2001-2004

VA/NC
HIGH SPEED RAIL
COMMISSION

MINUTES

VA/NC HIGH SPEED RAIL COMMISSION

2001-2002 SESSION
2003-2004 SESSION

CO-CHAIRS

SENATOR WIB GULLEY
REPRESENTATIVE NELSON COLE

STAFF
GILES PERRY

COMMITTEE ASSISTANT
SUZANNE SMITH

VA/NC INTERSTATE HIGH SPEED RAIL COMMISSION
2002-2004
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Representative Jim Crawford
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VA/NC HIGH SPEED RAIL COMMISSION
2001-2002

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ATTENDANCE

VA/NC Interstate High Speed Rail Commission

Dates	10/01/03	1/13/04													
Rep. Nelson Cole, Co-chair	X	X													
Senator Wib Gulley, Co-chair	X	X													
Rep. Jim Crawford	X	E													
Rep. Mitch Gillespie	X	X													
Senator Linda Garrou	X	E													
Senator Kay Hagan	E	E													
Senator Bob Rucho		E													
Bill Kincheloe	X	X													
Delegate J. Paul Councill		X													
Senator Frank Ruff	X														
Senator Kenneth Stolle	E														
Senator Martin E. Williams															
Delegate Leo Wardrup	X	X													
Senator John Watkins	X	X													
Delegate John Welch	X	X													
Staff															
Giles Perry, Counsel	X	X													
Suzanne Smith, Clerk	X														

ATTENDANCE

VA/NC Interstate High Speed Rail Commission

Dates	11/28/01	4/29-30/02	1/07/2003												
Rep. Nelson Cole, Co-chair	X	X	X												
Senator Wib Gulley, Co-chair	X	X	X												
Rep. Jim Crawford	X	E	X												
Rep. Pete Cunningham	X														
Senator Linda Garrou		X	X												
Senator Kay Hagan		E	E												
Senator Bob Rucho	X	X													
Bill Kincheloe		X	X												
Delegate J. Paul Councill	E		X												
Delegate Jack Rollison	X		X												
Senator Frank Ruff		X													
Senator Kenneth Stolle															
Senator Martin E. Williams															
Delegate Leo Wardrup	X														
Senator John Watkins	X	X	X												
Delegate John Welch	X	X													
Staff															
Giles Perry, Counsel	X	X	X												
Suzanne Smith, Clerk	X														

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2001

SESSION LAW 2001-266
SENATE BILL 9

AN ACT TO APPOINT MEMBERS TO THE VIRGINIA-NORTH CAROLINA INTERSTATE HIGH-SPEED RAIL COMMISSION.

Whereas, levels of congestion on interstate highways and at major airports along the east coast of the United States are rapidly rising, and in some locations have reached virtual gridlock for hours each day; and

Whereas, it is therefore necessary to develop and use alternative modes of transportation for the movement of goods and passengers long distances along the east-coast corridor; and

Whereas, preliminary engineering studies have documented that the creation of high-speed passenger rail service between points in Virginia and points in North Carolina could provide travelers along the corridor with an attractive alternative to highway travel, thus reducing highway congestion; and

Whereas, establishment of high-speed passenger rail service between Virginia and North Carolina offers the additional possibility of connection through the District of Columbia to origins and destinations as far north as New England; and

Whereas, establishment of high-speed passenger rail service between Virginia and North Carolina offers the additional possibility of connections to destinations in the South, including Florida, Greenville-Spartanburg, South Carolina, and Atlanta, Georgia; and

Whereas, the Virginia General Assembly by passage of Senate Joint Resolution 396 of the 2001 Session has taken its action to create the Virginia-North Carolina Interstate High-Speed Rail Commission; and

Whereas, it is useful and prudent to have a panel of legislators from both Virginia and North Carolina established in order to explore the benefits, costs, and required legislative actions associated with establishing high-speed passenger rail service; Now, therefore,

The General Assembly of North Carolina enacts:

SECTION 1. Upon the Virginia General Assembly's concurring action, the Virginia-North Carolina Interstate High-Speed Rail Commission is established. The North Carolina component shall consist of six members to be appointed as follows:

(1) Three members of the House of Representatives to be appointed by the Speaker of the House of Representatives; and

(2) Three members of the Senate to be appointed by the President Pro Tempore of the Senate.

SECTION 2. In conducting its study, the Commission shall hold meetings, tours of inspection, and public hearings as appropriate to determine the desirability and feasibility of establishing high-speed passenger rail service between Virginia and North Carolina. If it appears to the Commission that establishment of such service is desirable and feasible, the Commission shall consider and recommend to the Governor and General Assembly those legislative actions necessary to do so, including the identification of the necessary levels of funding and the sources of those funds.

SECTION 3. Upon approval of the Legislative Services Commission, the Legislative Services Officer shall assign professional and clerical staff to assist in the

work of the Commission. Technical support shall be provided by the Rail Division of the Department of Transportation. Clerical staff shall be furnished to the Commission through the offices of the House of Representatives and Senate Supervisors of Clerks. The Commission may meet in the Legislative Building or the Legislative Office Building upon the approval of the Legislative Services Commission. The North Carolina members of the Commission, while in the discharge of official duties, may exercise all the powers provided under the provisions of G.S. 120-19 through G.S. 120-19.4, including the power to request all officers, agents, agencies, and departments of the State to provide any information, data, or documents within their possession, ascertainable from their records, or otherwise available to them, and the power to subpoena witnesses. North Carolina members of the Commission shall receive per diem, subsistence, and travel allowances as follows:

(1) Commission members who are members of the General Assembly at the rate established in G.S. 120-3.1;

(2) Commission members who are officials or employees of the State or of local government agencies at the rate established in G.S. 138-6; and

(3) All other Commission members at the rate established in G.S. 138-5.

SECTION 4. The Commission shall report its findings and any recommendations to the Governor and the General Assembly by October 20, 2002, and may make an interim report to the Governor and General Assembly upon the convening of the 2002 Regular Session of the 2001 General Assembly.

SECTION 5. From funds appropriated to the General Assembly, the Legislative Services Commission shall allocate funds for the expenses of the Interstate High-Speed Rail Commission.

SECTION 6. This act is effective when it becomes law.

In the General Assembly read three times and ratified this the 25th day of June, 2001.

s/ Beverly E. Perdue
President of the Senate

s/ James B. Black
Speaker of the House of Representatives

s/ Michael F. Easley
Governor

Approved 11:50 a.m. this 4th day of July, 2001

summary | pdf

SENATE JOINT RESOLUTION NO. 396

Establishing the Virginia-North Carolina Interstate High-Speed Rail Commission.

Agreed to by the Senate, February 22, 2001
Agreed to by the House of Delegates, February 21, 2001

WHEREAS, levels of congestion on interstate highways and at major airports all along the East Coast of the United States are rapidly rising, and in some locations have reached virtual gridlock for hours each day; and

WHEREAS, it is thus highly desirable that, to the maximum degree possible, alternative modes of transportation be used to move people and goods long distances along the East Coast corridor; and

WHEREAS, the establishment of high-speed rail passenger service between Virginia and North Carolina would increase mobility for passengers on connecting rail services and lines in the Commonwealth; and

WHEREAS, preliminary engineering studies have documented that the creation of high-speed passenger rail service between points in Virginia and points in North Carolina could provide travelers all along the corridor an attractive alternative to highway travel, thus reducing highway congestion; and

WHEREAS, establishment of high-speed passenger rail service between Virginia and North Carolina offers the additional possibility of connection through the District of Columbia to origins and destinations as far north as New England; and

WHEREAS, establishment of high-speed passenger service between Virginia and North Carolina offers the possibility of connections to additional destinations in the south, including Florida; Greenville-Spartanburg, South Carolina; Atlanta, Georgia; and others; and

WHEREAS, it would appear both useful and prudent to have a panel of legislators from both Virginia and North Carolina established in order to explore the benefits, costs, and required legislative actions associated with establishing this service; now, therefore, be it

RESOLVED by the Senate, the House of Delegates concurring, That the Virginia-North Carolina Interstate High-Speed Rail Commission be established. The Virginia component of the Commission shall consist of six legislative members as follows: two members of the Senate, to be appointed by the Senate Committee on Privileges and Elections, and four members of the House of Delegates, to be appointed by the Speaker of the House, in accordance with the principles of proportional representation contained in the Rules of the House of Delegates.

In conducting the study, the Commission shall conduct such meetings, tours of inspection, and public hearings as appropriate to determine the desirability and feasibility of establishing high-speed passenger rail service between Virginia and North Carolina, including connecting rail lines in Hampton Roads. If the Commission determines that such rail service is desirable and feasible, it shall consider and recommend to the Governor and General Assembly legislative action necessary to facilitate the establishment of high-speed passenger rail service and connecting rail lines in Virginia, determine necessary levels of funding, and identify the sources of such funds.

The direct costs of this study shall not exceed $7,500 per year.

The Division of Legislative Services shall provide staff support for the study. Technical assistance shall be provided by the Department of Rail and Public Transportation. All agencies of the Commonwealth shall provide assistance to the Commission, upon request.

The Commission shall complete its work in time to submit its written findings and recommendations by October 20, 2002, to the Governor and the 2003 Session of the General Assembly as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents.

Implementation of this resolution is subject to subsequent approval and certification by the Joint Rules Committee. The Committee may withhold expenditures or delay the period for the conduct of the study.

General Assembly Home

SENATE JOINT RESOLUTION NO. 35

Offered January 9, 2002

Prefiled December 28, 2001

Continuing the Virginia-North Carolina Interstate High-Speed Rail Commission.

Patron—Watkins

Referred to Committee on Rules

WHEREAS, Senate Joint Resolution No. 396 established the Virginia-North Carolina Interstate High-Speed Rail Commission to determine the desirability and feasibility of establishing high-speed passenger rail service between Virginia and North Carolina, including connecting rail lines in Hampton Roads and, if it determines that such rail service is desirable and feasible, to consider and recommend to the Governor and General Assembly legislative action necessary to facilitate establishment of high-speed passenger rail service and connecting rail lines in Virginia, determine necessary levels of funding, and identify the sources of such funds; and

WHEREAS, SJR 396 contemplated the completion of the Commission's work in two years, with submission of a final report to the Governor and the 2003 Session of the General Assembly; and

WHEREAS, scheduling of meetings of the Commission in 2001 proved much more difficult than anticipated, owing both to the incompatibility of the dates of the sessions of the two legislatures, and also to complications caused by an exceptionally long and difficult session in North Carolina and the calling of a Special Session in Virginia for the purpose of redistricting; and

WHEREAS, after holding one joint meeting and discussing a possible work plan for the Commission, it appeared that expenses associated with the study might be somewhat higher than usual, owing in large measure to the need for considerable travel, some of it by air; now, therefore, be it

RESOLVED by the Senate, the House of Delegates concurring, That the Virginia-North Carolina Interstate High-Speed Rail Commission be continued. The Virginia component of the Commission shall consist of 10 legislative members as follows: six members of the Senate, to be appointed by the Senate Committee on Privileges and Elections; and four members of the House of Delegates, to be appointed by the Speaker of the House, in accordance with the principles of proportional representation contained in the Rules of the House.

The direct costs of this study shall not exceed $12,500 per year.

The Commission shall complete its work by November 30, 2004 and shall submit its written findings and recommendations to the Governor and the 2005 Session of the General Assembly as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents.

Implementation of this resolution is subject to subsequent approval and certification by the Joint Rules Committee. The Committee may withhold expenditures or delay the period for the conduct of the study.

Official Use By Clerks

Agreed to By The Senate		Agreed to By The House of Delegates	
with amendment	☐	with amendment	☐
substitute	☐	substitute	☐
substitute w/amdt	☐	substitute w/amdt	☐

Date: _____ Date: _____

Clerk of the Senate

Clerk of the House of Delegates

Proposed Budget
for the North Carolina Members of the
Virginia-North Carolina Interstate High-Speed Rail Commission

1.	Legislative Members Subsistence	$7488
	A. USUAL SITUATION - ONE DAY MEETINGS $104 x number of legislative members x 1 ½ (Half of members using two days subsistence) x number of meetings	
2.	Non-Legislative Members Subsistence	-0-
	A. USUAL SITUATION - ONE DAY MEETINGS $96 x number of non-legislative members x 1 ½ (Half of members using two days subsistence) x number of meetings	
3.	Travel Expenses $58.00 x number of members x number of meetings (Average 200 miles round trip x $.29 = $58.00)	2784
4.	Clerical Staff Average of $601 x number of meetings ($601 = average salary with benefits for 5 day work week)	4808
5.	Professional Staff (To be used if other than legislative professional staff is employed)	-0-
6.	Special Travel and Expenses	-0-
7.	Postage and Telephone	250
8.	Supplies	250
9.	Copying and Printing	1,000
10.	Reserve	8420
	TOTAL	$25,000

Suzanne Smith (Rep. Cole)

[redacted]stribution List Name: @Interested Parties HSR

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NORTH CAROLINA GENERAL ASSEMBLY
STATE LEGISLATIVE BUILDING
RALEIGH 27603

November 16, 2001

MEMORANDUM

TO: VA/NC HSR Commission Members

FROM: Senator Wib Gulley, Co-Chair
Representative Nelson Cole, Co-Chair

RE: Committee Meeting Notice

There will be a meeting of the VA/NC HSR Commission on Wednesday, November 28, 2001, from 10:00 a.m. to 2:00 p.m. in Room 1228 of the Legislative Building in Raleigh, NC.

Parking for non-legislative members of the commission is available in the visitor parking deck #75 located on Salisbury Street across from the Legislative Office Building. Parking is also available in the underground parking deck at the Museum of History Building located on the corner of Jones and Wilmington Streets across form the Legislative Building (see enclosed map). The cost for visitor parking is $.50 per hour or $4.00 per day and is reimbursed with a parking receipt that is submitted with your travel reimbursement form.

Please advise Suzanne Smith, Committee Clerk, at (919) 733-5779 or e-mail at Colela@ncleg.net if you will be unable to attend.

NC/sjs

Posted 16-Nov-01

cc: Press
Committee Record ✓
Interested Parties

AGENDA

Virginia-North Carolina
Interstate High-Speed Rail Commission
November 28, 2001
10:00 a.m.
Room 1228, Legislative Building

I. Convene, Welcome, Introductions, and Opening Remarks
N.C. State Senator Wib Gulley, N.C. State Rep. Nelson Cole
Va. State Senator John Watkins, Va. Delegate Paul Councill

II. Review of Legislative Charge
Giles S. Perry, N.C. Legislative Staff
Alan Wambold, Va. Legislative Staff

III. Adoption of Budget for North Carolina Members

IV. Status of Work in the Southeast High Speed Rail Corridor
Leo Bevon, Director of the Virginia Department of Rail and
Public Transportation, and David King, Deputy Secretary, NCDOT

V. Tier I Environmental Impact Study
David Foster, Rail Environmental Program
Manager, NCDOT Rail Division

LUNCH –Legislative Cafeteria

VI. Comments
Allan Rutter, Administrator, Federal Railroad Administration

VII. High Speed Rail in the 107th Congress
David Ewing, Federal Rail Programs Coodinator,
NC Washington Office

VIII. Amtrak Update
Jay McArthur, General Manager, Atlantic Coast Services, Amtrak

IX. Southeastern Economic Alliance
Jeff Merritt, Vice President for Intergovernmental Relations
Greater Raleigh Chamber of Commerce

X. Discussion of future meeting dates and work program

XI. Adjourn

MINUTES

VA/NC HIGH SPEED RAIL COMMISSION
Wednesday, November 28, 2001
10:00 a.m.
Room 1228, Legislative Building
Raleigh, North Carolina

The VA/NC High Speed Rail Commission held its first meeting on Wednesday, November 28, 2001, at 10:00 a.m. in room 1228 of the Legislative Building in Raleigh North Carolina. The following members were present: Senator Wib Gulley, Co-chair, Representative Nelson Cole, Co-chair, Representative Jim Crawford, Representative Pete Cunningham, Senator Bob Rucho, Delegate Jack Rollison, Delegate Leo Wardrup, Senator John Watkins, and Delegate John Welch.

Senator Gulley presided and called the meeting to order and welcomed each member, especially the Virginia members. He introduced the staff to the Commission members and had the Commission members introduce themselves. All of the Virginia members expressed how glad they were to be there and everyone is looking forward to working together and putting together a good transportation plan that will be beneficial to both states. Representative Cole, Co-chair, welcomed the Virginia members also and indicated that the Commission will be discussing one of the important aspects of transportation that has been neglected throughout the United States. He feels that the Commission will be able to come to a consensus on what they can do and also be able to get their fair share of dollars out of Washington, DC in order to complete these projects. Senator Gulley concurred with all of the members expressing he was happy to be serving on this Commission and about what the two states will be able to get done together for transportation.

REVIEW OF LEGISLATIVE CHARGE

Senator Gulley introduced Giles Perry, NC Legislative Staff. Mr. Perry indicated that North Carolina's authorizing legislation is Senate Bill 9, Session Law 2001-266, which is included in all members' notebooks (Attachment #1). The Commission shall report its findings and any recommendation to the Governor and the General Assembly by October 20, 2002, and may make an interim report to the Governor and General Assembly upon the convening of the 2002 Regular Session of the 2001 General Assembly. After going over a few sections of the legislation, he introduced Alan Wambold, Virginia's Legislative Staff. Mr. Wambold went over Virginia's legislation, which is Senate Joint Resolution Number 396 (Attachment #2), which is also included in all members' notebooks. The Virginia Commission is to have a written report to be submitted by October 20, 2002 for consideration of the 2003 Session of the General Assembly.

ADOPTION OF BUDGET FOR NORTH CAROLINA MEMBERS

Senator Gulley asked Giles Perry to go over North Carolina's Proposed Budget for the Commission (Attachment #3), which is also in the members' notebooks. $25,000 has been allocated for the Commission, which should be sufficient to cover the proposed meetings. Representative Nelson Cole moved to adopt the proposed budget. Senator Rucho seconded the motion. There being no further discussion, the motion was carried by a majority voice vote and the budget was adopted.

STATUS OF WORK IN THE SOUTHEAST HIGH SPEED RAIL CORRIDOR

Senator Gulley introduced Mr. Leo Bevon, Director of the Virginia Department of Rail and Public Transportation, to present information on the high speed rail project (Attachment #4). He went over the implementation process which includes the demands, preliminary engineering, capacity analysis, financial analysis and the routes between Washington, DC and Charlotte, NC. Virginia has worked with North Carolina in identifying some of these issues. The implementation process will include public hearings on the plan and the alternatives analysis, to look at the high speed corridor designation and to pick the corridor and look at the alternatives that might exist. The stage the Commission is at right now is the Environmental Analysis, which is a Tier 1 Environmental Analysis, which is to pick the route within the corridor. An example of this is in Virginia where they are doing a project to add an additional rail bridge over Quantico Creek. That was subject to a separate environmental analysis due to the impacts of the bridge over a waterway and wetlands. They are in the process of holding public hearings on this. The implementation process will continue with reaching agreements with the railroads and Amtrak, provide funding, the design, construction, the equipment and the service.

There are presently ten (10) corridors in the United States that have been selected as high speed rail corridors and funding has been made available to do those studies to approve the corridors. Virginia's high speed corridor was from Washington, DC to Richmond, VA with a spur to the Hampton Roads area. The U.S. Secretary of Transportation designated the Southeast Corridor as indicated on page five (5) of Attachment #4 with other corridors designated across the nation.

Virginia has done a series of rail passenger studies as they have some existing rail service. Their first priority is the Washington, DC to Richmond, VA, followed by completing it down to the Hampton Roads area which would connect what they call the Urban Crescent of Virginia, which is the main population center of Virginia. They have also looked at improving service from Washington, DC to Bristol, VA as Interstate 81, which runs in that area, is the most heavily congested truck route in the nation, and it would provide an alternative transportation in that sector which would be a benefit to the highway system.

The Washington, DC to North Carolina study, which is in the Tier I Environmental Analysis phase, will eventually go into preliminary engineering for the segments in Virginia. Virginia has finished the feasibility study of the Washington, DC to Richmond, VA segment with several corridor studies done by Amtrak and the Federal Railway Administration. Amtrak

looked at corridors across the nation and concluded that the Washington, DC to Richmond, VA to Charlotte, NC segment was one of the best segments in the country for the potential of high speed rail service. Previously Virginia looked at Richmond to Newport News, VA segment as part of the major investment study on Interstate 64 and they are currently in the process of studying Richmond and Norfolk using the I-460 corridor and that study will be completed in time for their next legislative session which starts in January 2002. They also are looking into a Bristol, VA to Washington, DC route. They feel all of these routes have great potential for a successful passenger rail service in the state.

The estimated cost of the Washington, DC to Richmond, VA corridor is $370 million. If that is made available they will be able to offer high speed rail service, commuter service as well as expanded freight service in that corridor. It is very cost effective considering the amount of people it will be able to move in an already highly congested area and will become even more congested in the future. This investment will allow the trains to operate at 110 mph on the corridor, which will reduce the time from Washington, DC to Richmond by 97 minutes. It will show a definite improvement in the corridors.

Virginia has already done a lot of work in the Potomac Yard, the old railroad yard. They have also made improvements in the tunnel leading into Washington Station, built a new bridge over Braddock Road and added a third track, have added a spur to the Lorton Road Bridge, which is an auto train connection to ease travel during the peak period. They have also put a new bridge in at Four Mile Run and have upgraded and improved a total of 61 grade crossings in the corridor.

The Richmond to Washington, DC Corridor Task Force consists of the Virginia Department of Rail and Public Transportation, CSX Transportation, Virginia Railway Express, Amtrak (non voting member) and the Federal Railroad Administration (non voting member).

There was a brief question and answer period at the end of Mr. Bevon's presentation.

Senator Gulley then introduced Mr. David King, Deputy Secretary with the North Carolina Department of Transportation (Attachment #5). Mr. King stated that plans are underway for the Charlotte, NC to Washington, DC corridor. Senator Rucho asked the question does North Carolina have a Federal partner in the intercity rail. Mr. King replied that the NCDOT, North Carolina Railroad and Norfolk Southern Corporation will sign a contract to invest about $25 million out of the $46 million that is needed for the investment to produce a series of capital improvements. There is work underway to shorten the train travel time by one and a half hours on the route from Charlotte, NC to Washington, DC. Mr. King indicated that the shorter time would make a big difference in the public making a decision for high speed rail travel, especially since September 11, 2001. He said as we now approach Congress in looking for the federal partner we can let them know that we already have a head start on the region for the high speed rail. Mr. King introduced Scott Saylor, President of the North Carolina Railroad, who was a visitor at the meeting.

Mr. King indicated that the state has had a substantial growth rate in the usage of the highway system which is more than three times the growth rate of the population of the state. If the state doesn't get serious about managing the growth rate, it will be difficult to manage.

Mr. King indicated that the state is looking at the western part of the state as well as the southeastern part for rail service that would be fed from the main corridor from Washington, DC to Richmond, VA to Raleigh, NC to Charlotte, NC and eventually to Atlanta, GA. He indicated that this project would be able to be done by completing one capital improvement at a time, and not by taking one great leap approach. The state is heavily into crossing safety and station improvements and looks forward to working with this Commission as the state makes its case to Congress so North Carolina and Virginia can deliver a successful intercity rail infrastructure.

TIER I ENVIRONMENTAL IMPACT STUDY

Senator Gulley then called on Mr. David Foster, Manager of the Rail Environmental Program with the NCDOT Rail Division to bring the Commission up to date on the Tier I Study. The High Speed Rail Corridor was designed in 1992 from Washington, DC to Richmond, VA to Charlotte, NC. Over the next seven years after that Virginia and North Carolina worked together and separately to do feasibility studies and in 1997 came together with a MOA between the states as well as the Federal Highway Administration and Federal Railroad Administration. In August of 1999 the draft for the Tier I Environmental Impact Statement was begun, Attachment #6. This is a program level document which looks at the regional impacts and general location of the project. The need is driven by population growth, increased mobility and limited mobility choice. Safety and energy use in rail travel are both better than air and auto travel which translates into better air quality benefits when funding any type of transportation facility. They are looking at nine different study areas from Washington to Charlotte. A summery of the comparison of these nine alternatives is found on pages 15 and 37 of the attachment.

The next steps that the study will take will be to finish up the public hearings, of which the last one will be held on December 10, 2001. A recommendation report, compiled after meeting with the Virginia and North Carolina Advisory Committees and their Transportation Agencies, will identify one or more alternatives that will be carried forward for a detailed study. In early 2002 they will begin the final environmental impact statement and record of decision, which they hope will be completed by the end of 2002, at which point Tier II Environmental studies will begin.

A question and answer period followed. Delegate Rollison asked what was the fastest rail travel time from Washington, DC to Charlotte, NC that they had looked at. Mr. Foster replied that it was six hours and fifteen minutes. Delegate Rollison then asked what was the cost of that travel time. Mr. Foster said it was 22-24 cents per mile for airline travel compared to 18-20 cents per mile for rail travel. It was pointed out that rail service is most effective in the 300-500 miles range, not the longer trips. Discussion followed.

At 12 noon, Senator Gulley announced an hour lunch break in the Legislative Cafeteria, returning at 1:00 p.m.

FEDERAL RAILROAD ADMINISTRATION

After the recess, Senator Gulley introduced Mr. Alan Rutter, Administrator of the Federal Railroad Administration. Having help set up the Texas High Speed Rail Authority eleven years ago with the then Governor of Texas, Bill Clemmons, Mr. Rutter expressed the things that he felt Texas had learned from their high speed rail project. His advice would be to design a system that meets the needs best for the states involved, and not compare it to the fast trains that Europe has that travel over 120 mph. The FRA will continue to offer their recommendations from things they have learned with other systems in the country as well as the safety for the citizens traveling on the system. Discussion followed. Delegate Wardrup asked if Virginia and North Carolina would have a federal partner in this project? Mr. Rutter stated that Congress is looking at funding these systems through projects that the states choose.

Senator Gulley broke away from the agenda and introduced Speaker of the North Carolina House of Representatives, Speaker Jim Black. Speaker Black gave a warm welcome the Virginia members present.

FEDERAL RAIL PROGRAMS

With time being a factor, Senator Gulley asked that the remaining three speakers limit their talks to five minutes each in order to hear everyone on the agenda. He then introduced Mr. David Ewing, the Federal Rail Programs Coordinator for North Carolina in Washington, DC. He stated that his job is to find funding for this rail service. There are three pieces of legislation in Congress that they are following that may offer financing. Mr. David King, Deputy Secretary , NCDOT, mentioned that they are trying to get $50,000 to match Virginia and North Carolina's state funds to support this Commission.

