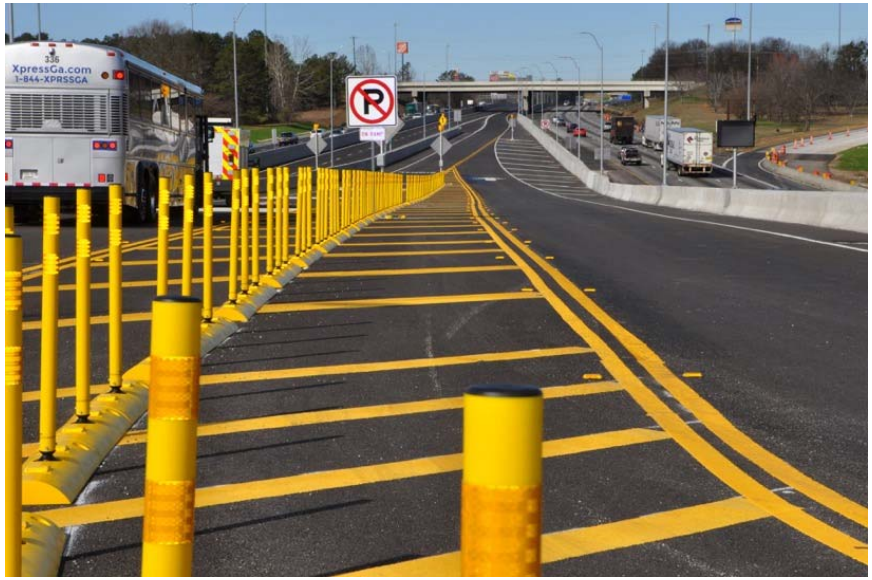
I-75 Commercial Vehicle Lanes









Matthew Fowler, PTP

GDOT - Office of Innovative Delivery

I-75 Central Corridor Coalition

November 15, 2018

What We Will Cover

- **Major Mobility Investment Program (MMIP)**
- **Freight Information**
- **I-75 Commercial Vehicle Lanes**

Major Mobility Investment Program (MMIP)



Major Mobility Investment Program



$11 Billion Program



11 projects under contract by 2026



Innovative Delivery and public-private partnerships to accelerate projects

11 MMIP Projects



3 Major Interchange Projects



4 Major Express Lanes Projects

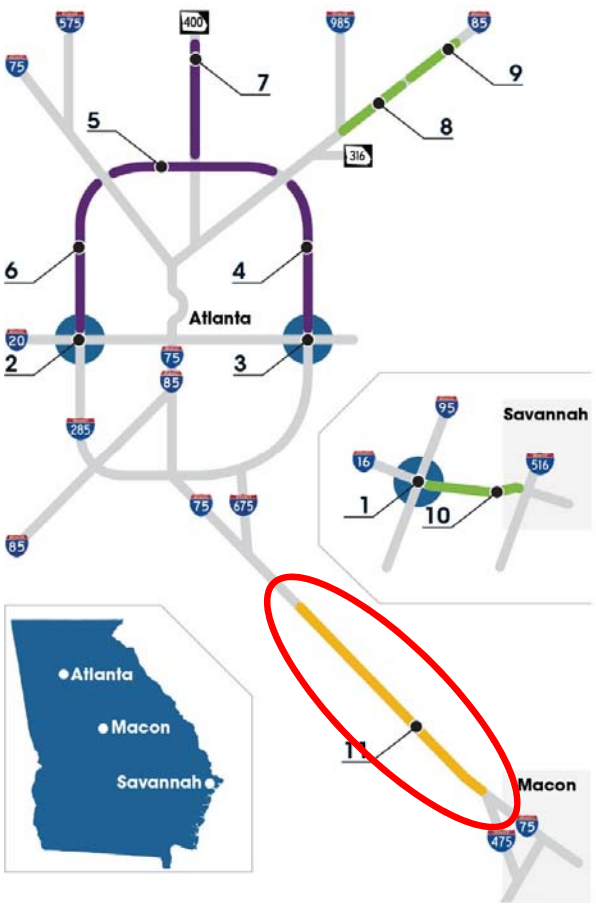


3 Major Interstate Widening Projects



1 Commercial Vehicle Lanes Project

MMIP Project Locations



Interchange Reconstruction:

