## **Transportation**

'In most cases, the shortest distance between a poor person and a job is along a line driven in a car. Prosperity in America has always been strongly related to mobility and poor people work hard for access to opportunities. For both the rural and inner-city poor, access means being able to reach the prosperous suburbs of our booming metropolitan economies, and mobility means having the private automobile necessary for the trip.' <sup>1</sup>

-- 'Working Far From Home,' Progressive Policy Institute

## **Principles**

Traffic congestion, while inconvenient, is a sign of Georgia's thriving economy. The cost of congestion, however, includes economic and quality-of-life consequences. Combating those consequences need not be a matter of social engineering, placing Georgians in discomfit to force them into planners' preferences. Instead, transportation policy must be centered on improving mobility, relieving congestion, meeting needs versus wants, and increasing the role of the market where possible. With public revenue shrinking, projects need to be prioritized, local governments need to be more accountable for transportation spending and users need to be educated on the value of their trip and time to prepare them for growing costs and limitations. Rising fuel prices, which reduce driving, and fuelefficient vehicles reduce revenue for infrastructure maintenance and improvements as well as for additional capacity to meet growing needs; shifting to user fees instead of relying on fuel taxes is therefore vital. A growing population requires increased capacity, and with the vast majority of Georgians choosing the flexibility of the automobile, adding roads is a critical component of Georgia transportation policy. While transit remains a necessary tool in transportation solutions, it must be objectively selected, comparing criteria of need, benefits and cost and the cost-effectiveness and efficiency of the various modes.

## Agenda

- 1. Focus transportation planning on increasing mobility.
- 2. Facilitate private enterprise involvement in transportation improvements.
- 3. Rethink how roads are priced.
- 4. Plan for increased capacity in growing urban areas.
- 5. Relieve congestion by expediting freight traffic.
- 6. Encourage types of transit that are competitive with automobiles.
- 7. Utilize competitive contracting to reduce costs.
- 8. Reduce the role of the federal government in the transportation funding equation.
- 9. Use objective criteria in choosing commuter and intercity passenger rail routes.

## Overview

According to the latest statistics from the Georgia Department of Transportation, Georgia has about 1,243 miles of interstate highway, 18,095 miles of state roads and 84,560 county road miles in its inventory.<sup>2</sup>

www.ppionline.org/ppi\_ci.cfm?knlgAreaID=114&subsecID=143&contentID=828

<sup>&</sup>lt;sup>1</sup> Progressive Policy Institute,

<sup>&</sup>lt;sup>2</sup> Georgia's Roadway Mileage & Characteristics Reports, Georgia Department of Transportation http://www.dot.state.ga.us/statistics/RoadData/Pages/400Series.aspx

Georgia has eight commercial airports with service by major national carriers. Atlanta's Hartsfield-Jackson International Airport, one of Georgia's most important ports and the world's busiest passenger airport, opened its fifth runway in May 2006, the first runway added since 1984 at the airport.

Three distinct taxes are levied on gasoline: federal (18.4 cents) and state (7.5 cents) per gallon taxes; and the state sales tax (4 percent). The 18.4 cents portion forms the core of federal highway funds and is largely deposited into a trust fund account called the Highway Trust Fund. Additionally, there are trust funds for aviation and transit.

One hundred percent of the 7.5 cents per gallon state tax on motor fuel is legally dedicated to the building and maintenance of roads and bridges. Seventy-five percent of the state sales tax on motor fuel is dedicated to highways and 25 percent of the sales tax goes to the state's General Fund. The state excise tax of 7.5 cents per gallon is the lowest in the nation and static – a fixed amount on each gallon of fuel, not a percentage of the price – so the revenue increases only as more fuel is used.

The challenge is that vehicle miles traveled are increasing along with Georgia's population growth, yet funding does not keep pace with the state's needs. Increasing fuel efficiency has reduced the revenue from this user fee even as the costs of construction and maintenance increase.

Georgia needs to increase funding for its transportation needs: maintenance, improvements to existing infrastructure and new capacity. In 2010, legislators passed HB 277, the <a href="Georgia 2020">Georgia 2020</a> <a href="Transportation Act">Transportation Act</a>, which will allow region-based votes on a 10-year penny sales tax to fund region-based projects. Voters in 12 special tax districts in the state will decide in a 2012 referendum whether to approve a sales tax for projects in their region. A county cannot opt out of the choice of its region; money raised in the district remains there and is not subject to congressional balancing. The list of projects will be voted upon by a roundtable in each region that approves the tax, not by the voters.

The ultimate goal for Georgia must be mobility. Transportation policy and funding needs to focus on enabling people and goods to travel from point A to Point B as quickly, efficiently and cost-effectively as possible. There is no "silver bullet," and with proposals in the state ranging from toll roads to trolleys to mag-lev trains, it is imperative that policy-makers choose prudently and use the limited funds wisely.

Traffic congestion is a costly inconvenience in metro Atlanta, which is characterized by low-density, widely dispersed communities; three interstates (I-75, I-85 and I-20) converging in the built-up downtown area, and a poor arterial road system. The metro area's low residential density and dispersed business centers present a challenge when planning mass transit solutions. The congestion is aggravated by the lack of alternative routes for freight. According to the state Department of Transportation, freight "through" traffic accounts for at least one-third of the freight moving to, from and within Georgia, yet much of that freight traffic is forced to pass through the metro Atlanta region.<sup>3</sup> In fact, 60 percent of the truck ton miles in the metro area are passing through, according to a state-commissioned transportation study by consultants McKinsey and Co. That's 28,000 trucks per day, equivalent to 100,000 cars daily.<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> 2005-2035 Georgia Statewide Freight Plan, Georgia Department of Transportation, <a href="http://www.dot.state.ga.us/informationcenter/programs/transportation/Documents/swtp/2005\_to\_2035\_ga\_freightplan\_oct06.pdf">http://www.dot.state.ga.us/informationcenter/programs/transportation/Documents/swtp/2005\_to\_2035\_ga\_freightplan\_oct06.pdf</a>

<sup>&</sup>lt;sup>4</sup> " Meeting Georgia's Mobilty Challenge, IT3," McKinsey and Co., <u>www.it3.ga.gov/Documents/Meeting-Georgias-Mobility-Challenges.pdf</u>

The growing role of Georgia's ports of Savannah and Brunswick will bring an increase in freight traffic in and through the state. Trucks are currently shipping 72 percent of the tonnage; that is expected to be 79 percent by 2035, adding to congestion unless alternatives are developed to the metro Atlanta route. (Rail is usually more competitive for freight shipped beyond 500 miles.)

Georgia has 14 urban public transportation systems. (Clayton County's transit system, C-Tran, ended operations in March 2010.) Georgia also has 110 rural transit systems. The rural transit service is a demand/response service that operates small buses and vans to serve rural residents.

A survey by the Metro Atlanta Chamber of Commerce released in 2004 reported that motorists in metro Atlanta – where rapid growth is exacerbating congestion – would be willing to embrace mass transit if it were fast, convenient and reasonably priced.

The goal of the Governor's Road Improvement Program (GRIP), established in 1989, is to connect Georgia's cities with a population of 2,500 or more by providing four-lane highway connectivity to the interstate highway system. The 3,309-mile system will place 98 percent of Georgia's population within 20 miles of a multilane highway and provide access for oversized trucks to all cities with populations above 2,000.

Currently, 76 percent of the active GRIP system is complete (open to traffic) or under construction, according to the Georgia Department of Transportation. There are 1,253 miles remaining to be completed, at a preliminary cost of \$11 billion, according to the Georgia DOT.

