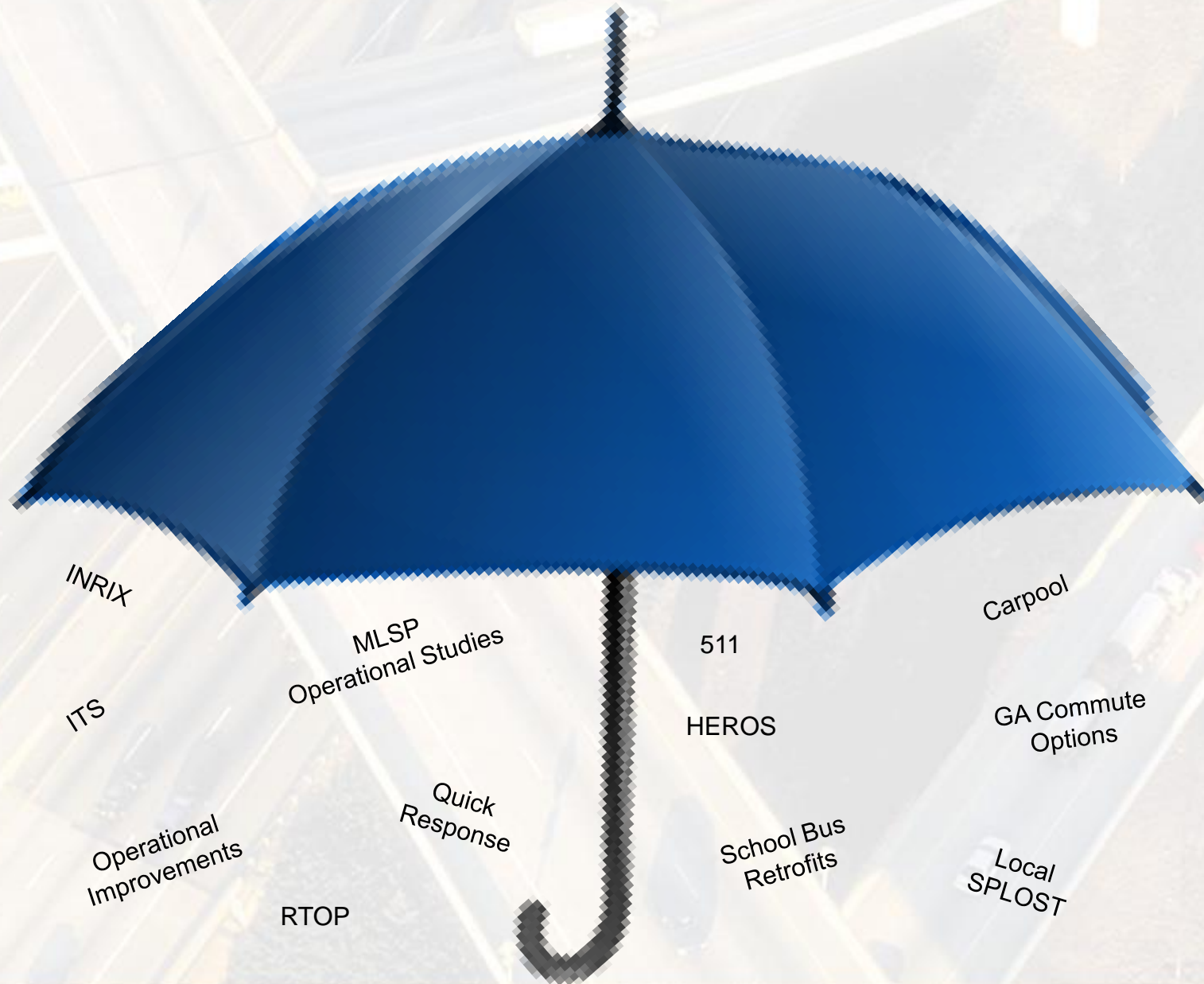


# Georgia's Air Quality Initiatives

Phillip M. Peevy  
Georgia Department of Transportation



# Emission Reduction Strategies





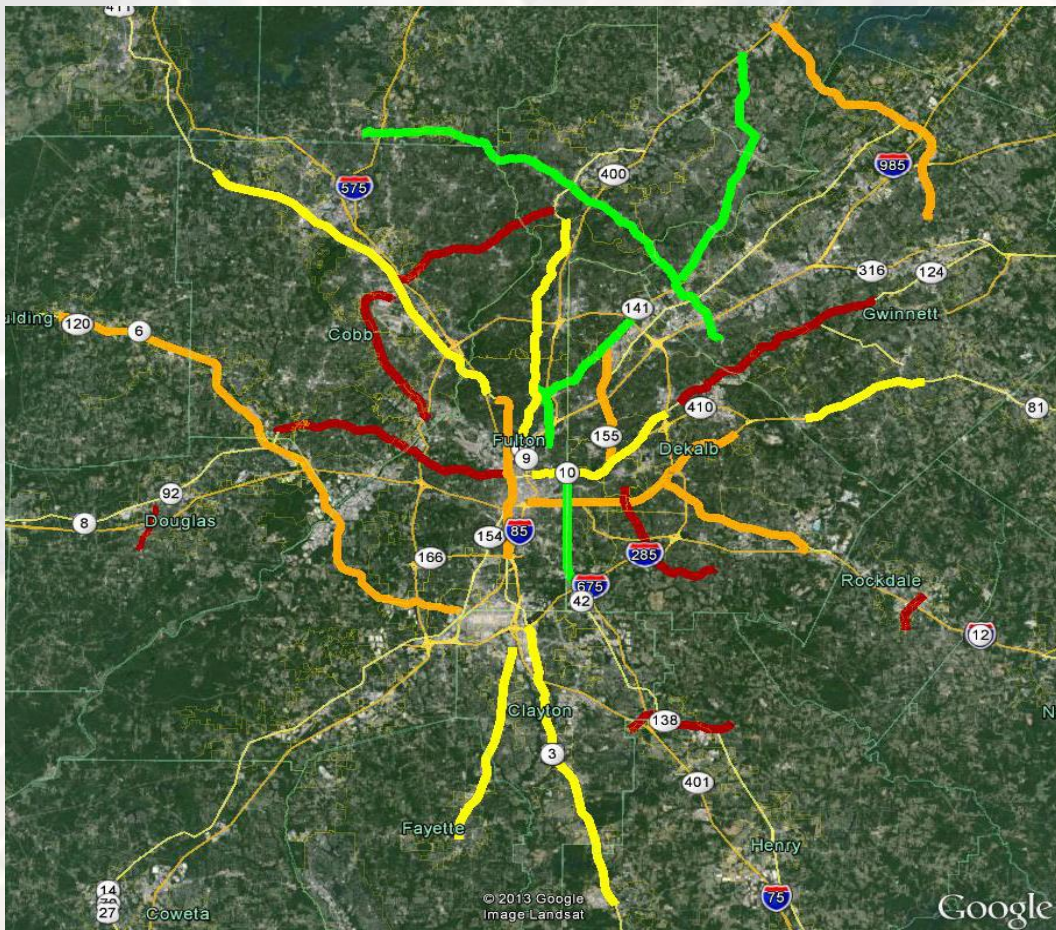
# Incident Management

- H.E.R.O. — Highway Emergency Response Operations
  - Annual Emission Reductions:
    - VOC: 12.23 (metric tons)
    - NOx: 17.18 (metric tons)
  - Provides first response to highway emergencies
  - Emphasis on removing vehicles from travel lanes
  - Expanded service along I-20 (East and West) and I-85 South as part of the 2013 CMAQ Call for Projects





# Regional Traffic Operations Program



- Expanding program
- Regional Focus
  - ✓ Mainline Priority
  - ✓ Cross-Jurisdictional
- Actively Manage Traffic Flow



Phase 1 – June 9, 2010

Phase 2 – October 27, 2010

Phase 3 – January 4, 2013

Phase 4 – October 15, 2013

1000 Signals  
\$14 million per year  
total 25 Corridors



# Traffic Signal Optimization

- Metro Signal Timing (2008-2013)
  - 1,364 intersections retimed (Metro Atlanta)
  - Total savings of \$101,160,000
  - Cost/benefit of 24.30 over entire project
- Statewide Traffic Signal Optimization (2014)
  - Signal systems on State Routes across Georgia
  - Partnerships with local maintaining agencies
  - Continuation of existing optimization through STIP years





# MLIP Will Update 2009 Atlanta Regional Managed Lane System Plan (MLSP)

- First regional managed lanes plan in the country
- In 2009, there were no priced managed lanes in the Atlanta region (only HOV lanes)
- Identified \$16 billion in managed lane projects

