

**APPENDIX C:**

**CONTROL POINTS TECHNICAL MEMO**



# ***THIRD INFANTRY DIVISION HIGHWAY CORRIDOR STUDY***

## **Task 5 Control Points**

### **Draft Technical Memorandum**

#### Background

Section 1927 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) (P.L. 109-59) requires “a report that describes the steps and estimated funding necessary to designate and construct a route for the 3rd Infantry Division Highway,” extending from Savannah, Georgia to Knoxville, Tennessee, by way of Augusta, Georgia.

This technical memorandum recommends Control Points for the 3<sup>rd</sup> Infantry Division Highway corridors along with supporting justification and the rationale for the recommendations. SAFETEA-LU specified that the route should link Savannah, GA, Augusta, GA, and Knoxville, TN. The Control Points are to be near the cities listed in the legislation, plus other points if warranted. They are defined as the end of a section of highway improvement of independent utility that are near the cities cited in the statute.

While the legislation requires that potential corridors connect the cities identified, the task order for this study included a potential Control Point at Lavonia, Georgia. Lavonia represents another control point that is defined as a section of highway improvement of independent utility but is not near the cities cited in the statute. The intent of this Control Point was to facilitate the development of corridors between the cities noted in the legislation while allowing consideration of corridors which would avoid the Great Smoky Mountains National Park. Input from the Expert Working Group (EWG) was considered during the development of the Control Point recommendations.

#### Expert Working Group (EWG) Input

The project includes coordination with an Expert Working Group (EWG), or a panel of area officials and industry leaders to help guide the project. The EWG serves as a sounding board to weigh technical options, examine issues from multiple perspectives and, by drawing upon its collective experience, help the team solve problems.

The initial meeting with the EWG was held on September 16, 2010, in Atlanta, GA. At the meeting, EWG members provided information and suggestions for the ICF Team to consider in the identification of the project Study Area and the Control Points. The ICF Team used this information along with professional

judgment to develop preliminary Control Points and prepare this technical memorandum illustrating the proposed points and explaining the rationale for their selection.

The ICF Team proposed a Draft Initial Study Area Map (See **Figure 1**) to the EWG at its kick-off meeting. The Draft Initial Study Area included the Control Points as stated in the law and within the scope of work. A number of members of the EWG thought that the Draft Initial Study Area should be expanded in several directions to account for existing interstate routes and to include other areas of influence such as Chattanooga, Cleveland, Atlanta, Greenville and cities further to the east. In other words, it should be less of a “bow-tie” and more of an oval.

Members of the EWG also voiced a preference for following as many existing routes as possible for the study corridors and asked that alternatives within the Great Smoky Mountains National Park be avoided. In terms of Control Points, members of the EWG requested the consideration of a potential connection with the 14<sup>th</sup> Amendment Corridor Study, the use of a wider stretch of I-85 in the vicinity of Lavonia, and I-20 in the vicinity of Augusta to allow greater flexibility in defining/identifying potential study corridors. Overall, the EWG members favored the use of broader Control Points instead of specific points which could limit the options for potential corridors. Some also expressed concern with any use of the I-40 corridor southeast of Knoxville, TN, due to continuing issues with rock slides and stability problems.

#### Recommendations on the General Study Area and Control Points

The ICF Team considered the above comments in developing a General Study Area Map, revising the Draft Initial Study Area Map, and making its recommendations on the Control Points to be used in the identification of potential highway corridors. In order to develop the General Study Area for consideration, the existing major facilities on either side of the proposed corridor were identified (see **Figure 2**). These include about 420 miles of existing roadway to the east, described as follows:

- Northeast on I-95 from Savannah, GA, to I-26;
- Northwest on I-26 through Columbia, SC, Spartanburg, SC, and Asheville, NC to I-40; and
- West on I-40 to Knoxville, TN.

These include approximately 460 miles of existing roadway to the west, described as follows:

- Northwest on I-516 to I-16 from Savannah, GA, to I-75 in Macon, GA, and on to Atlanta, GA; and,
- North on I-75 to Knoxville, TN.

These two routes provide an outside boundary for the General Study Area for the current project. As corridors, these two routes will not be studied until Phase 2 of this project, where they may be used as a basis for comparison with the corridors identified in Phase I. Recommendations for activities in Phase 2 of this project will be included as part of the Phase 1 work, including the potential for additional sub-studies.

At the request by members of the EWG, **Figure 2** was modified to include a representative corridor for the 14<sup>th</sup> Amendment study. Coordination between the two studies needs to be considered as they share a control point in the vicinity of Augusta, Georgia. The study of the 14<sup>th</sup> Amendment Highway was

authorized by the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) in 2005. The 14<sup>th</sup> Amendment Highway links Augusta, GA, Macon, GA, Columbus, GA, Montgomery, AL and Natchez, MS.

**Figure 2** also includes the general area for Corridor K. Corridor K is part of the Appalachian Development Highway System (ADHS), authorized by Congress in 1965, and intended to provide economic growth to depressed areas.

Within the General Study Area, the Control Points serve as corridor “wickets” through which potential alternatives must pass. The alignments of the alternatives can vary significantly between Control Points, but all alternatives must pass through the Control Points. The choice of Control Points is based on various considerations: stakeholder preferences, the location of economic development activities and major traffic generators, the location of military bases, logical points in accordance with logical termini definition, and others. Control Points may correspond to roadway segments showing independent utility, such as where there is a significant change in traffic volumes.