AMTRAK UPDATE

Senator Gulley introduced Mr. Jay McArthur, General Manager, Atlantic Coast Business Group. This group helps manage the overnight train service (Amtrak) from New York to Florida and all of the North Carolina supported services. They have worked closely with Virginia and North Carolina's DOT to develop the best plan. The success is all about the corridors, not what brand is on that rail. It will be the corridors that connect the citizens to the rail service. The corridors connect regional rail to intercity rail and vise versa. They recognize that what is good for rail transportation is good for Amtrak. They hope to be the vendor of choice, but if they aren't they hope they will help the commission decide who the vendor will be. Mr. McArthur referred to Attachment #7, the article from Time magazine.

SOUTHEASTERN ECONOMIC ALLIANCE

Senator Gulley introduced Mr. Jeff Merritt, Vice President for Intergovernmental Relations with the Greater Raleigh Chamber of Commerce. The Southeastern Economic Alliance is a coalition of 14 chambers of commerce in six Southeastern states (Attachment #8). The business leadership of the southeast region believes that the third leg of the transportation system should be a high speed rail system in order to ease the gridlock on the roads as well as airways. They have invested in this project as they feel it is a critical transportation need and the factors that are affecting our region will only grow worse if they don't make some investments now.

DISCUSSION OF FUTURE MEETING DATES AND WORK PROGRAM

Senator Gulley led the discussion for a spring meeting of the VA/NC High Speed Rail Commission. It was decided on the later part of March or early April for the next meeting with Virginia hosting it. It was discussed to bring in Norfolk Southern and CSX representatives to be a part of the meeting. Possibilities for the meeting could be either Richmond, VA or the Washington, DC area, where the Commission could talk with some of the Congressional leaders in Washington. It was also suggested that the Commission could ride the rail system from Richmond, VA to the Union Station in Washington, DC to experience the rail system that is in place now. It was also suggested to ride Amtrak from Washington, DC to Philadelphia, PA. Fredericksburg, VA was also mentioned as a possibility for the next meeting place. Senator Walkins requested that someone from KPMG attend the meeting also since they are involved in the study that is going on. Delegate Wardrup recommended that the North Carolina co-chairs work in conjunction with Delegate Rollison and Senator Watkins on deciding when and where to hold the next meeting. It was requested that phone numbers and addresses of the speakers of this meeting be provided to the Commission members. Senator Gulley indicated that DOT would help get this to the Commission members.

Representative Cole asked Pat Simmons with DOT to contact the presenters at the meeting today to see if they would like to get any additional printed information or comments that could be distributed to the Commission members.

There being no further business, the meeting was adjourned at 2:00 p.m.

Senator Wib Gulley, Co-Chair Presiding

Suzanne Smith, Committee Assistant

Representative Nelson Cole, Co-Chair

AM

VISITOR REGISTRATION SHEET

VA/NC High Speed Rail Commission — November 28, 2001

Name of Committee — **Date**

VISITORS: PLEASE SIGN IN BELOW AND RETURN TO COMMITTEE CLERK

NAME	FIRM OR AGENCY AND ADDRESS
Michael Testerman	Va. HSR Development committee 5101 Monument Ave. Richmond, VA 23230
Jan Ramsgell	NCPTA
Ruth Sapsin	NCDOT
George Conner	Va DRPT
DAVID KING	NC DOT
LEO BEVON	VA DRPT
Julia Hegle	NCDOT
GLENN HARTSOE	NCRR
Kat Christain	NCRR
Scott Saylor	NCRR

AM

VISITOR REGISTRATION SHEET

VA/NC High Speed Rail Commission — November 28, 2001

Name of Committee — **Date**

VISITORS: PLEASE SIGN IN BELOW AND RETURN TO COMMITTEE CLERK

NAME	FIRM OR AGENCY AND ADDRESS
Jay McArthur	Amtrak - 400 S. West St. Raleigh NC 27601
Sanford Crow	NCDOT - Public Transit
Sharon Matthews	DOT-DMV
DAVID EWING	NC DOT - Rail - Washington, DC
PAT Simmons	"
Melissa Lennon	General Assembly LA
DAVID FOSTER	NCDOT - RAIL
Mark Beason	Capitol Group

PM

VISITOR REGISTRATION SHEET

VA/NC High Speed Rail Commission — November 28, 2001

Name of Committee — **Date**

VISITORS: PLEASE SIGN IN BELOW AND RETURN TO COMMITTEE CLERK

NAME	FIRM OR AGENCY AND ADDRESS
J. Dent	Consultant
Julia Hegle	NCDOT
Michael Testerman	Va. HSR Development Comm. Rich. VA.
George Conner	Va DRPT
DAVID KING	NCDOT
LEO BEVON	VA DRPT
DAVID EWING	NC DOT Rail Wash.

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2001

SESSION LAW 2001-266
SENATE BILL 9

AN ACT TO APPOINT MEMBERS TO THE VIRGINIA-NORTH CAROLINA INTERSTATE HIGH-SPEED RAIL COMMISSION.

Whereas, levels of congestion on interstate highways and at major airports along the east coast of the United States are rapidly rising, and in some locations have reached virtual gridlock for hours each day; and

Whereas, it is therefore necessary to develop and use alternative modes of transportation for the movement of goods and passengers long distances along the east-coast corridor; and

Whereas, preliminary engineering studies have documented that the creation of high-speed passenger rail service between points in Virginia and points in North Carolina could provide travelers along the corridor with an attractive alternative to highway travel, thus reducing highway congestion; and

Whereas, establishment of high-speed passenger rail service between Virginia and North Carolina offers the additional possibility of connection through the District of Columbia to origins and destinations as far north as New England; and

Whereas, establishment of high-speed passenger rail service between Virginia and North Carolina offers the additional possibility of connections to destinations in the South, including Florida, Greenville-Spartanburg, South Carolina, and Atlanta, Georgia; and

Whereas, the Virginia General Assembly by passage of Senate Joint Resolution 396 of the 2001 Session has taken its action to create the Virginia-North Carolina Interstate High-Speed Rail Commission; and

Whereas, it is useful and prudent to have a panel of legislators from both Virginia and North Carolina established in order to explore the benefits, costs, and required legislative actions associated with establishing high-speed passenger rail service; Now, therefore,

The General Assembly of North Carolina enacts:

SECTION 1. Upon the Virginia General Assembly's concurring action, the Virginia-North Carolina Interstate High-Speed Rail Commission is established. The North Carolina component shall consist of six members to be appointed as follows:

(1) Three members of the House of Representatives to be appointed by the Speaker of the House of Representatives; and

(2) Three members of the Senate to be appointed by the President Pro Tempore of the Senate.

SECTION 2. In conducting its study, the Commission shall hold meetings, tours of inspection, and public hearings as appropriate to determine the desirability and feasibility of establishing high-speed passenger rail service between Virginia and North Carolina. If it appears to the Commission that establishment of such service is desirable and feasible, the Commission shall consider and recommend to the Governor and General Assembly those legislative actions necessary to do so, including the identification of the necessary levels of funding and the sources of those funds.

SECTION 3. Upon approval of the Legislative Services Commission, the Legislative Services Officer shall assign professional and clerical staff to assist in the

work of the Commission. Technical support shall be provided by the Rail Division of the Department of Transportation. Clerical staff shall be furnished to the Commission through the offices of the House of Representatives and Senate Supervisors of Clerks. The Commission may meet in the Legislative Building or the Legislative Office Building upon the approval of the Legislative Services Commission. The North Carolina members of the Commission, while in the discharge of official duties, may exercise all the powers provided under the provisions of G.S. 120-19 through G.S. 120-19.4, including the power to request all officers, agents, agencies, and departments of the State to provide any information, data, or documents within their possession, ascertainable from their records, or otherwise available to them, and the power to subpoena witnesses. North Carolina members of the Commission shall receive per diem, subsistence, and travel allowances as follows:

(1) Commission members who are members of the General Assembly at the rate established in G.S. 120-3.1;

(2) Commission members who are officials or employees of the State or of local government agencies at the rate established in G.S. 138-6; and

(3) All other Commission members at the rate established in G.S. 138-5.

SECTION 4. The Commission shall report its findings and any recommendations to the Governor and the General Assembly by October 20, 2002, and may make an interim report to the Governor and General Assembly upon the convening of the 2002 Regular Session of the 2001 General Assembly.

SECTION 5. From funds appropriated to the General Assembly, the Legislative Services Commission shall allocate funds for the expenses of the Interstate High-Speed Rail Commission.

SECTION 6. This act is effective when it becomes law.

In the General Assembly read three times and ratified this the 25th day of June, 2001.

s/ Beverly E. Perdue
President of the Senate

s/ James B. Black
Speaker of the House of Representatives

s/ Michael F. Easley
Governor

Approved 11:50 a.m. this 4th day of July, 2001

Attachment #2

SENATE JOINT RESOLUTION NO. 396

Establishing the Virginia-North Carolina Interstate High-Speed Rail Commission.

Agreed to by the Senate, February 22, 2001
Agreed to by the House of Delegates, February 21, 2001

WHEREAS, levels of congestion on interstate highways and at major airports all along the East Coast of the United States are rapidly rising, and in some locations have reached virtual gridlock for hours each day; and

WHEREAS, it is thus highly desirable that, to the maximum degree possible, alternative modes of transportation be used to move people and goods long distances along the East Coast corridor; and

WHEREAS, the establishment of high-speed rail passenger service between Virginia and North Carolina would increase mobility for passengers on connecting rail services and lines in the Commonwealth; and

WHEREAS, preliminary engineering studies have documented that the creation of high-speed passenger rail service between points in Virginia and points in North Carolina could provide travelers all along the corridor an attractive alternative to highway travel, thus reducing highway congestion; and

WHEREAS, establishment of high-speed passenger rail service between Virginia and North Carolina offers the additional possibility of connection through the District of Columbia to origins and destinations as far north as New England; and

WHEREAS, establishment of high-speed passenger service between Virginia and North Carolina offers the possibility of connections to additional destinations in the south, including Florida; Greenville-Spartanburg, South Carolina; Atlanta, Georgia; and others; and

WHEREAS, it would appear both useful and prudent to have a panel of legislators from both Virginia and North Carolina established in order to explore the benefits, costs, and required legislative actions associated with establishing this service; now, therefore, be it

RESOLVED by the Senate, the House of Delegates concurring, That the Virginia-North Carolina Interstate High-Speed Rail Commission be established. The Virginia component of the Commission shall consist of six legislative members as follows: two members of the Senate, to be appointed by the Senate Committee on Privileges and Elections, and four members of the House of Delegates, to be appointed by the Speaker of the House, in accordance with the principles of proportional representation contained in the Rules of the House of Delegates.

In conducting the study, the Commission shall conduct such meetings, tours of inspection, and public hearings as appropriate to determine the desirability and feasibility of establishing high-speed passenger rail service between Virginia and North Carolina, including connecting rail lines in Hampton Roads. If the Commission determines that such rail service is desirable and feasible, it shall consider and recommend to the Governor and General Assembly legislative action necessary to facilitate the establishment of high-speed passenger rail service and connecting rail lines in Virginia, determine necessary levels of funding, and identify the sources of such funds.

The direct costs of this study shall not exceed $7,500 per year.

The Division of Legislative Services shall provide staff support for the study. Technical assistance shall be provided by the Department of Rail and Public Transportation. All agencies of the Commonwealth shall provide assistance to the Commission, upon request.

The Commission shall complete its work in time to submit its written findings and recommendations by October 20, 2002, to the Governor and the 2003 Session of the General Assembly as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents.

Implementation of this resolution is subject to subsequent approval and certification by the Joint Rules Committee. The Committee may withhold expenditures or delay the period for the conduct of the study.

General Assembly Home

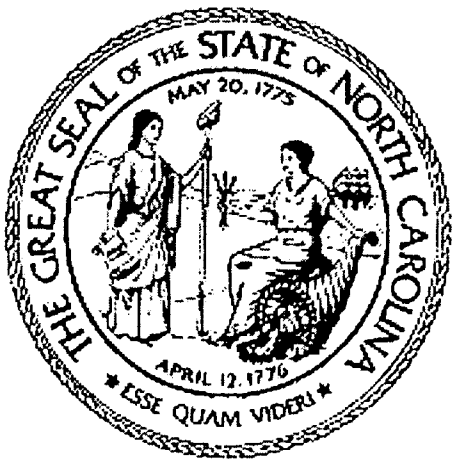
Attachment #3

Proposed Budget
for the North Carolina Members of the
Virginia-North Carolina Interstate High-Speed Rail Commission

1.	Legislative Members Subsistence	$7488
	A. USUAL SITUATION - ONE DAY MEETINGS $104 x number of legislative members x 1 ½ (Half of members using two days subsistence) x number of meetings	
2.	Non-Legislative Members Subsistence	-0-
	A. USUAL SITUATION - ONE DAY MEETINGS $96 x number of non-legislative members x 1 ½ (Half of members using two days subsistence) x number of meetings	
3.	Travel Expenses $58.00 x number of members x number of meetings (Average 200 miles round trip x $.29 = $58.00)	2784
4.	Clerical Staff Average of $601 x number of meetings ($601 = average salary with benefits for 5 day work week)	4808
5.	Professional Staff (To be used if other than legislative professional staff is employed)	-0-
6.	Special Travel and Expenses	-0-
7.	Postage and Telephone	250
8.	Supplies	250
9.	Copying and Printing	1,000
10.	Reserve	8420
	TOTAL	$25,000

Virginia – North Carolina High Speed Rail Commission Presentation

November 28, 2001



Virginia Department of Rail and Public Transportation

Attachment #4

Implementation Process

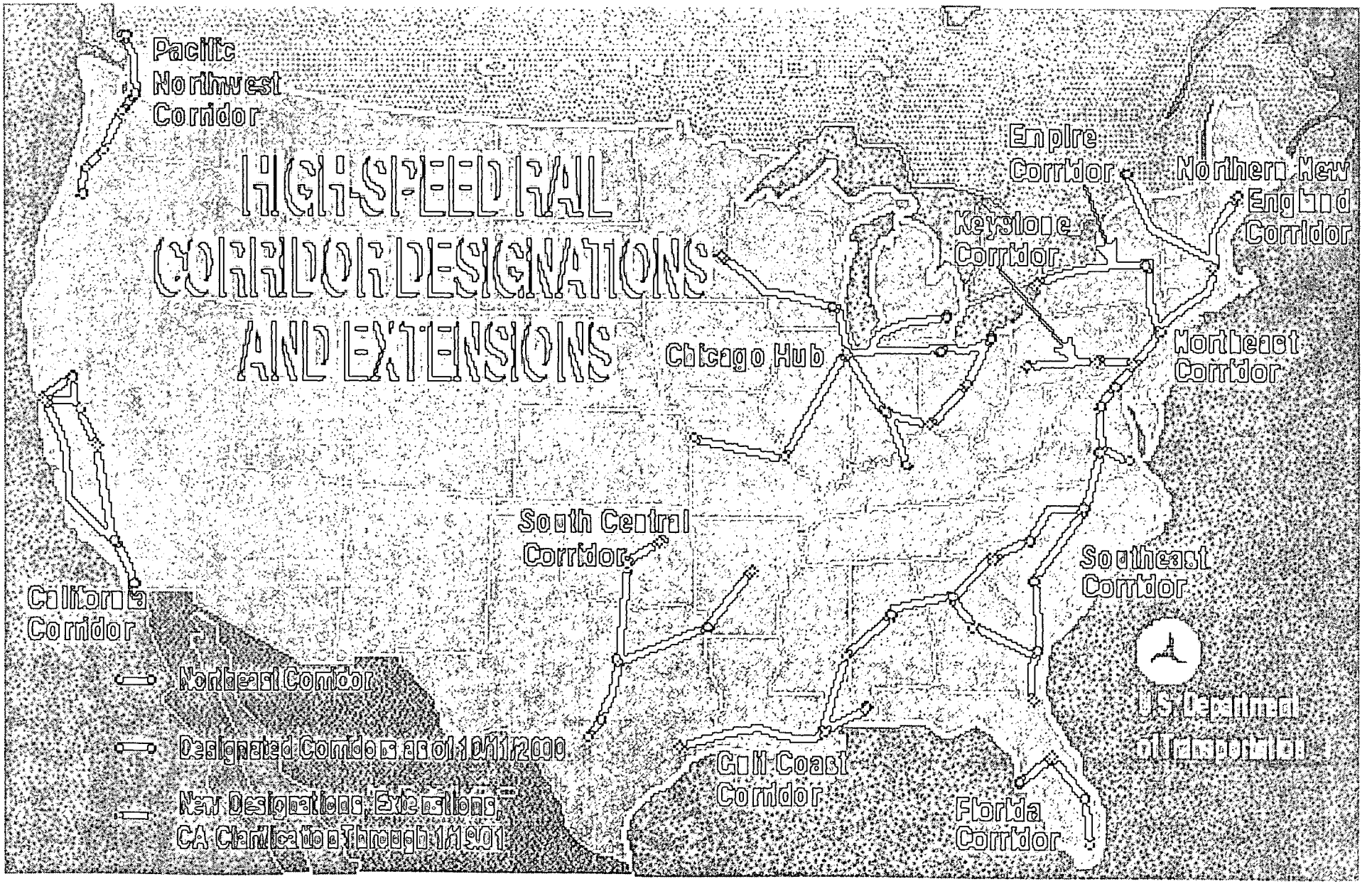
1. **Feasibility Study**
   a. Demand
   b. Preliminary Engineering
   c. Capacity Analysis
   d. Financial Analysis
   e. Routes
2. **Public Hearings on Plan (if necessary)**
3. **Alternatives Analysis**

Implementation Process
(Continued)

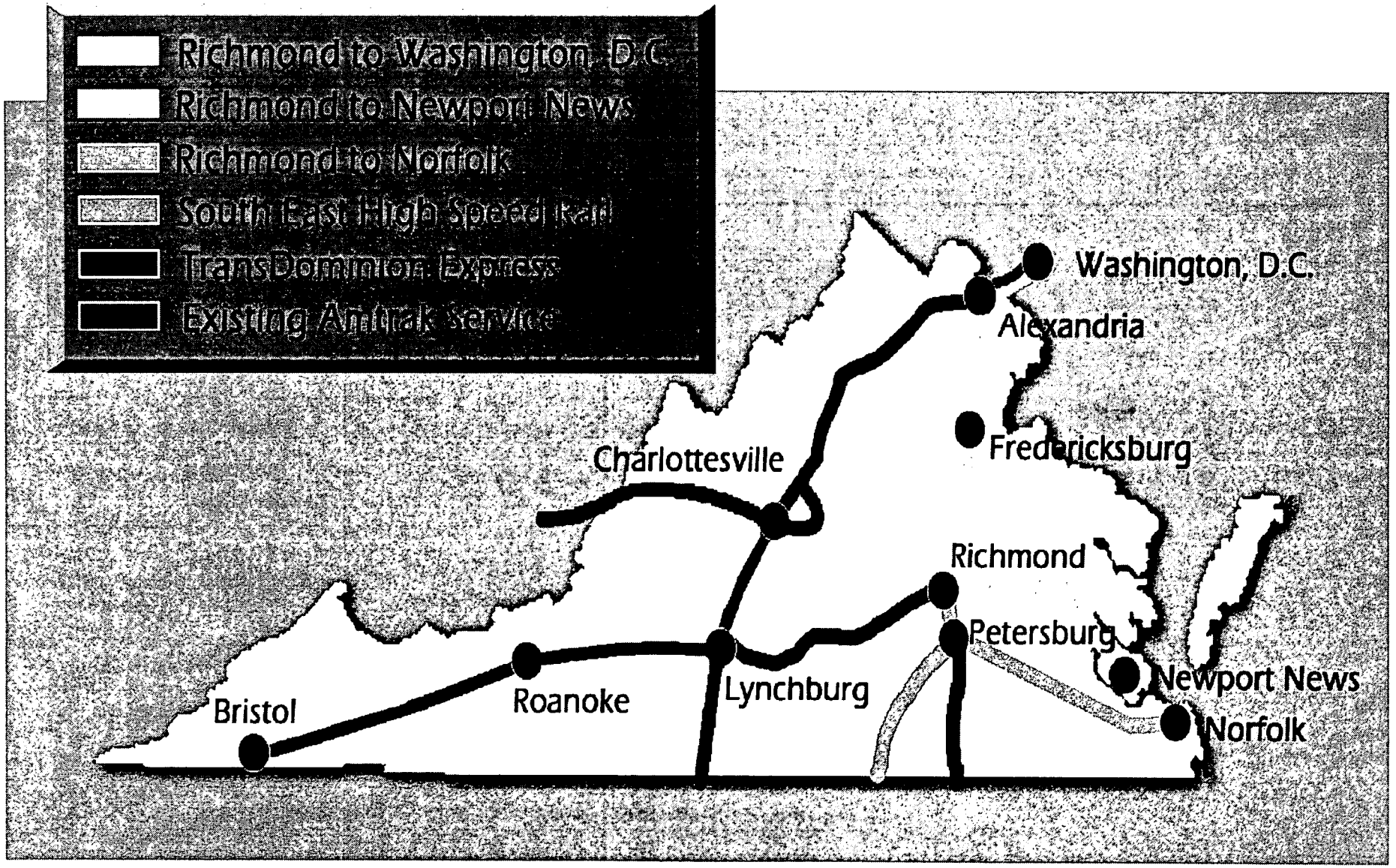
4. **High Speed Corridor Designation**
5. **Environmental Analysis**
    4. Tier 1
    5. Categorical Exclusions
    6. Tier 2
6. **Public Hearings**

Implementation Process
(Continued)

7. Agreements with Railroads, Amtrak, etc.
8. Funding
9. Design
10. Construction
11. Equipment
12. Service


HIGH-SPEED RAIL
CORRIDOR DESIGNATIONS
AND EXTENSIONS
Pacific
Northwest
Corridor
Empire
Corridor
Northern New
England
Corridor
Keystone
Corridor
Chicago Hub
Northeast
Corridor
South Central
Corridor
Southeast
Corridor
California
Corridor
Northeast Corridor
Designated Corridors as of 10/1/2000
New Designations, Extensions,
CA Clarification Through 1/15/01
Gulf Coast
Corridor
Florida
Corridor

Virginia Passenger Rail Network



Virginia Studies

1. **Washington, D.C. to North Carolina**
   - PE by Virginia
2. **Washington, D.C. to Richmond**
   - Feasibility Study by VA
   - Corridor Study by Amtrak & FRA
3. **Richmond to Newport News**
   - DRPT & VDOT (I-64 MIS)

Virginia Studies
(Continued)

4. Washington, D.C. to Charlotte

- Signal Study – VA
- Environment Impact Study – NC
- Overall Corridor Study - FRA

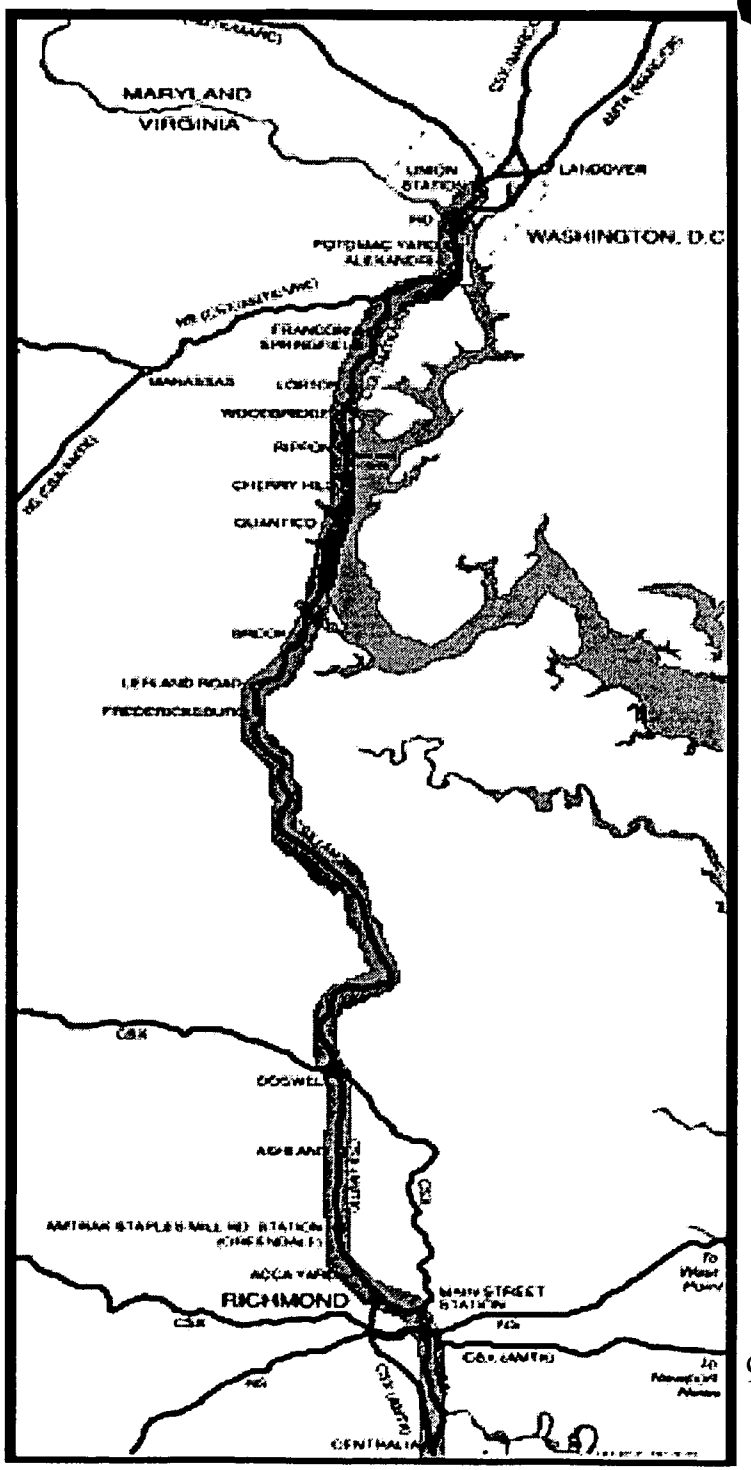
5. Bristol to Richmond & Washington

- Final Phase Underway by DRPT & NS

6. Richmond to Norfolk

- Feasibility Study and Demand Analysis underway by DRPT

Richmond to Washington, D.C. Rail Corridor



Estimated Cost:

$370 Million

Washington, D.C. to Richmond Corridor Projects Completed

1. **Potomac Yard**
2. **Washington Station Tunnel Improvements**
3. **Braddock Road Bridge**
4. **Lorton Road Bridge (Autotrain Connection)**
5. **Four Mile Run Bridge**
6. **Grade Crossings:**
   - 27 Upgraded
   - 19 Planned
   - 61 Total

Washington, D.C. to Richmond Corridor Projects Underway

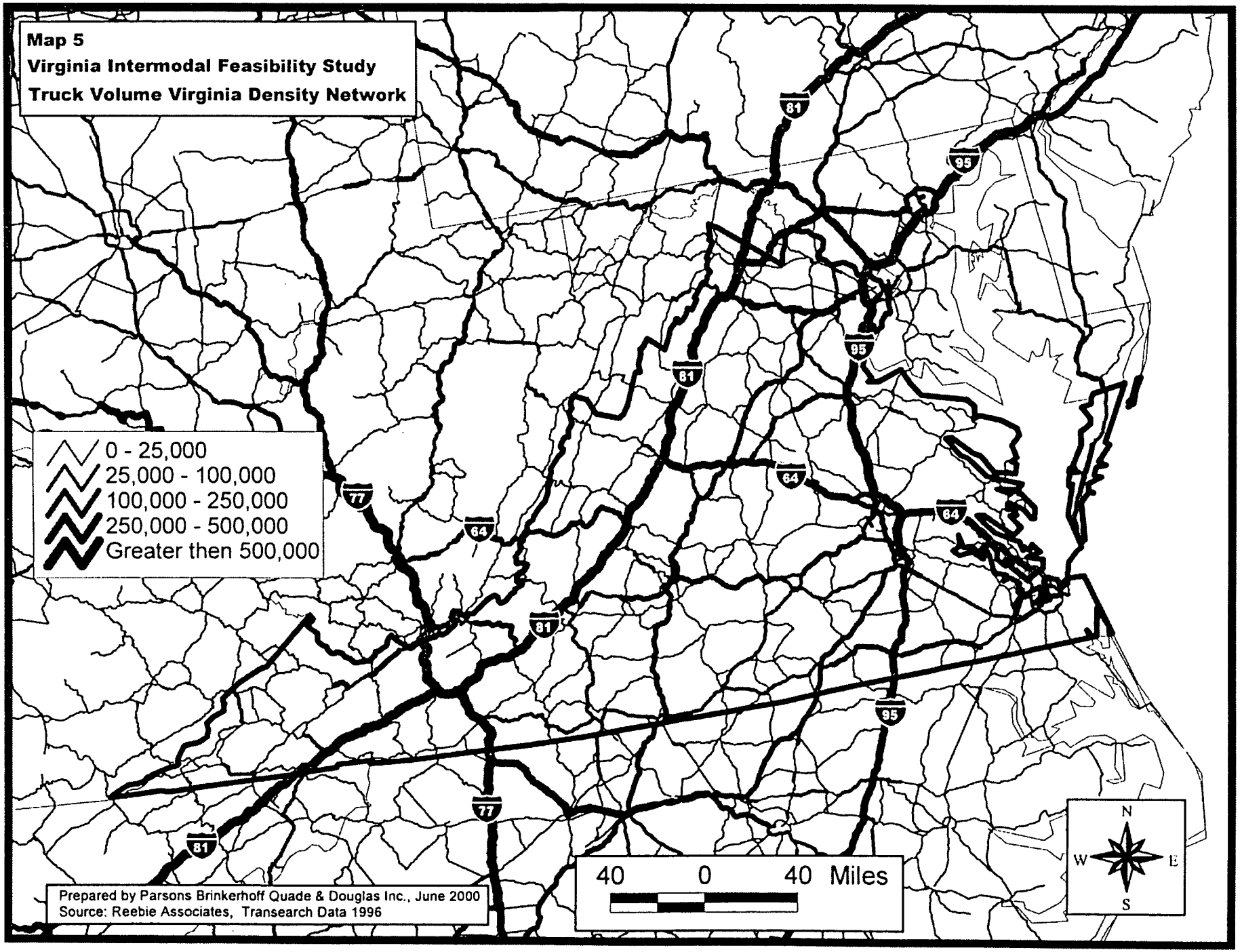
1. **AF Interlocking**
   - Complete and Testing Underway
2. **Quantico Bridge**
   - Design Underway - 2004 Completion
3. **MOU Projects – Mid 2003 Completion**
   1. **Third Track L'Enfant Plaza (D.C.)**
   2. **Third Track SRO-RO (Arlington Co.)**
   3. **Third Track Franconia Hill (Fairfax Co.)**
   4. **Aquia Crossover (Stafford Co.)**
   5. **Third Track FB-XR (Spotsylvania Co.)**
   6. **Rose Interlocking (Caroline Co.)**
   7. **South Anna Interlocking (Hanover Co.)**

Richmond to Washington, D.C Corridor Task Force

- **Virginia Department of Rail and Public Transportation**
- **CSX Transportation**
- **Virginia Railway Express**
- **Amtrak** (non-voting)
- **Federal Railroad Administration** (non-voting)

2000 General Assembly Funding

High Speed Rail	
•Northern VA District	**$29,225,000**
•Fredericksburg	**$18,225,000**
•Richmond	**$18,225,000**
Total High Speed Rail	**$65,675,000**
VRE Express Service	**$10,000,000**
Bristol Rail Capital Costs	**$ 9,339,000**

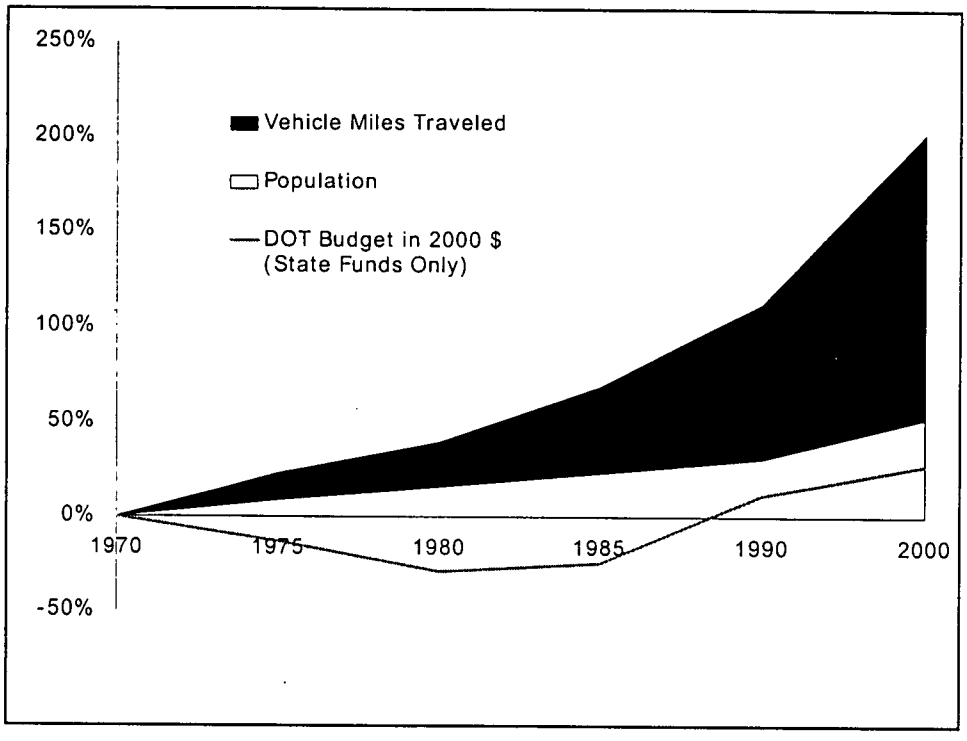

Map 5
Virginia Intermodal Feasibility Study
Truck Volume Virginia Density Network
0 - 25,000
25,000 - 100,000
100,000 - 250,000
250,000 - 500,000
Greater then 500,000
81
95
64
77
40 0 40 Miles
N
W
E
S
Prepared by Parsons Brinkerhoff Quade & Douglas Inc., June 2000
Source: Reebie Associates, Transearch Data 1996

VA/NC High Speed Rail Commission

Inaugural Meeting
November 28, 2001
Raleigh, North Carolina

VA/NC HSR Commission

- Exceedingly Well-positioned
- Bi-state Cooperation
- Tier I EIS
- USDOT HSR Designation
- Active State Program
- HSR Commission at head of the line



Issues to Watch

- Tier I EIS
- Congress
- NCRRIP
- Sealed Corridor & Traffic Separation Studies
- VA/NC HSR Commission
- Quite Zones
- WNC & SENC
- Southeastern Economic Alliance

Crossing Safety

- Traffic Separation Studies
- Sealed Corridor
  - Phase I CLT—GRO
  - Phase II GRO—RGH
  - Private Crossing Safety Initiative
- Volpe Reports to Congress

Station Improvement Program

- Rocky Mount
- Wilson
- Selma
- Fayetteville
- Hamlet
- Southern Pines
- Raleigh
- Cary
- Durham
- Greensboro
- High Point
- Salisbury
- Kannapolis
- Charlotte
- Asheville
- Black Mountain
- Old Fort
- Marion
- Morganton
- Hickory
- SENC

Ancillary Developments

- Congress
- Southeastern Economic Alliance
- Secretary's Rail Advisory Council
- Amtrak Reform Council
- Quite Zones & System Safety Plans
- Western North Carolina
- Southeastern North Carolina

Southeast High Speed Rail Studies

- High Speed Ground Transportation for America
- SEHSR: A Time to Act
- SEHSR: Feasibility Study Summary and Implementation Plan
- Potential Improvements to the Washington-Richmond Railroad Corridor
- Tier I EIS: Charlotte, NC to Washington, DC

SOUTHEAST HIGH SPEED RAIL

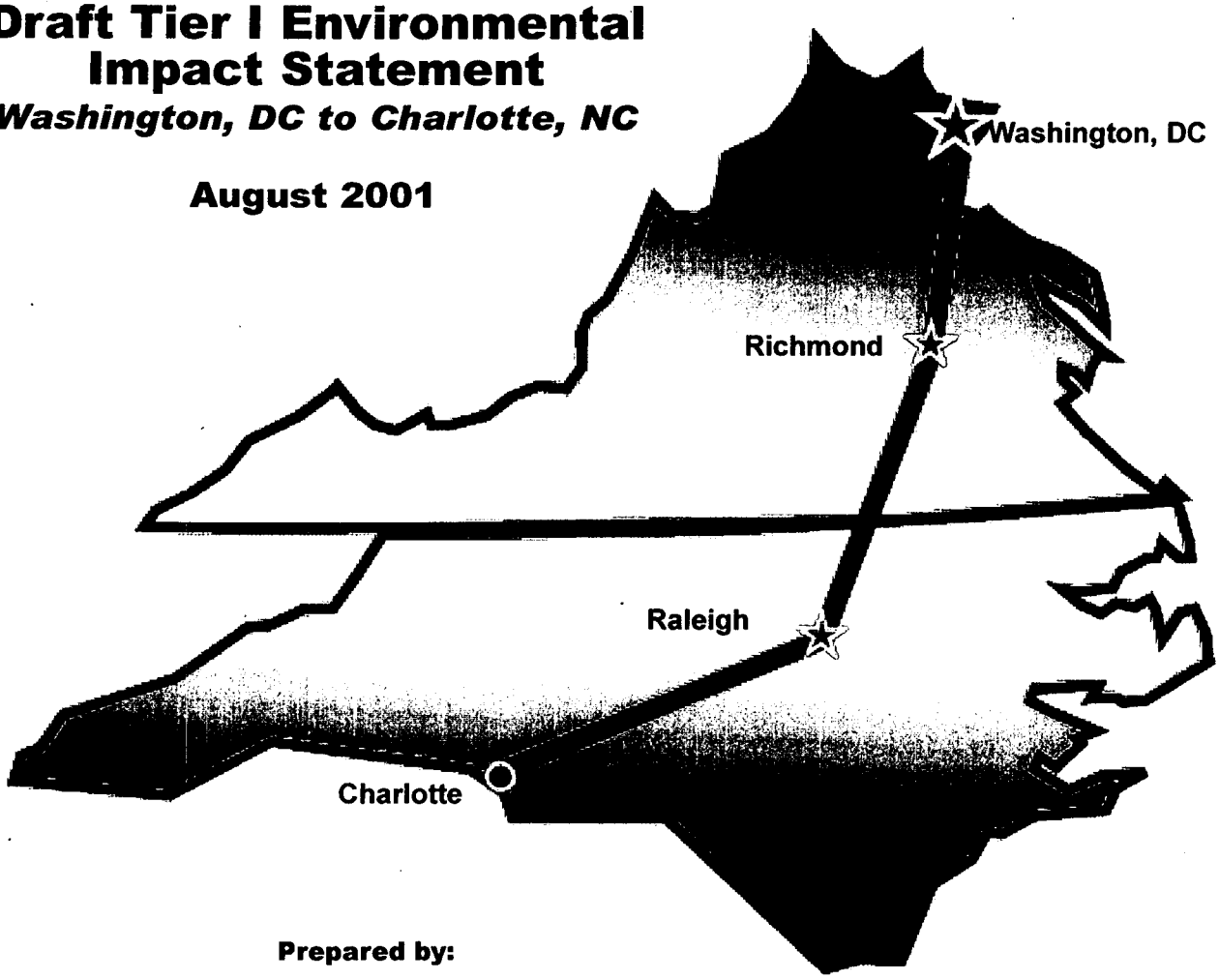
Washington, DC to Charlotte, NC

Executive Summary

Draft Tier I Environmental Impact Statement

Washington, DC to Charlotte, NC

August 2001



Prepared by:

North Carolina Department of Transportation and
Virginia Department of Rail and Public Transportation

DRPT
Leading Virginia to Greater Mobility
Department of Rail and Public Transportation

in cooperation with the
Federal Highway Adminstration and Federal Railroad Administration

Southeast High Speed Rail
Tier I Environmental Impact Statement
Executive Summary

The Southeast High Speed Rail program (SEHSR) is part of a plan by the U.S. Department of Transportation (USDOT) and the Sates to develop a nationwide high speed rail network. The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA Public Law 120-240, Section 1036) authorized a program of high speed rail corridors. This national high speed rail network is one component toward achieving ISTEA's goal of developing an economically efficient, environmentally sound, and globally competitive nationwide intermodal transportation system.

In 1992, the USDOT designated the Southeast High Speed Rail (SEHSR) corridor as one of five original national high speed rail corridors[1]. Further extensions to the corridor added connections south into South Carolina, Georgia, and Florida[2]. The fully extended SEHSR corridor is illustrated in **Exhibit ES-1.** The North Carolina Department of Transportation Rail Division (NCDOT) and the Virginia Department of Rail and Public Transportation (VDRPT), in partnership with the Federal Railroad Administration (FRA) and the Federal Highway Administration (FHWA), are working towards development and implementation of the SEHSR high speed rail program. This environmental complies for public review and comment, information on nine route alternatives.

Why is this environmental analysis being conducted?

Pursuant to the National Environmental Policy Act (NEPA), if a proposed project is being implemented by a federal agency, requires a federal permit, or has federal funding, a series of environmental analyses must be performed to identify probable environmental and community impacts and potential mitigation. Since the SEHSR project could potentially be funded by federal money, this environmental document is being prepared.

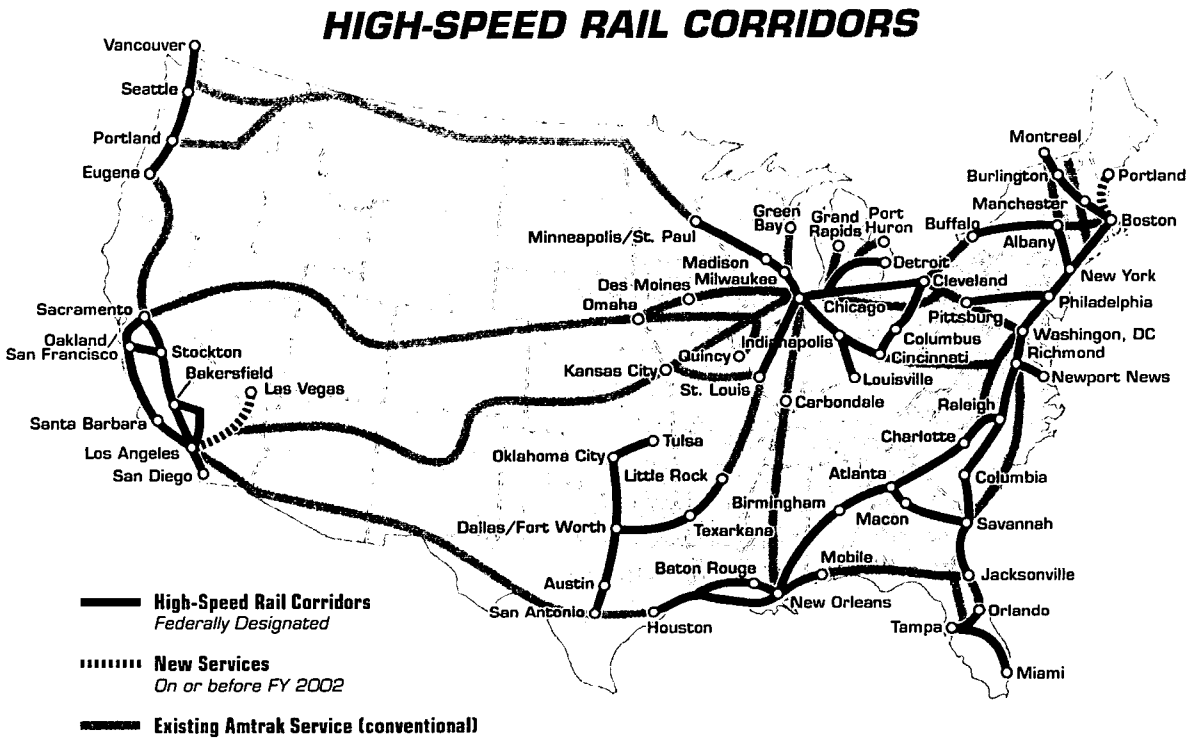
When conducting an environmental impact analysis, two types of documents can be developed: a program-level document or a project-level document. A program-level document (Tier 1) is typically performed when a large physical area is being addressed for a proposed project, or when a new program is being introduced that may have far reaching affects. A program-level document typically looks at general environmental conditions and general levels of impact. This is because site-specific details have not yet been identified or designed. A project-level document is performed when a specific project is being looked at in detail. Under this type of analysis, detailed impacts are quantified and analyzed and potential mitigation measures are identified. Sometimes a broad, general document (Tier I) is followed by a number of more detailed documents (Tier II). This is called a tiered approach.

[1] The designated corridor extended from Washington, D. C. to Charlotte, North Carolina via Richmond, Virginia and Raleigh, North Carolina.

[2] This designation allowed for federal monies to be spent on improvements to the existing rail system in order to achieve high speed service. The USDOT designated an extension of the SEHSR from Richmond to Hampton Roads in 1996. In 1998, the USDOT extended the corridor into South Carolina, Georgia, and Florida. Further extensions in 2000 added corridor connections in Georgia and Florida.

Due to the nature of this proposed project a Tiered Environmental Impact Statement (Tier I EIS) approach was chosen as the appropriate level for environmental analysis[3].

Exhibit ES-1
Federally Designated High Speed Rail Corridors



[3] The proposed project includes nine alternative study areas and a number of existing rail rights-of-way; is very long (approximately 500 miles); and is at the very early planning level stage.

As such, this Tier I (program-level) environmental document will provide an overview of the travel corridor and its study areas. This program level approach will provide the public, stakeholders, and agencies with an opportunity to review the overall Southeast High Speed Rail program concept and its potential benefits and impacts to the region. Following completion of this Tier I environmental process, specific alternative alignments (and associated facilities) would be developed and analyzed in subsequent project-level environmental documents (Tier II).

What is the purpose of this Executive Summary?

This executive summary presents an overview of the Southeast High Speed Rail program, the purpose and need for this project, a summary of alternatives analyzed in the Environmental Impact Statement (EIS), and an overview of potential impacts and benefits that may occur as a result of implementation of the SEHSR program. This executive summary is not intended as a substitute for the complete environmental document. For detailed information about methodology, existing conditions, and impacts analysis, please refer to the Southeast High Speed Rail Tier I EIS document. This executive summary is intended as a general informational piece for stakeholders and community members.

Were stakeholders and community members involved in this EIS process?

An extensive public involvement program was designed as part of this EIS process. The public involvement plan was based on a proactive approach. This was done to ensure that the communities in the nine alternative study areas being evaluated were included throughout the entire environmental process. There were seven components to the public involvement program:

- Public opinion survey;
- Public workshops and small group meetings;
- Fact sheets and newsletters
- Community outreach tools/techniques;
- Media outreach;
- Community Outreach Research; and
- Public feedback on study information.

Each of these components was implemented throughout year 2000. Examples of outreach include:

- almost 7,000 people were contacted by phone, with 1200 completing a full telephone survey
- over 225,000 direct mail pieces were sent out along the travel corridor, along with display ads in area papers notifying people of the community workshops about the project
- twenty-six (26) community workshops were held in locations throughout Virginia and North Carolina
- in depth interviews with community stakeholders were conducted; and
- public comments were continually solicited. Since the beginning of this study process, over 500 comments have been received.

In addition to general public outreach, agency coordination has also played a major role in the development of this Environmental Impact Statement. As with the overall public involvement process, the agency involvement process was designed to be proactive. Outreach and coordination techniques included written correspondence and informal communication, formal joint-agency meetings, small meetings and briefings, and formation of an advisory committee[4].

The advisory committee met in March and November 2000. Project staff provided information to the committee regarding the project's purpose and need, timeline, the Tier I EIS general approach, and the overall SEHSR program elements.

What elements are proposed as part of the SEHSR program?

The Southeast High Speed Rail (SEHSR) program would connect in Washington, DC with Amtrak's existing Northeast Corridor service that extends north to New York City and Boston. In North Carolina, the SEHSR system would connect with other rail passenger services in Charlotte for travel to South Carolina, Georgia and Florida. System linkages would also connect passengers (via Atlanta) to Alabama, Mississippi, Louisiana and Texas.

Based on findings from feasibility studies performed by the states and their federal partners, the Southeast High Speed Rail program is being developed through an incremental (step-by-step) approach[5]. Key elements of the incremental approach are:

- existing rail corridors are upgraded (instead of developing a new corridor); and
- service is added as market demand increases and/or when funding is available.

The incremental approach can minimize potential impacts to the environment by utilizing the existing railroad tracks and rail rights-of-way as much as possible. The incremental approach should generally require less capital investment (because the right-of-way already exists), and therefore costs less to build.

Why can't new trains just be added to the existing tracks?

Southeast High Speed Rail passenger trains are proposed to operate primarily on tracks owned by private railroad companies. As such, the SEHSR trains would share tracks with freight trains. With current service and projected increases in freight rail service in the existing rail corridors, tracks are becoming more congested.

Congestion has resulted from increased trains on the track, as well as chokepoints along the corridor -- particularly where bridges limit the system and where freight trains are put together and/or taken apart on the mainline track. If passenger trains are to provide fast, frequent, reliable and safe service, improvements must be made to relieve or bypass current chokepoints. Although the rail facilities already exist, the incremental approach would require improvements at various locations along the rail corridor to relieve these chokepoints. These improvements would accommodate higher passenger train speeds, as well as increase the capacity of the railroad to handle additional freight rail traffic and conventional passenger service.

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[4] The advisory committee is composed of officials and representatives from state, federal, and local jurisdictions and agencies along the travel corridor in both states.

[5] VDRPT, NCDOT-Rail, and FRA conducted numerous studies from 1991 to 1999 on the SEHSR corridor. The findings of these studies supported an incremental approach based on the forecasted ridership/revenue for the states, and on cost benefit analysis.

What is the purpose of the SEHSR program?

As population and travel demand grow, intercity transportation by air and auto will increasingly suffer from congestion and time delays -- particularly in metropolitan areas, at and around airports, and during weekend, holiday and bad weather periods. This decline in the level of transportation service and the quality of the travel experience adversely affects the intercity traveler, other transportation system users, carriers and the general public.

To respond to this travel need, the Virginia Department of Rail and Public Transportation, the North Carolina Department of Transportation, the Federal Railroad Administration and the Federal Highway Administration propose to extend high speed rail service from Washington, DC southward, through Virginia, to Charlotte, North Carolina (see **Figure ES-2**).

The purpose of the Southeast High Speed Rail program is to:

- divert trips from air and highway within the travel corridor, thus reducing the rate of growth of congestion in those modes;
- result in a more balanced use of the corridor's transportation infrastructure;
- increase the safety and effectiveness of the transportation system within the travel corridor; and
- serve business and leisure travelers within the two states and between the two states and the northeast region (via the Northeast Corridor beyond Washington DC), with future connections south.

Models run by the study team for the SEHSR program estimate that over one million passengers per year could be diverted to rail from air and highway travel in the corridor by 2015.

Why do we need this high speed rail passenger service?

Review of current growth trends in Virginia and North Carolina indicate that more and more individuals are traveling through the already congested highway and airport corridors. The Southeast High Speed Rail project could:

- provide the traveling public – special populations such as the elderly and the disabled -- as well as business and leisure travelers with improved transportation choices;
- help ease existing and future congestion (air, highway, passenger rail);
- improve safety and energy effectiveness within the transportation network;
- reduce the overall air quality related emissions per passenger mile traveled within the corridor; and
- improve overall transportation system efficiency within the corridor, with a minimum of environmental impacts.

Congested Facilities

Population and economic growth rates in Virginia and North Carolina have been tremendous over the past thirty years and are projected to remain high over the next few decades. In

addition to this rapid population growth, vehicle miles traveled within parts of the SEHSR corridor have grown at up to four times the rate of population growth[6]. Air travel within the corridor increased over 95% from 1980-1996, and this trend is expected to continue with 76% growth forecast nationally from 2000-2010[7].

This growth has burdened the airport and highway networks of both states. As a result, transportation facilities in Virginia and North Carolina are experiencing capacity problems that are projected to worsen despite planned improvements. Trends such as migration from rural to urban areas and aging populations in both states put additional and unique burdens on the transportation networks.

Travel Time and Reliability

Rail ridership in Virginia and North Carolina climbed steadily in the 1990's despite slow service and increasingly high levels of unreliability[8]. Both states are working to alleviate rail capacity constraints, as well as improve safety on their rail systems. However, conventional passenger rail service is not time-competitive with auto or air travel, and currently represents only an estimated 1% of the travel within the corridor[9].

