Joint Study Committee on Critical Transportation Infrastructure Funding

Keith Golden, P.E.

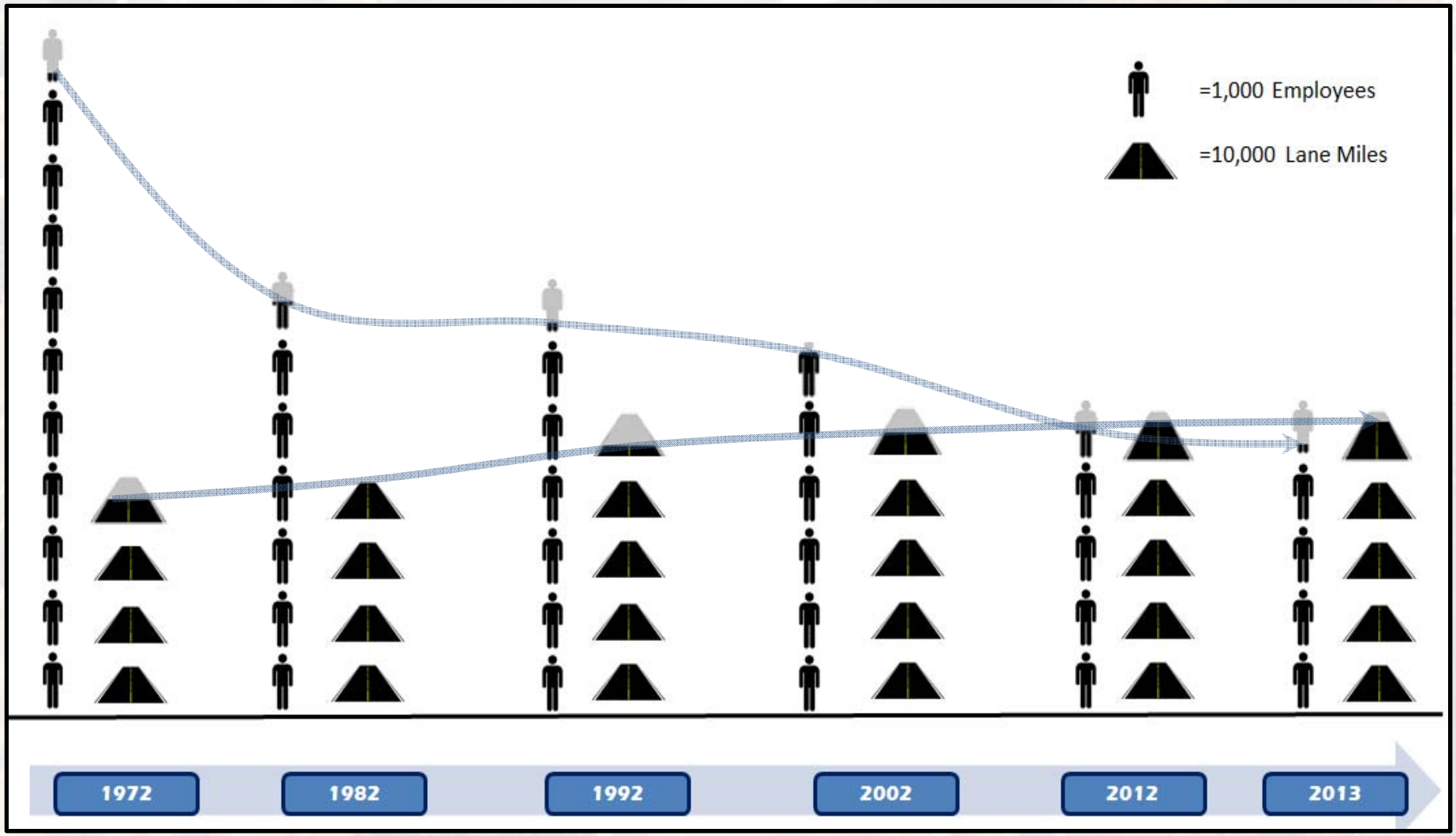
Georgia Department of Transportation

Transportation in Georgia

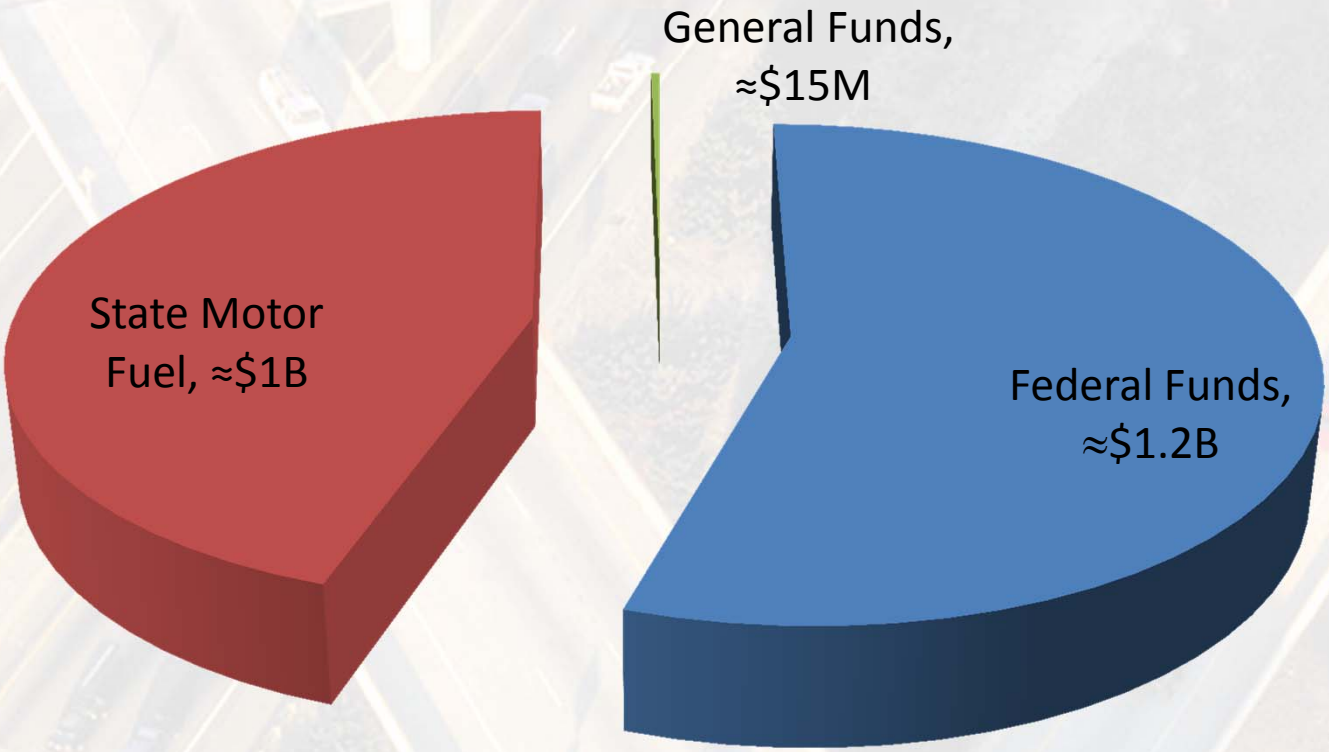
- **10th** Largest Road System in Nation
  - 17,967 Centerline Miles of State Routes/Interstates
  - 85,738 Centerline Miles of County Roads
  - 17,754 Centerline Miles of City Streets
- **14,666** Bridge Structures
- **4,500** Miles of Mainline & Shortline Railroad
- **Busiest** Airport in the world (Hartsfield)
- **4th** busiest container port in US (Garden City Terminal)
- **128** Transit Providers
- **103** General Aviation Airports

