Update on Scenarios and Scope of Financial Analysis

Discussion Document

October 15, 2008

TOPICS FOR DISCUSSION

- **Update on scenarios**
  - **Metro Atlanta**
  - **Freight**

- Update on financial scope

WE WILL ENGAGE THE STATE TRANSPORTATION BOARD THROUGHOUT THE PROCESS

PRELIMINARY

Today's discussion

July 16: Applying "business planning" to Georgia's transportation strategy

August 14: Review of goals and "customer service objectives"

August 20: Finalizing objectives for the state investment strategy

September 9: Past performance and key choices for the state

September 17: Review of proposed investment scenarios for non-attainment regions

October 7: Review of proposed investment scenarios for other regions

October 15: Proposed scope of work for financial analysis

November 4 (off-site): Review of scenario results and financial implications (4 hours)

November 13: Review of options for financial strategy (2 hours)

November 19: Update on financial options and implications for key choices (1 hour)

SCENARIOS UNDER EVALUATION FOR METRO ATLANTA

ILLUSTRATIVE

Basic scenario approach	Scenario description
• **Demand-side actions:** – Reduce travel demand – Reduce non-recurring delay	• ***Option 1 ("No regrets"):*** Improve incident management and utilize non-fee-based demand management • ***Option 2:*** Option 1 + some combination of: – HOV to HOT conversions on interstates – Additional aggressive demand management (e.g., VMT-based fees)

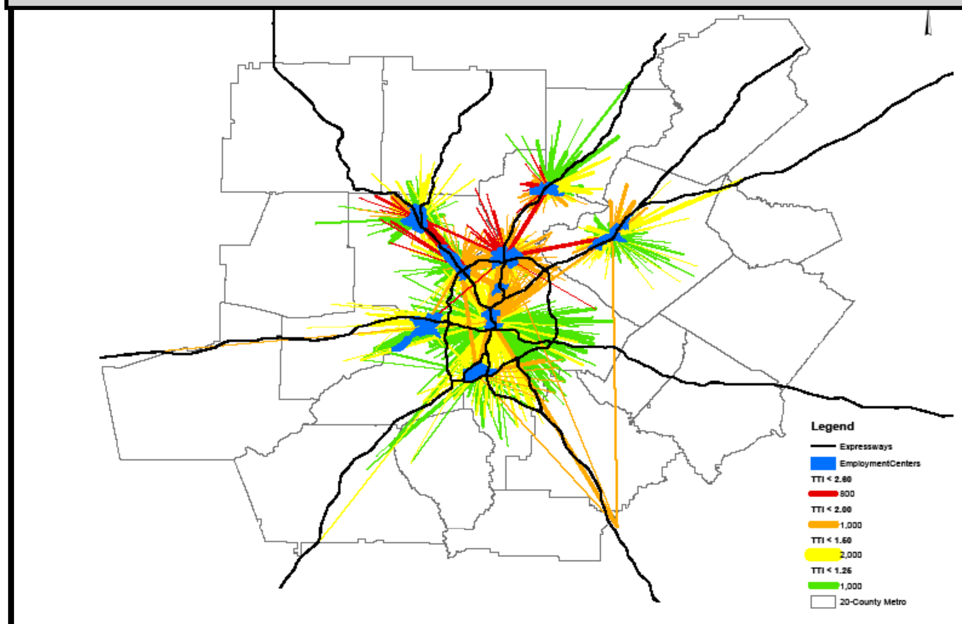
• **Supply-side and demand-side actions:**
– Reduce travel demand
– Reduce non-recurring delay
– Increase infrastructure supply
	• ***Option 3A:*** Option 2 + supply options that have lower impact on public funds and/or are implementable within 10 years:
	– New managed lanes
	– Expanded transit
	  • Express buses between centers
	  • "Premium" circulators in centers
	
	• ***Option 3B:*** Option 3A + high capacity transit projects:
	– By 2020 - 1-2 fixed guide way projects
	– By 2030 - 2-3 additional fixed guide way projects
	
	• ***Option* 4:** Option 3A or 3B + increased density near transit

PRELIMINARY

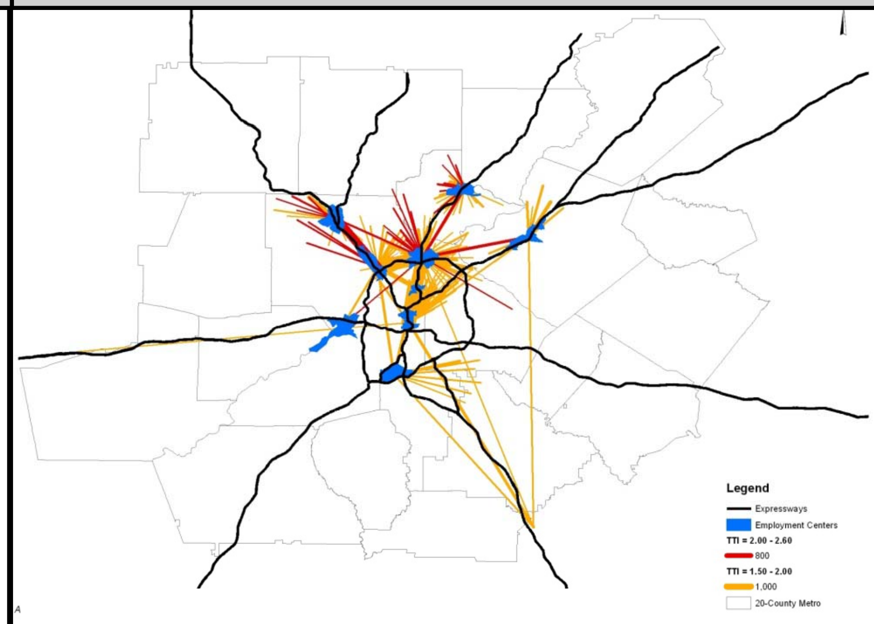
IN ATLANTA, A KEY FOCUS FOR SCENARIO DEVELOPMENT IS EXPANDING ACCESS TO MAJOR EMPLOYMENT CENTERS

OD pairs indicate volume during the AM travel period (line size) and travel time index (color)

All work trips to and from the largest employment centers: 2030 A.M. peak period, by volume and delay