1. **I-16/I-95**
2. **I-285/I-20 West**
3. **I-285/I-20 East**

Express Lanes:

4. **I-285 Eastside**
   I-85 to I-20
5. **I-285 Top End**
   I-75 to I-85
6. **I-285 Westside**
   I-20 to I-75
7. **SR 400**
   I-285 to McFarland Pkwy

Interstate Widening:

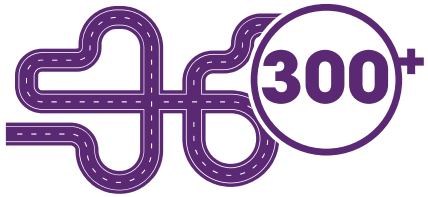
8. **I-85 North**
   I-985 to SR 53
9. **I-85 North**
   SR 53 to US 129
10. **I-16**
    I-95 to I-516

Commercial Vehicle Lanes:

11. **I-75**
    SR 155 to I-475

MMIP Gets Results

*Results are based on all projects being built and operational.
Figures are estimated from modeling analyses.
Source: Cambridge Systematics study for Georgia DOT, 2016



New Lane Miles

76 general purpose lanes,163 express lanes, 77 commercial vehicle lanes



New Jobs

Additional long-term, permanent jobs beyond construction



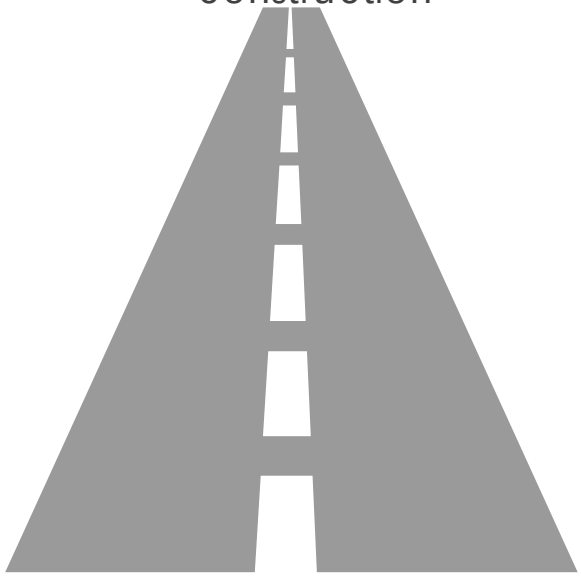
State Economic Growth

Estimated growth in Georgia's Gross State Product



Additional Personal Income

For residents throughout the state of Georgia





Reduction in Travel Delays

Reduced delays for vehicle traffic statewide

MMIP Benefits



Creates additional capacity



Reliability



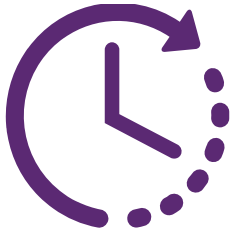
Improves passenger, transit and freight movement



Enhances safety



Offers operational improvements and efficiencies



Decreases travel times

MMIP Delivery Model



Program Management Consultant (PMC):

- Represents Georgia DOT
- Provides oversight of the entire program



General Engineering Consultants (GECs):

