



Need and Purpose Statement

**Environmental Impact Statement for
I-285 from I-75 to I-85**

March 18, 2008



A GEORGIA DOT-GRTA INITIATIVE



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Need and Purpose Statement

The Federal Highway Administration (FHWA), in cooperation with the Federal Transit Administration, the Georgia Department of Transportation (DOT) and the Georgia Regional Transportation Authority (GRTA) is preparing an Environmental Impact Statement (EIS) for a combined highway and transit proposal along I-285 from I-75 in Cobb County to I-85 in DeKalb County, which represents a length of approximately 12 miles. This effort is referred to as **revive285 top end**.

A clear, well-justified need and purpose statement explains to the public and decision makers that the expenditure of funds is necessary and worthwhile and that the priority the project is being given relative to other needed highway projects is warranted. In addition, although significant environmental impacts may be caused by the project, the need and purpose statement should justify why these impacts are acceptable based on the project's importance. This document presents the purpose and need for **revive285 top end**.

1. PROJECT PURPOSE

The purpose of **revive285 top end** is to satisfy the following needs: better manage and improve traffic congestion, improve mobility options for the traveling public, maintain and improve system linkages, and provide safer travel conditions along the corridor. Section 3 details data supporting these need statements. To accomplish the purpose and need, the following objectives are defined for each need statement.

- Better Manage and Minimize Traffic Congestion
 - Improve congestion management
 - Accommodate current and future travel demand
 - Reduce traveler delay
 - Maximize efficiency of corridor
- Improve Mobility Options for the Traveling Public
 - Provide convenient and competitive travel choices
 - Improve accessibility for transportation-disadvantaged populations
 - Accommodate interstate and regional trips without degrading local trip-making
- Maintain and Improve System Linkages

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- Maintain and improve regional highway system connectivity
- Improve linkages of regional transit system within study corridor
- Maintain and improve freight system connectivity
- Provide Safer Travel Conditions Along the Corridor
 - Reduce potential for severe crashes
 - Reduce secondary impacts of incidents
 - Improve bicycle and pedestrian accommodations

1.1 Public Input

Public input was sought and reviewed relative to the project purposes. This input was collected through stakeholder interviews, field briefings, online surveys, Technical Advisory Committee (TAC) meetings, Citizen Advisory Committee (CAC) meetings, resource agency scoping meetings, and public meetings. Specific input was requested as it related to perceived corridor transportation problems, needs, concerns, potential solutions, and potential alternatives. The following highlights key input from the public used to refine the project purpose and to develop the objectives:

- Traffic congestion was indicated as the biggest existing issue for travelers on I-285's top end, specifically backups at major interchanges.
- Uncertainty in travel times, lack of transit options, and the amount of truck traffic along the corridor were also identified as existing issues for travelers along I-285.
- Most travelers indicated that they use I-285 to travel to and from work.
- Overall, the public agreed that travel conditions on I-285's top end are a serious problem that must be addressed.
- Participants indicated that if no improvements are made to the project corridor, there would be an increase in uncertain travel times, degraded air quality, and negative effects on quality of life.

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- The top three strategies chosen by respondents include separating truck traffic from regular traffic, improving interchanges, and providing a transit alternative.
- The top three goals for improvements in this corridor include:
 - Increase multimodal connectivity
 - Improve system linkages
 - Decrease current congestion

The project purpose and objectives were developed in light of, and are reflective of, this input.

1.2 Regional Context

The project needs and objectives also take into account the corridor's regional context. There are several existing plans and policies that help define the regional vision for the I-285 corridor and identify improvements planned in the corridor. The following provides a summary of relevant plans and policies.

