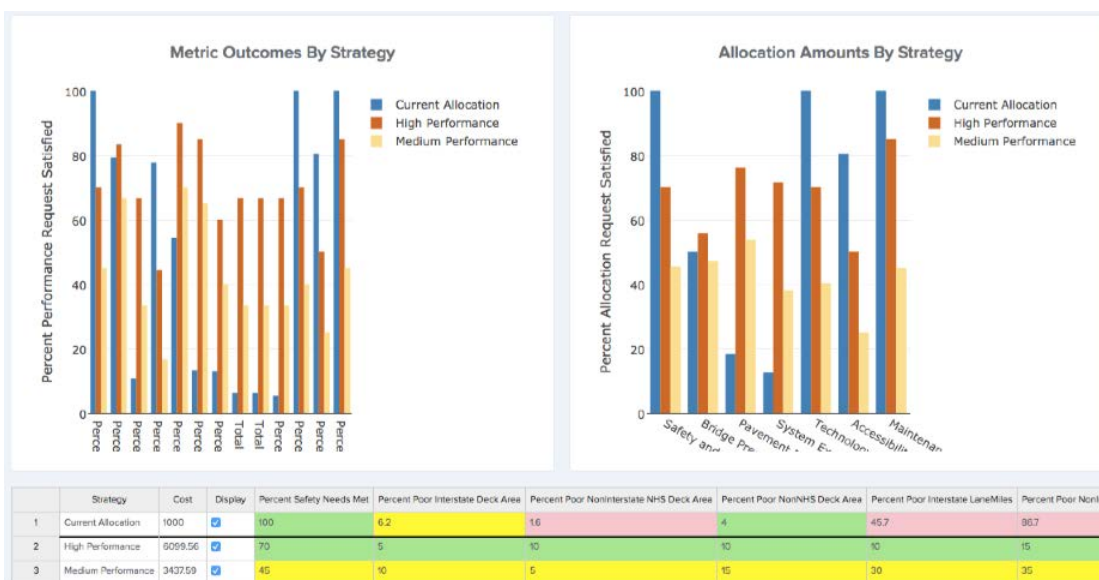
- Allow for performance-based scenario planning
 - **What if** I had to achieve these targets?
 - **What if** I invest more or less in one category?
 - **What if** I shift money from one category to another?
 - **What if** I was not mandated to fund this way?
 - **What if** my priorities change?



Workshop Dashboard Activity

Provide groups the opportunity to suggest a funding mix by using one of three approaches:

- 1. Using a flexible budget, set specific funding allocations to inform how performance targets are impacted.
- 2. Using a flexible budget, set specific performance levels to identify required funds to meet.
- 3. Using a fixed budget and goal priorities, set minimum and maximum funds and performance levels to maximize how funds are used.



Q&A

