

Atlanta Regional
MANAGED LANES
Implementation Plan

Metro Atlanta
OPS
OPERATIONAL PLANNING STUDY

Stakeholder Committee Meeting #2
March 25, 2013

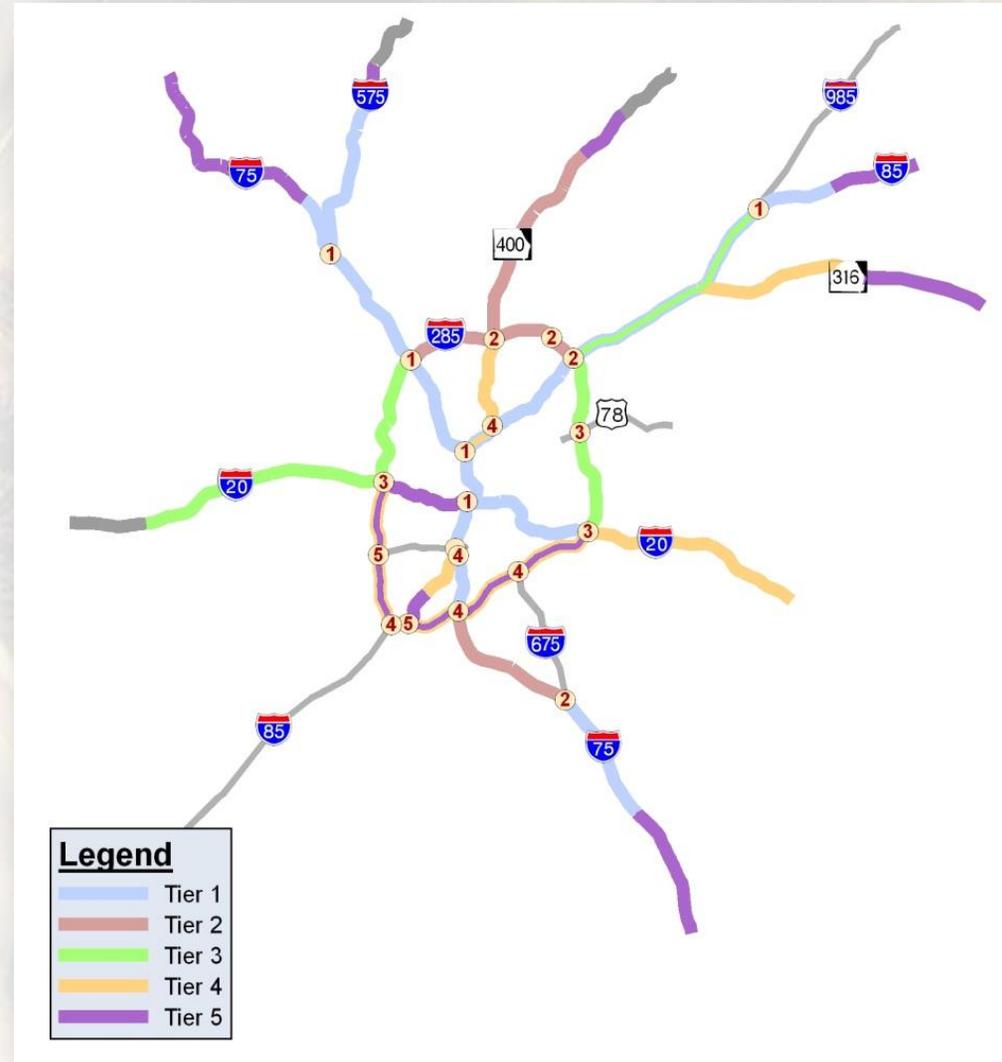


Agenda

- Opening Presentation
 - Overview of Studies
 - Status Update
 - Existing Needs
 - Corridor Screening Process
 - MLIP Projects for Evaluation
 - OPS Projects for Evaluation
- Break-out Groups
- Recap of Break-out Group Discussions
- Closing Presentation

Overview – MLIP

- Previous Atlanta Regional Managed Lanes System Plan (MLSP) Goals:
 - Protect mobility
 - Maximize person/vehicle throughput
 - Minimize environmental impacts
 - Provide a financially feasible system
 - Design and maintain a flexible infrastructure for varying lane management



