



March 7, 2014

2040 LRTP

Agenda

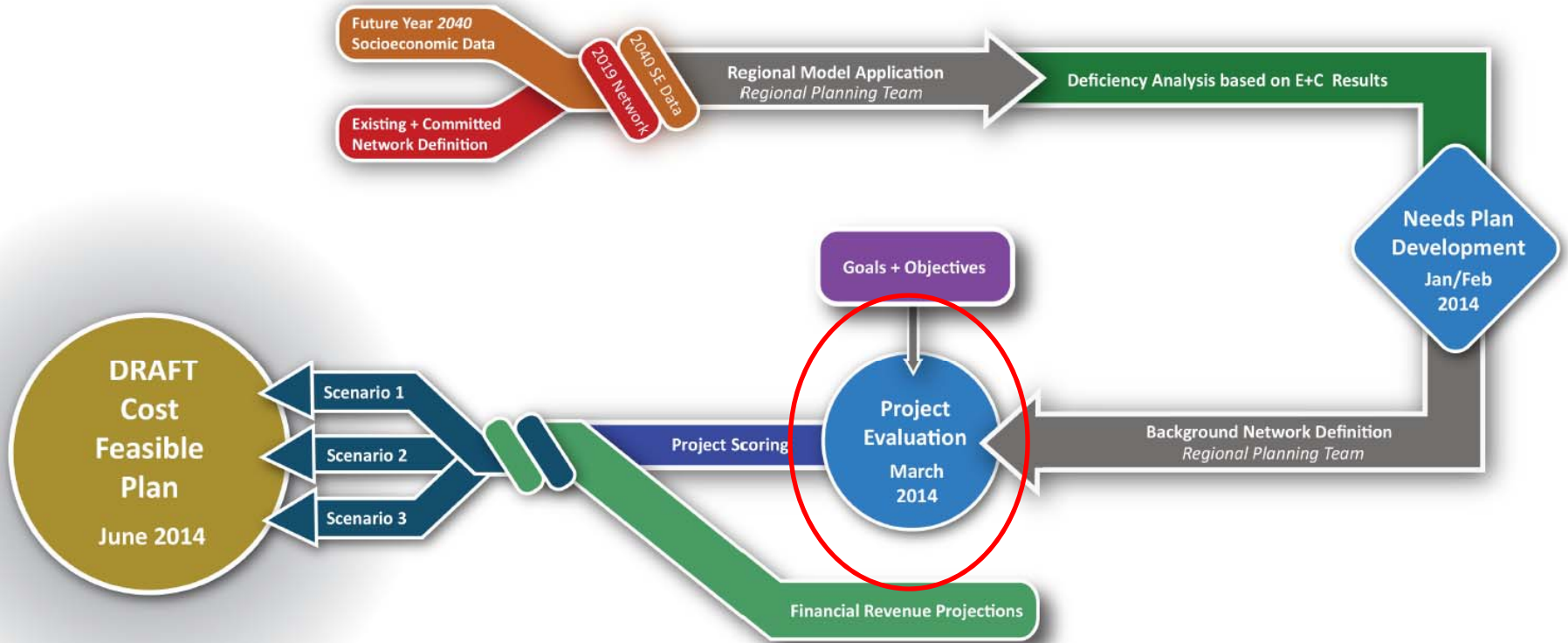
- ▶ Introductions
- ▶ Needs Assessment/MNAT Corridor Results
- ▶ Needs Projects Evaluation Methodology
- ▶ Project Costs (and Financial Set-Asides)
- ▶ Next Steps
- ▶ Meeting Adjournment



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LRTP Update Process



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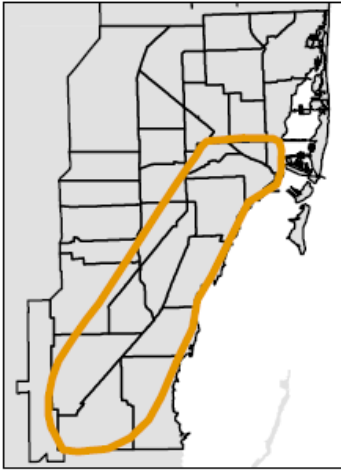
Needs/Cost Feasible Plan Milestones

