Transportation Fact Book



Population:

The 10-county Atlanta region added 52,700 new residents between April 1, 2013 and April 1, 2014.

Managed Lanes:

The number of average daily trips using the I-85 HOT lanes increased from 18,960 in April of 2013 to 20,141 in April of 2014.

Air Travel:

International passengers increased by 4.1% from 2011 to 2013.

Roadway Safety:

From 2008 to 2012, the **18-County region experienced a decrease of fatalities** on the public roadways of a total of 76, from 528 in 2008 to 452 in 2012.

The contents of this report reflect the views of the persons preparing the document, and those individuals are responsible for the facts and the accuracy of the data presented herein. The contents of this report do not necessarily reflect the official views or policies of the Department of Transportation of the State of Georgia. This report does not constitute a standard, specification or regulations.

Statistical references and data are for the 18 county MPO area in place before September, 2014. The expanded 19 county MPO will be reflected in future editions of the Fact Book.

Transportation Fact Book

ATLANTA REGIONAL COMMISSION regional impact + local relevance

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The Atlanta Regional Transportation Fact Book is published by the Atlanta Regional Commission (ARC), and presents a summary of the most current data for the transportation system in the Atlanta region. The Fact Book provides information about the existing regional transportation infrastructure and travel patterns, as well as other transportation-related issues. The 2014 Transportation Fact Book is the 15th edition, and is available in printed form or electronically at atlantaregional.com/transportation.

The data in this Fact Book is the most current available, coming primarily from 2012 and 2013 figures. But some tables and charts contain data that is not from 2012 or 2013. They are so noted.

The purpose of the Fact Book is to provide the public with a quick and easy reference guide of transportation assets and performance of the transportation system.

Note that the sources used to collect data are listed below each table. Readers should be aware of all sources, notes and descriptions of data. For example, some tables may refer to ARC's 10-county Regional Commission (RC)

area, others to the 18-county Metropolitan Planning Organization (MPO) area or the 20-county Atlanta air non-attainment area. A map with these boundaries is provided on the following page.

ARC and its predecessor agencies have been providing regional planning since 1947. In the early 1970s, ARC was designated by the State of Georgia as a Metropolitan Area Planning and Development Center (MAPDC) for the 10-county Atlanta area, with the responsibilities of a Regional Commission (RC). ARC is referred to in this document as the RC for the Atlanta region. Also referred to as an MPO, ARC is the federally-designated Metropolitan Planning Organization (MPO) for the 19-county Atlanta region, developing regional transportation plans and policies to enhance mobility, reduce congestion and meet air quality standards.

ARC regards data as an important community resource and makes every effort to maximize its use by both the public and private sectors. A complete list of ARC's current publications is available from ARC at 404.463.3102 or via ARC's Web site at atlantaregional.com.



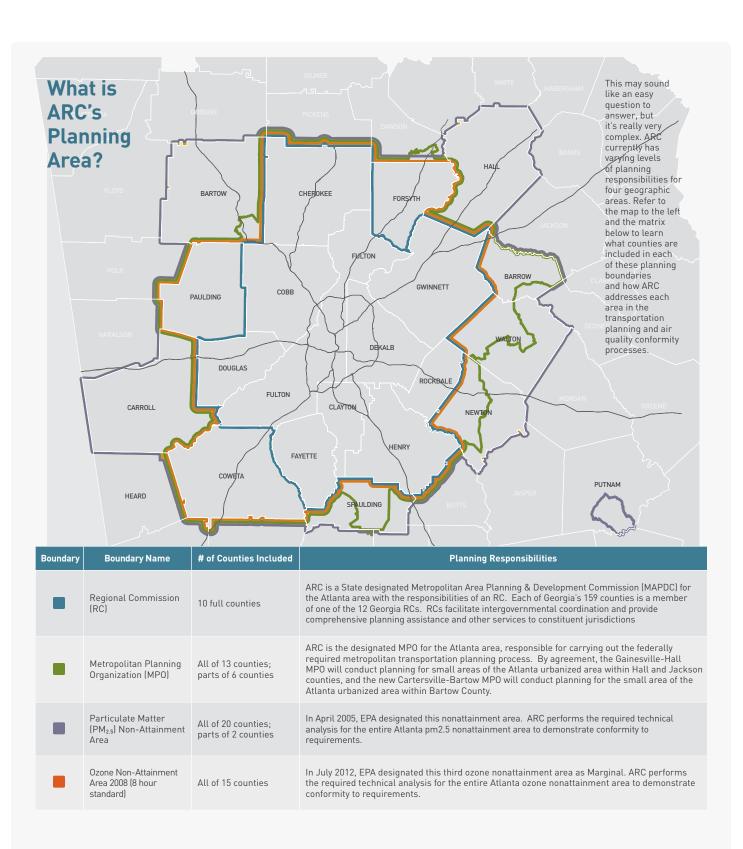












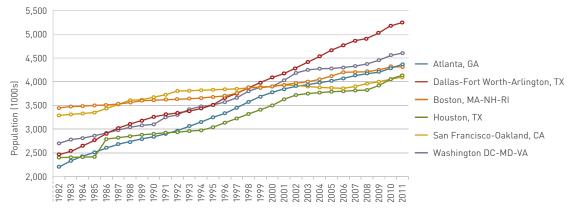


How Does Metro Atlanta Compare?

The Texas Transportation Institute (TTI) tracks growth in urbanized areas and annually assesses congestion. An Urbanized Area is a statistical geographic entity designated by the U.S. Census Bureau, consisting of a central core and the adjacent densely-settled territory that together contain at least 50,000 people, generally with an overall population density of at least 1,000 people per square mile. The Atlanta Urbanized Area used in the TTI analysis includes all or portions of the 20 counties in the ARC area.

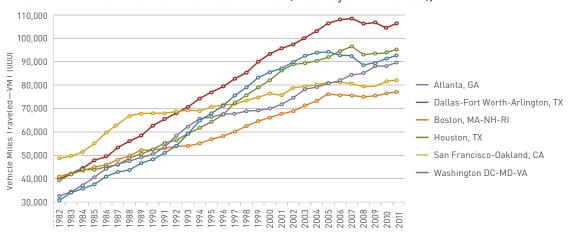
The Atlanta region is considered a "very large" region because the region has a population larger than three million. Since 1982, Atlanta has grown larger in population size than Houston and San Francisco, and is now similar to Boston in population size. During that time, Atlanta experienced the fifth largest average annual change in population (among the 14 very large regions), adding more than 74,000 people to the region each year. In 2011, the Atlanta region was the ninth largest region in population size with 4.3 million people (as calculated for selected regions in the TTI Urban Mobility Report 2012).

Chart 1: Urbanized Area Population Growth, 1982-2011



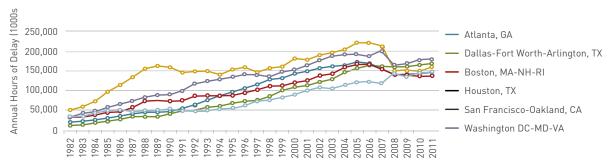
2012 Urban Mobility Report by Texas Transportation Institute (TTI)

Chart 2: Urbanized Area Vehicle Miles Traveled (Freeway and Arterials), 1982–2011



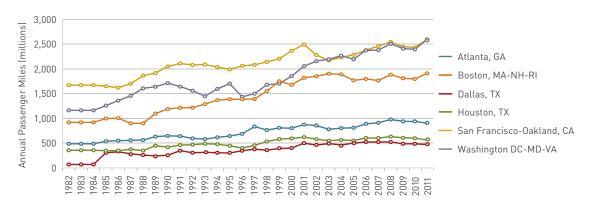
2012 Urban Mobility Report by Texas Transportation Institute (TTI)

Chart 3: Urbanized Area Total Delay (Annual Hours of Delay), 1982-2011



2012 Urban Mobility Report by Texas Transportation Institute (TTI)

Chart 4: Urbanized Area Public Transportation (Annual Passenger Miles Traveled), 1982-2011



2012 Urban Mobility Report by Texas Transportation Institute (TTI)

Population

POPULATION GROWTH

The 10-county Atlanta region added 40,100 new residents between April 1, 2012 and April 1, 2013. This growth is essentially the same experienced during each of the last five years, meaning that growth is still muted when compared to the booming years of the 1990s and early 2000s. As the table shows, the average annual growth since 2010 is less than half of the annual growth experienced between 1990 and 2010.

Table 1: Atlanta 10-County RC Area Population Change

| County | 1970 | 1980 | 1990 | 2000 | 2010 | 2012 | 2013 | Average Annual Change 2010-2013 | Average Annual Change 1990-2010 |
|-----------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|--|--|
| Atlanta Region | 1,500,8230 | 1,896,182 | 2,557,800 | 3,429,379 | 4,107,750 | 4,179,500 | 4,219,600 | 37,283 | 77,498 |
| Cherokee | 31,059 | 51,699 | 91,000 | 141,903 | 214,346 | 220,800 | 223,300 | 2,985 | 6,167 |
| Clayton | 98,126 | 150,357 | 184,100 | 236,517 | 259,424 | 262,300 | 263,700 | 1,425 | 3,766 |
| Cobb | 196,793 | 297,718 | 453,400 | 607,751 | 688,078 | 699,500 | 707,500 | 6,747 | 11,734 |
| DeKalb | 415,387 | 483,024 | 553,800 | 665,865 | 691,893 | 700,700 | 706,700 | 4,902 | 6,905 |
| Douglas | 28,659 | 54,573 | 71,700 | 92,174 | 132,403 | 133,900 | 134,700 | 766 | 3,035 |
| Fayette | 11,364 | 29,043 | 62,800 | 91,263 | 106,567 | 107,500 | 108,200 | 544 | 2,188 |
| Fulton | 605,210 | 589,904 | 670,800 | 816,006 | 920,581 | 936,100 | 945,400 | 8,273 | 12,489 |
| Gwinnett | 72,349 | 166,808 | 356,500 | 588,448 | 805,321 | 823,100 | 832,200 | 8,960 | 22,441 |
| Henry | 23,724 | 36,309 | 59,200 | 119,341 | 203,922 | 209,500 | 211,200 | 2,459 | 7,236 |
| Rockdale | 18,152 | 36,747 | 54,500 | 70,111 | 85,215 | 86,100 | 86,700 | 495 | 1,536 |
| City of Atlanta | 495,039 | 424,922 | 415,200 | 416,474 | 420,003 | 421,600 | 422,800 | 932 | 240 |

Source: U.S. Census Bureau, 2010 Census

Note: The City of Atlanta population numbers are included in Fulton County.

Since 2010, Gwinnett County has led the region in average annual growth, adding 9,000 new residents each year. This growth, like all jurisdictions, is well below the average annual change experienced between 1990 and 2010. As for last year, Fulton added the most new residents, up 9,300, then Gwinnett (+9,100), Cobb (+8,000) and DeKalb (+5,900).

Similar to the previous table, the following chart shows how each county and the City of Atlanta have grown over the past 40 years. As can be seen, each county "took off" at different points of time. Generally speaking, though, the more rural counties of Cherokee, Douglas and Henry experienced their booms last decade, while the more urban counties closer to the core had their booms during the 1990s.

25,000 1970 to 1980 1980 to 1990 20,000 1990 to 2000 2000 to 2010 2010 to 2013 15,000 Population Change 10,000 5,000 0 Douglas Clayton Cobb Gwinnett Fayette Henry Rockdale Cherokee Sity of Atlanta -5,000

Chart 5: 10-County Population Growth per Year, by Decade

The annual growth from 2012 to 2013 almost exactly matches the average annual growth during the 1970s. In fact, growth over the past 40 years has been quite symmetrical. As Chart 6 shows, the 1990s saw the greatest growth, while growth during the 1980s was similar to the growth during the 2000s.

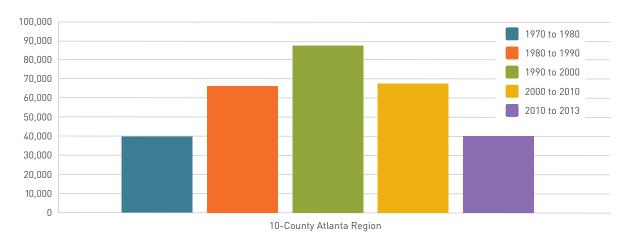


Chart 6: 10-County Growth per Year, by Decade

Population Growth Through The Decades

The 1990s were booming, as the 10-county Atlanta region added more than 900,000 new residents during the decade, by far the largest net gain in population when compared to other decades spanning back to the 1930s. On a percentage basis, however, the 1950s had the largest gains, growing by some 38 percent between 1950 and 1960.

40% 1,000,000 900,000 35% 800,000 30% 700,000 25% 600,000 20% 500,000 400,000 15% 300,000 10% 200,000 5% 100,000 0 0% % Change Change Change Change Change Change 40-50 50-60 60-70 70-80 80-90 90-00 00-10 Change Change Change Change Change Change Change Change 30-40 40-50 50-60 60-70 70-80 80-90 90-00 00-10

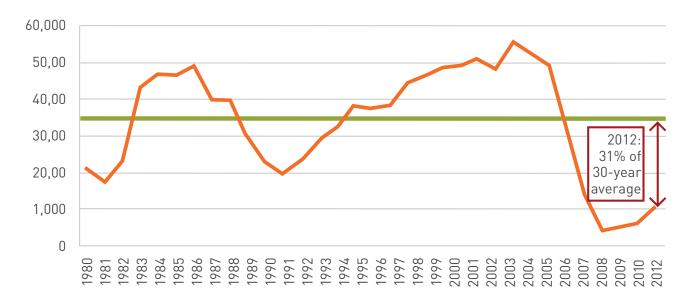
Chart 7: 10-County Change by Decade

Source: U.S. Census Bureau, 2010 Census

Building Permits Are An Indicator Of Population Growth

Given that residential building permit activity is still at all-time lows, it is not surprising that population growth is sluggish. Permits are on the rise, but again, just rising slowly. There were almost 11,000 residential units permitted in 2012, 4,500 more than in 2011. But, considering the region averaged around 35,000 new residential units each year since 1980, permit activity is still way down.

Chart 8: Building Permits, 1980-2012



2010 20-County Area Population & Diversity

Superdistricts are ARC-defined, sub-county areas that attempt, where possible, to mirror market areas. The map below shows the change in total population by ARC Superdistrict between 2000 and 2010. The 2010 Census data shows a decade of change, in which growth in non-White populations far outpaced growth in the White population.

The urban core, inside the I-285 perimeter and south of I-20, lost population over the course of the last decade. The second-ring suburbs, especially those to the north, had the biggest population gains, particularly the area stretching from northwest Cobb to eastern Gwinnett.

CHEROKEE FORSYTH -15,543-0 1-5,875 5,876-18,017 BARROW 18,018-34,970 34,971-78,697 PAULDING Counties WALTON DEKALB DOUGLAS ROCKDALE CLAYTON NEWTON SPALDING

Map 1: Atlanta 20-County Total Population Change, 2000-2010

Source: U.S. Census Bureau, 2010 Census

Region-wide, Blacks accounted for the largest population increase among races and ethnicities, with an increase of almost 470,000 last decade. In fact, Blacks accounted for 45 percent of all growth in the 20-county region. Hispanics grew by almost 295,000, followed by Asians (+115,000) and Whites (+85,100). Overall, the White population accounts for 50.1 percent of the 20-county region's 2010 total population.

While each county saw increases in its Black, Hispanic and Asian populations, seven of the "core" 10 counties lost White population between 2000 and 2010. There are now six counties, (Clayton, DeKalb, Douglas, Fulton, Gwinnett and Rockdale) that are majority non-White, according to the 2010 Census.

Gwinnett added more Blacks, Hispanics and Asians than any other county, making it the most diverse county in the state. Henry County added almost 57,000 Blacks, second-most in the region. Next are Cobb (+54,000) and Clayton (+47,600). Fulton added 26,200 Asians between 2000 and 2010, second-most in the region, followed by Clayton (+11,500) and Forsyth (+10,100).

Finally, Cobb added 37,400 Hispanics between 2000 and 2010, second-most in the region. Next are Fulton (+24,500) and Hall (+19,700).

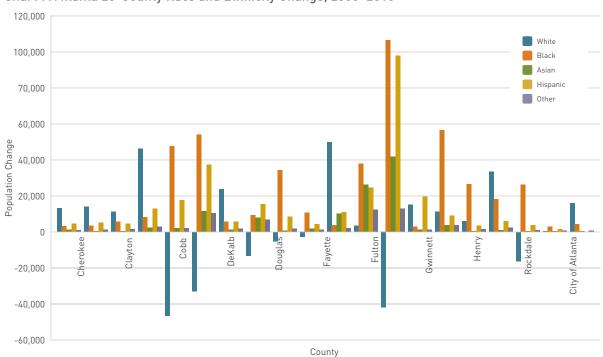


Chart 9: Atlanta 20-County Race and Ethnicity Change, 2000–2010

Source: U.S. Census Bureau, 2010 Census

Developments of Regional Impact

Under the Georgia Planning Act, development projects that are likely to have an impact beyond their local jurisdiction are subject to review by the applicable Regional Commission (RC) as Developments of Regional Impact (DRI). This review is intended to improve communication among governments and to provide a means of identifying and assessing potential impacts of large-scale developments before conflicts relating to them arise.

The Georgia Department of Community Affairs (DCA) establishes thresholds by size and type of development for determining whether a development qualifies as a DRI. To maintain its Qualified Local Government (QLG) status in the 10-county area, a local government must submit every potential DRI it is considering to ARC for review and comment. ARC, with input from neighboring local governments and other agencies, reviews such projects and issues comments and recommendations for the local government and developer to consider. After the review, the local government retains authority to make the final decision on whether to approve the development.

The Georgia Regional Transportation Authority (GRTA) is also required to review DRIs within its 13-county jurisdiction. GRTA can allow or disallow state or federal funds for transportation facilities, services or access to such development based on its reviews. GRTA's jurisdiction encompasses Cherokee, Clayton, Coweta, Cobb, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Paulding, and Rockdale counties. The goals of the reviews are to protect and efficiently allocate limited state and federal resources, to promote compliance with the regional transportation plans and air quality standards and to further GRTA's mission and goals.

