

*Atlanta Regional*  
**MANAGED LANES**  
Implementation Plan



*Metro Atlanta*  
**OPS**  
OPERATIONAL PLANNING STUDY

Stakeholder Committee Meeting #3  
September 9, 2013

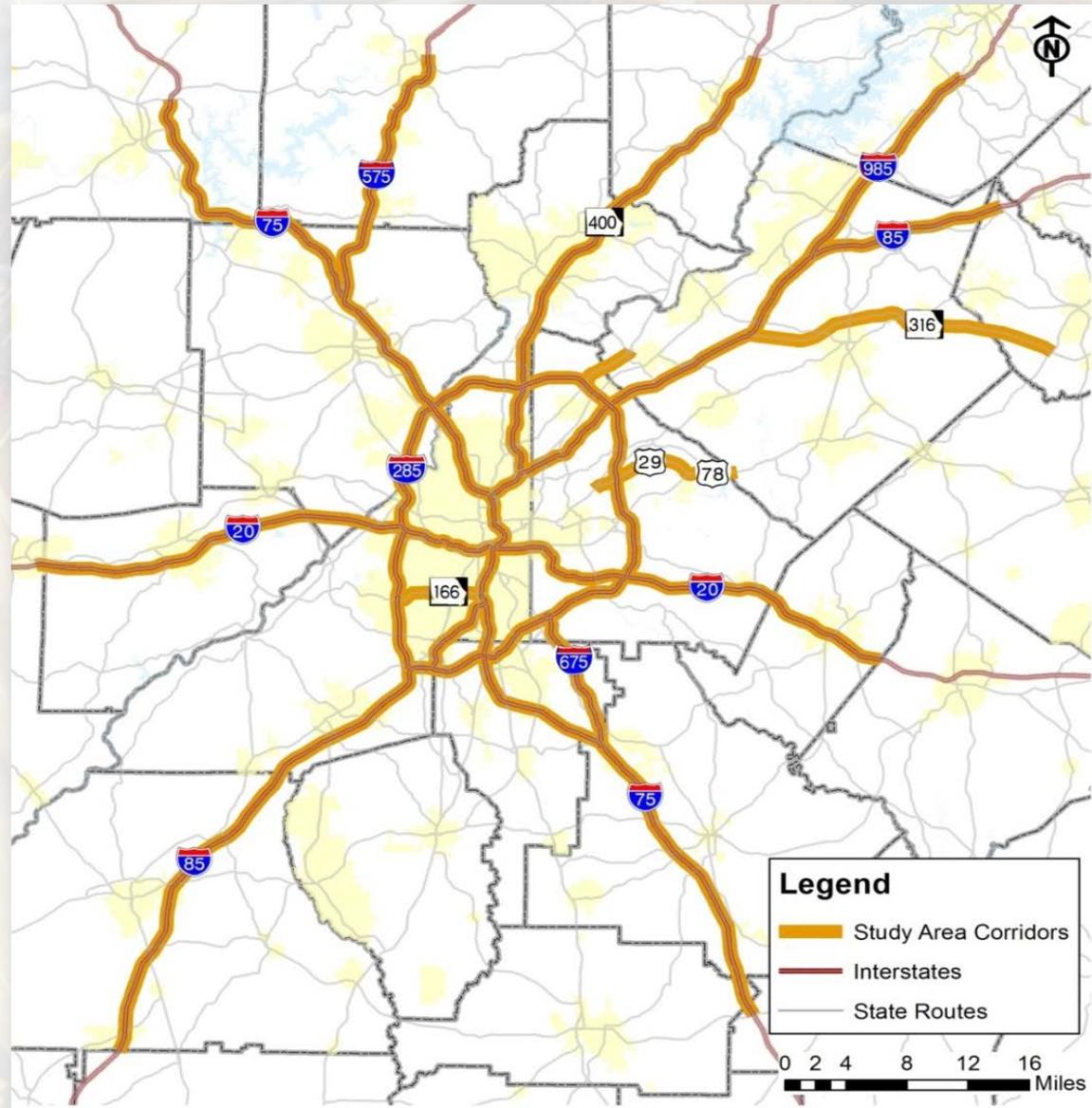


# Agenda

- Opening Presentation
  - OPS
    - Recap
    - Stakeholder Feedback
    - Operational Strategies
  - MLIP
    - Recap
    - Managed Lane Strategies
- Project Prioritization Structure Presentation
  - OPS Overview and Break-Out Session #1
  - MLIP Overview and Break-Out Session #2
- Next Steps