*Atlanta Regional*

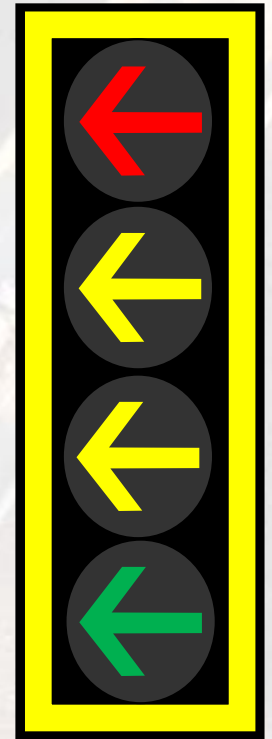
**MANAGED LANES**  
Implementation Plan

# New Assumptions

- All new limited access capacity in metro Atlanta will likely be tolled
- Remove HOV2+ to HOT3+ conversions from plans
- Eliminate assumptions of long-term concession agreements
- Evaluate lower-cost managed lane treatments, where possible

# Other Strategies Implemented

- Navigator/511
  - Cameras and electronic message signs
- Ramp Meters
  - Regulate Access onto the freeway
- Flashing Yellow Arrow
  - Reduces Vehicle Idling and Air Pollution
  - Reduction in Left Turn Crashes



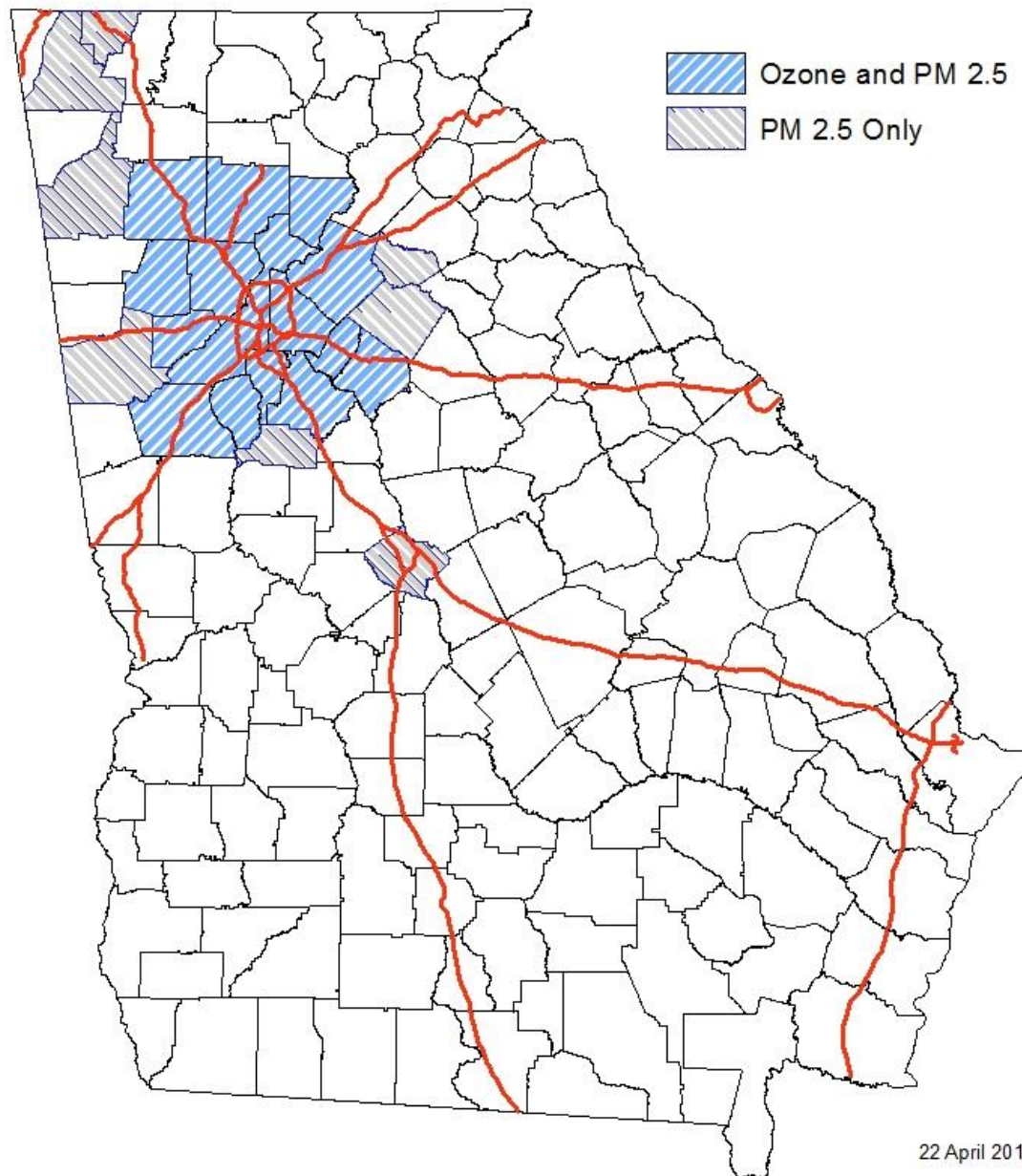


# CMAQ Project Selection Overview

- Atlanta MPO lead process
  - Collaboration with GDOT
- Project Emphasis Areas
  - Travel Demand Management
  - Clean Vehicle & Technology Programs
  - Transit Service Start-up Operation (and Expansion)
  - Roadway ITS / Operations / Incident Management
  - Managed Lanes