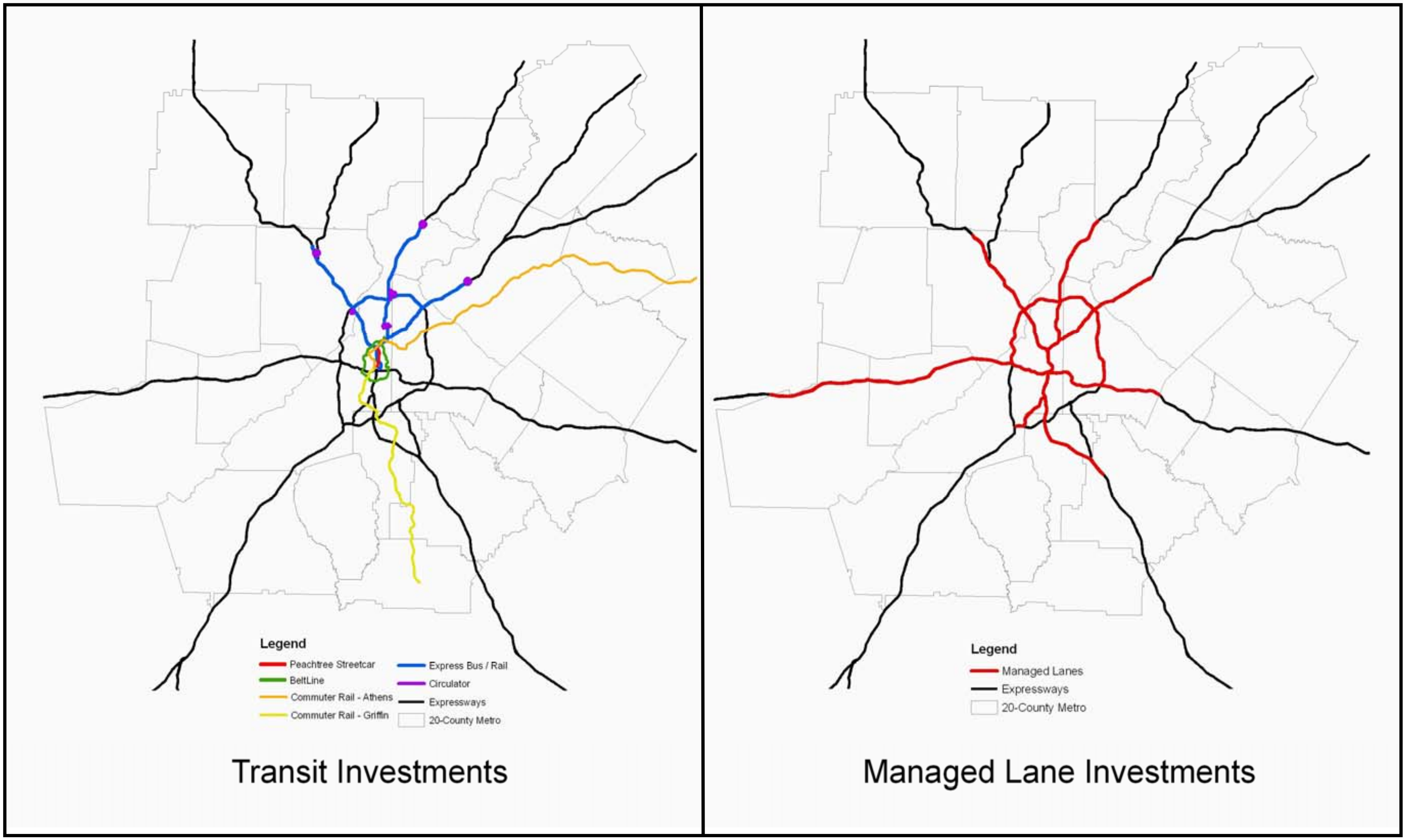
Most delayed work trips to and from the largest employment centers: 2030 A.M. peak period



Top 10 employment centers = ~25% of Metro Atlanta jobs

Source: ARC Travel Demand Model – 2030 No Build Scenario

METRO ATLANTA PEOPLE-MOBILITY SCENARIOS: POTENTIAL INVESTMENTS



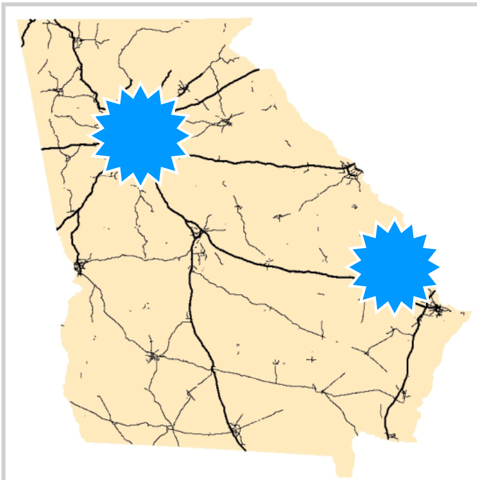
Source: ARC Travel Demand Model

SCENARIOS UNDER EVALUATION FOR FREIGHT (1/2)

New limited access facilities   Improvements to existing facilities

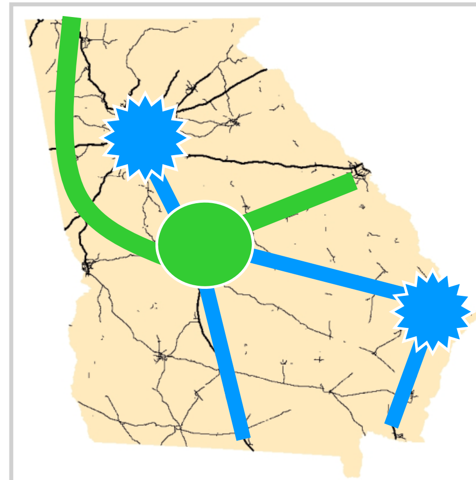
A

Current needs



B

Truck-heavy investments: current and future needs



Guiding principles/ assumptions

Scenario A

- Extremely limited resources available
- Demand management used to divert truck "through" traffic
- For other traffic, several key investments to "free the freeways"

Scenario B

- Builds on Scenario A: significant resources available
- Bottleneck relief and demand management are not enough – new facilities necessary
  - Create new limited access by-passes
  - Create an inland port south of Atlanta
- Railroads will expand capacity on their own if mode shift is possible

Key investments/ policies

Scenario A

- **New investments**
  - Last mile connectivity for port
  - Targeted improvements in intersections across the state
  - Grade-separated rail crossings where cars and trains meet
- **Demand management**
  - Focus on Atlanta bottlenecks