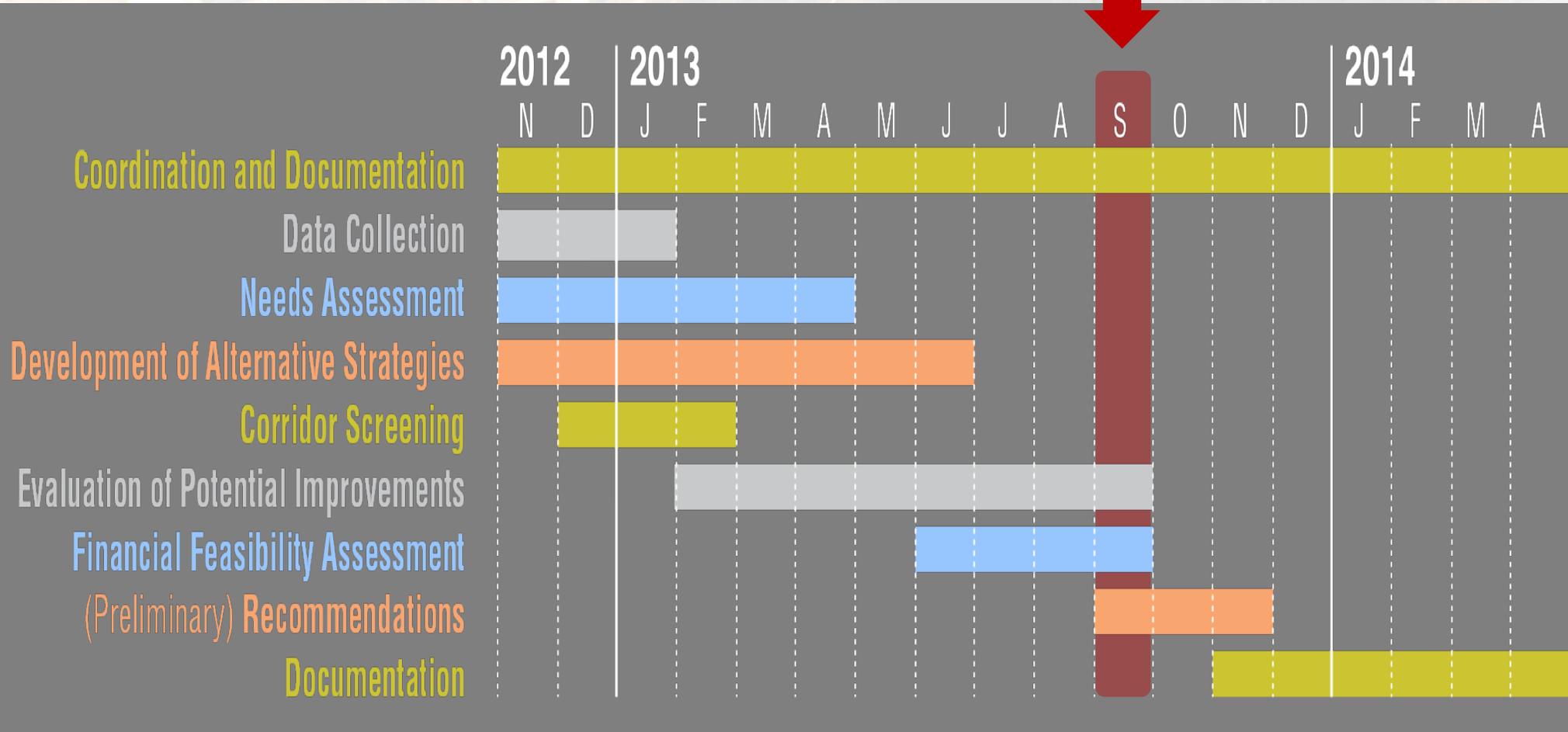
# Study Area

- All limited access facilities in metro Atlanta
- Emphasis on improving the Interstate mainline



# Schedule

We are here



*Metro Atlanta*

# **OPS**



**OPERATIONAL PLANNING STUDY**

# Objectives of OPS

- Identify bottleneck areas
- Identify and evaluate potential low-cost improvements that can be implemented within 6 months to 5 years
- Document a prioritized list of operational projects

# Incorporating Your Feedback

- Thank you for partnering with us and providing valuable input that has contributed to refining these strategy evaluations
- Actions we've taken based on your feedback:
  - ✓ Placed emphasis on ramp meters / transit vehicle preemption in the strategy evaluation
  - ✓ Incorporated bottleneck locations based on recommendations from GRTA bus drivers, HERO unit operators, GDOT's Traffic Management Center, CIDs and Atlanta MPO staff

# System-wide OPS Strategies for Consideration

- 1) Expand ITS support infrastructure to include all limited access facilities
- 2) Advanced queue warning signs at shoulder / moveable barrier locations
- 3) Variable speed limits on limited access facilities with priority at shoulder / moveable barrier locations
- 4) Dynamically change shoulder usage times based on congestion

# System-wide OPS Strategies for Consideration (Cont'd)

- 5) Upgrade technology for CCTV cameras / traffic flow monitoring
- 6) Provide adequate crash investigation sites where shoulders are used
- 7) Modify ramp meters to permit 2 cars per green
- 8) Quick response incident clearance across the region
- 9) Expand number of HERO units if needed
- 10) Modify truck lane restrictions

# Types of Location-Specific Strategies for Consideration

- 1) Variable / dynamic ramp closures (closed to all vehicles v. closed to unauthorized vehicles)
- 2) Auxiliary lanes (new or using shoulder)
- 3) Collector / distributor roads
- 4) Modifications to frontage road access
- 5) Channelization
- 6) Re-striping
- 7) Interchange reconfigurations (Diverging Diamond Interchanges, etc.)