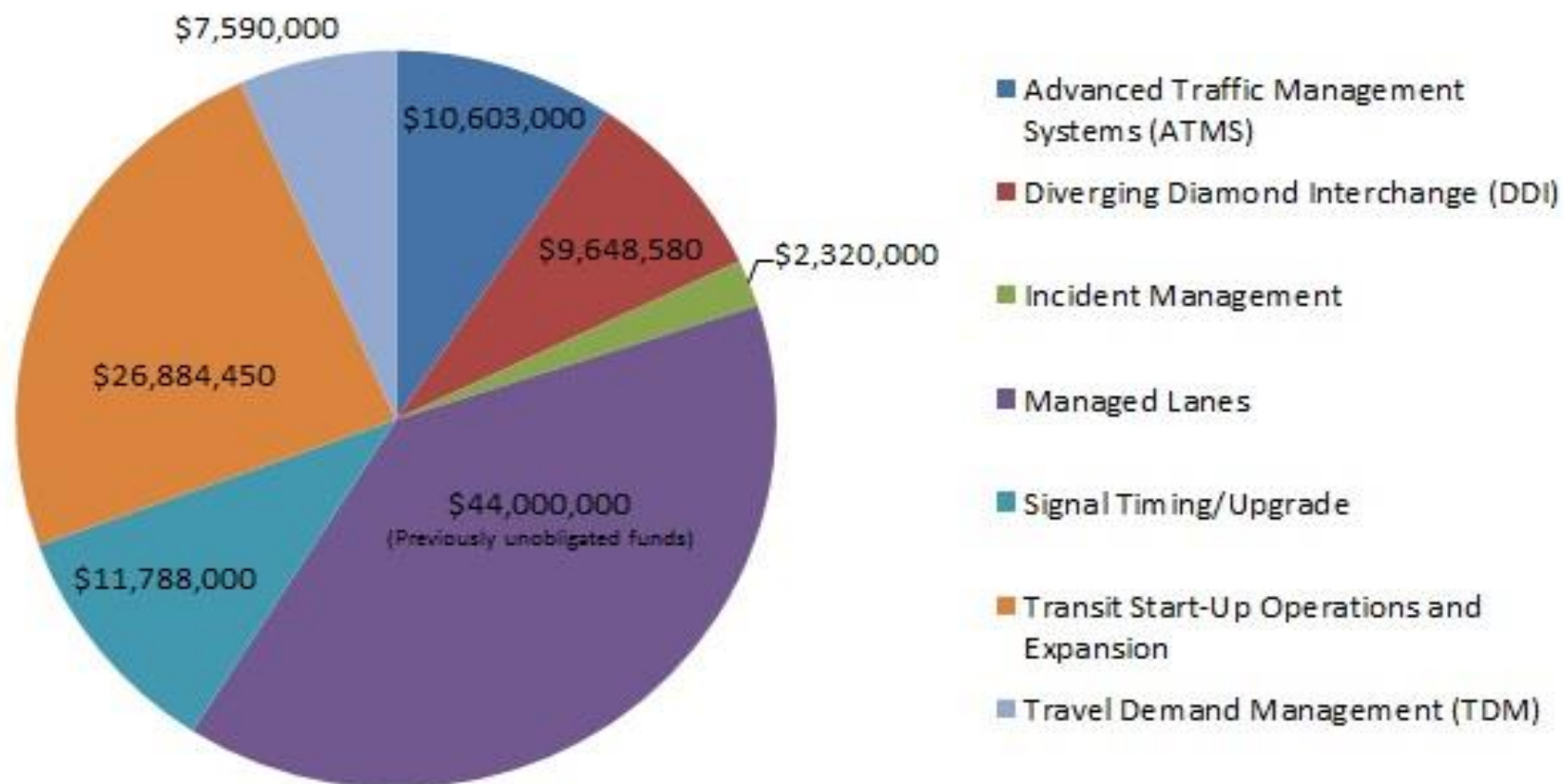
## Georgia Air Quality Nonattainment Areas