Overview – MLIP

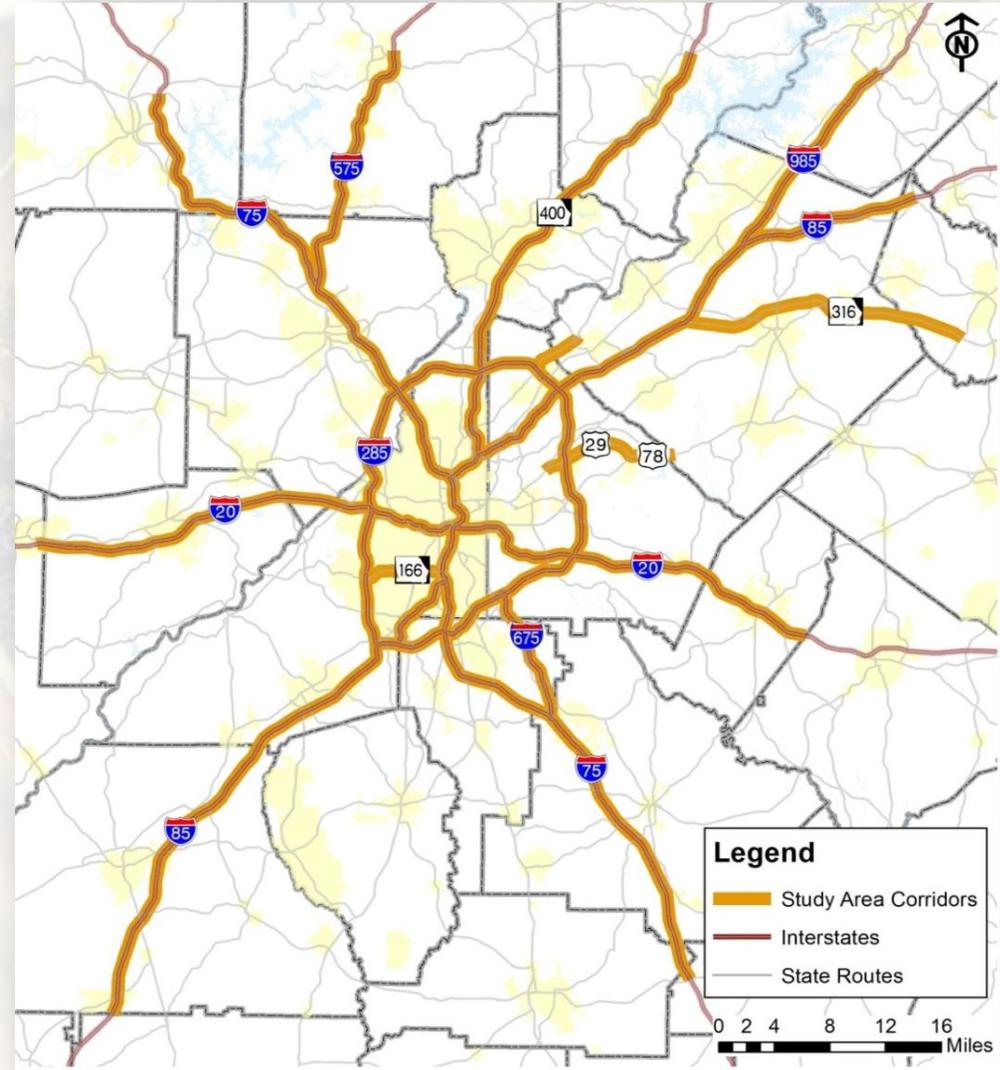
- Update MLSP as part of Managed Lanes Implementation Plan (MLIP) to:
 - Build upon previous MLSP goals
 - Reflect current funding constraints
 - Identify feasible locations for managed lane projects
 - Redefine and reprioritize projects from the previous plan based on current and future needs
 - Prioritize list of managed lane projects and accompanying financing strategies (P3 and traditional funding sources)
- Incorporate preliminary recommendations into RTP and TIP update, as appropriate during 2013-2014

Overview – OPS

- Identify bottleneck areas
- Identify and evaluate potential low-cost improvements
- Document a prioritized list of operational projects

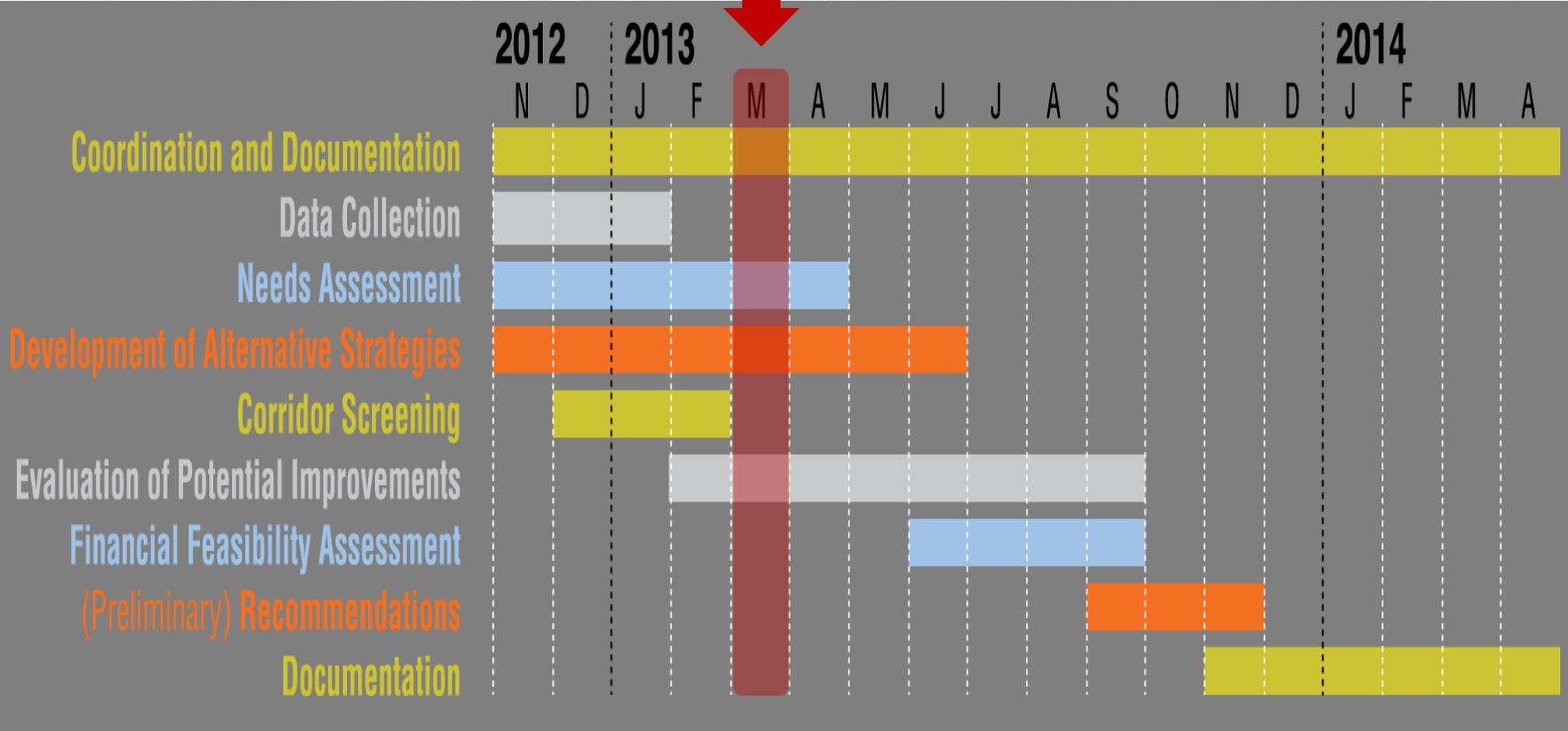
Study Area

- All limited access facilities in metro Atlanta
 - Interchanges
 - Up to 5 selected arterials within the interchange area of influence