1.2.1 Relevant Plans

1.2.1.1 *Envision6*

Envision6 is the long-range regional transportation plan adopted by the Atlanta Regional Commission (ARC), Atlanta's metropolitan planning organization. This plan, which is summarized in the **revive285 top end** Existing Conditions Report dated February 2008, includes a detailed list of programmed and planned projects that are either within the study corridor or connect to the study corridor. These include the following:

- High-occupancy vehicle (HOV) lanes along I-285 between I-75 northbound and I-85 northbound
- Bus rapid transit (BRT) along I-285 between the Cumberland/Galleria (I-75) and Perimeter Center areas
- Interchange upgrade at I-285 and Riverside Drive, Roswell Road, and SR 400
- BRT, truck-only lanes (TOLs), and managed lanes along I-75 northbound to Hickory Grove Road

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- Interchange upgrade at I-75 and Windy Hill Road
- Roadway capacity upgrade along Johnson Ferry Road/Glenridge Drive
- Roadway capacity upgrade along Hammond Drive
- Interchange capacity upgrade at SR 400 and Hammond Drive
- Managed lanes along SR 400 between I-285 and McFarland Road in Forsyth County

1.2.1.2 Northwest I-75/I-575 HOV/BRT Project (Ongoing)

The Northwest Corridor Project is a collaborative project between Georgia DOT and GRTA. The proposed project currently under consideration provides for the extension of managed lanes, express bus, and TOLs on I-75 northbound from Akers Mill Road to north of Hickory Grove Road. Additionally, HOV lanes are also proposed on I-575 from the I-75/I-575 interchange to Sixes Road in Cherokee County. A draft EIS has been completed and a final EIS is under way. *revive285 top end* connects to this corridor.

1.2.1.3 ARC I-285 Alternatives Analysis

This study analyzed BRT and light-rail transit along I-285's top end. Both strategies were assessed for their ability to meet east/west travel demand and provide alternative modes of transportation from the Cumberland/Galleria to Perimeter Center and Doraville areas (and points between). On February 26, 2004, the ARC board selected a locally preferred alternative for the I-285 Transit Corridor Study: BRT. The transit corridor selected was approximately 12 miles in length and generally followed I-285, with 10 designated transit stations. The preliminary alignment ran from the Cumberland/Galleria area on the west through the Perimeter Center area and terminated at the Doraville MARTA station to the east. In the Perimeter Center area, BRT follows Hammond Drive; elsewhere along the corridor, BRT runs adjacent to I-285. In addition to HOV lanes, the BRT concept was incorporated in the region's *Envision6* plan, and will be further evaluated in build alternatives for *revive285 top end*.

1.2.1.4 ARC Regional Freight Mobility Plan

To address freight in a comprehensive manner, ARC developed a data-driven, policy-based Regional Freight Mobility Plan for the metro Atlanta area. The purpose of the study was to identify and prioritize improvements and strategies that accommodate and enhance mobility of both people and goods while mitigating the negative impacts on congestion, safety, environment, and quality of life. This study provides data with regards to key freight corridors and destinations for consideration relative to *revive285 top end*.

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The study specifically highlighted freight industry identified bottlenecks along the study corridor at I-285 and I-85, I-285 at Peachtree Industrial Boulevard, and I-285 at 75. In addition, this study suggests geometric improvements at interchanges to improve truck travel safety.

1.2.1.5 Georgia DOT Statewide Managed Lanes Study (Ongoing)

Georgia DOT is investigating the implementation of managed-lane strategies in the metro Atlanta area to address recurring congestion during peak periods, sustained mobility, funding shortfalls, and opportunities for public private partnerships. The purpose of this study is to identify feasible corridors for managed lane implementation and to identify projects, revenue streams, and a prioritization of projects. This study will provide data regarding effective lane management strategies in the metro Atlanta area.

1.2.1.6 Georgia DOT Statewide Truck Lanes Needs Identification Study (Ongoing)

The Georgia DOT Statewide Truck Lanes Needs Identification Study, currently under final review, explores the need and feasibility of implementing truck only lanes (TOLs) on sections of interstate and other limited-access highways across the state including I-285. Preliminary findings from the study conclude that truck lanes do not solve congestion along the corridors studied. In addition, the study does not recommend implementing standalone truck lanes. Finally, the study recommends managing truck eligibility in managed-lane systems.

1.2.1.1 Transit Planning Board (TPB) Vision

The TPB is a partnership created by the Atlanta Regional Commission, Metropolitan Atlanta Rapid Transit Authority, and Georgia Regional Transportation Authority that is charged with establishing and maintaining a seamless, integrated transit network for the Atlanta region. TPB's future vision for regional transit includes a light-rail solution along the top end of I-285 connecting to a regional light-rail transit system. Although not currently part of the Atlanta region's adopted long range plan (*Envision6*), the TPB vision includes LRT along I-75, I-285 North and I-85 North.