The *Washington, D.C. to Richmond, Virginia Passenger Rail Study* found that if travel times between Washington and Richmond could be reduced to 90 minutes, rail ridership in the I-95 corridor would triple by 2015. The proposed SEHSR service could reduce travel time from Washington, DC to Charlotte, NC from the current ten hours to an estimated six to seven and one half hours. The travel demand models run by KPMG for the SEHSR also predict a tripling of the North Carolina ridership by 2015 based on the trip time goals as stated.

Safety

Passenger rail travel is one of the safest ways to travel. Over the past 30 years, Amtrak carried approximately 600 million intercity passengers, while suffering only 100 passenger fatalities[10]. By examining the number of fatalities per passenger mile, comparisons can be made between different methods of travel. Amtrak experienced .04 fatalities per 100 million passenger miles, which is similar to what major airlines experienced. In contrast, highway fatalities equaled 1.29 fatalities per 100 million passenger miles[11]. Safety of the existing rail system would be further improved by implementation of the SEHSR, due to track, crossing, and train upgrades.

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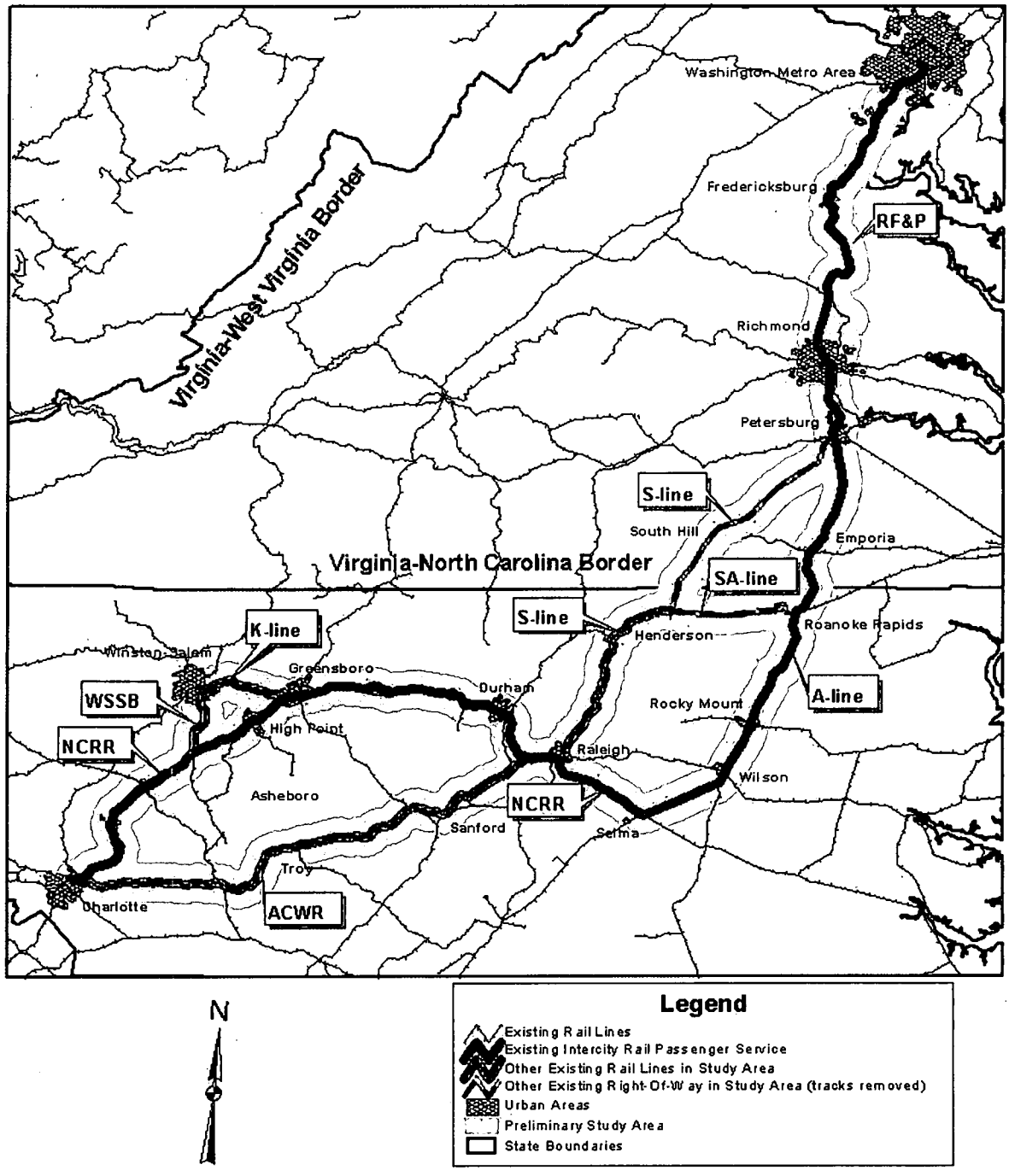
[6] Approximate growth in the Piedmont crescent of NC, Raleigh to Charlotte along the I-85 corridor, from 1975-2000.
[7] Federal Aviation Administration, March 2000 Annual 12 Year Forecast.
[8] *Feasibility Study Summary & Implementation Plan*, NCDOT- Rail Division, April 1999.
[9] Based on data supplied by NCDOT and VDRPT, *Annual Amtrak Ridership by Station In VA and NC,* 2000.
[10] Amtrak Senior Director of Communications, Cliff Black
[11] National Safety Council

Exhibit ES-2

Southeast High Speed Rail: Tier 1 EIS Alternative Study Areas



Source: United States Department of Transportation, 1997, prepared by Carter & Burgess, 1999

Energy Efficiency

Increasing the modal balance would also result in less energy use and a corresponding decrease in pollution within the corridor. Intercity rail is 45% more energy-efficient than domestic commercial airline service and 76% more energy-efficient than general aviation[12]. Even greater improvements are gained over highway travel, resulting in net benefits to the human and natural environment along the corridor.

How were alternatives developed for this Tier I EIS?

Since 1992, both states have performed extensive feasibility studies to identify alternatives between the major cities of the federally-designated Southeast High Speed Rail corridor. These studies looked at issues such as:

- environmental and engineering constraints;
- rail line capacities;
- train performance;
- ridership/revenue projections;
- commercial feasibility;
- economic impact and transportation benefits analysis; and
- benefit-cost and risk analysis.

The locations that make up the nine study area alternatives presented in this Tier I EIS are based on the earlier feasibility studies. The study area alternatives considered in this analysis encompass over 1,000 miles -- stretching from Washington, DC to Charlotte, NC.

In addition to these Study Area Alternatives (Build Alternatives), a No Build Alternative was also developed. This No Build Alternative provides a baseline for analysis in this environmental document.

No Build Alternative

The No Build Alternative consists of the existing transportation network in the Southeast Corridor. Included in this alternative are:

- the major highways that make up the roadway network (auto and bus travel);
- existing conventional passenger rail service (Amtrak);
- commuter rail services;
- local public transit services
- freight railroad services; and
- air travel.

The No Build Alternative also includes existing and committed highway, rail and airport improvements.

[12] *Transportation Energy Data Book, Edition 16*, Oak Ridge National Laboratory, July 1996. (Note: these numbers reflect Amtrak equipment in use in 1994, both fossil fuel and electric, and represent BTU's/passenger mile as compared with air travel)

The No Build Alternative includes a continuation of existing Amtrak service with some operational and service improvements. Such improvements would consist of maintenance, rehabilitation and improvement to track capacity, signal work, highway-rail crossings, and stations.

The current average speed for passenger rail service between Washington and Charlotte is less than 50 mph. Existing and committed rail improvements in Virginia and North Carolina are projected to reduce the rail trip time from DC to Charlotte from ten hours to between eight hours thirty minutes and nine hours. The planned improvements to the existing rail line will improve capacity, reliability and travel times along some segments of the Washington to Charlotte corridor. Other segments will continue to operate at slow speeds and experience delays.

Build Alternatives

Utilizing information developed in earlier studies, potential rail corridors in Virginia and North Carolina were identified. **Exhibit ES-2** shows the general location of these rail corridors. In an effort to facilitate the analysis and presentation of the data gathered during this Tier I study, these rail corridors were further divided into 21 segments. **Exhibit ES-3** identifies these segments. The 21 segments include the following existing railroad rights of way:

1. **Former RF&P and S-line** – Washington, DC to Centralia, VA (common to all 9 alternatives).
2. **S-line** (pre-1969) - Centralia, VA to Ettrick Station, VA (includes a portion of the A-line from north of Centralia to north of Chester and from approximately South Dunlop to Ettrick Station)
3. **S-line** (pre-1969) - Ettrick Station, VA to Burgess, VA (includes a portion of the A-line from Ettrick Station to the Appomattox River)
4. **S-line Burgess Connector** – not reviewed in this study, may be included for study later if appropriate
5. **S-line** – Burgess, VA to Norlina, NC
6. **S-line** - Norlina, NC to Raleigh (Boylan "Wye"), NC
7. **A-line** - Centralia, VA to Ettrick Station, VA
8. **A-line** - Ettrick Station, VA to Collier (Yard), VA
9. **A-line** - Collier (Yard), VA to Weldon, NC
10. **A-line** – Weldon, NC to Selma, NC
11. **SA-line** – Weldon, NC to Norlina, NC
12. **NCRR** - Selma, NC to Raleigh (Boylan "Wye"), NC
13. **NCRR** - Raleigh (Boylan "Wye"), NC to Cary (Fetner), NC
14. **NCRR** - Cary (Fetner) to Greensboro (Pomona), NC
15. **NCRR** - Greensboro (Pomona), NC to Lexington, NC
16. **NCRR** - Lexington, NC to Charlotte, NC
17. **K-line** - Greensboro (Pomona), NC to Winston-Salem, NC
18. **WSSB** - Winston-Salem, NC to Lexington, NC
19. **S-line** - Cary (Fetner) to Colon, NC
20. **NS Line & CF Line** – Colon, NC to Gulf, NC
21. **ACWR** – Gulf, NC to Charlotte, NC

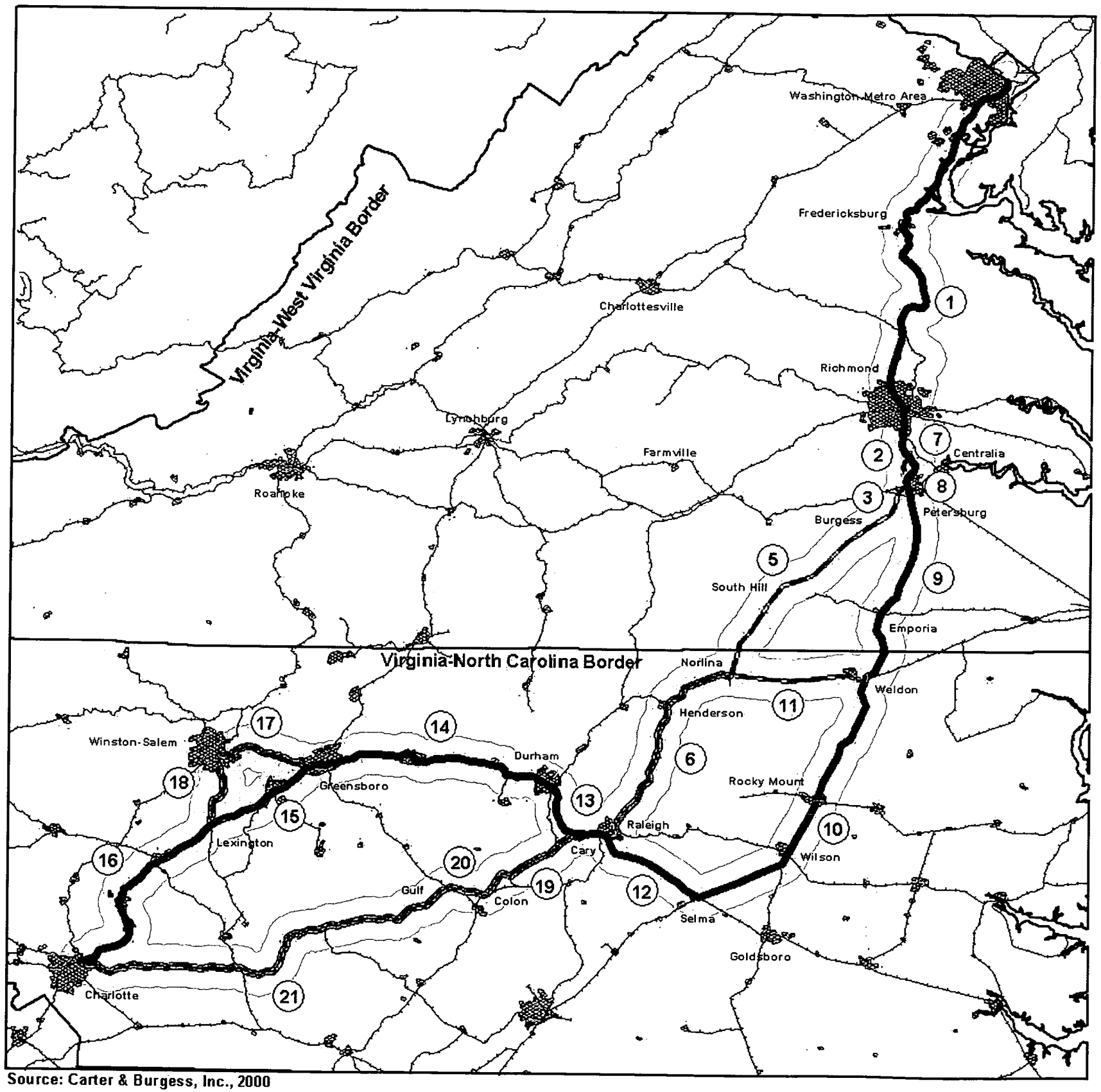
Using these 21 segments as a basis for corridor analysis, nine Study Area Alternatives, extending from Washington, DC to Charlotte, NC were identified. These nine (9) Study Area

Alternatives are shown in **Exhibit ES-4**. Each Study Area Alternative is approximately six miles wide and centered around an existing rail right of way. A summary of geographic information for each of the nine Study Area Alternatives (including segment numbers) is presented in **Exhibit ES-5**.

Following identification of these study areas, general characteristics were developed, including; general length of the corridor, estimated travel time, potential rail passenger train speeds, ridership, and conceptual costs. A summary of these general characteristics of each of the nine Study Area Alternatives is presented in **Exhibits ES-6**.

Exhibit ES-3

Segment Description - SEHSR



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16. NCRR - Lexington, NC to Charlotte, NC
17. K-line - Greensboro (Pomona), NC to Winston-Salem, NC
18. WSSB - Winston-Salem, NC to Lexington, NC
19. S-line - Cary (Fetner), NC to Colon, NC
20. NC Line & CF Line - Colon, NC to Gulf, NC
21. ACWR - Gulf, NC to Charlotte, NC

Legend

- Existing Rail Lines
- Existing Intercity Rail Passenger Service
- Other Existing Rail Lines Under Consideration
- Other Existing Right-Of-Way in Study Area (tracks removed)
- Preliminary Study Areas
- Urban Areas
- State Boundaries
- Segment Numbers

*Segment 1 - The RF&P and S-line are common to all Alternatives

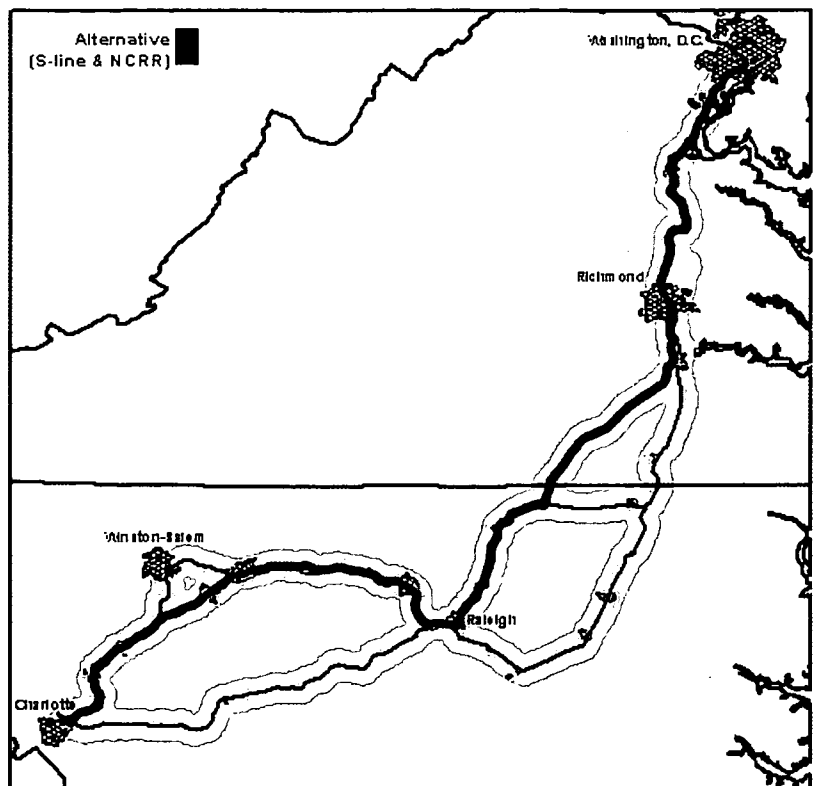
*Segment 4 - (S-line Burgess Connector) May be included in future studies if appropriate

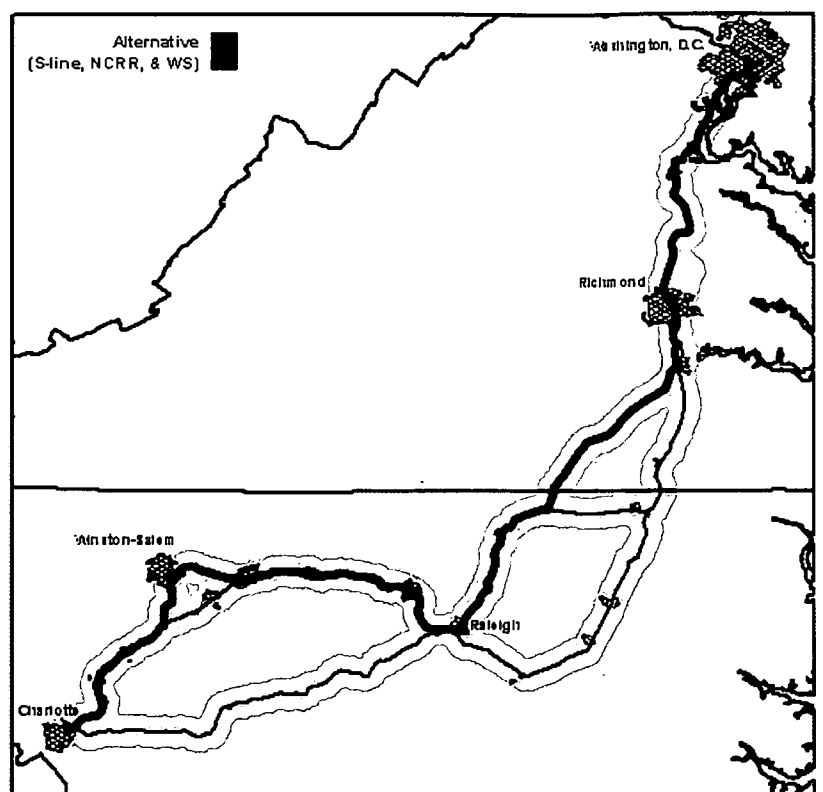
*ACWR includes short segments of the S-line, NS-line and CF-line (Cary to Gulf)

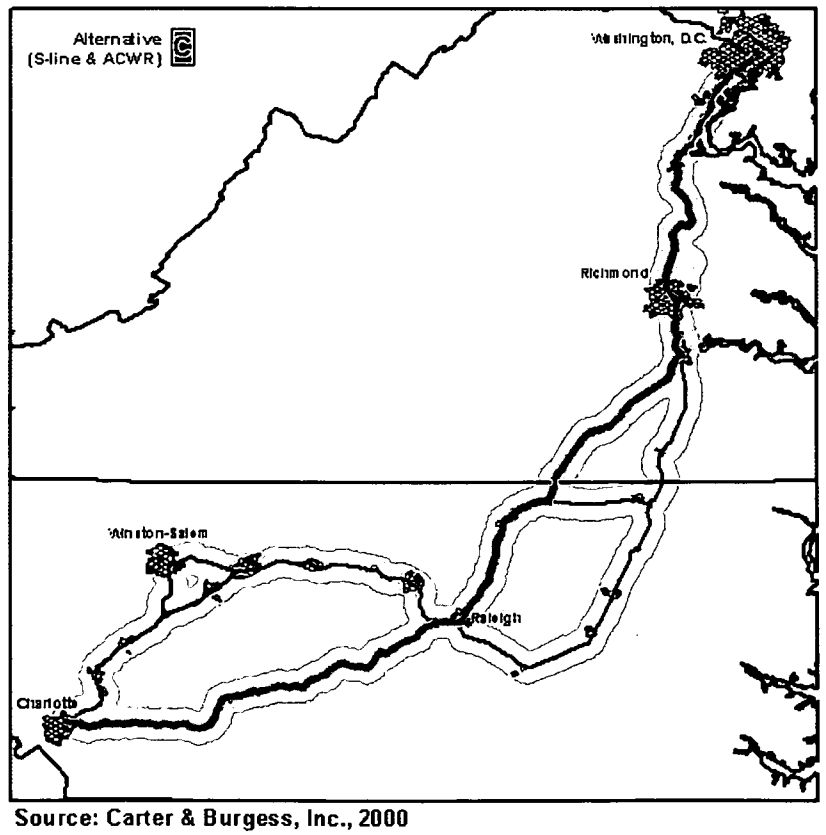
N

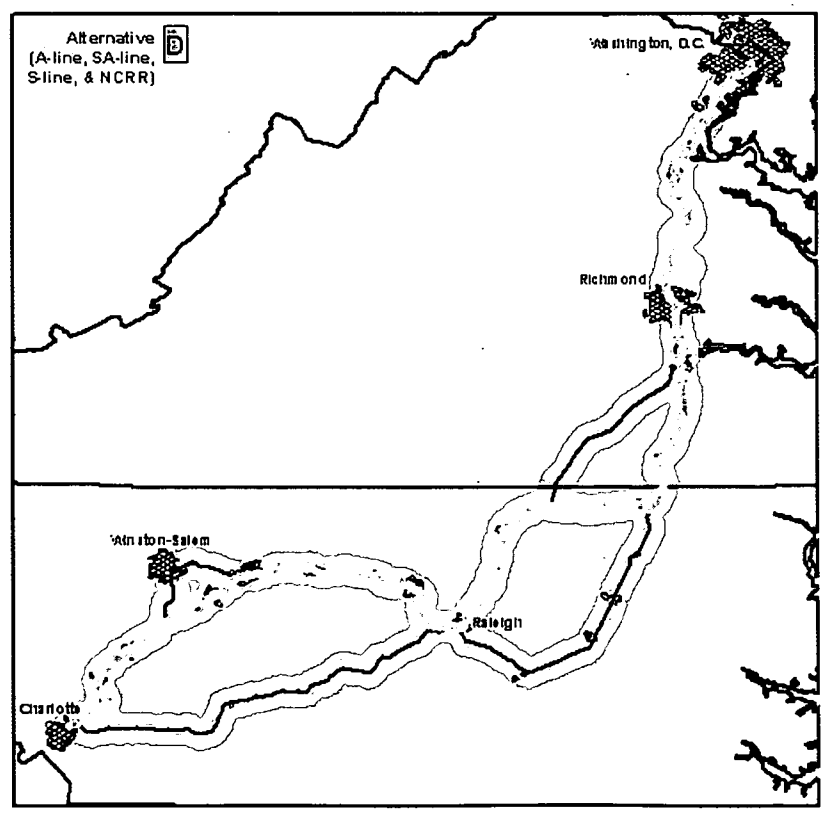
Source: Carter & Burgess, Inc., 2000

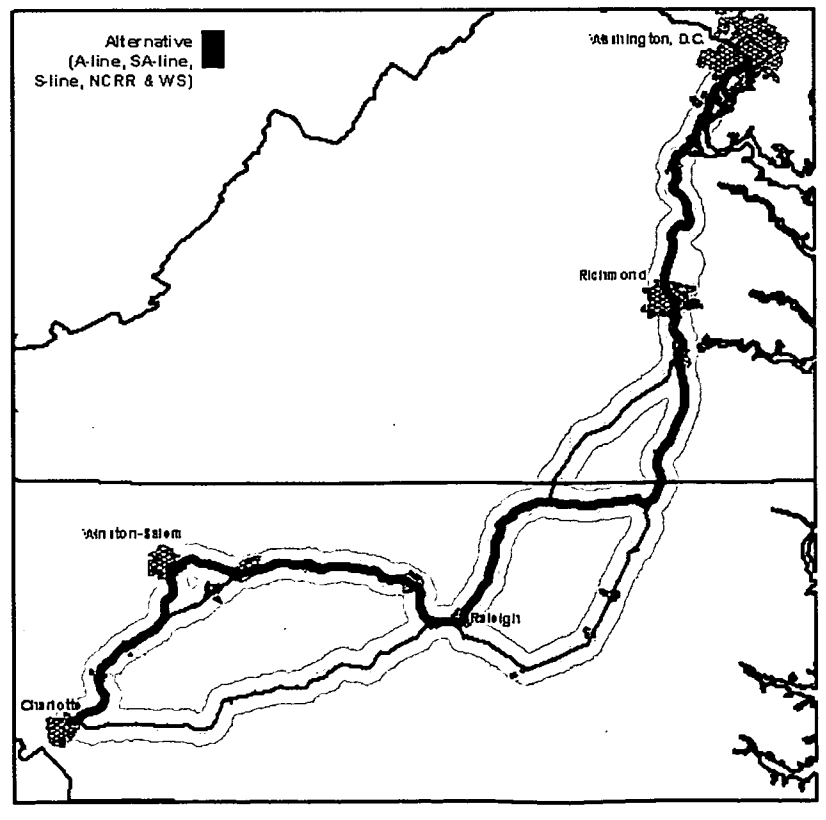
Exhibit ES-4
Study Area Alternatives - SEHSR