GDOT Responsibilities

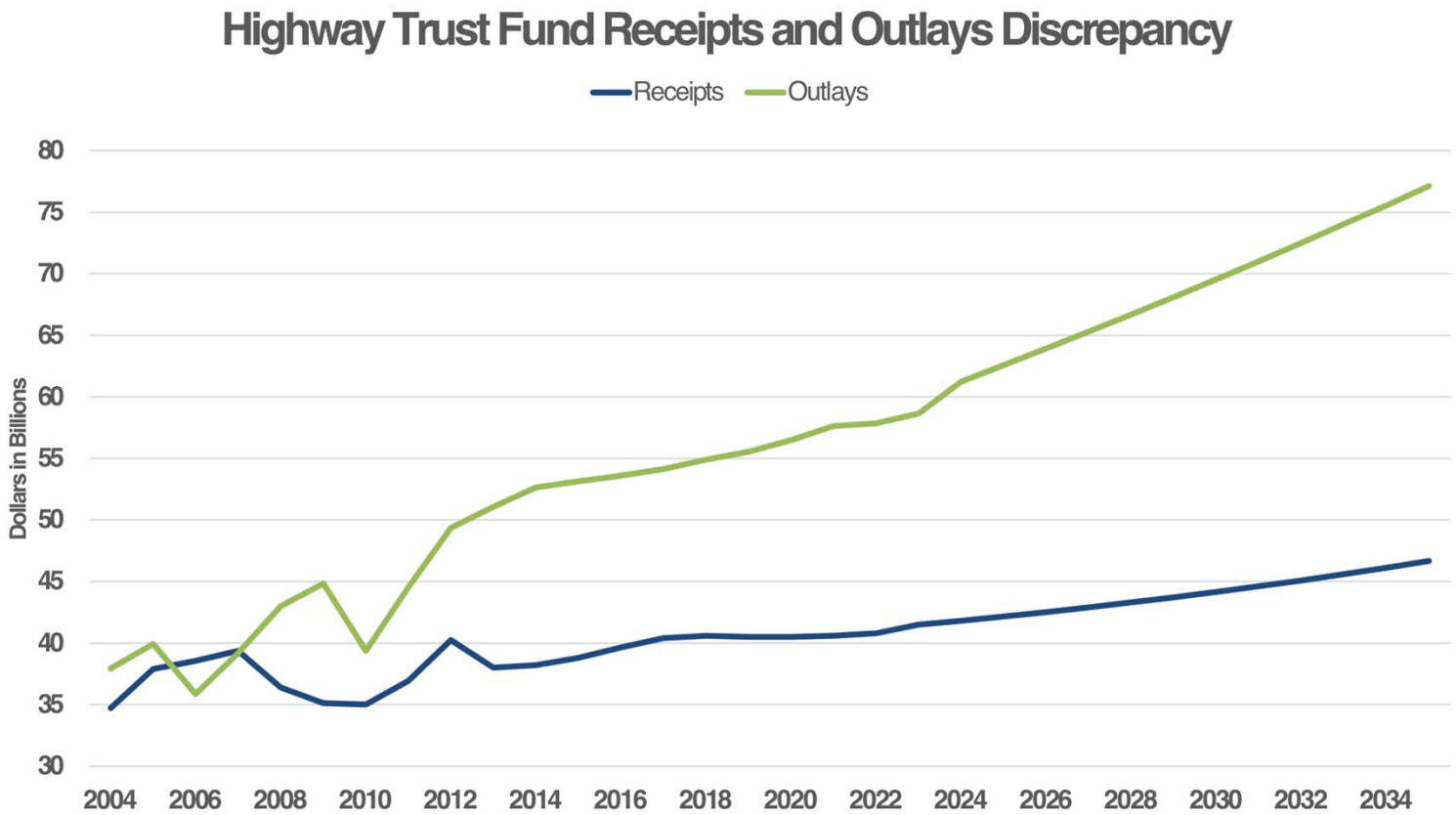
GDOT Staff & System



FY 15 GDOT Fund Sources



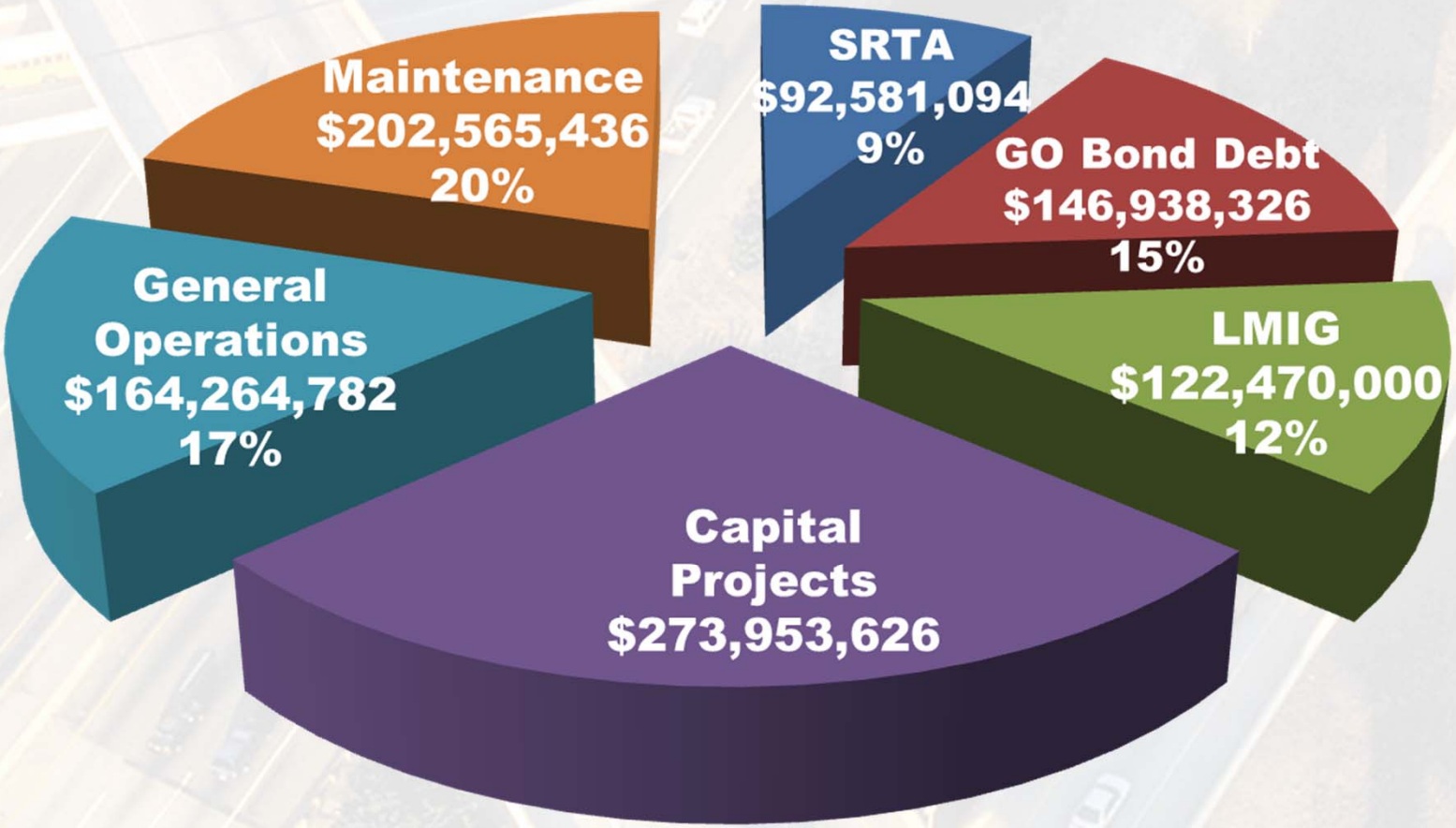
On the Federal Side - Highway Trust Fund Structural Imbalance