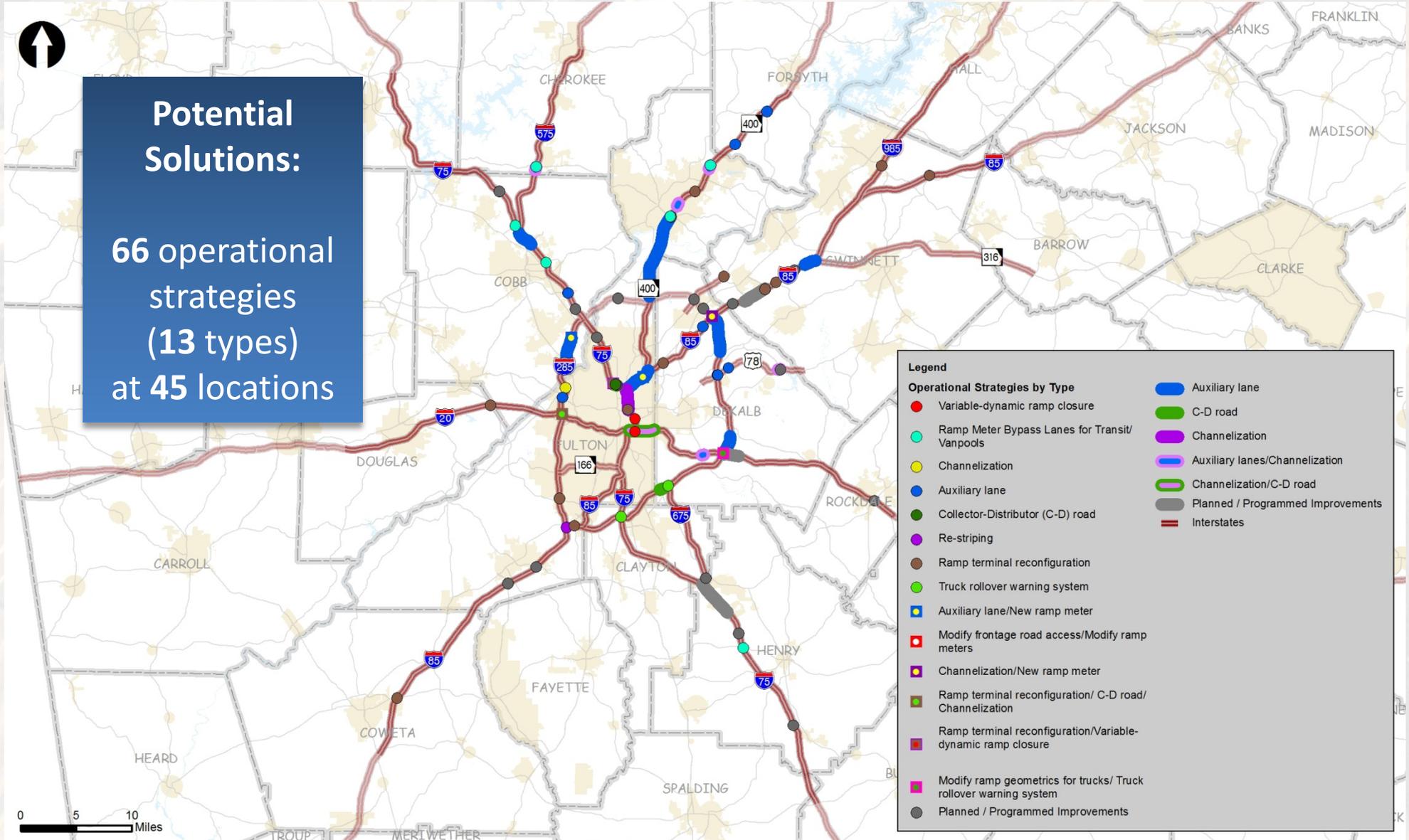
# Types of Location-Specific Strategies for Consideration (Cont'd)

- 8) Turning prohibitions
- 9) Additional ramp meters
- 10) Modify existing ramp meter operations
- 11) Modify ramp geometrics, with a focus to better accommodate trucks
- 12) Automated truck rollover warning systems
- 13) Ramp meter bypass lanes for transit and vanpools

# Potential OPS Strategies

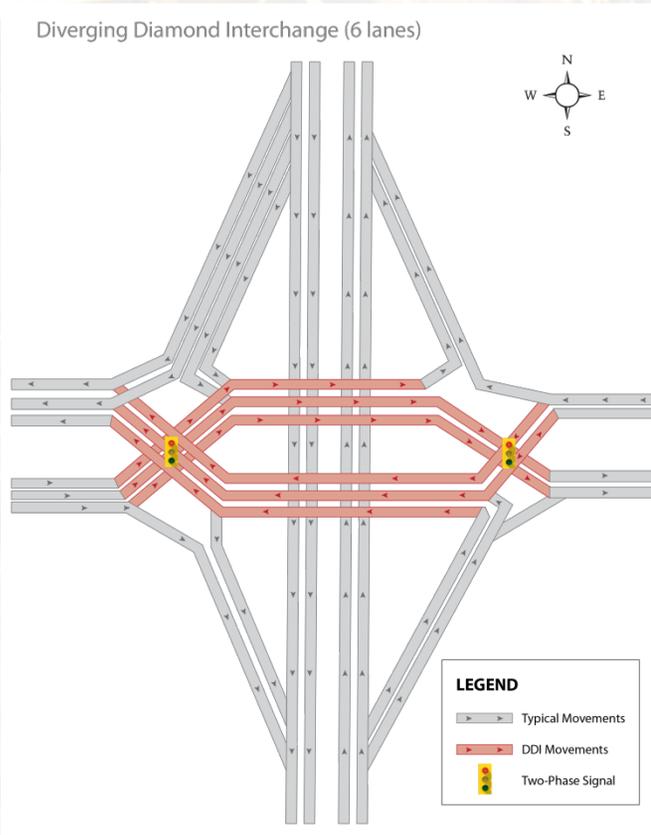
## Potential Solutions:

66 operational strategies (13 types) at 45 locations

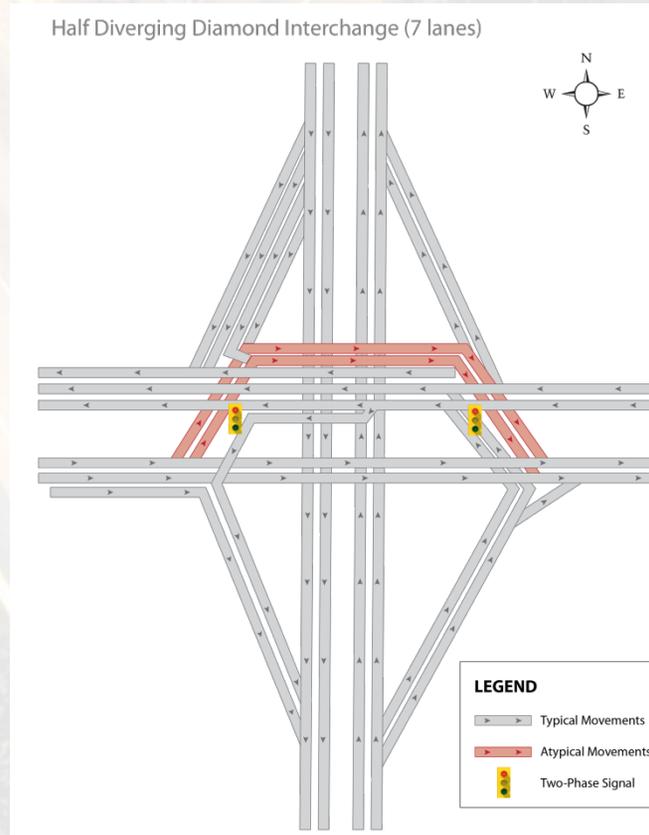


# Innovative Interchange Reconfiguration Options

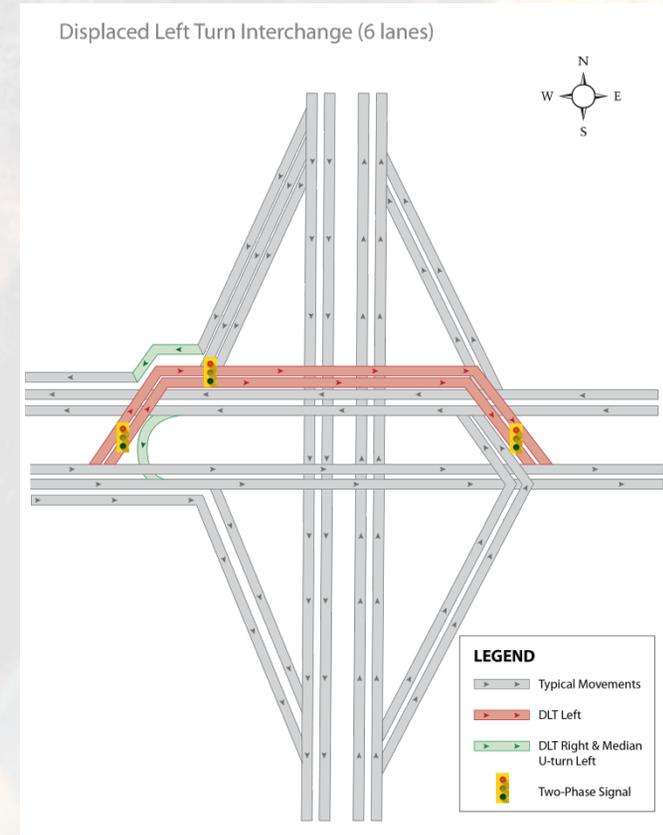
## Diverging Diamond Interchange (DDI)



## Partial DDI



## Modified Displaced Left Turn



# Project Prioritization Structure Goals



# Goals (Cont'd)

## NATIONAL MAP-21

1. Safety
2. Infrastructure condition
3. Congestion reduction
4. System reliability
5. Freight movement and economic vitality
6. Environmental sustainability
7. Reduced project delivery delays

## STATE

### Governor's Strategic Goals

1. **MOBILE:** Transporting people and products by improving the movement of people and goods across and within the state, expanding GA's role as a major logistics hub for global commerce, and leveraging public-private partnerships and improve intergovernmental cooperation for successful infrastructure development.
2. **GROWING:** Creating jobs and growing businesses
3. **HEALTHY:** Accessible care and active lifestyles
4. **SAFE:** Protecting the public's safety and security by reducing injury and loss of life on GA's roads

# Goals (Cont'd)

## LOCAL/REGIONAL GOALS

ARC Plan2040 RTP

1. Lead as the global gateway to the South
2. Encourage healthy communities
3. Expand access to community resources

## LOCAL/REGIONAL GOALS

MLSP/MLIP

1. Protect mobility
2. Maximize person/vehicle throughput
3. Minimize environmental impacts
4. Provide a financially feasible system
5. Design and maintain a flexible infrastructure for varying lane management