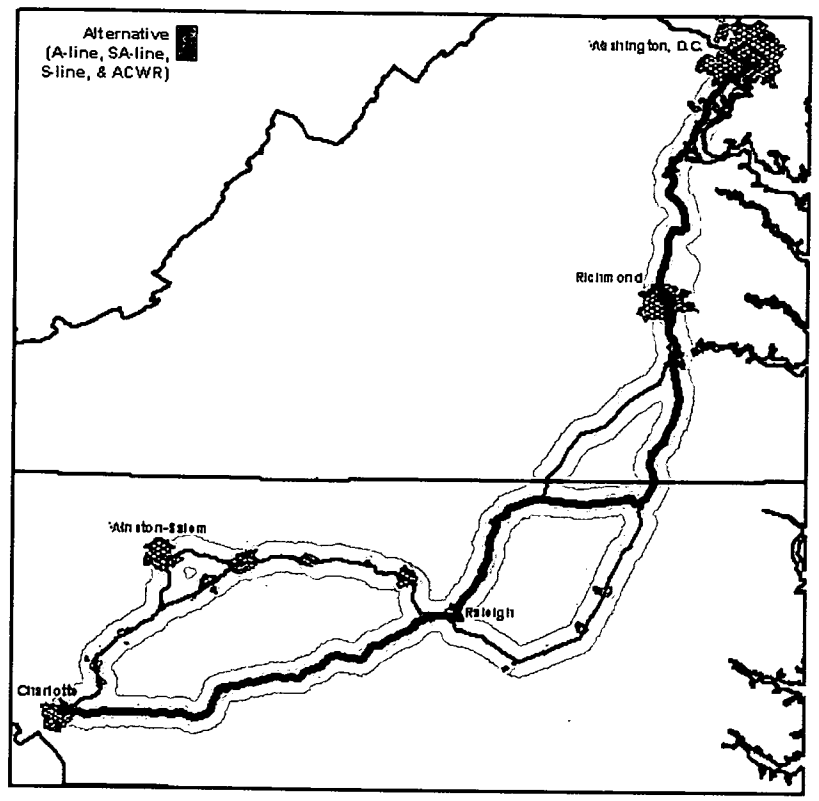
Legend

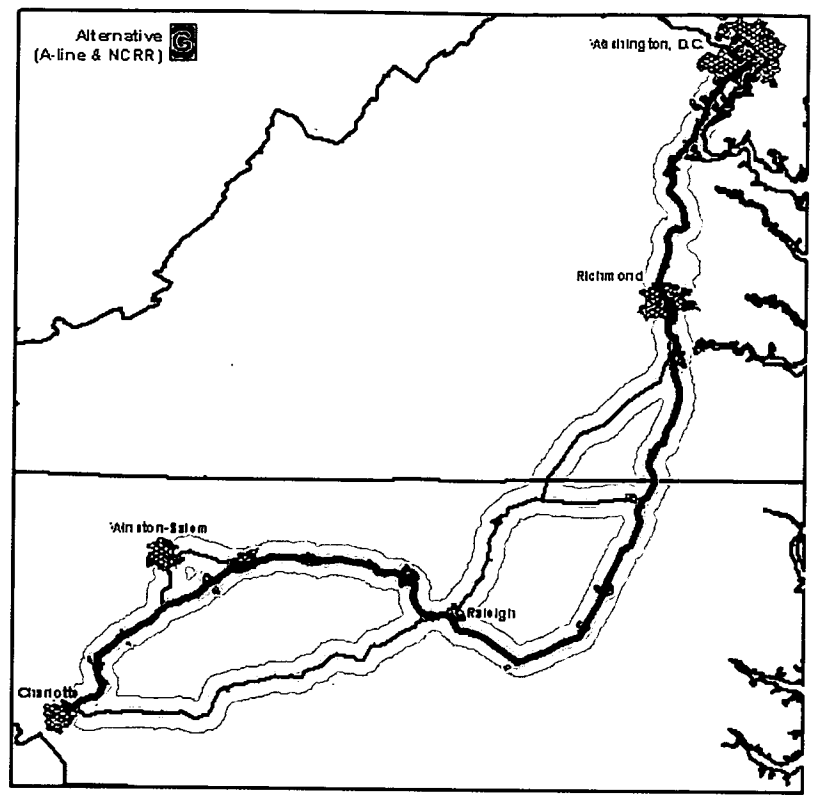
- Alternative
- Southeast High Speed Rail Study Corridor
- Preliminary Study Areas
- Urban Areas
- State Boundaries

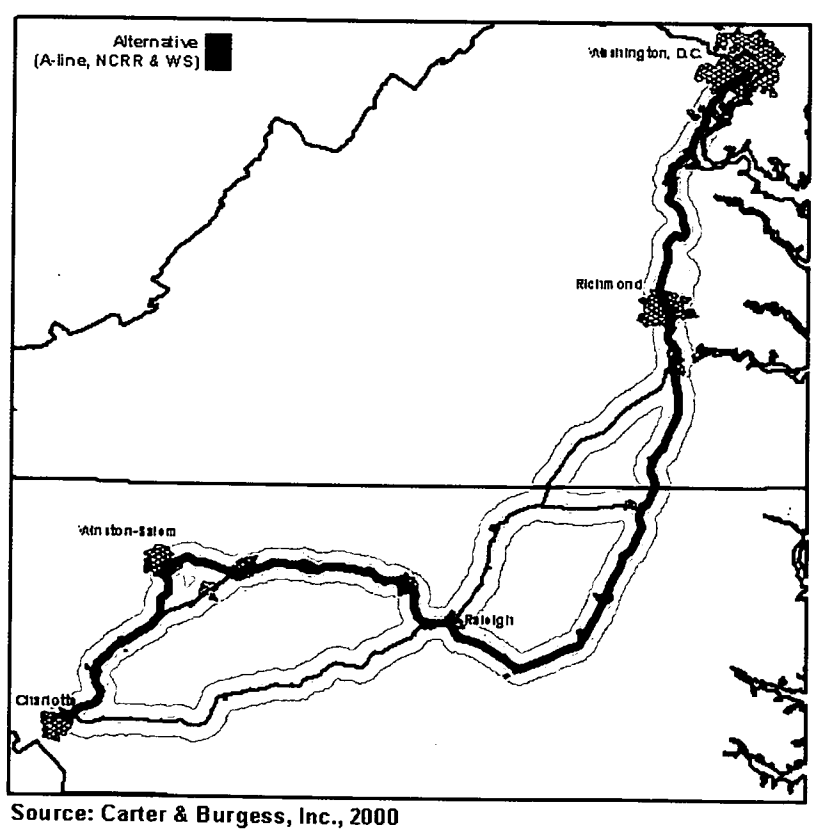
N

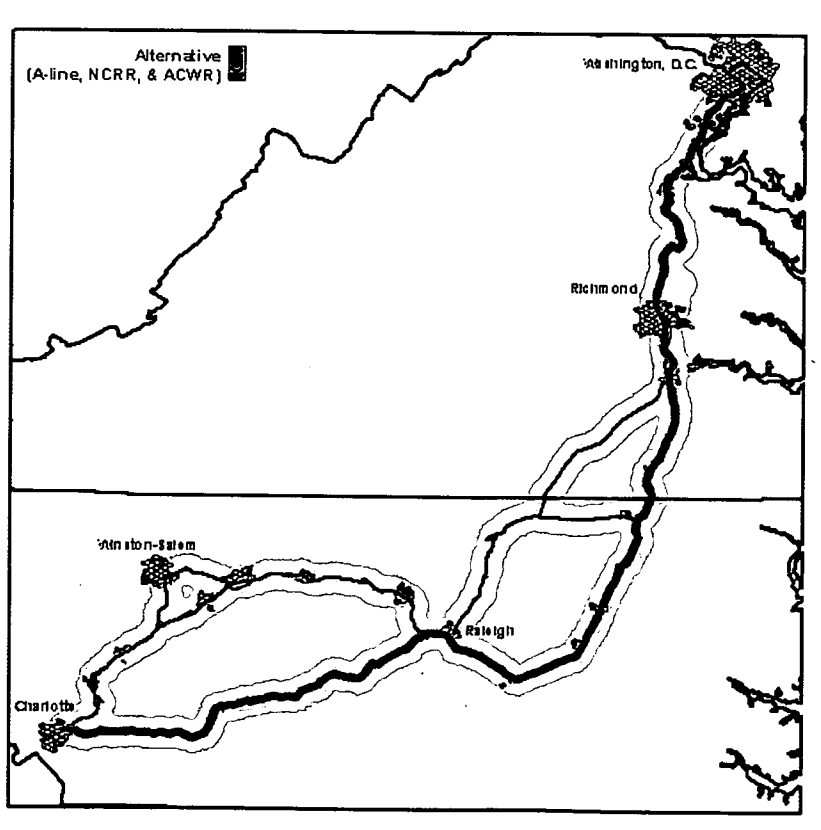
Source: Carter & Burgess, Inc., 2000

Exhibit ES-4 (Continued)
Study Area Alternatives - SEHSR









Legend

- Alternative
- Southeast High Speed Rail Study Corridor
- Preliminary Study Areas
- Urban Areas
- State Boundaries

N

Source: Carter & Burgess, Inc., 2000

Exhibit ES-5
Geographic Characteristics of Study Areas

Characteristics	A	B	C	D	E	F	G	H	J
Existing Rail Lines	Old RF&P NCRR S-line	Old RF&P S-line NCRR K-line WSSB	Old RF&P S-line NS Line CF Line ACWR	Old RF&P A-line SA-line S-line NCRR	Old RF&P A-line SA-line S-line NCRR K-line WSSB	Old RF&P A-line SA-line S-line NS Line CF Line ACWR	Old RF&P A-line NCRR	Old RF&P A-line NCRR K-line WSSB	Old RF&P A-line NCRR NS Line CF Line ACWR
Segments	1, 2, 3, 5, 6, 13, 14, 15 and 16	1, 2, 3, 5, 6, 13, 14, 16, 17 and 18	1, 2, 3, 5, 6, 13, 19, 20 and 21	1, 6, 7, 8, 9, 11, 13, 14, 15 and 16	1, 6, 7, 8, 9, 11, 13, 14, 16, 17 and 18	1, 6, 7, 8, 9, 11, 13, 19, 20 and 21	1, 7, 8, 9, 10, 12, 13, 14, 15 and 16	1, 7, 8, 9, 10, 12, 13, 14, 16, 17 and 18	1, 7, 8, 9, 10, 12, 13, 19, 20 and 21
Communities Served: **Virginia**	Alexandria Woodbridge Fredericksburg Ashland Richmond Centralia Petersburg Burgess La Crosse	Alexandria Woodbridge Fredericksburg Ashland Richmond Centralia Petersburg Burgess La Crosse	Alexandria Woodbridge Fredericksburg Ashland Richmond Burgess La Crosse	Alexandria Woodbridge Fredericksburg Ashland Richmond Chester Colonial Heights Petersburg Collier Emporia	Alexandria Woodbridge Fredericksburg Ashland Richmond Chester Colonial Heights Petersburg Collier Emporia	Alexandria Woodbridge Fredericksburg Ashland Richmond Chester Colonial Heights Petersburg Collier Emporia	Alexandria Woodbridge Fredericksburg Ashland Richmond Chester Colonial Heights Petersburg Collier Emporia	Alexandria Woodbridge Fredericksburg Ashland Richmond Chester Colonial Heights Petersburg Collier Emporia	Alexandria Woodbridge Fredericksburg Ashland Richmond Chester Colonial Heights Petersburg Collier Emporia
Communities Served: **North Carolina**	Norlina Henderson Raleigh Cary Durham Burlington Greensboro High Point Lexington Salisbury Charlotte	Norlina Henderson Raleigh Cary Durham Burlington Greensboro Winston-Salem Lexington Salisbury Charlotte	Norlina Henderson Raleigh Apex New Hill Moncure Colon Gulf Robbins Star Troy Norwood Oakboro Aquadale Midland Charlotte	Weldon Norlina Raleigh Cary Durham Hillsborough Burlington Greensboro High Point Lexington Salisbury Concord/ Kannapolis Charlotte	Weldon Norlina Raleigh Cary Durham Hillsborough Burlington Greensboro Kernersville Winston-Salem Lexington Salisbury Charlotte	Weldon Norlina Raleigh Apex New Hill Moncure Colon Gulf Robbins Star Troy Norwood Oakboro Aquadale Midland Charlotte	Weldon Rocky Mount Wilson Selma Clayton Garner Raleigh Cary Durham Hillsborough Burlington Greensboro High Point Lexington Salisbury Concord/ Kannapolis Charlotte	Weldon Rocky Mount Wilson Selma Clayton Garner Raleigh Cary Durham Hillsborough Burlington Greensboro Kernersville Winston-Salem Lexington Salisbury Charlotte	Weldon Rocky Mount Wilson Selma Clayton Garner Raleigh Apex New Hill Moncure Colon Gulf Robbins Star Troy Norwood Oakboro Aquadale Midland Charlotte

Source: Carter & Burgess November 2000: KPMG Model Forecast Data, October 2000. Complied by the Resource Group, Inc, May 2001.

Exhibit ES-6
Operational and Physical Characteristics Summary Information for Study Area Alternatives

Summary Information	A	B	C	D	E	F	G	H	J
Length (route miles)	448	463	428	468	483	448	481	496	461
Average Total Travel Time (Washington, DC to Charlotte, NC)	6.23 hrs.	6.90 hrs.	6.20 hrs.	6.55 hrs.	7.23 hrs.	6.53 hrs.	6.75 hrs.	7.43 hrs.	6.73 hrs.
Annual Ridership in 2025	1,790,600	1,756,700	1,400,900	1,700,700	1,660,600	1,333,300	1,669,700	1,625,000	1,312,000
Net operating income or (loss) in year 2025	$26,340,000	$21,270,000	$13,160,000	$18,980,000	$18,120,000	$1,830,000	$20,060,000	$13,570,000	$4,090,000
Net Energy Reduction Fuel (gal/yr)	10,015,119	9,724,939	6,679,376	9,924,448	9,557,693	6,564,192	10,433,752	9,993,470	6,910,545
Conceptual Capital Cost* (In Billions of dollars)	$2.611	$2.720	$2.515	$2.711	$2.820	$2.615	$2.848	$2.957	$2.752
Areas of Engineering Complexity (high)**	18	23	25	20	25	27	19	24	26
Potential right of way needs (in acres)	678	731	930	620	674	872	545	598	797
Estimated Relocations									
-Residential dwellings (each)	365	371	220	405	411	260	301	307	156
-Business (square footage)	65,145	110,920	57,374	62,191	107,966	54,420	70,344	116,119	62,573
Annual 2025 Trip Diversions									
-From auto to rail	865,349	841,840	595,092	858,004	828,290	585,761	899,266	863,596	613,822
-From air to rail	320,061	311,365	220,103	242,001	233,620	165,215	171,289	164,494	116,918
Fuel consumption (gal./trip)	403	432.3	383.5	421.2	450.5	401.7	434.2	463.5	414.7
At grade crossings	1,053	1,172	918	1,134	1,254	1,100	1,115	1,235	963

*All monies are in year 2000 dollars. Costs do not include equipment or station improvements.
** The complexity of the engineering required to design or construct the proposed project was based upon conceptual engineering assuming use of the existing railroad rights of way. An area was considered high if it involved considerable realignments or if physical constraints offered major challenges to developing acceptable engineering solutions.
Source: Carter & Burgess, Inc.; KPMG *Ridership and Revenue Report* September 2000: and William Gallagher and Associates.

Some of the basic assumptions used in developing the for all study area alternatives include:

- Transportation service would be provided on standard gauge railroad tracks capable of also supporting freight trains as well as the high speed passenger trains.

- While some segments of the high speed service may be operated on dedicated tracks, much of the segments will involve incremental improvements to tracks owned by commercial freight lines operating at conventional speeds. Shared trackage places certain technological requirements and limitations on the high-speed trainsets and other technology choices.

- The introduction of higher speeds onto existing rail lines will require modifications to the existing signal system. When any train operations exceed 79 mph, signal indications are required to be displayed in the locomotive cab or involve automatic train stop or automatic train control. All locomotives on the route, including lower speed freight locomotives, would require this capability.

- Station stops have not yet been determined. It was assumed that the SEHSR would serve all stations where Amtrak currently provides service, however every train would not stop at all stations.

- At-grade highway/train crossings are permitted for 110 mph train operations. However, FRA guidance states that pubic and private crossings where train speeds are between 90 and 110 mph should be equipped with special crossing protection devices, grade separated, or closed.

- The overall safety of the existing rail system would be improved by the implementation of a high speed rail system, which would upgrade the track, crossings and rolling stock, but also the stations and associated facilities.

- The proposed Southeast High Speed Rail service would consist of four round trips per day between Charlotte and Washington, DC. It would also provide four additional round trips between Raleigh and Charlotte.

- The operational model developed for this analysis assumed a maximum speed of 110 mph in the corridor, with an average speed of 85 to 90 mph. Based on this operational model, estimated end-to-end travel time for this high speed rail service would range from six hours to seven and one-half hours, depending upon which of the nine study area alternatives is used.

- Fossil fuel engines are proposed for use with the incremental approach. Fossil fuel is the most commonly used energy source in North America. Petroleum fuel is carried on-board the train, converting its chemical energy to electrical energy with a generator. This electric energy is then utilized by electric traction motors for movement. For high speed passenger applications, both diesel engines and proposed gas-turbine engines may be used. Both of these engine types burn commercially available grades of petroleum fuel.

How were these alternative study areas compared?

The Tier I EIS discusses the general environmental settings within the nine Study Area Alternatives. Data was collected at a corridor level and was based primarily on secondary data sources and general trends within the study areas. Therefore, discussions and conclusions were based on a "big

picture" perspective, rather than precise impacts and surveys.

Based on this general data collection effort, potential benefits and impacts of the proposed SEHSR program were assessed. Ranges of possible mitigation measures were also generally discussed. However, specific impacts, benefits, and mitigation measures will be detailed during the Tier II environmental documentation process.

For the purpose of this Tier I EIS, environmental resources were divided into three general categories: the human environment, the physical environment and the natural environment. This executive summary presents a general overview of the findings – for the Study Area Alternatives (Build Alternatives) -- for each of these categories. **Exhibit ES-20** provides a summary of much of the environmental data for the Study Area Alternatives.

What environmental resources were reviewed as part of the human environment?

In an environmental document, specific human environmental resources are reviewed regarding existing conditions within the area of potential project impact. Elements relate to communities, their economies, their history and their policies. Following collection and review of these elements, impacts analysis and potential mitigation plans are developed. **Exhibit ES-7** presents a list of the resources associated with the human environment analysis in an environmental document.

Exhibit ES-7
Human Environment Resources

Resource Element
Community Characteristics, Including:
Population and Community Characteristics
Economic Characteristics
Community Facilities and Services
Community Cohesion
Environmental Justice
Land Use And Planning
Disruption And Relocation
Public Utilities
Archaeological And Historical Resources

Communities

An assessment of potential community impacts was performed in an effort to evaluate overall benefits and impacts in the Study Area Alternatives. This assessment is a qualitative and quantitative evaluation that identifies potential impacts to local communities as it relates to their quality of life.

Given the "big picture" nature of this Tier I EIS document, only a high-level assessment of these characteristics and potential impacts on communities was performed. Data collection included an inventory of the many social, religious and educational institutions, emergency facilities, neighborhoods, and recreational facilities in the study areas. In addition community outreach and interviews were performed. The following summarizes the possible (and often, perceptual) impacts/benefits that the proposed Southeast High Speed Rail project may have on the various communities in the study areas.

- *Sound and Noise Vibration Levels.* While the effects of this project on changes in sound/noise vibration levels would be minimal given that many communities are already near existing railroads, several study areas could have potential impacts because of the proximity of religious,

educational or community facilities to the railroad. Specifically alternatives including segments 5 and 11 (refer to **Exhibit ES-4**) where no current rail service exists.

- *Barrier Effect (the dividing of a community, whether a human or natural community).* The impact of barrier effect would not be significantly greater than what exists with the current configuration of railroad tracks and safety equipment. A possible exception is the community effects of the closure of grade crossings for safety improvements. However, these closures generally include enhancements to alternative travel routes to minimize the effects of a barrier and isolation due to grade-crossing closures.

- *Aesthetics.* The predominant community aesthetic impacts of the Southeast High Speed Rail study area alternatives are on the rail stations. Some of the existing station facilities have fallen into disrepair, no longer serve a public function, or create an eyesore that are detrimental to public safety and aesthetics. The impact of the SEHSR program on aesthetics would have a neutral or positive effect on communities due to planned improvements and on-going redevelopment efforts at downtown rail stations in such locations as Richmond, Virginia, and Greensboro, North Carolina.

- *Compatibility with Community Goals.* Several communities have indicated in their master plans potential opportunities and goals for downtown revitalization. Supporting these community goals are needed improvements to transportation services and facilities. Implementation of the SEHSR program and renovation of rail stations would support these goals.

- *Safety at Grade Crossings.* Improvements to grade crossings are in response to documented needs for increased safety. Safety improvements are currently underway in Virginia and North Carolina and to install conventional and enhanced traffic control devices to separate vehicular and rail traffic; to separate dangerous intersections via bridges and underpasses as needed; and, to consolidate and close crossings as appropriate. The effect of these grade crossing improvements is enhanced community safety. Comments received at the spring and summer 2000 public workshops and through public opinion surveys expressed an overall concern about the safety of train speeds and adequate crossings for pedestrians and cars.

- *Mobility and accessibility* in communities are impacted positively by the SEHSR program due to increased opportunities for multi-modal and intermodal travel. The introduction of passenger rail service in a community has the effect of enhancing access and mobility through pedestrian and bicycle, public transportation and paratransit connectivity, intermodal freight opportunities, and vehicular access.

Environmental Justice

Over the past several decades, public concerns have increased over economic, racial, and ethnic fairness in the distribution of the environmental and socioeconomic burdens of transportation projects, as well as the economic and mobility benefits derived from transportation projects. The impetus behind environmental justice is to ensure that all communities, including minority and low-income communities, live in a safe and healthy environment.

At this stage of the environmental process, it is premature to conduct detailed assessments of disproportionately high and adverse impacts to low income and minority populations. A preliminary assessment of the study areas identified potential pockets in the study areas that

may have a higher ratio of low income and minority populations (see **Exhibits ES-8 and ES-9**), but no single Study Area Alternative appears more disposed to potential negative disparate impacts. No adverse affect on these populations can be assessed at this time. It is possible that these same populations may in fact receive positive economic development impacts and improved mobility options for their communities. Amtrak statistics show that current passenger rail service is disproportionately utilized by low-income and minority populations. It is reasonable to assume that these population groups would continue to use and benefit from enhanced passenger rail service in the Study Area Alternatives. Community leadership interview findings indicate that these populations may welcome the project in their communities.