Excludes $8.017 billion transfer from General Fund to Highway Account of HTF in September 2008; $7 billion transfer from General Fund to Highway Account of HTF in August 2009; $19.5 billion transfer from General Fund to Highway and Mass Transit Accounts of HTF in March 2010; $2.4 billion transfer from Leaking Underground Storage Tank Trust Fund to HTF in July 2012; $6.2 billion transfer from General Fund to Highway Account of HTF in FY 2013; $10.4 billion transfer from General Fund to Highway Account of HTF in FY 2014; $2.2 billion transfer from General Fund to MassTransit Account of HTF in FY 2014.

GDOT FY 14 Motor Fuel Budget

Total State Motor Fuel Budget: $1,002,773,264



Motor Fuel Taxes in GA

1%

1%

1%

1%

Local Tax on Gasoline

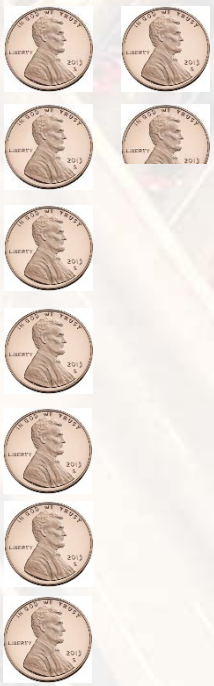
18.4 cent Federal Tax	7.5 cent State Excise Tax	4% State Prepaid Sales Tax (1% redirected)	Local Tax (not dedicated to trans.)

Here in Georgia- Effective State and Local Motor Fuel Taxes

Dedicated To Transportation

Dedicated To General Fund & Local SPLOSTs

Excise Tax (7.5 cents)



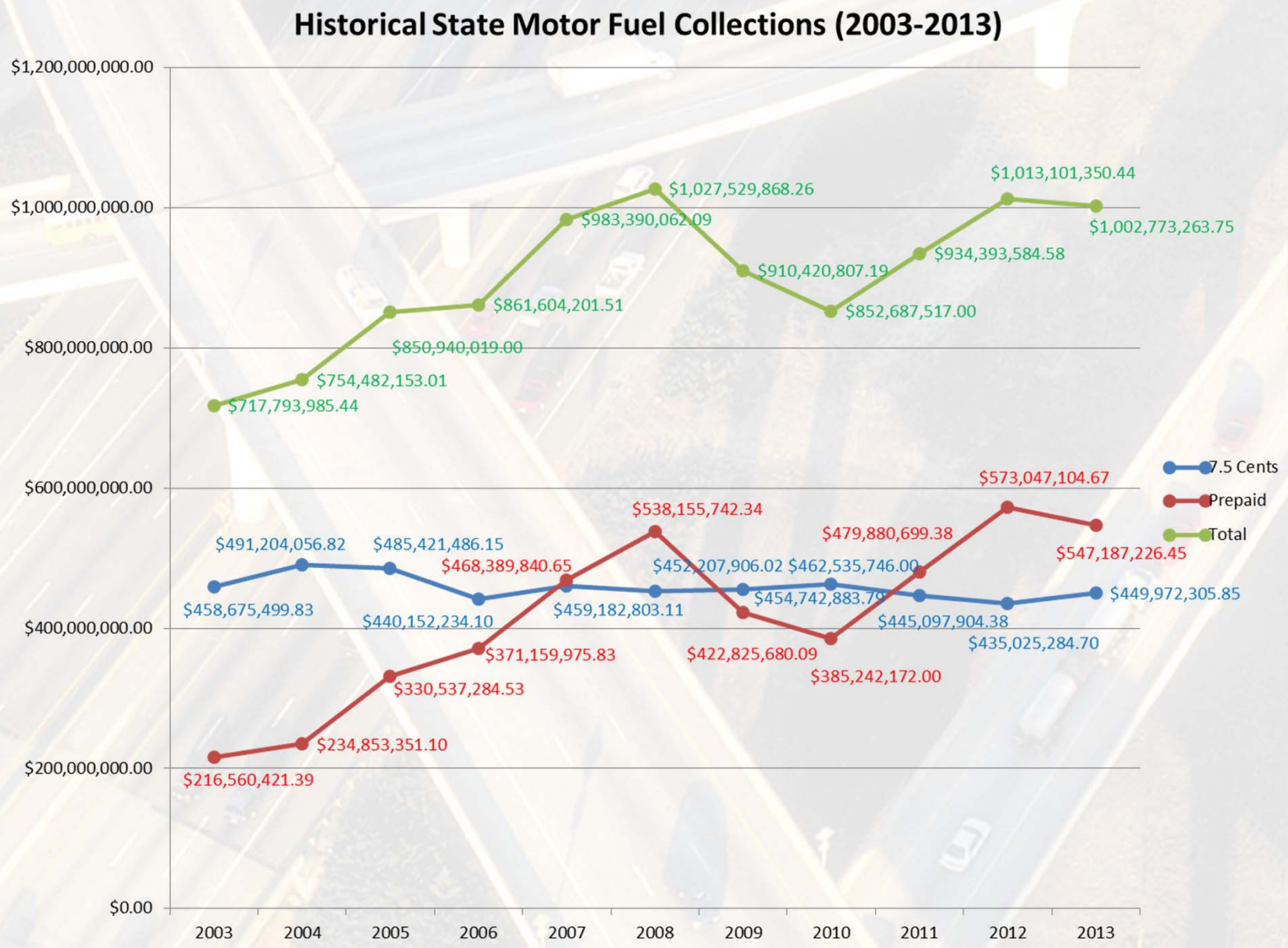
3% Prepaid Sales Tax (≈8.8 cents)

1% Sales Tax + Local Tax (≈11.2 cents)

*1% sales approx. $182M/yr @ $3.43/gal; Local taxes approx. $518M in FY 2013

Effective Motor Fuel Tax (Federal & State)

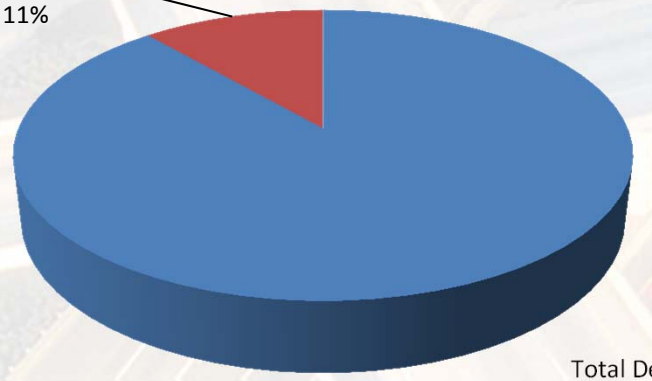
- Florida – 54.42 cents
- South Carolina – 35.15 cents
- North Carolina – 55.15 cents
- Tennessee – 39.80 cents
- Alabama – 39.27 cents
- Georgia Effective – 34.7 cents



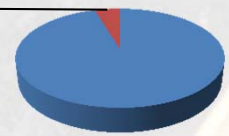
Georgia Department of Transportation

How do we compare?