## LOCAL/REGIONAL GOALS

SSTP

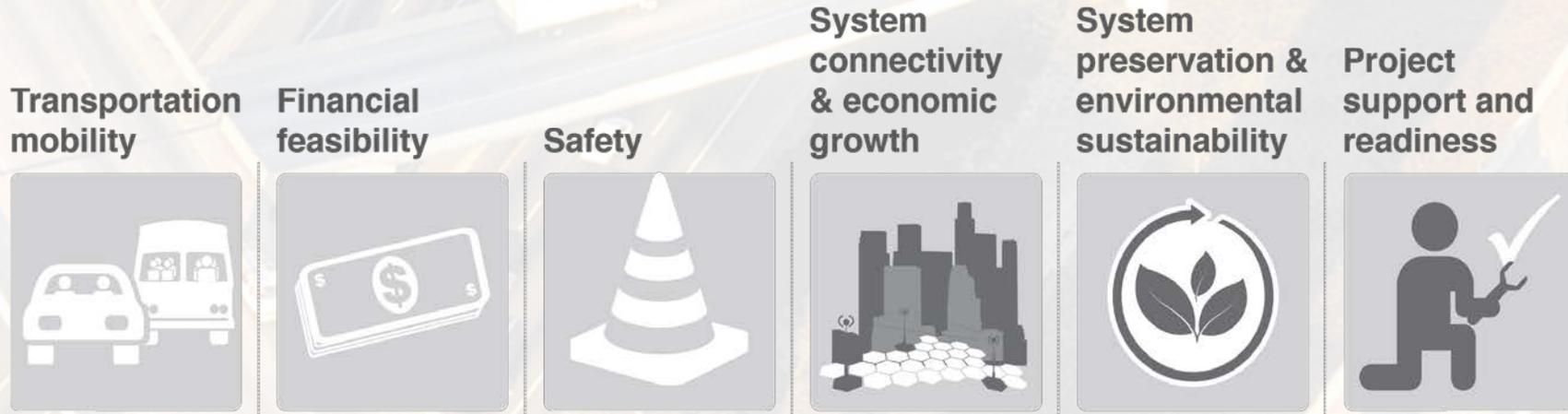
People Mobility in Metro Atlanta

1. Increase number of people who can reach a major employment center within 45 minutes
2. Increase number of people taking reliable trips
3. Reduce financial burden of wasted hours & fuel caused by traffic congestion

Metro Atlanta and Statewide Freight and Logistics

4. Fix bottlenecks
5. Improve interregional and last-mile connectivity

# OPS Project Prioritization Structure



		Transportation mobility	Financial feasibility	Safety	System connectivity & economic growth	System preservation & environmental sustainability	Project support and readiness
NATIONAL	MAP 21	Goals 3 & 4	-	Goal 1	Goals 3 & 5	Goal 6	Goal 7
STATE	Governor's Strategic Goals	Goal 1	Goal 1	Goal 4	Goal 2	-	-
LOCAL/REGIONAL	ARC Plan2040 RTP Goals	Goal 3	Assumed*	Goal 2	Goal 1	Goal 1	Assumed*
	SSTP**	Goals 1, 2, 3 & 4	-	Goal 7	Goals 3 & 8	-	-

\* Assumed or accounted for as part of the MPO TIP and RTP planning process.

\*\*Statewide Strategic Transportation Plan (SSTP) in the Atlanta region.

# OPS Preliminary Project Prioritization Structure

No.	Themes	Performance Measures
1	Transportation mobility	Vehicle throughput
		Changes in travel speeds or travel time savings
		Reduction of vehicle delay
		Facilitation of transit options
2	Financial feasibility	Cost
		Benefit/cost ratio
3	Safety	Anticipated reduction of crashes
		Anticipated reduction of incident response time
4	Connectivity and economic growth	Facilitation of current major freight movement
		Connectivity to current major employment centers
5	System preservation and environmental sustainability	System preservation
		Level of environmental impacts
6	Project support and readiness	Project readiness
		General constructability and schedule

# Break-Out Group Instructions

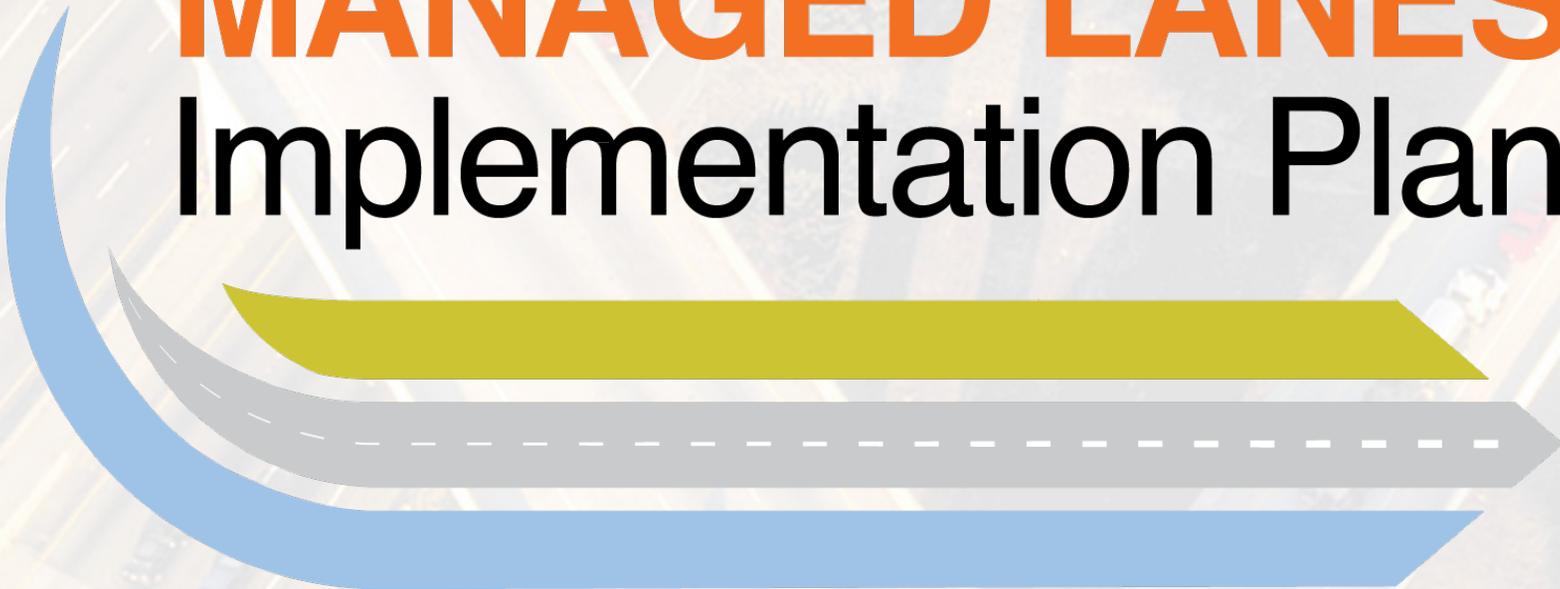
- Purpose of Break-Out Group
  - Discuss and receive input on the project prioritization structure
  - Which themes and elements are most important to you in evaluating these strategies?
- Instructions
  - Two break-out sessions
  - Participants will stay at their tables for each session
  - Each facilitator will report back the group's discussion highlights