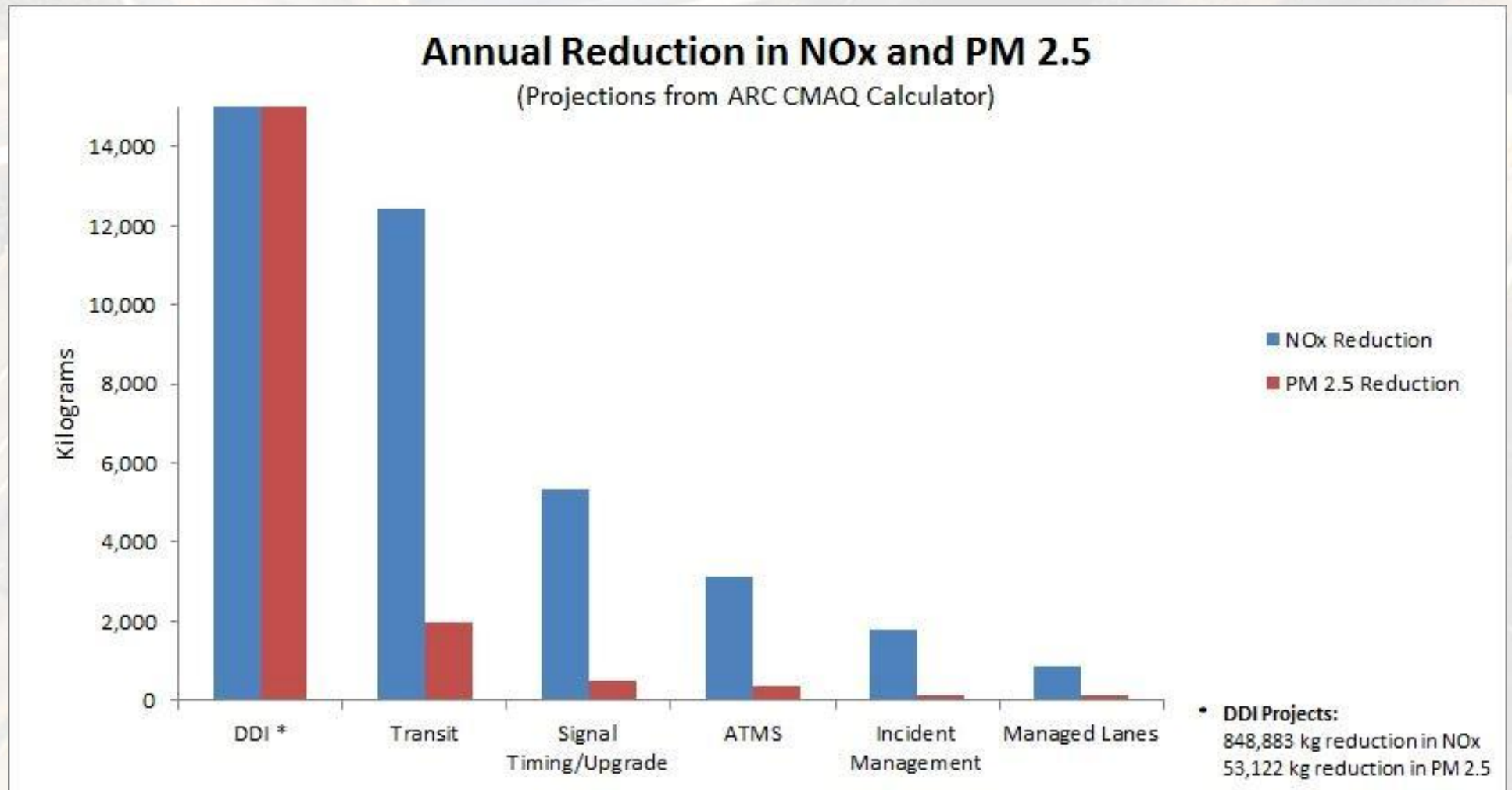
# Selected Projects

## Project Types by Total Federal Funding



28 Projects totalling approx. \$113 million

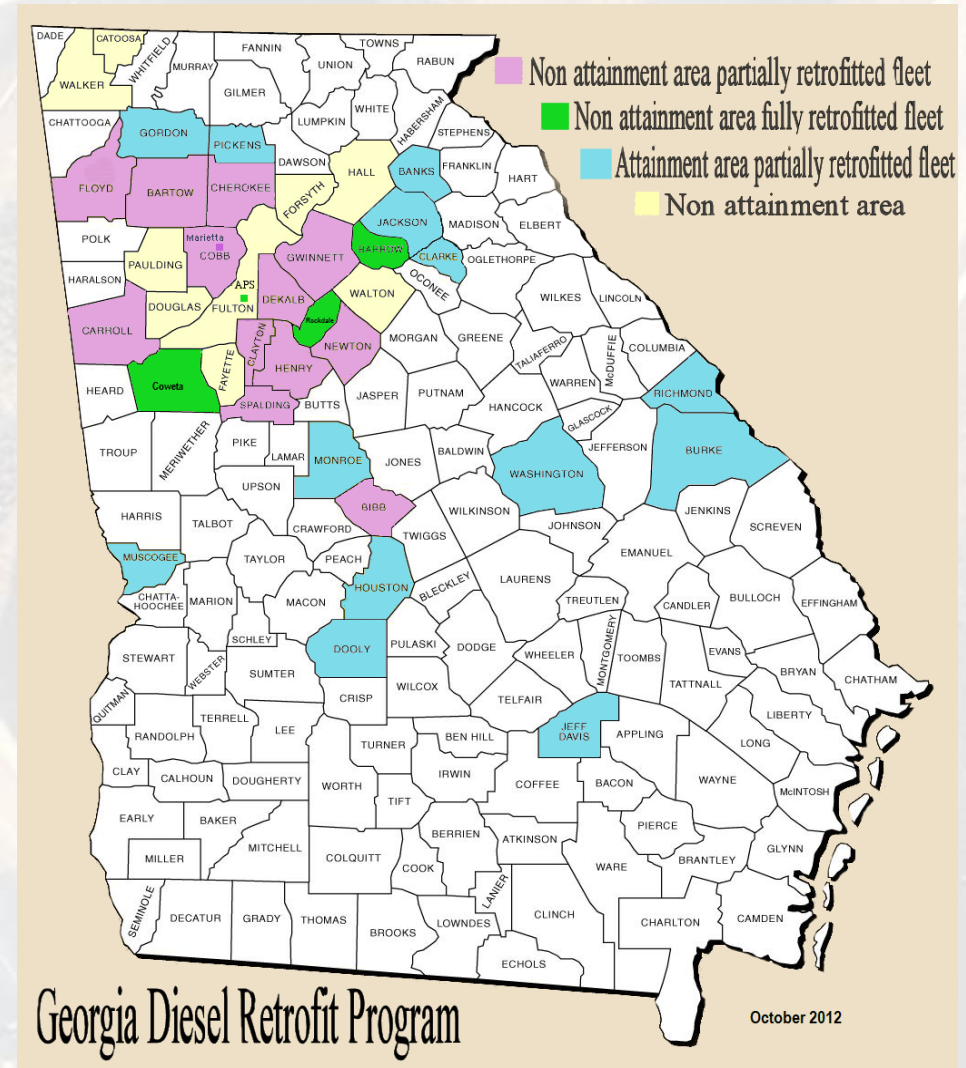
# Annual Emissions Reductions





# School Bus Retrofit Projects

- **1663** school bus retrofits
- **108** school bus replacements
- Over **\$13,000,000** programmed through 2015



# Mother-Slug Locomotive Retrofits

- “Mother” – Diesel-electric locomotive
- “Slug” – Uses excess electric power from “Mother”



