

# Georgia on the Move

## Atlanta to Chattanooga High Speed Ground Transportation Study

### Introduction

The Georgia Department of Transportation (GDOT), with the Tennessee Department of Transportation (TDOT), the Federal Railroad Administration (FRA), and the Federal Highway Administration (FHWA), is continuing a study of high speed ground transportation (HSGT) between Atlanta and Chattanooga. This is the second in a series of newsletters to inform stakeholders and the public about this study as it progresses. In this newsletter you will find information about the four alternative alignments that are proposed for further study in a Tier 1 Environmental Impact Statement (EIS), and the process by which those alignments were selected.



### Project Overview

The introduction of high speed ground transportation (HSGT) along the 110-mile corridor between Atlanta and Chattanooga is intended to provide a high capacity alternative to roadway and air travelers. The study involves the development of a Tier 1 Environmental Impact Statement (EIS) to ensure that alternatives for the proposed action are evaluated, including a no-build alternative; that transportation, social, economic, and environmental impacts are assessed; and that public involvement and comments are solicited to assist the decision-making process.

The Tier 1 EIS will evaluate potential HSGT alternatives, which include general station locations, and storage and maintenance facilities. The Tier 1 EIS will build upon previous Atlanta – Chattanooga HSGT studies. The Tier 1 EIS will be at a conceptual level of engineering and environmental detail. It will provide the FRA, FHWA, GDOT, and TDOT with sufficient information to determine a general alignment, general station locations, and define the requirements to build and operate an Atlanta – Chattanooga HSGT system.

### Scoping Meetings Update

One of the first steps in preparing an EIS is Scoping where the public, stakeholders, and government agencies provide input on the following:

- The study's purpose and need (see page 2);
- Suggested alignment alternatives for further study;
- The technical evaluations to be undertaken to determine how environmental impacts will be assessed;
- How the alternatives will be selected for further study; and
- The opportunities for public involvement.

Agency Scoping meetings were held with federal, state, and local agencies in Atlanta and Chattanooga in September 2007. Public Scoping open houses were also held in Powder Springs, Rome, and Chattanooga. Both sets of Scoping meetings provided an overview of the study and opportunities for input. The study team received numerous comments, questions, and suggestions during these meetings, and throughout the formal 30-day comment period.

After the close of the comment period, GDOT evaluated all the input received from agencies and the public regarding the purpose and need, methodology for the study, station locations, alignments, technology, and environmentally sensitive issues and made changes to the study as a result. These changes included the addition of new concept alignments to be considered as part of the analysis and enhancements to future public and agency coordination efforts.

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## Project Purpose and Need

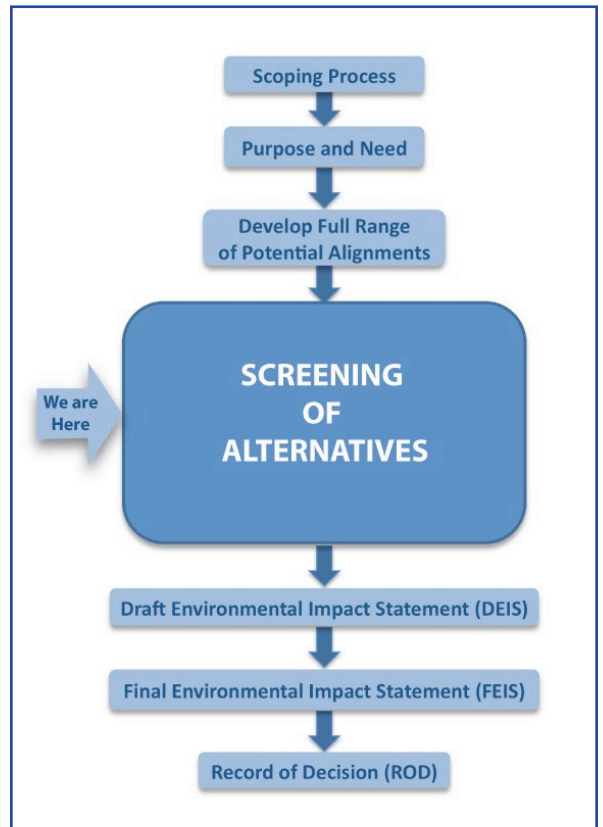
According to the U.S. Department of Transportation, a Purpose and Need Statement is one of the most important parts of an EIS. They explain, "It establishes why the agency is proposing to spend large amounts of taxpayers' money while at the same time causing significant environmental impacts. [It] explains to the public and decisionmakers that the expenditure of funds is necessary and worthwhile... and should justify why impacts are acceptable based on the project's importance."