Schedule

We are here



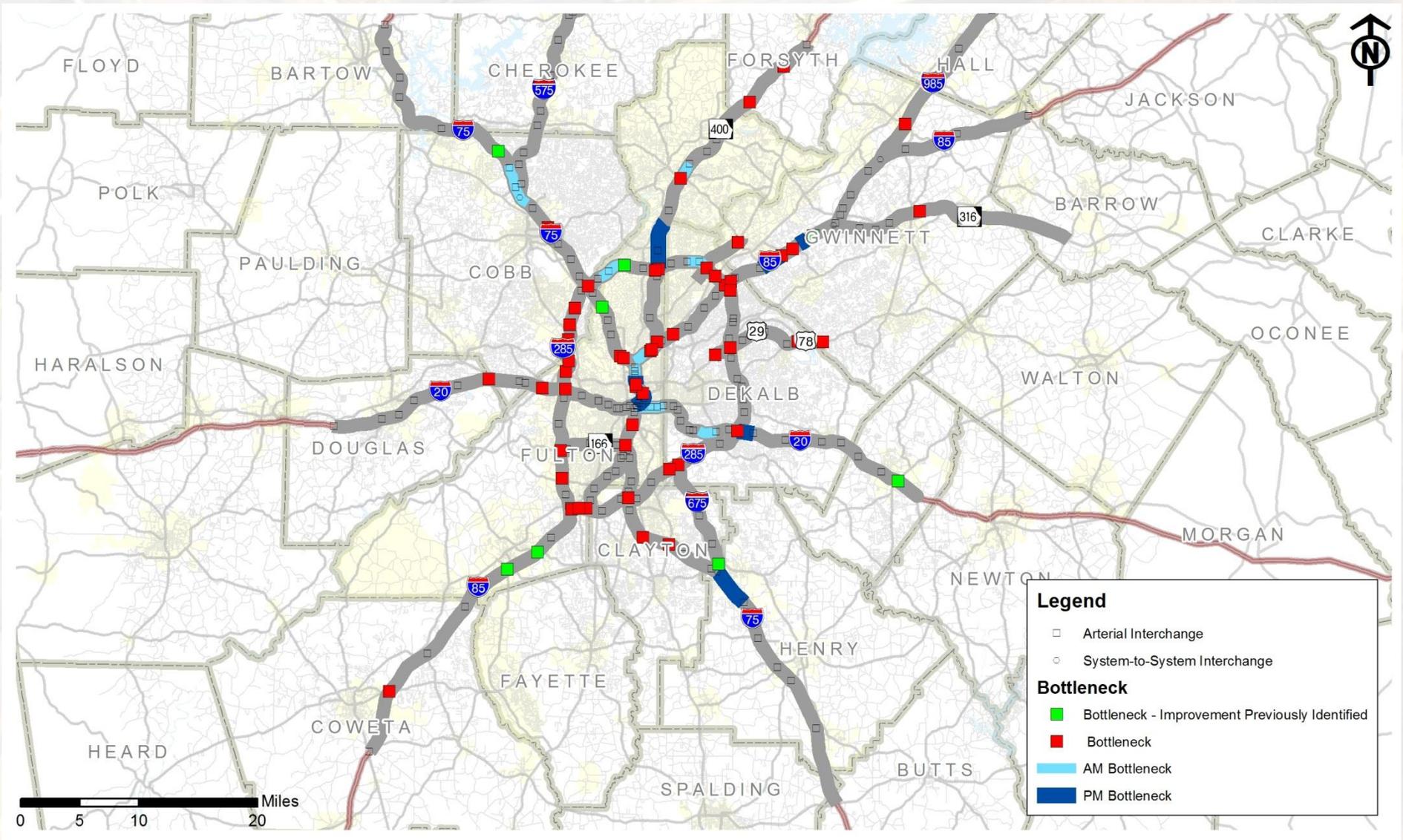
Status Update

- **Completed:**
 - Completed initial windshield survey and directional split analysis
 - Post-processed speed and volume data
 - Determined capacity and bottleneck needs
 - Completed corridor screening process
 - Developed managed lane candidate strategies for evaluation
- **Current Activities:**
 - Developing operational strategies for evaluation

Existing Needs - Causes of Bottlenecks

- High volumes
- Weaving
- Lane drops/additions
- Last minute decision making
- Lack of storage space at ramp terminals and/or high turn volumes
- Tight turning radii and/or steep grade on ramps
- Frontage road access
- Limited access facility terminates at signalized intersection
- Suspected drainage issues