1.2.2 Policies

The following policies will be considered when identifying and evaluating alternatives for **revive285 top end**.

- ➔ Both Georgia DOT and ARC have adopted policies for managed lanes that apply to all freeways in the metro Atlanta area. These policies seek to mitigate congestion and maintain mobility by managing eligibility, pricing, and or accessibility in new managed lanes. Georgia DOT has gone a step further and stated that all new freeway lanes in the metro Atlanta area will be managed and that

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all existing general-purpose lanes on interstates and major state routes will remain free to the public when using public private initiatives as the implementation mechanism.

- Through-trucks are currently restricted from using I-75, I-85, and I-20 inside I-285 unless they are serving a destination inside I-285. Therefore, heavy trucks rely on I-285 to travel through the metro Atlanta area.
- Georgia DOT, GRTA, and ARC are developing a regional transportation investment strategy for future transportation planning that clearly targets congestion and mobility. The purpose of the strategy, as defined in the Memorandum of Understanding signed by each agency, is to direct the efficient use of state and federal transportation resources and to target longer-term solutions such as land use.

2. PROPOSED PROJECT

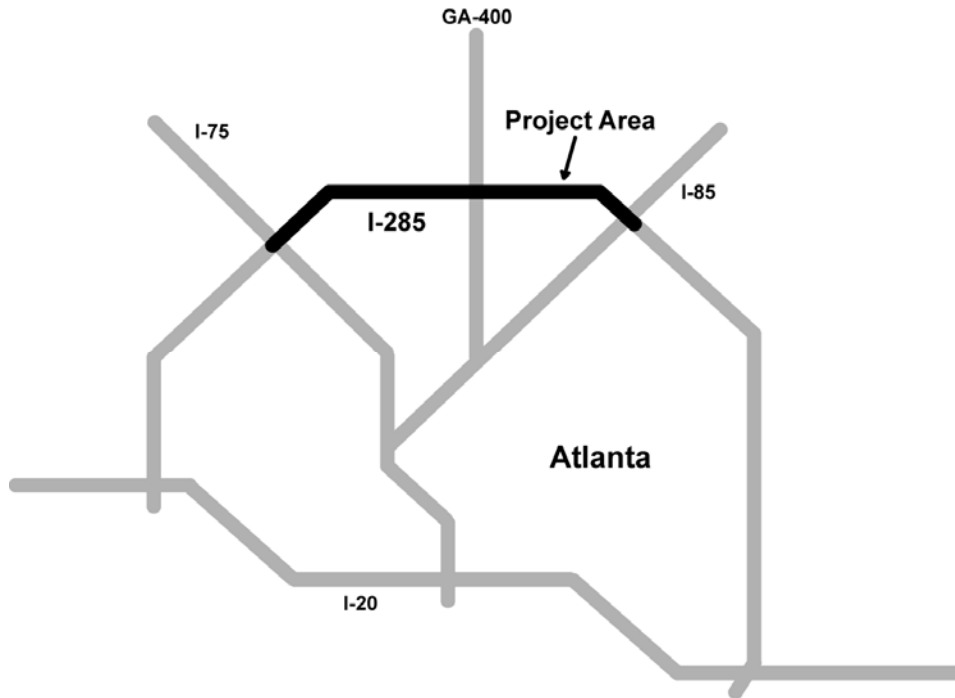
This project includes the development of an overall corridor concept for I-285's top end, incorporating each of the separate projects currently planned and programmed for the corridor. These include the addition of managed lanes, BRT, and operational improvements, including interchange improvements at Roswell Road, SR 400, Ashford Dunwoody Road, and Riverside Drive. Alternatives under consideration include: (1) no action or no-build; (2) transportation systems management; and (3) various build alternatives, including managed lanes, BRT, and operational improvements along I-285, as well as potential improvements on crossing and intersecting routes along the corridor.