Based on analysis of previous studies and through feedback from the public and agencies during the Scoping Process, the study team finalized the Purpose and Need Statement for the project.

**The purpose of the Atlanta – Chattanooga High Speed Ground Transportation (HSGT) project is to enhance intercity passenger mobility in northwest Georgia and part of Tennessee, by expanding passenger transportation capacity, increasing mobility, and providing an alternative to highway and air travel that is safe, reliable, and cost-effective while avoiding, minimizing, and/or mitigating impacts on neighborhoods and the environment.**

The needs for the HSGT project are summarized as follows:

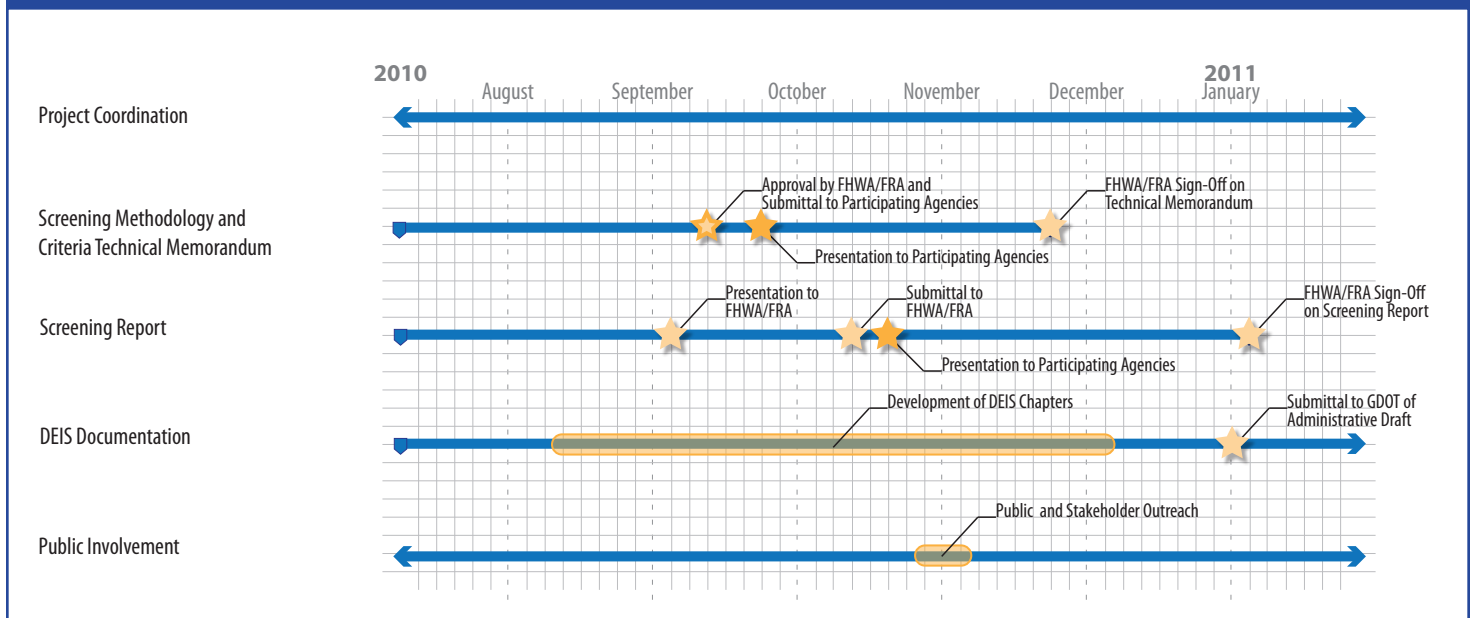
- Address travel demand and population growth
- Provide high capacity versus highway capacity
- Enhance airport access
- Maintain or improve air quality
- Address safety deficiencies in the study area
- Support economic development
- Reduce energy consumption
- Enhance intermodal connections
- Address social demands of various population groups
- Support comprehensive land use planning and smart growth initiatives
- Provide a link in the southeast U.S. region HSGT system