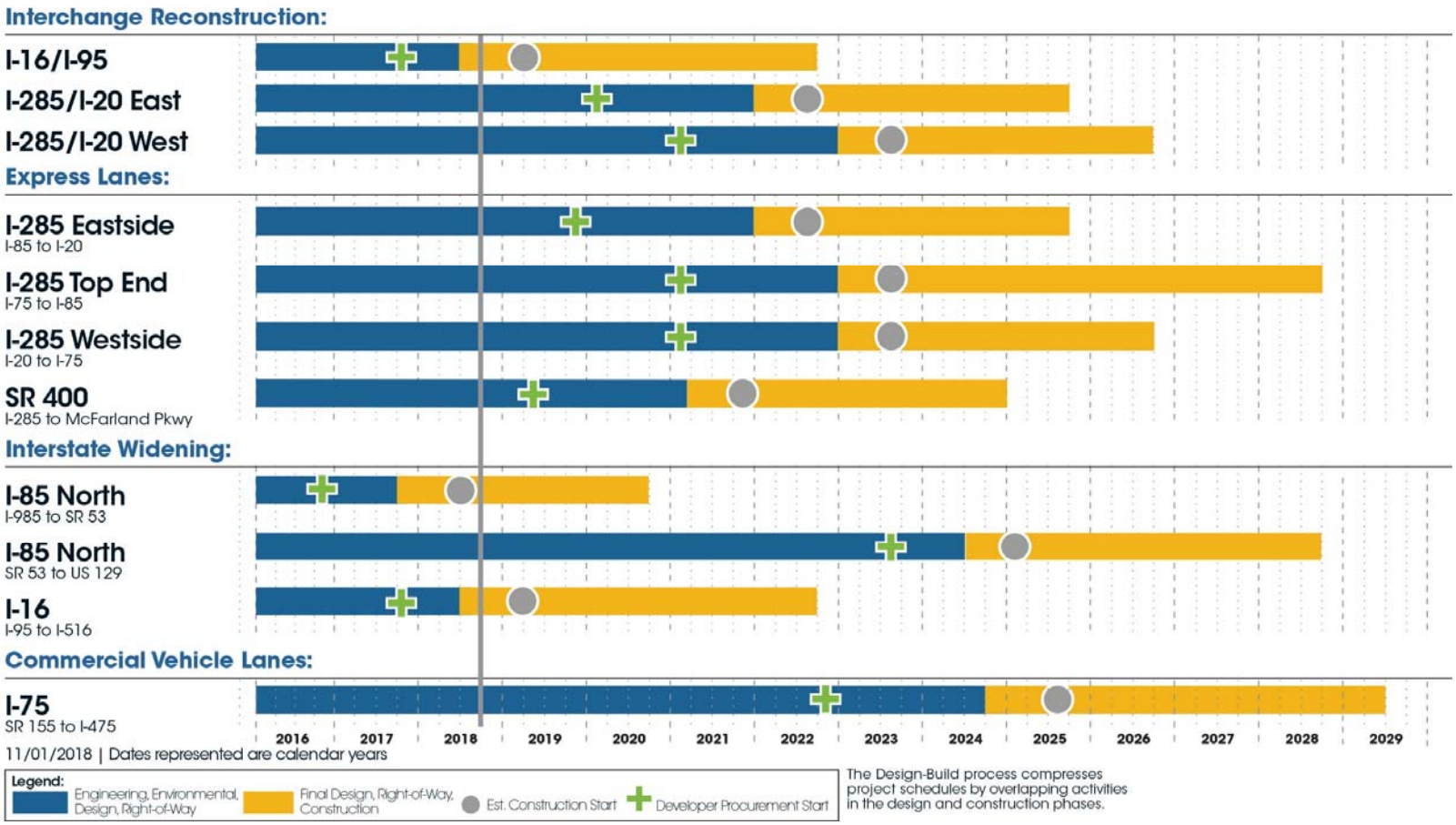
- Project-specific
- Performs pre-let and post-let work



Developers:

- Contractors performing final design and construction

MMIP Schedule



Disadvantaged Business Enterprises (DBE) and MMIP

- 38 DBE subcontractors supporting 8 GECs
- DBE experience covers all aspects of projects
  - Environmental
  - Geotechnical Services
  - Utility Coordination
  - Aerial Mapping
  - Right-of-Way Services
  - Public Involvement & Communications

