

# THIRD INFANTRY DIVISION HIGHWAY CORRIDOR STUDY

Expert Working Group  
Third Meeting  
March 8, 2011  
Atlanta, Georgia

## Meeting agenda

- Introductions
- Review of Previous Meeting
- Study Corridors Developed
- Environmental Constraints
- Fatal Flaw Screening
- Design Levels
- Preliminary Recommendations & Next Steps
- Closeout/next meeting

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## Overarching principles

- Respect the statutory language
- Follow the contract and Statement of Work
- Coordinate with the EWG, agencies and the public
- Be consistent with FHWA guidance on major project cost estimates
- Be consistent with 23 CFR 450 Appendix A, Linking Transportation Planning and NEPA
- Stay on schedule
- Submit all work products to FHWA for review and approval

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## What the study is....

The 3rd Infantry Division Highway Corridor Study will be conducted in two phases:

- Phase I (underway now) – Conceptual Feasibility Report: identify potential alignments that connect designated urban areas, develop cost estimates and recommend implementation steps
- Phase II (optional) – Sub-Studies and Beyond: explore potential alternative alignments for potential use in a long-range planning study and subsequent NEPA studies

The Conceptual Feasibility Report developed during Phase I will be used to inform Congress of the steps that would be necessary to move the project forward and will provide a planning-level estimate of what it would cost to construct. Additional planning studies will be conducted in Phase II as directed by FHWA.

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## What this study is not.....

- States and MPOs not required to:
  - implement any alternative
  - conduct further analyses
- The study will not result in a recommendation for a particular design or alignment unless FHWA specifically asks for it, as directed by Congress.
- The study will not necessarily lead to construction of any specific highway improvement
- A conceptual planning feasibility study

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## Recap of second meeting

- Purpose of study
- Updated study area
- Discussion of control points
- Public involvement plan
- Discussion of illustrative corridors

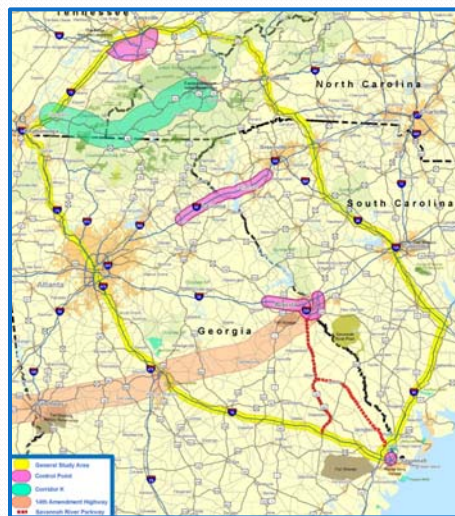
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## Updated Project Study Area



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## Updated Control Points



Knoxville

Lavonia

Augusta

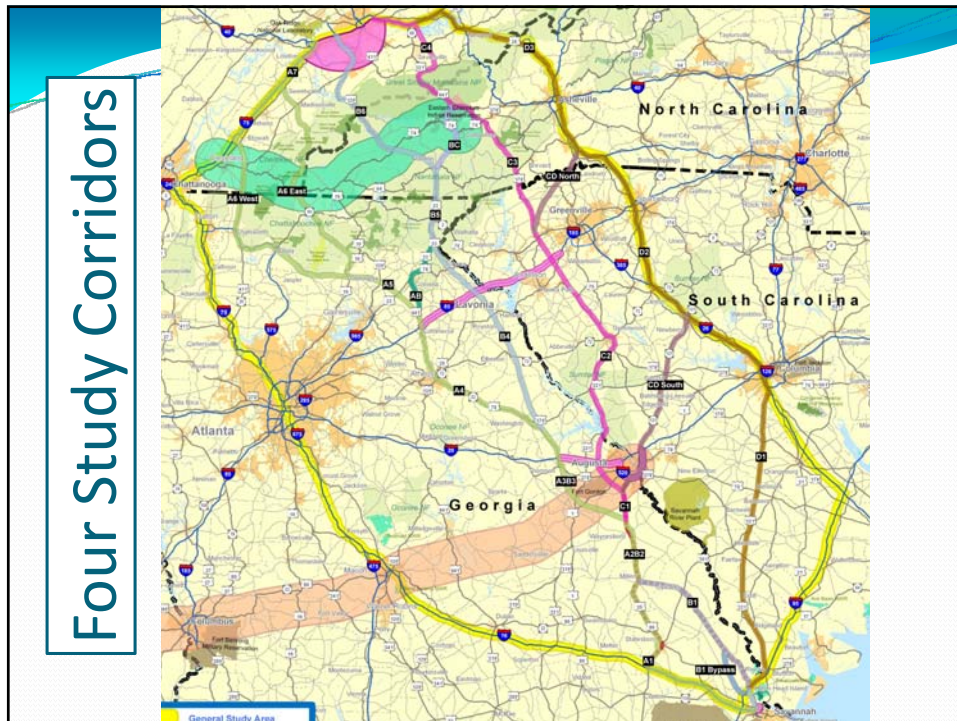
Savannah

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## Development of Study Corridors