# Break-Out Group #1 OPS Discussion

*Atlanta Regional*

**MANAGED LANES**  
Implementation Plan



# Objectives of MLIP

- Update MLSP as part of Managed Lanes Implementation Plan
- Evaluate new lanes, as well as lower cost priced managed lane solutions, such as shoulder lanes and movable barriers
- Incorporate preliminary recommendations, as appropriate and available, into RTP and TIP in the Fall of 2013; MLIP will wrap up in the Spring of 2014 with final recommendations

# MLIP Status Update

## System-Level Model Traffic & Revenue Analysis

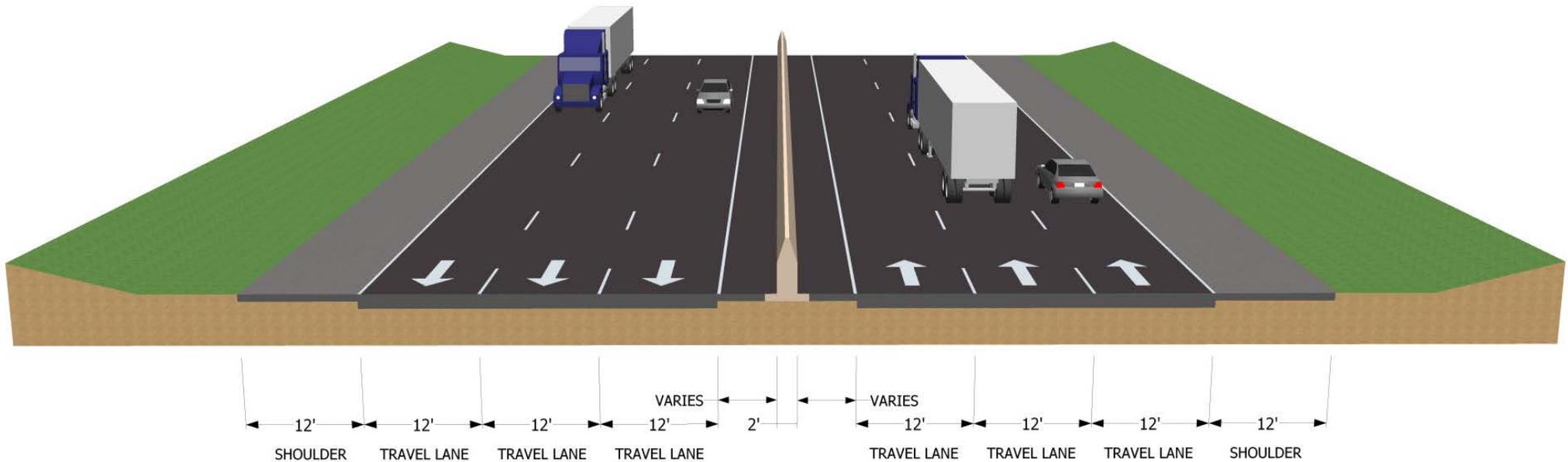
- New lane
- Priced shoulder lane
- Moveable barrier lane