Existing Needs – Bottleneck Locations

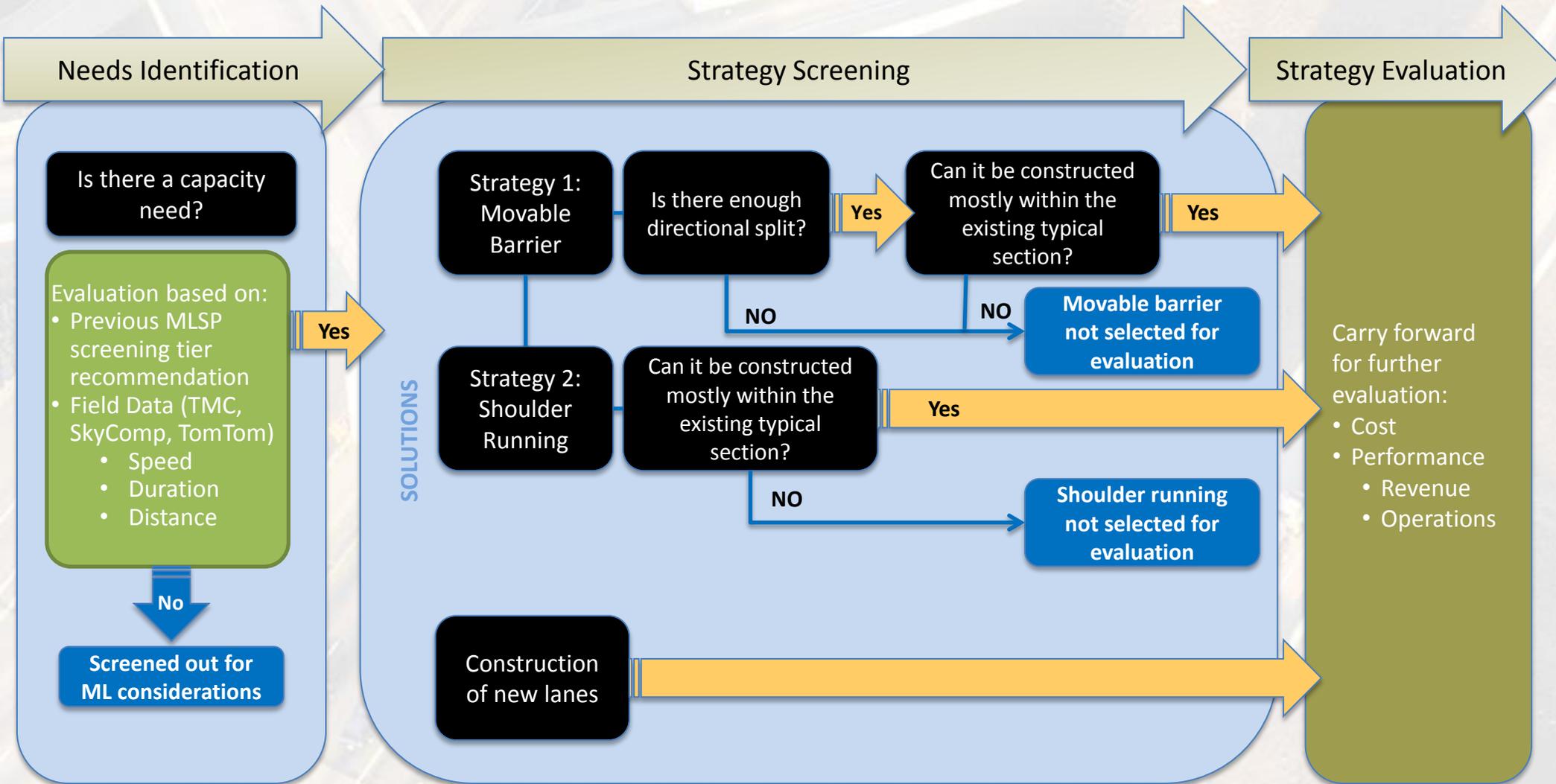


Corridor Screening Process

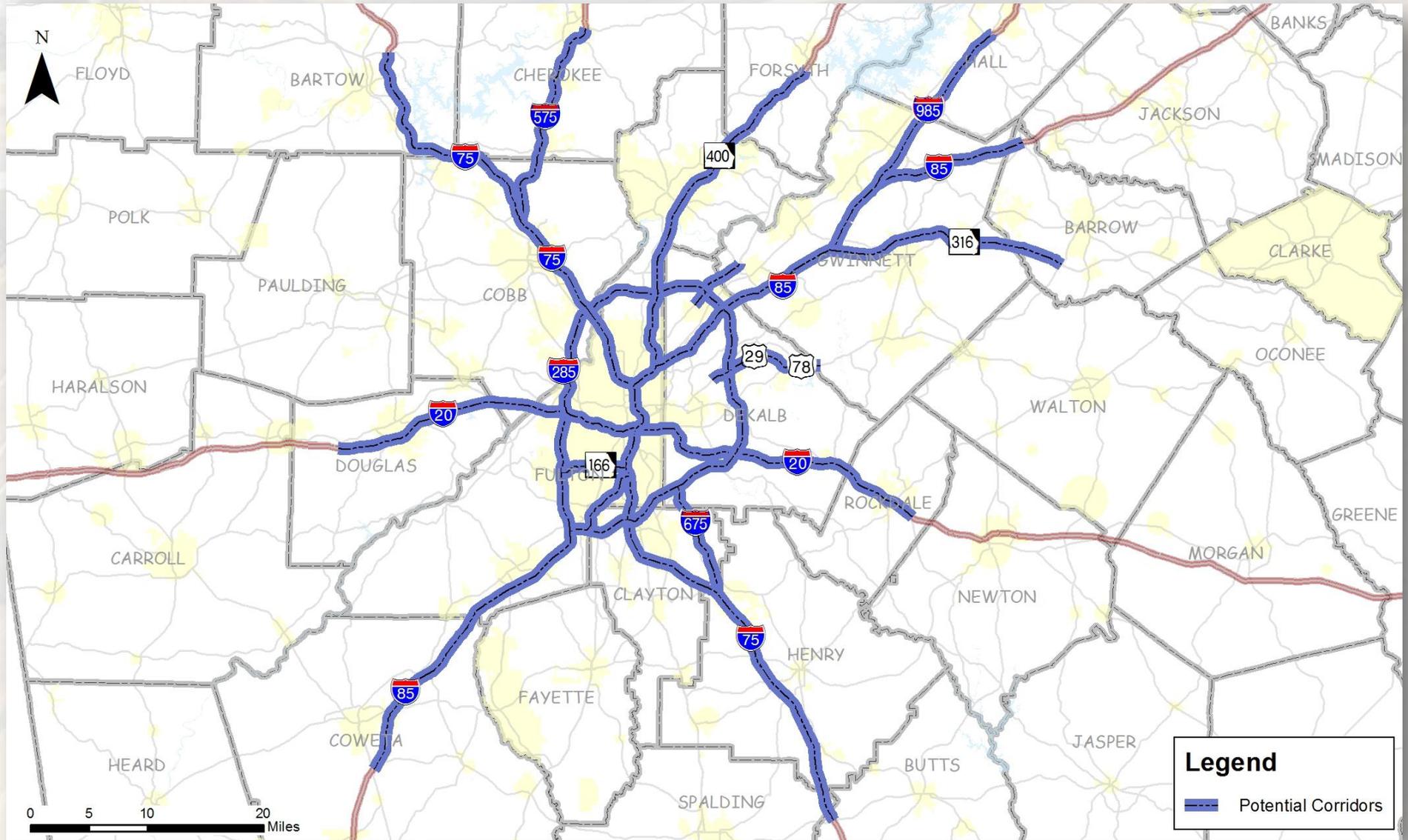
- Recurring vs. nonrecurring congestion locations
- Physical limitations in median and/or shoulder
- Estimated benefit
- New capacity (i.e. shoulder lanes or reversible lanes during the peaks) evaluated as part of MLIP
- Operational improvements evaluated as part of OPS