### Tier 1 EIS Process

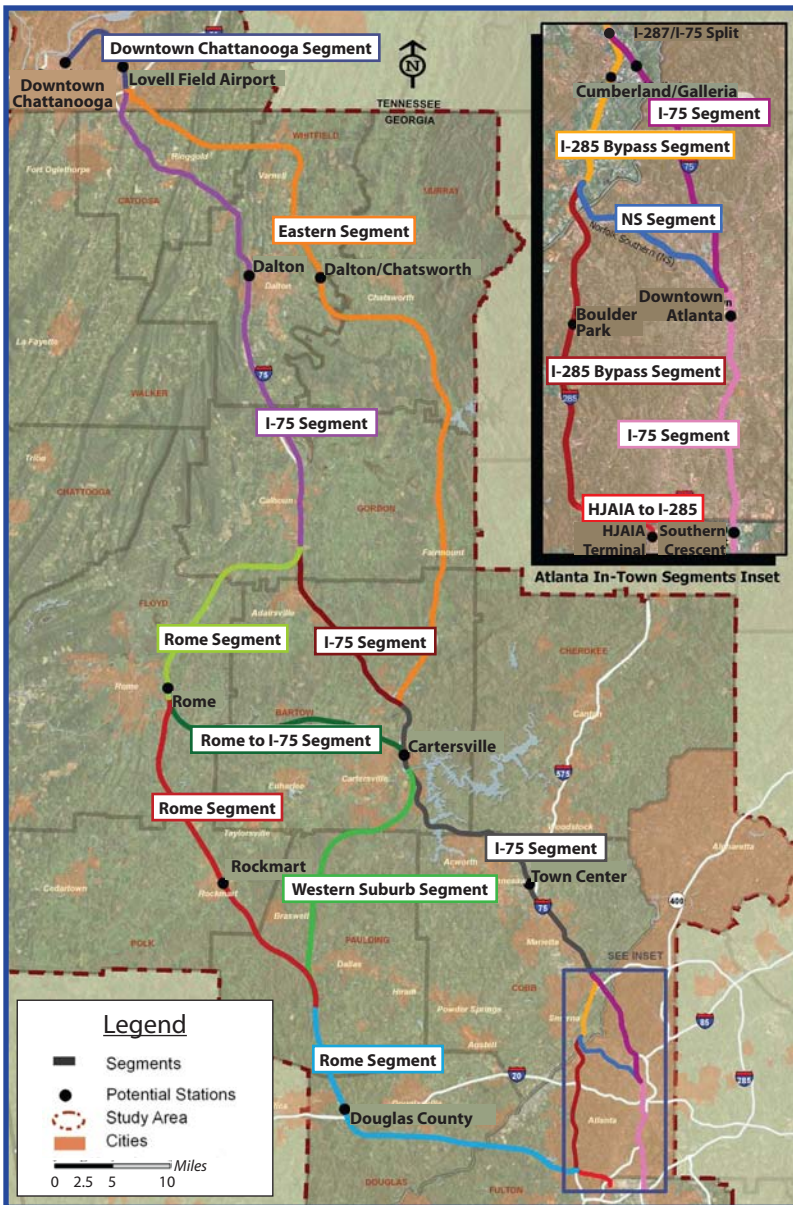
The remaining steps in the Tier 1 EIS process include the environmental impact evaluation, preparation of a Tier 1 Draft EIS (DEIS), presentation of findings to the public and agencies, preparation of the Tier 1 Final EIS (FEIS), and finally release of a Record of Decision (ROD) by FRA and FHWA.