Scenario B

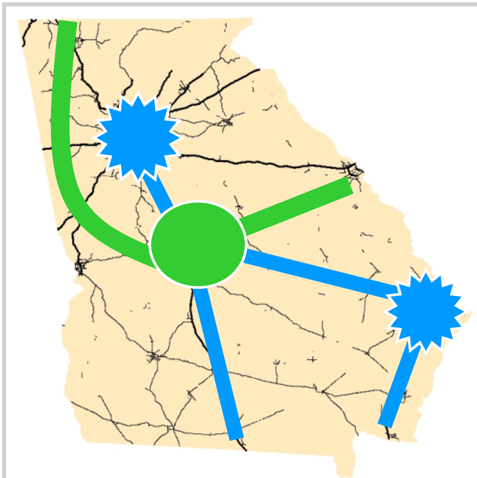
- **All investments in Scenario A and**
  - New East-West limited access expressway
  - North-West by-pass of Atlanta
  - Three lanes in each direction on existing interstates feeding the ports
- **Demand management – same as Scenario A**

SCENARIOS UNDER EVALUATION FOR FREIGHT (2/2)

New limited access facilities   Improvements to existing facilities

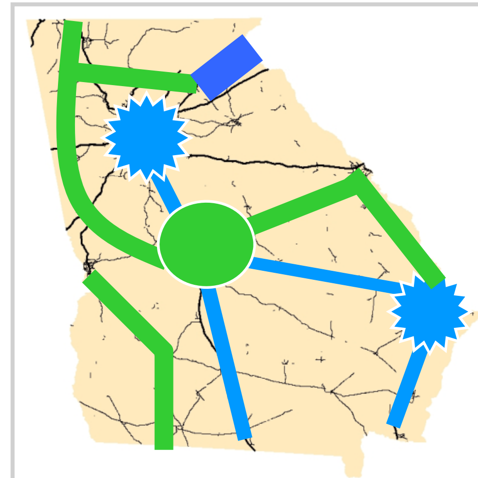
C

Truck- and rail-heavy investments: current and future needs



D

"Perfect" connectivity: current and future needs



Guiding principles/ assumptions

Scenario C

- Builds on Scenario A & B: significant resources available
- Improving rail capacity and operations in GA will
  - Have a material effect on reliability across the whole network
  - Result in a mode shift
- Benefits to the state from a 1% mode shift to rail are large

Scenario D

Target similar funding envelope to C

- Limit rail investments to what was already in B

Key investments/ policies

Scenario C

- **Investments from Scenarios A and B and (in partnership with railroads)**
  - Grade separate major at-grade rail crossings
  - Create new rail lines
- **Demand management – same as Scenario A**

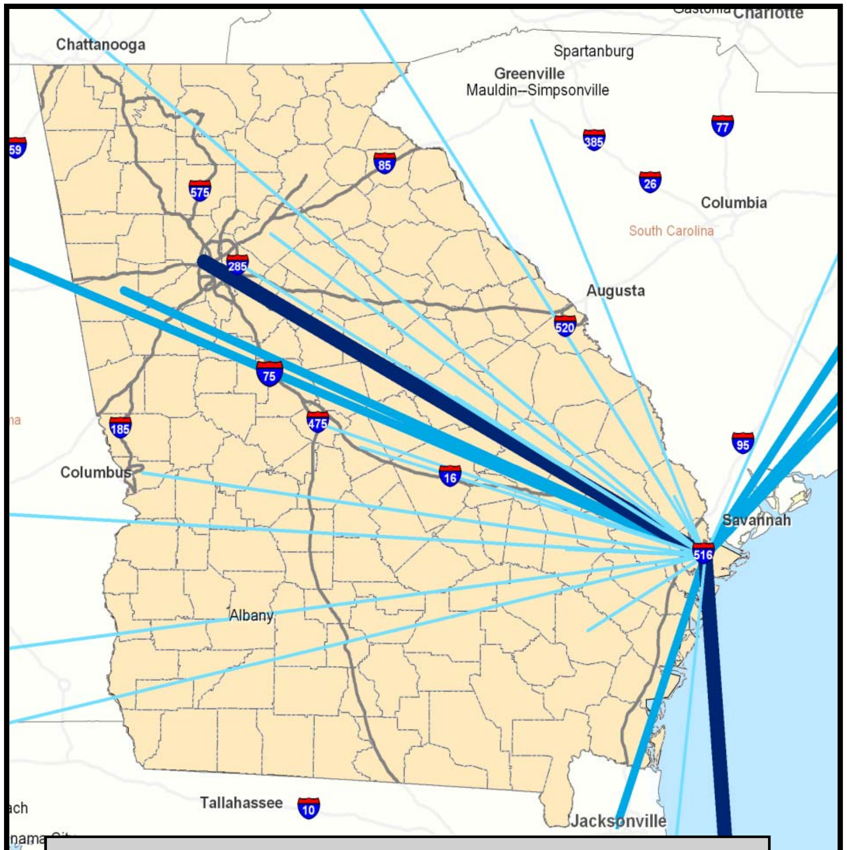
Scenario D

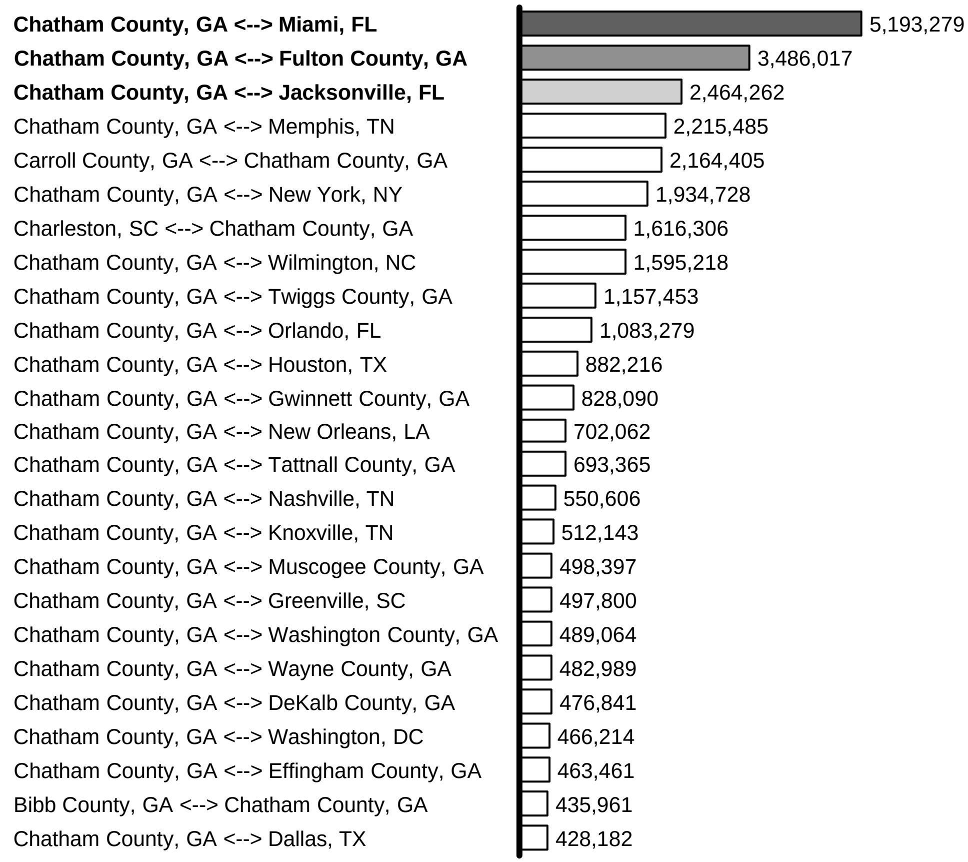
- **Investments from Scenarios A and B and**
  - Limited access bypasses connecting (nearly) all major freight origins and destinations
  - Limited access East-West by-pass that diverts traffic from I-285N
  - At least 3 lanes in each direction on I-85N
- **Demand management – same as Scenario A**