Three Control Points are identified in the legislation and a fourth is identified in the project scope of work. The project team has reviewed the project area resources, considered the input of the EWG, and recommends that no additional Control Points are necessary within the General Study Area. The following are descriptions of the four recommended Control Points:

- **Savannah, GA (Figure 3)** – Included in the original legislation, this Control Point addresses access to one of the major ports on the eastern seaboard and other resources in the Savannah area, such as tourism, manufacturing and military activities. Considerations for a Control Point in the Savannah area include the following:
  - The proposed corridor should provide a connection between the major connector roads around Savannah (I-16, I-516, I-95 and the Savannah River Parkway) and the 3<sup>rd</sup> Infantry Corridor.
  - With the existing congestion along I-95, this corridor should be avoided northeast of the Savannah River.
  - The Savannah River is a key natural feature that presently separates South Carolina and Georgia east of Savannah.
  - From a transportation standpoint, crossing the Savannah River to the north would provide a corridor that may be too close to I-95.
  - On the west side of Savannah, Fort Stewart is a key economic contributor to the region and takes up a large land area that should be avoided. Fort Stewart is also home to the headquarters of the U.S. Army’s 3<sup>rd</sup> Infantry Division.
  - Corridors to the west of Fort Stewart would require a southwest bypass of the government property before turning northwest toward Augusta, GA.

Therefore, the recommended Savannah Control Point would be: *A connection between the eastern edge of Fort Stewart and the Savannah River Parkway which serves the key economic resources of Savannah.*

- **Augusta, GA (Figure 4)** – Augusta, GA is also a Control Point included in the originating legislation. It lies between Columbia, SC, and Atlanta, GA, along I-20. I-520 is a ring road around the southern half of Augusta and provides a bypass of the center of Augusta. Augusta is also the starting point for the 14<sup>th</sup> Amendment Corridor (southern option) which is also under study at this time. The 14<sup>th</sup> Amendment corridor heads west from Augusta toward Macon, GA. Fort Gordon lies just west of Augusta and is a contributor to the regional economy. Considerations for the Augusta Control Point include the following:
  - The eastern portion of I-520 provides an existing crossing of the Savannah River and therefore the possibility of a corridor east of the Savannah River.
  - While the western connection between I-520 and I-20 might also be a potential end of this Control Point, a connection closer to Fort Gordon would serve the military activities in this area.
  - A corridor along the western edge of Fort Gordon might provide improved travel times while still providing connectivity to Augusta.
  - I-20 already provides a connection between Fort Gordon and I-75.

Therefore the proposed Augusta Control Point is: *A corridor crossing I-520 around Augusta or I-20 from the western edge of Augusta to a point just to the west of Fort Gordon.*

- **Lavonia, GA (Figure 5)** – This Control Point is identified in the project Scope of Work. Lavonia, GA, itself is not an economic driver in the region; rather, it represents a break point from which potential corridors could be developed while considering the Great Smoky Mountains National Park. In other words, this would allow the consideration of potential corridors which would avoid the park or use existing routes, where possible. In order to provide the most options for a transportation connection that minimizes impacts to the National Park, the I-85 corridor is recommended as the Control Point in this area.

I-85 connects Greenville, SC and Atlanta, GA. The proposed eastern edge of this Control Point is outside the eastern limits of Greenville, SC. This Control Point would provide alignments with better connections to Anderson, SC. In defining the western end, the possibility of connecting Athens, GA, while avoiding the Atlanta metro area has been considered. US 441 appears to be a logical north-south roadway that could be used as a connecting corridor.