Eight DRIs were reviewed in 2013, as compared to 10 in 2012, 6 in 2011, 8 in 2010, 9 in 2009, and 44 in 2008. On average, ARC reviews 29 DRIs per year. During the first six months of 2012, no DRI reviews occurred. From July to December 2012,

Table 2: Number of DRI Reviews by Jurisdiction, 2013

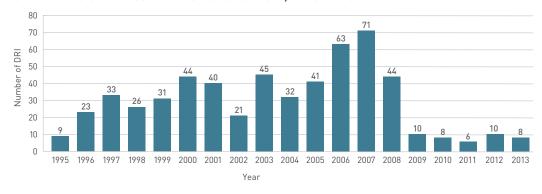
| Units |
|-------|
| 2 |
| 1 |
| 1 |
| 1 |
| 1 |
| 1 |
| 1 |
| 1 |
| |

Source: Atlanta Regional Commission (ARC)

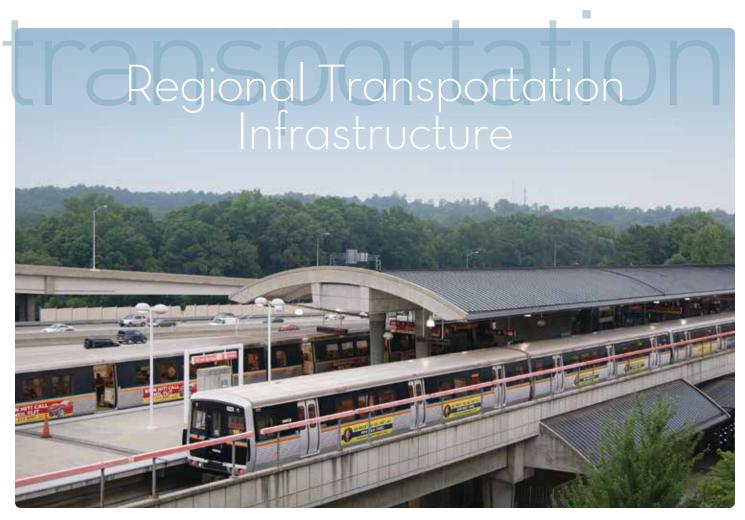
all 10 reviews occurred. During the first seven months of 2013, all 8 DRI reviews occurred. No DRI reviews occurred from August to December 2013. The low number of reviews is a direct reflection of the continued effects of the broader economic downturn.

- In total, these DRIs represent 3,240 proposed residential units, 2,405,828 square feet of proposed office space, 430,509 square feet of proposed commercial space and approximately 1.5 million square feet of proposed industrial space.
- 565 DRIs have been submitted for review since 1995.

Chart 10: Total Number DRI Reviews Per Year, 1995-2013



Source: Atlanta Regional Commission (ARC)



Roads & Highways

The Georgia Department of Transportation (GDOT) maintains centerline mile measures for all Georgia counties based on the character of traffic service each road provides, or its functional classification. There are three primary functional classifications: Arterial, Collector and Local. (Definitions for these classifications can be found in the Glossary of Acronyms and Terms.) A centerline mile is a measure of roadway length, in a specific direction of travel, independent of the number of lanes a roadway may have. The most current centerline mile measures for the Atlanta area are from 2012.

Table 3: Centerline Miles, 2011-2012

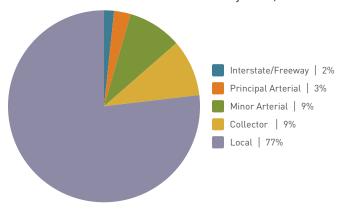
| County | Interstate/ Freeway | | Principal Arterial | | Minor Arterial | | Collector | | Local | | Total | Change 2011–2012 | |
|----------------------------------|------------------------|--------|-----------------------|--------|-------------------|--------|-----------|--------|-----------|--------|-----------|---------------------|-------------|
| County | Miles | %Total | Miles | %Total | Miles | %Total | Miles | %Total | Miles | %Total | Miles | Miles Change | % Change |
| Cherokee | 26.04 | 1.53% | 38.76 | 2.27% | 82.83 | 4.86% | 167.59 | 9.83% | 1,389.16 | 81.51% | 1,704.38 | 237.10 | 16.16% |
| Clayton | 25.92 | 2.31% | 34.82 | 3.10% | 105.01 | 9.36% | 57.80 | 5.15% | 898.72 | 80.08% | 1,122.27 | 0.03 | 0.00% |
| Cobb | 35.27 | 1.20% | 73.18 | 2.49% | 198.92 | 6.76% | 135.41 | 4.60% | 2,501.54 | 84.96% | 2,944.32 | 0.00 | 0.00% |
| DeKalb | 67.29 | 2.89% | 51.41 | 2.21% | 269.02 | 11.57% | 193.15 | 8.30% | 1,745.08 | 75.03% | 2,325.95 | 0.27 | 0.01% |
| Douglas | 18.87 | 2.11% | 20.68 | 2.32% | 79.66 | 8.93% | 67.93 | 7.61% | 705.06 | 79.02% | 892.20 | 0.00 | 0.00% |
| Fayette | 0.00 | 0.00% | 39.46 | 4.53% | 97.02 | 11.13% | 81.27 | 9.33% | 653.66 | 75.01% | 871.41 | 0.00 | 0.00% |
| Fulton | 108.22 | 2.58% | 118.12 | 2.82% | 414.32 | 9.89% | 436.59 | 10.42% | 3,112.58 | 74.29% | 4,189.83 | -0.20 | 0.00% |
| Gwinnett | 51.36 | 1.58% | 95.49 | 2.94% | 224.95 | 6.92% | 179.94 | 5.53% | 2,699.74 | 83.03% | 3,251.48 | 0.00 | 0.00% |
| Henry | 21.25 | 1.30% | 53.06 | 3.25% | 146.25 | 8.96% | 158.54 | 9.71% | 1,253.43 | 76.78% | 1,632.53 | 105.25 | 6.89% |
| Rockdale | 8.58 | 1.32% | 20.30 | 3.13% | 84.45 | 13.02% | 71.07 | 10.96% | 464.30 | 71.57% | 648.70 | 0.00 | 0.00% |
| 10-County Atlanta RC Area | 362.80 | 1.85% | 545.28 | 2.78% | 1,702.43 | 8.69% | 1,549.29 | 7.91% | 15,423.27 | 78.76% | 19,583.07 | 342.45 | 1.78% |
| Barrow | 2.40 | 0.32% | 18.31 | 2.48% | 38.03 | 5.15% | 139.97 | 18.95% | 539.79 | 73.09% | 738.50 | 165.08 | 28.79% |
| Bartow | 29.94 | 2.36% | 49.01 | 3.86% | 109.26 | 8.62% | 150.04 | 11.83% | 929.95 | 73.33% | 1,268.20 | 64.98 | 5.40% |
| Coweta | 23.37 | 1.78% | 23.38 | 1.78% | 117.54 | 8.96% | 143.97 | 10.97% | 1,003.90 | 76.51% | 1,312.16 | 0.00 | 0.00% |
| Forsyth | 14.81 | 1.69% | 25.74 | 2.93% | 89.30 | 10.17% | 83.84 | 9.55% | 664.37 | 75.66% | 878.06 | 0.00 | 0.00% |
| Newton | 15.09 | 1.46% | 16.38 | 1.59% | 102.79 | 9.96% | 102.07 | 9.89% | 795.42 | 77.09% | 1,031.75 | 50.82 | 5.18% |
| Paulding | 0.00 | 0.00% | 20.86 | 1.80% | 121.43 | 10.45% | 79.46 | 6.84% | 939.72 | 80.91% | 1,161.47 | 111.99 | 10.67% |
| Spalding | 4.61 | 0.67% | 20.08 | 2.90% | 71.19 | 10.28% | 132.41 | 19.12% | 464.26 | 67.04% | 692.55 | 0.00 | 0.00% |
| Walton | 4.99 | 0.46% | 9.29 | 0.86% | 96.78 | 8.91% | 186.17 | 17.15% | 788.38 | 72.62% | 1,085.61 | 71.41 | 7.04% |
| 18-County Atlanta MPO Area | 458.01 | 1.65% | 728.33 | 2.62% | 2,448.75 | 8.82% | 2,567.22 | 9.25% | 21,549.06 | 77.65% | 27,751.37 | 806.73 | 2.99% |

Source: GDOT Office of Transportation Data, GDOT 445 Series Report

Note: Fulton County data includes City of Atlanta.

Local roads comprise 78 percent of the total centerline mileage in the Atlanta 18-county area.

Chart 11: Percentage of Road Mileage by Functional Classification for the Atlanta 18-County Area, 2011



Source: GDOT 445 Series Report

Transit

The economy of the Atlanta region benefits greatly from the various public transit services throughout the region. In addition to providing an important mobility option to area workers and residents, transit also helps to relieve traffic congestion, reduce energy consumption, achieve clean air standards, create jobs, stimulate development around stations and maintain vitality in the region's primary business districts.

Fixed-Route Rail and Bus

The Atlanta region is currently served by five providers that, together, form the backbone of the regional transit system. As of the end of 2013, these providers were Metropolitan Atlanta Rapid Transit Authority (MARTA), Cherokee Area Transportation Services (CATS), Cobb Community Transit (CCT), Gwinnett County Transit (GCT) and GRTA Xpress (Georgia Regional Transportation Authority). Transfers between MARTA and these providers are seamless thanks to a series of reciprocal fare agreements between the partner agencies.

Circulator Shuttles

Circulator shuttles are also important components of the regional transit network. They provide access to communities and activity centers that otherwise would be too distant from major transit services. Most of these circulator shuttles are privately owned or are affiliated with a higher education organization and are offered at no cost to the rider. Currently, the Atlanta region has four pubically available circulator shuttles, including the Atlantic Station shuttle, The Buc, Georgia Tech Shuttles, and Emory University Cliff Shuttles.

Table 4: Fixed Route Transit Providers in Atlanta Area, 2013

| Transit Provider | Established | Service Type | Website |
|--|-------------|--|-------------------------------------|
| Cherokee Area Transportation System (CATS) | 1975 | Local Bus, Express Bus*, Vanpool, Demand Response | http://cats.cherokeega.com |
| Cobb Community Transit (CCT) | 1989 | Local Bus, Express Bus, Demand Response | http://dot.cobbcountyga.gov/cct |
| Georgia Regional Transportation Authority (GRTA) Xpress | 2004 | Express Bus, Vanpool | http://xpressga.com |
| Gwinnett County Transit (GCT) | 2000 | Local Bus, Express Bus, Demand Response | http://gctransit.com |
| Metropolitan Atlanta Rapid Transit Authority (MARTA) | 1972 | Heavy Rail, Local Bus, Express Bus, Demand Response | http://itsmarta.com |
| Atlantic Station Free Ride Shuttle | 2004 | Circulator Shuttle | www.asap-plus.com |
| the buc Shuttles | 2003 | Circulator Shuttle | http://bucride.com |
| Georgia Tech Trolley & Shuttles | 2003 | Circulator Shuttle | http://parking.gatech.edu |
| Emory University/CCTMA Cliff Shuttles | 1994 | Circulator Shuttle | transportation.emory.edu |
| Georgia State University Panther Express Shuttles | 1998 | Circulator Shuttle | gsu.edu/parking/pantherexpress.html |

Source: CATS, CCT, GCT, GRTA, MARTA, Lanier Parking, AUC Woodruff Library, Buckhead CID, Emory, Georgia State, Georgia Tech *Sponsored by CATS and operated by GRTA

Transit in the Atlanta region was profoundly impacted by the ongoing economic downturn in 2010. On March 31, Clayton County's local C-Tran service, which previously handled approximately 8,700 boardings per day, was discontinued after eight years of operation due to a lack of operating support. In September, MARTA implemented a major restructuring of its system, reducing bus and rail service by more than 10 percent and also increasing fares. Gwinnett County Transit also implemented significant reductions in service due to budget shortfalls. Largely due to these reductions, average combined weekday ridership on the major transit providers fell by more than 30,000 boardings in 2010, a six percent decrease from 2009 levels. Despite this overall trend, however, modest increases were reported for both Cobb Community Transit and GRTA's Xpress system. In November of 2014, Clayton County voted to join the MARTA system.

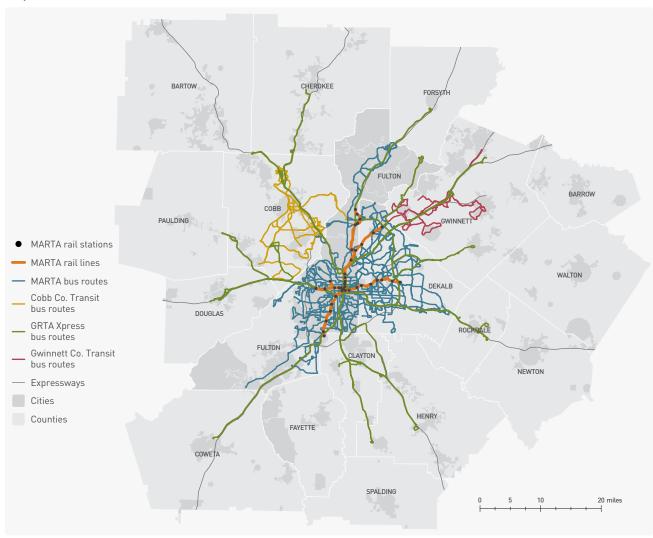
Table 5: Selected Characteristics of Atlanta Area Transit Services, 2012 & 2013

| | Bus Routes | | Fleet Size (Bus) | | Fleet Size (Rail) | | Rail Miles | Rail Stations |
|---|---------------|------|------------------|------|-------------------|------|---------------|------------------|
| Transit Provider | 2012 | 2013 | 2012 | 2013 | 2012 | 2013 | | |
| Cherokee Area Transportation System (CATS) | 2 | 2 | 3 | 3 | - | - | - | - |
| Cobb Community Transit (CCT) | 20 | 18 | 101 | 101 | - | - | - | - |
| Georgia Regional Transportation Authority (GRTA) Xpress | | 33 | 175 | 175 | - | - | - | - |
| Gwinnett County Transit (GCT) | 12 | 12 | 88 | 88 | - | - | - | - |
| Metropolitan Atlanta Rapid Transit Authority (MARTA) | 91 | 91 | 531 | 531 | 316 | 316 | 48 | 38 |
| Atlantic Station Free Ride Shuttle | 2 | 2 | 5 | 5 | - | - | - | - |
| the buc Shuttles | 2 | 2 | 7 | 7 | - | - | - | - |
| Emory University/CCTMA Cliff Shuttles | 19 | 20 | 40 | 40 | - | - | - | - |
| Georgia Tech Trolley & Shuttles | 7 | 7 | 22 | 22 | - | - | - | - |

Source: CATS, CCT, GCT, GRTA, MARTA, Lanier Parking, Buckhead CID, Emory University, Georgia Institute of Technology

 $Additional\ transit\ ridership\ information\ can\ be\ found\ later\ in\ the\ report\ under\ \textit{Regional\ Travel\ Patterns}.$

Map 2: Transit Providers and Routes in the Atlanta Area, 2013



Metro Atlanta continues to lay the groundwork for the implementation of the region's adopted long-range transit system plan, Concept 3. In 2010, this effort was driven by the Regional Transit Committee (RTC), a formal policy committee of ARC that met bi-monthly throughout the year. The voting membership of the RTC in 2010 consisted of county executives from nine metro counties; the mayor of Atlanta; the Chairpersons of ARC, MARTA, GDOT and GRTA; and the State Planning Director. The RTC continued the work of its predecessors, the Transit Planning Board and Transit Implementation Board, including monthly service coordination forums, continued refinement of the Concept 3 vision, and the finalization of conceptual legislation to support the legal constitution of a permanent regional transit governance structure.

Vanpools

Vanpools consist of seven-to-fifteen passengers who commute to work together in a vehicle leased through regional vanpool programs. In the Atlanta region, vanpool operators are responsible for purchasing the vans, providing insurance and maintenance and managing the contract with the commuters or company using the van. There were three vanpool programs in the Atlanta region provided by GRTA, Douglas County Rideshare, and CATS that operated a total of 326 vanpools in 2013. This represents a 23% decrease in the number of vanpools between 2011 and 2013.

Table 6: TDM Vanpool Service Providers, 2013

| Vanpool Service Providers | Number of vans in service in 2011 | Number of vans in service in 2012 | Number of vans in service in 2013 | Website |
|---|--|--|--|-------------------------------------|
| Cherokee Area Transportation System (CATS) | 12 | 1 | 1 | www.cats.cherokeega.com |
| Douglas County Rideshare | 61 | 62 | 59 | www.douglascountyrideshare.com |
| Georgia State University Panther Express Shuttles | 350 | 306 | 266 | gsu.edu/parking/pantherexpress.html |
| | 423 | 369 | 326 | |

Source: Enterprise Rideshare, UPSI Inc., Douglas County Rideshare and the Transportation Demand Management Division at ARC

Visitmygacommuteoptions.com to learn more about vanpool services in the Atlanta region.

On-Demand Transit Service

In addition to fixed-route rail and bus, circulator shuttles and vanpools, the Atlanta region is also served by six ondemand transit providers. On-demand transit means there are no fixed routes, bus stops or pick up times. Residents call and order a trip in advance and daily routes are generated based on the origin and destination locations.

Table 7: On-Demand Transit Service Providers in the Atlanta Area, 2014

| On-Demand Transit Service Providers | Website |
|---|--|
| Cherokee County Area Transportation System (CATS) | http://cats.cherokeega.com |
| Coweta Transit Dial-a-Ride | www.coweta.ga.us/index.aspx?page=950 |
| Fulton County Dial-a-Ride Transportation Services (DARTS) | www.fultoncountyga.gov |
| Henry County Transit | www.co.henry.ga.us/Transit/ |
| Paulding County Transit | www.paulding.gov/index.aspx?NID=809 |
| Three Rivers Regional Transit System | www.threeriversrc.com/Transit/tabid/561/Default.aspx |

Park & Ride Lots

In the Atlanta region, Park & Rides are usually used as locations for drivers to leave their vehicles during a weekday and take an express bus, a vanpool, or a carpool into and out of town. Park & Rides can also function as Kiss & Rides, transfer locations for buses at transit centers and hubs, and satellite parking lots accessed by university shuttles. Provided in the table below includes the location, the transit or Rideshare operator, number of parking spaces, and usage rates for both 2012 and 2013.

Park & Rides offer a number of benefits for express bus, vanpool, and carpool users. These include reduced individual travel costs in terms of vehicle maintenance and repair, fuel costs, parking costs, and stress. Other benefits include emissions reductions, reduced traffic congestion, reduced commute time from the use of HOV and HOT lanes, and reduced demand for parking in major activity centers.

Of the 63 Park & Ride lots in the 20-county Atlanta region, most are located in suburban or exurban areas. Many of these Park & Ride lots have express bus service provided by GRTA Xpress, CCT, GCT, or MARTA. Five locations are for universities such as Emory, Georgia State, and Kennesaw State, which utilize shuttles that connect leased parking facilities to their campuses for commuting staff, faculty and students. Four locations are transit centers or hubs which provide a central bus transfer location for transit operators such as CCT and GCT and for university shuttle operators such as Emory and Georgia Tech.

Some of the Park & Ride lots in the region are also meeting places for vanpools through GRTA's Vanpool Program as provided by vendors Enterprise and VPSI. Douglas County Rideshare provides vanpools at Park & Rides in Douglas County as well as two in the city of Villa Rica located in Carroll County. GDOT through Georgia Rideshare maintains 21 locations throughout the 20-county region with eight that are carpool or vanpool only. In the 20-county Atlanta area, there are 21,103 parking spaces at all Park & Ride lots.