OUR FREIGHT SCENARIOS WILL ADDRESS KEY MOVEMENTS FOR THE PORT OF SAVANNAH

Top 25 bi-directional O/D pairs for Chatham County**
Tons

Legend
Truck Tonnage
428,182 - 1,000,000
1,000,001 - 2,500,000
2,500,001 - 5,193,279
Freeway System (State)





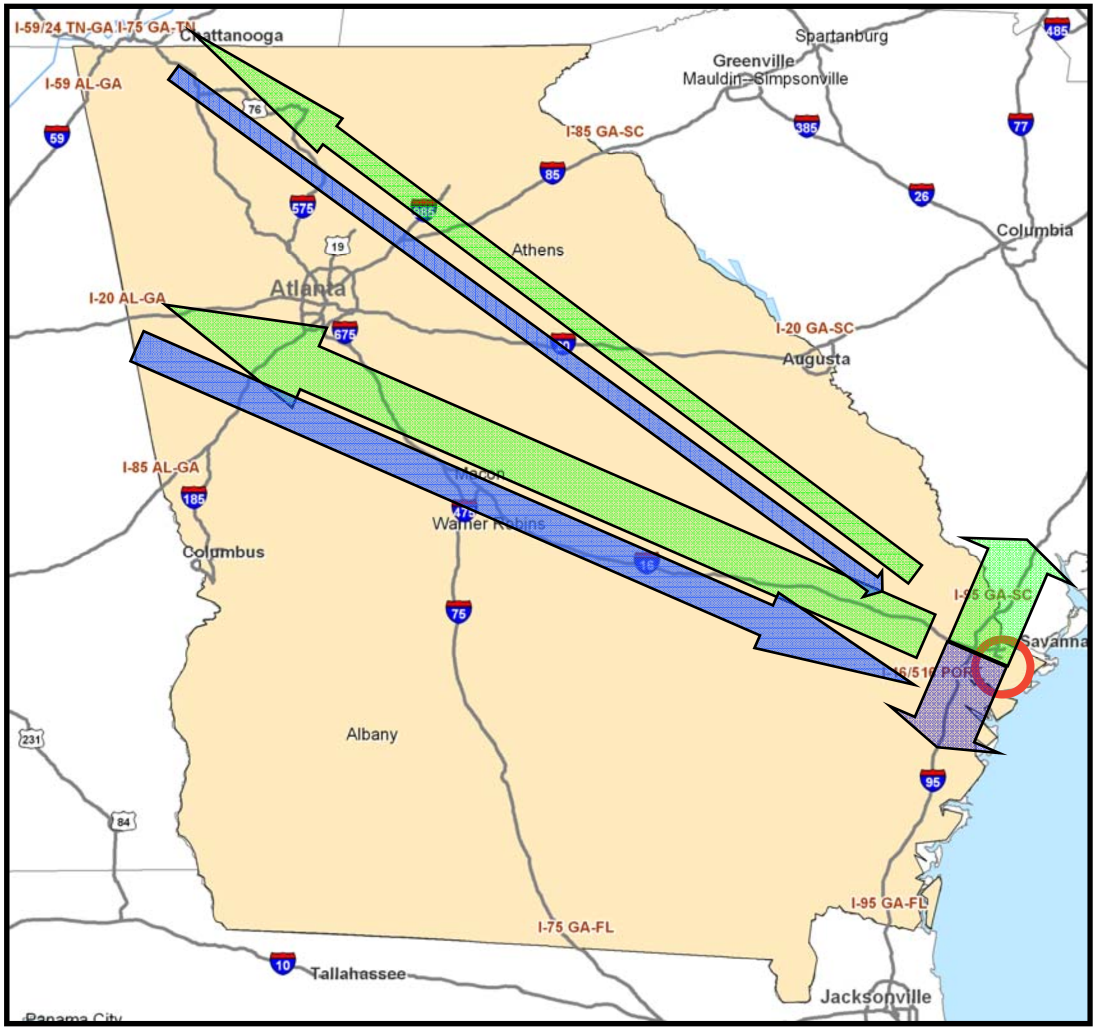
Top 25 pairs account for ~ 60% of all tonnage related to Chatham county

* Measured as truck flows to and from Chatham County, GA
** Excludes flows within Chatham County, GA

Source: Transearch 2004, ESRI Business Analyst

KEY FLOWS TO AND FROM THE PORT OF SAVANNAH RUN NORTHWEST

Directional distribution of truck tonnage passing through I-16/516 port of Savannah gateway



- ~37 million tons in 2004 (5% of total GA tons) pass through the I-16/516 gateway
- Largest share of inbound and outbound traffic flows
  - Along I-95 toward Florida and up the East Coast
  - Toward Atlanta
  - Toward the Alabama border (through the I-20 West gateway)
  - Toward the border with Tennessee, along I-75 North
- Freight investment scenarios must "preserve" these flows

* Gateways are defined as the highway segments on interstates that act as entries and exits of truck freight in and out of Georgia. I-16/516 Port gateway is comprised of I-16 and I-516 segments that surround the Port of Savannah

Source: Transearch 2004, ESRI Business Analyst

TOPICS FOR DISCUSSION

- Update on scenarios

- **Update on financial scope**

FINANCIAL ANALYSES WILL ANSWER 3 BASIC QUESTIONS

PRELIMINARY

Questions:

1. What resources do we have?
2. What resources are required?
3. How do we collect and distribute them fairly?

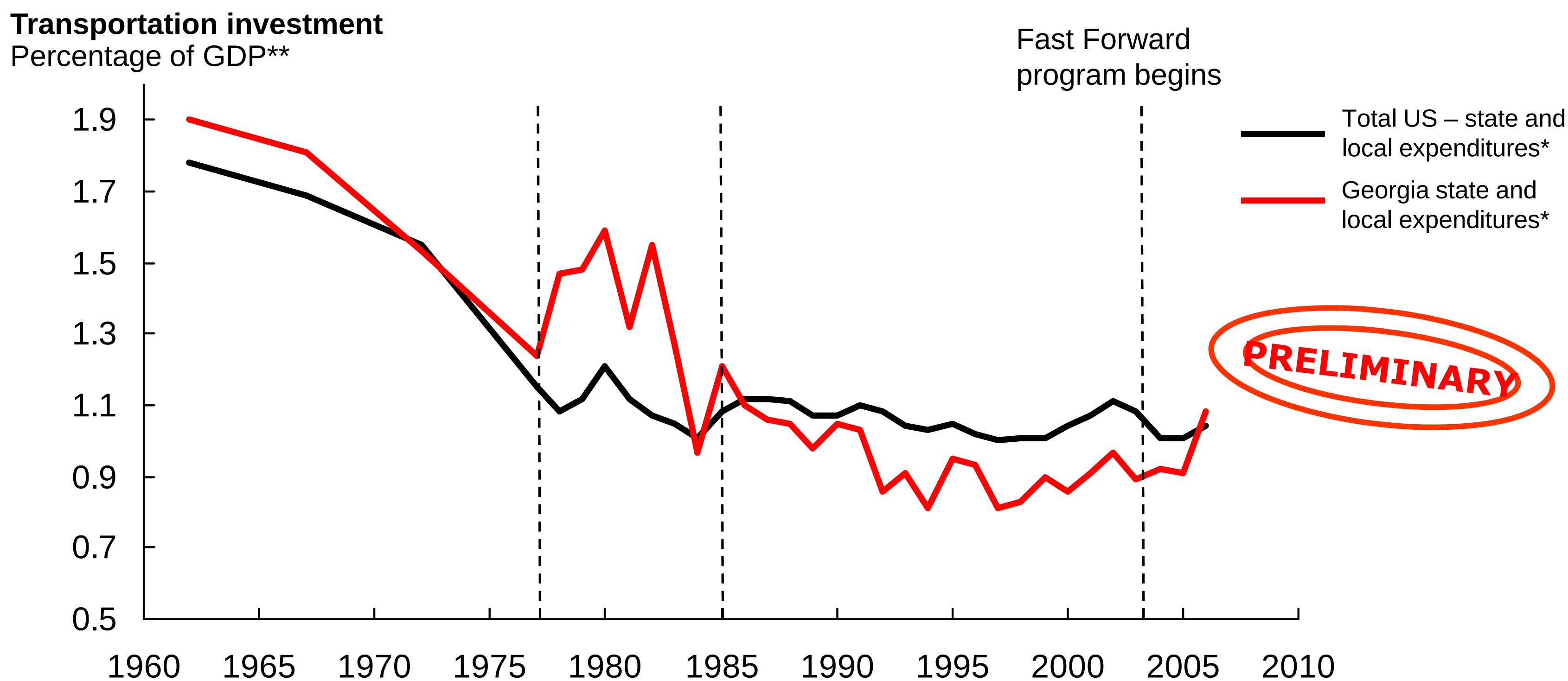
Deliverables:

1.
- Current revenue from transportation-related sources
  - Trend over time
  - Comparison with other states
- Current uses of revenue
  - Project prioritization

2.
- Total scenario costs estimates
- Breakdown of costs by project type and location

3.
- Review best practices and identify state assets that may be monetized
- Estimate additional revenue available from existing sources
- Estimate additional government resources
- Estimate non-government resources

AFTER A SPIKE IN THE EARLY-MID 1980s, GEORGIA PURSUED A “HARVEST” STRATEGY FOR TRANSPORTATION



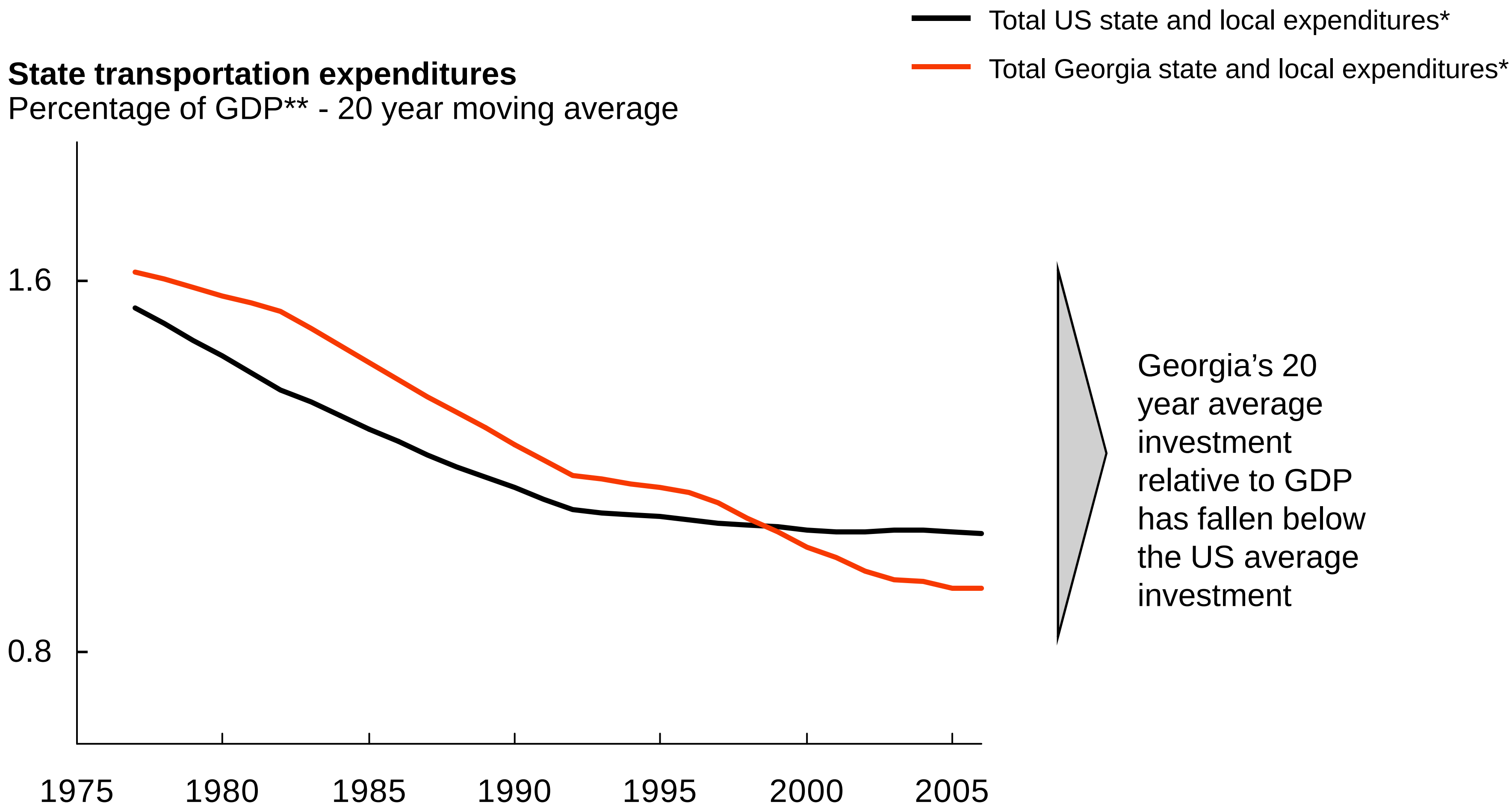
End of interstate system investment: 1962-1977	Major investment: 1977-1985	Reaping the benefits of past investments: 1985-2004	Future investment - ?
• Slow growth in lane miles per capita • GDP - GA: 8.6% (CAGR) • Population - GA: 1.6% (CAGR)	• “Free the Freeways” • MARTA • GDP - GA: 11.7% (CAGR) • Population - GA: 1.7% (CAGR)	• GA investment lower than US investment despite growth • Investment increase after 2004 primarily financed through bonds • GDP - GA: 6.5% (CAGR) • Population - GA: 2.1% (CAGR)	• What is the sustainable investment path for the future?