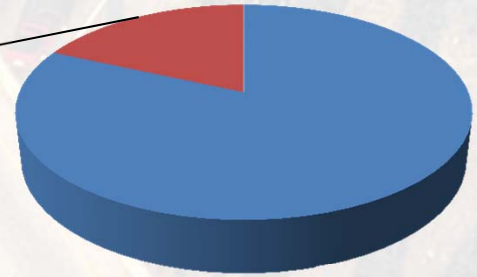
Florida, $5.1B



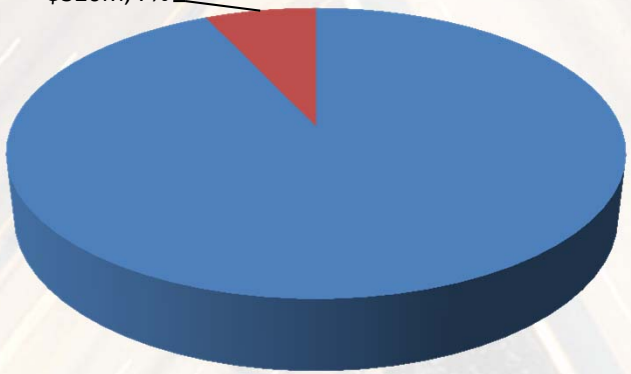
South Carolina, $1.3B



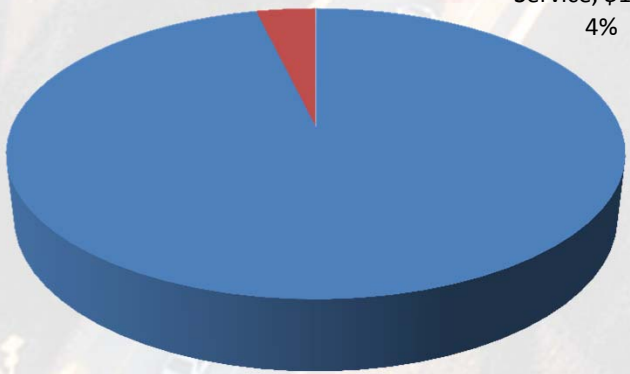
Georgia, $2.2B



Virginia, $4.3B



North Carolina, $4.3B



How do we compare?

State	Total Lane Miles	Center Line Miles	2012 Population	2012 FTE	Capital Expenditures (2012)	Routine Maint. Expenditures (2012)
Illinois	42,122	15,992	12,882,135	5,449	$3.5B	$0.7B
Florida	43,195	12,079	19,552,860	7,443	$4.4B	$0.9B
Georgia	**48,415**	**17,912**	**9,992,167**	**4,750***	**$1.3B**	**$0.2B**
California	50,462	15,127	38,332,521	18,406	$4.0B	$2.0B
Ohio	49,381	19,236	11,570,808	5,536	$2.4B	$0.4B
Pennsylvania	88,383	39,791	12,773,801	12,833	$3.5B	$1.4B

*GDOT 2012 FTE; GDOT 2014 FTE is now 4,121

Cost of Doing Business

$1.0M/lane-mile Resurface Interstate

$278,000/lane-mile Resurface State Route

$30.9M/year for mowing

$14M/year for litter pickup

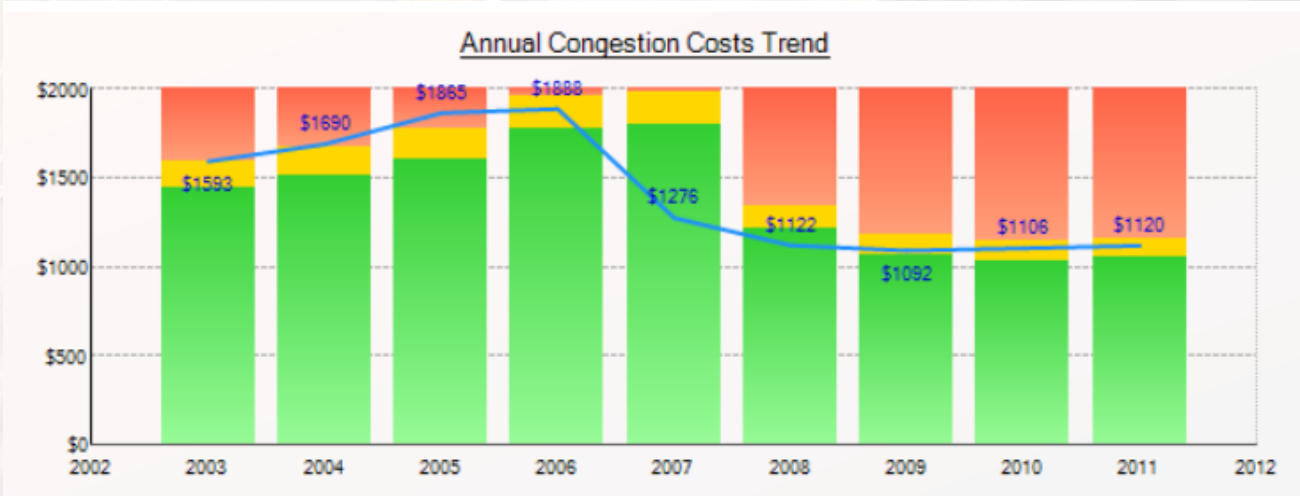
$5.2M/year for Rest Areas & Welcome Centers

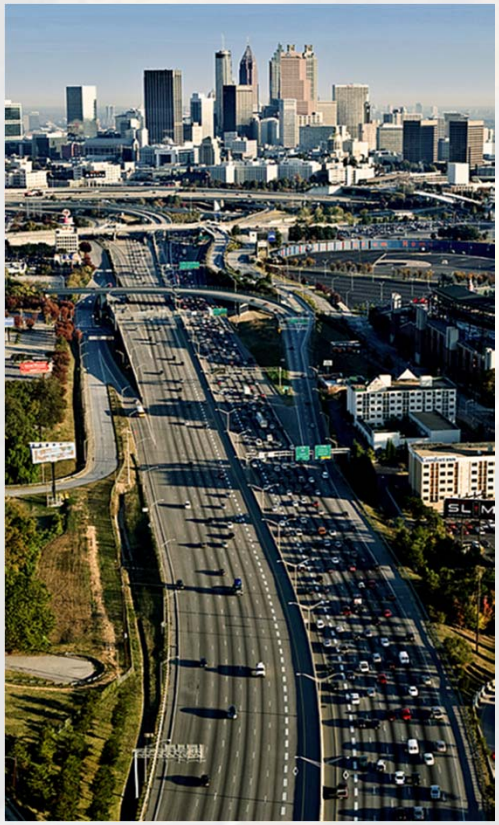
$5.3M to construct 1 new lane mile (urban)