Table 8: Atlanta Area Average Weekday Park & Ride Usage, 2012 & 2013

| County | City | Location | Provider | Spaces | 2012 USAGE | 2013 USAGE |
|----------|----------------|-----------------------------|-----------------------|--------|------------|------------|
| Bartow | Adairsville | SR 3 / US 41 | GDOT | 20 | 25% | 40% |
| Carroll | Carrollton | Northside Drive & SR 166 | GDOT | 65 | 26% | 14% |
| Carroll | Temple | SR 113 | GDOT | 15 | 13% | 13% |
| Carroll | Villa Rica | Liberty Road | Douglas County | 50 | 94% | 100% |
| Carroll | Villa Rica | SR 61 | Douglas County / GDOT | 160 | 54% | 58% |
| Cherokee | Canton | Boling Park | XPRESS (CATS) / GDOT | 173 | 54% | 23% |
| Cherokee | Woodstock | His Hands Church | XPRESS (CATS) | 400 | - | - |
| Clayton | Jonesboro | Tara Boulevard | XPRESS (GRTA) | 588 | - | - |
| Clayton | Riverdale | Lamar Hutchenson | XPRESS (GRTA) | 271 | - | - |
| Cobb | Acworth | Lake Acworth Drive | CCT / XPRESS (CCT) | 496 | - | 40% |
| Cobb | Kennesaw | Busbee | CCT / XPRESS (CCT) | 364 | - | 59% |
| Cobb | Kennesaw | Town Center | CCT / XPRESS (CCT) | 646 | - | 14% |
| Cobb | Kennesaw | Town Center at Cobb | Kennesaw State | 450 | - | - |
| Cobb | Kennesaw | Town Point | Kennesaw State | 656 | - | - |
| Cobb | Mableton | Floyd Road | CCT | 209 | - | 11% |
| Cobb | Mableton | Mable House | CCT / XPRESS (CCT) | 271 | - | 18% |
| Cobb | Marietta | South Marietta Parkway | CCT | 287 | - | 34% |
| Cobb | Powder Springs | Florence Road | XPRESS (CCT) | 271 | - | 51% |
| Cobb | Smyrna | Cumberland Transfer Center | CCT / MARTA | - | - | - |
| Coweta | Newnan | Hollz Parkway | XPRESS (GRTA) | 712 | - | - |
| DeKalb | Atlanta | Woodruff Circle Transit Hub | Emory / Georgia Tech | - | - | - |
| DeKalb | Decatur | Gallery at South DeKalb | Emory | 100 | - | - |

| 2012 USAGE | 2013 USAGI |
|------------|------------|
| - | - |
| 42% | 42% |
| 13% | 7% |
| 90% | 50% |
| 71% | 84% |
| 94% | 96% |
| 21% | 12% |
| 58% | 74% |
| 22% | 10% |
| 75% | 90% |
| 70% | 90% |
| - | - |
| 37% | 35% |
| 53% | 38% |
| 1% | 2% |
| - | - |
| - | - |
| 27% | 25% |
| - | - |
| - | - |
| 41% | 34% |
| - | - |
| - | - |
| 61% | 61% |
| - | - |
| 48% | 43% |
| - | - |
| 72% | 46% |
| - | - |
| 47% | 50% |
| 4% | 6% |
| - | - |
| - | - |
| - | - |
| - | - |
| 81% | 67% |
| 24% | 18% |
| - | 23% |
| 53% | 46% |
| - | - |
| 28% | 29% |
| | |
| | - |

Source: CCT, GCT, GRTA, MARTA, GDOT
Usage for total spaces is not possible to calculate, due to missing usage data for some providers.

The 2012 and 2013 parking usage rates for 28 of the 38 MARTA transit stations with parking are included below.

- With 22,270 parking spaces available at MARTA stations, the average weekday system usage rate was 54% in 2012 and 53% in 2013. These rates were down from 61% in 2011.
- North Springs and College Park Stations had the highest total usage in 2012 and 2013.
- Doraville, Inman Park / Reynoldstown, College Park, East Point, and Lindbergh Center Stations had the highest usage rates during 2012 and 2013.
- Ashby and West Lake Stations had the lowest usage rates during 2012 and 2013.

Table 9: MARTA Park & Ride Lot Usage, 2012 & 2013

| Station | Spaces | 2012 USAGE | 2013 USAGE | Station | Spaces | 2012 USAGE | 2013 USAGE |
|------------------------------------|--------|---------------|---------------|---------------------------|--------|---------------|---------------|
| Arts Center | 29 | 100% | 15% | Inman Park / Reynoldstown | 301 | 90% | 60% |
| Ashby | 158 | 13% | 48% | Kensington | 1,533 | 36% | 41% |
| Avondale | 717 | 56% | 50% | King Memorial | 21 | 95% | 100% |
| Bankhead | 12 | 58% | 37% | Lakewood / Ft. McPherson | 864 | 44% | 33% |
| Brookhaven / Oglethorpe University | 1,513 | 34% | 64% | Lenox | 462 | 29% | 41% |
| Chamblee | 992 | 68% | 77% | Lindbergh Center | 1,020 | 73% | 69% |
| College Park | 2,075 | 70% | 71% | Medical Center | 244 | 67% | 66% |
| Doraville | 1,452 | 81% | 35% | Midtown | 12 | 67% | 83% |
| Dunwoody | 1,209 | 39% | 25% | North Springs | 2,397 | 66% | 65% |
| East Lake | 637 | 36% | 75% | Oakland City | 345 | 49% | 50% |
| East Point | 713 | 69% | 40% | Sandy Springs | 1,149 | 49% | 43% |
| Edgewood / Candler Park | 558 | 42% | 49% | Vine City | 27 | 63% | 52% |
| Hamilton E. Holmes | 882 | 53% | 45% | West End | 475 | 62% | 74% |
| Indian Creek | 2,321 | 43% | 45% | West Lake | 152 | 26% | 14% |
| | | | | Total | 22,270 | 54% | 53% |

Source: MARTA

Note: The following MARTA stations do not have parking lots: Airport, Buckhead, Civic Center, Decatur, CNN Center, Five Points, Garnett, Georgia State, North Avenue and Peachtree Center.

Freight

As a thriving regional transportation hub, the Atlanta region has one of the highest concentrations of workers in wholesale trade and transportation services of any area in the country, with more than 520,000 employees across the area. Located at the intersection of major interstate routes, including I-85, I-75 and I-20, and along the main lines of the Norfolk Southern and CSX railroads, Atlanta is a major transportation distribution center. It is home to Hartsfield-Jackson Atlanta International Airport (H-JAIA) and is in close proximity to major marine container ports, linking world commerce to southeastern markets and points beyond.

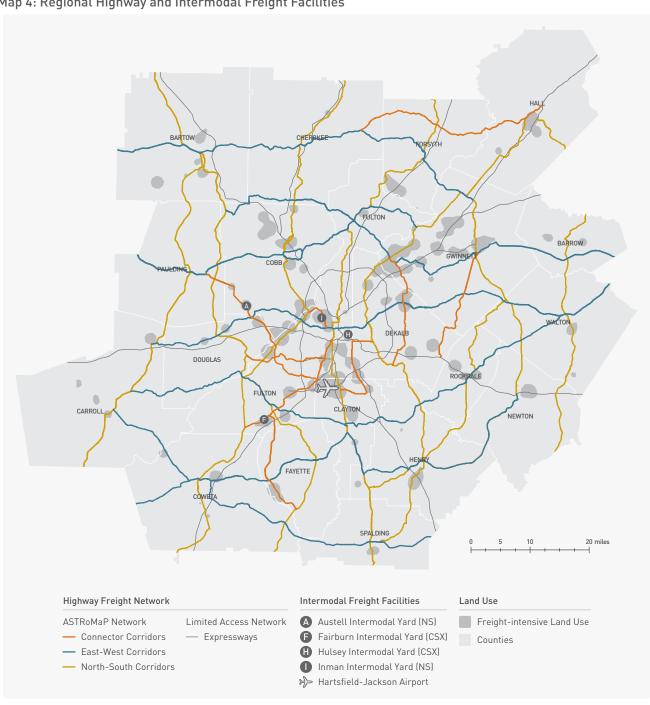
Map 3: Regional Rail and Intermodal Freight Facilities FORSYTH FULTON WALTON DOUGLAS FULTON CARROL FAYETTE 20 miles Freight Rail Network Intermodal Freight Facilities Land Use Class I Railroads Freight-intensive Land Use Shortline Railroads A Austell Intermodal Yard (NS) — CSXT — Fulton County Railroad Fairburn Intermodal Yard (CSX) Counties Norfolk Southern (NS) — Georgia Northeastern Railroad Hulsey Intermodal Yard (CSX) - Great Walton Railroad Company Inman Intermodal Yard (NS) Hartsfield-Jackson Airport

Source: Atlanta Regional Commission (ARC)

In addition to its strategic location on the critical national and global supply chain infrastructure, Atlanta presents a huge local market to serve as the anchor for distribution centers. Companies located in the region are able to send a significant portion of their shipments from their facilities to local destinations.

The critical regional goods movement infrastructure is made up of railways (CSX and Norfolk Southern), intermodal rail yards (Austell, Fairburn and Inman), H-JAIA, the limited access highway network and the Atlanta Strategic Truck Route Master Plan (ASTRoMaP). ARC began the development of the ASTRoMaP network in early 2009, which was a recommendation from the 2008 Atlanta Regional Freight Mobility Plan. This follow-up truck report included the development of a regional truck route network, as well as associated policies and guidelines.

Map 4: Regional Highway and Intermodal Freight Facilities

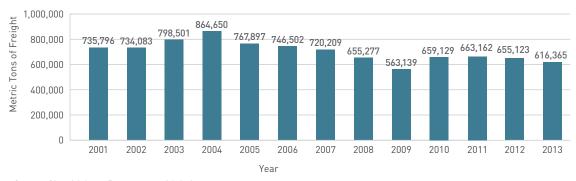


Hartsfield-Jackson Atlanta International Airport (H-JAIA)

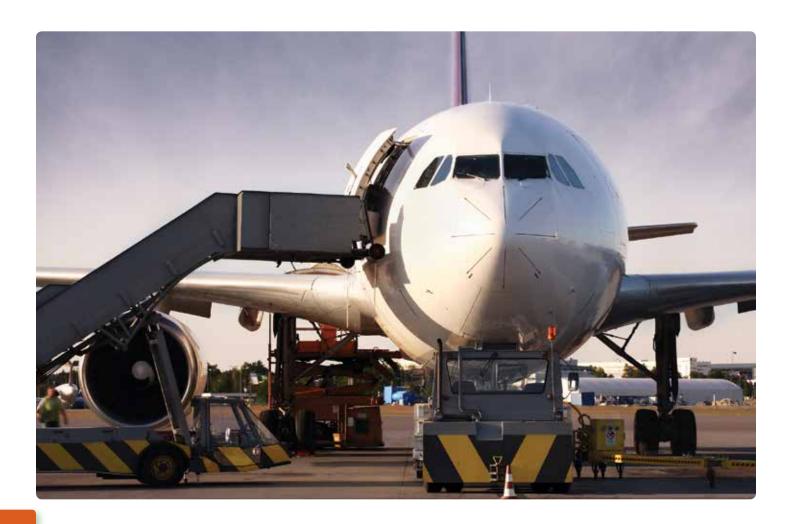
Air cargo activity (including domestic and international freight, express shipping and mail) within the Atlanta region is dominated by H-JAIA. There are three main air cargo complexes, North, Midfield and South, a Perishables Complex and an Equine Complex. The total on-airport air cargo warehouse space measures two million square feet. There are 28 parking positions for cargo aircraft, 19 at the north complex and nine at the south complex.

In 2013, H-JAIA handled 616,365 metric tons of air cargo, which is 6 percent less activity than in 2012. The following chart displays the amount of tonnage of air freight movement at H-JAIA in the years 2001 to 2013.

Chart 12: Hartsfield-Jackson Atlanta International Airport Freight Movement, 2013



Source: City of Atlanta Department of Aviation Web Reference: www.atlanta-airport.com



Bicycle & Pedestrian

Authorized Bicycle & Pedestrian Projects in the Transportation Improvement Program

The Atlanta Transportation Improvement Program (TIP) represents the list of transportation projects and programs scheduled to be undertaken over the next few years. Projects are drawn from a long-range Regional Transportation Plan (RTP), which must be financially constrained and demonstrate conformity to federal air quality standards. Bicycle and pedestrian projects within the TIP include such projects as the construction of off-street, multi-use pathways, sidewalks, bike lanes, underpasses, bridges, other bicycle and pedestrian facilities and/or a combination of these facilities. Table 10 displays the number of bicycle and pedestrian projects in the TIP.

These are not the only bicycle and pedestrian projects planned in the Atlanta region, as many projects are funded at the local and state levels. Many jurisdictions provide their own local funds for bicycle and pedestrian projects. These projects are only included in the TIP if inclusion is requested by the project sponsor. Also, many new roadway widening and repaving projects also include bicycle and pedestrian accommodations in them and may not be reflected as stand-alone projects in the TIP.

Table 10: Authorized Bicycle & Pedestrian TIP Projects, 2014-2019

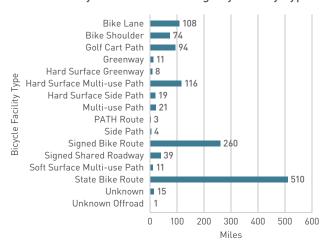
| Project Type | # Funded | Percent | Funds Committed | Percent |
|-------------------------------|----------|---------|--------------------|---------|
| Bicycle and Pedestrian | 78 | 18.93% | \$0.41 billion | 5.58% |
| General Purpose Road Capacity | 122 | 29.61% | \$3.02 billion | 41.35% |
| Managed Lanes | 3 | 0.73% | \$0.96 billion | 13.14% |
| Road Upgrades/Operations | 134 | 32.52% | \$1.47 billion | 20.15% |
| Transit | 58 | 14.08% | \$1.14 billion | 15.62% |
| Studies/Other | 17 | 4.13% | \$0.30 billion | 4.17% |
| Totals | 412 | 100.00% | \$7.3 billion | 100.00% |

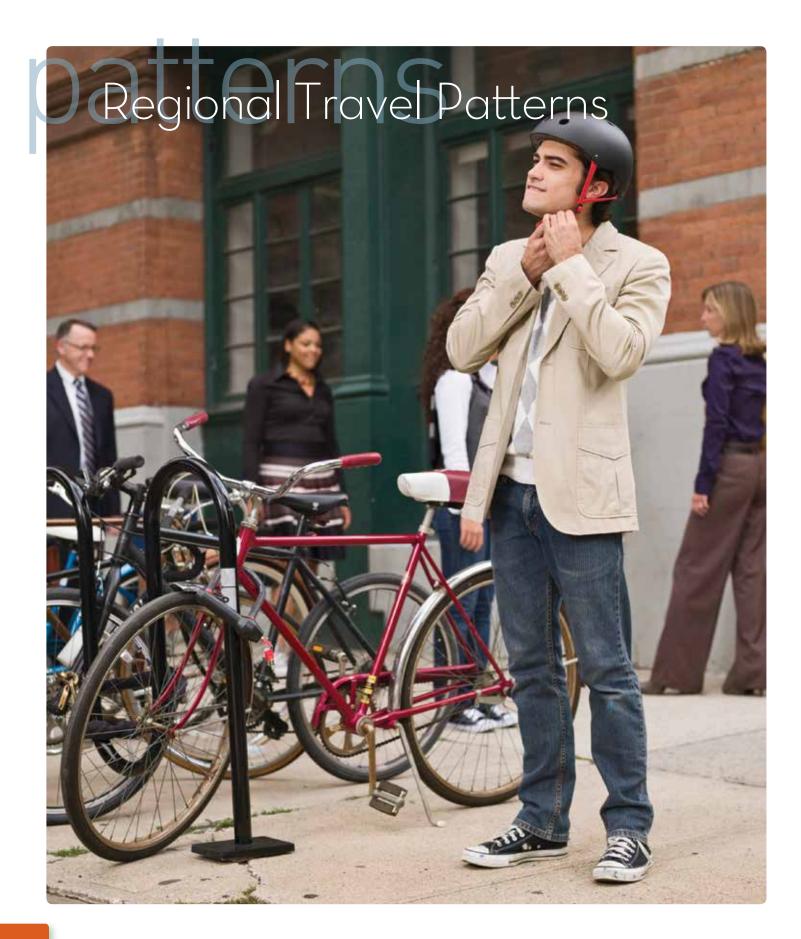
Source: Atlanta Regional Commission (ARC)

Atlanta Region Bicycle Facilities

In 2008, ARC conducted an inventory of regional bicycle facilities to begin establishing a dataset of where dedicated bicycle facilities are located throughout the region. Local jurisdictions provided information to ARC on the locations and types of facilities available. This inventory, the Atlanta Region Bicycle Facilities map, illustrates the bicycle lanes and multi-use paths that were identified and reported. The following table provides a mileage sum for each facility type for the 18-county region. Note that this is not inclusive of all facilities. This specifically sums the mileage of facilities identified to ARC by local jurisdictions. Total mileage for the 18-county region bicycle facility inventory is 1,295.

Chart 13: Bicycle Facilities Mileage by Facility Type





Atlanta Area Registered Vehicles

Table 11: Registered Vehicles by County, 2014

| County | Passenger Vehicles | Trucks | Motorcycles | Total Vehicles |
|-------------|-----------------------|---------|-------------|----------------|
| Barrow | 43,571 | 17,992 | 2,229 | 63,792 |
| Bartow | 57,209 | 27,307 | 3,224 | 87,740 |
| Cherokee | 141,216 | 40,221 | 6,760 | 188,197 |
| Clayton | 136,935 | 30,897 | 2,874 | 170,706 |
| Cobb | 456,853 | 85,214 | 13,424 | 555,491 |
| Coweta | 75,910 | 26,712 | 3,897 | 106,519 |
| DeKalb | 398,445 | 53,673 | 6,979 | 459,097 |
| Douglas | 75,662 | 22,592 | 3,130 | 101,384 |
| Fayette | 76,851 | 20,647 | 2,889 | 100,387 |
| Forsyth | 125,185 | 32,072 | 4,775 | 162,032 |
| Fulton | 586,392 | 74,949 | 9,986 | 671,327 |
| Gwinnett | 518,682 | 100,500 | 12,904 | 632,086 |
| Henry | 123,119 | 36,648 | 5,064 | 164,831 |
| Newton | 64,998 | 22,747 | 2,648 | 90,393 |
| Paulding | 78,229 | 28,467 | 4,325 | 111,021 |
| Rockdale | 48,549 | 14,523 | 1,697 | 64,769 |
| Spalding | 36,511 | 14,783 | 1,510 | 52,804 |
| Walton | 53,098 | 24,295 | 2,479 | 79,872 |
| 18 Counties | 3,097,415 | 674,239 | 90,794 | 3,862,448 |

Source: Georgia Department of Revenue Motor Vehicle Registration Data, as of June 29th, 2014.

The most vehicles were registered in Fulton County, with 671,327. Fulton County also had the most passenger vehicles registered with 586,392, but Gwinnett County had the most trucks registered with 100,500, and Cobb County had the most motorcycles with 13,424.