McKinsey and Co., however, does not consider completing the GRIP corridors a priority. Citing "unclear benefits," the consultants say there is no measurable benefit in terms of reducing congestion costs; no obvious link statistically between GRIP and GDP, job or population growth, and it would expand the proportion of the rural population that can reach major employment statewide by just 3 percentage points, from 88 percent to 91 percent.<sup>5</sup>

#### Agenda

**Traffic congestion, while inconvenient, is a sign of a thriving economy.** Traffic congestion is a major concern, particularly in metro Atlanta and around the "last mile" port area in Savannah. It is important to remember, however, that this is a challenge produced by growth, not decline. A growing economy allows individuals and businesses to pursue improvements in their quality of life and business opportunities. More citizens can afford cars and more trips result from the additional jobs that are created. More income means more discretionary trips. More women are joining or rejoining the work force, and the automobile gives them the flexibility to accommodate family and career, contributing to an improved lifestyle for their families.

There are environmental impacts associated with growth, but a growing economy is also critical to providing the resources necessary to develop innovative solutions to those impacts.

#### 1. Focus transportation planning on increasing mobility

Georgia's transportation policy must be geared toward increasing mobility and limiting congestion, not livability, "sustainability" or other liabilities to congestion relief. Transportation policy must not be

<sup>&</sup>lt;sup>5</sup> "IT3 Scenario Results and Implications," McKinsey and Co., <a href="https://www.dot.state.ga.us/aboutGeorgiadot/Board/Documents/2008%20meetings%20presentations/November/IT3-McKinseyReport.pdf">https://www.dot.state.ga.us/aboutGeorgiadot/Board/Documents/2008%20meetings%20presentations/November/IT3-McKinseyReport.pdf</a>

a social engineering tool to coerce people out of their vehicles into public transit or into higher-density/live-work-play areas.

Nor should environmental policy masquerade as transportation policy. Air quality is an important consideration, but that is a matter for environmental policy and should not drive transportation policy. While many mass transit proponents point to environmental advantages in public transportation, it's not necessarily true, says Cato Institute Senior Fellow Randal O'Toole out in an Issue Analysis for the Georgia Public Policy Foundation. He notes, "[T]ransit systems in the vast majority of American cities use more energy and emit more greenhouse gases than the average car."

Meanwhile, technological advances and fleet turnover will continue to reduce automobile emissions.

Congestion, on the other hand, will continue to frustrate commuters and threaten economic opportunity and quality of life unless mobility is addressed. The Texas Transportation Institute, which annually publishes a report on the cost of congestion, reported in July 2009 that metro Atlanta ranked eighth in population; sixth for total annual delay among large urban areas and third in the nation for delay per peak traveler. Congestion cost the Atlanta region \$2.98 billion in lost time and wasted fuel, or \$1,257 per person – the third highest cost in the nation per peak traveler. Nationwide, the total cost based on wasted fuel and lost productivity reached \$87.2 billion in 2007 – more than \$750 for every U.S. traveler.

#### 2. Facilitate private enterprise involvement in transportation improvements

Transportation leaders in Georgia frequently cite the state's ranking as "last but for Tennessee" in per-capita spending on transportation. But is spending the answer? In 2009, Georgia's roadway system tied for third place in the nation with Tennessee in a survey of truckers published in Overdrive Magazine. And Georgia ranks 13th on a list of the nation's best roads, according to a Reason Foundation/ Reader's Digest study.<sup>9</sup>

Based on projections, Georgia's population and resulting transportation demands will continue to grow. As technology improvements continue to enhance fuel efficiency and alternative fuels become more common, motor fuel tax revenue will decline, as will its role as the major funding source for roads and bridges in Georgia. This will require a new approach to funding roads.

**The funding gap**: Georgia raises 93 percent of its transportation revenue from the motor fuel tax, compared to an average of 60 percent in other states. The Georgia Department of Transportation expects revenues of \$829 million from the state tax for Fiscal Year 2011 (of which \$421 million would go to repay debt service) and anticipates "even less robust" revenues in FY 2012.

<sup>&</sup>lt;sup>6</sup> "Public Transit in Georgia: High Costs for Low Fares," Randal O'Toole, Cato Institute, June 8, 2010, http://tinyurl.com/2bx88rs

<sup>&</sup>lt;sup>7</sup> 2009 Annual Urban Mobility Report, Texas Transportation Institute, Mobility Data for Atlanta, <a href="http://mobility.tamu.edu/ums/congestion\_data/tables/atlanta.pdf">http://mobility.tamu.edu/ums/congestion\_data/tables/atlanta.pdf</a>

<sup>&</sup>lt;sup>8</sup> 2009 Annual Urban Mobility Report, Texas Transportation Institute, Mobility Data for Atlanta, <a href="http://mobility.tamu.edu/ums/congestion\_data/tables/atlanta.pdf">http://mobility.tamu.edu/ums/congestion\_data/tables/atlanta.pdf</a>

<sup>&</sup>lt;sup>9</sup> "The Best, Worst, and Deadliest Roads in America: The Rankings," Reason Foundation/Reader's Digest, http://tinyurl.com/yhbgaee

Amid declining transportation revenue, the cost of highway and street construction materials was up 8.3 percent in April 2010 over April 2009, according to the American Road and Transportation Builders Association. The federal American Recovery and Reinvestment Act of 2009, aimed largely at job creation and somewhat at helping rebuild and repair infrastructure, capped the amount available to transportation at \$26.6 billion and limited approval to "shovel-ready" projects, which disqualified many vital projects and allowed projects with minimal impact to get to the front of the line.

The federal government has long signaled states not to rely on federal funding. The Federal Highway Administration estimates that every year through 2020, the nation will need to spend, on average, about \$76 billion – or 18 percent more than it spent in 2000 – just to maintain the nation's highways and bridges, and about \$107 billion or 65 percent more than it spent in 2000 to improve them. But federal and state governments will face serious budget deficits and "a demographic tidal wave where mandatory spending for Social Security and Medicare will command a greater share of the nation's resources, overwhelming the funding available for discretionary programs such as transportation."

Clearly, projected funding shortfalls in infrastructure operations and maintenance are huge; finding funds for enhancements is an even greater challenge. The optimal revenue source for the state would be a fee system related to use of the roadway capacity instead of the use of fuel.

Toll roads have historically been the ultimate user fee, but traditional toll collection facilities were cumbersome, time-consuming and unpopular with the public. Today, electronic tolling technology enables toll collection while reducing hassles or delays and can even eliminate the toll booth altogether, as is happening with the North Texas Tollway Authority, which will have phased out cash toll collections by Dec. 10, 2010. 11 "All-electronic toll collection provides enhanced mobility, safety and air quality," the authority reports.

In Georgia, where the High-Occupancy Vehicle (HOV) lanes are scheduled to be converted to a high-occupancy toll (HOT) lane network and state funding is questionable, the conversion to toll roads can be expedited with private sector investment through concessions. Under a concession form of public-private partnership (PPP) the government defines and grants a company rights to build and operate a facility for a fixed period. The government has ultimate ownership of the facility. Payments can take place either way: Government pays the concessionaire under a contract to meet specific conditions or the concessionaire pays the government for the concession rights. (Government payments usually are to reduce the risk and raise the confidence for the private sector participation or make a project commercially viable.) A concession can range from five to 50 years, depending on the project.

Aside from making funding available for projects, the advantages of public-private partnerships are numerous: greater incentives to come in under budget and on deadline; faster implementation of projects; accelerated congestion relief; shifted risk from the taxpayer to private companies, better incentives to perform (contract-related) and ultimate public ownership.

Boston's "Big Dig" tunnel, projected to cost \$2.6 billion in 1985, had a total cost of \$22.6 billion by 2008, the Reason Foundation reported. An analysis of the project by City Journal, a publication of the Manhattan Institute, found:

"Massachusetts might have avoided some problems by transferring certain Big Dig risks to the private sector through discrete, well-defined deals: signing a long-term contract with a firm to help build, operate, and maintain the Zakim Bridge, for instance. Such an endeavor, though, would have required aggressive public-sector

<sup>&</sup>lt;sup>10</sup> General Accounting Office, www.gao.gov/new.items/d04419.pdf

<sup>11</sup> Tollroadsnews, http://www.tollroadsnews.com/node/4794

management of initial costs, scope, and complex contract language – things the state hasn't excelled at.