$5.6M/year to maintain ITS

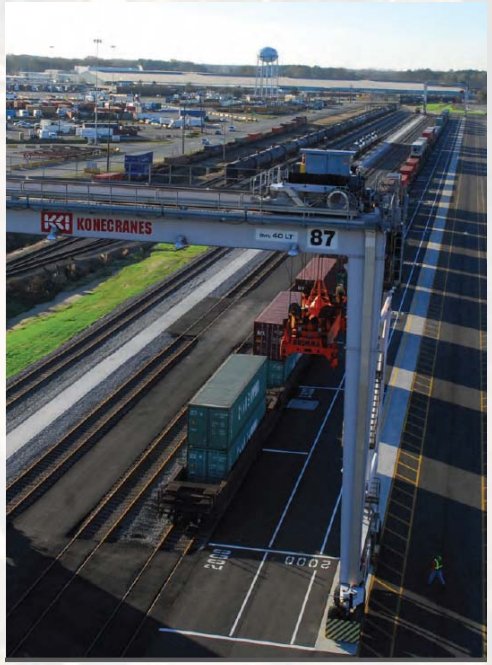
$8.4M/year to maintain traffic lights

Georgia Strategic Plan - Mobility

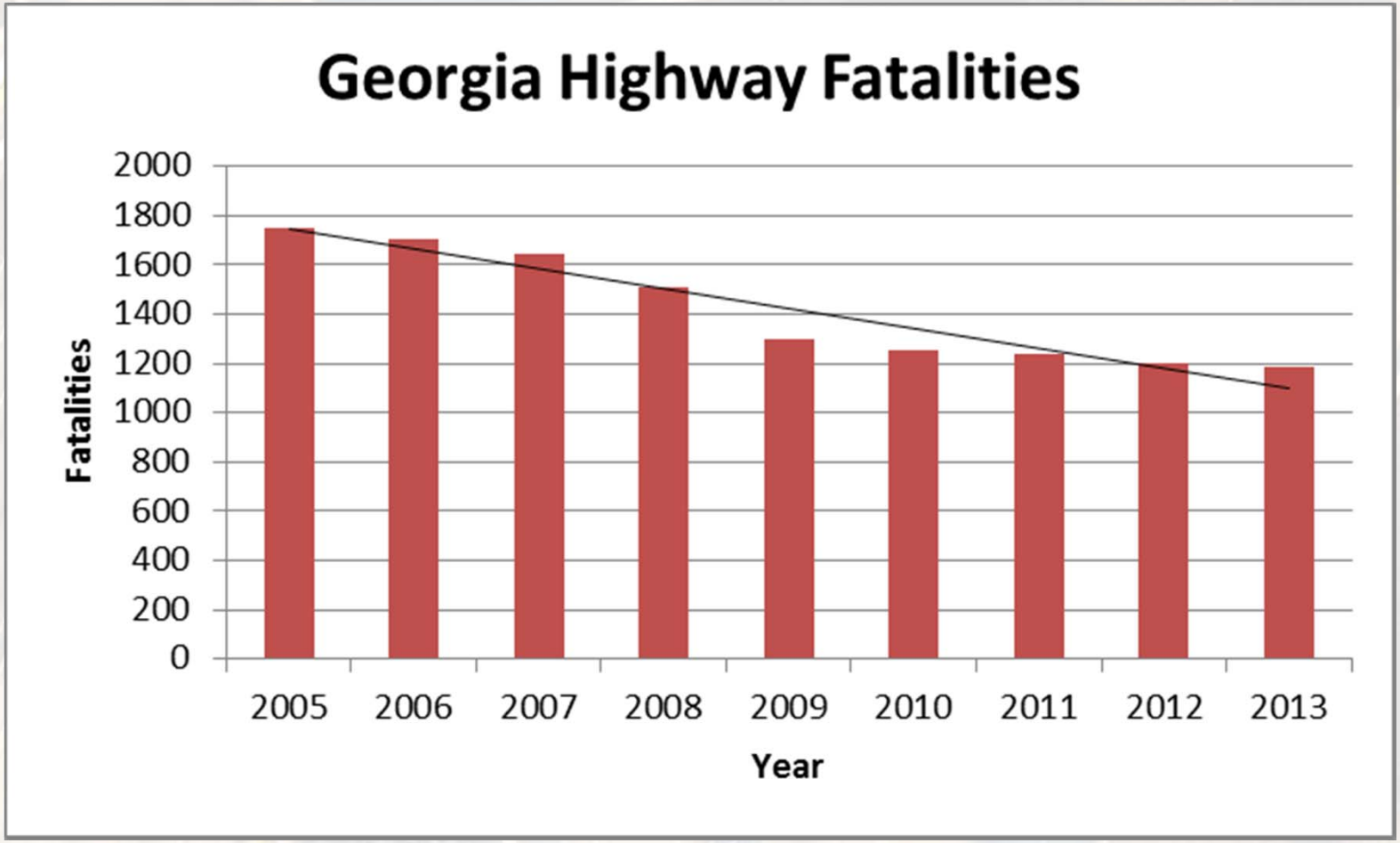




Georgia Strategic Plan - Freight

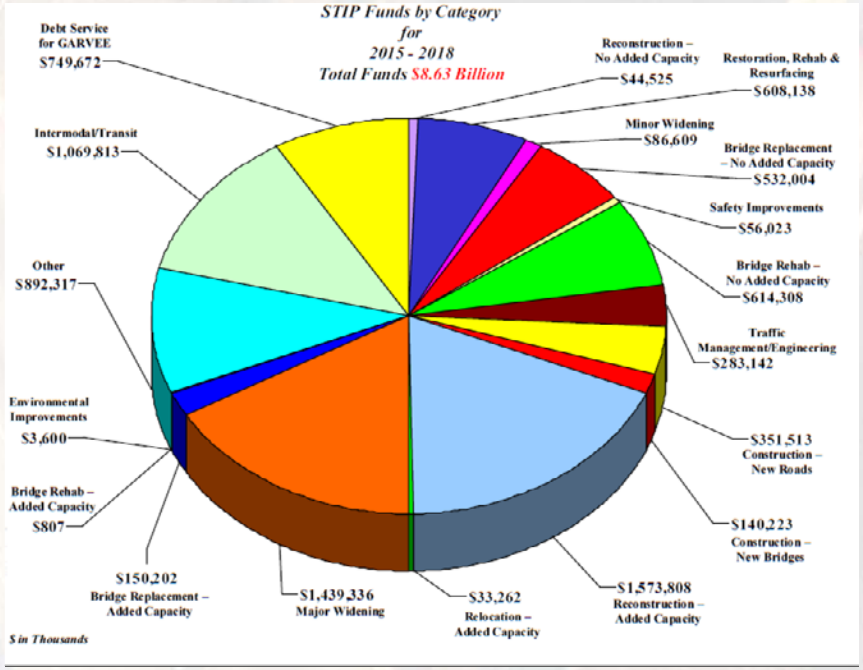


Georgia Strategic Plan - Safety



GDOT Needs

- FY 2015-2018 STIP
  - $8.63 Billion (Includes PE, ROW, Debt Service, etc)
  - Approximately $1.2 Billion in lettings each Fiscal Year