2012 Vehicle Miles Traveled (VMT)

Vehicle Miles Traveled (VMT) can be another indicator of SOV trips and private vehicle use. VMT is the number of miles traveled in a vehicle in a specified area for a specified period of time. The Georgia Department of Transportation (GDOT) publishes average daily VMT data for every county in Georgia on an annual basis. In 2013, ARC compiled average daily VMT data for the Atlanta 18-county area from 1995-2012.

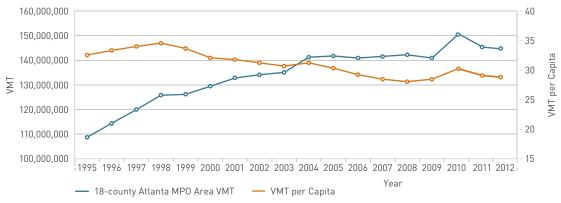
Table 12: Average Daily Vehicle Miles Traveled in the Atlanta Area, 1995–2012

| Year | 18-County Atlanta MPO Area VMT | Percent Change from Previous Year | VMT Per Capita |
|------|-----------------------------------|--------------------------------------|----------------|
| 1995 | 108,730,647 | n/a | 32.6 |
| 1996 | 114,462,547 | 5.27% | 33.3 |
| 1997 | 120,142,338 | 4.96% | 34.0 |
| 1998 | 125,864,531 | 4.76% | 34.6 |
| 1999 | 126,223,823 | 0.29% | 33.7 |
| 2000 | 129,486,176 | 2.58% | 32.1 |
| 2001 | 132,887,292 | 2.63% | 31.8 |
| 2002 | 134,124,420 | 0.93% | 31.3 |
| 2003 | 135,215,454 | 0.81% | 30.7 |
| 2004 | 141,346,238 | 4.53% | 31.2 |
| 2005 | 141,720,605 | 0.26% | 30.4 |
| 2006 | 140,981,999 | -0.52% | 29.2 |
| 2007 | 141,520,280 | 0.38% | 28.5 |
| 2008 | 142,289,456 | 0.54% | 28.1 |
| 2009 | 140,889,000 | -0.98% | 28.5 |
| 2010 | 149,877,000 | 6.38% | 30.2 |
| 2011 | 144,548,000 | -3.56% | 28.6 |
| 2012 | 143,994,000 | -0.38% | 28.0 |

Source: GDOT 445 Series Report, ARC Population Estimates

- In 2012, the average daily VMT in the Atlanta area was 143,994,000, a decrease of 0.38 percent from the previous year.
- The VMT per capita decreased by 0.6, from 28.6 VMT per capita in 2011 to 28.0 VMT per capita in 2012.

Chart 14: Atlanta 18-County Average Daily VMT Change, 1995-2012



Source: GDOT 445 Series Report, ARC Population Estimates

The average daily VMT by county for the Atlanta MPO area in 2012 is shown below.

Table 13: Average Daily Vehicle Miles Traveled for the Atlanta Area, 2012

| County | 2012 Daily VMT | 2012 Population | VMT Per Capita |
|------------------------------|----------------|-----------------|----------------|
| Cherokee | 5,439,000 | 221,315 | 24.6 |
| Clayton | 7,417,000 | 265,888 | 27.9 |
| Cobb | 18,288,000 | 707,442 | 25.9 |
| Dekalb | 20,187,000 | 707,089 | 28.5 |
| Douglas | 4,184,000 | 133,971 | 31.2 |
| Fayette | 2,983,000 | 107,524 | 27.7 |
| Fulton | 31,837,000 | 977,773 | 32.6 |
| Gwinnett | 20,289,000 | 842,046 | 24.1 |
| Henry | 6,376,000 | 209,053 | 30.5 |
| Rockdale | 2,823,000 | 85,820 | 32.9 |
| 10-County Atlanta RC Area | 119,823,000 | 4,257,921 | 28.1 |
| Barrow | 1,703,000 | 70,169 | 24.3 |
| Bartow | 4,571,000 | 100,661 | 45.4 |
| Coweta | 3,812,000 | 130,929 | 29.1 |
| Forsyth | 4,184,000 | 187,928 | 22.3 |
| Newton | 2,989,000 | 101,505 | 29.4 |
| Paulding | 3,033,000 | 144,800 | 20.9 |
| Spalding | 1,720,000 | 63,865 | 26.9 |
| Walton | 2,159,000 | 84,575 | 25.5 |
| Outer 8-County Area | 24,171,000 | 884,432 | 27.3 |
| 18-County Atlanta Area | 143,994,000 | 5,142,353 | 28.0 |

Source: GDOT 445 Series Report, ARC Population Estimates

In 2012, Bartow County (45.4) continued to have the highest VMT per capita and Paulding County (20.9) had the lowest.

Table 14: Average Daily Interstate/Freeway Vehicle Miles Traveled in the Atlanta MPO Area, 2012

| County | Interstate/Freeway VMT | Daily VMT | % on Interstate/Freeway |
|----------------------------|------------------------|-------------|-------------------------|
| Barrow | 144,000 | 1,703,000 | 8% |
| Bartow | 2,116,000 | 4,571,000 | 46% |
| Cherokee | 1,367,000 | 5,439,000 | 25% |
| Clayton | 2,883,000 | 7,417,000 | 39% |
| Cobb | 5,399,000 | 18,288,000 | 30% |
| Coweta | 1,333,000 | 3,812,000 | 35% |
| DeKalb | 8,970,000 | 20,187,000 | 44% |
| Douglas | 1,569,000 | 4,184,000 | 38% |
| Fayette | 0 | 2,983,000 | 0% |
| Forsyth | 947,000 | 4,184,000 | 23% |
| Fulton | 15,351,000 | 31,837,000 | 48% |
| Gwinnett | 5,371,000 | 20,289,000 | 26% |
| Henry | 2,240,000 | 6,376,000 | 35% |
| Newton | 712,000 | 2,989,000 | 24% |
| Paulding | 0 | 3,033,000 | 0% |
| Rockdale | 779,000 | 2,823,000 | 28% |
| Spalding | 207,000 | 1,720,000 | 12% |
| Walton | 100,000 | 2,159,000 | 5% |
| 18-County Atlanta MPO Area | 49,488,000 | 143,994,000 | 34% |

Source: GDOT 445 Series Report

Transportation Demand Management (TDM)

ARC's Transportation Demand Management (TDM) program develops strategies to increase the efficiency of the region's current transportation system. The primary strategy for accomplishing this is to provide commuters with transportation information and services. Specifically, the TDM program helps commuters find carpool, vanpool and bicycle partners, as well as transit routes, to and from work. Increasing the use of alternatives to driving alone can reduce daily vehicle miles traveled, relieve congestion and improve air quality in the Atlanta region.

Georgia Commute Options Regional Database

The Georgia Commute Options regional database, which included 28,782 commuters at the end of 2013, provides ride-matching services to individuals and TDM employer service organizations within the 20-county metro region. Commuters are entered into the database via a toll-free hotline, on-line registration, fax or surface mail. Here are a few facts about the database:

- A total of 5,434 new commuters were enrolled in 2013
- There were a total of 10,204 match requests of the commuters enrolled
- The overall successful match rate was 46 percent for the carpool mode of transportation

Guaranteed Ride Home Program

The Regional Guaranteed Ride Home program acts as a safety net and provides commuters who carpool, vanpool, bike or use transit with a reliable ride home or to their car if an unexpected event occurs during work hours. This program provides a free ride for eligible, enrolled commuters throughout the Atlanta region. Participating commuters may take up to five qualified trips home or to their car each calendar year.

In 2013:

- There were 12,260 commuters that enrolled in the Guaranteed Ride Home program.
- At least 2,242 requested guaranteed rides with an average trip distance of 20 miles.

Employer Services

ARC provides Congestion Mitigation and Air Quality (CMAQ) funding for six Employer Service Organizations (ESOs) to market regional TDM and financial incentives programs and provide outreach services. ESOs are non-profit organizations often supported by business communities to address the transportation needs of their particular employment markets. Their services include providing vanpool formation, transit pass discounts, bike and pedestrian programs, shuttle services, Alternative Work Arrangement assistance (flex-time, compressed work week and teleworking) and more.

Table 15: TDM Employer Service Organizations [ESO], 2013

| Employer Service Organization (ESO) | Estimated Employers in ESO Area | Estimated Employees in ESO Area | # of Partners | Website |
|---|---------------------------------------|------------------------------------|---------------|----------------------------|
| Atlantic Station Access + Mobility Program | 367 | 3,177 | 87 | www.ASAP-Plus.com |
| Buckhead Area Transportation Management Association | 10,887 | 92,781 | 112 | www.BATMA.org |
| Georgia Commute Options | 355,108 | 1,956,902 | 615 | www.mygacommuteoptions.com |
| Clifton Corridor Transportation Management Association | 738 | 16,048 | 14 | www.CCTMA.com |
| Central Atlanta Progress | 3,573 | 72,555 | 146 | www.AtlantaDowntown.com |
| Midtown Transportation Solutions | 4,998 | 55,517 | 156 | www.MidtownAlliance.org |
| Perimeter Transportation and Sustainability Coalition | 3,338 | 52,612 | 58 | www.PerimeterGo.org |

Note: An Employer Services Organization Partner (ESO Partner) is an employer or property manager who has made a commitment to work with Georgia Commute Optionsor a Transportation Management Association (TMA) to implement programs aimed at reducing the number of single occupancy vehicle commute trips to and from their worksite.

Est. Employer/ Employee Source: ESRI Business Analyst 2013

HOT Lanes

Overview

High Occupancy Toll (HOT) lanes such as the I-85 Express Lanes allow qualified carpools and transit to use the High Occupancy Vehicle (HOV) lanes for free, while drivers of other vehicles use the lanes for a fee. The fee rises and falls with the amount of congestion in the lane to keep the HOT lanes free flowing, thus providing more reliable travel times for commuters.

Benefits

- Trip Time Reliability Traffic volumes on HOT lanes are assessed to ensure consistent and reliable travel times, particularly during peak travel periods. The U.S. Department of Transportation's performance standard for HOT lanes states that vehicles should maintain average speeds of at least 45 mph (90 percent of the time). On Minneapolis' MnPASS Express Lane, speeds of 50 mph are maintained over 95 percent of the time. In addition, traffic on Seattle's HOT lane (State Route 167) consistently flows freely during all hours of operation at speeds between 50 and 55 mph.
- Commuter Choices In congested corridors with HOV facilities and transit service, HOT lanes provide Single Occupancy Vehicle (SOV) motorists with an additional travel choice: the option of paying for a dependable, congestion-free trip. Prices displayed on variable message signs provide potential users with the information they need in order to decide whether to use the HOT lane or the adjacent general-purpose lanes. Experience from other HOT lane projects suggests that single drivers use the lane on an as needed basis and value the HOT lane option for activities, including getting to an important meeting on time, picking up a child from day care, or attending a family sporting event.
- Transit Enhancements Transit vehicles are still able to use HOT lanes for free. In addition, transit users depend on more reliable trip times for their commute. Moreover, other HOT lane projects across the country report that travel times for transit remained the same or even decreased with the introduction of HOT lanes. Finally, significant transit enhancements in the form of new buses, increased express bus service, and new park and ride lots often accompany HOT lanes.

About the I-85 Express Lanes

The I-85 Express Lanes are High Occupancy Toll (HOT) lanes for use by Peach Pass account holders in single- and double-occupant vehicles for a fee, and transit, three- or more person carpools, motorcycles, emergency vehicles, and Alternative Fuel Vehicles (AFV) with the proper AFV license plate (does not include hybrid vehicles) toll-free.

Based on the number of vehicles using the Express Lanes, tolls will vary to keep the lanes free-flowing, even during the height of rush hour. Toll rates are displayed at each Express Lanes entry point on changeable message signs, allowing drivers to choose whether entering the Express Lanes makes sense for them at any given time. However, at the ending point of the southbound Express Lane near Chamblee-Tucker Road, single occupant vehicles must exit the lane and immediately merge into the general purpose lanes. Access to the I-85 Express Lanes does not warrant access to the existing HOV lanes for single occupant vehicles. This requirement is not applicable for the northbound Express Lane ending point near Old Peachtree Road since there are no HOV lanes north of the existing Express Lanes.

The Express Lanes are available 24 hours per day, seven days per week. A combination of tolling system enforcement and Department of Public Safety visual enforcement ensures that only registered vehicles with a Peach Pass use the Express Lanes and that vehicles enter and exit the Express Lanes in the proper areas. The maximum fine for an I-85 Express Lane violation is \$25, plus the toll amount. However, motorists could also receive an additional traffic citation of up to \$150 by law enforcement if they are pulled over for an occupancy violation (fewer than three people in the vehicle designed as non-toll when using the I-85 Express Lanes).

Map 5: I-85 Express Lanes

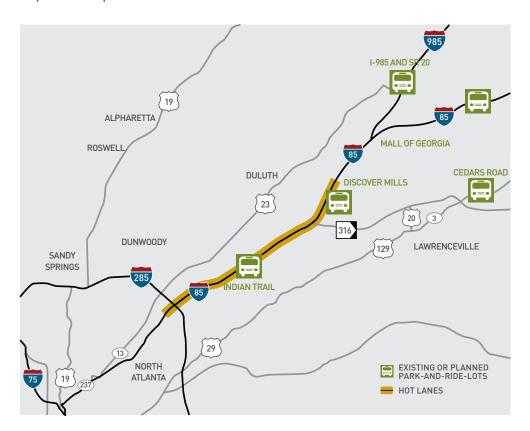
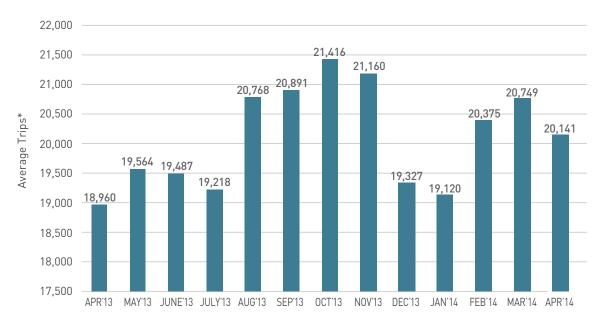


Chart 14: I-85 Express Lanes: Daily Trip Averages by Month*



^{*}Daily Averages do not include Weekends or State Holidays

Transit Ridership

Due to the major service reductions by MARTA and GCT, as well as the complete shutdown of C-TRAN bus service, the region experienced a significant drop in total ridership in 2010 compared to 2009. Other service providers including CCT and GRTA showed increases despite service reductions. The university shuttles showed strong increases while the Emory/CCTMA and other TMA circulator shuttles experienced declines in 2010.

The ridership numbers below include bus and rail data for MARTA and bus only for all other transit service providers.

- In 2013, average weekday transit boardings totaled 475,415.
- In 2011, a ten percent decrease in ridership was experienced by the major transit providers in the Atlanta MPO Area, in part due to service cuts.
- In 2013, the average weekday transit boardings for circulator and university shuttles totaled 30,005.

Table 16: Atlanta Area Transit Ridership, 2010-2013

| Average Weekday Boardings | Change 2010-2013 | | Actual Change | | | |
|---|------------------|---------|---------------|---------|---------|-----|
| Service Provider | 2010 | 2011 | 2012 | 2013 | Number | % |
| Cherokee Area Transportation System (CATS) | 93 | 110 | 115 | 113 | 20 | 22 |
| Cobb Community Transit (CCT) | 16,606 | 16,074 | 13,715 | 13,017 | -3,589 | -22 |
| Georgia Regional Transportation Authority (GRTA) Xpress | 7,385 | 7,440 | 8,432 | 8,972 | 1,587 | 21 |
| Gwinnett County Transit (GCT) | 8,134 | 8,747 | 7,738 | 6,573 | -1,561 | -19 |
| Metropolitan Atlanta Rapid Transit Authority (MARTA) | 470,195 | 452,615 | 429,581 | 416,735 | -53,460 | -11 |
| Major Transit Providers | 502,413 | 484,986 | 459,581 | 445,410 | -57,003 | -11 |
| Atlantic Station Free Ride Shuttle | 1,971 | 2,209 | 2,078 | 2,174 | 203 | 10 |
| the buc Shuttles | 489 | 483 | 509 | 451 | -38 | -8 |
| Emory University/CCTMA Cliff Shuttles | 12,082 | 10,400 | 11,000 | 12,100 | 18 | 0 |
| Georgia Tech Trolley & Shuttles | 12,490 | 12,361 | 14,970 | 15,280 | 2,790 | 22 |
| Circulator Shuttles | 27,032 | 25,453 | 28,557 | 30,005 | 2,973 | 11 |
| Atlanta MPO Area Total: | 529,445 | 510,439 | 488,138 | 475,415 | -54,030 | -10 |

Source: CATS, C-TRAN, CCT, GCT, GRTA, MARTA, Lanier Parking, AUC Woodruff Library, Buckhead CID, Emory,

Georgia State, Georgia Tech, NTD

In 2013, MARTA rail service experienced a 0.89 percent decline in average weekday entries.

Table 17: MARTA Average Weekday Rail Station Entries, 2010-2013

| <u> </u> | e Weekday Rail Station Entri | | | |
|------------------------------------|------------------------------|--------------|--------------|--------------|
| Station | 2013 entries | 2012 entries | 2011 entries | 2010 entries |
| Airport | 9,173 | 9,181 | 9,483 | 11,36 |
| Arts Center | 6,605 | 6,641 | 6,771 | 6,86 |
| Ashby | 1,791 | 1,539 | 1,725 | 2,23 |
| Avondale | 4,327 | 4,568 | 4,611 | 5,50 |
| Bankhead | 1,903 | 1,862 | 2,274 | 2,03 |
| Brookhaven/Oglethorpe University | 2,357 | 2,350 | 2,410 | 2,82 |
| Buckhead | 2,643 | 2,468 | 2,351 | 2,51 |
| Chamblee | 3,785 | 3,929 | 3,924 | 3,95 |
| Civic Center | 2,692 | 2,611 | 2,557 | 2,82 |
| College Park | 9,026 | 8,949 | 9,206 | 9,50 |
| Decatur | 3,821 | 3,975 | 4,224 | 4,48 |
| Dome/GWCC/Philips Arena/CNN Center | 2,107 | 2,096 | 2,079 | 2,37 |
| Doraville | 5,521 | 5,370 | 5,386 | 5,42 |
| Dunwoody | 3,545 | 3,426 | 3,629 | 3,45 |
| East Lake | 1,241 | 1,349 | 1,382 | 1,15 |
| East Point | 4,571 | 4,534 | 4,586 | 5,38 |
| Edgewood/Candler Park | 1,143 | 1,179 | 1,233 | 1,37 |
| Five Points | 19,447 | 20,138 | 21,651 | 23,52 |
| Garnett | 1,516 | 1,511 | 1,622 | 1,81 |
| Georgia State | 4,055 | 4,121 | 4,409 | 4,88 |
| Hamilton E. Holmes | 6,480 | 6,506 | 6,627 | 7,71 |
| Indian Creek | 5,612 | 5,656 | 5,765 | 5,84 |
| Inman Park/Reynoldstown | 2,525 | 2,722 | 2,870 | 3,09 |
| Kensington | 5,950 | 6,073 | 6,660 | 7,00 |
| King Memorial | 1,517 | 1,407 | 1,363 | 2,00 |
| Lakewood/Ft. McPherson | 2,207 | 2,091 | 2,171 | 2,05 |
| Lenox | 3,284 | 3,533 | 3,414 | 3,71 |
| Lindbergh Center | 8,604 | 9,127 | 9,200 | 9,03 |
| Medical Center | 1,629 | 1,618 | 1,584 | 1,76 |
| Midtown | 5,664 | 6,297 | 5,674 | 5,58 |
| North Avenue | 5,045 | 5,022 | 5,341 | 6,17 |
| North Springs | 6,436 | 6,288 | 6,211 | 6,20 |
| Oakland City | 4,432 | 4,312 | 4,513 | 5,22 |
| Peachtree Center | 7,453 | 7,021 | 7,253 | 7,97 |
| Sandy Springs | 2,322 | 2,259 | 2,299 | 2,66 |
| Vine City | 821 | 823 | 801 | 1,69 |
| West End | 7,056 | 7,154 | 7,360 | 6,94 |
| West Lake | 1,378 | 1,494 | 1,616 | 2,52 |
| Total | 169,684 | 171,200 | 176,235 | 190,74 |

 ${\tt Source: Metropolitan\ Atlanta\ Rapid\ Transit\ Authority\ (MARTA).}$

Airports

The Atlanta region has experienced much of its prosperity as a result of having the world's busiest passenger airport, Hartsfield-Jackson Atlanta International Airport (H-JAIA). Direct transit passengers are passengers who continue their journey on a flight having the same flight number as the flight on which they arrived. Passengers in direct transit are only counted once. Other transit passengers and stop-over passengers are counted twice: once as arrivals and once as departures.