"Any risk transfer, moreover, would have been limited. Massachusetts could never have turned over full technical, operational, and financial risks of the Big Dig to any reputable company or group. The project had too many unknowns. Smart, reputable companies don't take unlimited risks at the behest of a fickle, indecisive client for a limited profit. The best thing Massachusetts could have done was to realize the project's real risks so that it could manage them effectively." 12

The will to succeed is critical. Georgia's Public-Private Infrastructure Act of 2003 was prompted by, and immediately spurred, private-sector interest in investing in adding road capacity but frustrated potential investors became disillusioned by the bureaucratic foot-dragging and hiccups in the process. The law is only now finding traction.

This year, three bidders representing 15 companies have qualified to bid on the West by Northwest Corridor (I-75/I-575 and I-285/I-20 West) project, the state's first PPP. It involves design, construction, financial participation and ongoing operations and maintenance of a managed lane system on segments of I-75 and I-575 in Cobb and Cherokee counties as well as the preparatory engineering and environmental work for a managed lane system on the I-285 West and part of I-20 in Cobb County. <sup>13</sup>

Motorists can expect to encounter more toll roads, particularly on new road capacity, as PPPs generate a return on transportation investments. Policy-makers must be vigilant in preventing bureaucratic barriers to private sector investment. The need to educate the public on the benefits is crucial. Oversight is necessary, but so is government's ability to relinquish control. Excessive rules and regulations diminish private-sector profitability and flexibility. That discourages investment, delaying and ultimately defeating the goal of expediting increased mobility.

### 3. Rethink how roads are priced

The reasons for <u>pricing roads</u> can differ.<sup>14</sup> Tolling can be used for revenue generation, demand management, transit promotion and environmental improvements, as shown in projects in London, Sweden, the Netherlands, Germany, the Czech Republic and Singapore.

In Singapore, for example, all net funds collected via its electronic road pricing are returned to the general fund and redistributed to road users in the form of vehicle ownership tax rebates. That "further emphasizes that the purpose of road pricing is not to generate revenue but to improve service levels during peak hours," reports a U.S. "international scan" team that included Georgia Transportation Commissioner Vance Smith.

To improve mobility, commuters must consider the value of their trip. Tolls are not only a revenue-raising tool. They also encourage commuters to decide when, whether and where to plan their trip. A trip along an improved arterial road may be a lengthier but cheaper choice than a tolled highway lane, which adds lane capacity on the highway. Higher user charges for roads during peak travel periods will encourage some diversion of vehicle travel to less congested periods.

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<sup>&</sup>lt;sup>12</sup>"Lessons of Boston's Big Dig, Nicole Gelinas, City Journal, Autumn 2007, <a href="http://tinyurl.com/dxxrdf">http://tinyurl.com/dxxrdf</a>

<sup>&</sup>lt;sup>13</sup> West By Northwest Project Overview, Georgia Department of Transportation, <a href="http://tinyurl.com/2edv7kt">http://tinyurl.com/2edv7kt</a>

<sup>&</sup>lt;sup>14</sup> "International Scan: Reducing Congestion and Funding Transportation Using Road Pricing," Federal Highway Administration, <a href="http://international.fhwa.dot.gov/pubs/roadpricing/roadpricing.pdf">http://international.fhwa.dot.gov/pubs/roadpricing/roadpricing.pdf</a>

The value of a road is much greater during heavy congestion than during low congestion. But the current user fee – the motor fuel tax – does not recognize this change in value. In many ways, sitting in traffic carries an exorbitant but uncaptured price. To encourage the most efficient use of our existing road capacity, Georgia needs to implement congestion pricing on highly congested roads. Dynamic charges on a tolled road – perhaps changing by time of day or road conditions – become congestion insurance and encourage carpooling.

Congestion pricing follows the basic economic concept that higher prices reduce demand. This concept has been applied in several areas by converting HOV lanes to HOT (High Occupancy Toll) lanes. If HOV lanes are underutilized, converting to an HOT lane allows that excess capacity to be used by other vehicles for a fee.

To be considered a good performer, says transportation expert Robert Poole, an HOV lane needs to carry about 950 vehicles per hour. Despite huge expenditures on HOV lanes, buses and other transportation alternatives, transit's market share and carpooling have declined. Georgia Department of Transportation counts showed in 2003 that the metro area's busiest HOV lanes – north- and southbound I-75/85 at 14<sup>th</sup> Street – average 582 cars per hour, compared with the 12 general-use lanes that each average 1,205 cars per hour. <sup>15</sup>

Atlanta's busiest HOV lanes, in other words, average just 41 percent of the traffic of a general-use lane. And on I-75 northbound (one of the least-used HOV lanes), it's not uncommon for drivers to risk a \$75 fine during the evening rush hour to ride in the underutilized HOV lane.

In 2004, the General Assembly authorized the Department of Transportation and the State Road and Tollway Authority (SRTA) "to implement high occupancy toll (HOT) lanes where appropriate in qualifying HOV lanes." SB 489 adds that "The department may design and develop a system of HOT lanes which uses value pricing and lane management." Lane management refers to restricting HOT lane access based on objectives such as occupancy or vehicle type. In 2009, the State Transportation Board passed a resolution supporting this move.

In such a system, state-of-the-art electronic tolling would allow a motorist a seamless transition among the interstates and allow variable time-of-day pricing to ensure the trip remains congestion-free. The Legislature's enabling laws for public-private partnerships can expedite the process. The revenue from tolls would help pay for the expedited project; the lanes' speed and congestion pricing would promote car-pooling, van pools and express bus service, thus adding further capacity in general-purpose lanes.

Georgia's pioneering role on electronic toll collection; a 2005 HOT lane study completed by SRTA and the proposals in "Reducing Congestion in Atlanta," 16 an analysis by the Reason Foundation's Robert W. Poole and the Georgia Public Policy Foundation, all point to the ability to convert the state's HOV system to an HOT express lane system. The toll for HOT lanes may vary based upon congestion levels to maintain the free flow of traffic. The SRTA study projected significant time savings in 2030, as did a more recent sampling by HNTB for the Georgia Department of

<sup>&</sup>lt;sup>15</sup> "Tolls Could Bail Metro Area Out Of Congestion," Benita M. Dodd, Georgia Public Policy Foundation, June 6, 2003, http://tinyurl.com/24eh6fq

<sup>&</sup>lt;sup>16</sup> "Reducing Congestion in Atlanta: A Bold New Approach to Increasing Mobility," www.reason.org/ps351.pdf

#### Transportation. (See below):

Sample Trip Routes	2030 PM Peak Period		
	Travel Time Via GP Lanes (min)	Travel Time Via Managed Lanes (min)	Travel Time Savings (min)
Downtown to I- 85/Pleasant Hill Rd (Gwinnett Place Mall area) - 23 miles	105	60	45
I-285/I-75 (Cobb Co) to SR 400/Holcomb Bridge Road - 19 miles	70	45	25
I-20/Panola Road to I- 285/SR 400 (via I-20/I- 285) - 22 miles	65	40	25
I-20/SR138 (Conyers) to Atlanta Airport (via I-20/I- 285) - 29 miles	80	65	15
I-75/Hampton Locust Grove Rd to Atlanta Airport (via I-75) - 35 miles	90	70	20

Sample time savings, 2030 PM Peak travel (Source: HNTB for Georgia DOT)