Project	GEC/OVF Team	DB Team
16@95 Improvement Projects	Michael Baker INTERNATIONAL	SAVANNAH MOBILITY CONTRACTORS
I-285/I-20 West Interchange	WSP	
I-285/I-20 East Interchange	PARSONS	
I-285 Top End Express Lanes	JACOBS	
SR 400 Express Lanes	AECOM	
I-285 Eastside Express Lanes	ATKINS	
I-285 Westside Express Lanes	ARCADIS	
I-85 North Widening I-985 to SR 53	Michael Baker INTERNATIONAL	CWM CONTRACTING
I-85 North Widening SR 53 to US 129	2019	
I-75 Commercial Vehicle Lanes	RS&H	

Freight Information



Freight Statistics

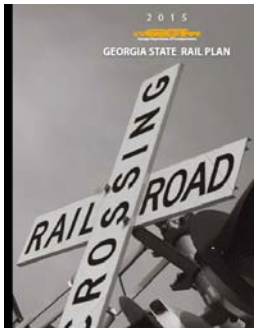
- Commercial vehicles transport 85% of freight shipped in Georgia
- Truck freight values increasing
  - 2015: $537.7 Billion
  - 2040: $993.6 Billion
- 70% of all trucks entering Georgia have final destination in Georgia
- Port of Savannah is 4th busiest and fastest growing in U.S.
- Atlanta is 5th largest freight hub in U.S. and 2nd only to Chicago as inland freight hub

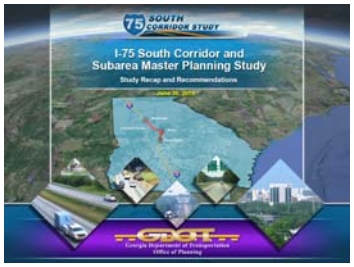


Source: GDOT Planning & Ga Ports Authority

Plans & Studies







GDOT Statewide Freight & Logistics Plan

2012

GDOT Statewide Rail Plan

2015

GDOT I-75 South Corridor & Subarea Master Planning Study

2015

GDOT I-75 South Commercial Vehicle Lanes Scoping Study

2017

2012 GDOT Statewide Freight & Logistics Plan - Georgia's Economy

$100B (25%)

of Georgia's Gross State Product
Produced by 5 Freight-Related Economic Sectors



Heavily Reliant on All Modes
of freight transportation



Georgia Interstate Network:
- 1,243 miles
- 9th largest in US

Source: GDOT Planning

I-75 Corridor: I-475 to McDonough

- Approximately 40 miles in length
- Existing Traffic: 75,000-90,000 vehicles per day; 35% trucks
- Future Traffic: 120,000-150,000 vehicles per day; 40% trucks
- Northbound commercial vehicle movements:
  - 60% originate from I-475
  - 40% originate from I-75
- Above average crash rates, average of one truck involved accident per week
- Trucks commonly add one hour travel buffer time in corridor to ensure on-time delivery

I-75 Corridor: I-475 to McDonough

- Port of Savannah:
  - Moved more TEU containers in FY17 than previous years
  - 242,222 TEUs added in FY17 vs FY 16, more than any other east coast port

- ARC 2016 Freight and Mobility Plan identified McDonough as "freight intensive cluster" containing:
  - 13% of region's warehouse/distribution centers
  - Largest average size of warehouse 543,000 square feet vs. 200,000-300,000 average size elsewhere in region
  - GPS data identifies McDonough cluster as a "prominent truck end location"