In 2013, more than 94 million passengers traveled through H-JAIA, a 1.13 percent decrease from the previous year. There are two airports in the Metro Atlanta Region with scheduled passenger service, Hartsfield-Jackson Atlanta International Airport, and DeKalb-Peachtree Airport. There are three reliever airports, Fulton County Airport

(Charlie Brown Field), Cobb County Airport (McCollum Field), and Gwinnett County Airport (Briscoe Field).

Table 18: Hartsfield-Jackson Atlanta International Airport Passenger and Operations Activity, 2005-2013

| | Aircraft Opera | ations | | Passengers | | | |
|-------------------------|----------------|---------------|---------|------------|---------------|------------|--|
| Year | Domestic | International | Total | Domestic | International | Total | |
| 2005 | 932,968 | 47,418 | 980,386 | 78,774,044 | 6,734,452 | 85,907,423 | |
| 2006 | 915,691 | 60,756 | 976,447 | 76,264,446 | 8,073,855 | 84,846,639 | |
| 2007 | 925,970 | 68,376 | 994,346 | 79,796,551 | 8,897,291 | 88,693,842 | |
| 2008 | 911,510 | 66,573 | 978,083 | 80,416,839 | 9,180,491 | 89,597,330 | |
| 2009 | 909,891 | 60,344 | 970,235 | 79,061,501 | 8,832,195 | 87,893,696 | |
| 2010 | 888,203 | 61,916 | 950,119 | 80,099,037 | 9,139,022 | 89,238,059 | |
| 2011 | 855,215 | 68,781 | 923,996 | 82,532,069 | 85,659,485 | 92,389,023 | |
| 2012 | 862,101 | 68,209 | 930,310 | 85,659,485 | 9,854,343 | 95,513,828 | |
| 2013 | 843,126 | 67,948 | 911,074 | 84,173,091 | 10,258,133 | 94,431,224 | |
| 2011 - 2013 % Change | -2.20% | -0.38% | -2.07% | -1.74% | 4.10% | -1.13% | |
| 2005- 2013 % Change | -9.63% | 43.30% | -7.07% | 6.85% | 52.32% | 9.92% | |

Source: www.atlanta-airport.com

Cherokee County Airport Mathis Airport Cobb County Airport Winder Barrow Airport Paulding County Regional Airport DeKalb Peachtree Airport Monroe-Walton **Fulton County Airport** County Airport Stockmar Aviation 2009 airports Hartsfield-Jackso Cities Atlanta International Airport Municipal Airport Counties South Fulton Airport Gordon E. Bellah Airpor Berry Hill Airport Clayton County Airport Peachtree City Airport Newnan-Coweta Rust Airstrip County Airport Griffin-Spalding **County Airport**

Map 6: Atlanta 18-County Area Airports, 2010

Source: Atlanta Regional Commission (ARC)

Bicycle & Pedestrian Travel Data

Collecting data on bicycle and pedestrian travel is important in order to gauge the changes over time, the locations with highest demand and the response to infrastructure improvements. A reliable set of non-motorized transportation data would help local governments and planners estimate the likely results in reduced car trips and air quality benefits associated with potential sidewalk and bicycle infrastructure investments.

Former U.S. DOT Secretary Ray LaHood issued a new non-motorized transportation policy statement in March 2010 that encourages government agencies to collect data on bicycling and walking trips. Historically, local governments and state DOTs tend to collect data on vehicle counts only. When pedestrian and bicycling data are collected, those two modes are often combined, making the results more difficult to interpret.

Nationwide, several sources of non-motorized travel data are available, mostly geared toward commutes to work. Commute to work trips tend to be the longest journey of the day and, as a result, bicycling and walking are more likely to be used for only a section of the commute to work, or for other, shorter trips. Such local trips by non-motorized transportation modes are particularly hard to document and model.

American Community Survey Commute to Work by Biking & Walking Data

The U.S. Census Bureau's American Community Survey (ACS) collects three-year estimates on a variety of parameters, including commuting to work questions. As a result, fairly recent data are available on commutes to work by walking and bicycling modes in the Atlanta region. Unfortunately, this data source does not document bicycling and walking for non-work trips, and does not account for people who walk to transit, or bicycle to work only some of the time. These data also do not document which corridors have the highest demand for walking and bicycling facilities. The table below includes data from American Community Survey, from the 2001 National Household Travel Survey (NHTS) and from the 2009 NHTS. NHTS gathers information on all trips, including non-work trips.

Table 19: Bicycling and Walking Mode Share Figures for Metro Atlanta

| | Bicycle to Work: Percent of All Commute Trips | Walk to Work: Percent of All Commute Trips |
|------------------------------------|---|--|
| Major US Cities | 1.0% | 5.0% |
| Atlanta-Sandy Springs-Marietta MSA | 0.17% | 1.3% |
| City of Atlanta | 0.8% | 4.7% |
| Five "Core" Counties | 0.3% | 1.7% |

Source: U.S. Census Bureau

- For the Atlanta MSA, the percentage of all commute trips by bicycle remained unchanged, at 0.17 percent from the 2007-09 ACS data to the 2008-12 ACS data.
- For the Atlanta MSA, the percentage of all commute trips by walking decreased from 1.4 percent from the 2007-09 ACS data to 1.3 percent in the 2008-12 ACS data.



Regional Congested Facilities

Traffic congestion cost in metro Atlanta was, in 2011, on average \$1,120 per auto commuter, according to the 2012 Texas Transportation Institute's Urban Mobility Report. This includes 23 gallons of wasted fuel, and 51 hours of wasted time, sitting in traffic. This is a total of over \$4 billion in the metro area, lost due to traffic congestion on interstates, highways, and local streets, a major drag on the economy. In response to these problems, the Atlanta Regional Commission continues to produce studies and plans to alleviate the most congested roadways in the metro area.

ARC purchased 2010 travel time data from INRIX for the entire 20 county region. This data has 15 minute time segments for the average over each day of the week, by month. This is over 75M individual records of travel speed on over 8,500 TMC locations in the metro Atlanta region. After working with the INRIX data, and researching other datasets, the ARC purchased the 2012 NAVTEQ travel time data and evaluated it. The NAVTEQ dataset is comparable to the INRIX dataset, but it was important to have additional data for comparison.

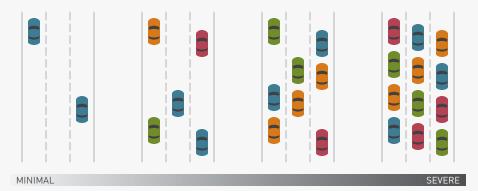
When studying congestion, it is important to note that there are three dimensions of congestion:

- Intensity,
- Duration, and
- Extent.

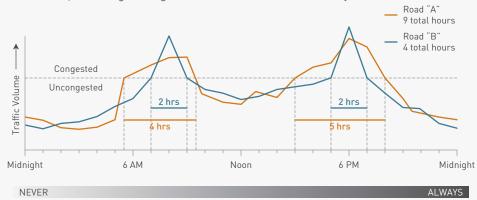
In the following page, there is a graphic representation of these dimensions. The dimension of intensity and extent is discussed in this section, but the ARC has also researched the duration of congestion, and will continue to do so, along with intensity and extent.

The Three "Dimensions" of Congestion

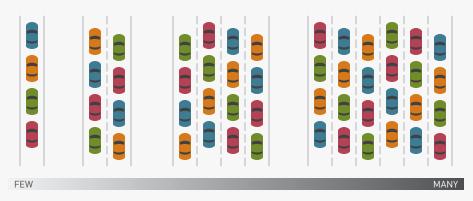
1 INTENSITY | How bad does congestion get on a particular roadway?







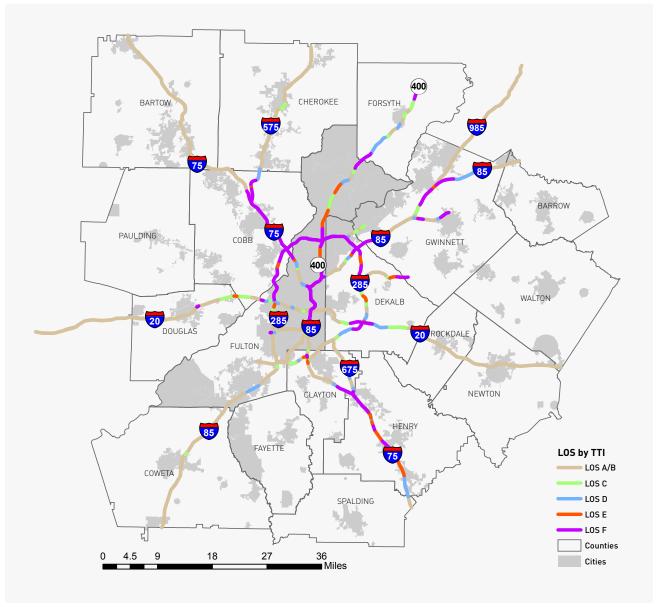
3 EXTENT | From a regional perspective, how many people are impacted by congestion on the roadway?



Source: ARC Congestion Management Process, July 2006

Regionwide Analysis

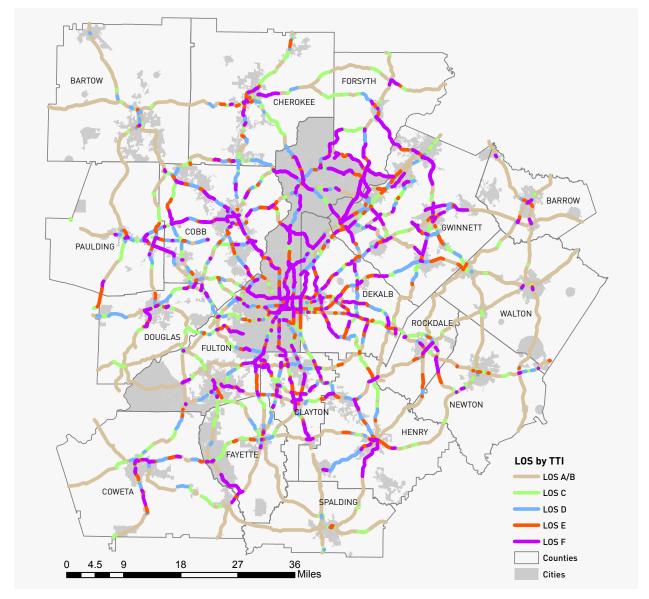
Using the NAVTEQ data, ARC mapped the travel time index (TTI) for each segment of the limited access freeways, as seen in Map 7. The TTI measures the 5th percentile travel time over the 95th percentile travel time for each peak period and is weighted by the link distance according to the model network. For example, a TTI of 1.5 indicates that the travel time is 50% longer, 7.5 minutes than its travel time in the fastest observed 15 minutes. A TTI number closer to 1 is better. Map 8 shows the TTI for the major thoroughfares network.



Map 7: Most Congested Freeway Segments by Direction, 2012

Source: Atlanta Regional Commission (ARC)

The Downtown Connector (I-75/I-85), State Route 400, I-75 North and I-85 North experience the highest levels of congestion of all the freeways in the region.



Map 8: Most Congested Surface Segments by Direction, 2012

Source: Atlanta Regional Commission (ARC)

For non-freeway facilities, the highest congestion levels are concentrated north of I-20, in Cobb, Fulton, DeKalb and Gwinnett counties.

Atlanta Air Quality Non-Attainment Status and the Regional Transportation Plan

The Clean Air Act Amendments of 1990 (CAAA) is a federal law to protect air quality in the United States. As such, CAAA mandates that states meet federal clean air standards for six pollutants:

- Ground level ozone (O₃)
- Carbon monoxide (CO)

• Lead (Pb)

- Nitrogen dioxide (NO₂)
- Particulate matter (PM)
- Sulfur dioxide (SO₂)

The United States Environmental Protection Agency (EPA) carries out the mandate of this act by establishing limits on how much of a pollutant can be in the air anywhere in the United Sates. These pollutant standards are referred to as National Ambient Air Quality Standards or NAAQS. Areas exceeding the NAAQS are referred to as non-attainment areas and are designated as such by the EPA.

ARC is responsible for managing the process that ensures transportation plans and programs within the Atlanta nonattainment area, when implemented, do not cause or contribute to degraded air quality. This process is referred to as transportation conformity. Mobile (transportation-related) emissions, as estimated by ARC, must conform to established limits, or Motor Vehicle Emissions Budgets (MVEB), for nonattainment pollutants and/or their precursors. MVEB are set by the state air agency, the Georgia Environmental Protection Division (EPD), in the State Implementation Plan (SIP), and are approved by the EPA as adequate for use in the transportation conformity process.

PLAN 2040, the Atlanta region's long-range transportation plan, received an initial positive conformity determination under the eight hour ozone standard and under the annual PM2.5 standard on April 30, 2014. The current conformity determination was issued on September 29, 2014, associated with the PLAN 2040 TIP Amendment #1. These determinations were made for both the 20-county PM2.5 and the 15-county Ozone nonattainment areas, and demonstrate that the Regional Transportation Plan complies with all air quality requirements. Refer to page 4 of this report for a map displaying the various nonattainment and MPO boundaries.

Ground Level Ozone

Chart 16: Ozone Formation



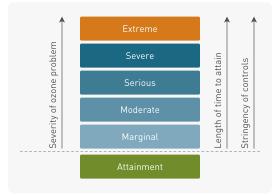
- Ozone is formed when volatile organic compounds (VOCs) and nitrogen oxides (NOx) react with sunlight and oxygen. Sources of ozone precursors include coal-fired power plants, fuel combustion in cars and trucks, and the natural environment. Combining these chemicals with the typical summer weather conditions and geography equals a recipe for poor air quality in the Atlanta region.
- Ground level ozone creates serious health and environmental problems when concentrations reach high levels.
- The long-term effects of ozone are caused by inflammation of the lungs when ozone is inhaled. This type of exposure can be compared to repeated sunburns and can lead to permanent scarring of lung tissue, loss of lung function and reduced lung elasticity.

• In Georgia, the ozone monitoring season is March 1 – October 31, when temperatures are the highest.

For the ozone air quality standard, the USEPA has developed a classification system to characterize the magnitude of the problem. Areas with the worst ozone pollution problems are given the longest time to attain the NAAQS. The prescribed control measures increase with the severity of the pollution problem.

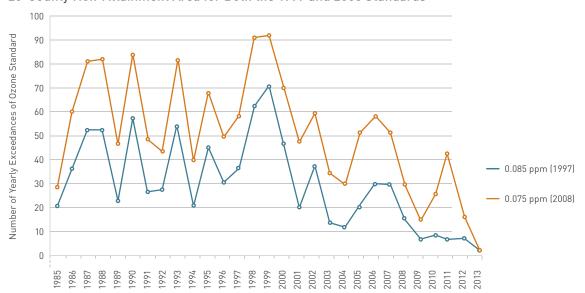
- In 1990, Atlanta (13-county area) was originally classified as a serious non-attainment area under the one-hour ozone standard. The one-hour standard was later revoked in 2005, shortly after Atlanta attained, as a result of implementing the more stringent 1997 eight-hour ozone standard.
- In April 2008, the region (20-county area) was reclassified from a Marginal to a Moderate eight-hour ozone nonattainment area.
- In 2011, EPA issued a clean data determination for the region and in 2013 EPA approved a Maintenance Plan that keeps the region in compliance of the 1997 eight-hour ozone standard.
- A revised ozone standard was released in 2008 and 15 counties were designated as a marginal nonattainment area for the new standard in July of 2012.

Chart 17: USEPA Ozone Classification System



Source: U.S. Environmental Protection Agency (USEPA)

Chart 18: Yearly Exceedances of the Federal Ozone Standard in the Atlanta 20-County Non-Attainment Area for Both the 1997 and 2008 Standards



Source: Georgia Environmental Protection Division (EPD)

The number of graphed exceedances, seen in the chart above, reflects the trend in atmospheric pollutant concentrations for both the 1997 (now defunct) and 2008 ozone standard. The yearly fluctuations in the number of exceedances can be attributed to a variety of factors such as variations in seasonal weather and the implementation of advanced control technologies. Cleaner fuel standards, fleet turnover, and particle capturing devices at power plants have all contributed to a reduction in exceedances over time. Enhanced tools and models also help make more accurate measurements and can affect the number of measured exceedances.

Fine Particulate Matter (PM_{2.5})

Particulate matter is comprised of a complex mixture of small solid and liquid particles that, because of their small size, can penetrate into the lungs and bloodstream, causing health risks.

- Health risks include premature death from heart and lung disease, aggravation of heart and lung conditions and respiratory and cardiovascular effects.
- Fine particulate matter shares many common pollution sources as ground level ozone.

In 1997, the EPA established a standard for fine particulate matter. This standard is referred to as PM2.5 (meaning that this matter is 2.5 micrometers or smaller in diameter). On December 14, 2012, the EPA tightened the annual fine particle standard to $12 \mu g/m3$.

Unlike the ozone standard, there is no classification system for fine particulate matter. An area either meets the standard (attainment) or exceeds the standard (non-attainment).