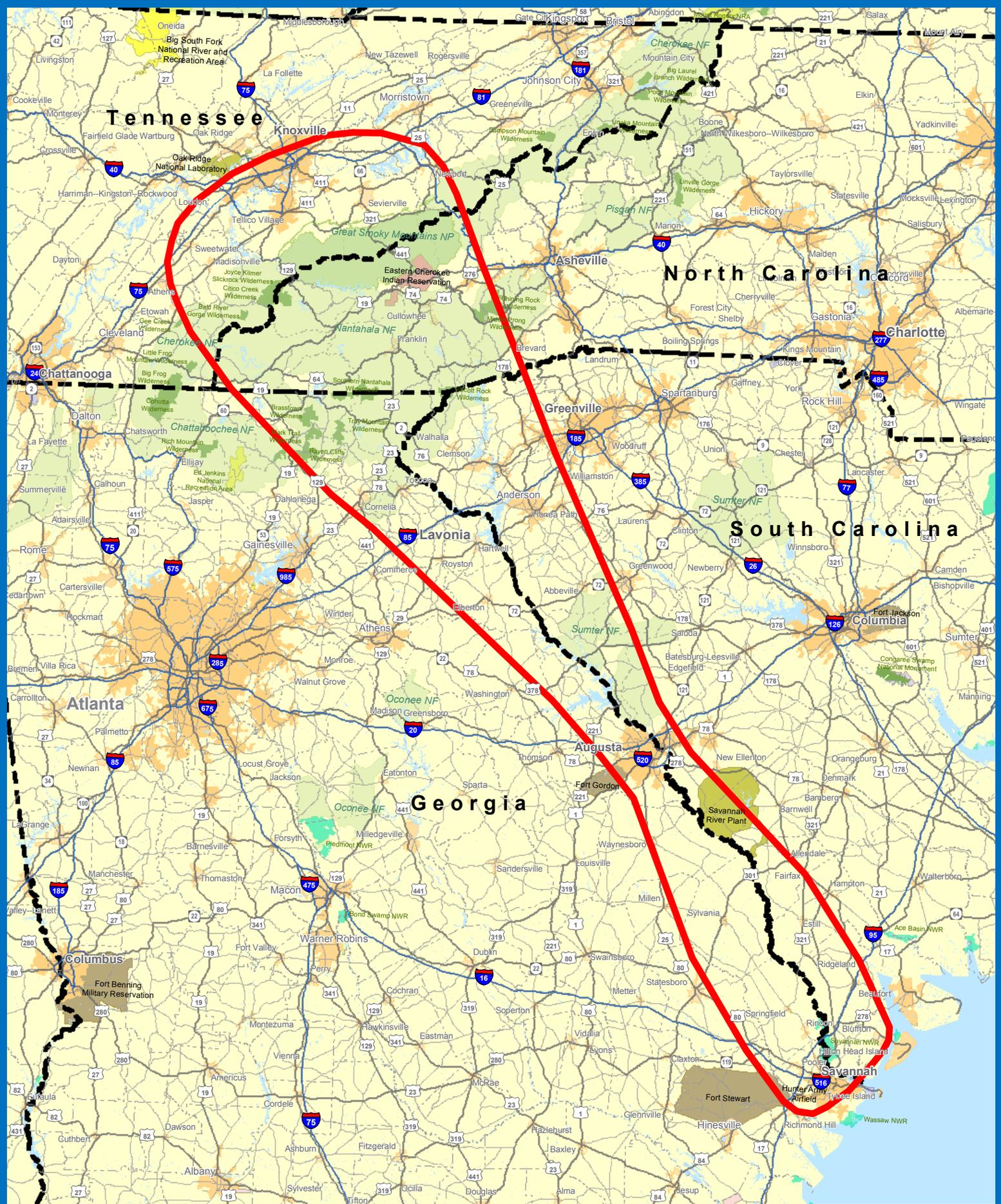
Therefore the proposed Lavonia Control Point is: *Along I-85 from west of the Greenville Bypass to the US 441 Interchange.*

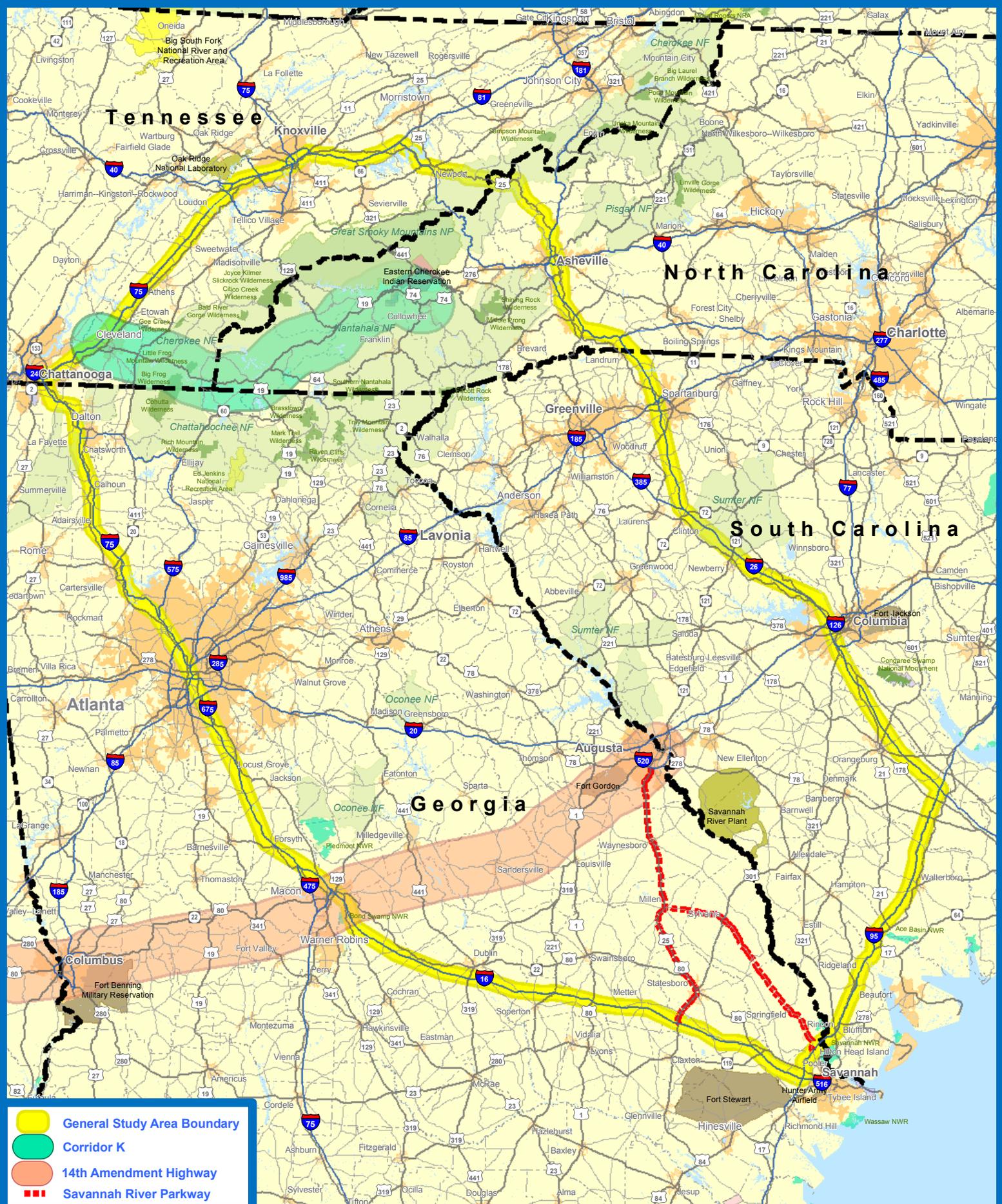
- **Knoxville, TN (Figure 6)** – Knoxville, TN, is the northern-most Control Point identified in the legislation. Knoxville can be accessed from the west (via I-75), from the south (via I-140), or from the east (I-40). Therefore the Knoxville Control Point is: *Connect to an existing limited access highway in Knoxville.*