Exhibit ES-8
Low-Income Households Within the Census Block Group For A 300 Foot Buffer Area In the SEHSR Study Areas

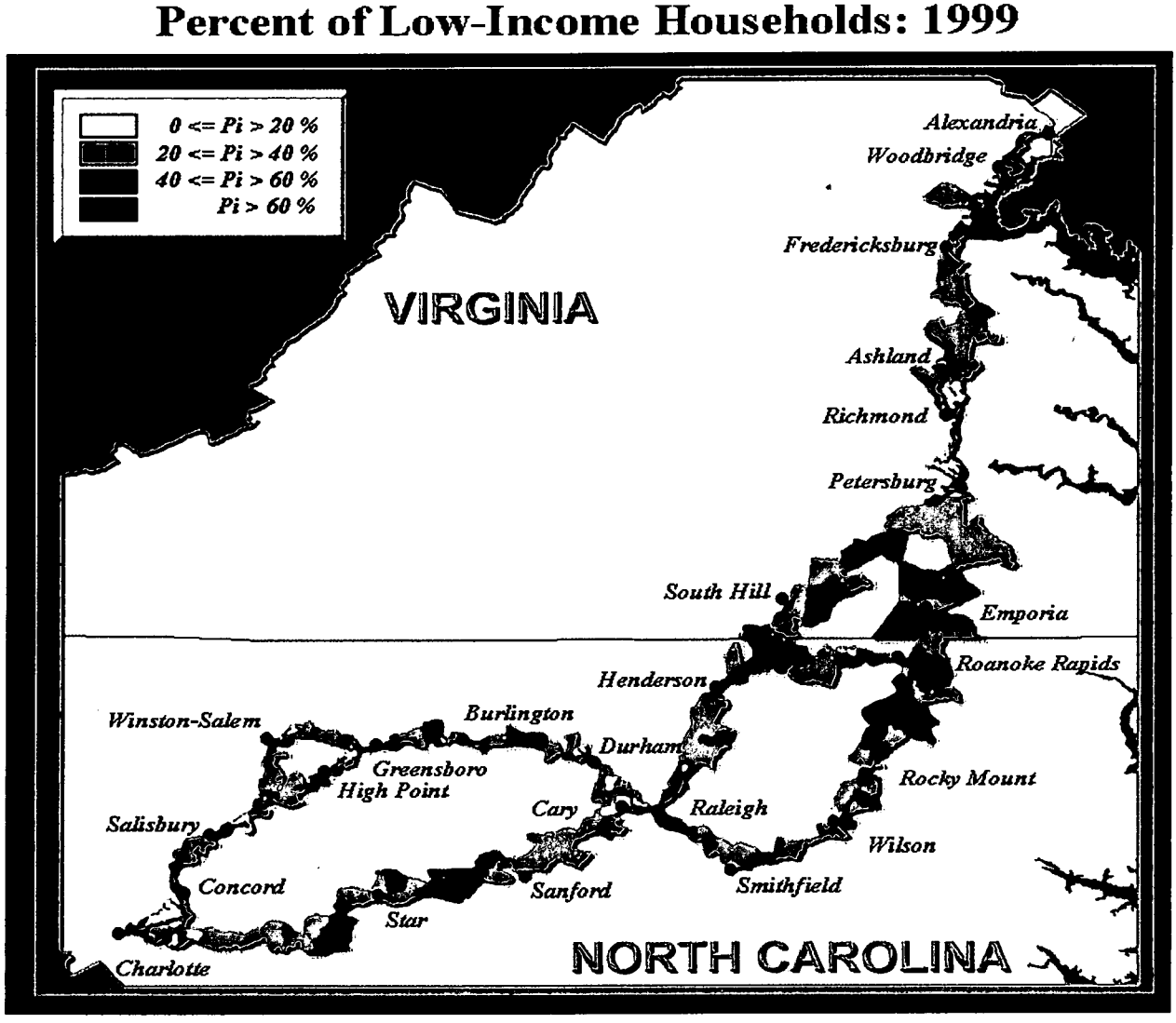
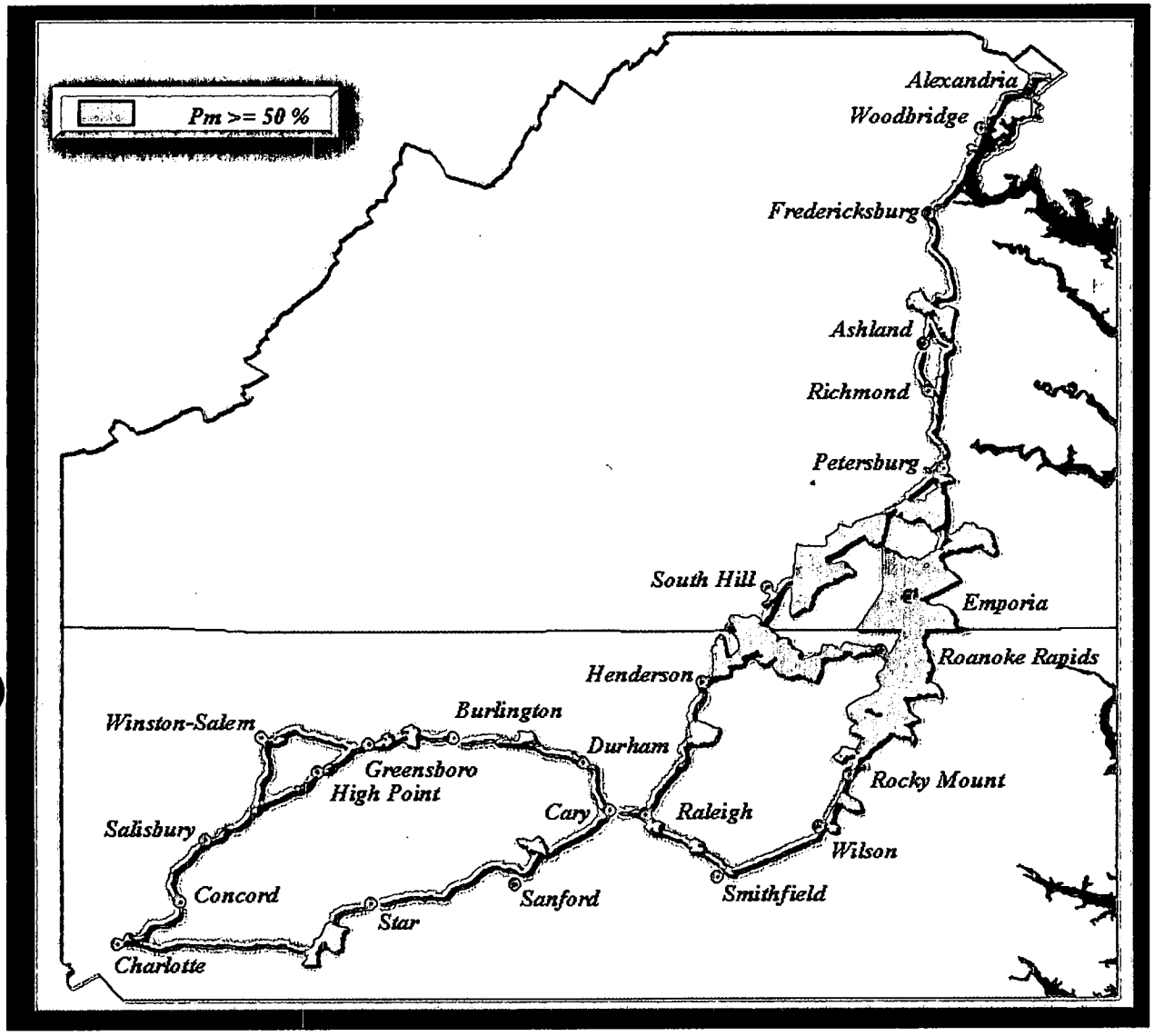


Exhibit ES-9
Minority Populations At or Greater than 50 Percent of the Population Within the Census Block Group For A 300 Foot Buffer in the SEHSR Study Areas

Census Block Groups that are more than 50% Minority: 1999



Economy

The SEHSR corridor between Washington, DC and Charlotte, NC passes through numerous counties in Virginia and North Carolina whose economies vary dramatically. Development is diverse, with sections of rural agricultural land and areas of industrial and commercial development, and high population density. Some counties along the route have economies that are dominated by one industry while others have a diversified economic base.

The addition of high speed rail service would provide numerous transportation, environmental, and community benefits in the study areas. An increase in ridership could reduce traffic congestion and

dependence on the highway, thus adding efficiency to the total transportation system. It is anticipated that the construction and operation associated with the SEHSR program could spur economic activity creating additional jobs, income, and sales that generate additional tax revenues for both Virginia and North Carolina.

Construction of the Southeast East High Speed Rail project between Washington DC, and Charlotte NC, could potentially create new jobs for individuals to upgrade the road bed, install signal and safety devices, build frontage/service roads, improve grade crossings, and build bridges to replace grade crossings. Additional jobs —potentially within the study areas – could be created within the manufacturing sector to produce the equipment and devices needed to make these improvements. The additional jobs would increase income, thus affecting the economy of a region.

The impact of expenditures from operation would probably be more concentrated, with the majority of new jobs created in communities that would be primarily served by the new rail service. Ticket agents and other railroad personnel would be located in these communities, and the secondary impacts of their employment would be spread throughout the counties in which the communities are located. Once new rail passenger service is in place there would be additional needs such as maintaining the equipment and the track. In North Carolina alone, it has been estimated the SEHSR program would bring $700 million in new state and local tax revenues, $10.5 billion in employee wages over 20 years, over 31,400 new one-year construction jobs, more than 800 permanent new railroad operation positions, and nearly 19,000 permanent full-time jobs from businesses which choose to locate or expand in North Carolina because of the SEHSR service[13]. It can be reasonably assumed that similarly positive benefits would accrue in Virginia.

In addition to impacts from direct expenditures on system construction and operation, the Southeast High Speed Rail service would increase the flow of travelers between cities along the route and thus enhance economic activity in those communities with station stops.

Since development and capital investment seek advantaged locations, the SEHSR program will provide Virginia and North Carolina the infrastructure to remain competitive within other growing regions in the United States.

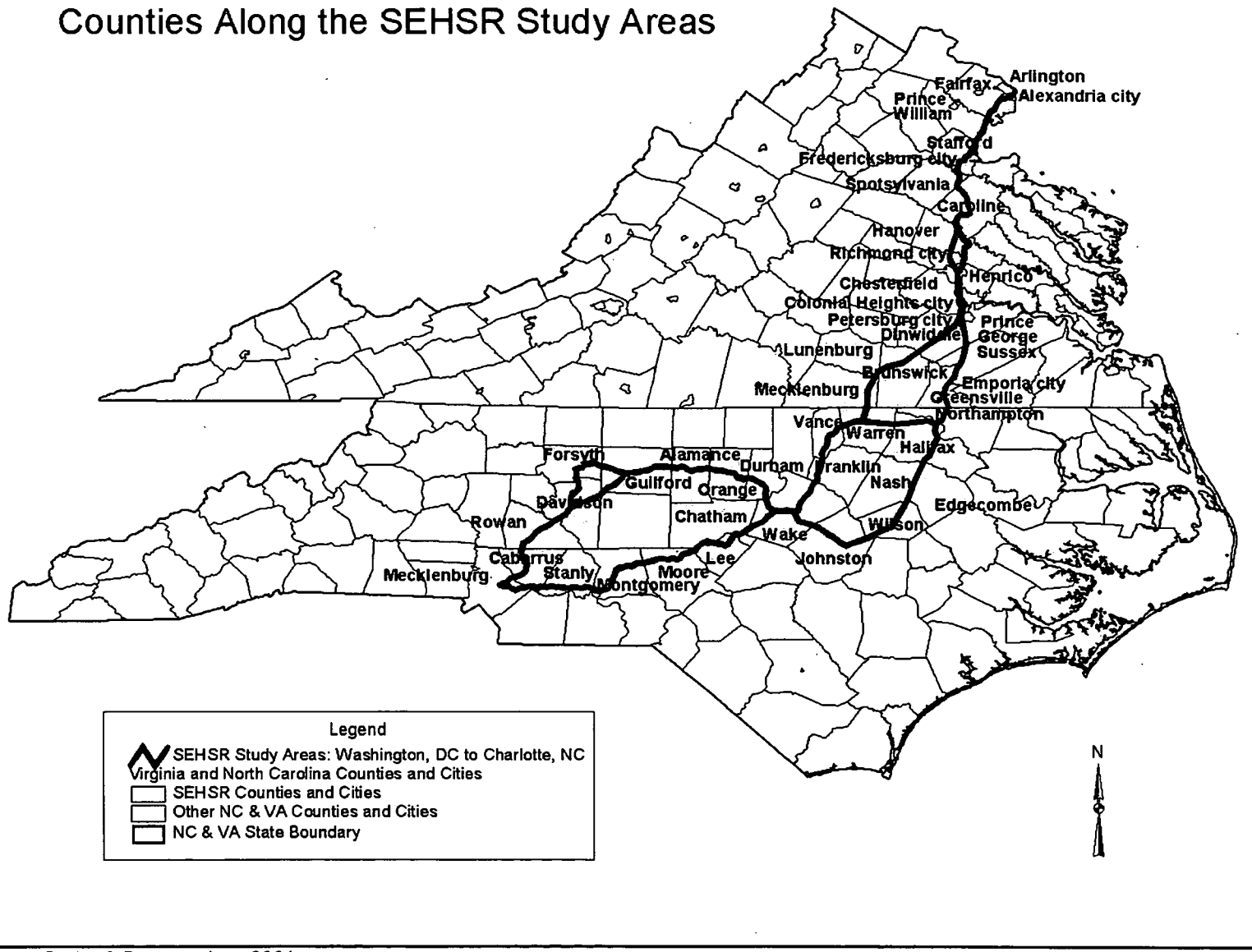
Land Use

The Southeast High Speed Rail study areas are very diverse in land use, varying from urban to rural settings. Interstates 40, 85 and 95 run parallel to the study areas and link communities to the major metropolitan areas of Washington, DC; Richmond, VA; Raleigh, NC; Greensboro, NC; Winston-Salem, NC; and Charlotte, NC. The Study Area Alternatives travel through 16 counties in Virginia and 24 counties in North Carolina (**Exhibit ES-10**).

[13] *Feasibility Study Summary & Implementation Plan*, NCDOT- Rail Division, April 1999.

Exhibit ES-10

Counties Along the SEHSR Study Areas



Source: Carter & Burgess, Inc., 2001

For the most part, the Study Area Alternatives are proposed to utilize existing rail lines and rail rights-of way that generally run adjacent to established cities and towns. As a result, no direct major influences in land use are anticipated at the regional level. The potential for direct impact on land use and development resulting from the proposed SEHSR program, is generally a function of:

- land available for development or redevelopment;
- regional and local markets; and
- the plans, zoning ordinances and economic development programs of local government.

Communities located within the study areas offer unique economic, educational, medical and cultural opportunities. High speed rail access to the communities in the study areas could enhance the way people live, work, shop, go to school, interact with other businesses and services, and choose to participate in cultural and recreation activities. Many land use categories could benefit from having convenient access to the SEHSR service.

Implementation of the SEHSR project would increase transportation opportunities, allowing communities within the study areas to look to long-term land use planning to spur development and increase redevelopment. The presence of these opportunities would also create an environment favorable for new economic activity and investment.

Land use within the urban areas (of the study areas) typically consists of medium to high-density residential, light and heavy industrial, public and all facets of commercial land use. Most urban areas and downtown districts of cities within the study areas are dominated by shops and small businesses; restaurants and hotels; service industries; community, government and school facilities; and historic sites and districts.

In the rural expanses of the Study Area Alternatives, land use tends to be low density residential, environmental, recreational and industrial. Housing is usually single-family dwellings and is more spread out. Vacant and agricultural lands are more abundant, than residential uses in these areas. Outside of urban areas, commercial land use is located along interchanges of major highways and interstates.

During the public workshops held in the summer of 2000, many counties and cities within the Study Area Alternatives expressed support and enthusiasm for the implementation of the SEHSR program. Many have developed long-term land use and transportation plans that focus on physical growth and development along existing rail lines and in downtown areas. Most of these plans focus on stations, station development and renovation. The SEHSR program would generally compliment these future plans.

Displacement and Relocation

With the implementation of the Southeast High Speed Rail program, each of the Study Area Alternatives potentially would require varying degrees of right-of-way acquisitions and varying numbers of relocations.

Based upon the conceptual engineering analysis, right-of-way acquisitions would result from realigning curves to obtain/maintain the maximum operating speed of the high speed passenger rail service. In sections of the corridor where natural and man-made features restrict the possibility of realigning curves, preserving these features would require a new location for the

rail alignment as well as sufficient right-of-way to construct, maintain and improve this new alignment.

Curves that are realigned could be shifted in order to flatten (straighten out) the curve for improved travel speed. Depending on the amount of shift, the impacts on adjoining properties would vary from none (where the realignment is contained within the existing right-of-way) to residential and/or business relocations (depending upon the modification to the curve).

All persons whose property is acquired or who are displaced as a result of a Federal or Federally-assisted project are ensured of fair, consistent and equitable treatment through the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public law 91-646) and the Uniform Relocations Act Amendments of 1987 (Public law 100-17). The need for land acquisition and the number and types of properties that might be acquired will be more thoroughly defined during the Tier II environmental process. In addition, information will be gathered about the properties and occupants and relocation benefits and sites will be specified.

Utilities

Utilities are, by definition, a commodity or service provided for public use. From municipal utilities to interstate pipelines, the Study Area Alternatives contain numerous facilities for water treatment and supply, sanitary sewer collection and treatment, storm water collection and discharge, electric generation and distribution, communication facilities and cabling, natural gas storage and distribution, petroleum storage and trans-flo facilities, solid waste collection and management facilities, and interstate pipelines. Initial coordination efforts were undertaken as part of this Tier I EIS. The following summarizes general findings in the Study Area Alternatives:

- *Water treatment and supply facilities.* Metropolitan areas, cities, and most towns within the study areas maintain and operate water treatment and supply facilities. Some of the rural counties and communities have joined to form regional water authorities that function similar to municipal water systems. The infrastructure for water systems varies throughout the study areas. Detailed studies will be required to determine the extent of impacts to water treatment and supply facilities. However, it should be possible to minimize the impacts by involving utility providers in the preliminary design stages for the SEHSR program.

- *Sanitary sewer collection and treatment facilities* exist in the metropolitan areas, cities and most towns within the study areas. There are a limited number of regional sewer authorities. Impacts to sanitary sewer facilities would also require detailed studies to determine the extent of utility involvement during preliminary design of the SEHSR program.

- *Storm water collection and discharge* occurs throughout the study areas regardless of population or development. Since the majority of the Study Area Alternatives follow existing railroads along "ridge" lines, the impact to storm water systems should be limited to realignments requiring pipe extensions and/or sidings requiring pipe extensions or network additions.

- *Power supply facilities.* Virginia Power Company, Carolina Power & Light and Duke Power provide and maintain the majority of the electric generation and distribution systems within the Study Area Alternatives. Electric system impacts may be minimized with attention to vertical clearances between top of rail and either above or below grade power lines, and with detailed studies of substation and transformer locations.

- *Communication facilities* along railroads began in the late 1800's with the installation of telegraph poles and cables. Impacts to communications facilities are both time-consuming and expensive. Therefore, early involvement of communications utilities will expedite implementation of the SEHSR program.

- *Natural Gas.* Residences and businesses throughout Virginia and North Carolina use natural gas. Cost-effective delivery of natural gas depends on volume sales that require the location of distribution systems in centers of population or industry. Therefore, the impacts of the SEHSR project on natural gas facilities would be at these locations and would depend on information from the utilities and from detailed studies to complete an evaluation.

Archaeological and Historic Resources

Section 106 of the National Historic Preservation Act of 1966 (36 CFR 800), as amended, requires that all federal agencies consider the impact of their actions on properties, sites, structures, or objects listed on, or eligible for listing on the National Register of Historic Places (NRHP) and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment. The NRHP is this country's basic inventory of historic resources and is maintained by the Secretary of the Interior.

A review of archaeological survey files at the Virginia and North Carolina and State Historic Preservation Offices revealed that no known archaeological sites are located with the 1500-foot survey buffer of the nine study area alternatives The evaluation and assessment of archaeological sites required under Section 106 of the National Historic Preservation Act would be conducted as part of the Tier II environmental studies.

National Register Historic Sites and sites on the State Historic Preservation Office (SHPO) "Study List," including sites determined to be eligible for the National Register were identified for the study areas. **Exhibit ES-11** summarizes the number of historic sites located in each of the study areas.

Exhibit ES-11 Historic Sites by Study Area Alternatives

Study Area	National Register Historic Sites	Study List Historic Sites
A	317	102
B	317	102
C	273	58
D	387	165
E	387	165
F	343	121
G	390	168
H	390	168
J	346	124

Source: North Carolina and Virginia State Historic Preservation Offices, 1999, Compiled by AG&M, 2000.

What environmental resources were reviewed as part of the physical environment?

In an environmental document, specific physical environmental resources are reviewed with the potential project impact area. Elements relate to features of our natural environment such as water, air and earth. Following collection and review of these features, impacts analysis and

potential mitigation plans are developed. **Exhibit ES-12** presents a list of the resources often associated with the physical environment analysis in an environmental document.

Wetlands and Water Resources

All of the Study Area Alternatives (from Washington DC to Charlotte, NC) cross through eleven river basins and over seven of the basin's main rivers. Other smaller rivers and numerous streams are also crossed. **Exhibit ES-13** lists these major basins and rivers.

Associated with these surface waters are numerous wetlands. A general review of existing mapping (National Wetland Inventory maps and hydric soils maps) was performed to determine an order-of-magnitude impact to wetlands in the nine study areas. **Exhibit ES-14** presents this estimate.

Exhibit ES-12
Physical Environment Resources

Resource Element
Meterology and Climatology
Water Resources
Waster Quality
Topography, Geology and Soils
Mineral Resources
Hazardous Material Sites and Underground Storage Tanks
Air Quality
Noise and Vibration
Prime and Important Farmlands
Visual Character

Wetlands are considered "Waters of the United States", and their protection comes under the jurisdiction of the U.S. Army Corps of Engineers (USACE). Impacts will require coordination and permission (permits from the USACE) for encroachment into wetland communities. Final determination of permit applicability lies with the USACE. Coordination with the USACE to obtain the necessary permits will be completed during Tier II environmental reviews, after the completion of final design.

The USACE has adopted, through the Council on Environmental Quality (CEQ), a wetland mitigation policy that embraces the concepts of "no net loss of wetlands". The purpose of this policy is to restore and maintain the chemical, biological, and physical integrity of "Waters of the United States," specifically wetlands. Mitigation of wetland impacts has been defined by the CEQ to include: avoidance of impacts (to wetlands), minimizing impacts, rectifying impacts, reducing impacts over time, and compensating for impacts (40 CFR 1508.20).

Exhibit ES-13 – Potential Crossings of Major Rivers by Each Study Alternative

Study Area Alternatives	Major Rivers																																	Total Crossings
	Potomac River	Occoquan River	Rappahannock River	Po River	Matta River	Mattaponi River	North Anna River	Little River	South Anna River	Pamunkey River	Chickahominy River	James River	Appomattox River	Nottoway River	Meherrin River	Roanoke River as Lake Gaston	Roanoke River as Roanoke Rapids Lake	Roanoke River	John H. Kerr Reservoir	Tar River	Little River (Wake Co.)	Neuse River	Eno River	Haw River	East Fork Deep River	West Fork Deep River	Deep River	Uwharrie River	Yadkin River as High Rock Lake	Rocky River (Stanley Co.)	Cape Fear River	Rocky River (Chatham Co.)	Little River (Montgomery County)	West Fork Little River	Pee Dee River as Lake Tillery	
A	x	x	x	x	x	x	x	x	x	x	x	xx	x	x	x	x			x	x	x	x	x	x	x	X	x	x	x	x					29
B	x	x	x	x	x	x	x	x	x	x	x	xx	x	x	x			x	x	x	x	x	x	xx	x	X			x	x					28
C	x	x	x	x	x	x	x	x	x	x	x	xx	x	x	x	x			x	x	x	x		x			x			x	x	x	x	x	x	29
D	x	x	x	x	x	x	x	x	x	x	x	xx	x	x	x			x	x	x	x	x	x	x	x	X	xxx	x	x	x					31
E	x	x	x	x	x	x	x	x	x	x	x	xx	x	x	x	x	X	x	x	x	x	x	x	xx	x	X			x	x					30
F	x	x	x	x	x	x	x	x	x	x	x	xx	x	x	x	x	X	x	x	x	x	x		x			xxx			x	x	x	x	x	x	33
G	x	x	x	x	x	x	x	x	x	x	x	xx	x	x	x			x		x	x	xx	x	x	x	X	x	x	x	x					29
H	x	x	x	x	x	x	x	x	x	x	x	xx	x	x	x			x		x	x	xx	x	xx	x	X			x	x					28
J	x	x	x	x	x	x	x	x	x	x	x	xx	x	x	x			x		x	x	xx		x			xxx			x	x	x	x	x	x	31

NOTE: Number of "X"s represents number of crossings.

Source: Arcadis, Geraghty & Miller, May 2001.

Floodplains and Floodways

Executive Order 11988, *Floodplains Management*, prohibits floodplain encroachments which are uneconomic, hazardous, or result in incompatible uses of the floodplain; as well as any action which would cause a critical interruption of an emergency transportation facility, a substantial flood risk, or adverse impact on the floodplain's natural resource values. The proposed project would unavoidably encroach upon 100-year floodplains, as defined by the Federal Emergency Management Agency (FEMA), in several of the Study Area Alternatives[14].

Water Quality

The primary sources of water quality degradation in rural areas are agriculture and construction. Construction of the proposed project would remove the vegetative cover and disturb the soil in some locations. This may cause water quality degradation from runoff and sedimentation. Also, any increase in impervious areas would introduce other elements of degradation to water resources. These elements include hydrocarbons, toxic substances, debris, and other pollutants. Anticipated impacts to water resources include: additional substrate destabilization, bank erosion, increased turbidity, altered flow rates, and possible temperature fluctuations within the stream channel caused by the removal of streamside vegetation. Precautions should be taken to minimize impacts to water resources in the project area. Quick revegetation of these areas helps to reduce the impacts by supporting the underlying soils. Appropriate measures must be taken to avoid spillage and control runoff. Such measures should include an erosion and sedimentation control plan, provisions for waste materials and storage, stormwater management measures, and appropriate maintenance measures.

Aquatic communities are acutely sensitive to changes in their environment and environmental impacts from construction activities may result in long-term or irreversible effects. Spanning structures or bottomless culverts at stream crossings should be used where practical to maintain fish and aquatic animal passages and minimize impacts. Impacts usually associated with in-stream construction include increased channelization and scouring of the streambed. In-stream construction alters the substrate and impacts adjacent streamside vegetation. Such disturbances within the substrate lead to increased siltation, which can clog the gills and/or feeding mechanisms of benthic organisms, fish, and amphibian species. Siltation may also cover benthos with excessive amounts of sediments that inhibit their ability to obtain oxygen. These organisms are slow to recover and usually do not, once the stream has been severely impacted. Increasing water temperatures due to the removal of streamside vegetation is also detrimental to aquatic communities. Warmer water contains less oxygen, thus reducing aquatic life that depends on high oxygen concentrations. Quick revegetation of stream banks, with both herbaceous and woody vegetation, helps to reduce the impacts by supporting the underlying soils and providing a shade cover.

Since the proposed project is in the planning process and designs have not been prepared, the need for stream relocations is unknown at this time. Should such actions be needed, coordination with the U.S. Fish and Wildlife Service (USFWS) and the Virginia Department of Game and Inland Fisheries (VDGIF) or North Carolina Wildlife Resources Commission (NCWRC), in accordance with the Fish and Wildlife Coordination Act (72 Stat.563, as amended; 16 USC 661 et seq. [1976]), will be initiated.

[14] Only FEMA mapped flood plains were assessed in the Tier I EIS.

Topography, Geology and Soils

Topography in the project study areas traverses two physiographic regions, the Appalachian Piedmont and Gulf-Atlantic Coastal Plain. Slopes of the Appalachian Piedmont are gently rolling to moderately steep, while slopes of the Gulf-Atlantic Coastal Plain are flat to gently rolling. Topography may buffer rail traffic noise and vibration, visually screen rail traffic from surrounding residential areas and help to filter pollution impacts.

Geology of the Study Area Alternatives consists primarily of a variety of metamorphic and igneous rocks, with discrete zones of sedimentary rocks. Currently there are no active fault zones in the region; however, the study areas are subject to some infrequent, low intensity seismic activity.

Overall, the majorities of study area soils have low shrink-swell potential, and are well suited for rail transportation. There are some soils in the Piedmont region that tend to have a higher shrink-swell potential and might create long-term effects on track alignments. Some major study area soils such as Cecil, Pacolet and Appling are susceptible to erosion hazard when vegetation or other ground cover is disturbed.

Impacts caused by construction of the SEHSR project, in certain areas, would depend on the type of proposed construction and existing conditions at specific locations within the Study Area Alternatives and cannot be specifically determined at this time. However, impacts are possible if an alternative is chosen where realignments extend beyond current rail rights-of-way.

Mineral Resources

The Commonwealth of Virginia boasts over 400 different minerals within its borders. More than 30 different mineral resources are produced in Virginia, at a combined annual value of nearly $2 billion. Impacts to mines and quarries are an important consideration in the development of any major transportation improvement project. Affecting such sites can dramatically increase the overall complexity and cost of a project. Therefore, it is important to know early in the environmental analysis process where potential conflicts with these sites may occur, so that proper planning can be conducted to avoid and minimize impacts to these locations. It is also worth noting that impacts to mines and quarries can be positive, due to improved access to freight rail service.

Exhibit ES-15
Abandoned Mines in the Study Area Alterntaves

Study Area	Number of Abandoned Mines
A	36
B	37
C	40
D	37
E	38
F	41
G	33
H	34
J	37

Source: U.S. Geological Survey Digital Data Series DDS-52; 2000

The US Geological Survey Mineral Database, Year 2000, data layer was mapped to present a comprehensive summation of abandoned mines that exist within the Study Area Alternatives. However, mines within 0.5-mile proximity to the existing rail lines within the Study Area Alternatives, are much more likely to be directly affected by any necessary improvements. The location of all mines within a 0.5-mile proximity to the existing rail lines is shown in **Exhibit E-15**.