2.1 Project Corridor

The **revive285 top end** corridor is developed with a wide range of land uses. Residential development along the corridor is mainly low- to medium-density housing between the Chattahoochee River and the Roswell Road interchange, transitioning to a mixture of apartments, townhouses, and high-rise condominium buildings in the Sandy Springs and Perimeter Center areas, then to medium-density residential with some multifamily residential properties in the Dunwoody and Doraville areas. Commercial and office land uses, although found throughout the corridor, are concentrated in four activity centers: the Cumberland/Galleria, Perimeter Center, Sandy Springs, and Peachtree Industrial Boulevard/Doraville areas. The area of the Doraville General Motors plant will be redeveloped with a mix of uses, while the Cumberland/Galleria and Perimeter Center areas feature high-density office, commercial, and institutional uses, all surrounding regional shopping malls. Future growth with more residential properties and higher densities is both highly anticipated and desired.

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Figure 2.1 Project Location



2.2 Logical Termini

The project corridor limits illustrated in Figure 2.1 Project Location are determined to be the project's logical termini by FHWA, FTA, Georgia DOT, and GRTA. Logical termini are defined as rational endpoints for a transportation improvement and rational endpoints for a review of environmental impacts. The most common termini are points of major traffic generation, especially intersecting roadways. The travel patterns and configuration of the regional freeway system effectively combine traffic from I-285 west and I-75 north to the top end of I-285. Similarly, traffic from I-285 east and I-85 north are also combined to the top end of I-285. As a result, the confluence of I-285 and I-75 serves as the logical project termini to the west, and the confluence of I-285 and I-85 serves as the logical project termini to the east.

Furthermore, to facilitate meaningful evaluation of alternatives and to avoid commitments to transportation improvements before they are fully evaluated, NEPA guidance requires that the action evaluated shall: (1) connect logical termini and be of sufficient length to address environmental matters on a broad scope; (2) have independent utility or independent significance (i.e., be usable and be a reasonable expenditure even

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if no additional transportation improvements in the area are made); and (3) not restrict consideration of other reasonably foreseeable transportation improvements.

The proposed project limits connect logical termini and include a project length of at least 12 miles - an appropriate length to address environmental impacts and benefits on a broad scope. While the proposed project will benefit from coordination with other planned projects in the region, it does not depend on other transportation improvements in the area to provide independent significance. Finally, the proposed project will not restrict consideration of other reasonable foreseeable transportation improvements in the area. In fact, specific consideration will be given to other potential improvements such as the possible additional of a regional light rail transit system.

3. PROJECT NEEDS

The project needs and objectives described in Section 1 are the result of much consideration of current and anticipated future travel demands in the corridor. These primary transportation needs are described in the following sections.

3.1 Traffic Congestion

3.1.1 Current Demand

The project corridor serves both as the regional bypass for through traffic and as a primary commuting corridor to major employment centers. According to Georgia DOT traffic count data, this corridor is one of the most heavily traveled corridors in Georgia, serving between 200,000 vehicles and 250,000 vehicles per day. According to ARC *Envision6*, the project corridor contains about 4 percent of the regional lane-miles, serves 8 percent of regional vehicle miles traveled, and experiences 14 percent of the regional delay. It also carries 17 percent of regional freeway/expressway traffic and 10 percent of regional truck traffic. Current demand for the corridor has resulted in high levels of congestion for travelers, especially during the peak hours.

3.1.1.1 Peak-Period Congestion

According to the I-285 Strategic Implementation Plan, the entire corridor experiences congestion during both a.m. and p.m. peak periods, and both a.m. and p.m. peak periods last longer than typical periods. During the p.m. peak period, westbound I-285 queues from I-75 routinely extend to Roswell Road, which is more than 5 miles. During the p.m. peak period, eastbound I-285 queues from I-85 routinely extend to Ashford Dunwoody Road, which is more than 5 miles.

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In the p.m. peak period, which is generally from 3:30 p.m. to 7:00 p.m., the majority of the I-285 westbound volume flows to I-75 northbound or continues on I-285 westbound. Both of these movements are currently operating at maximum capacity. I-75 northbound is also currently operating at capacity in the p.m. peak period. Lack of capacity on I-75 northbound and I-285 westbound is a contributing cause of congestion on the I-285 top end westbound lanes during the p.m. peak period.

The I-285 Strategic Implementation Plan indicates that the high peak-hour volumes reflect a.m. traffic headed toward high-density employment areas at the Perimeter Center and Cumberland/Galleria areas. A detailed analysis of this congestion reveals insufficient capacity of the receiving roadways to accommodate traffic from the top end of I-285.