- In April 2005, the EPA designated a 20+county metro-Atlanta non-attainment area for failing to meet the 1997 fine particulate matter standard.
- The region currently has clean data for the 1997 annual PM2.5 standard. The Georgia EPD has submitted a Maintenance Plan to EPA to designate the Atlanta region as in attainment of the 1997 annual standard. This plan is expected to be approved in 2014.
- Designations for the new 2012 annual fine particle standard are scheduled to occur by the end of 2014. The area to be designated is pending validation of 2013 data.

The chart below shows the $PM_{2.5}$ monitoring stations in the region. Currently, all are attaining the annual 1997 $PM_{2.5}$ standard. As of 2012 validated data, only two stations were not meeting the 2012 annual standard.

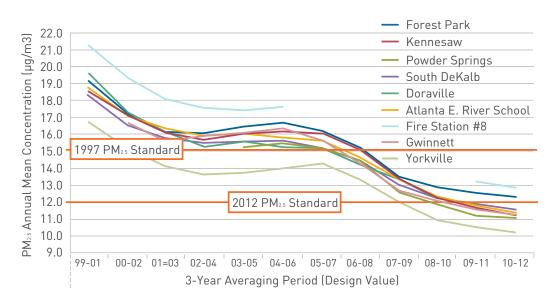


Chart 19: 3-Year Average Annual Concentration for Atlanta PM_{2.5} Monitors (Arithmetic Mean)

Roadway, Bicycle & Pedestrian Safety

Crash Fatalities

From 2008 to 2012, the 18-County region experienced a decrease of fatalities on the public roadways of a total of 76, from 528 in 2008 to 452 in 2012. The largest decrease was found in Paulding County, which went from 21 fatalities in 2008 to only eight fatalities in 2012, with a decrease of 62% over those five years. Overall, the 18-County saw a drop of 14% in fatal crashes.

Table 20: Total Crash Fatalities

| County | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------|------|------|------|------|------|
| Barrow | 19 | 12 | 9 | 10 | 13 |
| Bartow | 15 | 15 | 23 | 19 | 27 |
| Cherokee | 15 | 11 | 15 | 11 | 18 |
| Clayton | 33 | 17 | 24 | 30 | 20 |
| Cobb | 67 | 35 | 35 | 42 | 47 |
| Coweta | 14 | 9 | 17 | 16 | 13 |
| DeKalb | 60 | 76 | 49 | 51 | 76 |
| Douglas | 19 | 19 | 14 | 15 | 21 |
| Fayette | 1 | 6 | 6 | 5 | 5 |
| Forsyth | 13 | 9 | 11 | 19 | 22 |
| Fulton | 113 | 101 | 72 | 61 | 77 |
| Gwinnett | 53 | 60 | 57 | 50 | 45 |
| Henry | 34 | 19 | 29 | 18 | 23 |
| Newton | 17 | 11 | 18 | 19 | 12 |
| Paulding | 21 | 13 | 8 | 10 | 8 |
| Rockdale | 8 | 6 | 10 | 4 | 8 |
| Spalding | 15 | 8 | 7 | 11 | 12 |
| Walton | 11 | 12 | 11 | 12 | 5 |
| Region | 528 | 439 | 415 | 403 | 452 |

Source: Governor's Office of Highway Safety

Fatality Crash Rates

From 2008 to 2012, the fatal crash rate, in the 18-County region, dropped from 1.01 per 100 million VMT to 0.86 per 100 million VMT, for a decrease of 15%. The largest drop was found in Paulding County, which saw its fatal crash rate drop from 1.75 to 0.72 per 100 million VMT, for a decrease of 59%.

Table 21: Fatality Crash Rates, per 100 Million VMT

| County | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------|------|------|------|------|------|
| Barrow | 3.10 | 1.95 | 1.43 | 1.62 | 2.09 |
| Bartow | 0.86 | 0.85 | 1.25 | 1.10 | 1.62 |
| Cherokee | 0.79 | 0.58 | 0.76 | 0.57 | 0.91 |
| Clayton | 1.23 | 0.64 | 0.85 | 1.10 | 0.74 |
| Cobb | 1.00 | 0.53 | 0.50 | 0.62 | 0.70 |
| Coweta | 1.04 | 0.64 | 1.17 | 1.14 | 0.93 |
| DeKalb | 0.80 | 1.02 | 0.64 | 0.69 | 1.03 |
| Douglas | 1.04 | 1.21 | 0.87 | 0.95 | 1.38 |
| Fayette | 0.09 | 0.56 | 0.52 | 0.46 | 0.46 |
| Forsyth | 0.94 | 0.65 | 0.73 | 1.28 | 1.44 |
| Fulton | 1.00 | 0.90 | 0.59 | 0.52 | 0.66 |
| Gwinnett | 0.74 | 0.84 | 0.74 | 0.68 | 0.61 |
| Henry | 1.51 | 0.85 | 1.21 | 0.78 | 0.99 |
| Newton | 1.54 | 1.03 | 1.56 | 1.73 | 1.10 |
| Paulding | 1.75 | 1.26 | 0.71 | 0.92 | 0.72 |
| Rockdale | 0.79 | 0.58 | 0.89 | 0.38 | 0.78 |
| Spalding | 2.27 | 1.25 | 1.05 | 1.71 | 1.91 |
| Walton | 1.40 | 1.57 | 1.35 | 1.53 | 0.63 |
| Total | 1.01 | 0.85 | 0.76 | 0.76 | 0.86 |

Source: Governor's Office of Highway Safety

Crash Injuries

The total number of crash injuries in the 18-County region grew slightly, at 6%, from 59,219 in 2008 to 63,004 in 2012. The largest reduction in injuries was found in Newton County, which saw its crash injuries drop by 45%, from 1,074 in 2008 to 586 in 2012.

Table 22: Total Crash Injuries

| County | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------|--------|--------|--------|--------|--------|
| Barrow | 634 | 744 | 641 | 603 | 685 |
| Bartow | 1,453 | 1,567 | 1,528 | 1,249 | 1,327 |
| Cherokee | 1,582 | 1,533 | 1,544 | 1,374 | 1,527 |
| Clayton | 3,550 | 3,488 | 3,216 | 3,396 | 3,678 |
| Cobb | 6,489 | 7,413 | 6,497 | 5,044 | 7,821 |
| Coweta | 1,636 | 1,615 | 1,275 | 1,357 | 1,399 |
| DeKalb | 9,127 | 9,310 | 8,145 | 8,320 | 10,078 |
| Douglas | 1,989 | 2,534 | 1,822 | 1,827 | 1,927 |
| Fayette | 912 | 973 | 897 | 856 | 789 |
| Forsyth | 1,207 | 1,169 | 1,184 | 955 | 1,156 |
| Fulton | 14,511 | 15,650 | 13,896 | 13,285 | 15,673 |
| Gwinnett | 8,637 | 8,191 | 7,404 | 7,733 | 9,800 |
| Henry | 2,335 | 2,704 | 2,422 | 2,766 | 2,749 |
| Newton | 1,074 | 1,169 | 1,121 | 1,118 | 586 |
| Paulding | 1,205 | 1,503 | 1,622 | 1,426 | 1,269 |
| Rockdale | 1,097 | 1,152 | 912 | 1,081 | 1,019 |
| Spalding | 896 | 1,028 | 970 | 1,014 | 801 |
| Walton | 885 | 980 | 933 | 1,016 | 720 |
| Total | 59,219 | 62,723 | 56,029 | 54,420 | 63,004 |

Source: Governor's Office of Highway Safety

Injury Crash Rate

In 2012, the 18-County region had an injury crash rate of 119.88, which was 6% higher than in 2008, at 113.55. The highest decrease in injury crash rate was found in Newton County, which saw a decrease of 45%, from 97.57 in 2008 to 53.71 in 2012.

Table 23: Injury Crash Rate, per 100 million VMT

| County | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------|--------|--------|--------|--------|--------|
| Barrow | 103.36 | 120.97 | 102.16 | 97.75 | 110.20 |
| Bartow | 83.10 | 88.39 | 82.91 | 72.48 | 79.54 |
| Cherokee | 83.14 | 80.67 | 78.05 | 71.32 | 76.92 |
| Clayton | 132.64 | 130.83 | 114.21 | 124.97 | 135.86 |
| Cobb | 97.24 | 111.24 | 93.15 | 74.48 | 117.17 |
| Coweta | 121.87 | 114.06 | 88.01 | 96.44 | 100.55 |
| DeKalb | 122.16 | 124.54 | 105.97 | 112.92 | 136.78 |
| Douglas | 109.26 | 161.60 | 113.35 | 115.41 | 126.18 |
| Fayette | 84.06 | 90.11 | 78.34 | 79.26 | 72.47 |
| Forsyth | 86.90 | 84.91 | 78.83 | 64.29 | 75.70 |
| Fulton | 128.41 | 138.73 | 114.30 | 113.21 | 134.87 |
| Gwinnett | 121.32 | 114.03 | 96.76 | 105.04 | 132.33 |
| Henry | 103.65 | 120.41 | 101.11 | 119.19 | 118.12 |
| Newton | 97.57 | 109.17 | 97.28 | 101.59 | 53.71 |
| Paulding | 100.32 | 145.66 | 144.84 | 131.06 | 114.63 |
| Rockdale | 108.51 | 110.79 | 81.49 | 103.34 | 98.89 |
| Spalding | 135.67 | 160.72 | 145.22 | 157.31 | 127.59 |
| Walton | 112.74 | 128.36 | 114.83 | 129.65 | 91.37 |
| Total | 113.55 | 121.11 | 102.42 | 103.15 | 119.88 |

Source: Governor's Office of Highway Safety

Total Crashes

The 18-County region had 191,289 total crashes in 2012, an increase of 10% over 2008, when there were 173,392. The largest decline in total crashes was in Newton County, which saw a decline of 61%, from 2,689 crashes in 2008 to 1,058 crashes in 2012.

Table 24: Total Crashes

| County | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------|---------|---------|---------|---------|---------|
| Barrow | 1,527 | 1,730 | 1,737 | 1,716 | 2,005 |
| Bartow | 3,168 | 3,569 | 3,153 | 2,893 | 3,164 |
| Cherokee | 4,567 | 4,475 | 4,782 | 4,925 | 5,174 |
| Clayton | 9,415 | 9,301 | 9,072 | 10,678 | 11,411 |
| Cobb | 23,184 | 24,154 | 22,611 | 16,192 | 22,380 |
| Coweta | 3,718 | 3,739 | 3,097 | 3,191 | 3,034 |
| DeKalb | 26,626 | 26,928 | 23,172 | 25,632 | 32,420 |
| Douglas | 4,419 | 5,245 | 4,195 | 4,036 | 4,188 |
| Fayette | 2,870 | 2,812 | 2,496 | 2,760 | 2,499 |
| Forsyth | 3,950 | 3,897 | 3,957 | 3,893 | 4,662 |
| Fulton | 45,790 | 48,399 | 4,317 | 44,748 | 50,047 |
| Gwinnett | 25,820 | 24,403 | 24,059 | 24,787 | 31,486 |
| Henry | 6,395 | 6,920 | 6,837 | 7,429 | 7,695 |
| Newton | 2,689 | 2,507 | 2,355 | 1,467 | 1,058 |
| Paulding | 2,596 | 3,114 | 3,936 | 3,653 | 3,415 |
| Rockdale | 2,968 | 3,006 | 2,904 | 3,192 | 3,247 |
| Spalding | 1,995 | 2,162 | 2,063 | 2,017 | 1,522 |
| Walton | 1,695 | 1,643 | 1,571 | 1,491 | 1,882 |
| Total | 173,392 | 178,004 | 126,314 | 164,700 | 191,289 |

Source: Governor's Office of Highway Safety

Total Crash Rate

The 18-County region had an increase of 9% in total crash rate, from 332.46 in 2008 to 363.96 in 2012. The largest declines in total crash rate were found in Newton County, which declined by 60%, from 244.29 to 96.98.

Table 25: Total Crash Rate per 100 Million VMT

| County | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------|--------|--------|--------|--------|--------|
| Barrow | 248.94 | 281.28 | 276.84 | 278.19 | 322.56 |
| Bartow | 181.19 | 201.33 | 171.09 | 167.89 | 189.64 |
| Cherokee | 240.01 | 235.50 | 241.72 | 255.65 | 260.62 |
| Clayton | 351.78 | 348.88 | 322.16 | 392.95 | 421.50 |
| Cobb | 347.42 | 362.46 | 324.18 | 239.09 | 335.27 |
| Coweta | 276.96 | 264.06 | 213.78 | 226.78 | 218.06 |
| DeKalb | 356.38 | 360.21 | 301.49 | 347.87 | 440.00 |
| Douglas | 242.74 | 334.48 | 260.97 | 254.96 | 274.23 |
| Fayette | 264.52 | 260.41 | 217.99 | 255.55 | 229.52 |
| Forsyth | 284.38 | 283.07 | 263.45 | 262.06 | 305.27 |
| Fulton | 405.20 | 429.02 | 35.51 | 381.34 | 430.68 |
| Gwinnett | 362.67 | 339.71 | 314.42 | 336.69 | 425.17 |
| Henry | 283.88 | 308.14 | 285.41 | 320.12 | 330.65 |
| Newton | 244.29 | 234.11 | 204.37 | 133.31 | 96.98 |
| Paulding | 216.12 | 301.79 | 351.49 | 335.73 | 308.48 |
| Rockdale | 293.59 | 289.09 | 259.50 | 305.14 | 315.12 |
| Spalding | 302.07 | 338.00 | 308.86 | 312.91 | 242.43 |
| Walton | 215.93 | 215.20 | 193.36 | 190.26 | 238.82 |
| Total | 332.46 | 343.70 | 230.90 | 312.17 | 363.96 |

Source: Governor's Office of Highway Safety

Project Implementation

As 2013 drew to a close, over \$9 Billion in funds from various sources were dedicated to transportation improvements in the 2012-2017 Transportation Improvement Program (TIP). In the interest of transparency, accountability and policy improvement, ARC actively tracks and reports on the delivery status of these important mobility solutions. An analysis of regionally significant transportation projects completed within the 18-county MPO area has found that, of the 268 project work activities (phases) scheduled to begin in FY 2013, 63 percent received funding authorization to begin work as scheduled. This welcome figure represents a sharp increase from FY 2012, in which only 43 percent of scheduled phases advanced on time.

These findings were published in the ARC report, Breaking Ground 2013, which analyzes the timely delivery of all project phases with funding commitments scheduled between July 1, 2012, and June 30, 2013, (FY 2013) in the region's FY 2012-2017 TIP. Breaking Ground 2013 is the eleventh annual transportation project advancement progress report for the Atlanta region.

The region's improvement in project phase advancement in FY 2013 can be explained in part by the increased collaboration between ARC and project sponsors. Upon adoption of PLAN 2040 in the summer of 2011, funding to identify and program new projects into the TIP was set aside for three modal programs. These programs fund projects which improve the efficiency, safety and effectiveness of the Atlanta region's transportation network for motorists, pedestrians, cyclists and ground freight operators. In the summer of 2012, a solicitation was held to award funding across these three programs to new projects. The end result of this solicitation was the inclusion of over \$95 million in federal funding and 63 new projects to the TIP across the three programs. Thanks to close coordination between ARC and project sponsors, the impact of this solicitation on the advancement rate of FY 2013 phases was overwhelmingly positive, with 100 percent of all 25 FY 2013 solicitation project phases advancing on schedule.

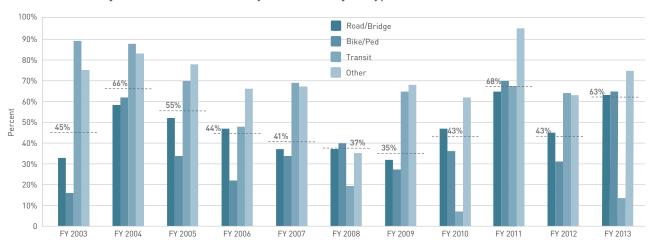


Chart 20: Project Advancement Rate by Year and Project Type

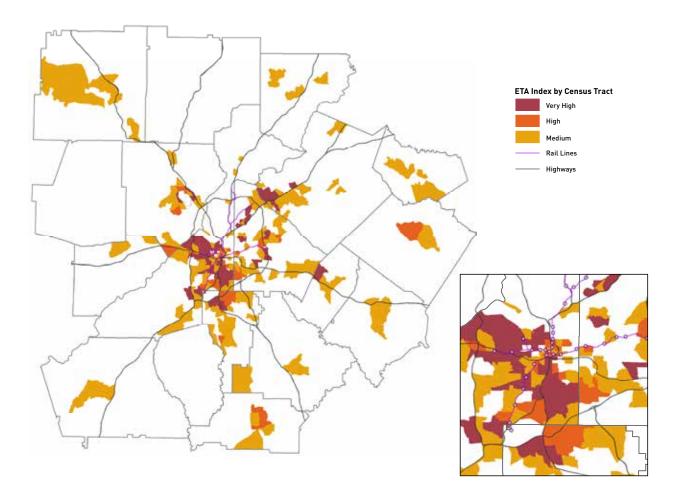
Source: Atlanta Regional Commission (ARC); 2009 Breaking Ground Report

Over the past decade, findings from Breaking Ground reports have helped focus more attention on the issue of project delivery. In order to delve deeper into the issues involved with the topic, staff and stakeholders at the state, regional and local levels agreed in March 2014 to form a Task Force on Project Delivery. This group will meet throughout 2014 in order to identify actionable strategies which project sponsors may utilize to improve the on-time delivery of transportation improvements.

The *Breaking Ground Report*, which is available in full on ARC's Program Delivery page (atlantaregional.com/project delivery), includes a dashboard element which allows readers to interactively explore project phase data.

Equitable Target Areas

The Equitable Target Areas (ETA) Index is a tool the ARC uses to better understand complexities in communities of concern –high percentage of people living in poverty or high minority population – and how we can make wise decisions regarding investments. The index was redeveloped in 2014, as part of updating the Regional Transportation Plan, to identify environmental justice communities in the Atlanta region. 2010 Census race data and 2012 ACS 5-year poverty data were used to create the index at the census tract level.

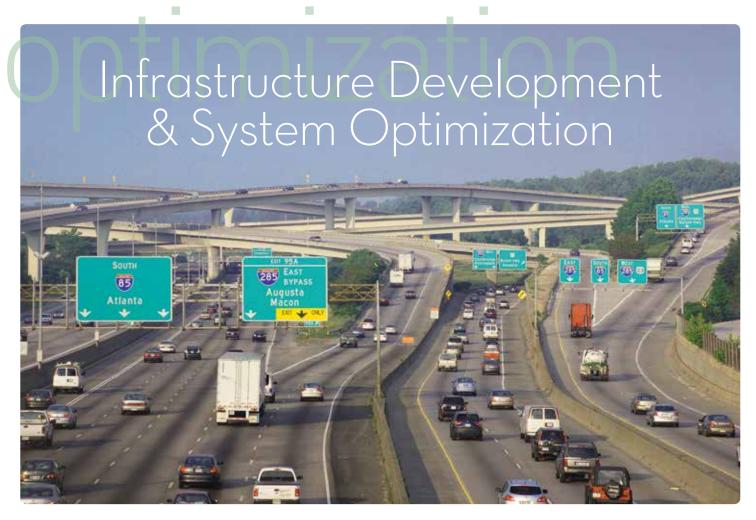


Map 9: Distribution of Equitable Target Areas

Source: Atlanta Regional Commission (ARC); US Census Bureau, 2010 Census, 2012 American Community Survey (ACS) 5-year estimate Regional Transportation Plan

This index is used to measure the impacts of investments and programs contained within The Regional Transportation Plan on ETAs. It is also used as input for project prioritization and evaluation, monitoring resource allocation, and assisting in decision-making.