- Assess Needs – January/February 2014
 - **MNAT results NOT intended to represent ultimate project impact or project evaluation criteria – it is a WORKING tool**
- Evaluate/Prioritize Needs – March 2014
- Present Needs to Public – April 2014
- Test Cost Feasible Plan scenarios – May 2014
- Review/Revise/Finalize DRAFT Cost Feasible Plan – June 2014

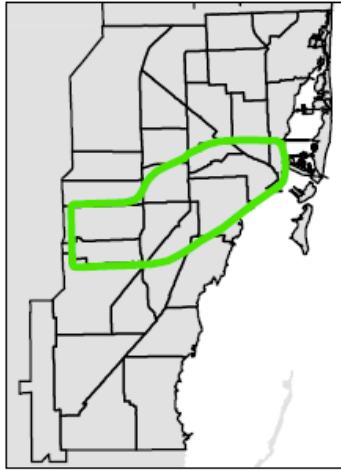


2040 Needs Assessment Corridors

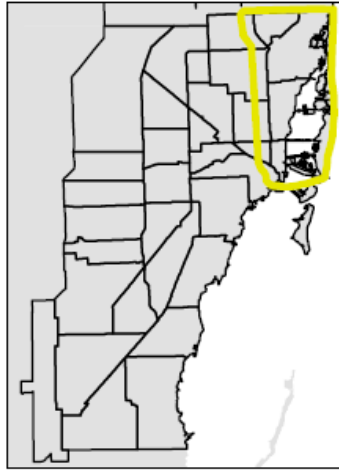
Corridor 1



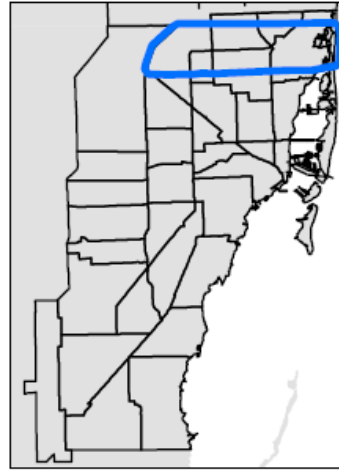
Corridor 2



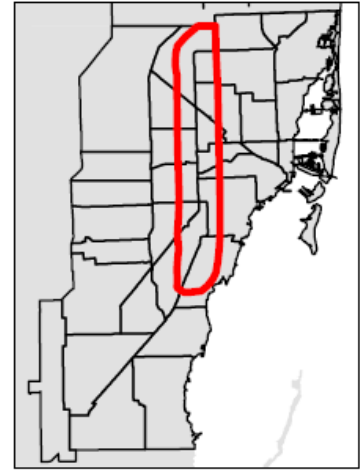
Corridor 3



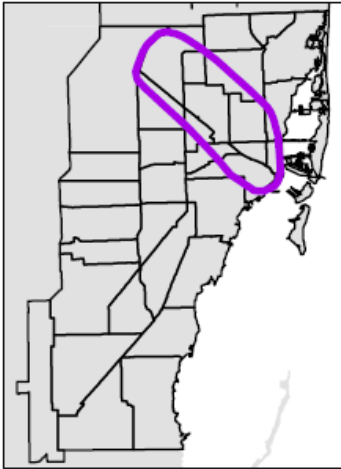
Corridor 4



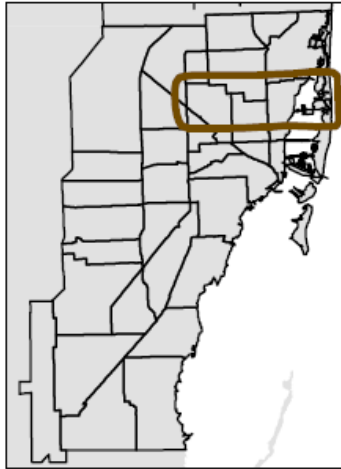
Corridor 5



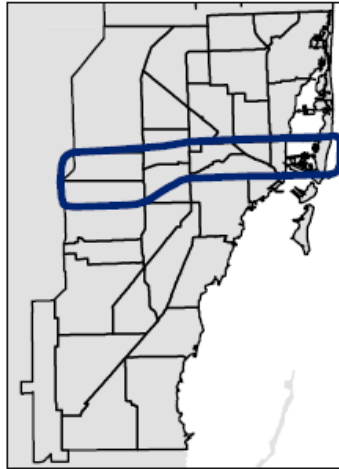
Corridor 6



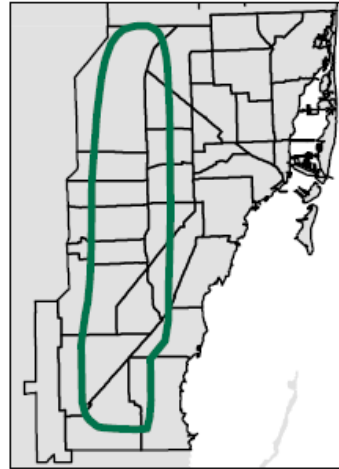
Corridor 7



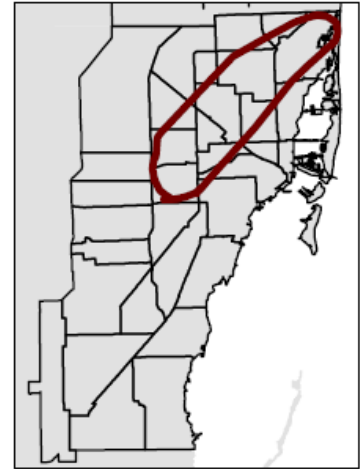
Corridor 8



Corridor 9



Corridor 10



MNAT Corridor/Screenline Results

- Comparison of E+C Volume/Capacity ratios to estimated reductions in V/C by needs projects
- MNAT Results from workshop indicate all 10 corridors reduced to below 1.0 V/C with needs projects
(all 10 corridors have $V/C > 1.0$ in E+C)
- With Needs Plan projects, 3 screenlines still have $V/C = 1.0$ or higher in corridors 3 and 8 – urban core screenlines with limited room for improvement
- Overall, screenline V/C improved by an average 28% or 0.35



MNAT Corridor/Screenline Results

Corridor	2040 E+C Aggregate V/C	2040 Needs	
		Screenlines with V/C >0.98	Aggregate V/C
1 – Southwest US 1	1.22	n/a	0.91
2 – Kendall-Downtown	1.14	n/a	0.86
3 – Northeast	1.38	31=1.01, 33=1.05	0.97
4 – North County	1.03	n/a	0.77
5 – Northeast Kendall NS	1.09	n/a	0.87
6 – NW-Downtown	1.16	n/a	0.86