Threshold for Commercial Vehicle Lanes

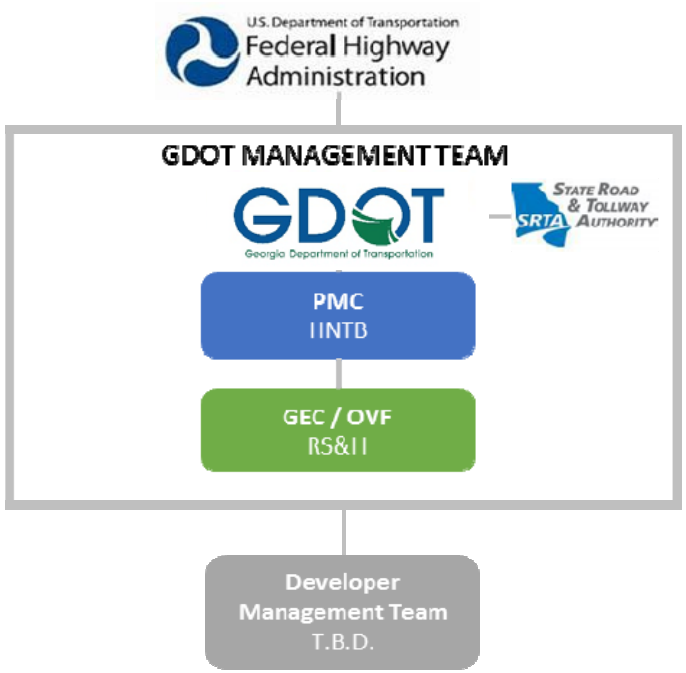
- 2010 NCHRP Report 649/NCFRP Report 3, Separation of Vehicles-CMV Only Lanes

- Commercial Vehicle Lanes feasible under following conditions:
  - Total traffic volumes over 100,000
  - Truck volumes over 20,000
  - Truck percentages are over 25% of total volume
  - Major freight generator at one terminus

I-75 Commercial Vehicle Lanes



I-75 Commercial Vehicle Lanes: Project Team



- **GEC Team – RS&H, Inc.**
- **Alternatives Development**
  - Typical Section
  - Interchange Configurations
  - CVL Access Points
- **Environmental Study**
  - Logical Termini Justification
  - Ingress/Egress Points
  - Noise Impacts
  - ROW Acquisition
- **Coordination**
  - 5 Counties, 3 Cities, 2 MPOs
  - Adjacent Projects
- **Procurement**
  - DBFOM
  - Developer Acquisition
- **Final Design/Construction**
  - Oversight Role

I-75 Commercial Vehicle Lanes: Preliminary Concept

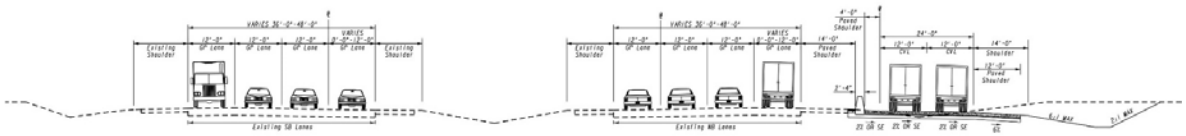
- 2 lanes northbound, east of existing lanes from I-475 to McDonough
- Concrete, barrier-separated from general purpose lanes
- Toll-free
- 29 new bridges, replacements, or widenings
- Work in five counties: Butts, Henry, Lamar, Monroe, Spalding
- Cost: $1.8 billion
- Planned DBFOM Procurement



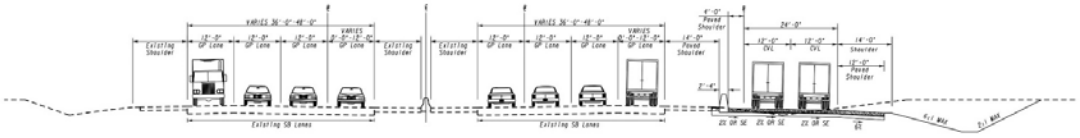


I-75 Commercial Vehicle Lanes: Preliminary Concept

- Concrete pavement
- 4’ left shoulder
- 14’ right shoulder, 12’ paved
- 10-12% reduction of commercial vehicle travel time during peak periods