## Annual emission reduction

PM 2.5 - 12.29 tons

Nox - 195.93 tons

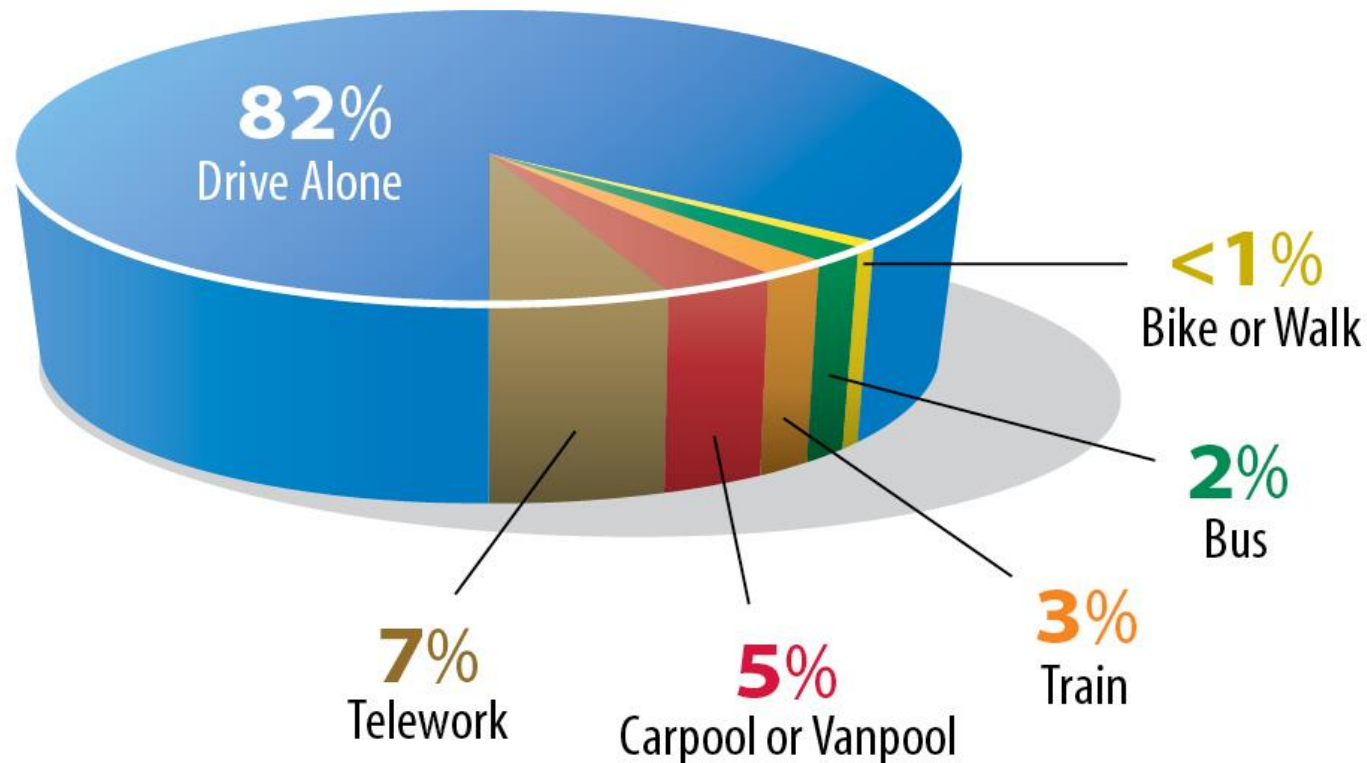


# GA Commute Options: “Get More by Driving Less”



- Carpooling – Free service to match carpoolers
- Employer Services – Program Consultation, Ride-matching for employees, Tax Benefits, Teleworking
- Guaranteed Ride Home Service
- Vanpools – Find or start a vanpool
- Transit – Provide Traveler Information
- Commute Options provides incentives for switching from driving alone to another option