**Figure 7** shows the established Control Points within the General Study Area, along with other key transportation facilities in the area such as interstates, Corridor K and the 14<sup>th</sup> Amendment Corridor.

### Next Steps – Corridor Alternatives

The next step will be to develop a set of potential corridor alternatives that connect these Control Points within the General Study Area. Four alternatives will be developed from Savannah to the Lavonia Control Point (see preliminary corridors for discussion purposes in **Figure 8**). From the Lavonia Control Point to Knoxville, TN, five corridors will be evaluated (see preliminary corridors for discussion purposes in **Figure 9**). For each corridor, an upgrade of existing roadways and a new corridor will be evaluated.





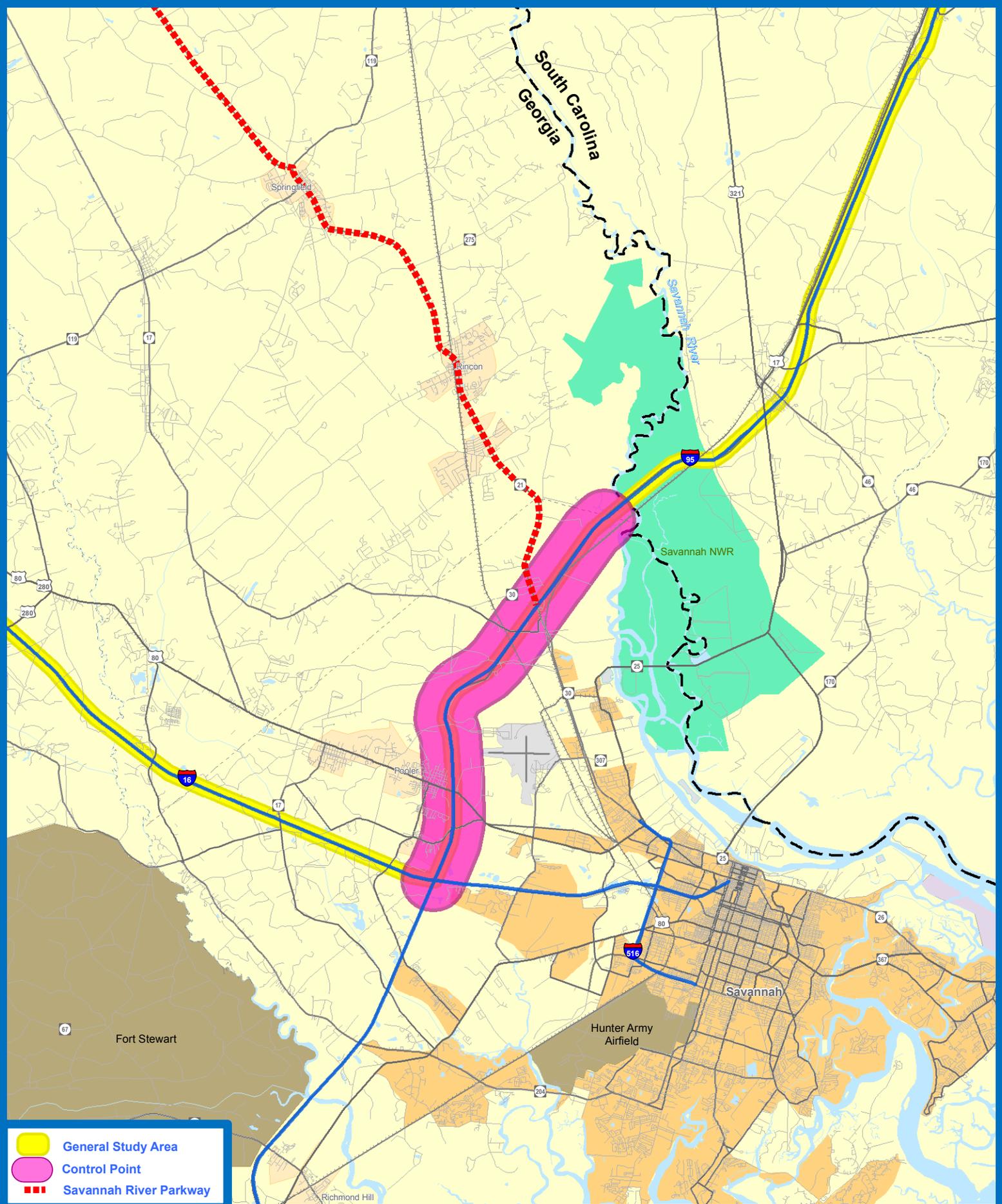
- General Study Area Boundary
- Corridor K
- 14th Amendment Highway
- Savannah River Parkway