- Four corridors between Savannah and Lavonia
  - Five corridors between Lavonia and Knoxville
  - At least one option designed to interstate standard
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- Four Study Corridors were developed to avoid major environmental features and waterways and based on Illustrative Corridor input from EWG

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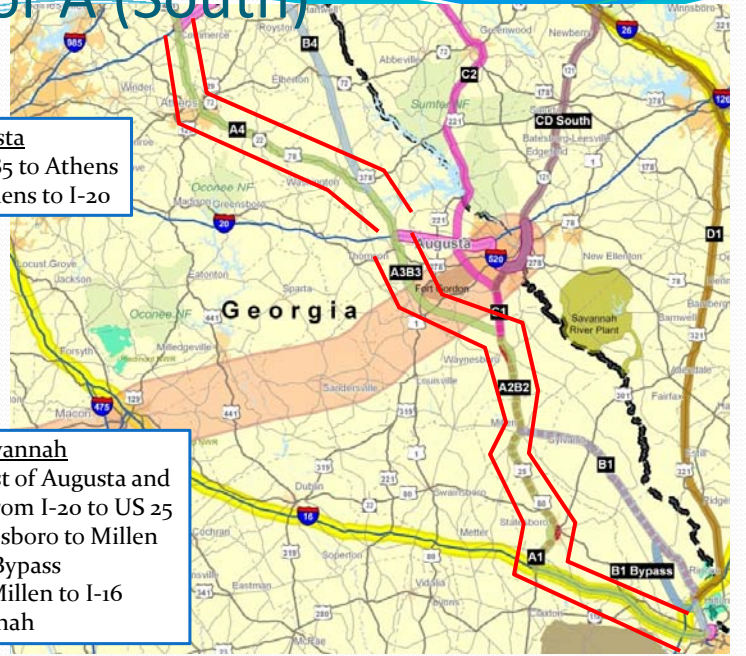
## Corridor A (South)

### Lavonia to Augusta

- US 441 from I-85 to Athens
- US 78 from Athens to I-20

### Augusta to Savannah

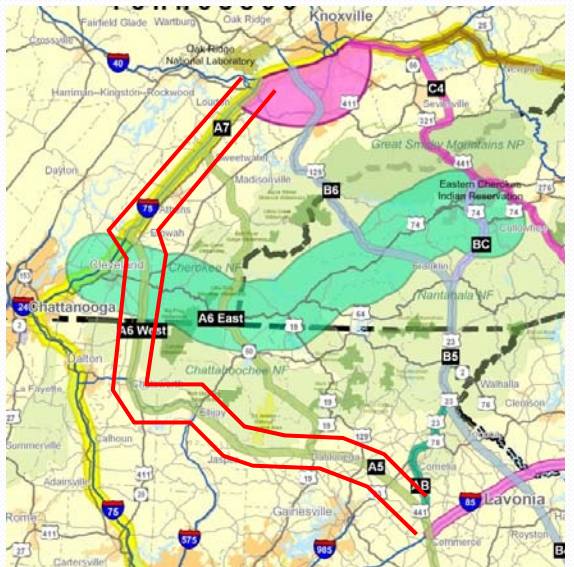
- New link west of Augusta and Fort Gordon from I-20 to US 25
- US 25 Waynesboro to Millen
- New Millen Bypass
- US 25 from Millen to I-16
- I-16 to Savannah



## Corridor A (North)

### Knoxville to Lavonia

- I-75, Knoxville to Cleveland
- New link from I-75 to US 411
- US 411, to Chatsworth
- US 76, Chatsworth to Ellijay
- SR 52, Ellijay to Dahlonega
- New link, Dahlonega to I-85

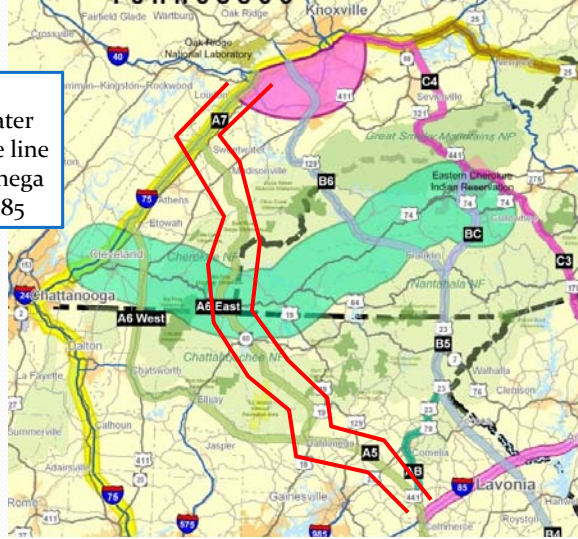


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## Corridor A (North) East Option