* State and local expenditures include Federally-funded expenditures
** Used 5-year CAGR to estimate 2001 and 2003 local expenditures data
Source:U.S. Bureau of Economic Analysis, U.S. Census Bureau, Georgia Department of Audits and Reports (FY 2003-06)

IF INVESTMENT IS "SMOOTHED" OVER 20 YEARS, THE 1980's SPIKE "WORE OFF" AROUND 1999

PRELIMINARY

State transportation expenditures
Percentage of GDP** - 20 year moving average



Georgia's 20 year average investment relative to GDP has fallen below the US average investment

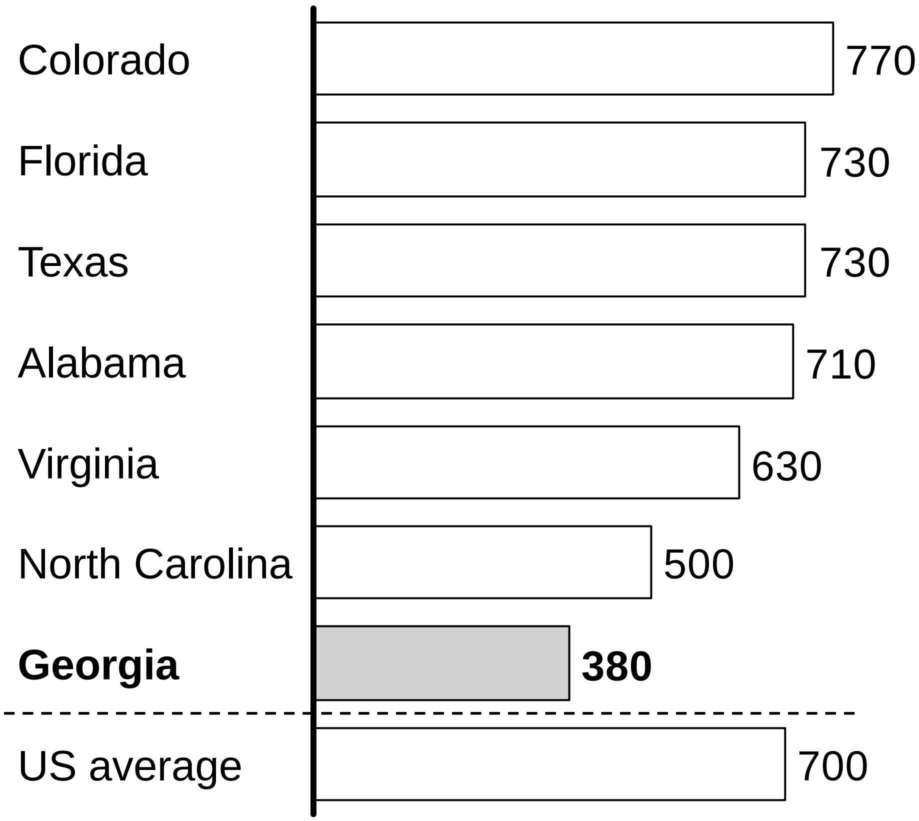
* State and local expenditures include federally-funded expenditures
** Used 5-year CAGR to estimate 2001 and 2003 local expenditures data

Source: U.S. Bureau of Economic Analysis, U.S. Census Bureau, Georgia Department of Audits and Reports (FY 2003-06)