The analysis by HNTB recommended the ideal configurations for the corridors of the 630-lane-mile HOT lane network ("managed lane" network) and estimated a total capital cost of about \$16.2 billion. Private sector investment is assumed in the financial analysis, which showed "that the funding gap is approximately \$7 billion. That is, around half of the cost for the entire recommended managed lane system can be covered through forecast toll revenues. The other half would come from the State of Georgia or some other source of funds." <sup>17</sup>

Conversion of general-purpose lanes is being considered in just two areas: I-75/I-85 between the Airport Connector and Brookwood Interchange and I-20 West inside I-285. Both sections have limited widening capacity. The metro Atlanta HOT lane network would be a choice; solo drivers or two-occupant vehicles would voluntarily pay a toll for a congestion-free ride and a "HOT3+ policy" would allow with three or more occupants in the managed lanes at no charge, as well as motorcycles, alternative fuel vehicles and emergency vehicles. Significantly, "the managed lanes can also accommodate 60 buses per hour at no charge," according to the final report of the Georgia DOT. Plus:

"Managed lane users experience an 83% reduction in delay compared to a 2030 no-build scenario. This delay benefit equates to a \$47B system-wide net reduction in the cost of congestion and a \$37B decrease in congestion cost for the managed

<sup>&</sup>lt;sup>17</sup> Atlanta Regional Managed Lane System Plan, HNTB for the Georgia Department of Transportation Office of Planning.

 $<sup>\</sup>underline{www.dot.state.ga.us/informationcenter/programs/studies/managedlanes/Documents/Financial\%20 Feasibility\\ \%20 Analysis.pdf$ 

lane users. In addition, the managed lanes do produce significant public benefits, including an 8% system-wide reduction in vehicle delay (the system is defined as all roads in the Atlanta Regional Commission's 20-county Travel Demand Model)."18

Despite criticism of these "Lexus lanes," HOT lanes are in fact used by a diverse group of users. Demographic studies on existing HOT lanes show similar income characteristics of those using HOT lanes and those in the regular lanes. For example, hourly wage workers lose money every minute they are sitting in traffic and parents are eager to avoid stiff late fees at day care centers.

As the state moves toward greater use of tolls, other concerns are that certain areas will get the toll roads while others get the "free" roads, and that roads adjoining toll roads will suffer. These problems can be solved by establishing objective criteria to determine which roads are tolled. Only new projects that meet objective feasibility criteria should become toll roads.

Critics argue that tolling is a form of double-dipping because drivers already pay fuel taxes. The toll road user, however, is paying a premium price for a premium service. Reasonable alternative routes must be available for those unwilling to pay a toll; those may be longer and less convenient. As for opposition to tolling existing roads - critics consider these already paid for - the fact is that roads are never truly paid for. Maintenance, repairs and improvements are ongoing expenses.

## 4. Plan for increased capacity in growing urban areas

Despite the metro Atlanta traffic congestion, traffic density (traffic volume per square mile) is below average. One of the primary reasons for the traffic gridlock is a poorly functioning arterial road network, which causes overuse of freeways for local trips and does not allow for alternate routes around accidents and traffic jams.

Much of the reason for this congestion is Atlanta's failure to plan for growth by designing and building an effective grid of arterial roads. Areas around the state that are not fully developed can learn from Atlanta's lesson and plan for a functional arterial road system.

Adding capacity does not always mean building more lane miles. It can be as simple as diverting traffic, adding turn lanes, implementing a system to quickly move disabled vehicles out of traffic (HERO units and tow truck incentives) or adding shoulders so that transit buses do not hold up traffic at stops.

Two ambitious opportunities exist to add capacity in stressed urban areas. Both are costly. But they are necessary for planning ahead in a growing Georgia economy and are clearly less expensive than the alternative: gridlock that drives investment, industry and growth out of the state. The first opportunity is to divert unnecessary traffic. The second is to physically add capacity to existing interstates.

#### **Diverting unnecessary traffic:**

U.S. 27: Tourist traffic between Florida and the Gulf and Tennessee can be routed around the metro Atlanta area by state planners if they develop U.S. 27 along the western length of Georgia as a limited-access highway. Truckers would also be able to avoid the metro Atlanta area and choose U.S. 27 if it is developed and upgraded to be a viable alternative route (limited access). As of April 2010, 304 miles (87 percent) of the 352-mile corridor was

<sup>&</sup>lt;sup>18</sup> Atlanta Regional Managed Lane System Plan, Final Plan, Georgia Department of Transportation, http://www.dot.state.ga.us/informationcenter/programs/studies/managedlanes/Documents/FINALREPORT.p df

- open to traffic or under construction. The estimated cost to complete the four-laning is \$664,373,000<sup>19</sup>
- Alternative to I-285 to I-185 north: Traffic headed down I-75 north up I-85 must take I-285 east or I-75 through metro Atlanta. As politically unpopular as the concept has been for decades, the need continues for a "northern arc" around the outer northern edge of Atlanta between I-75 and I-85 to avoid the need to travel through the metro area.
- Alternative to I-75 between Macon and the Georgia-Tennessee border. The most heavily congested area of I-75 in Georgia, this convergence of truck and tourist traffic can be reduced by a new route around Atlanta on the west side.
- The Fall Line Freeway: The corridor traverses the entire width of the state from the Alabama state line at Columbus to Macon then to Augusta at the South Carolina state line. Upon completion, the 215-mile, four-lane highway would eliminate the need for travelers to go through Atlanta (I-75, I-285 and I-85) to get between Columbus and Macon to Augusta or South Carolina and beyond. 20 The highway was 83 percent complete as of April 2010.
- Establishing an inland freight distribution center in the Macon area could provide more than half of existing trucks a way to avoid the metro Atlanta area, bringing needed traffic congestion relief. The convergence near Macon of a western "arc" around Atlanta and into Chattanooga on the U.S. 27 corridor, the Fall Line Freeway and I-16 from the ports of Savannah and Brunswick would provide access to I-85, I-75 and I-20 without going through metro Atlanta, reducing congestion in the metro area and expediting through traffic.

Detouring freight traffic around metro Atlanta would not mean that those trucks would converge on a few towns. The various road improvements would disperse trucks traveling through Georgia in several directions as they make their trips as efficient as possible.

Adding capacity to existing interstates: Innovative opportunities to physically add capacity to existing interstates do exist, as a Foundation report revealed in 2007. The report, "Reducing Congestion in Atlanta: A Bold New Approach to Increasing Mobility<sup>21</sup>" called for a major "rethinking" and "rewriting" of Atlanta's long-range transportation plan and proposed four major toll road projects to significantly reduce the region's current and projected traffic congestion. To reduce existing gridlock and accommodate future growth, the study published by the Reason Foundation and Georgia Public Policy Foundation proposed four innovative projects, to be paid for largely by the private sector or toll revenues and not tax dollars.

- 1. A network of variably-priced toll lanes added to the entire freeway system, replacing and expanding upon the HOV lane network. These express toll lanes could be utilized free of charge by buses and vanpools, providing a congestion-free alternative that would speed up service and significantly upgrade the region's mass transit system. They would also quarantee drivers always have the option of lanes moving at the maximum speed limit. This plan would convert the existing carpool lanes into toll lanes and build another 1,132 lane miles to form a seamless network of connecting toll lanes using advanced, hassle-free toll collection technology.
- 2. A double-decked tunnel linking the southern terminus of Georgia 400 with I-20 and later with the northern terminus of I-675. The tunnel would provide major relief to the Downtown

<sup>&</sup>lt;sup>19</sup> Georgia Department of Transportation U.S. 27 Fact Sheet, Georgia Department of Transportation, April

www.dot.state.ga.us/informationcenter/programs/roadimprovement/GRIP/Documents/Facts/Us27FactSheet.p

<sup>&</sup>lt;sup>20</sup> Fall Line Freeway Fact Sheet, Georgia Department of Transportation, April 2010, http://www.dot.state.ga.us/informationcenter/programs/roadimprovement/GRIP/Documents/Facts/FallLineFr eewayFactSheet.pdf

<sup>&</sup>lt;sup>21</sup> "Reducing Congestion in Atlanta: A Bold New Approach to Increasing Mobility," www.reason.org/ps351.pdf

Connector (I-75/85), the most congested portion of the freeway system. This tunnel is based on a similar project currently being constructed beneath Versailles, France. A tunnel is recommended because the high land values in the downtown area make above-ground expansion too costly.