A total of 55 mines were identified within the 0.5-mile buffer. In Virginia, Caroline County and

Dinwiddie County have the greater number of abandoned mines. In North Carolina, Mecklenburg County, Moore County, Wake County, and Stanly County have the greater number of abandoned mines.

Hazardous Materials Sites

A search of appropriate State and Federal agency file records was conducted to identify possible hazardous material and waste sites. An assessment of the potential for the proposed project to impact any of these sites was made based on reported contamination or regulatory activity and the distance of each site to the existing rail corridors. No field verifications were performed as part of the Tier 1 EIS. The assessment findings are preliminary and are not intended to supplant more detailed studies of subsurface soils and groundwater, if warranted. In addition to the sites identified through the file search, other potential hazardous materials and waste sites may exist within the study areas due to illegal dumping, lack of compliance with regulatory reporting practices, and limited regulatory data.

Hazardous substance sites within the study areas ranged from 1,426 sites identified to 1,780 sites identified per Study Area Alternative. Study Area Alternative H had the highest number of hazardous substance sites, followed by Study Area Alternatives G and E. Study Area Alternative C had the smallest number of hazardous substance sites within the 6-mile buffer. **Exhibit ES-16** presents a summary of these data.

During subsequent Tier II environmental studies, and the preliminary design phase, additional investigations would be considered for any sites, which could potentially impact the project's right-of-way. In addition, site conditions would be thoroughly assessed during the right-of-way acquisition phase of the project to insure that no hazardous wastes or materials are encountered.

Exhibit ES-16 Hazardous Substance Sites within Study area Alternatives

Study Area Alternative	Hazardous Substance Sites
A	1,708
B	1,728
C	1,426
D	1,720
E	1,740
F	1,448
G	1,760
H	1,780
J	1,488

Source: EDR, Center for Geographic Information Analysis; 1999, Complied Arcadis, Geraghty & Miller 2000.

Air Quality

Potential air quality impacts resulting from the Southeast High Speed Rail project could result from fuel emissions. The emission constituents of greatest concern from locomotive diesel engines are oxides of nitrogen (NOx), particulate matter (PM) and smoke. NOx is formed at high temperatures and pressures associated with combustion of fuel in the engine, when nitrogen in the air combines with available oxygen in the combustion chamber. PM generally results from incomplete evaporation and burning of the fuel droplets (and lubrication oil) in the combustion chamber.

In addition to potential fuel emissions air impacts, the implementation of the SEHSR project in any of the nine study areas could actually result in a positive affect on air quality in that study area. Ridership projections for the

SEHSR program indicate that approximately 95% of diverted trips to rail will come from automobile trips. As a result, pollutant emissions of automobiles should decrease as a result of the SEHSR program, and there should be a net reduction in emissions for the travel corridor.

No reduction in pollutant emissions from commercial aircraft or buses as a result of riders diverting to passenger rail is anticipated. Although much of the projected SEHSR ridership is from travelers diverting from air travel, it is assumed that even if the number of flights in the corridor is reduced, additional flights to cities outside of the corridor will be added. Buses tend to serve many rural customers who will continue to need the service they provide. They also can collect riders who may ride to cities where they can connect to SEHSR service; therefore, no reduction in service is expected.

Air quality modeling was not performed for this Tier I EIS. Detailed analyses and modeling will be undertaken as part of the Tier II analyses. In both Virginia and North Carolina an assessment will need to be completed during the Tier II studies for the SEHSR project to determine its ability to comply with the ambient air quality standard and not interfere with attainment or maintenance of national standards. There is strong potential for improved air quality, which would benefit attainment and maintenance efforts.

Noise and Vibration

Detailed noise and vibration studies will be performed during the Tier II environmental studies, however, similar studies performed for the St. Louis to Chicago high speed rail showed only a slight increase (less than 3 decibels) for most locations. The noise level changes are expected to be fairly consistent across all Study Area Alternatives.

At speeds in excess of 80 mph (130 kph) the major source of train noise is the rolling of train wheels on the track rail. Such noise grows louder as speeds increase. This fact, coupled with increased frequency of intercity services, would result in a greater amount of noise at a given location over a 24-hour period. At some locations noise levels may also be affected by more frequent sounding of locomotive horns at road crossings for safety reasons.

Although the actual increase in noise (or in some cases, no change in noise) may be minimal, the community may perceive that noise levels have increased substantially. Lessening the perceived noise problem can be approached in three different ways: via the noise source, along the sound path, and at the point of perception. **Exhibit ES-17** presents a summary of ways to mitigate noise impacts related to rail.

Another source of impact from rail is from ground-borne vibration. This is a result of wheel/rail friction. An enhanced track and vehicle maintenance program could minimize vibration from wheel/rail interaction. Vibration levels could be further reduced by any of these four measures:

- installation of ballast mats[15];
- installation of floating concrete slabs (effectively applied in Washington and Toronto);
- switching from concrete to wood ties; or
- construction of deep trenches parallel to the existing ballast to the tracks between the tracks and nearby buildings.

[15] The ballast mats could be installed under the existing ballast at the locations where the greatest vibration impact is expected. These mats have been shown to be effective in Europe and on rapid transit lines in Boston.

Another effective means of lessening the effects and occurrence of vibration would be the design and location of track work. Turnouts and crossovers are special track works that are most prone to causing problematic vibrations. Relocating such track work to less vibration-prone areas and the application of vibration-resistant railroad hardware are two remedies.

Exhibit ES-17
Rail Noise Mitigation Techniques

Addressing the Noise Problem:	Mitigation Technique
At the noise source	Vehicle design
	Railroad maintenance
	Service reductions
	Sound barriers
Along the sound path	Track construction materials
At the point of perception	Building insulation

Prime Farmland

In enacting the Farmland Protection Policy Act (7 CFR Part 658), Congress found that the Nation's farmland was "a unique natural resource" and that each year, "a large amount of the Nation's farmland" was being "irrevocably converted from actual or potential agricultural use to nonagricultural use." The general purpose of the Act is to "minimize the extent" of the role of federal programs in the conversion of farmland to nonagricultural uses and to "assure that federal programs are administered in a manner that, to the extent practicable, will be compatible with state, unit of local government, and private programs and policies to protect farmland" (section 1540(b) of the Act). The Act directs federal agencies to "identify and take into account the adverse effects of federal programs on the preservation of farmland; consider alternative actions, as appropriate, that could lessen such adverse effects; and assure that such federal programs, to the extent practicable, are compatible with state, unit of local government, and private programs and policies to protect farmland."

Exhibit ES-18 lists prime farmland by Study Area Alternative. Prime farmland is defined as land that has "the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion."

The percentages of prime farmlands within each study area ranges from 18% to 34%. Study Area Alternatives G and H, with 57,346 acres and 59,134 acres respectively of prime farmland,

exhibited the highest percentages, while Study Area Alternative C, with 26,523 acres of prime farmland, exhibited the lowest percentage.

Exhibit ES-18 Prime Farmland without Qualifications for Drainage and Flood Protection per Study Area Alternative

Study Area	Total PF (acreage) per Study Area	% PF per Study Area
A	37,219	24
B	39,360	24
C	26,523	18
D	45,137	28
E	46,992	28
F	34,308	22
G	57,346	34
H	59,134	34
J	46,670	29

Source: USDA; 1997-2001

Visual Impacts

It is likely that most of the improvements related to the proposed SEHSR project would occur within existing railroad right-of-way where existing track and support structures are in place. The development of SEHSR facilities would represent an incremental change in the visual environment that would be noticeable in most locations. Proposed improvements would facilitate train movements at a faster pace through residential views. Improved train sidings would allow trains to move past each other without one having to wait for the other to past. Thus the trains would pass faster through the view of the on-looker. Overall, no change in visible quality is expected from the proposed project. The operation of additional trains within existing railroad rights-of-ways would have the same impacts as existing trains. The actual change in views would be momentary.

A number of bridges would have to be constructed or reconstructed or modified. Most bridges would be built beside the existing bridge structure or the existing structure are proposed to be modified to accommodate the proposed project. Thus there would be only minimal changes in the visual environment.

The most significant visual quality impacts would result from construction, when construction equipment would be visible to adjacent residents and land use. Construction of physical improvements may cause some temporary degradation of visual quality. Actual construction should occur fairly quickly and would be similar to existing maintenance activities along the right-of-way.

Protected Species

Information concerning the occurrence of federal and state protected species within the nine study areas was gathered from the United States Fish and Wildlife Service (USFWS) list of protected species, the Virginia Division of Natural Heritage (VDNH) and the North Carolina Natural Heritage Program (NCNHP) databases of rare species and unique habitats. Field reconnaissance in the project area would be conducted during Tier II investigations. The surveys would determine natural resource conditions, and document natural communities and the presence of protected species or their habitats. **Exhibit ES-19** presents a list of federally protected species that could potentially be found in the Study Area Alternatives.

Wildlife

A good diversity of species is present throughout the Study Area Alternatives, with exception to those species that require large-scale contiguous forests.

Loss of wildlife habitat is an unavoidable aspect of most development. Temporary fluctuation in populations of animal species that utilize terrestrial areas is anticipated during the course of construction. Slow-moving, burrowing, and/or subterranean organisms would be directly impacted by construction activities, while mobile organisms would be displaced to adjacent communities. Competitive forces in the adapted communities would result in a redefinition of population equilibria. The study area alternatives would constitute a barrier to wildlife utilizing natural communities within the study area. As a result, many species could experience some loss by vehicles or become forage opportunities for other species. Deer, snakes, raccoons, opossums, and small mammals may suffer fatalities or injury as a result of contact with the trains. The proposed increased service and additional tracks would further increase these numbers. Longer bridges and larger culverts would be considered, especially in the vicinity of the stream crossings, to accommodate for wildlife movement.

Required Permits and Actions

The proposed implementation of the SEHSR program would require several environmental regulatory permits from various state and federal agencies. Subsequent Tier II investigations may reveal additional requirements or specific necessary actions. The Virginia Department of Rail and Public Transportation (VDRPT) and the North Carolina Department of Transportation (NCDOT) would obtain all permits prior to construction.

Exhibit ES-17

Federally Protected Species Known from Virginia and North Carolina Counties Along the SEHSR Corridor

Scientific Name	Common Name	Federal Status	City of Alexandria	Arlington	Brunswick	Caroline	Chesterfield	City of Emporia	Fairfax	City of Fredericksburg	Greensville	Hanover	Henrico	Mecklenburg	City of Petersburg	Prince George	Prince William	City of Richmond	Spotsylvania	Stafford	Sussex	Alamance	Cabarrus	Chatham	Davidson	Durham	Edgecombe	Forsyth	Franklin	Guilford	Halifax	Johnston	Lee	Mecklen.	Montgomery	Moore	Nash	Northampton	Orange	Randolph	Rowan
Aeschynomene virginica	Sensitive joint-vetch	T				X	X		X			X	X			X	X		X	X																				
Alasmidonta heterodon	Dwarf wedgemussel	E					X				X	X					X			X	X								X		X	X				X		X		
Cardamine micranthera	Small-anthered bittercress	E																									X													
Clemmys muhlenbergii	Bog Turtle	T(S/A)																							X		X													
Echinacea laevigata	Smooth coneflower	E																								X								X	X			X		
Elliptio steinstansana	Tar spiny mussel	E																									X		X		X	X				X				
Felis concolor couguar	Eastern cougar	E																																	X						
Haliaeetus leucocephalus	Bald eagle	T				X	X		X			X	X	X		X	X	X		X	X				X	X	X			X				X	X		X			X
Helianthus schweinitzii	Schweinitz's sunflower	E																					X		X									X	X				X	X
Helonias bullata	Swamp pink	T				X							X																											
Isotria medeoloides	Small whorled pogonia	T				X			X			X	X				X		X	X																		X		
Lasmigona decorata	Carolina heelsplitter	E																					X											X						
Notropis mekistocholas	Cape Fear shiner	E																							X							X			X				X	
Percina rex	Roanoke logperch	E			X						X			X							X																			
Picoides borealis	Red cockaded woodpecker	E																			X				X			X	X			X	X	X		X	X	X	X	X	
Ptilimnium nodosum	Harperella	E																							X								X								
Rhus michauxii	Michaux's sumac	T			X		X				X			X							X					X			X			X		X		X		X		
Schwalbea americana	American chaffseed	E									X										X															X				

Source: Arcadis, Geraghty & Miller, May

How were these alternative study areas compared?

The Tier I EIS discusses the general environmental settings within the nine study areas area alternatives. Data was collected at a corridor level and was based primarily on secondary data sources and general trends within the study areas. Therefore, discussions and conclusions were based on a "big picture" perspective, rather than precise impacts and surveys.

Based on this general data collection effort, potential benefits and impacts of the proposed SEHSR program were assessed. Ranges of possible mitigation measures were also generally discussed. However, specific impacts and benefits would be detailed during the Tier II environmental documentation process.

Exhibit ES-20 presents a general overview of the findings from the Tier I DEIS. Those impact areas, primarily the human/social environment, for which impacts could not be quantified are not included in this table. The potential impacts in these areas are more qualitative and the reader is referred to the discussion of impacts in those sections of this Chapter 4 of the Environmental Impact Statement.

What are the next steps?

After the Tier I EIS is completed and public hearings are held, it is anticipated that a recommended study area report will be prepared for approval by the Secretaries of Transportation for Virginia and North Carolina. The subject of the report would be the Study Area Alternatives to be discussed in the final environmental impact statement and in the record of decision.

If the record of decision documents a Build Alternative as the preferred course of action, a program would be developed identifying the proposed actions necessary to implement the Southeast High Speed Rail program in the recommended Study Area Alternative(s). The anticipated type of environmental documentation needed for each action, or group of actions would be determined, and a phased program of project development would be established based on availability of resources and on the priorities of the states of Virginia and North Carolina.

The VDRPT and the NCDOT Rail Division would then proceed with the Tier II project development, which would involve further refinements within the recommended Study Area Alternative(s) including the identification of specific alignments, station locations, detailed environmental analysis, detailed engineering analysis, and more accurate capital cost estimates. A schedule for the development of the Tier II documentation efforts would be developed and initiated. During the Tier II efforts, detailed agency coordination would take place including the securing of permits following the appropriate environmental documentation.

Exhibit ES-20 Summary of Potential Impacts and Benefits of the Study Area Alternatives										
Environmental Information	**Buffer width for review**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**J**
Water Supply Watersheds	6 mi.	27	33	19	28	35	21	27	34	21
Major Rivers (potential crossings)	N/a	29	28	29	31	30	33	29	28	31
Wetlands (NWI & hydric soils)	300 ft.	117.3	115.8	117.0	124.0	122.5	123.7	190.7	189.2	190.4
FEMA 100-year Floodplain crossings	n/a	83	76	44	89	82	50	97	90	58
Mineral Resources (Mines)	.5 mi	36	37	40	37	38	41	33	34	37
Hazardous Materials Sites	6 mi.	1,708	1,728	1,426	1,720	1,740	1,448	1,176	1,780	1,488
Air Quality-Net reduction in Nox emissions (lbs/yr)	N/a	554,889	530,895	279, 065	547,392	517,065	269,540	589,505	553,099	298,179
Noise &Vibration Category 3 sensitive receptors	300 ft.	333	342	259	371	371	287	369	372	284
Prime farmland (acres)	6 mi.	37,219	39,360	26,523	45,137	46,992	34,308	57,346	59,134	46,670
Protected Species- # Of known populations identified	6 mi.	33	35	45	44	46	56	43	49	51
National Rivers Inventory	6 mi.	11	11	13	10	11	13	12	13	14
Historic Sites										
-National Register Sites	1500 ft.	61	61	32	32	61	32	48	48	19
-Study List Sites	1500 ft.	317	317	273	387	387	343	390	390	346
Parks	500 ft.	14	15	11	14	15	11	15	16	12
Gamelands/Public lands (ac.)	500 ft.	5.7	5.7	14	5.7	15.7	15.3	5.7	5.7	15.3
Areas of Envir Complexity (high)*	n/a	6	8	4	5	7	3	7	9	5

**Refers to* the level of difficulty required to avoid or minimize environmental impacts in a certain area. High areas of complexity are those that would require creative avoidance and minimization techniques and add substantially to the overall construction effort and would require public and agency coordination and involvement.

Source: Carter & Burgess, Inc. 2001, compiled the Resource Group May 2001

IS THIS ANY WAY TO RUN A RAILROAD?

It's Judgment Day for Amtrak: the ailing system needs to speed up—or be shut down for good

By DANIEL EISENBERG

JUDGING BY THE GAGGLE OF TRAVELERS pouring onto trains over the Thanksgiving holiday, you might think that Amtrak is finally enjoying a smooth ride. But you would be wrong. Three decades after Congress created this poor stepchild from the remnants of the freight railroads' money-losing passenger business, Amtrak is closer than ever to derailing.

The Amtrak Reform Council, a federal oversight board, last month formally concluded what most observers have known for years: the nation's floundering passenger-train operator has no chance of becoming self-sufficient by the end of 2002, as Congress mandated five years ago. Now that it's clear Amtrak can't go it alone, Congress and the Bush Administration will have to decide whether to invest up to $100 billion in the kind of high-speed trains that glide along at up to 180 m.p.h. in Europe and Japan—or essentially give up on intercity passenger service altogether.

Why can't the U.S. have speedy trains like Europe and Japan?

To many rail enthusiasts, the coming debate is long overdue. "Sept. 11 highlighted an existing problem: we don't have a balanced transportation system," says James RePass, president of the National Corridors Initiative, a nonprofit pro-rail group. "One of the reasons we have government is to do things we need that private business won't. No transportation system in the world really makes money."

And U.S. trains, compared with other modes of transportation, don't get much help. Passenger trains receive only 4% as much in federal subsidies as the $13 billion pulled in annually by airports. And highways get even more: $30 billion a year. Speedy, reliable passenger trains could help relieve congestion on the nation's highways and at its airports, especially for trips of 100 to 500 miles. If their railbeds were upgraded and widened to allow them to run faster, they could speed travelers between the business districts of cities such as Los Angeles and San Francisco, or Chicago and St. Louis, as quickly as the tag team of taxi-airplane-taxi. Trains are also two to eight times as fuel efficient as planes.

That doesn't mean that Amtrak, a creature of pork-barrel politics, is the right entity to revive rail travel. Burdened by the conflicting missions of providing comprehensive nationwide service and making a profit, Amtrak has failed at both. Now many experts are concluding that Amtrak as we know it will probably have to be scrapped—perhaps to be replaced by semiprivatized, regional passenger-train networks.

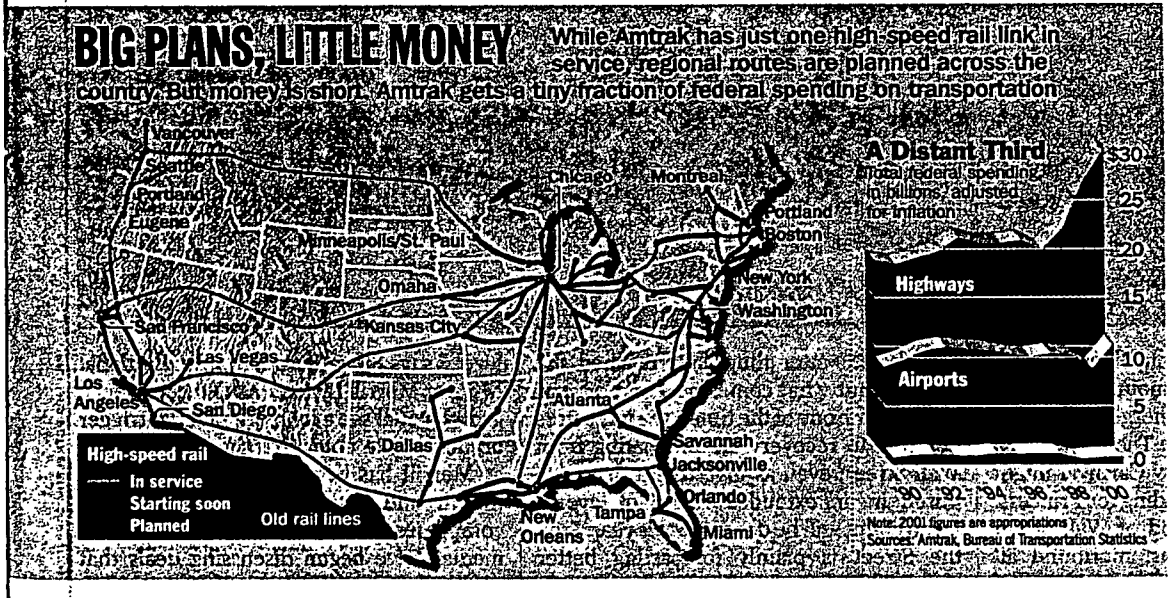
Since its inception, Amtrak has been saddled with entrenched bureaucracy, outdated equipment and high labor costs for its unionized workers. Thanks to its inconsistent schedules, for example, Amtrak pays heavily to put up stranded crews in hotels. In the past decade, passenger trains have not significantly increased the number of riders, which stands at 22 million a year—about 1% of all intercity travel. Only one Amtrak route, from Washington to New York City, makes money, and many trains amble along as slowly as they did 50 years ago.

In the most recent fiscal year, which ended Sept. 30, Amtrak had an estimated operating loss of $365 million (which doesn't include capital expenses) on total revenues of around $2.5 billion. This summer it took out a $300 million mortgage on New York City's Penn Station to keep the trains running. When the nation's skies were shut down after Sept. 11, Amtrak did enjoy a brief spike in traffic, especially on its faster, new Acela trains between Washington and Boston. But with leisure travel across the country slipping, Amtrak's overall September ridership was actually 6% lower than last year's, and security costs are rising.

Getting more people to consistently climb aboard is going to take a major commitment of both public and private dollars. Passenger trains, after all, didn't die a natural, market-driven death. In the 1930s and '40s, a consortium of General Motors, Firestone, Standard Oil and others bought up popular electric street trolleys in various

RACHEL COBB FOR TIME

ZOOM: Amtrak's speedy trains are jammed with business travelers—but only in the East



U.S. cities only to shut them down, and lobbied for highways at the expense of rails.

Both airlines and highways have dedicated sources of federal funding: gasoline and ticket taxes. Until rail gets its own lifeline—like an extra penny of federal gasoline tax, which would bring in more than $1 billion a year—Amtrak may have to continue "fighting for table scraps," as CEO George Warrington puts it.

Members of Congress have proposed a host of bills to fix that, by giving Amtrak and the states anywhere from $20 billion to $70 billion in tax-exempt bonds and loan guarantees. But despite a diverse coalition of passenger-rail supporters, from Senate majority leader Tom Daschle to his Republican counterpart Trent Lott, it's unlikely that Amtrak will control all the funding or that it will survive much longer in its current form.

The Amtrak Reform Council will probably recommend that Congress create a new entity to take over Amtrak's responsibility for managing the busy, 700-mile Northeast Corridor, from Washington to Boston. The corridor is the only part of the nation's rails that Amtrak actually owns—the freight rails control the rest—and it costs $400 million to $600 million a year to maintain.

The U.S. passenger-rail market is still too small and fragile to have multiple carriers enter routes between cities, as the airlines have. But separate regions that have already formed high-speed corridors could open up their service contracts to competitive bidding—as many now do with commuter service—from a scaled-down Amtrak or private companies that operate commuter and passenger-rail services around the world, such as Connex and Herzog. "We see potential there, and we'd like to see opportunity," says Jim Stoetzel, a vice president at Connex North America, a division of France's Vivendi, which runs passenger trains in Europe.

Since 1996, 21 states, led by California, have invested almost $1 billion in intercity-rail projects in conjunction with Amtrak. Illinois, for instance, is helping finance a $400 million high-speed link between Chicago and St. Louis. If Congress would provide matching funds, the states would have added incentive to invest. In high-density parts of the Midwest, Florida, Texas and the West Coast, intercity rail could gain 20% to 30% of the travel market—just as Amtrak commands 40% of mass-transit trips between New York City and Washington.

One possible casualty under this scenario would be the long, scenic routes that cross the country, serving small, remote towns—and losing millions of dollars. The only way such lines will survive in the long run, Heritage Foundation economist Ronald Utt argues, is to morph into entertainment and recreational offerings, as cruise ships have done.

Before that can happen, though, Washington will have to find a new way to keep the trains running at all. And travelers looking for an alternative to the crowded highways and long lines at airports have to hope that Amtrak—or its successor—can seize this chance to get on track. ***—With reporting by Elizabeth Coady/Chicago, Unmesh Kher/New York and Jeffrey Ressner/Los Angeles***

SOUTHEASTERN ECONOMIC ALLIANCE

Building a 21st Century Transportation Infrastructure

The Southeastern Economic Alliance (SEA) is a coalition of 13 chambers from across six Southeastern states, representing business leaders from Atlanta, Birmingham, Charlotte, Chattanooga, Columbia, Greenville, Hampton Roads, Macon, Raleigh, Richmond, Savannah, Spartanburg, and Winston-Salem. All of these cities are located on or near the federally designated Southeast High Speed Rail Corridor.

The goal of the SEA is rapid implementation of competitive, reliable and safe high-speed passenger rail service across our region.

We believe improved passenger rail is an important investment for our rapidly growing region. Passenger rail will drive billions in economic development and encourage urban revitalization while enhancing our global competitiveness as a region. It will also help alleviate the congestion of our roads and airports that business travelers experience everyday. The time is now for investing in high-speed passenger rail, and the Southeastern Economic Alliance is committed to leveraging the business community to ensure that the Southeast corridor becomes a reality.

WHAT DO YOU NEED TO DO?

- Call and write your elected officials in Washington indicating your support for the passage of the High Speed Rail Investment Act (S. 250). Draft letters are available from SEA.
- Participate in local educational events and transportation committees of your local chamber to increase your knowledge and energy as a rail advocate.
- Call and write your state and city elected officials regarding the importance of continued momentum for high speed rail development. State updates and key next steps are available from SEA.