## Project Schedule



## Alignment Alternatives Evaluated in the Scoping Process

Prior to the Scoping Process, the study team developed a series of potential HSGT “segments” that could be combined in various configurations to connect Downtown Atlanta and Hartsfield-Jackson Atlanta International Airport (HJAIA) to Downtown Chattanooga. Each segment represents a potential connection that could be made between key destinations in Georgia and Tennessee. The segments are shown in the map below. These segments were reviewed, analyzed and developed into full-length alignments during the Scoping Process.



Map of Alternatives Evaluated in the Scoping Process

The Scoping Process also gave the public and agencies an opportunity to review and comment on the method by which the long list of alternatives would be reduced. This process is called “screening” where suggested alternatives are evaluated against a series of agreed upon criteria. This study utilized a two-step screening process to eliminate certain suggested alternatives, and identify those that warrant further consideration in the Tier 1 EIS. The two-step approach to screening consisted of the following:

- **Step 1:** An initial corridor screen to advance the best performing corridor(s) based on transportation mobility and consistency with the project’s Purpose and Need Statement, and
- **Step 2:** A second screen of alignment(s) within the remaining corridor(s) that provided a more detailed assessment relative to ridership, mobility, environmental, and financial/economic criteria.

Based on the results of the screening process the alignments discussed had the best overall performance.

### Four Alignment Alternatives to be Advanced in the Draft Tier 1 EIS

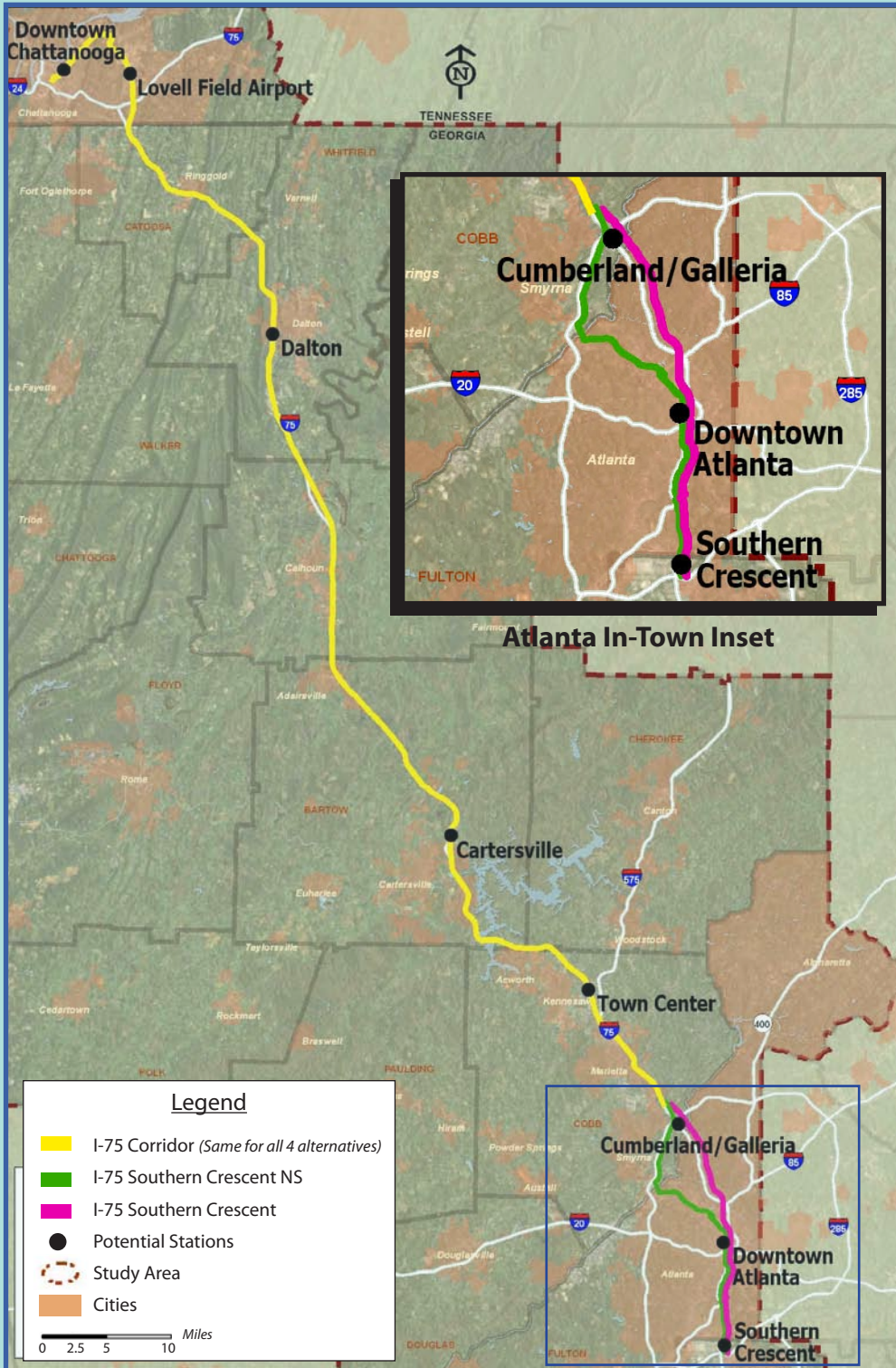
Four alignment alternatives, all generally following I-75, are proposed to advance in the Tier 1 DEIS analysis. South of the I-285/I-75 split, two alignments follow the Norfolk Southern (NS) railroad corridor and two continue along I-75 to Downtown Atlanta.