- 3. A new east-west link to relieve I-20, made up of the existing Lakewood freeway, extended to the east by a new toll tunnel and to the west by upgrading portions of Campbellton Road and Camp Creek Parkway. On this route, just 28.2 of the 111.2 lanes miles would be toll lanes.
- 4. A separate toll truckway system, permitting heavy trucks to bypass Atlanta's congestion in exchange for paying a toll; a portion of this system would be tunneled below downtown.

Community opposition sometimes thwarts efforts to add needed capacity. But with delays impacting quality of life for Georgians, public opinion is increasingly in favor of capacity additions and cost-effective, efficient public transportation alternatives.

Other options to increase efficiency on existing roads include improving traffic signal coordination, adding metering ramps, improving flow by using roundabouts instead of stops at intersections, reducing the effect of vehicle crashes and breakdowns (incident management), introducing changeable lane assignments and improving intersection designs.

- Metering ramps: A Georgia Department of Transportation survey found that ramp meters installed on ramps to Georgia highways improved highway travel times from 15 percent to 40 percent.<sup>22</sup> The down side of ramp meters is that traffic may back up on the entrance roads to the highways, causing arterial delays.
- **Signal coordination**: The Texas Traffic Light Synchronization program reduced delays by 24.6 percent, fuel consumption by 9.1 percent and stops by 14.2 percent. Along an 11-intersection arterial road in Saint Augustine, Fla., arterial delays were reduced 36 percent, travel time 10 percent and stops by a whopping 49 percent. The FHA estimated annual fuel savings of 26,000 gallons and a cost savings of \$1.1 million. And in Georgia, Alpharetta reported a 31 percent reduction in delays, 17 percent reduction in travel time, 23 percent reduction in stops and 8 percent fuel savings after one year of the program.
- Roundabouts: Using roundabouts instead of four-way stops or traffic signals at intersections improves flow and safety by implementing slower speeds, fewer conflict points and easier decision-making. According to the Insurance Institute for Highway Safety, a study of three intersections in Kansas, Maryland and Nevada, where roundabouts replaced stop signs, found that vehicle delays were reduced 13-23 percent and the proportion of vehicles that stopped was reduced 14-37 percent. A study of three locations in New Hampshire, New York, and Washington, where roundabouts replaced traffic signals or stop signs, found an 89 percent average reduction in vehicle delays and a 56 percent average reduction in vehicle stops. Roundabouts provide 90 percent reduction in fatal crashes, 76 percent reduction in injury crashes; 30-40 percent reduction in pedestrian crashes and 10 percent reduction in bicycle crashes.
- Incident management. In 2007, it took an average of 269 minutes to clear a wreck on a
  metro Atlanta interstate that involved a commercial truck. By 2009 that was reduced to 95
  minutes, thanks to Georgia's Towing and Recovery Incentive Program (TRIP), a financial
  incentive program to expedite towing and recovery. The goal is clearance in less than 90
  minutes. Qualified wrecker companies are assigned a designated route on the interstate

<sup>&</sup>lt;sup>22</sup> Ramp Meter Early Study Results, Georgia Department of Transportation, www.dot.state.ga.us/travelingingeorgia/rampmeters/Pages/default.aspx

<sup>&</sup>lt;sup>23</sup> Roundabouts Q&A, Insurance Institute for Highway Safety, www.iihs.org/research/qanda/roundabouts.html

- and rewarded for clearing an incident within a designated time frame. HERO (Highway Emergency Response Operators) units are another key component of the state DOT's Incident Management program
- Changeable lane assignments: This is a cost-effective and efficient way to add capacity
  when traffic volume is higher in one direction during portions of the day. Essentially, these
  "reversible lanes," are a capacity loan from a low-volume area to a higher-volume lane to
  reduce peak-hour congestion.

## 5. Relieve congestion by expediting freight traffic

The freight network is the backbone of Georgia's economy. Smoothing freight passage by rail, road, sea or air will ensure economic growth. For example, when rail capacity is relinquished to commuter rail service, it takes a toll on freight capacity. That eventually forces more freight onto trucks, clogging roads.

Truck traffic has a significant and growing impact on traffic congestion. Although the largest trucking companies have highly sophisticated communications and navigation equipment and support that allow them to avoid most traffic congestion and operate efficiently, small trucking companies, particularly independent truckers, sometimes lack this advantage and often contribute to and are adversely affected by traffic congestion.

In an industry where just-in-time delivery dominates, an irresponsible truck driver racing to meet a requested delivery window can initiate a deadly interstate wreck that backs up traffic and shuts down roads for hours. The Department of Motor Vehicle Safety is tasked with oversight of trucks but lacks the ability to monitor speeding trucks. DMVS vehicles must be equipped with speed detecting equipment, which not only will enable officers to cite speeding truckers but act as a deterrent to promote safe driving and traffic flow. In 2006 (the latest data available), large trucks made up 8.8 percent of the vehicles in Georgia's fatal crashes although they represented 3.6 percent of the vehicles in crashes.<sup>24</sup> (It's worth noting that passenger vehicles are at fault in 75 percent of crashes involving trucks.)

Between 1980 and 2000, vehicle miles traveled (VMT) on the U.S. highway system grew 80 percent while lane-miles grew 4 percent. Through 2035, total VMT is expected to increase 129 percent while truck VMT will increase 185 percent, according to the Georgia Department of Transportation.

One Georgia possibility to expedite truck traffic is toll-financed truck freeways. When the Reason Public Policy Institute asked trucking companies to propose routes on which they would consider paying tolls in order to operate long double and triple tractor-trailers, the companies came up with 17 possible routes. One of Reason's tollway recommendations after analysis was the I-75 corridor from the Ohio Turnpike near Toledo south through Cincinnati, central Kentucky and Tennessee, and Atlanta to the northern end of Florida's Turnpike and Tampa. Reason predicts it would be "a major north-south trucking route of high efficiency and safety." Georgia should continue to explore this option.

Encouraging truck drivers to stay out of rush-hour traffic in urban areas will help reduce congestion. Simple, market-based options include discounting prices at truck stops outside congested areas

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<sup>&</sup>lt;sup>24</sup> Georgia Governor's Office of Highway Safety, <a href="http://tinyurl.com/243p567">http://tinyurl.com/243p567</a>

<sup>&</sup>lt;sup>25</sup> "Corridors for Toll Truckways: Suggested Locations for Pilot Projects," Reason Public Policy Institute, www.rppi.org/ps316.pdf

and updating technology to inform truckers at truck stops or in their vehicles of traffic conditions and alternate routes. Since trucks dislike traffic as much as individuals do, simply finding a way to better inform truckers about traffic conditions could make a substantial difference.

Freight traffic will also be expedited by expanding alternative routes that detour around metro Atlanta and through other parts of the state. Improvements to U.S. 27, which runs down western Georgia from Tennessee to Florida, could make the four-lane highway an attractive route for trucks and eventually a truck tollway. (See item on adding capacity.)

### 6. Encourage types of urban transit that are competitive with automobiles.

According to the American Public Transportation Association, 7.2 million people regularly use transit to commute (2008), or 5.01 percent of the population. Transit should be a part of any transportation plan. Transit is important for many reasons, primarily to provide transportation alternatives to citizens unable or unwilling to drive. Transit can benefit the local economy by broadening access to job opportunities for citizens and to employees for businesses.