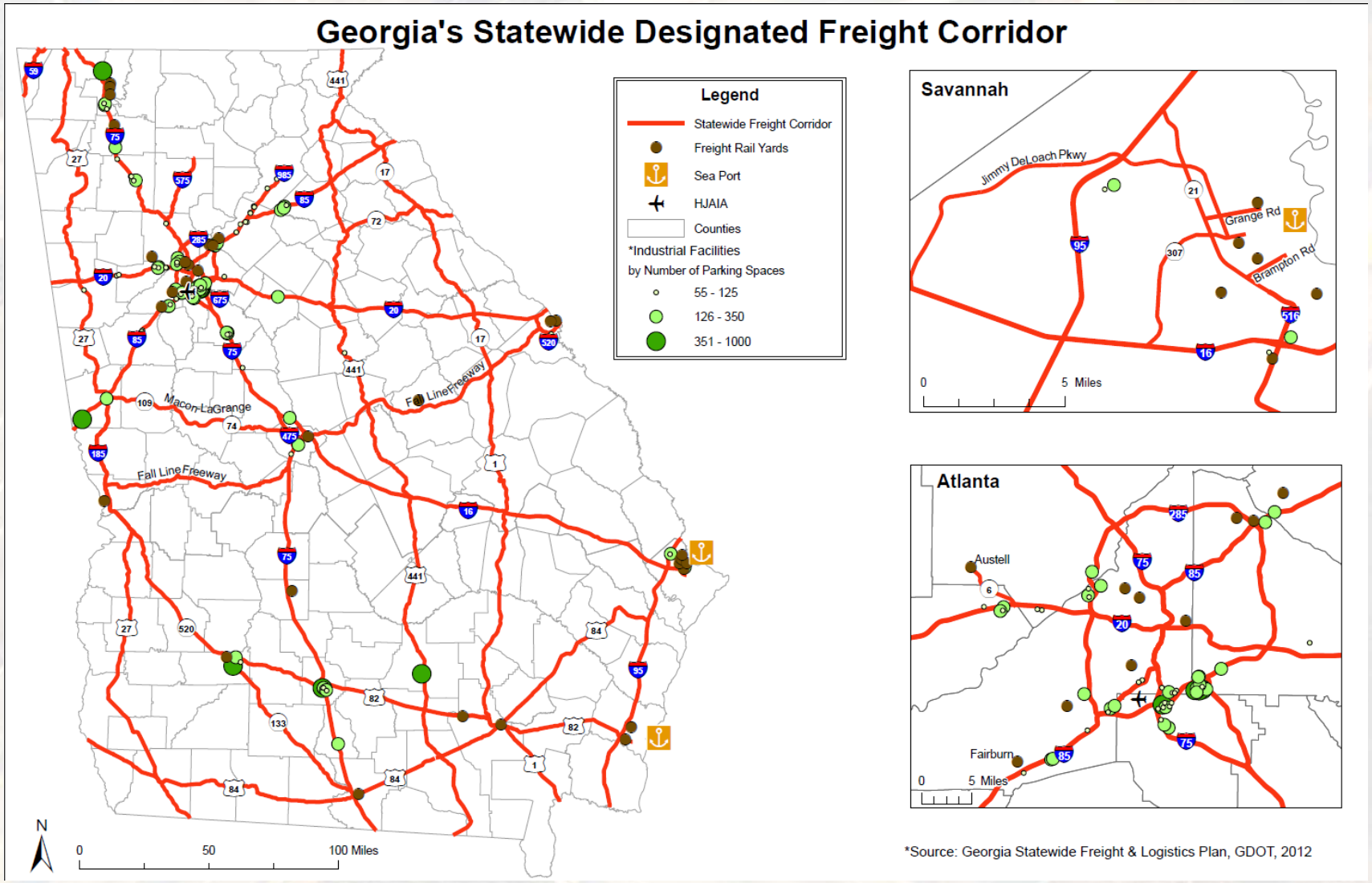


GDOT Needs – Capital Projects

- Not in STIP.
- **$29B*** of Identified but unfunded projects
  - GRIP
  - Freight
  - Rural Mobility
  - Urban Mobility

*This list is not intended to be exhaustive. It represents an analysis of the existing GDOT program.
It does not include needed projects that not currently included within the GDOT Construction Work Program or locally driven priorities.

GDOT Needs – Capital Projects (Freight)



*Source: Georgia Statewide Freight & Logistics Plan, GDOT, 2012

GDOT Needs – Capital Projects (Freight)

Long Haul Capacity:

Project	Cost ($ Millions)
I-85: ATL to SC Line	$800
I-85: ATL to AL Line	$450
I-20: ATL to AL Line	$800
I-75: ATL to Macon	$1,100
I-20: ATL to SC Line	$3,000
I-95: FL Line to SC Line	$1,600
I-75: Macon to FL Line	$1,000
I-75: ATL to Chattanooga	$2,700
I-16: Macon to Savannah	$1,900
Total	**$13,350**

Source: Georgia Statewide Freight and Logistics Plan (2012)

GDOT Needs – Capital Projects (Freight)

Interchanges/Other:

Project	Cost ($Millions)
I-16 @ I-75	$300
I-285 @ I-20W	$450
I-285 @ I-20E	$250
I-16 @ I-95	$70
I-20 @ Savannah River	$41
Brampton Road Connector	$24
Sandersville Bypass	$21
Total	$1,156

Source: Georgia Statewide Freight and Logistics Plan (2012)

GDOT Needs – Capital Projects

Rural Mobility:

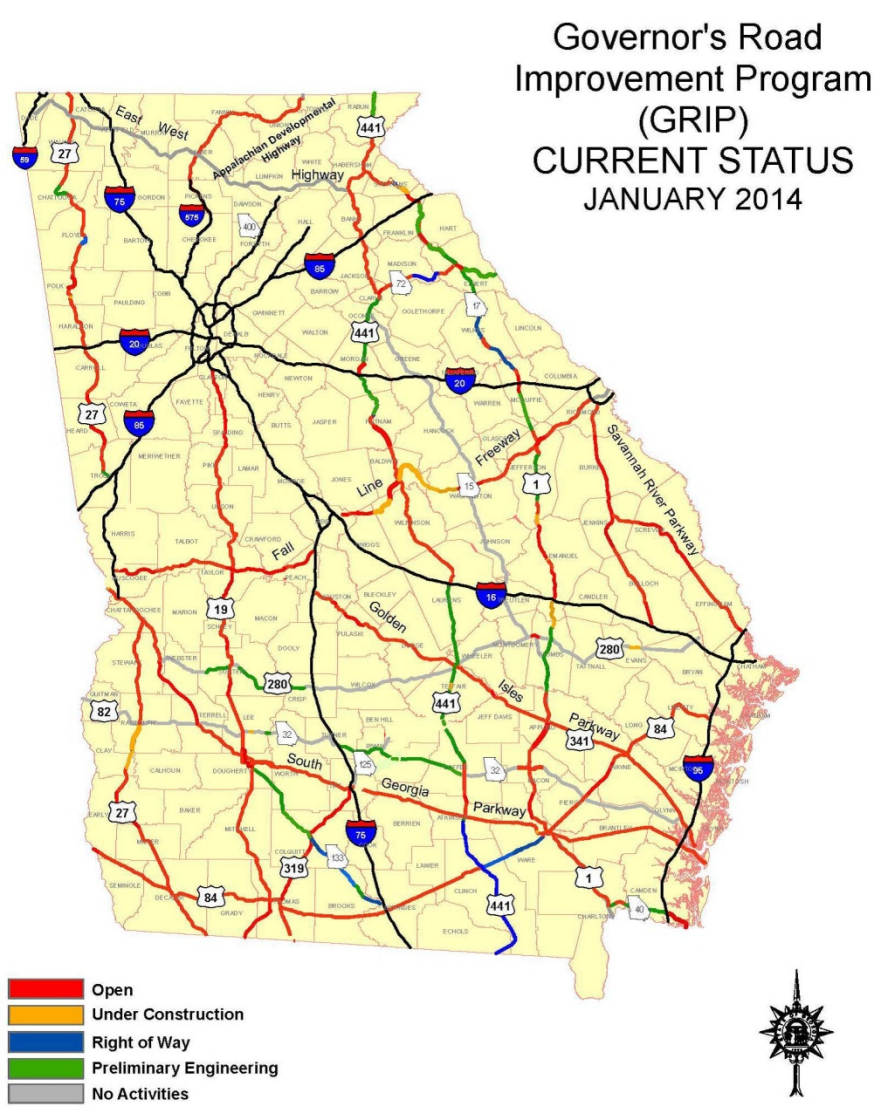
Project	Cost ($ Millions)		Project	Cost ($ Millions
SR 5/McCaysville Bypass (Fannin)	$35		SR 36 Widening (Lamar/Upson)	$121
SR 101 Improvements (Floyd)	$90		SR 115 Widening (Lumpkin)	$47
SR 166 Widening (Carroll)	$45		Cleveland Bypass Phase III (White)	$8
SR 96 Widening (Houston/Twiggs)	$90		SR 99 Widening (Glynn)	$105
SR 10 Improvements (Clarke)	$35		SR 107 Widening (Ben Hill)	$35
Hinesville Bypass (Liberty)	$12		SR 11/US 129 Widening (Union)	$42
Sparta Bypass (Hancock)	$9		**Total**	**$674**