### Knoxville to Lavonia

- I-75, Knoxville to Sweetwater
- SR 68, Sweetwater to state line
- SR 60, state line to Dahlonega
- New link, Dahlonega to I-85



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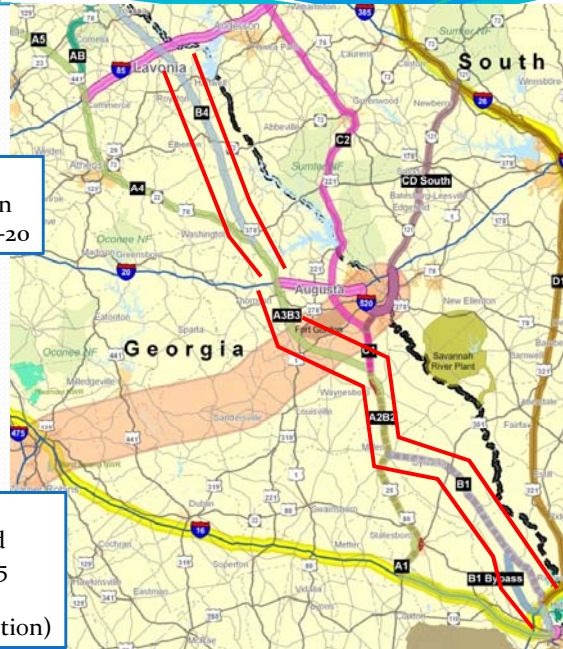
## Corridor B (South)

### Lavonia to Augusta

- New link, I-85 to Washington
- US 78 from Washington to I-20

### Augusta to Savannah

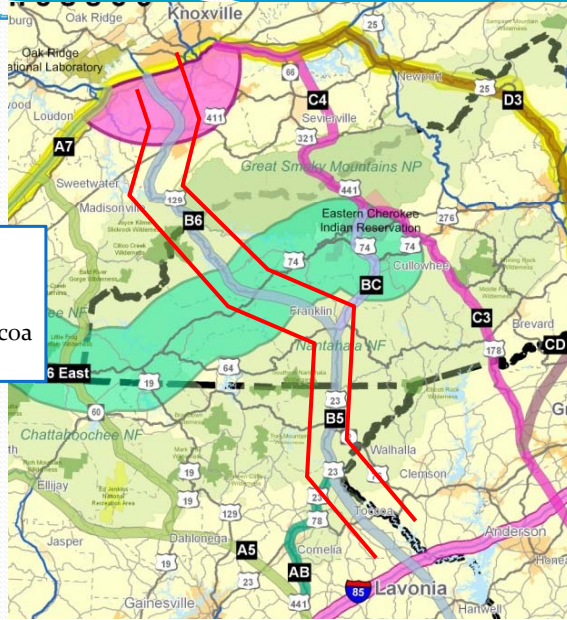
- New link west of Augusta and Fort Gordon from I-20 to US 25
- US 25 Waynesboro to Millen
- SR 21 to Savannah (Bypass option)



## Corridor B (North)

### Knoxville to Lavonia

- I-140 to US 129
- USFS roads to Franklin
- US 23/US 441, Franklin to Toccoa
- New link to I-85

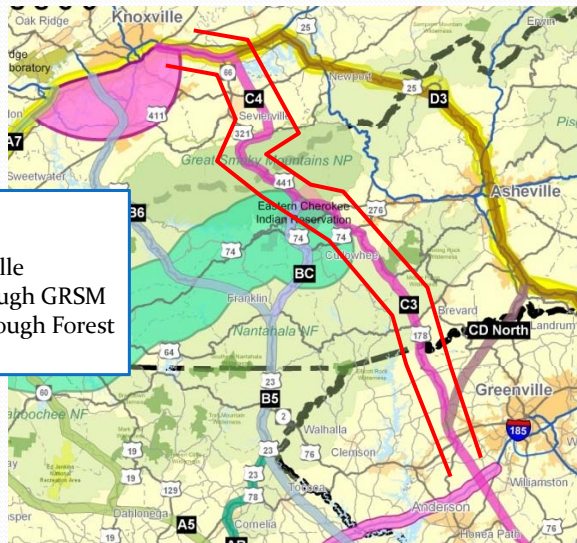


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## Corridor C (North)

### Knoxville to Lavonia

- I-40 east from Knoxville
- New link bypassing Sevierville
- US 441/Newfound Gap through GRSM
- SR 215/Blue Ridge Pkwy through Forest
- US 178, Rosman to I-85



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## Corridor C (South)