**THIRD INFANTRY  
DIVISION HIGHWAY  
CORRIDOR STUDY**



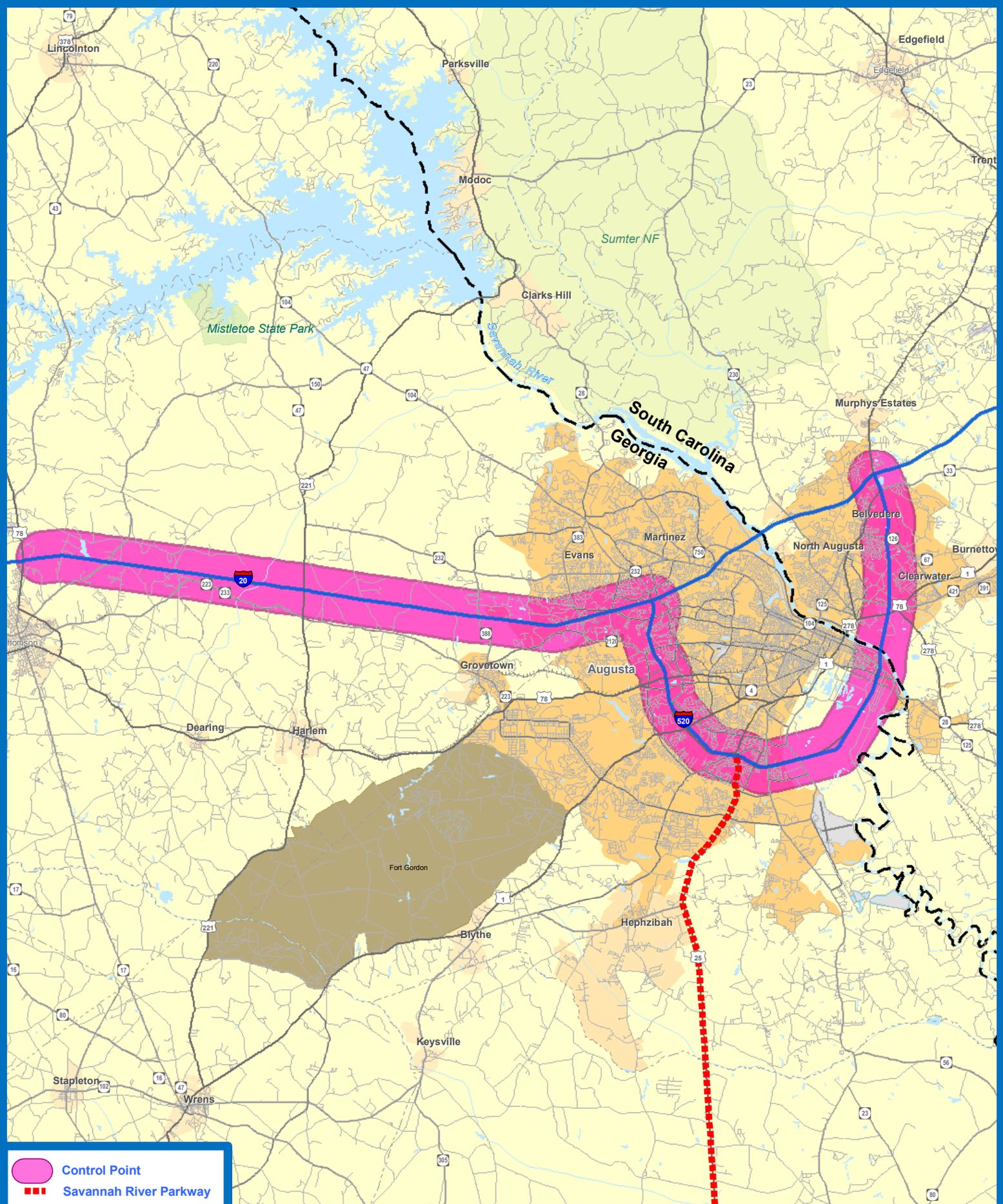
0 10 20 40 60 Miles

**Figure 2**  
**General Study Area Map**



- General Study Area
- Control Point
- Savannah River Parkway