The four alignment alternatives (shown on the next page) are as follows:

- I-75 Median Southern Crescent NS
- I-75 Non-Median Southern Crescent NS
- I-75 Median Southern Crescent
- I-75 Non-Median Southern Crescent

These alignments are being presented to the public and stakeholders through this newsletter and at public information meetings to be held in November 2010 (see page 6). It is important that the public understand how these selections were made and have an opportunity to review and comment.

# Alignment Alternative Map



## I-75 Median and Non-Median Southern Crescent Norfolk Southern (NS) Alignment

The two I-75 Southern Crescent NS Alignments begin on the east side of HJAIA at the proposed Southern Crescent station immediately adjacent to I-75, and follow I-75 to a point south of the proposed Downtown Atlanta station. Using the existing NS rail corridor northwest to I-285 into Cobb County, the alignment continues along I-285 to the proposed Cumberland/Galleria station. Heading north, the alignment occupies the right-of-way of I-75 north of the I-285/I-75 junction utilizing the interstate's median (Median Alignment), or the broader I-75 corridor area (Non-Median Alignment), to continue to the Town Center, Cartersville, Dalton, and Lovell Field (Chattanooga Metropolitan Airport) stations, and terminating at the Downtown Chattanooga station.

## I-75 Median and Non-Median Southern Crescent Alignment

Like the previous alignments, the two I-75 Southern Crescent Alignments begin on the east side of HJAIA at the proposed Southern Crescent station immediately adjacent to I-75, and follow I-75 to a point south of the proposed Downtown Atlanta station. The alignment continues northeast to I-75 turning northwest into the median of I-75 to the proposed Cumberland/Galleria station. Heading north, the alignment occupies the right-of-way of I-75 and utilizes the interstate's median (Median Alignment), or the broader I-75 corridor area (Non-Median Alignment) to continue to the Town Center, Cartersville, Dalton, and Lovell Field stations, and terminating at the Downtown Chattanooga station.