### Lavonia to Augusta

- New link, I-85 to Hornea Path
- US 178, Hornea Path to Greenwood
- US 221, Greenwood to Augusta
- New link to I-20

### Augusta to Savannah

- New link, I-20 to US 25 in Augusta
- US 25 to Waynesboro
- Follows Corridor A or B to Savannah

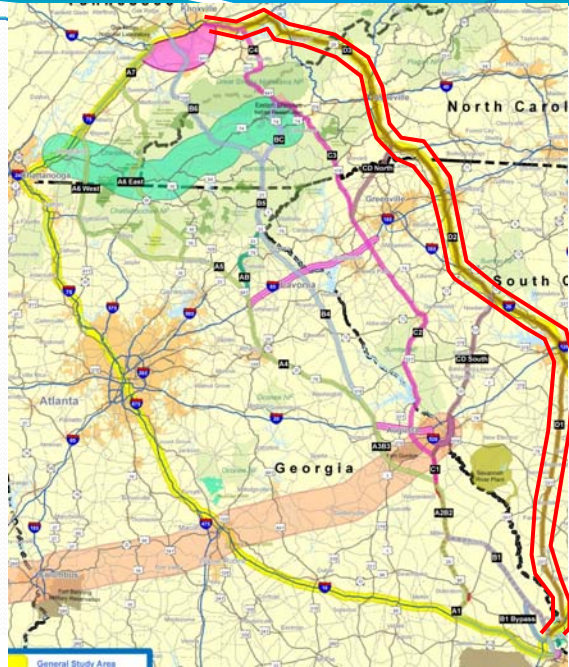


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## Corridor D

### Knoxville to Savannah

- I-40 to US 25 at Newport
- US 25 to Asheville
- I-26, Asheville to Columbia
- US 321, Columbia to I-95
- I-95 into Savannah



General Study Area

## Corridor Comparison

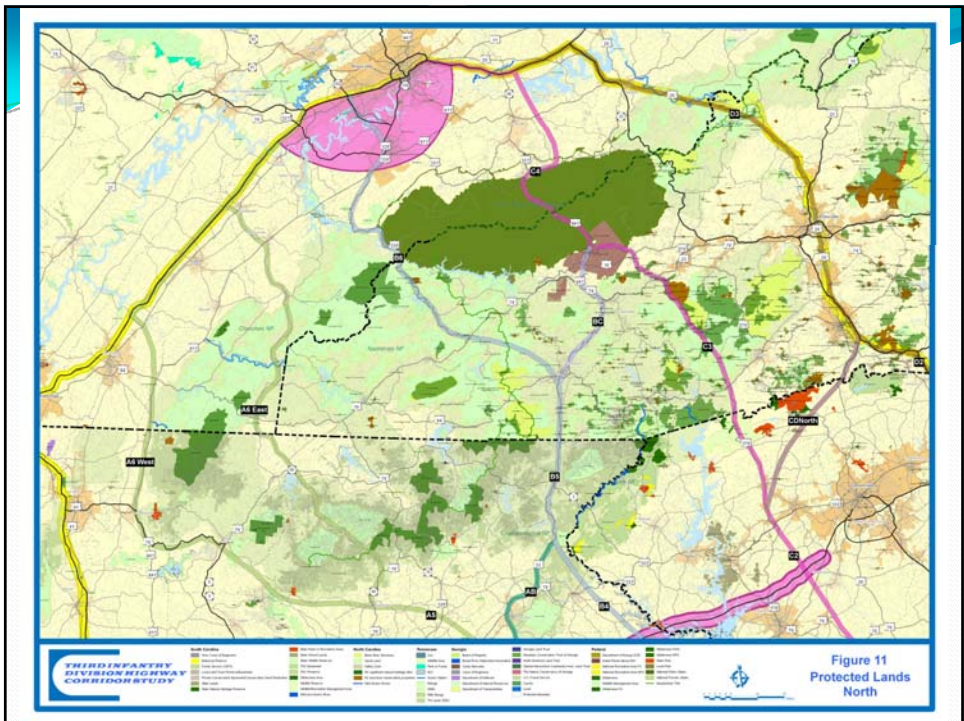
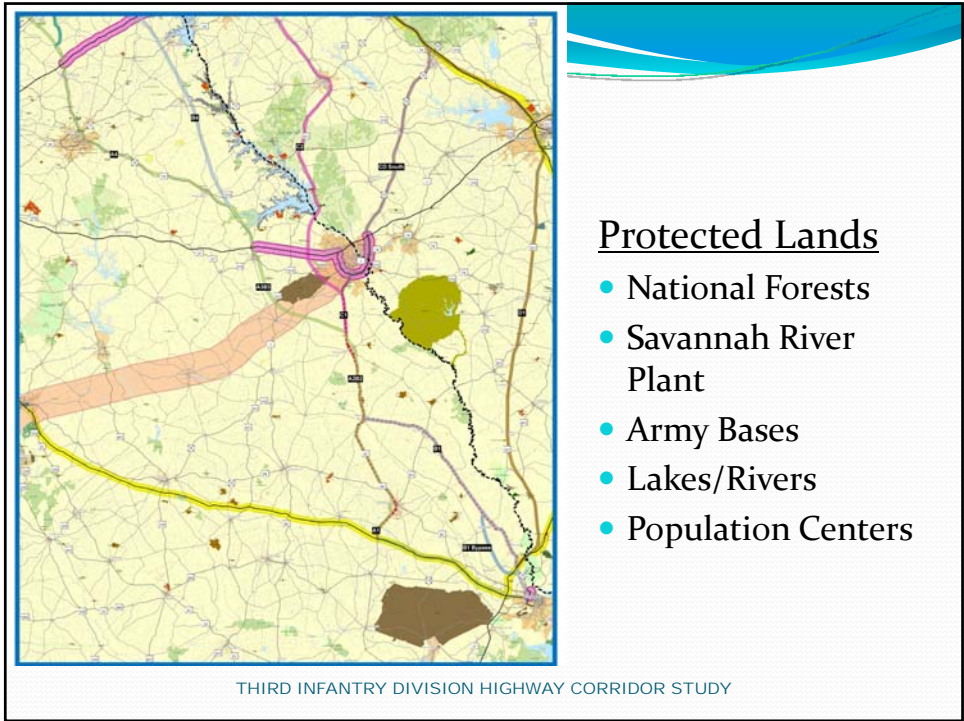
Corridor	Reuses Existing Alignment	Transportation Network
A (South)	Most (15% new)	Safety issues in Savannah, Bypasses congestion in Augusta and Atlanta
B (South)	Some (50-60% new)	Congestion issues in Savannah, can be avoided using Bypass corridor
C (South)	Most (23-33% new)	
D (South)	All (0% new)	Congestion issues in Savannah
A (North)	Most (18% new)	Safety & congestion issues in Knoxville, spur to I-75, Corridor K link
B (North)	All (0% new)	Corridor K link
C (North)	Most (15% new)	Bypasses congestion in Sevierville
D (North)	All (0% new)	Could bypass congestion in Asheville