IN RECENT YEARS, GEORGIA HAS INVESTED ~45% LESS IN TRANSPORTATION THAN OTHER US STATES

PRELIMINARY

Total highway and transit resources – 2006*
Dollars per capita



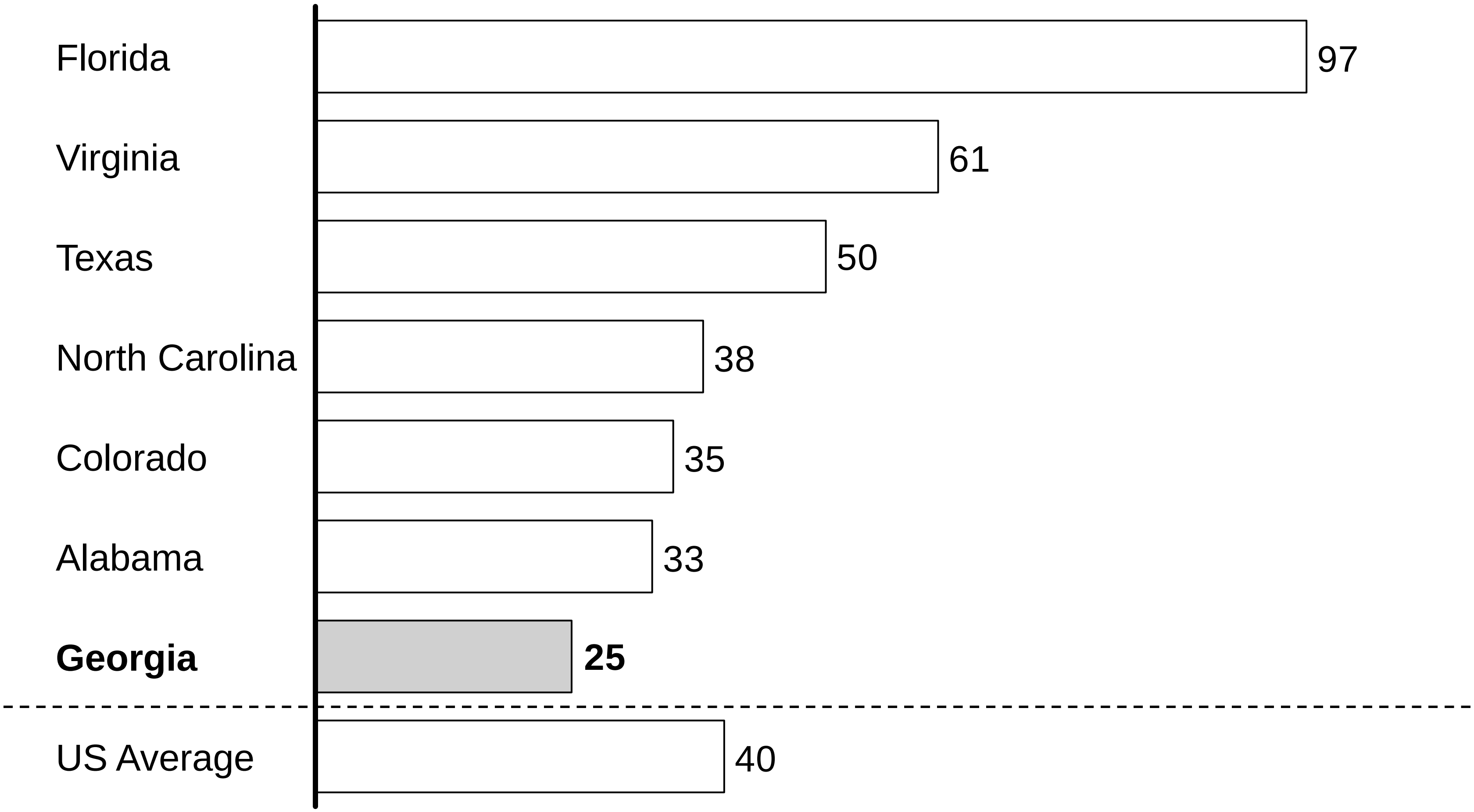
- Georgia has the 2nd lowest transportation resources per person in the U.S.
- Tennessee ranks last, with $354 of transportation revenue per capita

* Latest local resource figures available for other states are from 2005. The 2006 estimates of local resources are based on historical trends. Transit fares and other revenues are included in local receipts. Excludes proceeds from bonds and revenue generated by transportation that isn't spent on transportation

Source: Federal Highway Administration, National Transit Database, U.S. Census Bureau estimates