During the a.m. peak period, which is generally from 7:00 a.m. to 9:00 a.m., I-285 is congested in both directions leading to the Perimeter Center area, especially from SR 13 (Buford Highway) to SR 400 in the westbound direction and from New Northside Drive to SR 400 in the eastbound direction. During the p.m. peak period, the westbound direction of I-285's top end experiences more congestion than the eastbound direction, especially from Chamblee Dunwoody Road to I-75.

The section of I-285 between Paces Ferry Road and Cobb Parkway is congested in both directions in both peak periods. Some other congested areas on the top end of I-285 are between Roswell Road and Riverside Drive (a.m. – eastbound direction), Peachtree Dunwoody Road and Ashford Dunwoody Road (a.m. – westbound direction), Ashford Dunwoody Road and Chamblee Dunwoody Road (a.m. – westbound direction), and between Peachtree Industrial Boulevard and Buford Highway (a.m. – westbound direction).

3.1.1.2 Level of Service

Traffic operating conditions are typically described through a level of service (LOS) rating of six levels from A through F. The scale ranges from LOS A, which corresponds to free-flowing traffic and minimal delays, to LOS F, which corresponds to a complete breakdown in traffic flow. The table below provides an overview of the average LOS along the corridor during the peak hours of congestion for different locations. This table demonstrates the directional split of congestion along the corridor.

Table 3.1 Level of Service

Location Along I-285	AM		PM	
	Eastbound	Westbound	Eastbound	Westbound
Between Buford Highway (SR 13) and Peachtree Industrial Boulevard (SR 141)	LOS C	LOS F	LOS F	LOS D
Between I-75 and New Northside Drive	LOS F	LOS C	LOS C	LOS E

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Source: I-285 Strategic Implementation Plan

3.1.1.3 Intensity, Duration and Extent

The ARC Congestion Management Update (2005) classifies congestion using intensity, duration, and extent. Intensity is measured in terms of a travel time index (TTI), which is defined as the ratio of congested travel time required to complete a trip to the travel time required to complete the same trip during off-peak hours. This score is measured for peak period travel, with the AM peak period between 6:00 a.m. to 10 a.m. and the PM peak period between 3:00 p.m. to 7:00 p.m. The TTI for the western half of the study corridor between I-75 and SR 400 ranges from 2.0 to 2.5, while the TTI for the eastern half of the study corridor ranges from 2.5 to 3.0, which is the second highest in the region; only the Downtown Connector (I-75 in downtown Atlanta) has a higher estimated TTI than the eastern half of the study corridor. The fact that the eastern half of the study corridor has a higher TTI than the western half may suggest that most trips do not travel through the entire top end corridor.

Duration is measured in terms of the total number of hours that a facility experiences congestion (below LOS E or V/C higher than 1.0). [The duration measure includes both directions, although only one direction may be congested during the a.m. and the other during the p.m. In addition, both directions could be congested throughout the day.](#) The duration of congestion for the western half of the study corridor ranges from six hours to eight hours, which is a moderate range when compared to the rest of the region. For the eastern half of the study corridor, the duration of congestion is much more severe and ranges from 10 hours to 12 hours. This ranks as the second worst tier in the region; only the Downtown Connector has a longer duration of congestion, with more than 12 hours per day. The data also suggest that many trips using the eastern half of the study corridor do not continue through the western half of the project corridor.

Extent is defined as the number of people or vehicles in the region affected by congestion or the spatial distribution of congestion. The extent of congestion in the western half of the study corridor is moderate and ranges from 3 percent to 4 percent of total vehicles in the region. For the eastern half of the corridor, extent ranges from 6 percent to 8 percent, which is the second highest in the region; only the section of I-75 from I-285 to its split with I-575 has a larger extent of congestion.

3.1.2 Future Demand

Based on local jurisdictional land use plans, future land use patterns are expected to be similar to existing patterns with proposed density (both employment and population) increases in the activity centers. This future growth will likely result in increased travel demand along the corridor.

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3.1.2.1 Socioeconomic Conditions

The 10-county Atlanta region has grown significantly between 1990 and 2000, adding approximately 915,000 persons and 564,000 jobs. This is an increase of 36.4 percent and 41.4 percent, respectively. This rapid growth is projected to slow over the next 30 years. In addition, the rate of employment growth is anticipated to outpace the rate of population growth in two of the three future decades. The table below provides a historical and future perspective of population and employment growth in the 10 county area surrounding the study corridor.