7 – Northeast EW	1.21	n/a	0.84
8 – EW-Downtown	1.34	84=1.06	0.87
9 – West County	1.06	n/a	0.73
10 – Kendall-Northeast	1.22	n/a	0.83

*Aggregate V/C represents sum across screenlines.

Needs Projects Evaluation Methodology

- Projects must be evaluated, scored, and ranked for Cost Feasible Plan development
- Project evaluation methodology is a 3-step process
 1. Technical evaluation against specific elements and criteria in 2040 Goals and Objectives.
 2. Assign weighted project scores for project ranking.
(Complementary projects will be identified/grouped.)
 3. Presentation of technical results/ranked projects to Committee for further evaluation/tweaking.



Needs Projects Evaluation Methodology

Technical Evaluation

Technical evaluation involves a detailed process to isolate and relate projects to “elements” within Goals and Objectives

1. Identify elements and develop GIS data to represent them.
2. Identify metrics to relate projects to elements.
(e.g. transit projects within ¼ mile of elderly areas)
3. Perform GIS analysis to measure projects against elements.
4. Group/Identify complementary projects that do not score similarly.



Needs Projects Evaluation Methodology Scoring

Process carefully designed to provide a fair and balanced scoring across all projects

1. For every element addressed within each Goal, 1 point is awarded to the project.
2. Because there are varying numbers of elements in the different goals, a percentage of addressed elements is computed for each goal (e.g. 2 of 4 elements addressed = 50%).
3. Percentage of addressed elements (by goal) is multiplied by the weight for the goal.
4. The product of step 3 for each Goal is summed for a total weighted score.