For transit to draw motorists out of their cars, it must compete effectively with the automobile. As a 2004 Metro Atlanta Chamber of Commerce (MACOC) survey found, as many as two-thirds of metro Atlanta commuters would consider taking transit at least some of the time – if it were fast, easy and inexpensive. Systems that do not compete effectively with automobiles will not attract discretionary riders (those who own cars) and will not be successful.

Time is the most important transit variable, as MACOC's survey respondents reiterated. Transit must provide a trip time that is competitive with the automobile. Studies have shown that riders particularly dislike time spent waiting, so frequency of service is also crucial.

Convenience is also critical. Discretionary riders resist multiple transfers and long walks to stations and from stations to final destinations. Transit must provide a broad network in order to compete with the freedom of automobiles. Transit cannot be most effective unless it offers convenient access to the majority of destinations in the region.

For Atlanta to reach the "viable" threshold for transit would require a population density in the built-up area that is five times higher than it is now, estimates urban planning expert Alain Bertaud. That's about 7,770 people per square mile. (The built-up Buckhead Triangle area of Atlanta has a population density of 4,878 people per square mile, still short of the density required.<sup>27</sup>)

Even considering the region's population growth rate, achieving Bertaud's threshold would require about two-thirds of the existing real estate stock to be destroyed over 20 years; two thirds of the built-up area would have to revert to nature, and population and jobs would have to move into the 36 percent of the city remaining. <sup>28</sup>

## As Bertaud puts it:

"To understand better why density is important in the operation of transit, let us use a concrete example and compare Atlanta with Barcelona, one among many European cities where transit represents a significant share of daily trips. Atlanta and Barcelona have about the same population; both cities have recently emerged as regional economic power houses; both cities recently hosted Olympic Games. However, the spatial structures of the two cities are extremely different: the

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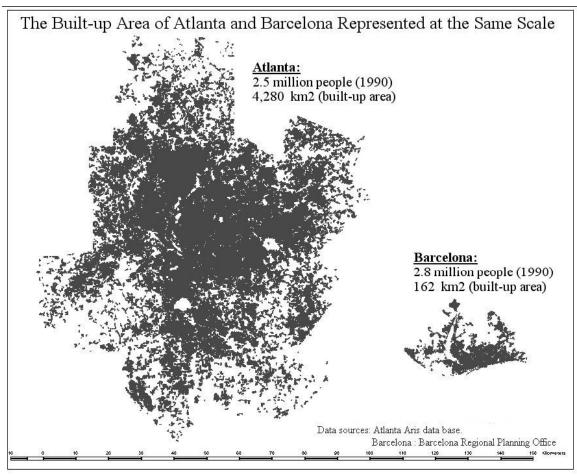
<sup>&</sup>lt;sup>26</sup> "Fast transit key to luring drivers," Julie Hairston, Atlanta Journal-Constitution, Feb. 3, 2004, www.ajc.com/metro/content/metro/0204a/03transit.html

<sup>&</sup>lt;sup>27</sup> City Data, <a href="http://www.city-data.com/neighborhood/Buckhead-Triangle-Atlanta-GA.html">http://www.city-data.com/neighborhood/Buckhead-Triangle-Atlanta-GA.html</a>

<sup>&</sup>lt;sup>28</sup> http://alain-bertaud.com/images/AB Clearing The Air in%20Atlanta 1.pdf

average built-up density of Barcelona's metropolitan area (68.4 people per acre) is 28 times larger than Atlanta's (2.4 people per acre). The difference of density implies that in Atlanta the area covered by the transport network has to be 28 larger than in Barcelona, while carrying about the same number of people. The metro network in Barcelona is 99 kilometers (62 miles) long while 60% of the population lives at less than 600 meters (about a third of a mile) from a metro station. Atlanta's metro network is 74 km (46 miles), not so different from Barcelona – but only 4% of the population live within 800 meters (a half-mile) from a metro station. We should not be surprised if in Atlanta only 4.5% of trips are by transit vs. 30% in metropolitan Barcelona where the high density allows also an impressive 8% of all trips to be walking trips.

"Suppose that the city of Atlanta would want to provide its population with the same metro accessibility that exists in Barcelona i.e. 60% of the population within 600 meters from a metro station. Atlanta would have to build an additional 3,400 kilometers (about 2,100 miles) of metro tracks and about 2,800 new metro stations."



Atlanta vs. Barcelona. Source: Alain Bertaud

<sup>&</sup>lt;sup>29</sup> Ibid

## Fixing Public Transit

Randal O'Toole, Cato Institute senior fellow, wrote an Issue Analysis for the Georgia Public Policy Foundation in June 2010. In, "Public Transit in Georgia: High Costs for Low Fares," he says transit agencies could do several things to provide better transit at a lower cost. 30

"One of the major obstacles to change is that Congress has, intentionally or not, given transit agencies incentives to choose high-cost forms of transit. Once these incentives are changed, it will be easier for transit agencies to adopt some or all of the following policies.

**End highway subsidies:** Taxpayers and highway users would both be better off if highways were funded exclusively out of tolls, vehicle-mile fees or some other user fee. Ending subsidies would only increase the cost of driving by a few pennies per mile, but it would take away the excuse rail advocates use for diverting billions of dollars of highway user fees to pay for the construction of expensive rail lines, which is, "Highways are subsidized, so we need to subsidize rail transit as well."

**Smaller vehicles:** A major urban area sees millions of passenger trips each day from hundreds of thousands of different origins to hundreds of thousands of different destinations. No more than a tiny fraction of these trips will ever be taken by "big box" forms of transit such as trains or large buses. The average Georgia transit bus has 39 seats and room for 16 people standing, yet carries an average of fewer than nine people. Smaller vehicles can save energy and nimbly serve more parts of each urban area.

**Contracting out:** Hiring private companies to operate buses and other transit vehicles can save taxpayers millions and/or spread available resources to more transit routes. Denver contracts out half of its bus services, and it pays only 52 percent as much per vehicle mile for the contracted service as it spends on buses it operates itself. The main obstacle to contracting out services is generally union opposition, even though some contracting companies are unionized and pay scales are comparable.

**Jitneys:** Also known as shared taxis, jitneys are a combination of taxis and buses. They tend to be privately owned vehicles operating on fixed or semi-fixed routes. The airport shuttles found in most American urban areas are a form of a jitney, but one that can only start or end at the airport. Opening up urban areas to competitive jitney services would allow more people to take advantage of door-to-door or near-door-to-door services at a lower cost than taxis. The main opponents are taxi companies, but they could in fact become major jitney operators. A private party in Houston recently started a jitney service called the Wave.

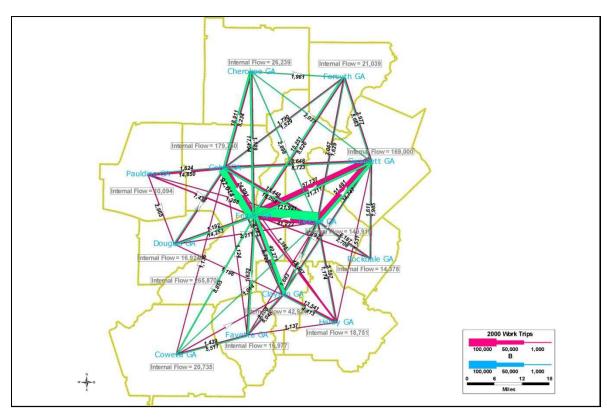
**Privatize:** Transit agencies could take the ultimate step of selling their assets to private operators, restoring the system that prevailed in most American cities before Congress gave cities incentives to take over private transit companies in 1964. The private operators would have incentives to find the optimal sized vehicle for each route and to run transit where people want to use it, not in every suburb that pays taxes to the transit agency. The United States still has a few private transit services that operate largely without subsidies, including the Atlantic City Jitney Association, New York Waterway and publicos (jitneys) in Puerto Rico.