GDOT Needs – Capital Projects

Urban Mobility:

Project	Cost ($ Millions)		Project	Cost ($ Millions
Revive285	$3,000+		I-85 @ SR 74 (Fulton)	$22
Managed Lane Implementation Plan	$2,800		West Winder Bypass (Barrow)	$28
Rome-Cartersville Econ. Dev. Corridor	$180		SR 138 Widening (Rockdale)	$105
Sugarloaf Pkwy Extension	$300		SR 162 Widening (Rockdale/Newton)	$23
SR 316 Interchange (Barrow)	$45		SR 140 Widening (Cherokee/Bartow)	$165
SR 20 Widening (Cherokee/Forsyth)	$110		SR 369 Widening (Forsyth)	$53
SR 92 Widening (Cobb/Paulding)	$125		**Total**	**$6,956**

GDOT Needs – Capital Projects (GRIP)



GDOT Needs – Capital Projects (GRIP)

GRIP Corridor	Cost to Complete ($ Million)		GRIP Corridor	Cost to Complete ($ Million)
Appalachian Development Corridor	$15		US 280	$1,400
SR 72	$150		SR 32	$1,250
US 1/SR 17	$775		SR 40	$60
US 27	$375		East-West Highway	$550
US 441	$800		SR 15	$920
US 84	$110		SR 125	$170
SR 133	$270		**Total**	**$6,840**

Source: GDOT GRIP Fact Sheet (January 2014)

Other Capital Projects

- Vision, But No Money
  - SR 400 widening (North of McFarland)
  - Completion of SR 316 interchanges/grade separations
  - Macon – LaGrange Freight Corridor
  - Unforeseen Economic Development Needs
  - Other Locally Driven Transportation Priorities

GDOT Needs – Bridge Maintenance

- There are 6,651 GDOT Bridge Structures. Of these:
  - The average age is **44** with the oldest being 112.
  - The average bridge handles **17,698** vehicles per day with the heaviest traveled handling 335,210 vehicles per day.
- The state must do more with less; a "worst to first" approach won't work.
- Maintaining bridges in a state of good repair enhances local economic engines.

GDOT Needs – Bridge Replacements

- 1622 GDOT Structures need to be replaced over the next 20 years at a cost of $6.44B.
  - Should be replacing **89** structures per year to maintain a 75 year life cycle.
- 2450 locally owned structures need to be replaced over the next 20 years at a cost of $4.8B.
  - Should be replacing **107** structures per year to maintain a 75 year life cycle.
- In 2014, GDOT replaced **60** bridges.

Source: Bridge Inventory Reports

GDOT Needs – On-going Bridge Maintenance

- Total bridge maintenance costs – representing deferred bridge maintenance (backlog).

Activity	# of Bridges/year	Funds Needed
Fatigue Prone	35	$15,000,000
Scour Critical	71	$27,500,000
Deck Overlay	3089	$2,280,000,000
Deck Rehab	412	$1,480,000,000
Bridge Painting	1724	$78,300,000
Deficient Joints	1802	$52,500,000

Source: Bridge Inventory Reports; GDOT Analysis

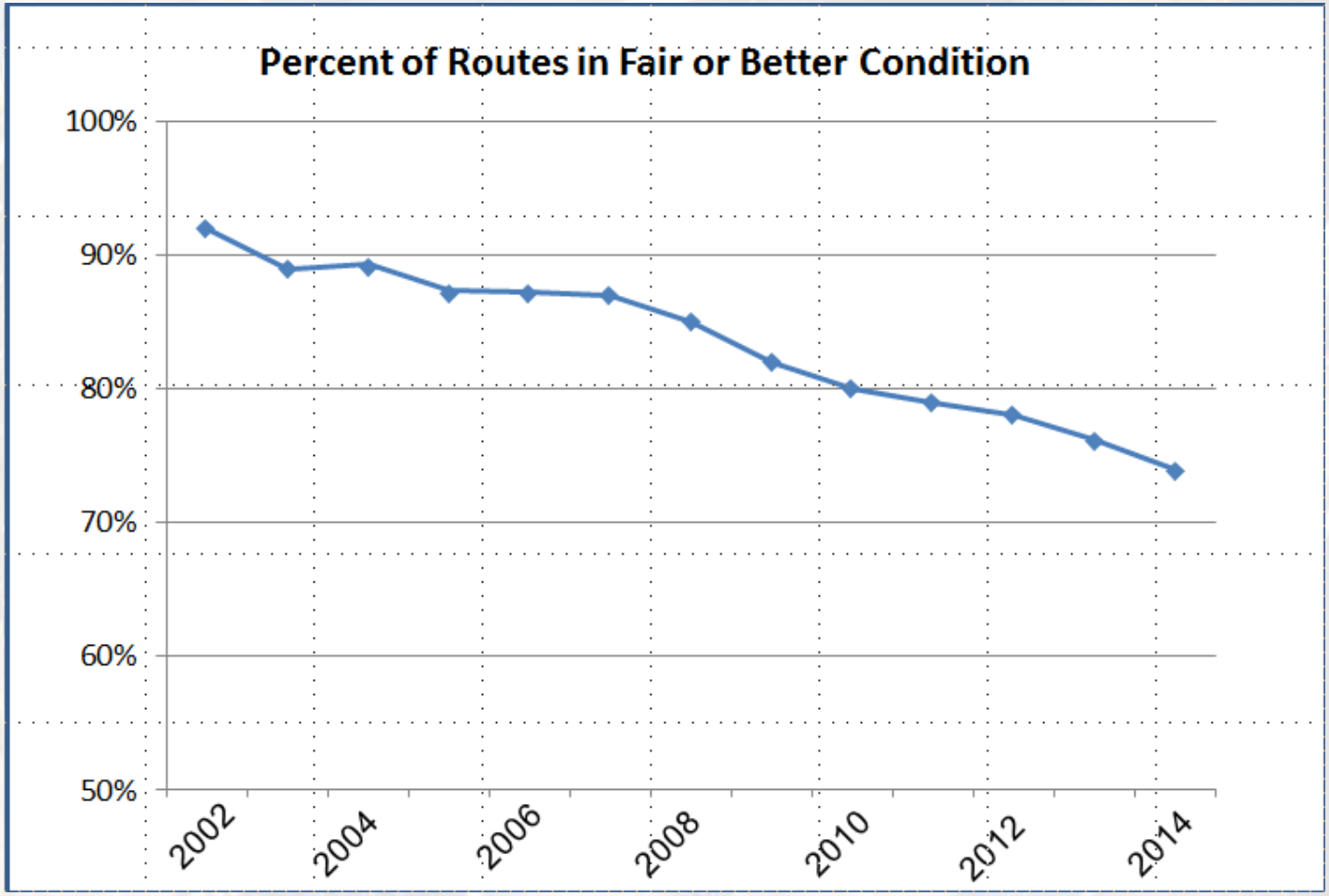
GDOT Needs – On-Going Bridge Maintenance