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## Environmental Constraints

- Protected Federal/state lands
- Geology/Geotechnical
  - Terrain
  - Karst areas (fissures and caves)
  - Landslide susceptibility
- Socioeconomics
  - Low-income populations
  - Economically distressed counties
  - Minority populations

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## Corridor Comparison: Protected Lands

Corridor	Park Impacts	Distance in National Forests	Wilderness / Wildlife Zones*
A (South)	3 adjacent	None	1 WMA adjacent
B (South)	2 adjacent	None	1 WMA adjacent
C (South)	2 adjacent	18 miles	1 WMA adjacent
D (South)	None	None	National Wildlife Refuge; 1 NHA adjacent
A (North)	None	1.5 miles	2 WMA along; 2 WMA adjacent
B (North)	2 adjacent, including GRSM	79 miles	Gamelands; 1 NHA along; 5 NHA adjacent
C (North)	20 miles in GRSM	29 miles	Black Bear Sanctuary; 7 NHA along; 7 NHA adjacent
D (North)	1 adjacent	41 miles	Black Bear Sanctuary; 3 NHA along; 2 NHA adjacent

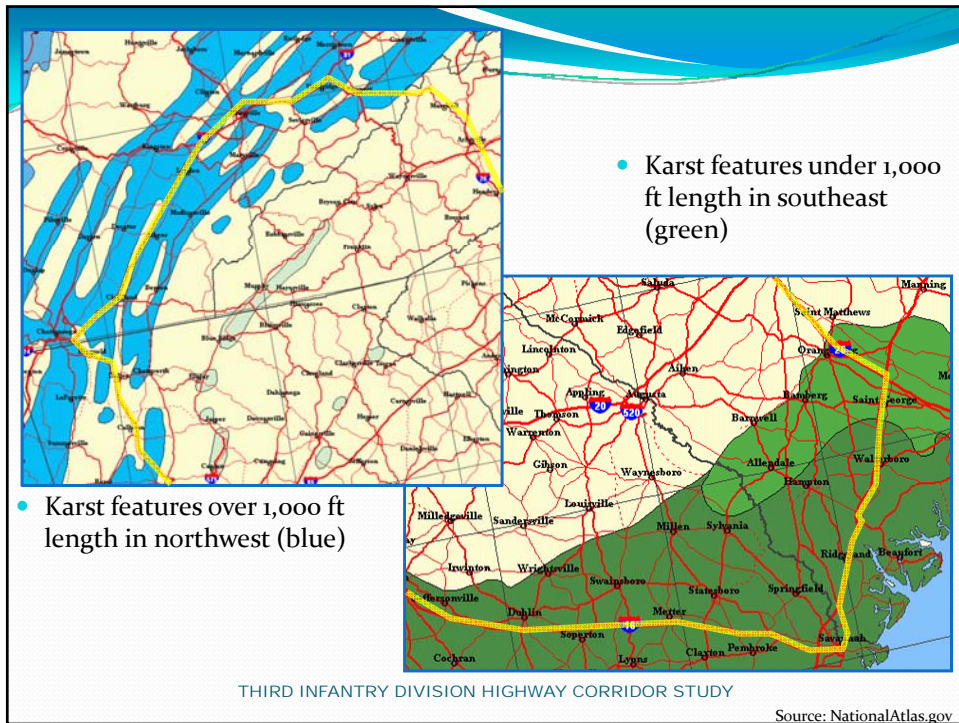
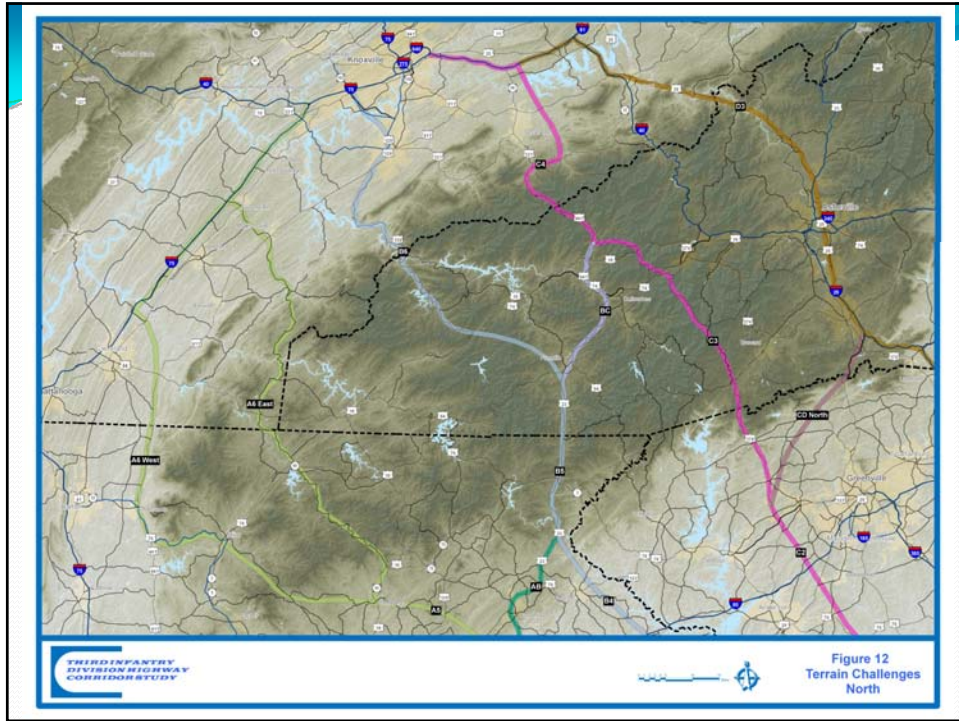
\* NHA = Natural Heritage Area (NC); WMA = Wildlife Management Area (GA)

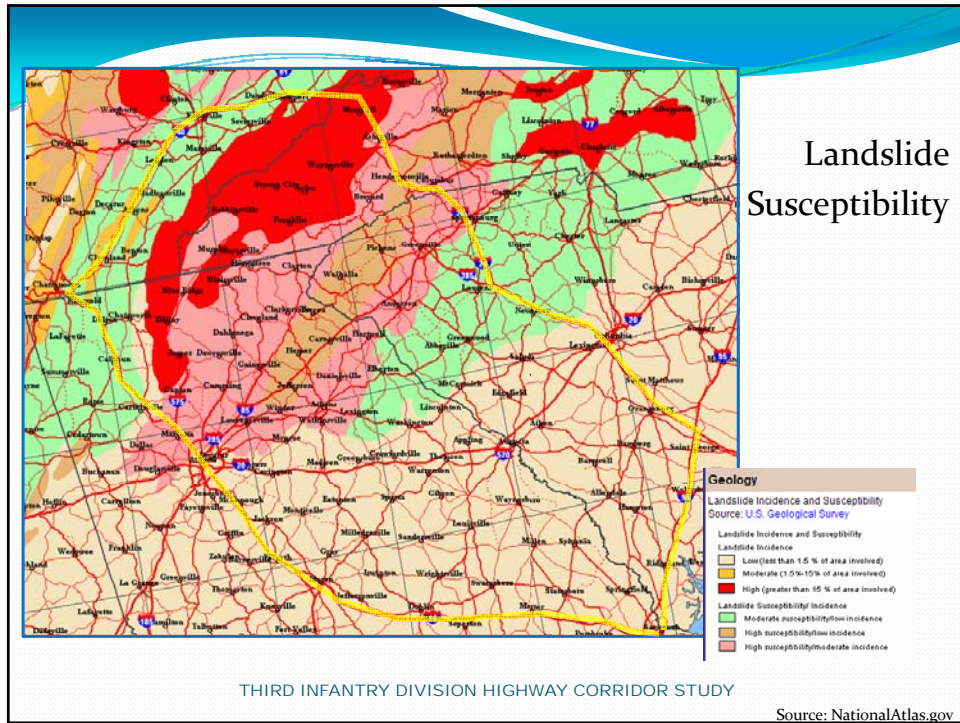
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## Corridor Comparison: Features