## Initiated cost estimates (roadway and tolling)

- Capital
- O&M

# Existing Condition

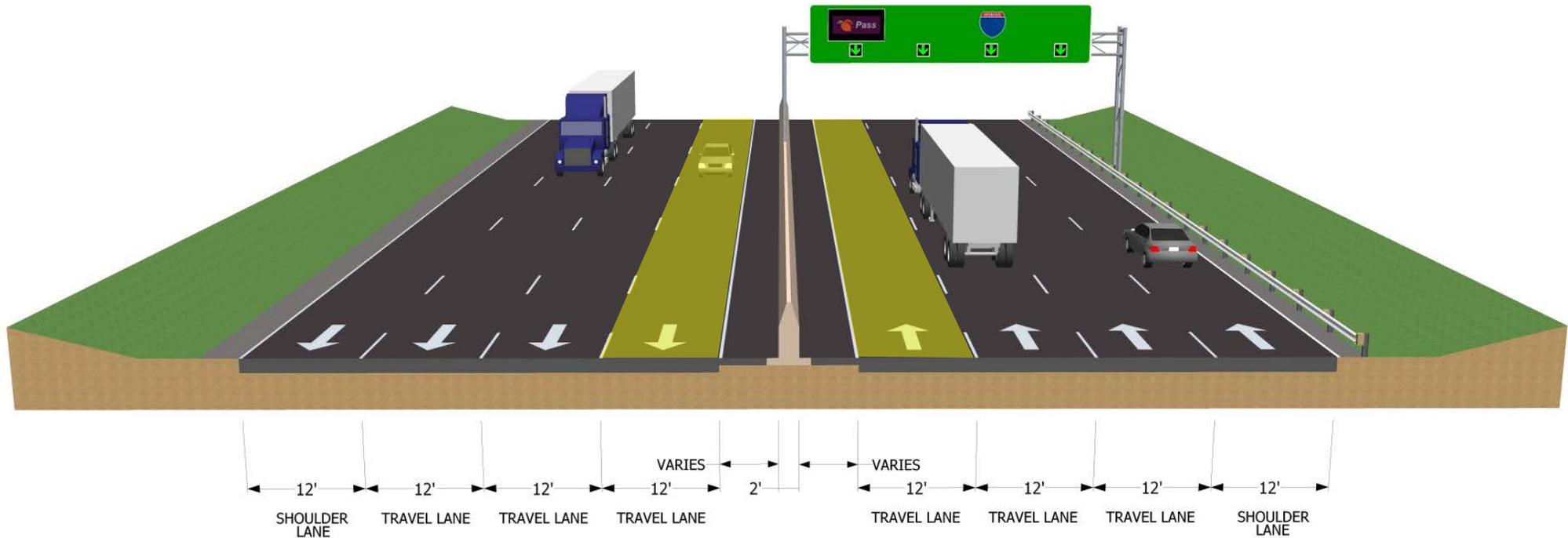
*Existing Condition*



# MLIP Strategies for Consideration

## *Priced Shoulder Lane*

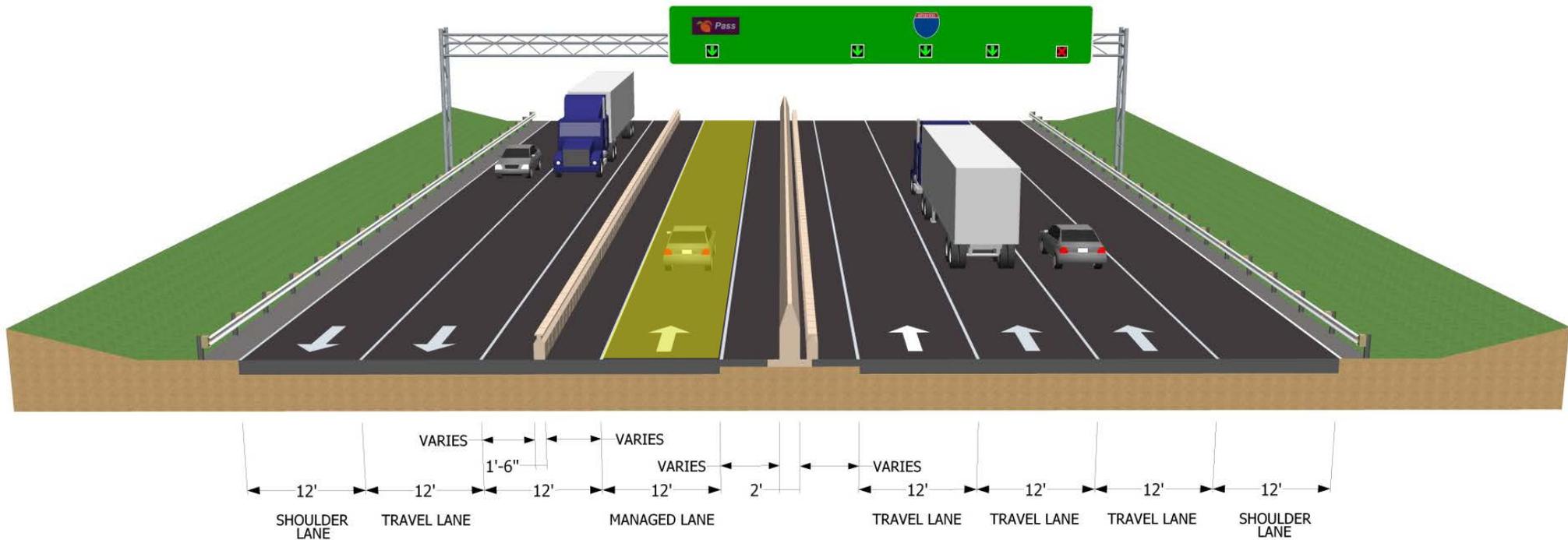
*Shoulder Lane Open*



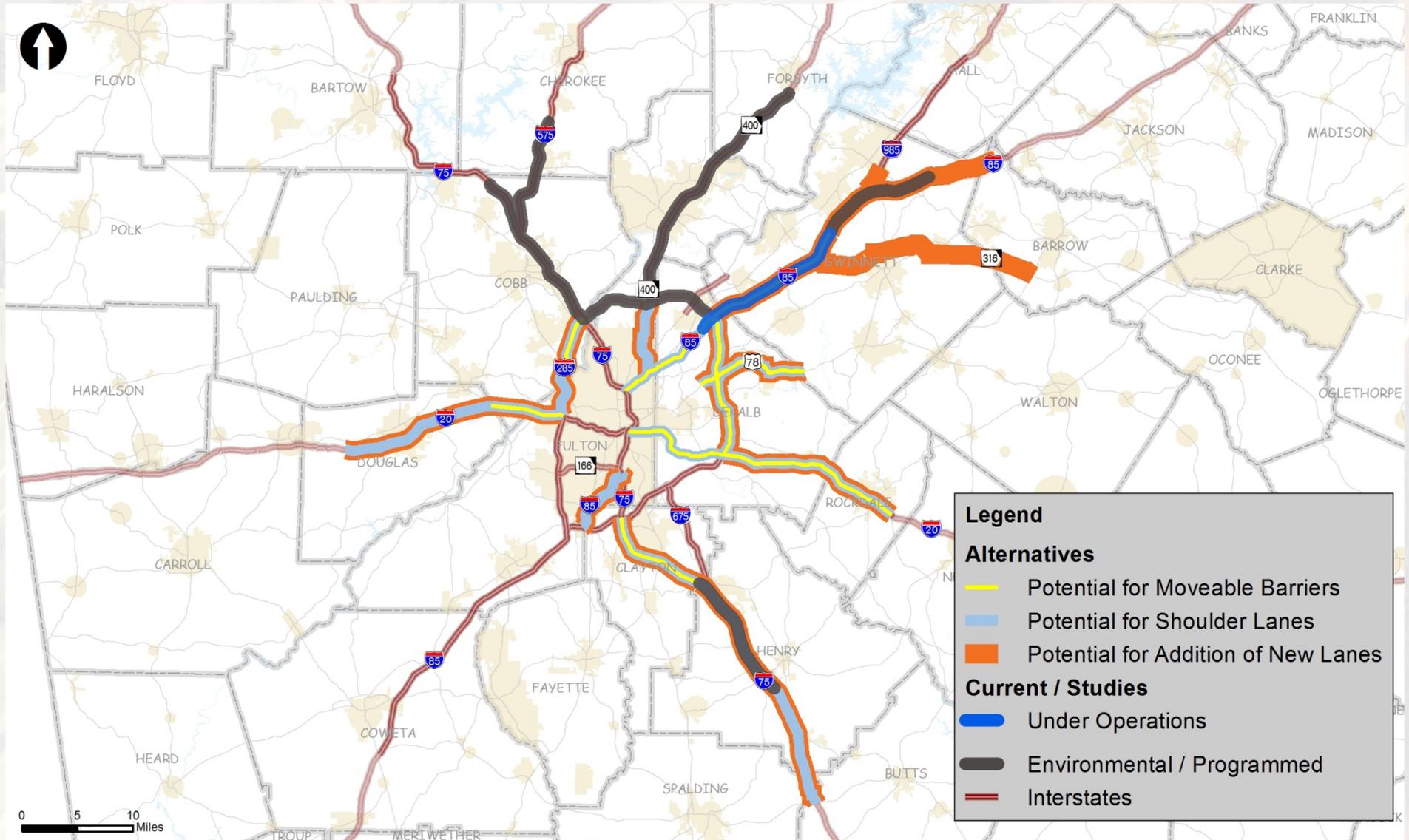
# MLIP Strategies for Consideration

## *Moveable Barrier*

*Moveable Barrier (including shoulder usage)  
Departing Vehicle Deployment*



# MLIP Strategies for Consideration (Cont'd)



# MLIP Project Prioritization Structure



	Transportation mobility	Financial feasibility	System connectivity & economic growth	System preservation & environmental sustainability	Project support and readiness	
NATIONAL	MAP 21	Goals 3 & 4	-	Goals 3 & 5	Goal 6	Goal 7
STATE	Governor's Strategic Goals	Goal 1	Goal 1	Goal 2	-	-
LOCAL/REGIONAL	MLSP/MLIP Goals	Goals 1 & 2	Goal 4	Goal 1	Goal 3	Goal 5
	ARC Plan2040 RTP Goals	Goal 3	Assumed*	Goal 1	Goal 1	Assumed*
	SSTP**	Goals 1,2 & 3	-	Goals 3 & 8	-	-

\* Assumed or accounted for as part of the MPO TIP and RTP planning process.

\*\*Statewide Strategic Transportation Plan (SSTP) in the Atlanta region.

# MLIP Preliminary Project Prioritization Structure

No.	Themes	Performance Measures
1	Transportation mobility	Vehicle throughput and person throughput
		Changes in travel speeds or travel time savings
		Corridor reduction of vehicle delay
		Facilitation of transit options
2	Financial feasibility	Revenue/mile
		Cost/mile
		Project financing index (PFI)
3	System connectivity and economic growth	Managed lane system connectivity
		Connectivity to major employment centers
		Jobs accessed within 45 minutes of travel by car or transit
4	System preservation and environmental sustainability	System preservation
		Flexible lane management
		Level of environmental impacts
5	Project support and readiness	Project readiness
		General constructability and schedule
		Compatibility with regional plans

# Break-Out Group #2

## MLIP Discussion

# Next Steps

- Complete evaluation of MLIP and OPS projects based on refined project prioritization structure
- Conduct Final Stakeholder Committee Meeting (#4)
  - Share preliminary recommendations
  - Winter 2013/2014
- Develop financial plan for managed lane projects
- Complete documentation and corridor profiles
- Continue coordinating with ARC on PLAN2040 RTP Update throughout the process

# Questions?