Table 3.2 10-County Population and Employment (1970–2030)

Year	Persons	% Increase	Employees	% Increase
1970	1,500,823	N/A		N/A
1980	1,896,277	26.3	901,157	N/A
1990	2,514,066	32.6	1,363,723	51.3
2000	3,429,379	36.4	1,928,039	41.4
2010	4,038,777	17.8	2,168,669	12.5
2020	4,591,877	13.7	2,597,629	19.8
2030	5,261,534	14.6	3,086,304	18.8

Sources: U.S. Census (1980–2000); ARC (1970 and 2010–2030 Population Estimates); Georgia Department of Labor (1980–2000); ARC (1980 and 2010–2030 Employment Estimates)

A significant portion of population and employment growth in the Atlanta metropolitan statistical area (MSA) has occurred in the MSA’s favored quarter. The favored quarter is defined as the radial quarter of an MSA where the bulk of executive housing and white collar jobs are located, and where the largest portion of new housing growth, both executive and more affordable, is developed. Atlanta’s favored quarter largely equates to the locally named “Golden Triangle,” the area north of downtown between I-75 and I-85, anchored by SR 400 and the Chattahoochee River. The **revive285 top end** corridor runs east-west through the approximate center of this area.

Over the past 10 years, more than 70 percent of the region’s job growth has occurred within the favored quarter, while only 54 percent of the region’s population growth occurred in this area, illustrating a worsening gulf between where Atlanta residents live and work. This widening gulf is fueling demand for housing closer to employment, especially closer to larger activity centers such as the Cumberland/Galleria and Perimeter Center areas.

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Total regional employment is expected to grow by almost 70 percent by 2030. The I-75, SR 400, Peachtree Dunwoody Road, Ashford Dunwoody Road, and Peachtree Industrial Boulevard interchanges are surrounded by major regional employers and provide primary travel routes to other regional employment locations.

3.1.2.2 Trips

The U.S. Bureau of Census' Transportation Planning Package provides information related to work trips. For the **revive**285 *top end* corridor, people are commuting into all areas of the corridor from all 13 counties in the Atlanta region, but more than half are commuting from the northern side. In addition, although workers are commuting to destinations throughout the entire study area, the Cumberland/Galleria and Perimeter Center areas attract the majority of trips. With the anticipated population and employment growth, these trip patterns are likely to increase and intensify.

According to ARC's *Envision6*, the total number of person trips attracted to the entire study area that are produced outside of the corridor is projected to increase from 596,000 trips in 2005 to about 714,000 trips in 2030, which represents an increase of almost 20 percent. The total number of person trips produced by the entire study area that are attracted outside of the corridor is projected to increase from 296,000 trips in 2005 to about 354,000 trips in 2030, which represents an increase of almost 20 percent. At the same time, the increase in work trips for the same market is almost 28 percent.

The areas expected to have the greatest rate of growth in both trip production and trip attraction are the areas around Shallowford Road and Cotillion Drive near the city of Doraville. The growth in work trips in this market is approximately 42 percent.

3.2 Travel Choice

As corridor congestion increases, fueled by growth and development in the study area, there will be a need to provide multimodal options to and between activity centers to meet increased travel demands. Although approximately 85 percent of trips in the corridor are anticipated to be by automobile, opportunities exist to enhance mobility options and must be explored.

3.2.1 Transit

The corridor currently provides general-purpose highway lanes with no special provisions for carpools, transit, or other alternative means of travel. Several transit agencies provide service in the vicinity of the project corridor, including Metropolitan Atlanta Rapid Transit Authority (MARTA), Cobb Community Transit

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(CCT), and Gwinnett County Transit (GCT). GRTA also provides express bus service (Xpress) on adjacent corridors, with plans for future service on the I-285 corridor. Existing transit services range from multicounty heavy rail and bus systems to local activity-center-based shuttle services. Although there is currently no east-west high-capacity transit service in the project area, I-285 Alternatives Analysis indicates a potential range of 15,000 new riders to 40,000 new riders for all transit strategies considered in that study.