Corridor	Other Features
A (South)	Clarks Hill Lake
B (South)	Clarks Hill Lake, Lake Louise
C (South)	Fort Gordon, Clarks Hill Lake, Lake Louise
D (South)	Does not intersect Lavonia or Augusta Control Points
A (North)	Lake Zwerner dam, Carters Lake, Hiwassee River, Tennessee River
B (North)	Little Tennessee River, Tallulah Falls Lake, Appalachian Trail, Fort Foudon Lake, Tellico Lake, Chilhowee Lake, Calderwood Lake, Santeetlah Lake, Cheoah River
C (North)	Cherokee Reservation, Douglass Lake, French Broad River
D (North)	Appalachian Trail, French Broad River, Douglass Lake

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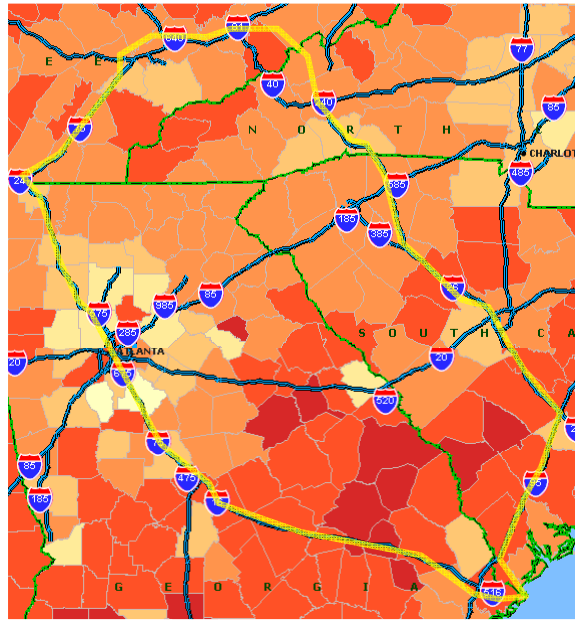
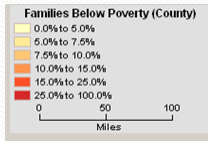


## Corridor Comparison: Geology/Geotechnical

Corridor	Terrain	GA Protected Mountains	Karst Potential	Landslide Potential
A (South)	Level	No	Yes	Moderate/High
B (South)	Level	No	Yes	Moderate/High
C (South)	Level	No	Yes	Moderate/High
D (South)	Level	No	Yes	Moderate/High
A (North)	Moderate	Yes	Yes	High
B (North)	Aggressive	Yes	Yes	High
C (North)	Extremely Aggressive	No	Yes	High
D (North)	Aggressive	No	Yes	Moderate/High

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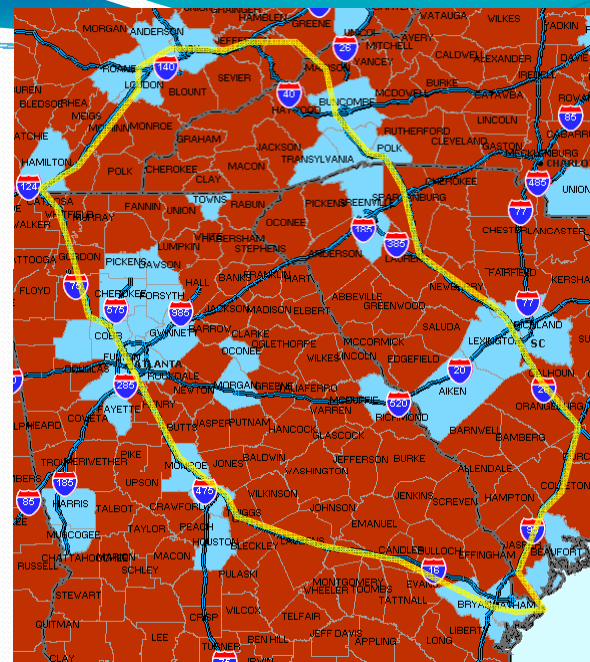
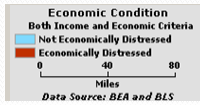
## Low Income Concentrations