- Ongoing costs yearly to fully maintain state owned bridges and tackle backlog

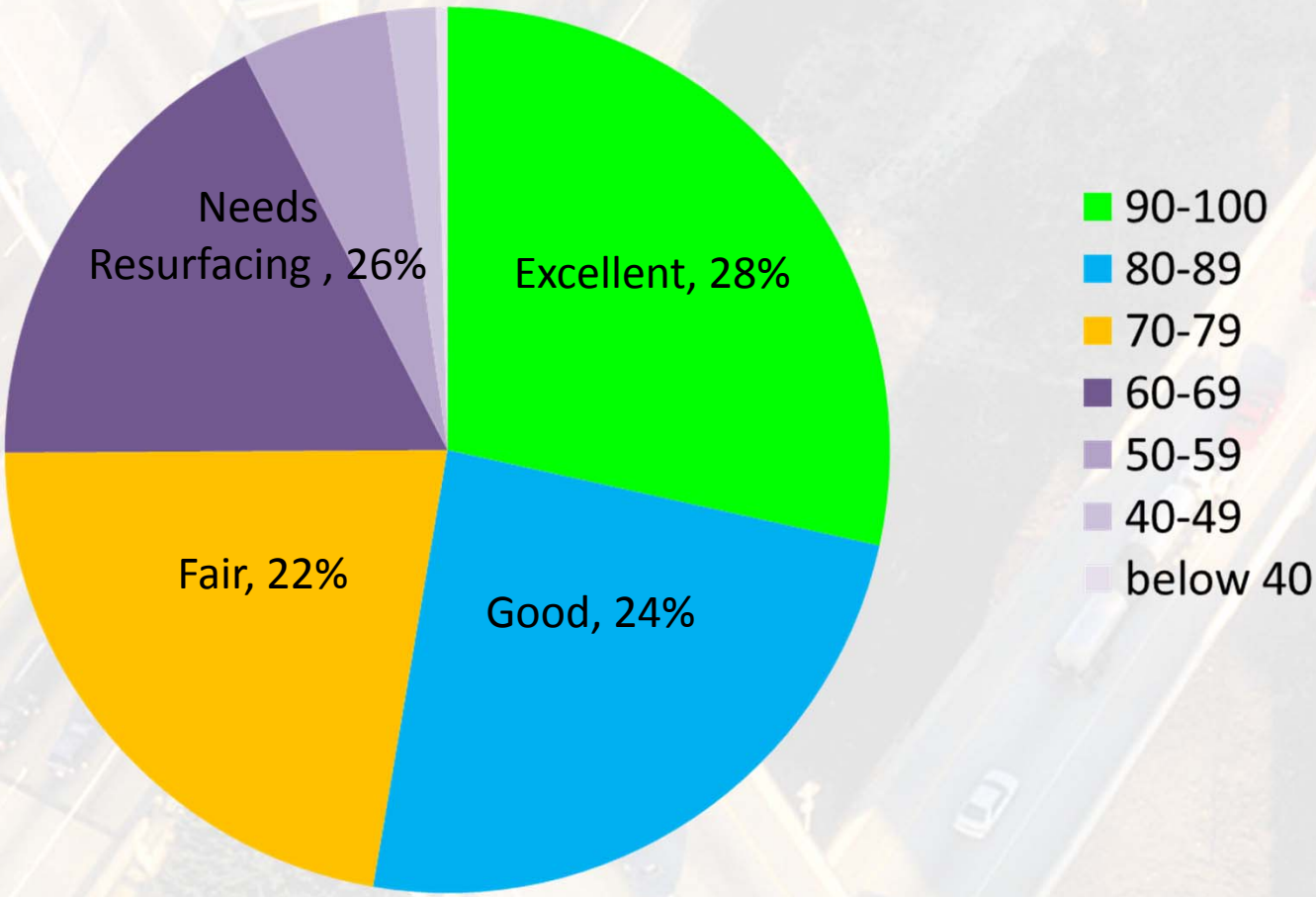
Activity	# of Bridges/year	Funds Needed
Bridge Painting	69	$6,500,000
Bridge Joints	600	$6,000,000
Deck Overlay	193	$159,940,000
Bridge Rehab	101	$128,500,000

- Current Annual Funds Available (2015-2018 STIP): Approx. $24M/year

GDOT Needs - Roadway Maintenance



GDOT Needs - Roadway Maintenance



GDOT Needs - Roadway Maintenance

Maintenance Need	Current Annual Allocation	Annual Allocation Need ($)
State Route Resurfacing		$200,000,000.00
Interstate Rehabilitation		$140,000,000.00
Overhead Sign Replacement		$10,000,000.00
Striping and Raised Pavement Markers		$28,000,000.00
Total Capital Maintenance (Federal funds)	**$125,000,000.00**	**$378,000,000.00**
Equipment		$15,000,000.00
Ground Signs		$2,500,000.00
Guardrail, Crack Filling, Mowing, Vegetation Control, Litter Removal, Slab Replacement, Fencing, Wall Repair		$100,000,000.00
Total Routine Maintenance (State Funds)	**$51,654,478.00**	**$117,500,000.00**
Grand Total	**$176,654,478.00**	**$495,500,000.00**

GDOT Needs - Intermodal

- Georgia Airport 5 year Capital Improvement Plan - $924M Total Cost ($18.6M State match/year)
- Annual maintenance cost of $30M for airfield pavement
  - Work is being deferred resulting in declining pavement ratings
- Short Line railroad rehab and maintenance costs total $836M over 20 years ($41.8M/year)
- **FY 15 Budgeted Amount: $10,961,881**
  - **$10,598,291 Airport Aid**
  - **$363,590 Rail State General Fund**

Total Needs

- Total unfunded (not in STIP) capital needs approximately $29 billion.
- $320M/year gap for roadway maintenance.
  - $6.4B over 20 years
- $276M/year gap for bridge maintenance.
  - $5.5B over 20 years
- $70M/year gap for airport aid/rail.
  - $1.4B over 20 years