## High Speed Ground Transportation Technologies

### Steel-Wheeled

- Steel-wheel vehicles on steel rail.
- Electric-powered locomotives receive energy from overhead wires.
- Operates on a grade-separated right-of-way, which eliminates potential points of conflict with pedestrians or other non-rail vehicles.
- Technically capable of operating in a shared use environment with freight and passenger trains.
- Station spacing can be as short as 30 miles, but averages 50-75 miles.
- Average operating speed of 180 mph, but capable of 220 mph average speed. Operating speeds in excess of 320 mph are possible.
- Currently utilized throughout Europe and Asia.
- Appropriate for intercity use, and can provide a travel time competitive with automobile travel within the Atlanta-Chattanooga corridor.



Canadian Steel-Wheeled



Japanese Steel-Wheeled



Spanish Steel-Wheeled

### Maglev (Magnetic Levitation)

- Uses “attractive” or “repulsive” electromagnetic forces to lift and propel a train along a guideway, with power supplied to the magnets through the track.
- Allows vehicles to hover or float a small distance above the guideway, eliminating friction and rolling resistance.
- Operates on a grade-separated right-of-way, which eliminates potential points of conflict with pedestrians or other non-rail vehicles.
- Systems in operation are designed for maximum operating speeds of 310 mph. A Japanese Maglev train has reached speeds of 360 mph.
- No Maglev intercity systems are currently in service, but a commercial track in China and a test track in Germany are in operation.
- Appropriate for intercity use, and can provide a travel time competitive with automobile and air travel within the Atlanta-Chattanooga corridor.



German Maglev



Japanese Maglev

## Project Team

### Georgia DOT

**Erik Steavens**  
 Director of Intermodal  
 Programs  
 T: 404-347-0573  
 esteavens@dot.ga.gov

**Glen Bowman, P.E.**  
 State Environmental  
 Administrator  
 T: 404-631-1101  
 gbowman@dot.ga.gov

**Alan Ware**  
 Project Manager  
 T: 404-631-1226  
 alware@dot.ga.gov

### AECOM

**Sheldon Fialkoff**  
 Consultant Project Manager  
 T: 404-946-9536  
 shelly.fialkoff@aecom.com



## High Speed Ground Transportation Public Information Meetings

You are invited to attend a public information meeting to better understand the travel opportunities for the corridor, and provide your opinion on potential high speed rail alternatives to connect Atlanta to Chattanooga. With your help GDOT and its partners hope to create a long-term plan that will increase travel choices and access in this critical part of the southeast region. Please attend one of the three meetings planned in November.

### Chattanooga, TN

#### Thursday, November 4

Regional Planning Agency  
1250 Market Street  
Chattanooga, TN 37402  
First Floor, Room 1A  
6:00 p.m. - 8:00 p.m.  
(presentation at 6:30 p.m.)

### Dalton, GA

#### Monday, November 8

Dalton State College  
650 College Drive  
Dalton, GA 30720  
James Brown Center, Room 105  
6:00 p.m. - 8:00 p.m.  
(presentation at 6:30 p.m.)

### Atlanta, GA

#### Tuesday, November 9

St. Mark United Methodist Church  
781 Peachtree Street NE  
Atlanta, GA 30308  
Fellowship Hall  
6:00 p.m. - 8:00 p.m.  
(presentation at 6:30 p.m.)

### Can't attend a meeting?

Submit your comments online at [www.atl-chatt.org/CommentForwardAdd.do](http://www.atl-chatt.org/CommentForwardAdd.do)

### Contact Us

#### Georgia Department of Transportation

One Georgia Center  
600 West Peachtree Street NW  
Atlanta, Georgia 30308  
P: (404) 631-1990  
F: (404) 631-1844  
HSGT@dot.ga.gov  
[www.atl-chatt.org](http://www.atl-chatt.org)