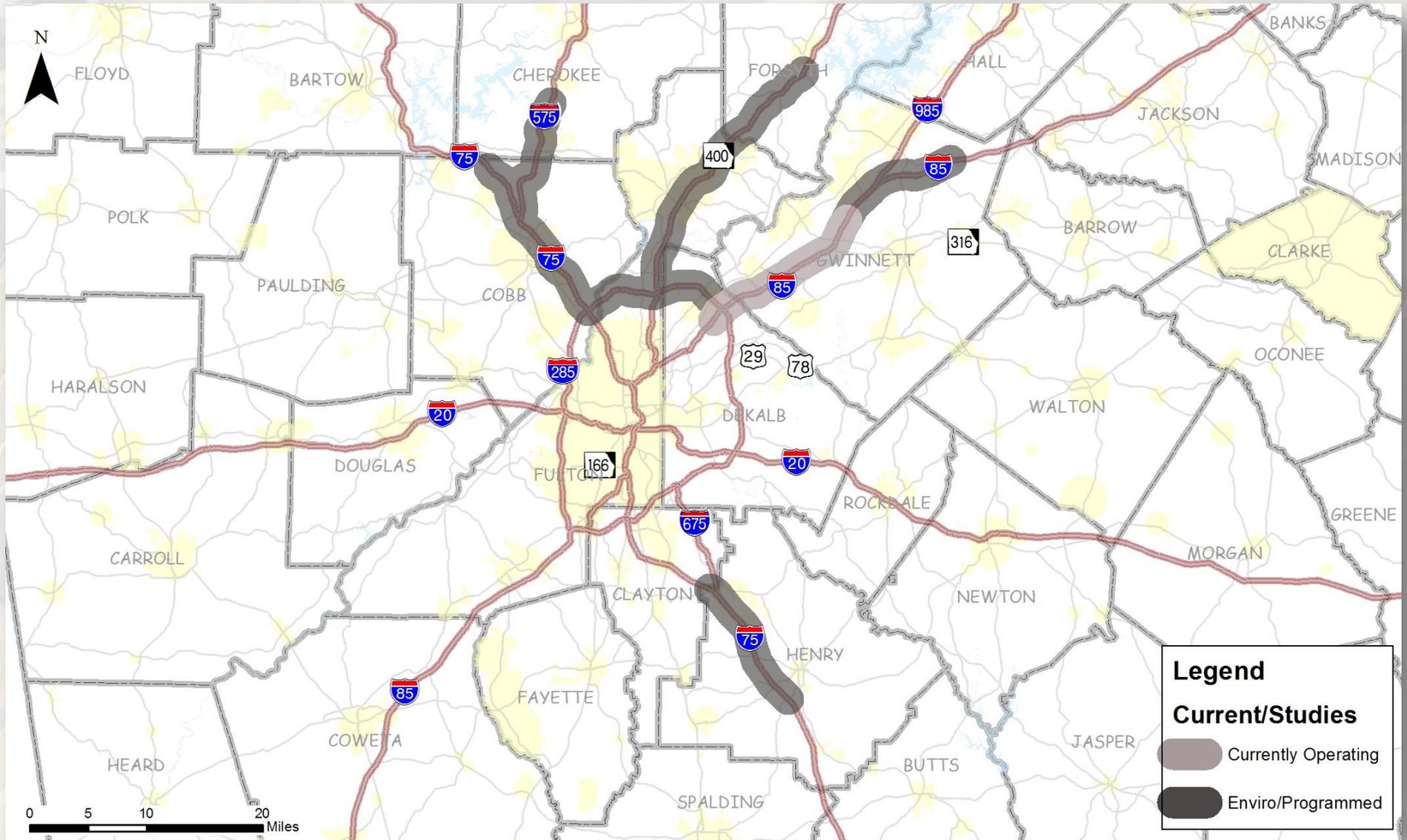
Managed Lane Strategy Screening



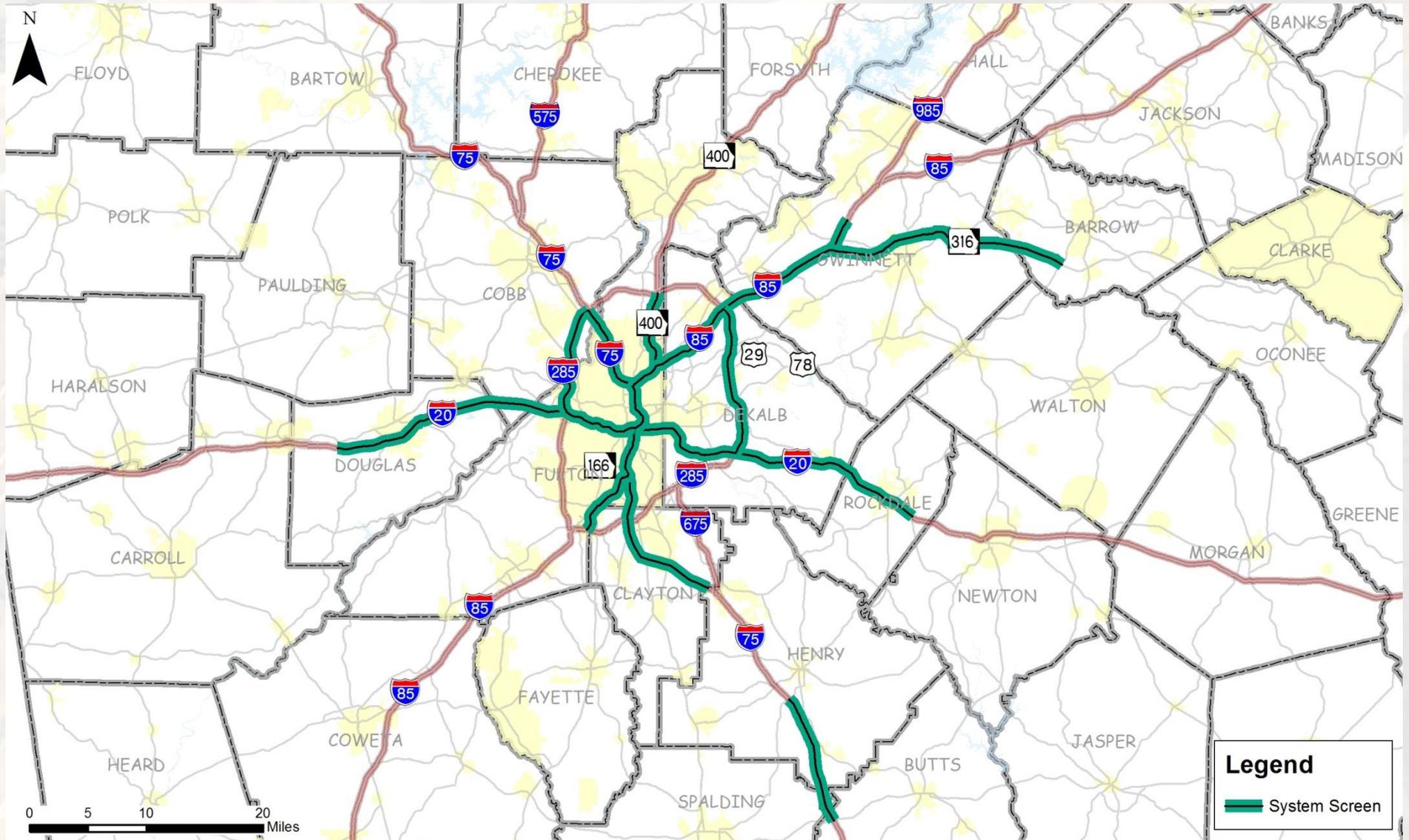