3.2.2 Low Vehicle Availability

There are several areas in the project corridor with a high rate of households without automobiles. These areas are more prevalent east of Roswell Road. Census tract 212.04 in DeKalb County has a 31 percent rate of households in the study area without automobiles. This tract is located in the southeastern section of the study area and is roughly bounded by New Peachtree Road to the north, Shallowford Road and Buford Highway to the east, Dresden Drive to the south, and Clairmont Road to the west.

Census tract 101.10, located in Fulton County, has an 18 percent rate of households without automobiles. This tract is in the central part of the study area and is roughly bounded by Mount Vernon Highway to the north, the DeKalb County line to the east, I-285 to the south, and Roswell Road to the west.

Census tract 212.09 in DeKalb County has a 15 percent rate of households without automobiles. This tract is located in the south-central section of the study area and is roughly bounded by West Nancy Creek Drive, Harts Mill Road, and Chamblee Dunwoody Road to the north; Peachtree Road and Peachtree Industrial Boulevard to the east; a section of Johnson Ferry Road to the south; and Ashford Dunwoody Road to the west.

3.3 System Linkages

I-285 is a circumferential interstate encompassing the city of Atlanta and connecting the region's radial expressways. As part of *Envision6*, ARC approved a Regional Strategic Transportation System (RSTS). **revive285 top end** is part of the RSTS and is classified as a regional freight corridor and a priority corridor for mass transit implementation.

3.3.1 Regional Highway Network

The study corridor is an important link between the major interstates of I-85 and I-75 and connects several state highways, including SR 400, SR 13, SR 9, and SR 141. This facility is one of the only continuous east-to-west connections in the north metro Atlanta area.

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There are currently managed lanes on two intersecting highways, I-75 and I-85. I-285's top end is a potential link for these existing managed lanes and others planned on SR 400 and I-75 north of I-285. HOV counts performed in 2005 indicate that an average of 22 percent of vehicles include carpools of two or more individuals, indicating good potential for moving more people in the region via these managed/HOV facilities.

3.3.2 Transit Network

The current MARTA service area includes Fulton and DeKalb counties. Although more than 80 percent of the **revive**285 top end corridor is in the MARTA service area, no service along the I-285 top end is provided by MARTA. Although demand exists¹, current congested conditions along I-285's top end are not conducive to effective express bus service. Several MARTA routes parallel I-285 for short segments and provide limited east-west connectivity. There are nine east-west bus routes that enter the project corridor limits. Traveling from New Northside Drive to Pleasantdale Road at I-85 on the MARTA bus system currently requires a minimum of seven transfers. Using a combination of bus and rail service, a similar trip involves a minimum of three transfers.

CCT currently services Cobb County, although limited bus service is operated in Fulton County. Similar to MARTA, no service along the I-285 top end is provided. CCT Route 65 serves east-west travel from Marietta in Cobb County to the Perimeter Center area in DeKalb County and follows Roswell Road, Johnson Ferry Road, and Hammond Drive to the Dunwoody MARTA station. Service to the Perimeter Center area is available only during peak hours, and the route terminates at Lower Roswell Road during the off-peak period.

GCT services Gwinnett County, with several express bus routes to midtown and downtown Atlanta. Although express routes pass through the eastern side of the I-285 project corridor on I-85, no GCT service is provided along I-285's top end. Although demand exists, current congested conditions along I-285's top end are not conducive to effective express bus service. Additionally, no parallel east-west service is provided by GCT, since express routes are all radial.

The entire metro Atlanta region falls in the GRTA Xpress bus service area. Currently, Xpress operates one route (428 - Panola Road to the Perimeter Activity Center) in the I-285 corridor and perpendicular routes on I-75, SR 400, and I-85. There are two planned Xpress routes that will provide additional service within the project corridor limits, including routes 407 and 409. Start dates for these services are being studied by GRTA.

¹ The ARC Transit Alternatives Analysis indicates demand for transit along I-285.

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Planned transit improvements either along or connecting to the corridor include Bus Rapid Transit (BRT) on I-285 from the Cumberland Activity Center (near I-75 north) to the Perimeter Activity Center (near SR 400); Express Bus on I-75 north; and Arterial BRT on SR 13 (Buford Highway).