Source: hepgis.FHWA.dot.gov

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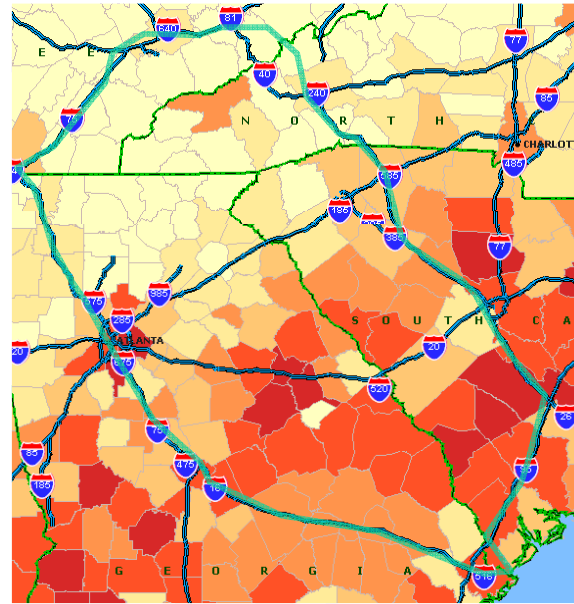
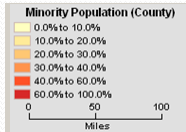
## Economically Distressed Counties



Source: hepgis.FHWA.dot.gov

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## Minority Population Concentrations



Source: hepgis.FHWA.dot.gov

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## Potential Fatal Flaws

- **Impacts within GRSM**
  - Corridor A avoids park
  - Corridor B runs along 11 miles of western border on US 129
  - Corridor C passes through 20 miles on US 441
  - Corridor D avoids park
- To emphasize challenges of going through GRSM, two proposed roadway improvement projects were cancelled/reduced due to impacts

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## Potential Fatal Flaws

- **Mountainous Terrain**
  - Corridor A crosses ridges up to 2,500 ft (West option) or 3,300 ft (East option). Least landslide issues.
  - Corridor B crosses ridges up to 5,000 ft
  - Corridor C crosses ridges up to 6,200 ft
  - Corridor D crosses ridges up to 2,900 ft
  
- Per miles costs increase between flat/rolling and heavy mountains has a factor of 5x

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## Potential Fatal Flaws

- **Missing any Control Points**
  - Corridors A, B, C hit all control points
  - Corridors D misses Augusta and Lavonia control points
  
- **Strong public opposition**
  - Likely for any of 4 corridors in northern section
  - Most controversial for corridors with GRSM impacts
  
- **Other Fatal Flaws?**

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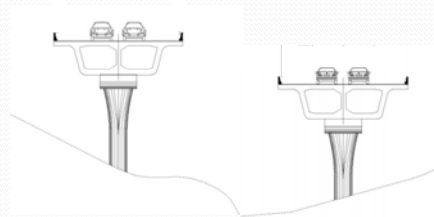
## Corridor design levels

- At least one corridor in each segment shall include:
  - Interstate standard design level
  - Substantial portions of existing highways
  - For Lavonia to Knoxville, at least one corridor outside of the Great Smoky Mountains National Park
- An alternate may include an alignment with a design level that changes
  - Example: freeway for a portion of the segment and an expressway for another portion of the segment

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## Corridor design levels

- Interstate
  - 4-6 lanes
  - Grade-separated interchanges
  - Can use tunnels or viaduct



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## Corridor design levels

- Arterial
  - 4 lanes
  - At-grade intersections
  
- Super-2 Highway
  - 2-3 lanes
  - At-grade intersections
  - Truck climbing/passing lanes

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## Fatal Flaw Screening

Corridor	GRSM Impacts	Terrain	Control Points	Public Input
A	No	Moderate	Crosses 4	Likely Opposition
B	Possible	Aggressive	Crosses 4	Likely Opposition
C	Yes	Extremely Aggressive	Crosses 4	Likely Strong Opposition
D	No	Aggressive	Crosses 2	Likely Strong Opposition

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## Recommendations

- North of Lavonia: Corridor A Western Option
  - Interstate Design Level
  - Can estimate costs for other design level options
- South of Lavonia: Corridor A, B, or B Bypass
  - Interstate Design Level or Arterial (existing south of Augusta)
- Additional corridor for cost comparison?

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## Next Steps

- Provide your comments on Draft Alternatives Report
- ICF team will provide meeting summary
- Next tasks
  - Additional GIS
  - Cost estimates
  - Steps necessary to complete construction

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## Closeout/next meeting

- Recap of meeting
- Questions/comments
- Future meetings
- Contact information:
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JMettill@wilbursmith.com

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