Potential Managed Lane Corridors



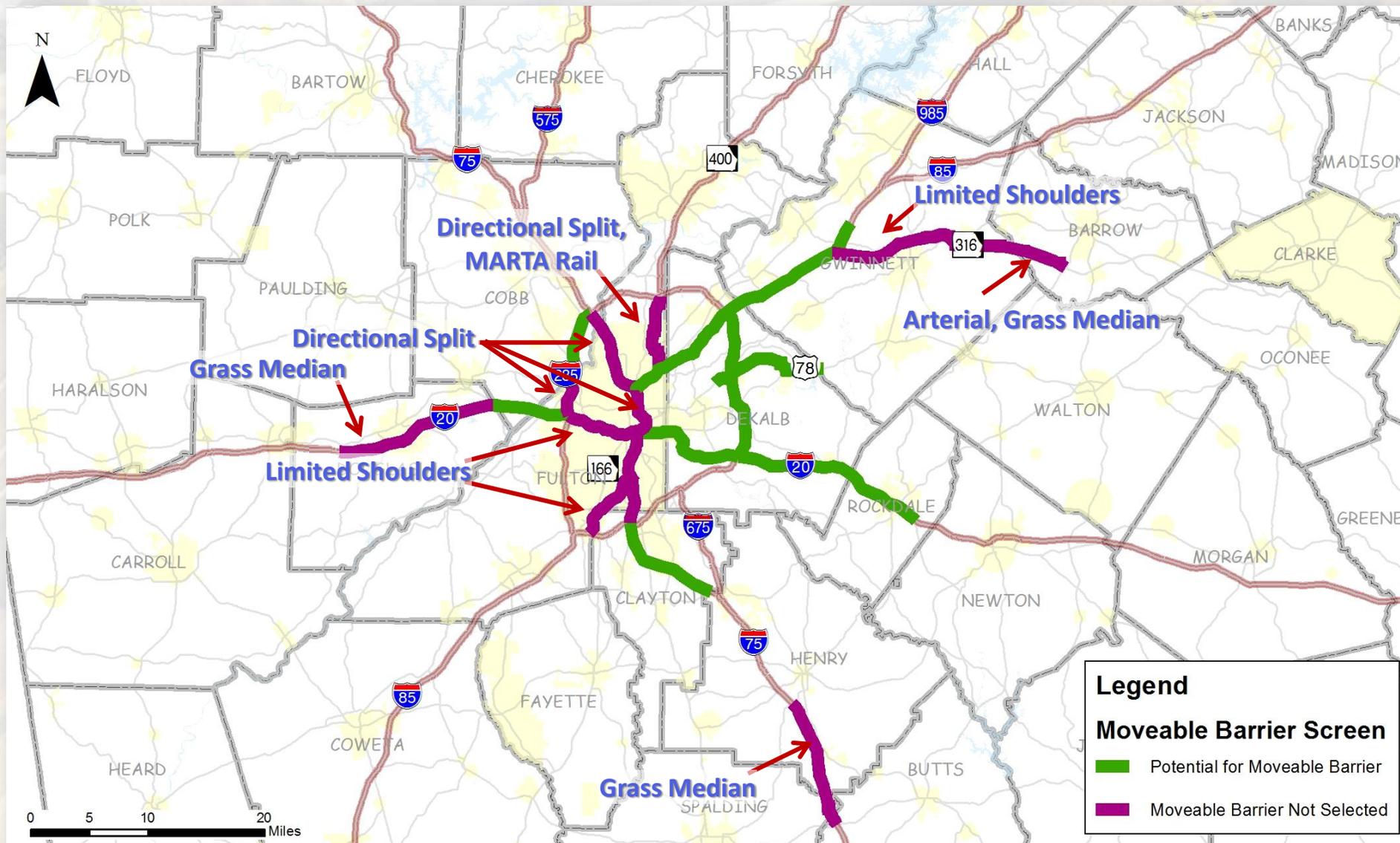
Corridors Currently in Operation or Under Study