Needs Projects Evaluation Methodology

Scoring Example

MDX102:	RCTO Managed Lanes - SR 836
Limits:	SR 826/836 Int. to Just west of I-95
Description:	Managed Lanes

Goal	Goal Score	Goal Weight	Weighted Score
Goal 1	64%	25	15.9
Goal 2	33%	8	2.7
Goal 3	50%	3	1.5
Goal 4	50%	12	6.0
Goal 5	75%	14	10.5
Goal 6	17%	14	2.3
Goal 7	67%	12	8.0
Goal 8	43%	12	5.1
Total:		100	52.1



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Needs Projects Evaluation Methodology - Scoring Example

GOAL 8: Preserve Existing System (3/7) = 43%

- Climate change vulnerability
- Water, sewer, drainage facilities in place to support improvement
- Operational/Maintenance Improvement on Evacuation Facility
- Operational/Maintenance Improvement
- TDM or non capital improvement
- Operational Improvement using technological solutions
- Managed Lanes Improvement

GOAL 7: Optimize Sound Investments (2/3) = 67%

- Improvement Eligible for TRIP or other Regional Funding
- Improvement to local road with connection to a regional facility
- Viable Candidate for P3

GOAL 6: Enhance Connectivity (1/6) = 17%

- Multimodal Improvement on SIS Facility
- Freight improvement addressing intermodal operation integration
- Intermodal freight improvement within 1/2 mile of freight Os and Ds
- Improvement to facility crossing regional jurisdictional boundaries
- Transit/Multimodal Improvement
- Connection to a SIS facility

GOAL 5: Protect the Environment/Quality of Life (3/4) = 75%

- Not within 1/2 Mile of Historic Areas
- Improvement within Urban Expansion Area
- Decreases Dependence on Fossil Fuels
- Is not within 1/2 mile of environmentally sensitive areas

GOAL 1: Improve System & Travel (7/11) = 64%

- Within 1/4 Mile of Health Care Facilities
- Within 1/4 Mile of Recreational Facilities
- Within 1/4 Mile of Educational Facilities
- Within 1/4 Mile of Major Employment Facilities
- Within 1/4 Mile of cultural facilities
- Transit improvement within 1/4 mile of disadvantaged communities
- Transit improvement within 1/4 mile of elderly/disabled communities
- Managed Lanes or Transit Improvement
- Transit improvement outside of current service coverage area
- Managed Lanes or Fixed Guideway Transit
- Connection to or Improvement to Facility of Regional Significance