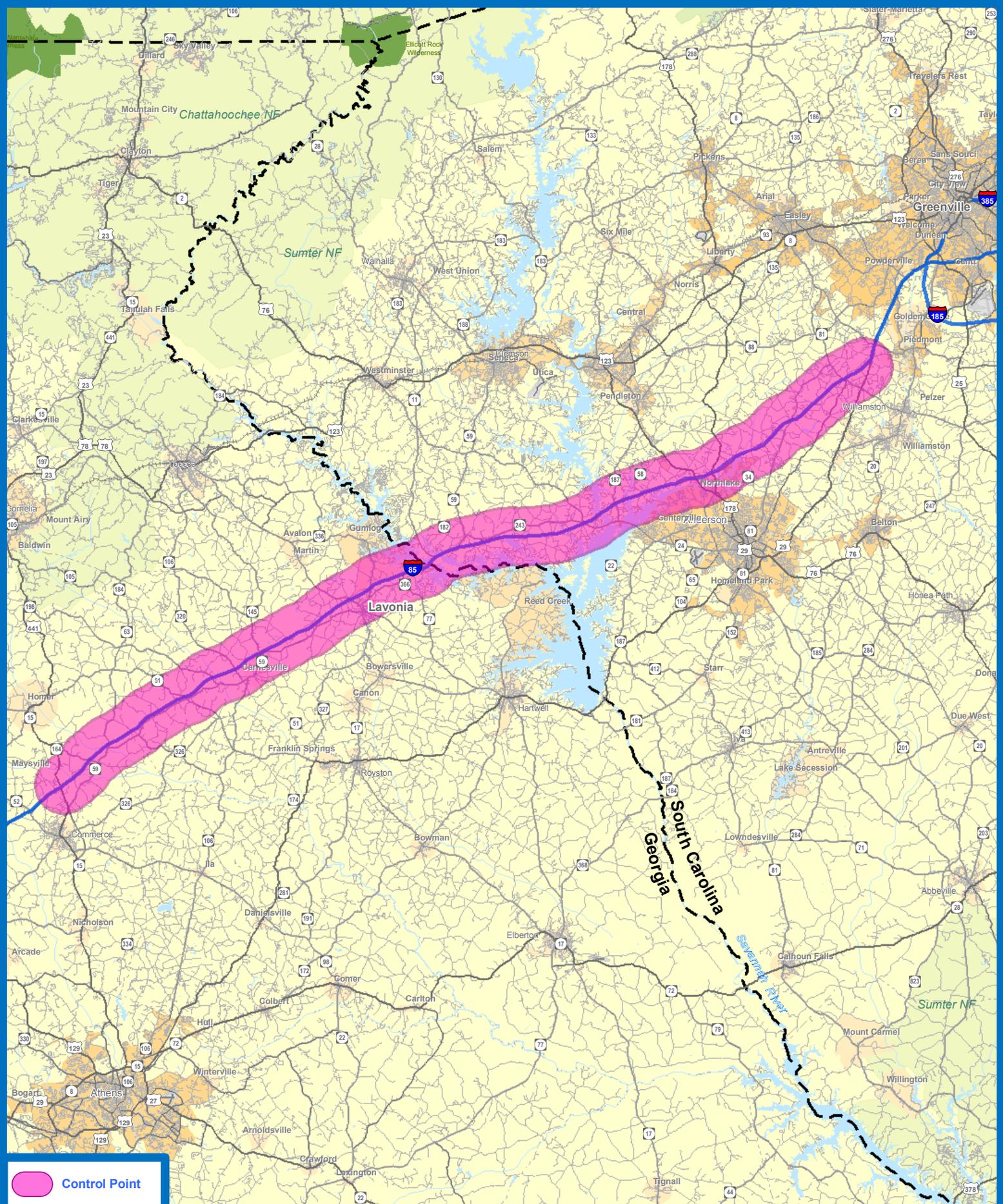




- Control Point
- Savannah River Parkway



**Figure 4**  
**Augusta, GA Control Point**

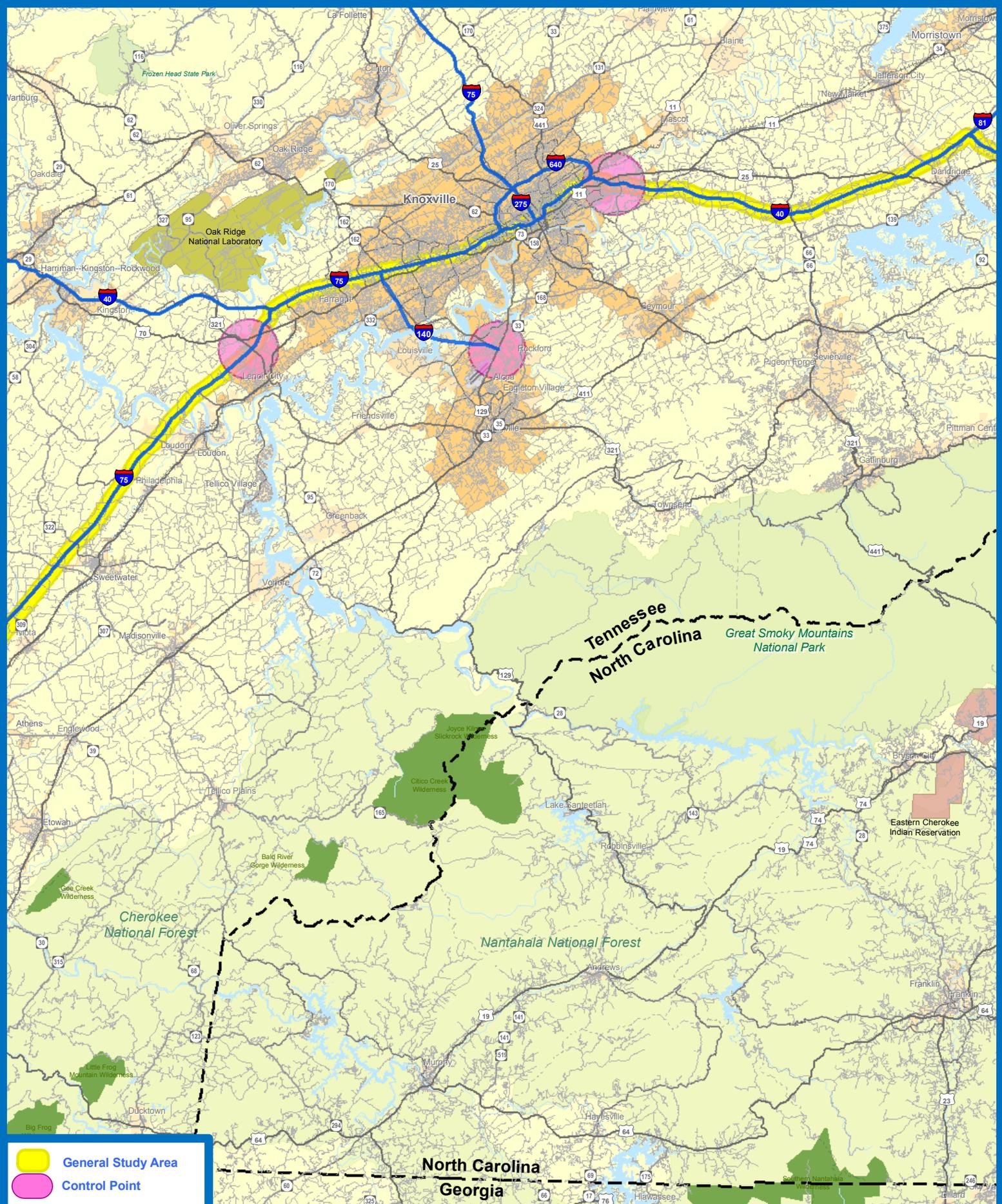


 Control Point

**THIRD INFANTRY  
DIVISION HIGHWAY  
CORRIDOR STUDY**