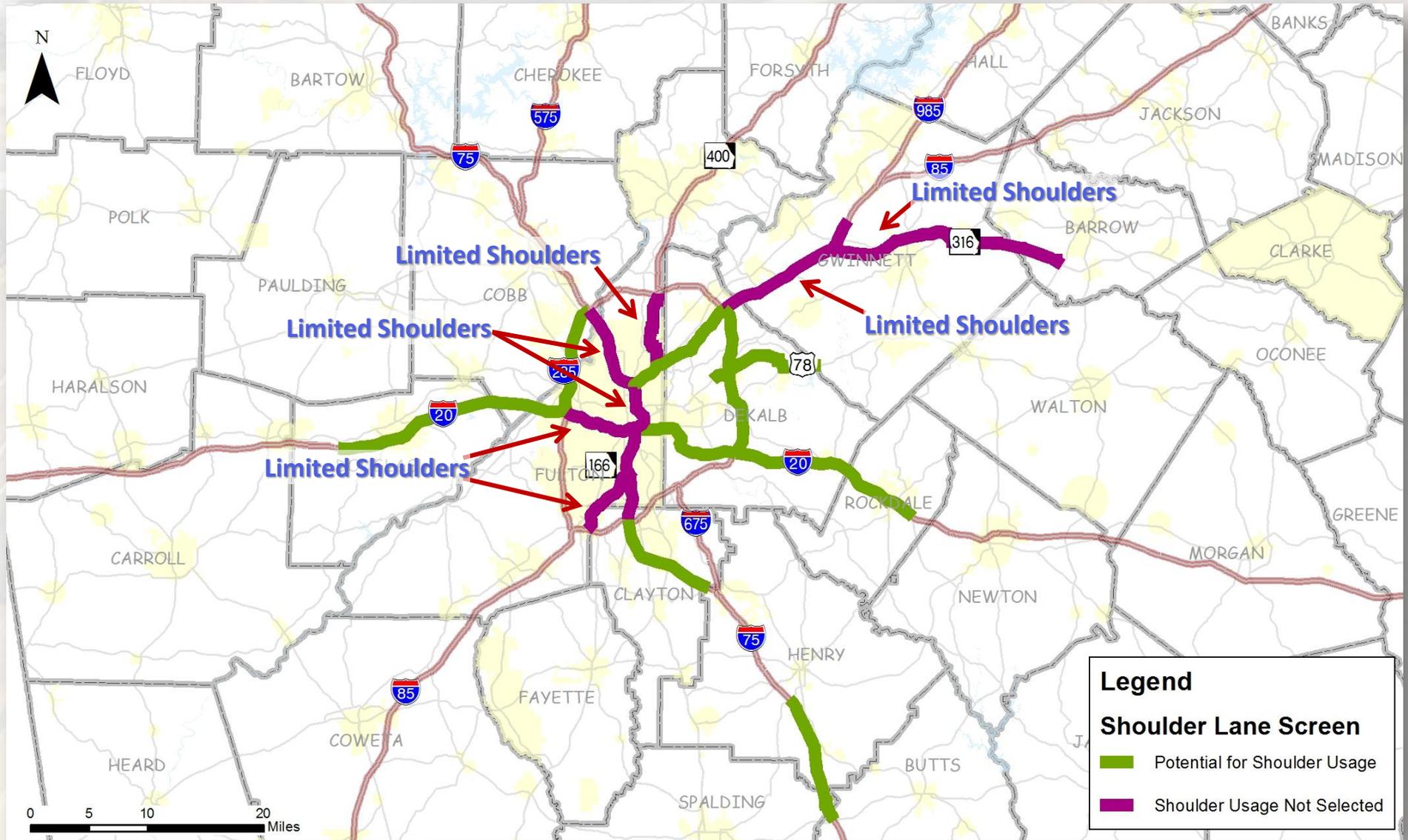
Corridors Selected for Shoulder/Moveable Barrier Evaluation