<sup>&</sup>lt;sup>30</sup> "Public Transit in Georgia: High Costs for Low Fares," Randal O'Toole, Cato Institute <a href="http://tinyurl.com/2bx88rs">http://tinyurl.com/2bx88rs</a>

**Vouchers:** Transit is important to people who have no access to cars. But such people are rare: Nearly 90 percent of Georgia households have at least one car, so even people who can't drive usually have someone in the household who can drive for them. Instead of funding expensive transit agencies to serve those few who still lack automobility, state and local governments could give transportation vouchers/stamps to people who are too young, too old, or otherwise unable to drive. These vouchers could be applied to any public conveyance: taxis, private shuttle buses, intercity buses, Amtrak or the airlines. This would give people the mobility they need at a much lower cost to taxpayers."

#### More options:

**Bus Rapid Transit/Flex-Trolley:** In densely populated cities, rail-based transit provides a high-capacity, convenient transit solution that makes up for its high capital cost. But Atlanta's travel patterns, as in many cities, represent a spider-web type pattern, better described as "everywhere to everywhere" travel, which does not lend itself well to traditional light rail or heavy rail solutions.



Work trips in metro Atlanta. (Source: Atlanta Regional Commission)

Business leaders and policy-makers in metro Atlanta support Flex-Trolley, or Bus Rapid Transit, which combines the cost-effectiveness and flexibility of buses with the efficiency and customer appeal of trains.<sup>31</sup> These systems utilize rubber-tired vehicles that offer amenities similar to and look very much like light rail vehicles. Stations are more robust than traditional bus stops and offer pre-payment to speed up boarding. The vehicles can operate in various modes. On regular streets, signal pre-emption limits the number of stops at intersections. HOV lanes, HOT lanes and

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<sup>&</sup>lt;sup>31</sup> What is Bus-Rapid Transit, National BRT Institute, www.nbrti.org/media/presents/nbrti/generic what is BRT presentation 1.ppt

sometimes emergency lanes are used on freeways to shorten trip times. And in highly congested corridors, exclusive busways can be used to separate the buses from all other traffic and eliminate congestion-related delays.

A 2001 Government Accountability Office report noted: "Bus Rapid Transit provides a more flexible approach than Light Rail because buses can be routed to eliminate transfers; operated on busways, HOV lanes and city arterial streets; and implemented in stages."32

The exclusive busways built for bus rapid transit (BRT) provide further options for improvements. In addition to being used by emergency vehicles, any excess capacity not utilized by the flex-trolley vehicles could be used for other high-occupancy vehicles such as shuttle vans or van pools. In addition, the busways can serve as a "placeholder" for future rail transit lines if future population densities or technologies make that feasible.

The greatest benefit of a flex-trolley system is its comparatively low costs for construction and operations. This means that a metro-wide network could be established in very little time for the same amount of money that would only fund a limited light rail system. In addition, if growth patterns shift after the flex trolley system is deployed, it has the flexibility to adapt to the growth.

In Atlanta, light rail was selected as the transportation mode for Atlanta's proposed Beltline project, which is intended "to combine green space, trails, transit and new development along 22 miles of historic rail segments that encircle the urban core." A study found that installing light rail would cost \$270 million to \$300 million more than a bus rapid transit system and \$50 million to \$58 million more than streetcars, the DeKalb News reported in 2007.

According to a 2005 study for the Beltline Steering Committee on the capital costs per mile for the modes under consideration, the range was: BRT, \$15 million to \$25 million per mile; streetcar, \$15 million to \$20 million per mile, and light rail, \$25 million to \$50 million per mile.<sup>34</sup>

"Prior to the application of the cost effectiveness performance measure, the Modern Streetcar and LRT alternatives consistently outperform the BRT alternatives, due to superior qualitative scoring for their potential to enhance the urban environment and to support redevelopment within a halfmile of Beltline stops."35

In 2009, a team of researchers at the World Resources Institute compared BRT and light rail as two options for Maryland's Purple Line Project, a 16-mile transit corridor that will connect the D.C. suburbs. It found that "enhanced buses ... would cost less, offer similar services, and fight global warming better than light-rail cars." As far as cutting CO2 emissions, the institute said, "It is very important to consider the electricity source for [light rail], and in our region the dominant source is currently coal-fired power plants."<sup>37</sup> Georgia is also dominated by coal-fired power plants; the metro area faces challenges meeting increasingly tougher federal air quality standards.

<sup>&</sup>lt;sup>32</sup> "Mass Transit, Bus Rapid Transit Shows Promise," Government Accountability Office, September 2001, www.gao.gov/new.items/d01984.pdf

33 "Despite Costs, Light Rail Chosen for Atlanta's Beltline," www.planetizen.com/node/22490

<sup>&</sup>lt;sup>34</sup> Atlanta BeltLine Tax Allocation District (TAD) Feasibility Study, Prepared for the BeltLine Steering Committee, March 2005, www.atlantada.com/media/beltline\_final.pdf

<sup>35</sup> Detailed Screening Results and Selection of Locally Preferred Alternative, MARTA, January 2007 www.itsmarta.com/planning/Belt%20Line/Current/Document%20by%20Section/Detailed%20Screening%20 Results-LPA%20Ch%208.pdf

<sup>&</sup>lt;sup>36</sup> "Enhanced Buses Best Option for DC-Area 'Purple Line,' WRI Finds," World Resources Institute, January 15, 2009, www.wri.org/press/2009/01/enhanced-buses-best-option-dc-area-purple-line-wri-finds

<sup>&</sup>lt;sup>37</sup> Bus Rapid Transit, Worldchanging Team, October 14, 2006, www.worldchanging.com/archives/005046.html

The World Resources Institute notes that BRT builds off existing infrastructure and has a high carrying capacity so it can be more economical than light rail. A typical BRT system costs between \$1 million and \$35 million per mile, while a light rail or subway system typically costs \$13 million to \$336 million per mile, reports the BRT Policy Center. The World Bank reported a 32 percent reduction in travel time for passengers using the TransMilenio in Colombia, and a BRT line in Beijing, China, can reduce an hourlong trip by 23 minutes.

**Prioritize**: Georgia has come under fire for being one of seven states that do not fund operating costs for transit. A fair solution would be to link the funding of public transportation operating costs to the percentage of public transit ridership in a county. Seventy-eight percent of Georgia workers drove to work alone in 2006 (down 3 percentage points from 2002); 12 percent carpooled (up 1 point); 2 percent took public transportation (down 1 point) and 2.54 percent of worked from home in 2006 (up from 1.9 percent). Clearly, roads must come first; other modes should not be disproportionately funded.

**Coordinate:** HB 277, the <u>Georgia 2020 Transportation Act</u>, would spur cost-sharing through a new Coordinating Committee for Rural and Human Services Transportation representing the State School Superintendent and the departments of Transportation, Human Services, Behavioral Health and Developmental Disabilities, Community Health, Labor, Community Affairs and the Governor's Development Council. This could help flex existing grants. For example, existing Medicaid and welfare funds are available for transit, but a vehicle providing services to these clients is often not allowed to provide services to other customers, even if picking up these customers would not significantly lengthen the trip time by picking up riders on their existing route, or by providing transit on their way to and from existing clients when their vehicles are empty. The law also creates a Transit Governance Study Commission to investigate the feasibility of combining all of the regional public transportation entities into an integrated regional body.

#### 7. Utilize competitive contracting to reduce costs.

Around the world, major transit systems have been and are being converted to competitive contracting, under which the transit agency maintains full policy control of the system, while awarding limited-time contracts for the operation of routes or segments of the system. Fares, route alignments, timetables, and service standards are established by the transit agency, which administers contracts that set performance goals.