TYPICAL SECTION
I-75
CVLS ON OUTSIDE ALTERNATIVE WHEN
WIDE EXISTING MEDIAN



TYPICAL SECTION
I-75
CVLS ON OUTSIDE ALTERNATIVE WHEN
NARROW EXISTING MEDIAN

I-75 Commercial Vehicle Lanes: Preliminary Concept

- Direct entrance northbound from I-75 or I-475
- Limited to commercial vehicles
  - More than six wheels and CV as defined by GA Code Section 40-1-1
- Trucks required to use unless
  - Pick up or delivery to/from shipper
  - To/from vehicle's terminal facility, repair facility, or residence



I-75 Commercial Vehicle Lanes: Preliminary Concept

- Intermediate access
  - Enter/exit weave zone north of Forsyth
  - Exit from CVL to general purpose lane south of SR 36
  - Enter CVL from general purpose lane north of SR 16
- Northbound merge into I-75 general purpose lanes, south of SR 155, with possible access to Bethlehem Road
- Maintain existing weigh station north of Forsyth



I-75 Commercial Vehicle Lanes: Project Benefits

- Reduce the number of truck/passenger vehicle accidents
- Reduce congestion in corridor
- Enhance northbound freight mobility for major generators:
  - Port of Savannah
  - Florida

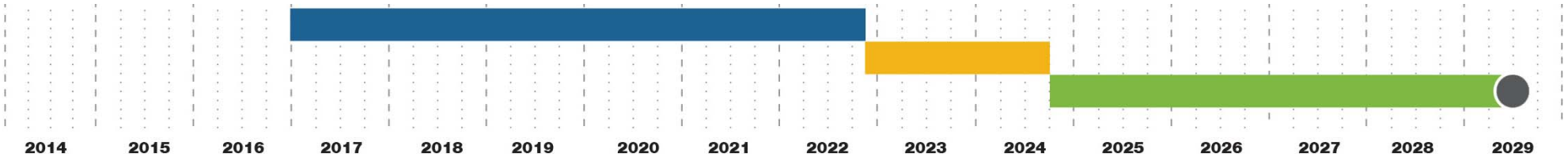






I-75 Commercial Vehicle Lanes: Schedule

- GEC (RS&H) NTP issued May 2018
- Pre-let activities continue through 2024
  - Engineering
  - Environmental
  - Preliminary design
  - Right-of-way acquisition
  - Procurement
- Post-let activities begin 2024
  - Final design
  - Complete right-of-way acquisition
  - Construction





Current Activities: Traffic Data Collection

October 2018 Data Collection

- 40+ miles of corridor
- Priority 1 – 288 separate counts
- Priority 2 – 100 separate counts

State-of-the-art video recording equipment used

- Improved accuracy: can be slowed, paused or rewound
- Minimized disruption to the traveling public
- Facilitated off-site programming
- GPS tagged site locations

Installation Team

- 4 Installation team vehicles
- Coordinated installation route



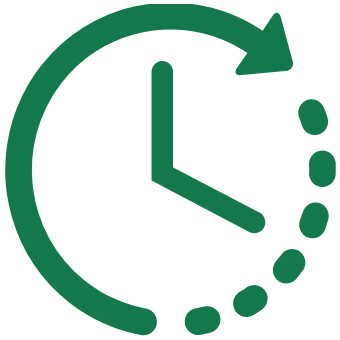


Connected Vehicles/Autonomous Vehicles

CV & AV anticipated to:



Inform travelers



Reduce reaction times



Reduce opportunity for human errors

Connected Vehicles/Autonomous Vehicles

- Vehicle platooning
- Dedicated lanes
- Road markings
- Cybersecurity for Traffic Management Systems
- Quickly evolving, yet-to-be defined future, requires flexible infrastructure:
  - Modular lanes: Next generation of managed lanes



Recap

- **MMIP**
  - Statewide program
  - 11 projects
  - $11 billion
  - All projects under contract by 2026

- **I-75 Commercial Vehicle Lanes**
  - Toll-free, northbound lanes from near Macon to near McDonough
  - $1.8 billion
  - Open to traffic in 2029

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THANK YOU
For Viewing

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