

Evaluation of High Speed Rail Options

Macon-Atlanta-Greenville- Charlotte

Rail Corridor

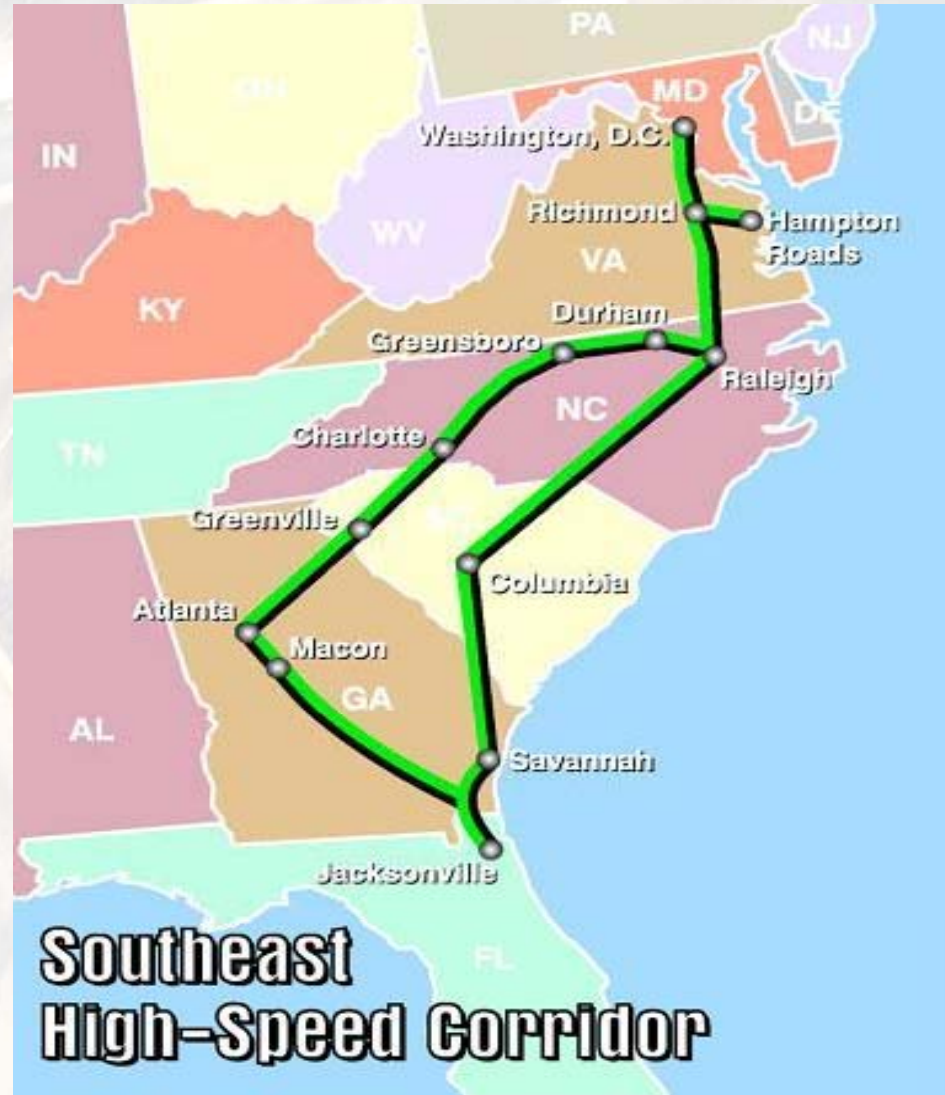
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ISTEA (1991)
Established
11 HSR corridors
authorized by FRA

Establishment of
the
South East Corridor



Study Objective

- Study routes use current AMTRAK station locations and selected locations (airports) that would allow speeds between 90 mph and 200 mph.
- Firm alignment(s) will be established in later studies.
- Study routes were used to:
 - Estimate Trip times
 - Estimate Capital costs
 - Identify potential problems
 - Suggest alternative and variations of route and station stops

Study Corridor

14 Station locations identified

NC - Charlotte,
Charlotte International
airport
& Gastonia.

SC - Spartanburg,
Greenville – Spartanburg
Airport, Greenville and
Clemson

GA -
Toccoa, Gainesville, North
Atlanta, Atlanta
MMPT, Hartsfield –
Jackson, Griffin & Macon



Technologies

Options 90, 110, 125 & 150 MPH Diesel Electric Locomotives
150 & 200 MPH Electric Locomotives with overhead power lines.

All technologies assumed 4 car consists for 264 seats (200mph electric assumed 6 car consist for 284 seats).



Estimated Trip Times

One way Charlotte to Macon

2 hours 35 minutes at 200mph

5 hours 29 minutes at 90mph

One way Atlanta to Charlotte

1 hour 46 minutes at 200mph

3 hours 51 minutes at 90mph

Approximate Costs

	90 – 110 MPH	Best Options			150-200 MPH Electrified I-75 Corridor
		125 MPH	150 MPH Diesel NS Corridor	150 MPH Diesel I-75 Corridor	
Charlotte to Atlanta	\$1,015M	\$1,162M	\$1,379M	\$1,379M	\$1,800M
Approximate Distance	262	262	262	262	262
Cost/mile	\$3.9M	\$4.4M	\$5.3M	\$5.3M	\$6.9M
Atlanta to Macon	\$325M	\$426M	\$544M	\$430M	\$690M
Approximate Distance	103	103	103	88	88
Cost/mile	\$3.2M	\$4.1M	\$5.3M	\$4.9M	\$7.8M
Subtotal + 25% Contingency	\$1,675M	\$1,985M	\$2,405M	\$2,261M	\$3,113M
Vehicle Cost*	\$105M	\$75M	\$115M	\$115M	\$240M
Total	\$1,780M	\$2,060M	\$2,520M	\$2,376M	\$3,353M

Recommendations

- Development of Diesel Electric Locomotives capable of 125 /150mph speeds and within FRA safety guidelines.
- Design and engineering to accommodate new technology when available.
- The states of GA, SC, NC need to develop innovative approaches for capital cost and initial operating deficits.
- Development of a rail operator selection plan or partner with AMTRAK.

Federal Initiative

- Passenger Rail Investment and Improvement Act signed in 2008
- Provision to bring US rail into the 21st Century with a new true high-speed rail corridor network
- The law authorizes USDOT to solicit private/public interest in High Speed Rail Corridor
- Law requires investment based on State Rail Plan

Currently

- Notice Requesting Expression of Interest in Implementing a High Speed Intercity Passenger Rail Corridor / Federal Register December 16, 2008.
- Letter expressing the Interest of GA, NC and SC as a joint effort, sent to FRA on January 30, 2009.

Next Steps

- GA, NC, SC working on new MOU so joint work can go on.
- New Travel / intercept studies.
- Origin and destination surveys of corridor travelers.
- Update Ridership/Revenue model
- Begin NEPA Process.

For More Information

- January 8th 2009 Volpe Released the Study to the Public.
- WWW.SEHSR.ORG.