**Figure 5**  
**Lavonia, GA/I-85 Control Point**



 General Study Area  
 Control Point

**THIRD INFANTRY  
 DIVISION HIGHWAY  
 CORRIDOR STUDY**



0 2.5 5 10 15  
 Miles

**Figure 6**  
**Knoxville, TN Control Point**



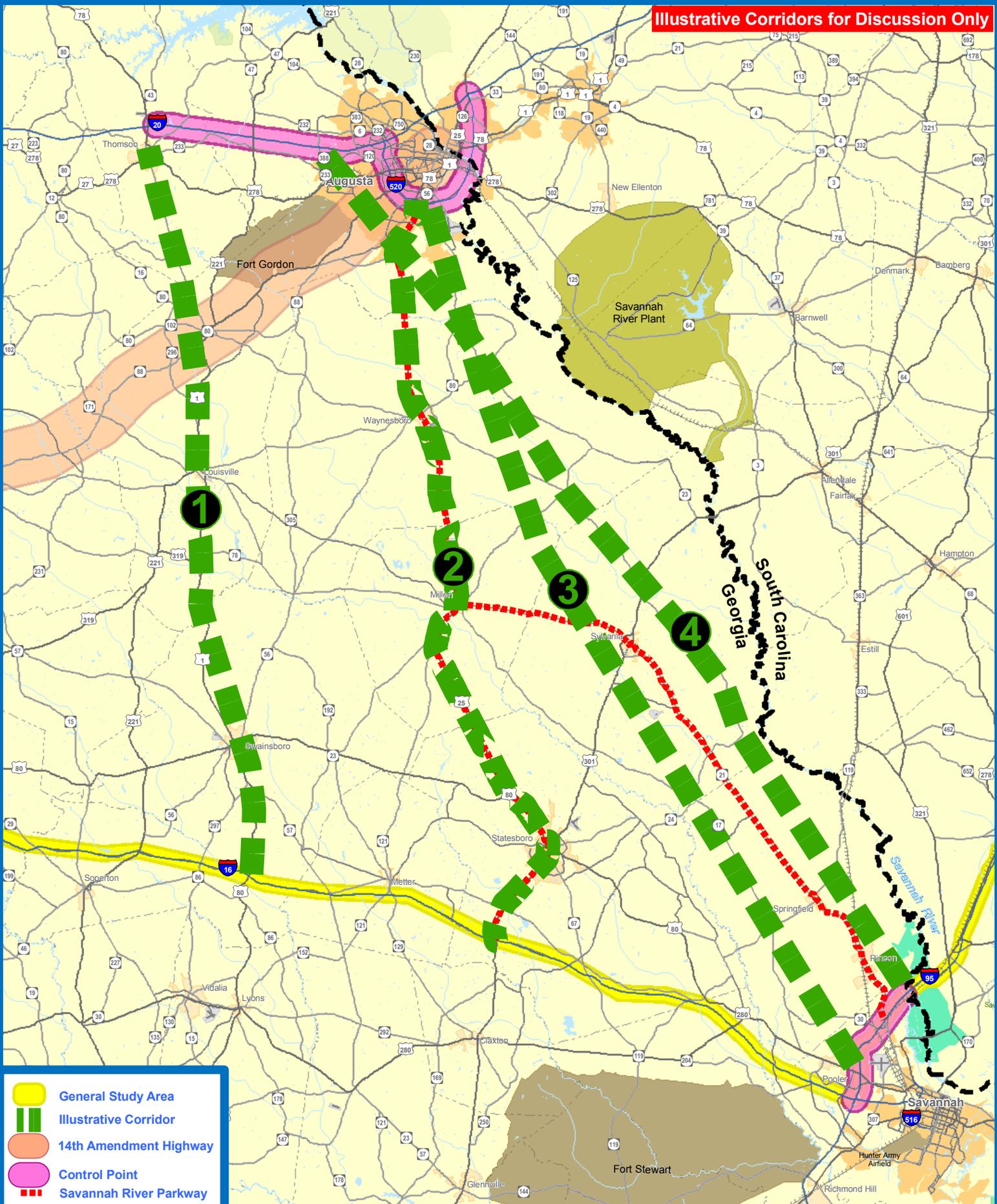