Both bus and rail service have been competitively contracted. In such cases, the transit system remains an integrated whole, and commuters remain largely unaware that the system is operated by multiple operators. Cobb County's bus transit system is competitively contracted.<sup>39</sup> The Metro Atlanta Rapid Transit Authority (MARTA) is not contracted out.<sup>40</sup> While bus operating expenses per vehicle revenue hour are close – \$88.50 for MARTA and \$86.37 for Cobb – a comparison of the two bus services shows operating expenses per vehicle revenue mile are \$7.16 for MARTA versus \$4.62 for Cobb; operating expenses per passenger mile are 91 cents for MARTA versus 35 cents for Cobb.

## 8. Reduce the role of the federal government in the funding equation.

The federal tax on gasoline is 18.4 cents a gallon (24.4 cents for diesel), of which 2.86 cents go to the "Mass Transit Account." The tax is the main source of funding for the Federal Highway Trust

<sup>&</sup>lt;sup>38</sup> Georgia 2020 Transportation Act, <a href="http://tinyurl.com/2fbkmqk">http://tinyurl.com/2fbkmqk</a>

<sup>&</sup>lt;sup>39</sup> National Transit Database, Federal Transit Administration, Cobb County Department of Transportation Authority (CCT), <a href="www.ntdprogram.gov/ntdprogram/pubs/profiles/2008/agency\_profiles/4078.pdf">www.ntdprogram.gov/ntdprogram/pubs/profiles/2008/agency\_profiles/4078.pdf</a>
<sup>40</sup>National Transit Database, Federal Transit Administration, Metropolitan Atlanta Rapid Transit Authority (MARTA), <a href="www.ntdprogram.gov/ntdprogram/pubs/profiles/2008/agency\_profiles/4022.pdf">www.ntdprogram.gov/ntdprogram/pubs/profiles/2008/agency\_profiles/4022.pdf</a>

Fund, established in 1956 to build the interstate highway system. Now that the interstate system is largely complete, highways and other transportation solutions can best be decided and resolved regionally and locally. The continued tax collection by the federal government is inefficient, unfair and no longer needed; it has also become a weapon wielded by Congress, which has the ability to divert highway funds to the General Fund or withhold them to enforce regulations. With federal funds meeting up to 90 percent of the cost of the projects they support, the potential for abuse and misuse is high. States tend to inflate requests with expensive, ambitious projects that have little relevance to consumer demand.

Georgia is one of the top 10 "donor" states that receive back less than 100 percent of the federal gas tax dollars they send to Washington. The 1998 Transportation Equity Act (TEA-21) guaranteed that for a portion of the transportation programs, each state would get back a share equal to at least 90.5 percent of its contribution. When all programs are considered, however, many states receive a rate of return less than 90.5 percent. In 2008, Georgia received a 96 percent return, but the overall return rate between 1956 and 2008 was 84.5 percent.<sup>41</sup>

Transportation policy expert Ronald Utt of the Heritage Foundation points out:"42

"In fiscal 2000, the trust fund – a repository of federal per-gallon fuel taxes paid by drivers – boasted a \$23 billion surplus. But in 2005, the highway reauthorization bill OK'd program spending in excess of fuel tax collections. The rest, as they say, is deficit history.

Once a moneymaker for the feds, the highway trust fund is now part of the problem of exploding government deficits. And the Congressional Budget Office projects the funds financial problems will only get worse. Under current legislation, the CBO says, programs normally funded by highway user taxes will require \$67.3 billion in general revenue subsidies over a five-year period ending in fiscal 2012.

The trust fund will pile up another \$56.1 billion in losses in the five years after that. And that's not counting the 75 percent spending hike proposed in the six-year, \$500 billion Surface Transportation Authorization Act drafted by House Transportation and Infrastructure Committee Chairman James L. Oberstar, Minnesota Democrat.

Rather than double down and institutionalize a deficit-riddled federal highway program, it's time to reform the system. Washington should return surface transportation responsibility to the states, along with the right to levy the ...federal fuel tax."

# 9. Use objective criteria in choosing commuter and intercity passenger rail routes

Increasing highway and airport congestion, along with security delays in the wake of terrorist attacks, have heightened interest in rail travel. The Southeastern Economic Alliance, a coalition of 14 chambers of commerce across six states including Georgia, has for years explored the possibility of safe and reliable high-speed passenger rail service across the Southeast. Georgia continues to toy with intercity and commuter rail service, beginning with service between Atlanta and Lovejoy.

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<sup>&</sup>lt;sup>41</sup> "Federal Highway Program Shortchanges Half of the States," Ronald Utt, Heritage Foundation, April 15, 2010, http://tinyurl.com/25z94mo

<sup>42 &</sup>quot;Running on Empty," Ronald Utt, Heritage Foundation, June 10, 2010, http://tinyurl.com/2ayg4d6

The Obama Administration's \$8 billion in grants, described as a "jump start" on developing a national high-speed rail network, will barely shift the initiative. A California alone estimates it would cost \$45 billion to construct its high-speed network linking San Francisco, San Jose, the Central Valley and Los Angeles with trains traveling at 220 mph. (President Obama allocated \$48 billion in transportation funds for the entire nation in the federal economic stimulus package.) Transportation infrastructure projects are notorious at low-balling costs: A Reason Foundation analysis found the final price tag actually at \$65 billion to \$81 billion.

Further, the current shortfalls in maintaining and enhancing existing transportation infrastructure are overwhelming. The Federal Transit Administration has warned that more than one-third of the equipment and facilities of the nation's seven largest rail transit agencies are in disrepair, needing \$50 billion for repairs and \$5.9 billion a year for maintenance.

Two factors are important in evaluating rail proposals:

- 1. Passenger rail must not disrupt freight operations. Compromising the efficiency of the freight network would put rail at a competitive disadvantage to trucks. Diverting rail freights to trucks would increase truck traffic on Georgia's already-congested highway system.
- 2. In order to attract enough riders to justify its cost, passenger rail must offer competitive trip times. Based on extensive surveys by the Georgia Department of Transportation, "intercity travelers would be willing to use intercity rail service in significant numbers only if it were as fast or faster than the automobile, implying a trip of average speed of 70-75 mph or higher. In order to reach these average speeds, top train speeds must generally be above 100 mph." The average speed of commuter rail is 31.2 miles per hour, according to the American Public Transit Association. <sup>44</sup> The average speed of light rail is 15 miles per hour.

By leveraging federal funding, some rail corridors may make sense if these two criteria are met. Absent federal funding, the cost per passenger mile of providing passenger rail is unlikely to compete with the cost per passenger mile of providing additional road capacity.

According to a 2002 study reported in the Journal of the American Planning Association, costs are underestimated in nine out of 10 transportation infrastructure projects. For rail projects, actual costs are, on average, 45 percent higher than estimated costs. "The key policy implication for this consequential and highly expensive field of public policy is that those legislators, administrators, bankers, media representatives and members of the public who value honest numbers should not trust the cost estimates presented by infrastructure promoters and forecasters," the authors warn. <sup>45</sup>

http://apta.com/resources/statistics/Documents/FactBook/APTA\_2010\_Fact\_Book.pdf

<sup>&</sup>lt;sup>43</sup> "Go Slow on High-Speed Rail," by Benita M. Dodd, Georgia Public Policy Foundation, May 15, 2009, http://tinyurl.com/26f7z7t

<sup>&</sup>lt;sup>44</sup> 2010 Public Transportation Fact Book,

<sup>&</sup>lt;sup>45</sup> "Georgia Must Put Brakes on Commuter Rail," Benita M. Dodd, Georgia Public Policy Foundation, March 26, 2004, <a href="http://tinyurl.com/2d789jq">http://tinyurl.com/2d789jq</a>