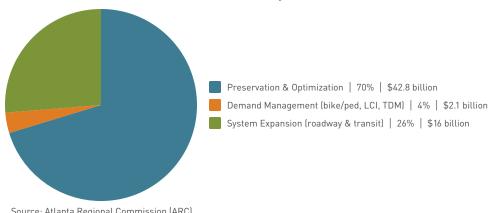
PLAN 2040 Regional Transportation Plan (RTP) was adopted by the ARC Board in 2011, and it was updated in 2014. This plan prioritizes approximately \$60.9 billion in transportation investments in the 19-county Atlanta MPO area through the year 2040.



Regional Transportation Plan

PLAN 2040 Regional Transportation Plan (RTP) was adopted by the ARC Board and prioritizes approximately \$60.9 billion in transportation investments in the 18-county Atlanta MPO area through the year 2040. Under federal law, a new RTP must be developed at least every four years and represent a balanced multimodal approach to addressing the region's transportation challenges. Although the RTP focuses on new projects, a majority of the funding will be spent simply maintaining current infrastructure and maximizing its efficiency.

Chart 21: Draft PLAN 2040 RTP Investment Priority Areas



Transportation Improvement Program (TIP)

The Transportation Improvement Program (TIP) is the first six years of the RTP and includes detailed information on projects actively moving toward implementation. ARC conducts quarterly administrative modifications to the TIP to address minor implementation issues, and conducts periodic amendments, as necessary, to reflect more substantive changes. These amendments require public outreach and ARC Board approval.

The FY 2014-2019 TIP was adopted along with the PLAN 2040 RTP Update in April 2014. All TIP data reflected in this Fact Book covers information from January 2014 through September 2014. During 2014, the TIP underwent minor adjustments as part of the routine quarterly administrative modification process. One amendment was conducted July of 2014. Changes to the TIP via amendment entailed cost estimate adjustments and the advancement of high priority regional projects into the TIP period.

Included in the adopted FY 2014-2019 TIP was a total of \$7.05 billion in funding covering six years. In the remaining years of the TIP, as of September 2014 there was \$7.3 billion in project investment. The following charts represent the number of projects and amount committed sorted by project type for the remaining period covered by the FY 2014-2019 TIP. Chart 22 shows the number of projects funded in the remaining years of the FY 2014-2019 TIP while Chart 23 shows funds committed by project type.

Chart 22: Number of Transportation Improvement Program (TIP) Projects, Funded FY 2014-2019

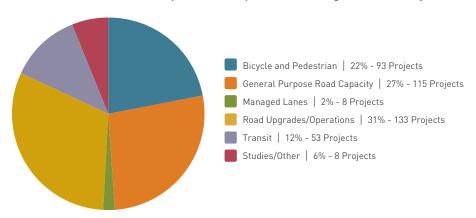
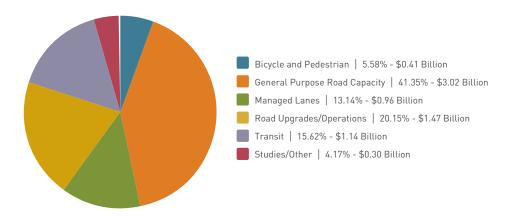


Chart 23: Number of Transportation Improvement Program (TIP) Projects, Committed FY 2014-2019



Source: Atlanta Regional Commission (ARC)

Human Services Transportation (HST)

The ARC Board adopted the region's Coordinated Human Services Transportation Plan on April 21, 2010. Human services transportation is the provision of transportation services to individuals who are considered transportation disadvantaged, including persons with disabilities, older adults, and low-income individuals. In the Atlanta region, human services transportation is planned, funded and operated by a range of federal, state and local resources. Typical services include fixed-route transit, ADA paratransit, demand response services, mobility management, transportation vouchers and volunteer drivers.

The current federal transportation bill, Moving Ahead for Progress in the 21st Century (MAP-21), has reorganized the two primary Federal Transit Administration (FTA) funding programs that are dedicated to HST implementation. Metropolitan Atlanta Rapid Transit Authority (MARTA), Cobb County Transit, and Gwinnett County Transit each are eligible for Section 5307 - Low Income component funding. Below is a table illustrates the transition from the old SAFETEA-LU programs to the new MAP-21 programs.

Table 26: Comparisons of SAFETEA-LU and MAP-21 Funding Programs

| SAFETEA-LU Funding Programs (previous) | MAP-21 Funding Programs (current) | | | |
|--|---|--|--|--|
| Section 5316 - Job Access and Reverse Commute (JARC) program | Section 5310 - Enhanced Mobility of Seniors and Individuals with Disabilities program | | | |
| Section 5317 – New Freedom program | Section 5307 – Urbanized Area Formula Grants - Low Income program | | | |

Source: Atlanta Regional Commission (ARC), FTA Federal Register

Enhanced Mobility of Seniors and Individuals with Disabilities Program Purpose

This program consolidates the SAFETEA-LU (Safe Accountable Flexible Efficient Transportation Equity Act), New Freedom and Elderly and Disabled programs. It is intended to enhance mobility for senior and persons with disabilities by providing funds for programs to serve the special needs of transit-dependent populations beyond traditional public transportation services and Americans with Disabilities Act (ADA) complementary paratransit services. Eligible activities include:

- At least 55% of program funds must be used on capital projects that are:
 - O Public transportation projects planned, designed, and carried out to meet the special needs of seniors and individuals with disabilities when public transportation is insufficient, inappropriate, or unavailable.
- The remaining 45% may be used for:
 - O Public transportation projects that exceed the requirements of the ADA.
 - O Public transportation projects that improve access to fixed-route service and decrease reliance by individuals with disabilities on complementary paratransit.
 - O Alternatives to public transportation that assist senior and individuals with disabilities.

Urbanized Area Formula Grants - Low Income Program Purpose

This program provides grants to the region's Urbanized Areas, as defined by the 2010 U.S. Census, for public transportation capital, planning, job access and reverse commute projects, as well as operating expenses in certain circumstances. Eligible activities include:

- Capital projects;
- Planning;
- Job access and reverse commute projects that provide transportation to jobs and employment opportunities for welfare recipients and low-income workers;
- Operating costs for grantees which operate a maximum of 100 buses in fixed-route service during peak hours (rail fixed guideway excluded).

Regional Mobility Management

Mobility Management is a strategic approach for managing and delivering coordinated transportation services to all customers. ARC, with a consortium of its partners is developing a Regional Mobility Management Program with the goal to link accessible and responsive transportation with community needs. There are several individual projects and services that ARC directly or indirectly facilitates as part of its Regional Mobility Management program. They are described below.

REGIONAL ONE CALL - ONE CLICK MOBILITY CENTER

This program is managed by the ARC Mobility Services and Aging and Health Resources Divisions. As a recipient of FTA's Veterans Transportation and Community Living Initiative (VTCLI) grant, ARC has been working for 2+ years on the One-Click System (branded locally as "Simply Get There"). This ITS (intelligent transportation system) project, which has a soft launch for the public in November 2014, is a transportation trip planner enhanced for persons with disabilities, older adults, persons with low income and veterans. These groups are often referred to as Human Services Transportation (HST) populations. ARC collaborated with regional partners including the Veterans Affairs Medical Center of Atlanta, Aging and Disability Resource Connection, Disability Link (local Center for Independent Living), Atlanta Regional Workforce Board, Cobb Community Transit, Goodwill Industries and Georgia Commute Options.

The key creative solution has been to build upon existing technology such as standardized public transit data (i.e. general transit feed specification a.k.a., GTFS feeds) and open source trip planning software (i.e. Open Trip Planner), broadening these to include additional transportation options specific to HST populations. Services such as ADA complementary paratransit, voucher programs, volunteer driver systems, senior center trips, etc. tend to be demand-response (curb-to-curb or door-to-door) and require different types of data to be shown effectively on trip planners. Instead of lines and points in GIS for fixed route, these services require polygons to demonstrate the service area. Also, these services require information on accommodations (e.g. vehicles with lift, driver assistance) and eligibility (e.g. age, disability). Once all of this is included in a database, a query can be done between personal information reported by the end user and the service attributes to pinpoint a possible trip match.

As important as it is that the public have easy trip planning access to these demand-response type services, it is equally important that fixed route transit is shown as the backbone of the HST system in large urban areas such as the Atlanta metro. Oftentimes, an HST user will not know how convenient the public transit trip would be, and aligning all the options on one trip planner helps them with this side-by-side comparison. Not only do fixed route transit trips foster independence (not requiring early booking, etc.), but they are more cost effective for agencies and make the most of all the ADA accessible infrastructure that has been built over time. In addition to these modes, information on carpool commuting trips (connectivity with Georgia Commute Options) and vehicles for hire (taxis, Lyft, Uber) is provided. Simply Get There is open source software with code that can be leveraged and built upon by any other entity.

As trip planners with various transportation options evolve, it is critical to include the needs of HST populations in getting to medical/health needs, employment/education facilities and general quality of life trips in this evolution. As "transportation access" is more and more connected with technology, providing inclusive technology solutions reduces barriers and enables all members of society to function at their highest level.

AGEWISE CONNECTION

This service is provided by ARC's Aging and Health Resources Division. AgeWise Connection is the first stop in the Atlanta region for information about services and programs for older adults such as housing options, retirement planning, in-home services, leisure and recreation activities, volunteer, educational opportunities, and transportation. AgeWise functions as a "clearinghouse" to a variety of services and resources. Citizens seeking AgeWise assistance, opportunities to provide services, or volunteer opportunities may call (404) 463-3333 or visit www.agewiseconnection.com

ATLTRANSIT TRIP PLANNER

ATLtransit is a collaborative effort of metro Atlanta's four major transit providers — MARTA, GRTA, Cobb Community Transit (CCT) and Gwinnett County Transit (GCT), working with the Atlanta Regional Commission (ARC) — to provide a single portal of information and resources for customers who want to ride transit in metro Atlanta.

ATLtransit is currently a pilot project, for the first time bringing all of the agencies' resources to one place for customers. This pilot project is a first step, designed to allow the transit operators to gather research and feedback from the public about what information and resources are most useful to transit riders.

Customers can use this site to plan a trip and find options for paying their fare and connecting among systems. The site is designed to allow the transit agencies to learn from customers what information and resources will best help customers as they move throughout the region on transit. The site will continue to be tested and updated, with site improvements and features added as they become available. We encourage users to tell us about their experience with ATLtransit and what additional features they would like to see.

This website can be accessed at atltransit.org/

Livable Centers Initiative (LCI)

The Livable Centers Initiative (LCI) is an ARC program launched in 1999 to encourage local jurisdictions to link transportation improvements with land use development and strategies to create sustainable, livable communities. Local governments and non-profit organizations apply for LCI planning grants to help them prepare plans for the enhancement of existing town centers, activity centers and corridors. ARC awards these funds on a competitive basis to areas that can best take advantage of the infrastructure and private investments committed in their community to achieve balanced regional development that reduces vehicle miles traveled and improves air quality.

To date, ARC has approved \$18 million in LCI study funds – \$1 million annually – for use in years 2000 to 2017. ARC also approved a total commitment of \$500 million for priority funding of transportation projects resulting from LCI studies. Overall, more than \$169 million in planning and transportation funds have been allocated for 107 distinct areas in the region, and a total of 93 projects within 54 LCI communities have been awarded funding for a variety of transportation improvements.

Although the completed LCI studies show an impressive range of ideas and techniques to achieve livability, all demonstrate the fundamental concepts of:

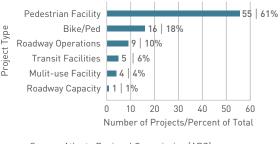
- Connecting homes, shops and offices
- Improved safety and sense of place
- Emphasizing the pedestrian
- Improving access to transit and other transportation options
- Expanding housing options

Table 27: LCI Studies and Transportation Projects by County

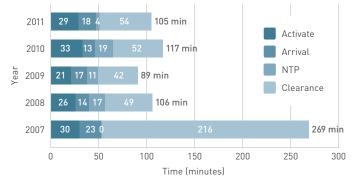
| County | Studies | Supplemental Studies | Transportation Projects |
|----------|---------|-------------------------|----------------------------|
| Atlanta | 17 | 10 | 23 |
| Barrow | 1 | - | - |
| Cherokee | 4 | 4 | 7 |
| Clayton | 6 | 3 | 3 |
| Cobb | 12 | 7 | 18 |
| DeKalb | 19 | 10 | 24 |
| Douglas | 2 | 2 | 4 |
| Fayette | 2 | 1 | 4 |
| Forsyth | 1 | 1 | - |
| Fulton | 17 | 9 | 11 |
| Gwinnett | 14 | 13 | 14 |
| Henry | 4 | 4 | 3 |
| Newton | 1 | 1 | 1 |
| Paulding | 1 | - | 1 |
| Rockdale | 2 | - | 1 |
| Spalding | 3 | 4 | 1 |
| Walton | 2 | 1 | - |
| Total | 108 | 70 | 115 |

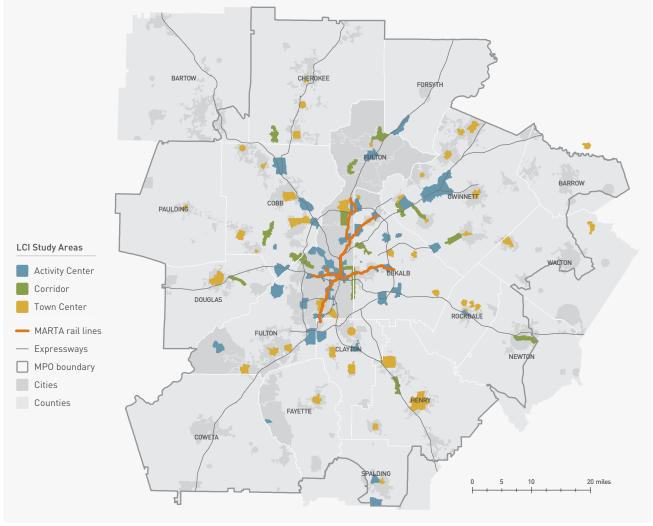
Source: Atlanta Regional Commission (ARC)

Chart 24: LCI Transportation Projects by Type, 2003 – 2013 Table 28: LCI Program Status, 2003 – 2013



Source: Atlanta Regional Commission (ARC)





Map 10: Livable Centers Initiative Study Areas, 2000-2013

Source: Atlanta Regional Commission (ARC)

Intelligent Transportation Systems

Intelligent Transportation Systems (ITS) use technology, traffic control devices, changeable message signs and vehicle detection and monitoring to maintain real-life information about potential delays on freeways, major arterials and on bus and train routes. Travelers can make decisions based on information provided by ITS devices which work together to form an Advanced Traffic Management System (ATMS).

Table 29: Intelligent Transportation System Data for the Atlanta MPO Area, 2003-2010

| ATMS Components | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2014 |
|---|------|------|------|------|------|------|------|------|-------|
| Miles of Freeway Surveillance (Fiberoptic Cable) | 222 | 240 | 260 | 275 | 280 | 320 | 420 | 456 | 296 |
| Miles of Arterial Surveillance (Fiberoptic Cable) | 179 | 150 | 150 | 180 | 180 | 180 | 180 | 180 | 279 |
| Number of Surveillance Cameras on Freeway (Pan, tilt and zoom) | 311 | 187 | 321 | 330 | 355 | 487 | 500 | 510 | 626 |
| Number of Surveillance Cameras on Arterial (Pan, tilt and zoom) | 211 | 287 | 207 | 207 | 210 | 210 | 220 | 220 | 552 |
| Number of Video Traffic Detection Cameras (fixed) | 1223 | 1245 | 1361 | 1361 | 1450 | 1645 | 1700 | 1750 | 1,885 |
| Number of Changeable Message Signs (CMS) on Freeway | 91 | 71 | 80 | 101 | 105 | 133 | 135 | 141 | 110 |

| ATMS Components | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2014 |
|---|------|------|------|------|------|------|------|------|------|
| Number of Changeable Message Signs (CMS) on Arterial | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| Number of CMS dedicated to Express Lanes | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 11 |
| Number of Ramp Meters | 5 | 5 | 8 | 8 | 8 | 136 | 155 | 165 | 184 |
| Number of Highway Emergency Response Operator (HERO) Vehicles | 55 | 56 | 56 | 68 | 68 | 88 | 88 | 110 | 108 |
| Advanced Traveler Information Systems (ATIS) | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2014 |
| Number of Advanced Traveler Information System (kiosks) | 115 | 115 | N/A | 5 | 5 | 5 | 5 | 5 | 0 |
| Real-Time Traffic Information (www.georgia.navigator.com) | No | No | Yes |
| MARTA Information (www.itsmarta.com) (www.breezecard.com) | No | No | Yes | Yes | Yes | Yes | N/A | N/A | Yes |
| "DOT" free cellular service (*DOT) | No | No | Yes | Yes | 511 | 511 | 511 | 511 | 51 |
| Other ITS | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2014 |
| Number of Accident Investigation Sites | N/A | 75 | 75 | 75 | 75 | 75 | 75 | 75 | 75 |

Source: Georgia Department of Transportation (GDOT), Metropolitan Atlanta Rapid Transit Authority (MARTA)

• In 2010, the ITS surveillance system included 636 miles of fiberoptic cable, 730 tilt, pan and zoom cameras and 1,750 video traffic detection cameras.

Highway Incident Management

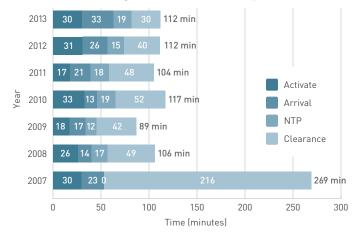
The Highway Emergency Response Operators (HEROs) are the key component of the Georgia Department of Transportation's Incident Management Program. Striving to reduce congestion on the highways, HEROs respond quickly to incidents and clear the roads so that the normal traffic flow can be restored. Funding for the HERO program has been provided by the Congestion Mitigation and Air Quality (CMAQ) program, as well as corporate sponsorship.

• In 2014, 110 HERO vehicles were available in the region to respond to traffic incidents.

The Georgia Towing and Recovery Incentive Program (TRIP) is a recovery incentive program to pay heavy-duty recovery companies a monetary bonus for clearing commercial vehicle wrecks quickly. TRIP helps to reduce the impact of major traffic incidents in metro Atlanta while meeting the Traffic Incident Management Enhancement (TIME) Task Force's aggressive clearance goal of 90 minutes or less.

- From 2007 to 2013, clearance times were reduced by 186 minutes, from 216 to 30 minutes.
- 112 TRIP incidents occurred during the calendar year of 2013.