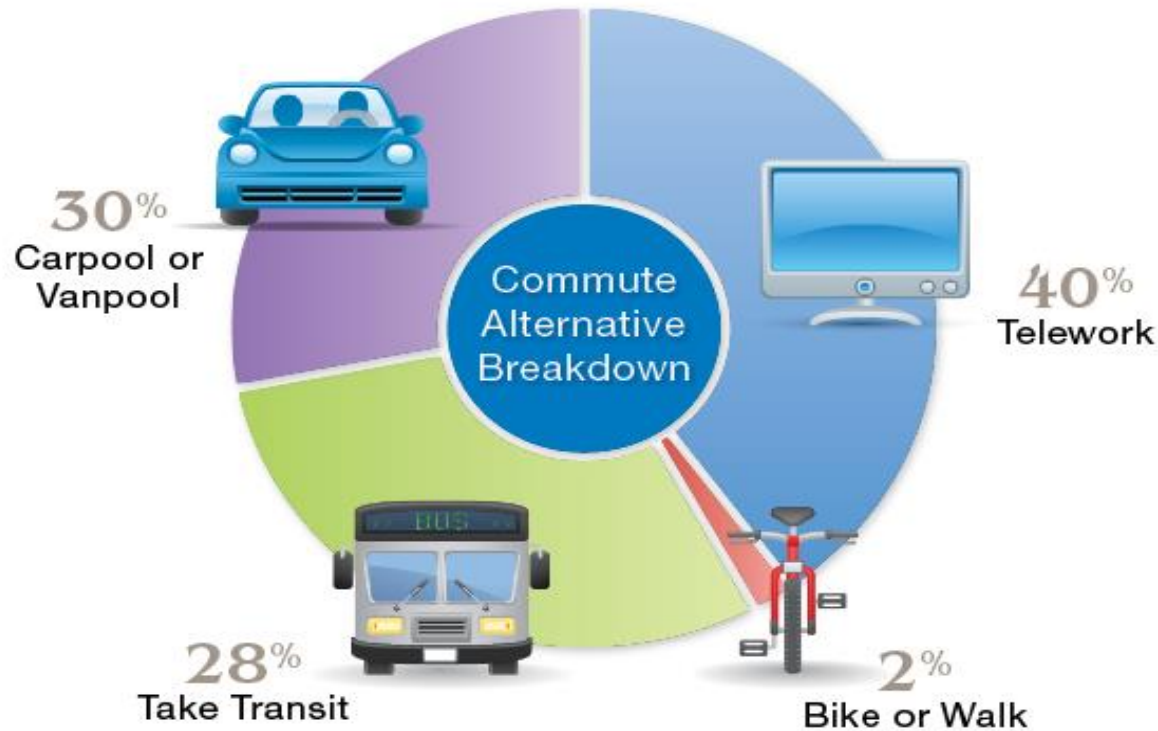
# Metro Atlanta Commuter Patterns



**Source: 2010 Center for Transportation and the Environment study conducted on behalf of the Georgia Department of Transportation**



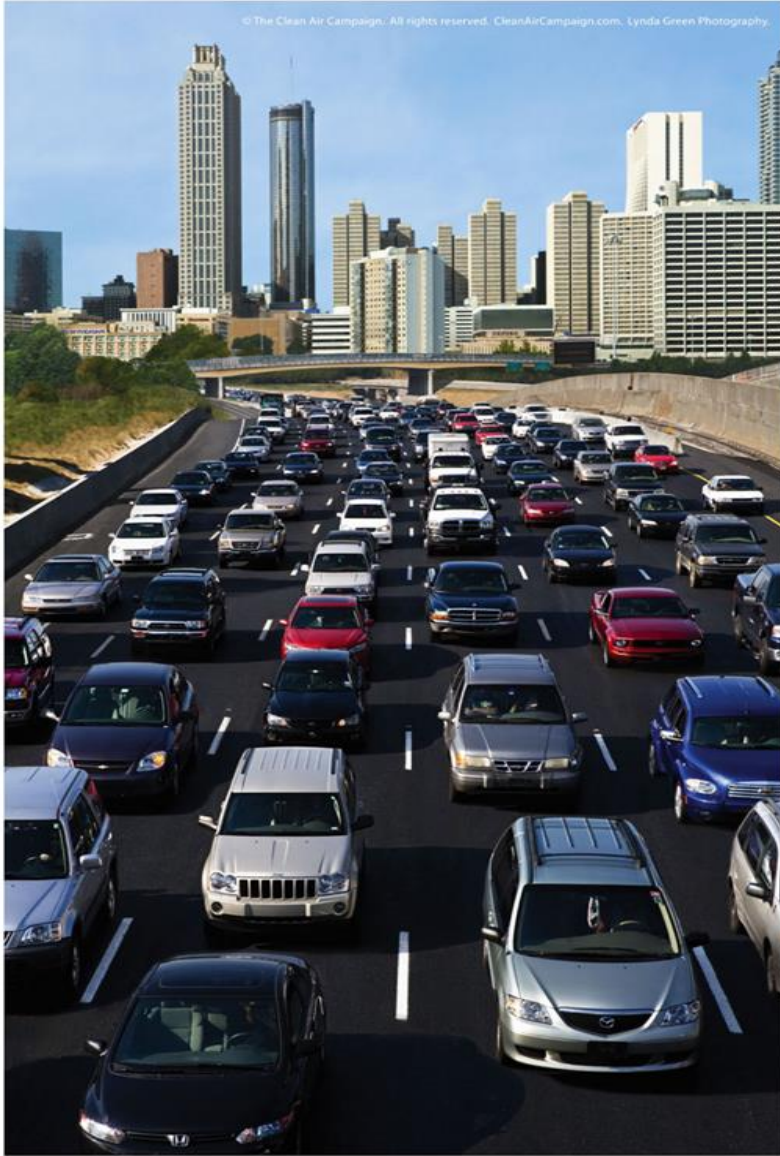
# Georgia Commute Options Participant Commuter Patterns



**20% increase since 2007 in the number of commuters using alt modes 3+ days per w**

**Source: 2010 Center for Transportation and the Environment study conducted on behalf of the Georgia Department of Transportation**

# GCO Reduces Congestion





# Georgia Commute Options

## *Daily Results*

- Serves 1,600 Georgia employers and property managers
- Reduces 1.1 million miles of vehicle travel daily in metro Atlanta
- Eliminates 550 tons of air pollution daily in metro Atlanta
- Saves participants \$500,000 in direct savings on gas and vehicle expenses, daily in metro Atlanta

# Questions?