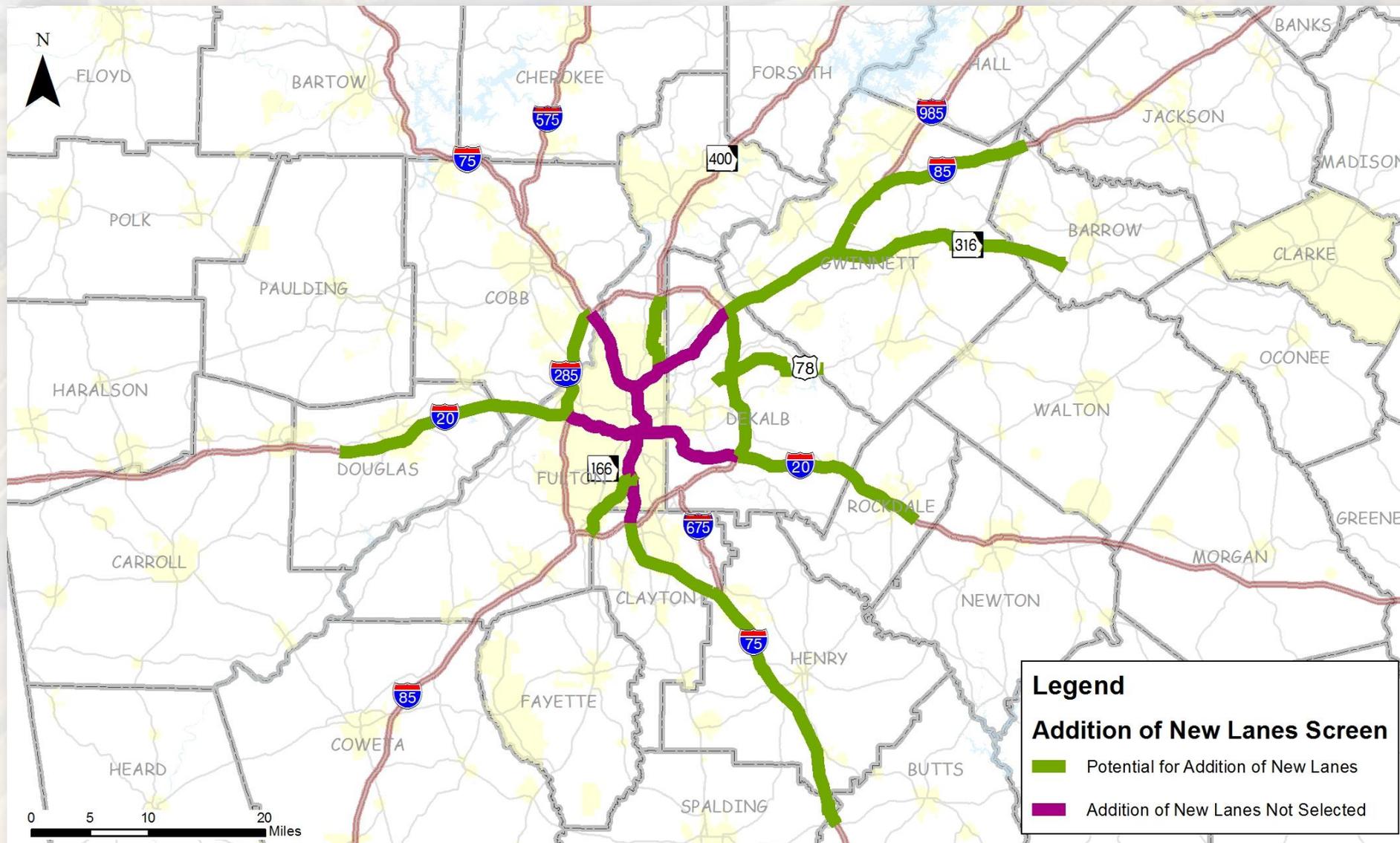
Corridors Selected for Moveable Barrier Evaluation



Corridors Selected for Shoulder Lane Evaluation



Corridors Selected for Additional Lanes Evaluation



OPS Solutions

- System-wide solutions for consideration
- 75+ bottleneck locations indentified
- 12 types of location-specific solutions identified for evaluation
- Some locations include more than one solution for consideration

System-wide OPS Strategies for Evaluation

- 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 Evaluation

- 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

Location-Specific OPS Strategies for Evaluation

- 1) Variable/dynamic ramp closures (closed to all vehicles v. closed to unauthorized vehicles)
- 2) Auxiliary lanes (new or using shoulders)
- 3) Collector/distributor roads
- 4) Modifications to frontage road access
- 5) Channelizations
- 6) Re-stripings

Location-Specific OPS Strategies for Evaluation

- 7) Interchange reconfigurations (Diverging Diamond Interchanges, etc.)
- 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

Break-Out Group Instructions

- Purpose of Break-Out Group
 - Share some of the operational strategies being considered for evaluation
 - Obtain feedback on strategies and bottleneck locations
- Instructions
 - Start out at your assigned station
 - Rotate to the next station
 - After you have participated at all 3 stations, each facilitator will report back discussion highlights

Next Steps

- Complete development of operational strategies for evaluation
- Evaluate projects
- Next Stakeholder Committee Meeting (#3)
 - Share impacts of projects evaluated
 - Summer 2013
- Recommend preliminary list of projects

Next Steps (Cont'd)

- Final Stakeholder Committee Meeting (#4)
 - Share preliminary recommendations
 - Late 2013
- Develop financial plan for managed lane projects
- Coordinate with Atlanta MPO on PLAN 2040 update throughout the process

Questions?