GOAL 2: Increase Safety (1/3) = 33%

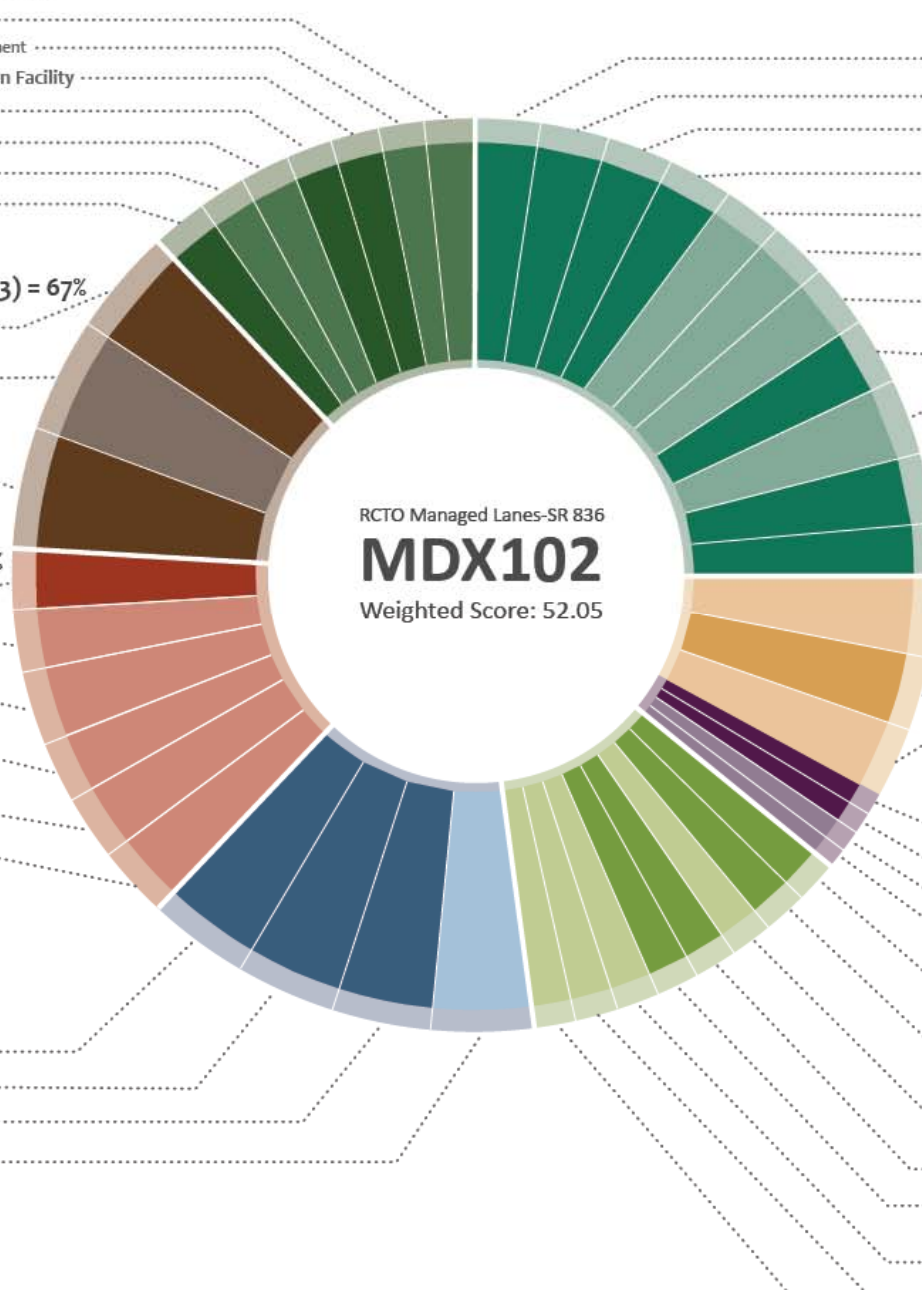
- Primary focus on safety
- Improvement to High Crash Facility
- Primary focus is non-motorized safety

GOAL 3: Increase Security (2/4) = 50%

- Increases Capacity on Evacuation Facility with Access to the Elderly/Disabled
- Increases Capacity on Evacuation Facility
- Primary focus is security
- Security improvement at port/intermodal facility