ON A PER CENTER LINE MILE BASIS, GA RANKS 35TH IN TOTAL ROAD RESOURCES NATIONALLY

Road transportation resources – 2006
$ Thousands / center line mile

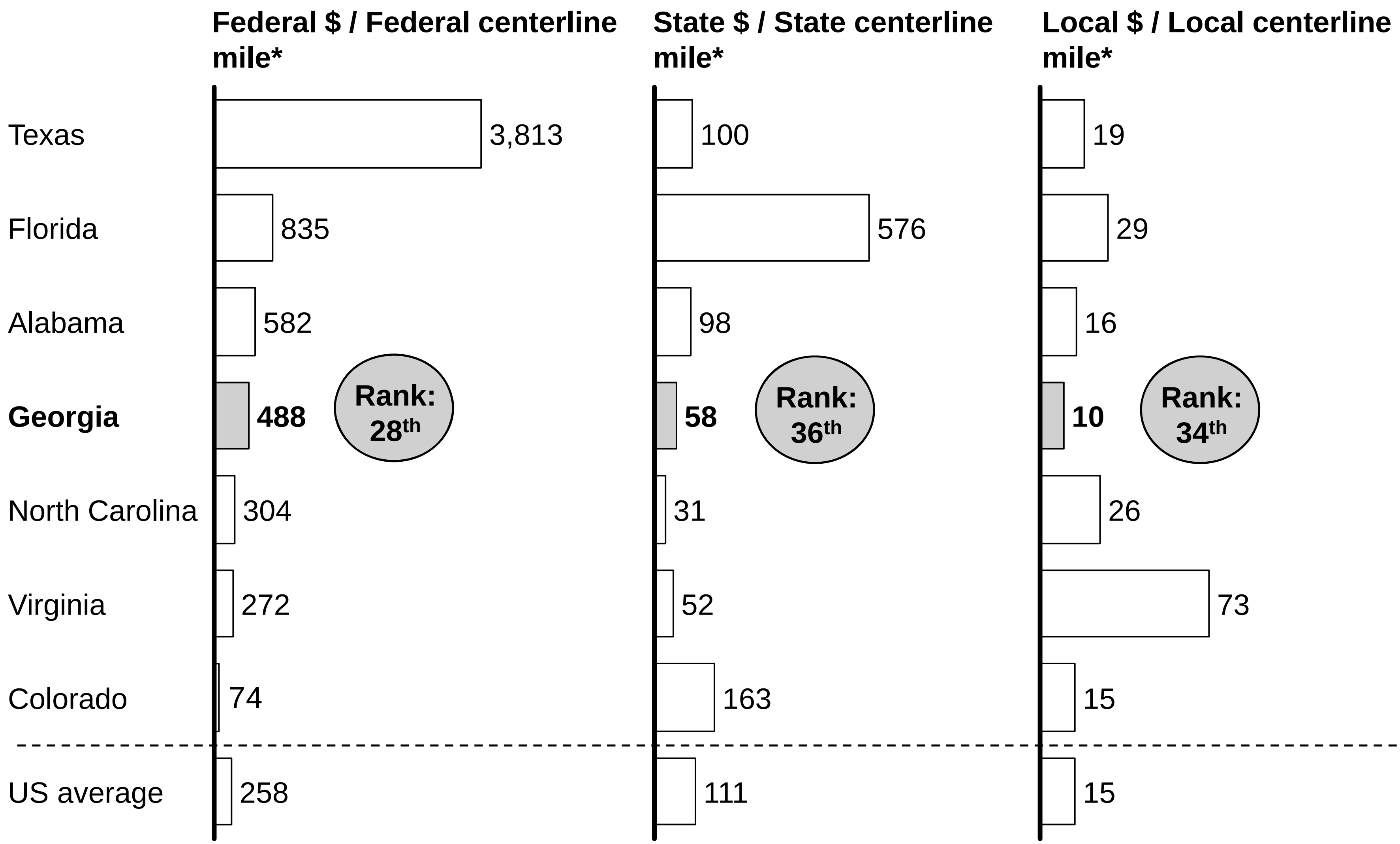


Source: FHWA, FTA, National Transit Database

GEORGIA INVESTS ABOUT 50% LESS STATE AND LOCAL FUNDS FOR ROADS THAN THE US AVERAGE

Road transportation resources by government source and ownership – 2006

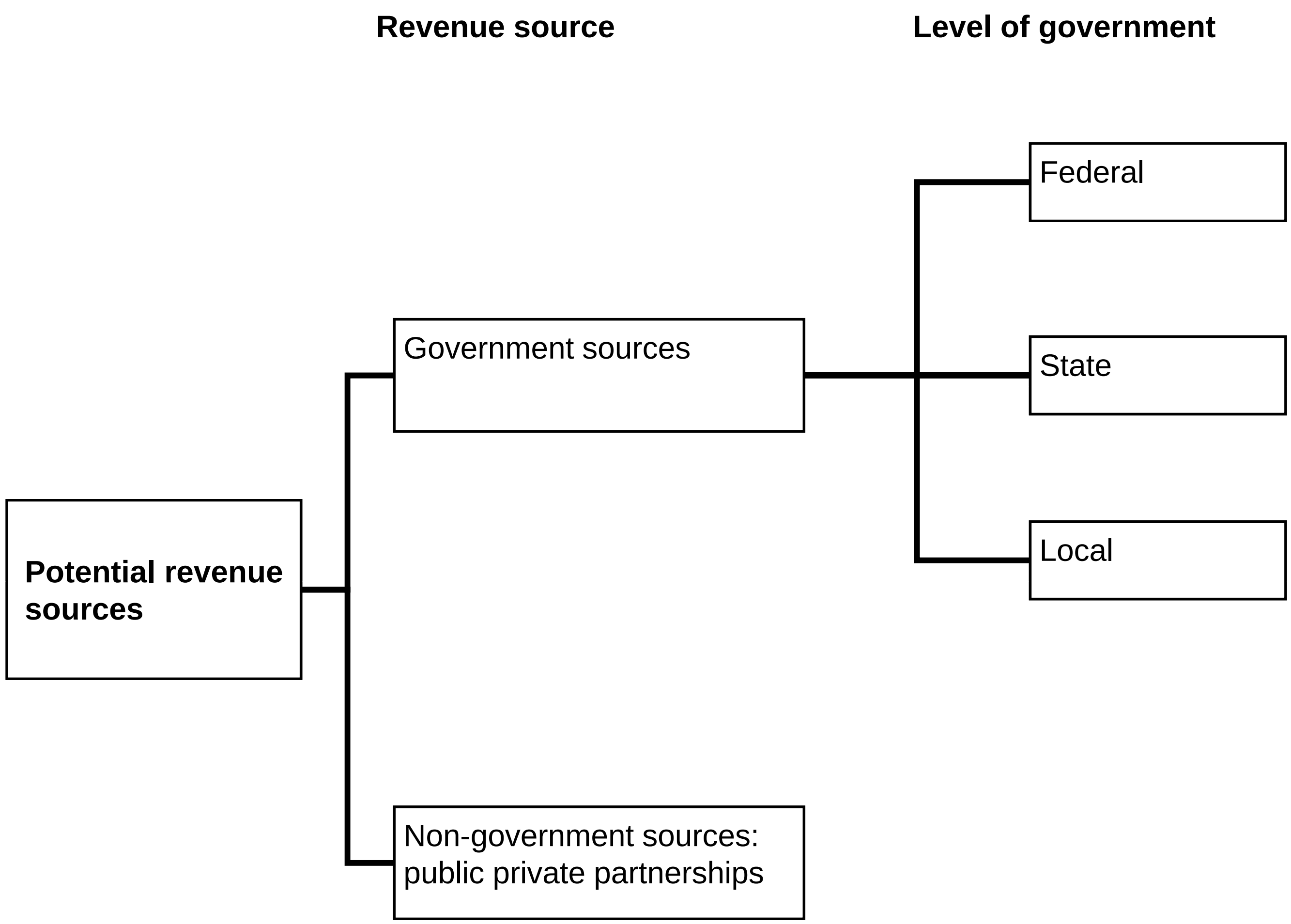
$ Thousands / centerline mile by ownership type



* Excludes roads not classified under any government level of ownership (federal, state, local)

Source: FHWA, Bureau of Transportation Statistics

THERE ARE TWO KEY LEVERS FOR INCREASING GA'S TRANSPORTATION REVENUE SOURCES



OPTIONS FOR INCREASING GOVERNMENTAL TRANSPORTATION RESOURCES

Can be used only in PPPs

Level | **Potential revenue sources** | **Options under evaluation**

- **Government sources**
  - Federal
    - New start fund
    - TIFIA program
    - PABs
  - State
    - Repurpose existing revenues
      - 1% ad-valorem motor fuel tax
      - Reallocate transportation-related taxes to transportation spend (e.g., motor vehicle fees)
      - Have GA pay GDOT's service debt on GO bonds
    - Increase existing revenue sources
      - Motor vehicle excise tax
      - State sales tax
      - Hotel and rental car fees
      - Tolls and fares
      - Lease fees on state assets
    - Create new revenue sources
      - Encroachment fees
      - State impact fees
      - VMT-based taxes or fees
      - Engine size/emissions fees
      - Monetize unused state assets (e.g., surplus property)
  - Local
    - Repurpose existing revenues
      - Property tax on vehicles, other transportation-related fees
      - State motor fuel tax revenues "passed through" to counties
    - Increase existing revenue sources
      - Impact fees
      - Fares
      - Local SPLOSTS
    - Create new revenue sources
      - Tax allocation districts (TADs)
      - Regional / local T-SPLOSTS
      - Establish parking fees

Source: US DOT, FHWA, FTA, GDOT interviews, other state DOT interviews, GRTA research, expert interviews