Chart 25: TRIP Program Time to Roadway Clearance, 2007-2013



Source: Metro Atlanta Traffic IncidentManagement Enhancement (TIME) Task Force, Inc.

Glossary of Terms

Advanced Transportation Management System (ATMS) —

Collective term for technologies which improve the flow of traffic on the transportation network without the addition of physical capacity. Most commonly seen on highways, these technologies include changeable message signs, surveillance cameras and loop detectors. ATMS can also be applied to vehicles in the form of in-vehicle navigation systems, global positioning trackers and communications equipment. The term ATMS is commonly interchanged with ITS or Intelligent Transportation Systems.

Alternative Mode — Loosely defined term generally used to identify any form of travel other than driving alone in a single occupancy vehicle (SOV), including carpooling, transit, walking and bicycling.

American Recovery and Reinvestment Act (ARRA) of 2009 — On Feb. 17, 2009, Congress passed the ARRA of 2009 at the urging of President Obama, who signed it into law four days later. A direct response to the economic crisis, the Recovery Act has three immediate goals: [1] Create new jobs and save existing ones, [2] Spur economic activity and invest in long-term growth and [3] Foster unprecedented levels of accountability and transparency in government spending.

Arterial — Functional classification for a street or highway that provides the highest level of service at the greatest speed for the longest uninterrupted distance, with some degree of access control

Attainment Area — An urbanized area which meets federal air quality standards defined in the Clean Air Act.

Car Pool — An arrangement where two or more people share the use and cost of privately-owned vehicles for traveling together to and from pre-arranged destinations.

Centerline Mile — A term of measurement used to refer to the length of a roadway in a single direction from the center of the paved surface. For a two-lane road running in a single direction, a centerline mile is measured from the point between the lanes.

Cherokee Area Transportation System (CATS) — Cherokee County's CATS provides rural transportation for all Cherokee County residents to local establishments, demand response services, Xpress bus service from Canton/Woodstock to downtown Atlanta, fixed transportation routes for the City of Canton, van pools with "ride-matching" by home and work location and leasable buses and trolleys for special events.

Clean Air Act Amendment (CAAA) — Federal legislation that established acceptable levels of certain air pollutants. Regional Transportation Plans and Transportation Improvement Plans must demonstrate conformity to these federally-designated air quality attainment levels

Collector — Functional classification for a street or highway that provides a less highly developed level of service than an arterial and at a lower speed for shorter distances by collecting traffic from local roads and connecting them with arterials.

 ${\bf Commuter} - {\sf Person}$ who travels regularly between home and work or school.

C-TRAN — Clayton County's transit system was discontinued in 2010. Clayton County residents voted in November 2014 to join MARTA and reestablish local transit service.

Cobb Community Transit (CCT)-Transit system operated by Cobb County. Current and planned services include local routes within the county, express bus services to Downtown Atlanta, Midtown Atlanta and the Perimeter Center Area with connections to the MARTA rail system.

Conformity — A process in which transportation plans and spending programs (i.e., Regional Transportation Plans and Transportation Improvement Programs) are reviewed to ensure they are consistent with federal clean air requirements and contribute to attainment of air quality standards. These plans and programs must demonstrate that they do not exceed the Motor Vehicle Emission Budgets established in the state air quality plan called the State Implementation Plan (SIP).

Congestion Management Process — A process managed by ARC that identifies congested locations and facilities within the metropolitan area, develops and implements potential strategies for improving congested locations, and monitors the effectiveness of the solutions.

Congestion Mitigation and Air Quality (CMAQ) Improvement Program — First created in 1991, CMAQ is a federal program that provides funding for surface transportation and other related projects that contribute to air quality improvements and congestion mitigation, especially in air quality non-attainment and maintenance areas. CMAQ provides funds to state DOTs, MPOs and transit agencies to invest in projects that reduce emissions from transportation-related sources.

Department of Community Affairs (DCA) — Created in 1977 to serve as an advocate for local governments. DCA operates a host of state and federal grant programs; serves as the state's lead agency in housing finance and development; promulgates building codes to be adopted by local governments; provides comprehensive planning, technical and research assistance to local governments; and serves as the lead agency for the state's solid waste reduction efforts.

Development of Regional Impact (DRI) — The DRI review is intended to improve communication among governments on large-scale and certain types of developments, and to provide a means of identifying and assessing potential impacts before conflicts relating to them arise.

Emissions — Pollutants which result in decreased air quality. For the purposes of transportation planning, emissions are generally defined as pollutants generated by vehicle internal combustion engines. Limits on the amount of mobile source emissions which can be produced within a non-attainment area are defined by the Motor Vehicle Emission Budgets established in the State Implementation Plan developed by the Georgia Environmental Protection Division.

Environmental Protection Agency (EPA) — Federal agency that works with other federal agencies, state and local governments, to develop and enforce environmental regulations. EPA is the federal agency charged with establishing policies to ensure that transportation plans meet air quality standards defined by the Clean Air Act.

Envision6 — A development and transportation plan that integrated land use, transportation and water planning. The Envision6 2030 Regional Transportation Plan, associated with the FY 2008–2013 TIP, provided an overview of key challenges, strategies, projects and system performance.

Federal Highway Administration (FHWA) — Arm of the U.S. Department of Transportation that provides federal financial and technical assistance in planning, constructing and upgrading the nation's network of highways, roads and bridges.

Federal Transit Administration (FTA) — Arm of the U.S. Department of Transportation that provides federal financial and technical assistance in planning, constructing and upgrading transit systems at the local, regional and national levels.

Flex-Fuel Vehicle — A vehicle that can operate using any combination of gasoline with up to 85% ethanol.

Functional Classification — The grouping of streets and highways according to the character of service they provide.

Georgia Department of Transportation (GDOT) — State of Georgia agency vested with the ability to plan and implement a variety of transportation projects and programs, including highways, bridges, rural transit and commuter rail throughout the state. GDOT is responsible for developing the State Transportation Improvement Program (STIP), which incorporates the regional TIP, developed by ARC.

Georgia Environmental Protection Division (EPD) – The Environmental Protection Division (EPD) of the Georgia Department of Natural Resources is a state agency charged with protecting Georgia's air, land, and water resources through the authority of state and federal environmental statutes. These laws regulate public and private facilities in the areas of air quality, water quality, hazardous waste, water supply, solid waste, surface mining, underground storage tanks, and others. EPD issues and enforces all state permits in these areas and has full delegation for federal environmental permits except Section 404 (wetland) permits.

Georgia Express Lanes – Georgia Express Lanes are optional toll lanes that run alongside existing interstates in some of the most congested corridors around metro Atlanta. These lanes provide a choice for drivers to pay a toll to bypass congestion when desired, offer a clear path for transit operators and add an alternative to the roads that exist today. Express Lanes are intended to provide a mobility choice and more reliable travel times in peak periods for motorists and bus patrons. The result is a network of lanes that provide more reliable and predictable trip times.

Georgia Regional Transportation Authority (GRTA) — State of Georgia agency vested with the ability to plan and implement a variety of transportation projects and programs, including roadways and transit services, in areas of the state which are classified as non-attainment for air quality standards. GRTA provides the state's approval of the regional Transportation Improvement Program (TIP) developed by ARC.

Gwinnett County Transit (GCT) — The transit system operated by Gwinnett County. Current and planned services include express bus service to downtown and midtown Atlanta, connections to the MARTA rail system and local routes within Gwinnett County.

High Occupancy Toll (HOT) Lanes — Limited-access managed lanes that allow eligible carpoolers, transit, motorcycles and Alternative Fuel Vehicles to use the lane for free, while allowing previously ineligible solo drivers to buy back into the lane for a fee. The number of cars using these lanes can be controlled through value pricing via electronic toll collection so as to maintain free-flowing traffic in them at all times, even during the height of rush hours.

High Occupancy Vehicle (HOV) Lanes — Lanes dedicated for exclusive use by multi-occupant vehicles such as buses, carpools and vanpools. In Georgia, it is legal for motorcycles and alternatively-fueled vehicles (such as electric cars) to use HOV lanes also.

Human Services Transportation (HST) — Includes a broad range of service options designed to meet the needs of the transportation disadvantaged including older adults, persons with disabilities and individuals with lower incomes. Planning and Coordinating HST helps to improve the efficiency of limited transportation resources, reduce duplication of services, and improve customer satisfaction.

Intelligent Transportation Systems (ITS) — The application and integration of advanced technologies, information processing, communications technologies, and advanced control strategies for the efficient and effective operation of the existing transportation system.

Intermodal — Transportation of persons and goods that involves the interchange between transportation modes such as surface routes, airways and waterways.

Intermodal Surface Transportation Efficiency Act

(ISTEA) — Landmark federal legislation signed into law in 1991. It made broad changes in the way transportation decisions are made by emphasizing diversity and balance of modes, as well as the preservation of existing systems and construction of new facilities. The law expired in 1997, but much of the program is carried forward by TEA-21.

Interstate/Freeway — High-speed, limited-access facility that often crosses boundaries from one state into another.

Level of Service (LOS) — Qualitative rating of the effectiveness of a road relative to the service it renders to its users. LOS is measured in terms of a number of factors, such as operating speed, travel time, traffic interruptions, freedom to maneuver and pass, driving safety, comfort and convenience.

Livable Centers Initiative (LCI) — Created by ARC, LCI is a program that funds investment policy studies for activity centers and town centers. The primary focus of these studies is to encourage increased development, mixed uses and connectivity at the activity and town center level as one alternative to standard, suburban or strip development.

Local Road — Functional classification which consists of all roads not defined as arterials or collectors. Local roads primarily provide access to land with little or no through movement.

Managed Lanes — A system of lanes that use eligibility, access, pricing or any combination thereof, to preserve mobility on the managed lanes (i.e. HOV lanes, toll lanes, etc.).

MAP 21 — The Moving Ahead for Progress in the 21st Century Act (P.L. 112-141), was signed into law by President Obama on July 6, 2012. Funding surface transportation programs at over \$105 billion for fiscal years (FY) 2013 and 2014, MAP-21 is the first long-term highway authorization enacted since 2005. The United States Congress is currently debating on extending MAP-21, or passing new transportation legislation.

Metropolitan Atlanta Rapid Transit Authority

[MARTA] — Transit agency which serves the City of Atlanta, Fulton County and DeKalb County through a 1% sales tax levy in those jurisdictions. Current and planned services include heavy rail and associated park and ride lots, express bus routes along major travel corridors and an extensive local bus route network.

Metropolitan Planning Organization (MPO) — A federally required planning body responsible for transportation planning and project selection in its region. The governor designates an MPO in every urbanized area with a population of more than 50,000 people. An MPO is responsible for developing the Transportation Improvement Program (TIP) and the Regional Transportation Plan (RTP) for the urbanized area it represents. ARC is the MPO for the 19-County Atlanta region as of Sept. 2014.

Mobility 2030 — ARC's previous RTP, a \$53 billion long-range transportation plan, associated with the 2006–2011 TIP and approved by the ARC Board in December, FY 2004.

Motor Vehicle Emissions Budget (MVEB) — The amount of mobile source emissions within a non-attainment area which can not be exceeded by the transportation system in order to permit the area to conform to federal air quality standards defined by the Clean Air Act.

National Ambient Air Quality Standards (NAAQS) — Federal law passed in 1969 which sets national policies and implements necessary initiatives to protect the natural environment.

NaviGAtor — GDOT clearinghouse for real-time travel data. The Transportation Management Center (TMC) is the headquarters and information clearinghouse for NaviGAtor, operating 24 hours a day, 365 days a year. Real-time information is collected from Video Detection System (VDS) cameras along the interstates and from *DOT calls from travelers. The information is confirmed and analyzed at the TMC and incident response personnel, such as HEROs, are notified. The information is communicated through changeable message signs (CMS) on the roadways, the NaviGAtor website and media relations.

Nitrogen Oxides (NOx) — Emission that forms from combustion of fossil fuels. NOx reacts with heat, sunlight and Volatile Organic Compounds (VOC) to produce ground level ozone and smog, particularly during Georgia's hottest and driest months, between July and September.

Non-attainment Area — Geographic area, as designated by EPA, where air quality does not meet federal air quality standards designed to protect public health. The Atlanta non-attainment area currently includes 15 counties for ground level ozone and all of 20 counties plus parts of two other counties based on a new standard for particulate matter.

Ozone — The primary component of smog, ozone is a colorless gas formed when VOC and NOx combine in the presence of sunlight. There are two types of ozone. "Good" ozone protects the Earth from the sun's harmful ultraviolet rays and is found in the upper atmosphere. "Bad" ozone can linger at ground level and cause respiratory problems, especially with children and the elderly. The EPA sets standards for the maximum allowable concentration and associated exposure limit of ground level ozone.

Particulate Matter — Solid or liquid particles found in the air that can cause respiratory problems, especially with children and the elderly. The EPA sets standards for the maximum allowable concentration and associated exposure limit of particulate matter of 2.5 micrometers or less in diameter.

Pedestrian — Georgia law defines a pedestrian as "any person who is afoot." By state definition, roller skaters, in-line skaters, skateboarders and wheelchair users are also considered pedestrians.

Peer Region — Geographic regions that are comparable in certain aspects such as urbanized area size and urbanized area population, as well as comparable public policies. Representatives from peer regions share and learn best practices and successes that would be adaptable to the comparable region.

PLAN 2040 — PLAN 2040 serves as both the regional transportation plan and regional comprehensive plan, defining both transportation and land use policy and investment strategies to address regional needs across these multiple planning emphasis areas. Through a collaborative effort among local, state and federal planning partners, PLAN 2040 guides regional growth through its specific investment strategies and programs for metro Atlanta through the year 2040.

Qualified Local Government (QLG) Status — In order to maintain QLG status under the Georgia Planning Act, local governments must have an approved and adopted Short Term Work Program (STWP) for implementation of their Comprehensive Plan. The STWP is a key implementation tool that reflects those activities and strategies the local government has chosen to undertake in the current five-year period.

Regional Commission (RC) — Multi-county planning and development agencies serving municipal and county governments in different areas of a state. RCs are involved in such activities as comprehensive planning, land use development, historic preservation, aging services, revolving loan funds, business retention and development, affordable housing, global economies, tourism, defense conversion, workforce development, coordinated transportation, telecommunications and technology, geographic information systems and disaster mitigation planning.

Regional Strategic Transportation System (RSTS) — Includes interstate freeways and highways, existing and future regional transit service and important principal arterials that provide cross regional mobility. The RSTS was developed through a project prioritization process to ensure the most cost effective achievement of the region's transportation vision and goals.

Regional Transportation Plan (RTP) — A multimodal list of transportation projects and initiatives developed by an MPO for its urbanized area. It is required by the federal government and must cover a minimum of 20 years and be updated at least every fourth year in non-attainment areas (five years for attainment areas). The program must be fiscally constrained (approximate balance of revenues and expenses over the lifespan) and must also demonstrate conformity with applicable federal air quality standards.

Rideshare — The act or an instance of sharing motor vehicle transportation with another or others, especially among commuters (i.e. carpools, vanpools, etc).

Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) — On August 10, 2005, the President signed SAFETEA-LU into law. With guaranteed funding for highways, highway safety and public transportation totaling \$244.1 billion, SAFETEA-LU represented the largest surface transportation investment in United States history. The two landmark bills that brought surface transportation into the 21st century, the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21st Century (TEA-21) in 1998, shaped the highway program to meet the nation's changing transportation needs. SAFETEA-LU promotes more efficient and effective Federal surface transportation programs by focusing on transportation issues of national significance, while giving State and local transportation decision makers more flexibility for solving transportation problems in their communities.

Single Occupant Vehicle (SOV) — A private vehicle, such as an automobile, SUV or light truck that contains only the driver.

State Implementation Plan (SIP) — A federally required document prepared by the Georgia Environmental Protection Division. The SIP defines a statewide strategy to meet air quality standards defined by the Clean Air Act. The Motor Vehicle Emissions Budget established for air quality non-attainment areas is a component of the SIP.

State Road and Tollway Authority (SRTA) — A state-level, independent Authority created by the Georgia General Assembly to operate tolled transportation facilities within the State and act as the transportation financing arm for the State of Georgia.

Texas Transportation Institute (TTI) — Institute member of the Texas A&M University System where research, education and technology transfer focus on areas such as safety, security, mobility, funding, asset management, environment, and workforce development.

Traffic Incident Management Enhancement (TIME) Task
Force — Develops and sustains a region-wide incident
management program to facilitate the safest and fastest roadw

management program to facilitate the safest and fastest roadway clearance, lessening the impact on emergency responders and the motoring public.

Transportation Demand Management (TDM) — Programs or infrastructure that reduce automobile demand on the transportation system. Examples include transit, programs to promote telecommuting, flextime and ridesharing.

Transportation Improvement Program (TIP) — A multimodal set of short-range transportation projects and initiatives developed by an MPO for its urbanized area. It is required by the federal government and must cover a period of four years. The program must be financially balanced (costs equal anticipated revenues) and be drawn from a conforming RTP.

Transportation Management Association (TMA) — Non-profit, member-controlled organizations that provide transportation services in a particular area, such as a commercial district, mall, medical center or industrial park. They are generally public-private partnerships, consisting primarily of area businesses with local government support. A TMA will often provide services such as carpool and vanpool ridematching, transit and vanpool discounts, safe cycling courses, telework assistance, shuttle services, educational seminars and creative incentive programs to help manage the demand for the transportation system and balance it across all modes.

Travel Demand Model — A computer application that uses travel and land use data to determine how a transportation network will function in the future. It is a planning tool that is used to develop and test numerous scenarios. The modeling process used by ARC has four essential steps: 1) trip generation, 2) trip distribution, 3) mode split and 4) trip assignment.

Travel Time Index (TTI) — The ratio of peak-period travel time to free-flow travel time. The TTI expresses the average amount of extra time it takes to travel in the peak relative to free-flow travel. A TTI of 1.3, for example, indicates a 20-minute free-flow trip will take 26 minutes during the peak travel time periods, a six-minute (30 percent) travel time penalty.

Unified Planning Work Program (UPWP) — A program used to coordinate transportation and comprehensive planning in a metropolitan region. Its intent is to broaden the MPO's awareness of local activities and plans that may impact the surface transportation system. It ensures planned improvements are based on a common set of existing conditions and forecasts.

United States Department of Transportation (USDOT) — The federal agency that sets national policy and provides funding and technical assistance to state and local transportation agencies for all transportation modes. The USDOT is comprised of several modally-oriented (such as highways, transit, railroad and aviation) administrations.

Vehicle Hours Traveled (VHT) — A measurement of the total hours spent by vehicles in the process of traveling along the roadway network.

Vehicle Miles Traveled (VMT) — A measurement of the total miles traveled by all vehicles on the roadway network in the area for a specified time period.

Volatile Organic Compounds (VOC) — Family of emissions, such as carbon monoxide, which forms from combustion of fossil fuels. VOC reacts with heat and NOx in the presence of sunlight to produce ground level ozone and smog, particularly during Georgia's hottest and driest months, between July and September.

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