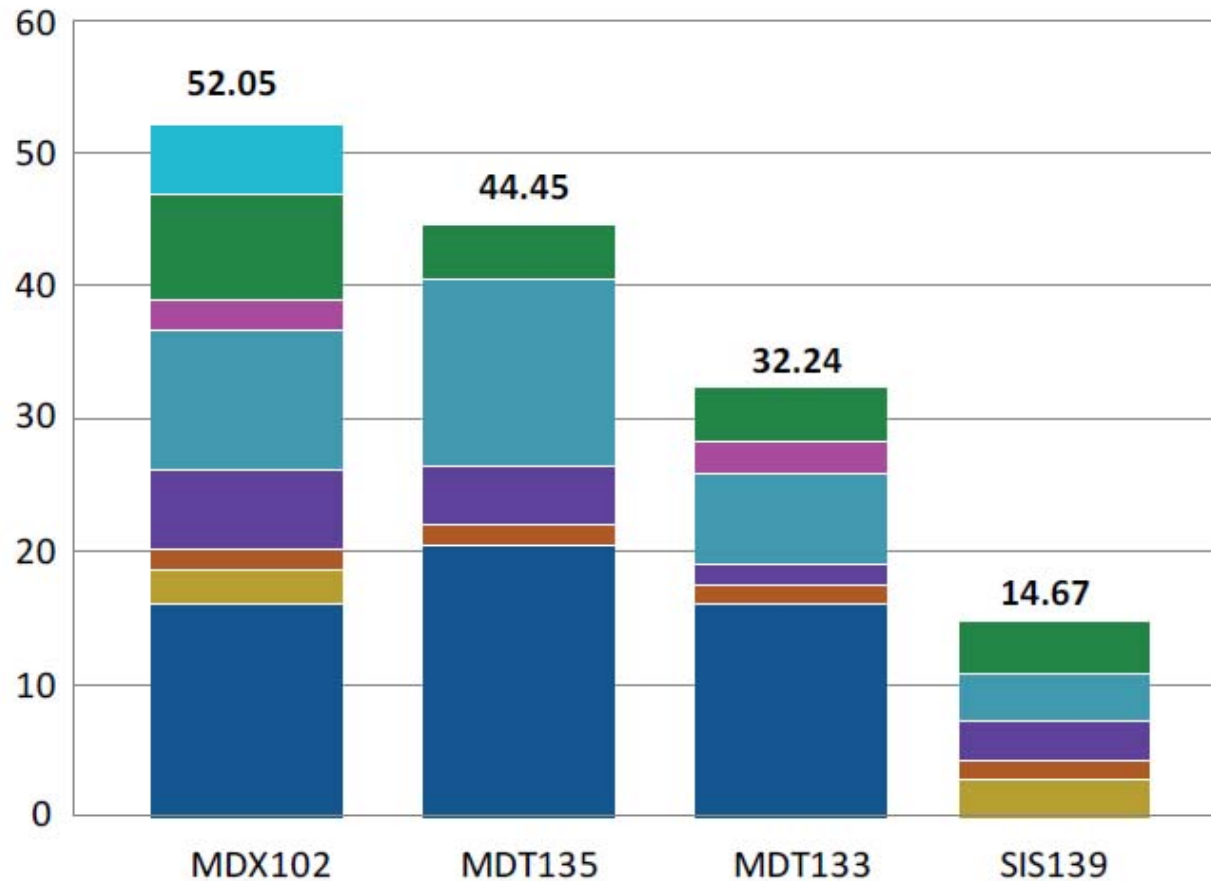
GOAL 4: Economic Vitality (4/9) = 44%

- Access to Tourist Destinations
- Improves Freight Access to Airports/Seaports
- Transit/multimodal improvement with providing access to major employment centers
- Improvement on Freight Facility
- Within 1/4 Mile of Economic Development and Redevelopment Areas
- Highway improvement with access to agriculture
- Improvement in the Port of Miami



Needs Projects Evaluation Methodology

Scoring Example



Weighted Scores for Select Projects

52.05 MDX 102: RCTO Managed Lanes-SR 836
 44.45 MDT 135: Beach Connection (Baylink)
 32.24 MDT 133: Kendall Enhanced Bus
 14.67 SIS 139: Krome Ave/SR 997

- GOAL 8
- GOAL 7
- GOAL 6
- GOAL 5
- GOAL 4
- GOAL 3
- GOAL 2
- GOAL 1



Project Costs

- Detailed project costs needed to build Cost Feasible Plan
 - Planning/Design
 - Right of Way
 - Construction
 - O&M
- Historical project costs for projects included in 2035 LRTP Cost Feasible Plan can be accessed at:
<http://www.miamidade2035transportationplan.com/docs/Miami-Dade2035-FinancialResourcesReportAppB.pdf>
- Project cost estimates not provided will be estimated using FDOT unit cost information



Financial Set-Asides

- Financial Set-Asides to guarantee inclusion of particular categories of projects
 1. Non-Motorized (2030 and 2035 updates)
 2. Congestion Management (2035 update)
 3. Freight (New)
- Set-Asides make sense for one or more reasons, including:
 1. To facilitate a concurrent planning process (Non-Motorized and Congestion Management)
 2. To guarantee inclusion of projects that would otherwise be unfairly prioritized against other types (Freight)



Next Steps

- Project Evaluation
- Project Costs
- Revenue Scenarios
- Public Meetings



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Questions / Comments

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