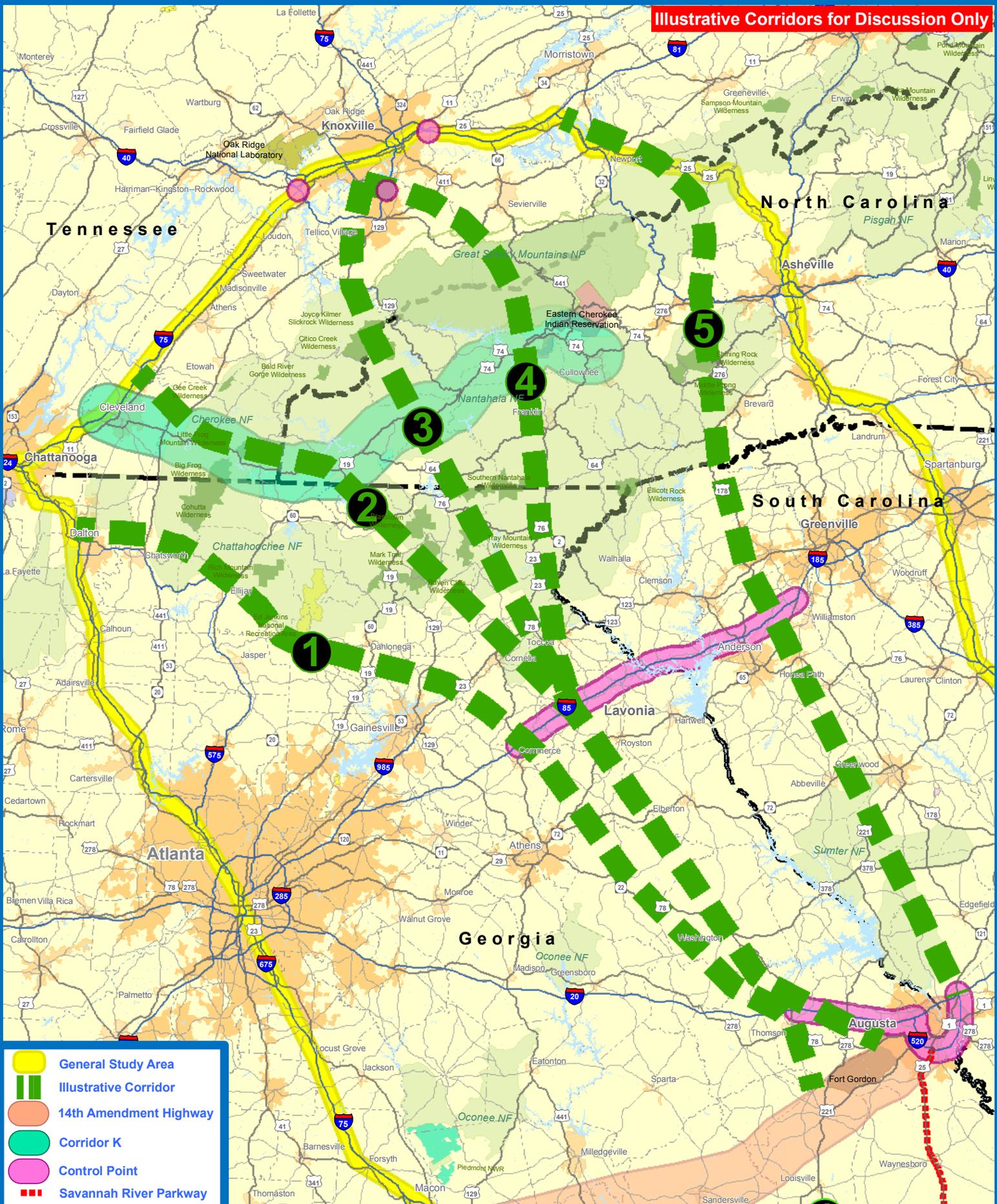


Figure 8  
Illustrative Corridors South



- General Study Area
- Illustrative Corridor
- 14th Amendment Highway
- Corridor K
- Control Point
- Savannah River Parkway



Figure 9  
Illustrative Corridors North