3.3.3 Freight Network

Because through-trucks are not allowed to travel inside I-285 on I-85, I-75, and I-20, the I-285 perimeter takes on much of the regional truck traffic. ARC's Freight Study has found Atlanta to have 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. Served by major interstates and railroads, Atlanta is a major transportation and distribution center. There are multiple industrial areas within Atlanta, two of the biggest being the Fulton Industrial area southwest of the city and the I-85 corridor in northeastern Atlanta. The Fulton Industrial area consists of large, older commercial facilities, while the I-85 corridor combines older developments at the perimeter with new developments that stretch outward, away from the city along I-85. These industrial areas are connected via I-285. According to ARC *Envision6*, the project corridor carries 10 percent of all regional truck traffic.

3.4 Safety

The study corridor experiences high volumes of traffic and congestion, weaving and merging traffic and a mixture of vehicle types which contribute to crash rates higher than the statewide average for similar roadways. In addition, there are elements of the corridor that do not meet current design standards, but could be upgraded or replaced as part of any reconstruction of the corridor.

3.4.1 Crash Rates and Locations

Table 3.1 presents a comparison of crash rates by type on I-285 with the statewide average. The table shows that although fatal crashes, on average, are less frequent on I-285, the frequency of all crashes is significantly higher (more than 30 percent) than the statewide average. The frequency of injury crashes on I-285 is also about 13 percent higher than the statewide average. In addition, specific segments of I-285 exceed the statewide average rates on urban interstates for all crashes, including fatality crashes. The lower average fatality rate is consistent with the slower speeds experienced during the many congested hours of each day.

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Table 3.3 I-285 and Statewide Average Crash Rates by Type (2001 – 2005)

Type	I-285			Statewide Average
	Individual Segment		Corridor	
	Minimum	Maximum	Average	
All Crashes	115.1	444.4	261.6	198.8
Fatality Crashes	0.17	2.06	0.44	0.61
Injury Crashes	19.7	91.1	54.2	48

Source: Georgia DOT

Note: Rates are in number of crashes per 1,000,000 VMT

According to the I-285 Strategic Implementation Plan, injury crashes appear to have the same geographic distribution as total accidents. Most crashes involve single-occupant vehicles and occur at interchanges. Truck crashes tend to cluster around freeway-to-freeway interchanges.

3.4.2 Pavement and Bridge Conditions

The Georgia DOT PACES database documents the amount and type of surface distress on a roadway based on standardized terminology. Ratings are done for each mile (or partial mile) by selecting a sample section for cracking distresses representative of the pavement condition for that rating segment. A rating of 70 or below indicates that the section is failing and should either be rehabilitated by deep milling (6 inches to 8 inches) and inlaying or be totally replaced. Recent evaluations by Georgia DOT indicate that the eastbound section of I-285's top end between Peachtree Dunwoody Road to Henderson Mill Road has a rating of 56, indicating a failing condition that should be rehabilitated or replaced.

In addition, there are several locations along I-285 with substandard shoulders. The rating provided for shoulder conditions is based on the AASHTO rating system for standard shoulder widths. The locations with substandard shoulders are primarily those where widening has occurred beneath existing bridges and include the bridge locations at I-285 and:

➔ SR 400

➔ I-85

Need and Purpose Statement

- Northside Drive/New Northside Drive
- Riverside Drive
- Roswell Road
- Ashford Dunwoody Road
- Chamblee Dunwoody Road/North Peachtree Road
- Powers Ferry Road (east and west)
- Mount Vernon Highway
- Southern Railway Railroad

Bridge structures were reviewed to identify the overall existing bridge conditions. Georgia DOT regularly inspects bridges throughout the state and keeps a detailed database of major features and conditions called the Georgia DOT Bridge Sufficiency Database. A bridge sufficiency rating of 50 or below indicates the need for rehabilitation. There are currently two bridges in the project corridor with a sufficiency rating of less than 50: the I-285 ramp to I-75 over Cumberland Parkway and Rottenwood Creek (49.45 rating) and the I-285 bridge over Powers Ferry Road (48.33 rating). Five bridges have a sufficiency rating between 50 and 70: the I-285 bridges over Cobb Parkway, I-75, and the Chattahoochee River; the Roswell Road bridge over I-285; and the I-285 westbound ramp to I-75 southbound.