To help make Southeast high-speed rail happen, contact your local Chamber of Commerce or Scott Brady, vice president for transportation at the Metro Atlanta Chamber of Commerce (404-586-8467)

RECOMMENDED WEBSITES

Southeast High Speed Rail Organization www.sehsr.org

Federal Railroad Administration www.fra.dot.gov/o/hsgt/hsgt.htm

Amtrak www.amtrak.com

Virginia Department of Rail and Public Transportation www.drpt.state.va.us

North Carolina DOT - Rail Division www.bytrain.org

Georgia Rail Passenger Program www.garail.com

American Passenger Rail Coalition www.aprc.org

High Speed Ground Transportation Association www.hsgt.org

National Association of Railroad Passengers www.narprail.org

National Corridors Initiative www.nationalcorridors.org

Metro Atlanta Chamber of Commerce

Birmingham Area Chamber of Commerce

charlotte CHAMBER

The Chamber Greater Raleigh Chamber of Commerce

CHATTANOOGA AREA CHAMBER OF COMMERCE

GREATER Greenville CHAMBER OF COMMERCE 24 Cleveland Street Greenville, South Carolina 29601

Greater Columbia Chamber of Commerce

Greater Richmond Chamber of Commerce

HAMPTON ROADS Chamber of Commerce

The GREATER MACON CHAMBER OF COMMERCE

Spartanburg Area Chamber of Commerce

SAVANNAH AREA CHAMBER

WSCC WINSTON-SALEM CHAMBER OF COMMERCE

Consulting assistance for the Southeastern Economic Alliance provided by The DaVinci Group.

Virginia/North Carolina Interstate High Speed Rail Commission

Proposed Meeting Agenda

Monday April 29, 2002

11:00 am
Meet at Holiday Inn Ballston, travel to Union Station for ride on Amtrak's Acela Train. Or, meet at Acela train gate at Union Station at 12:30 p.m.
Post trip briefing from Amtrak.
See enclosed letter for details

Tuesday,April 30, 2002

9:00am	Welcome Senator John Watkins Legislative Update – Virginia Legislative Update – North Carolina Introduction of New Members Senator Watkins
9:15am	Passenger Demand AECom – Bruce Williams
9:45am	Report on Richmond to Norfolk Study Alan Tobias
10:10am	BREAK
10:25am	Update on Tier I Study Pat Simmons
10:45am	Update on Federal Legislation David Ewing AASHTO Studies
11:05am	North Carolina Activities David King
11:25am	Virginia Activities Leo Bevon
11:45am	Federal Compact Legislation Pat Simmons
11:55pm	Discussion: Commission's Work Plan Senator Watkins
12:25pm	Summary Senator Watkins Next Meeting
12:35pm	Adjourn

Virginia/North Carolina Interstate High Speed Rail Commission Meeting
Confirmed Attendees – April 29-30, 2002

North Carolina

Wib Gulley
Senator – Durham

Linda Garrou
Senator – Winston-Salem

Bob Rucho
Senator - Matthews

Jim Crawford
Representative – Oxford

Nelson Cole
Representative – Reidsville

Bill Kinchloe
Private Citizen

Virginia

John Watkins
Senator - Midlothian

Frank Ruff
Senator - Clarksville

John Welch
Representative – Virginia Beach

Jack Rollison, III
Representative - Woodbridge

Staff

Giles Perry
Legislative Research

David King
Deputy Secretary - NCDOT

Pat Simmons
Director – NCDOT Rail Division

Caitlin Hughes
NCDOT Washington Office

Leo Bevon
Director – Virginia DRPT

George Conner
Assistant Director – Rail DRPT

Tom Stewart
Rail Passenger Programs Manager

Alan Tobias
Rail Passenger Projects Manager

John Garrett
Deputy Clerk - Senate

Alan Wambold
Legislative Services

Other

Willard Andrews
Va. High Speed Rail Dev. Comm.

Paul Reistrup
CSX

Bruce Wingo
NS

Glenn Scammel
House Transp. & Infrastructure Comm.

Bruce Williams
AECom Consultants

VA/NC HIGH SPEED RAIL COMMISSION
MEETING MINUTES

Ballston, VA April 30, 2002

A meeting of the Virginia/North Carolina High Speed Rail Commission was held in Ballston, Arlington County, VA on April 30, 2002. Commission members in attendance were Senator John Watkins, VA and Senator Wib Gulley, NC co-chairmen and Senator Linda Garrou, NC, Senator Bob Rucho, NC, Representative Jim Crawford, NC, Representative Nelson Cole, NC, Bill Kinchloe, NCRR, Senator Frank Ruff, VA, and Delegate John Welch, VA. Also in attendance were staff members from Virginia and North Carolina, speakers and invited guests. Attached is a copy of the sign-in sheet for others in attendance.

Senator Watkins opened the meeting with a welcome and introduced the Virginia delegation. Senator Gulley introduced the North Carolina Senators and Representative Cole introduced the North Carolina Representatives.

On April 29, a train ride on the Acela was arranged by Amtrak for the members of the Commission and a discussion followed concerning the ride and the meeting with Amtrak officials afterward.

The first speaker, Bruce Williams, with the consulting firm of AECOM Consulting discussed the "Passenger Demand Forecasts" for the Southeast High Speed Rail. He distributed a handout that explained the forecasting approach. Surveys that had originally been conducted in the mid 90's that have been updated showed an important connection to the Northeast Corridor (NEC). The Southeast would add 18% to the riders and revenues for the NEC. Ridership and revenue forecasting is based on two components: Total Market Size/Composition and High Speed Rail Market Share. Each of these was discussed in detail as to their relationship with SEHSR. Frequency and travel time are important factors in the modal selection. Forecast results of the nine alternatives in the Tier I FIS were presented showing the annual ridership, ticket revenue, passenger miles and the average ticket yield per mile.

Alan Tobias, Virginia Department of Rail and Public Transportation was the next speaker and covered two subjects. The first was the "Richmond to South Hampton Roads High Speed Rail Feasibility Study". He had handouts for the "Executive Summary" and the "Findings and Recommendations" of a study prepared by the Parsons Transportation Group consulting firm. He covered the major tasks of the study: Engineering, Environmental Overview, and Ridership and Revenue Forecasting. AECOM was involved in the demand analysis. These documents showed that rail service is feasible and estimated the cost at $236 million. They also showed that frequency of service has more impact on ridership than increased speed. Additional study needs to be done to determine routings, to develop a phased implementation and operating costs. He noted

that there are two ways to get to South Hampton Roads and we are looking at both. Senator Gulley raised the issue of liability and separate tracks. Norfolk Southern has provided comments on the study. The Commonwealth will work with the Railroads to resolve issues or go to Congress for assistance. Willard Andrews commented on the need to address Jamestown 2007.

The second part of his talk dealt with the "L'Enfant Plaza Station Study" also completed by the Parsons Transportation Group under the direction of the Virginia Railway Express (VRE). Many issues were discussed from the Virginia Avenue Tunnel to direct access from the VRE Station to the METRO Station. Existing conditions and the recommended improvements were discussed. This would allow run-through service and reduce delays. Handouts were passed out detailing the two studies.

The next speaker was Patrick Simmons, Director, NCDOT Rail Division, who discussed the status of the study of the "Southeast High Speed Rail (SEHSR) Tier I Environmental Impact Statement". Handouts were given out outlining the phases of the study, which was prepared by the North Carolina Department of Transportation and the Virginia Department of Rail and Public Transportation in cooperation with the Federal Highway Administration (FHWA) and the Federal Railroad Administration (FRA). The results of the study indicate that it is a viable project. Out of the 800 comments received at the public hearings, only 12 were negative. The aspects of the study discussed were the purpose and need, the incremental approach, the nine alternatives, the evaluation, the public/agency input and the recommended alternative. To indicate the extent of public involvement in the project, they have a database of 7,500 people to whom they send periodic updates of the study. At this time, the report has been approved by the transportation boards of both Virginia and North Carolina and has been submitted to the Federal Highway Administration who will issue the Record of Decision (ROD) upon their approval. Hopefully, this approval will be forthcoming this fall. The Commission needs to meet with members of Congress and get the federal government as partners.

David King, Deputy Secretary, North Carolina DOT, spoke about North Carolina activities. He discussed their experience with the proposed Asheville and Wilmington services that are not high-speed rail and both are intra-state services. He also spoke about how North Carolina was dealing with some grade crossings. They are protecting the crossings with what they call a "Sealed Corridor". This means they have four quadrant gates or long gate arms sealing the approach on both sides of the road along with a median barrier that prevents a vehicle from crossing into the opposing lane. He indicated they have shown a significant reduction in accidents at these locations. It was noted that North Carolina has joined the I-95 Coalition. They are now working better with railroads. Need to work with railroads and trucking companies to get freight off the highway and on to rail. A primary role of the Commission should be to work with Congress to look at multi-year investment strategies.

Leo Bevon, Director, Virginia Department of Rail and Public Transportation, spoke next about Virginia activities. He discussed a "Memorandum of Understanding (MOU)" with CSX that gave a schedule of several improvements and enhancements and what benefits

are derived from these improvements from Washington to Fredericksburg. (Handout) We are also looking at the type of equipment on the Richmond to Washington to attract riders. He discussed the AF Interlocking improvements and the increased on-time performance of the Virginia Railway Express. He also talked about the I-81 Corridor and the estimated cost of $13 billion to improve the highway facilities in the corridor. If inter-modal rail were used in conjunction with highway improvements, it would greatly reduce the overall cost. The "Trans-Dominion Express", a regular passenger train running from Washington and Richmond through Lynchburg to Bristol was discussed. The I-95 Corridor, which would be similar to the I-81 Corridor as far as relieving highway traffic on the interstate was mentioned. Senator Watkins noted that Virginia has requested $100,000 in federal grants for high-speed rail and Congressman Eric Cantor, VA has been very helpful in obtaining federal funding.

The next speaker was David Ewing, States for Passenger Rail Coalition, who provided an update of federal legislation. He talked about a report prepared for the Standing Committee on Rail Transportation (SCORT) of the American Association of State Highway and Transportation Officials (AASHTO) by AECOM Consulting, which is scheduled to be completed by mid-June. The Swift Rail Investment Act, HR 4545, S1991 and other bills were discussed. He stated that a dedicated source of funding is needed. With a short session of Congress, no major legislation will pass. He suggested a focus on increasing the Swift Act to $100 million and get in the FY '03 appropriations.

A discussion on liability and access ensued. It was noted that States favored status quo on these issues and negotiations. It was suggested that a liability cap like the airlines have should be considered.

Glen Scammel, Majority Counsel, House Transportation and Infrastructure Committee, United States Congress spoke about Interstate Rail Passenger Compacts. He gave a brief history of the compact legislation and RIDE 21 (HR2950) (Handout). Tax Exempt Bonds and Tax Credit Bonds were explained. It was noted that a Tax Credit bond program would be similar to other transportation programs. The match would be approximately 70/30. The Railway Labor Act and the Davis-Bacon Act were also discussed. Labor is trying to get all legislation to include the Railway Labor Act and retirement provisions.

After the last speaker finished, it was decided that a delegation from both states visit the legislators in Washington before Labor Day. Staffs were asked to develop an outline of who the Commission is, what they are doing, and present their position to the legislators. Giles Perry and Alan Wambold are to develop a background paper for the Commission analyzing forms of governance. The paper will address various arrangements through which the work of the two states to develop high-speed rail could be progressed. Among the options that will be examined are an interstate compact, an authority and other forms of interstate agreements.

The group decided that they need more information on equipment at the next meeting. Virginia agreed to provide a video they developed on the Northwestern service through Seattle. A trip is planned by the Virginia Committee for the Advancement of the Trans-Dominion Express to the West Coast to ride a long distance train on June 22-26, 2002. Senator Watkins will be participating in this trip.

The next meeting of the Commission is to be planned for the end of October in North Carolina. They want to get the freight railroads involved and want to write to NS and CSX and ask that they attend the next meeting so they could get some insight into what the Commission is doing.

The minutes of the November 28, 2001 meeting were approved as presented.

The meeting was adjourned at 12:50 pm.

Addendum:

These minutes were prepared by the Virginia staff of the Virginia/North Carolina High Speed Rail Commission.

Virginia/North Carolina Interstate High Speed Rail Commission

Southeast High Speed Rail (SEHSR) Passenger Demand Forecasts

AECOM CONSULTING TRANSPORTATION GROUP

April 30, 2002

Overview of Forecasting Approach

- Based on Two Components:
- Total Market Size/Composition
  - Existing Market Size
  - Market Growth
- High Speed Rail Market Share
  - Characteristics of Competing Modes
    - Auto (passenger car, truck, or van)
    - Air
    - Intercity Bus
  - Characteristics of High Speed Rail

Total Market Size/Composition

- Existing Market Size
  - Passenger/Vehicle Counts
    - Traffic counts
    - Published FAA data
    - Amtrak ridership data
    - Greyhound data
  - Extensive Travel Surveys
    - Highways (7 locations plus other studies)
    - Airports (3 locations)
    - Rail (5 routes)
    - Intercity Bus (3 locations)

Total Market Size/Composition (cont.)

- Travel Survey Results

	Interview Surveys (part 1)	Paper Surveys (part 2)		
		Distri-buted	Returned	Response Rate
Auto	11,250	11,250	3,850	34%
Airport	2,000	2,000	650	33%
Rail	(w/ paper)	1,300	300	23%
Intercity Bus	550	550	50	10%
TOTAL	13,800	15,100	4,850	32%

Total Market Size/Composition (cont.)

- Market Growth

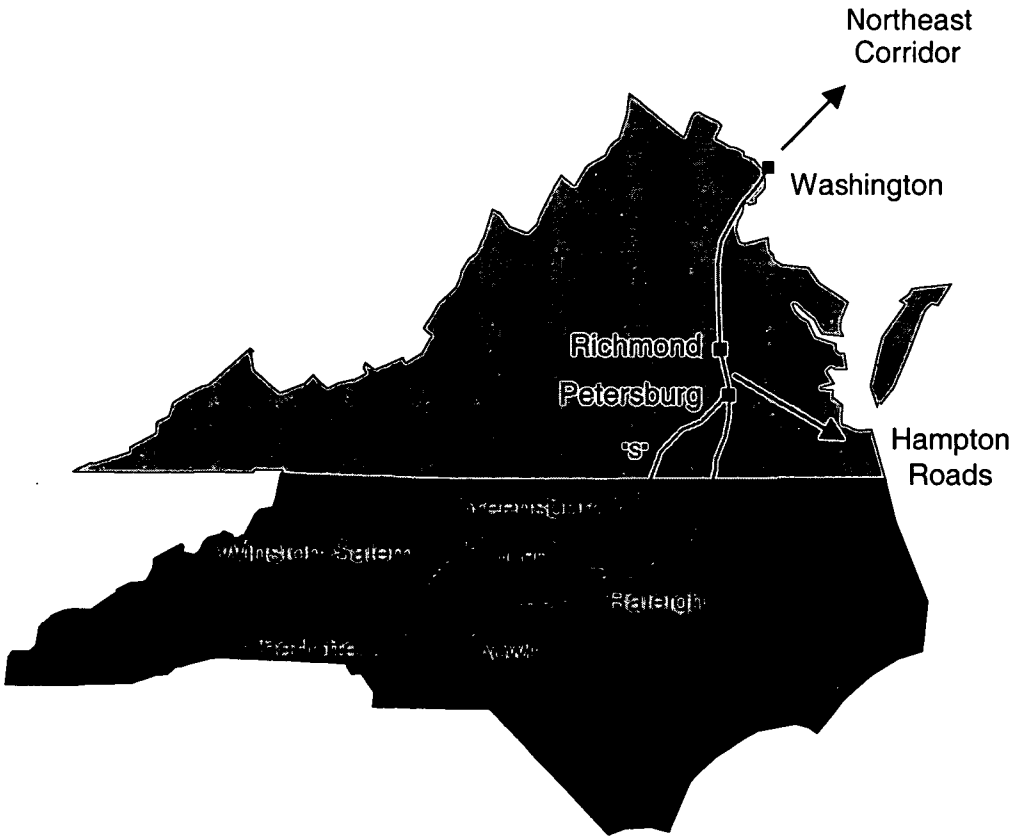
	Population		Employment	
Metro Area	**1999**	**2025**	**1999**	**2025**
Charlotte Metro Area, NC-SC	1,715,700	2,566,300 50%	963,300	1,311,000 36%
Greensboro-Winston-Salem, NC	1,146,100	1,500,100 31%	637,200	773,500 21%
Raleigh-Durham-Chapel Hill, NC	1,065,400	1,780,000 67%	644,300	1,063,500 65%
Richmond-Petersburg, VA	941,300	1,180,900 25%	540,600	643,700 19%
Washington, DC-MD-VA	4,398,900	6,378,700 45%	2,456,200	3,365,900 37%
TOTAL	9,267,400	13,406,000	5,241,600	7,157,600

  - Source: DRI-McGraw Hill

High Speed Rail Market Share

- Key Characteristics of Modes
  - Travel Time
    - Line Haul (in mode)
    - Access (to/from/within terminals)
  - Travel Cost/Fare
  - Schedule/Frequency
    - Departure/Arrival time-of-day
- Key Characteristics of Markets/Travelers
  - Trip Length
  - Trip Purpose
  - Income

SEHSR Study Area



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4/30/02

SEHSR Scenarios

- Base (Existing) Service
- Nine (9) Future Service Alternatives Reflecting
  - Three (3) alternative alignments between Raleigh and Richmond (CSX "S" line, CSX "A" line, CSX "S"+ "A" lines via Weldon)
  - Three (3) alternative alignments between Charlotte and Raleigh (NCRR, NCRR+Winston-Salem, ACWR)

SEHSR Travel Times

- Richmond-Raleigh
  - Base (existing "A" line) 3:29
  - "A" line (improved) 2:28
  - "S" line 1:57
  - "A"+"S" via Weldon 2:14
- Raleigh-Charlotte
  - Base (existing NCRR) 3:48
  - NCRR (improved) 2:17
  - NCRR+Winston-Salem 2:43
  - ACWR 1:57

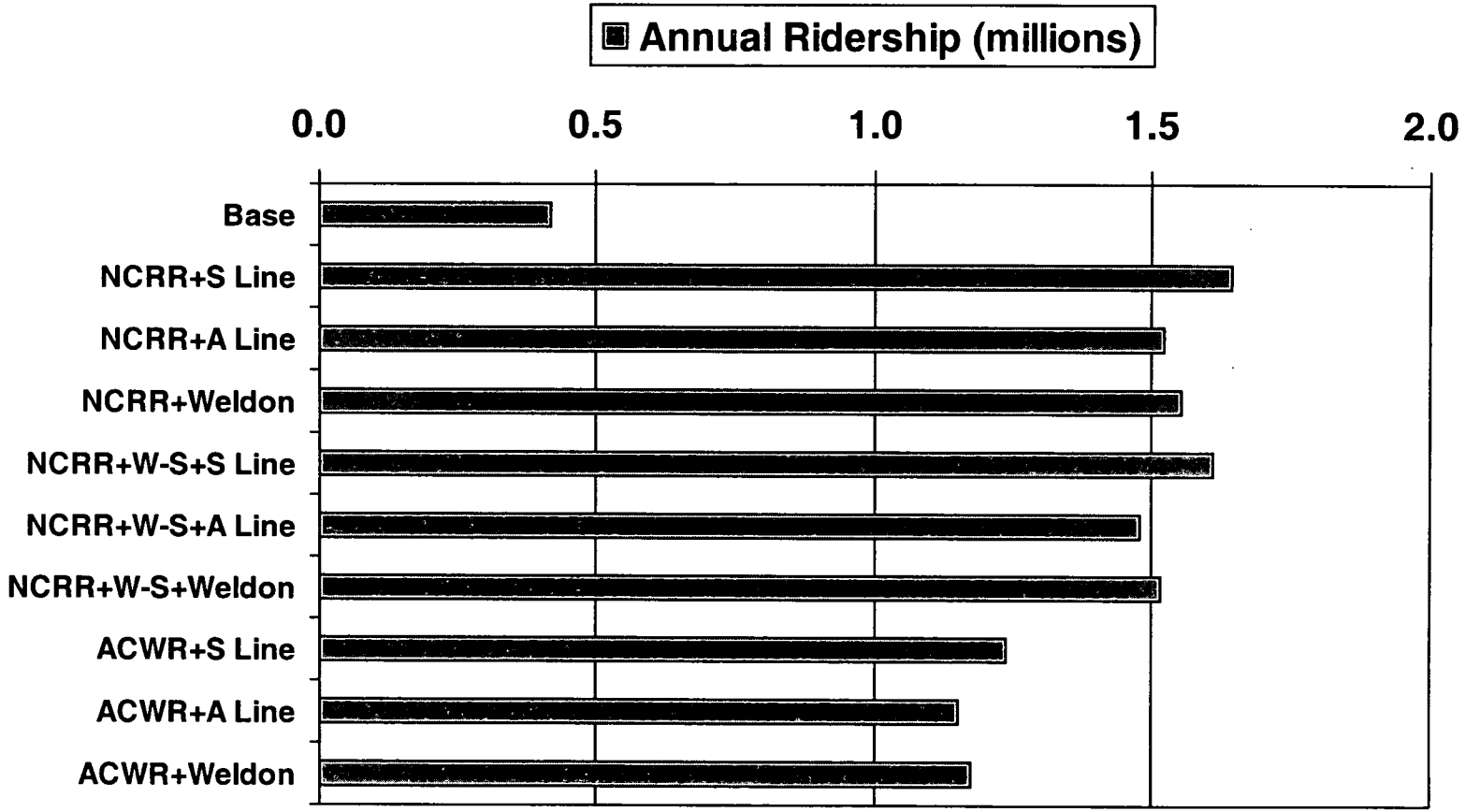
SEHSR Frequencies

- Richmond-Raleigh
  - Base
    - Corridor service — 1 daily
    - Long Distance service — 1 daily
  - Future
    - SEHSR service — 4 daily
    - Long Distance service — 1 daily
- Raleigh-Charlotte
  - Base (all corridor) — 2 daily
  - Future (all SEHSR) — 8 daily

Summary of Forecast Results

	Base	NCRR +S Line	NCRR +A Line	NCRR +Weldon	NCRR +W-S +S Line	NCRR +W-S +A Line	NCRR +W-S +Weldon	ACWR +S Line	ACWR +A Line	ACWR +Weldon
Forecast Year	1999	2025	2025	2025	2025	2025	2025	2025	2025	2025
Annual Ridership (millions)	0.418	1.645	1.524	1.556	1.612	1.481	1.518	1.239	1.153	1.175
Annual Ticket Revenue (millions)	$19.5	$98.4	$86.1	$90.7	$100.4	$88.3	$93.1	$77.8	$68.9	$72.1
Average Revenue per Passenger	$46.65	$59.83	$56.49	$58.27	$62.27	$59.60	$61.32	$62.75	$59.76	$61.38
Annual Passenger Miles (millions)	124.1	443.9	434.3	445.4	453.5	438.6	451.9	341.5	335.5	342.3
Average Ticket Yield per Mile	$0.157	$0.222	$0.198	$0.204	$0.221	$0.201	$0.206	$0.228	$0.205	$0.211

Summary of Forecast Results: Annual Ridership



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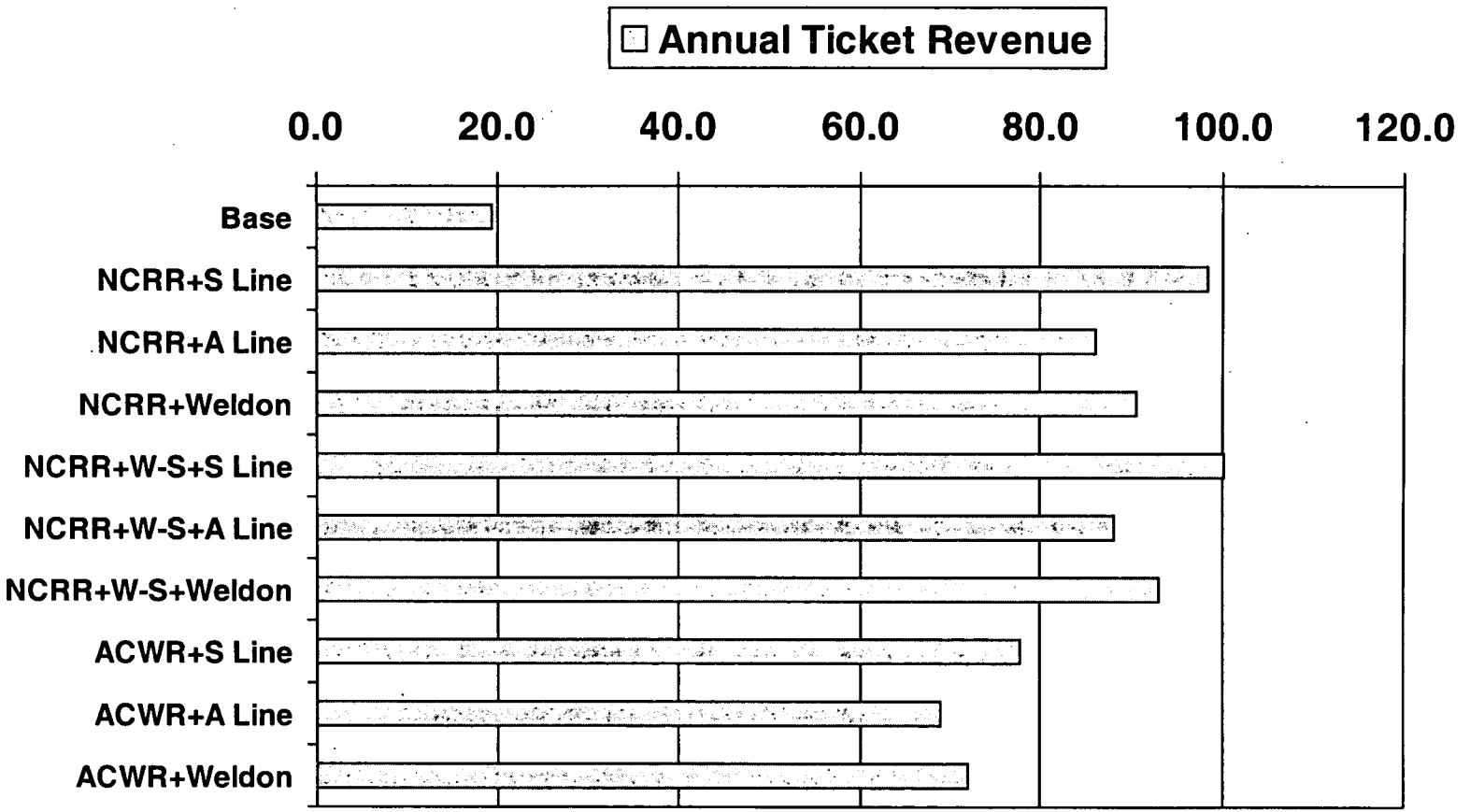
Summary of Forecast Results: Annual Ticket Revenue



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INTERSTATE RAIL PASSENGER COMPACTS: A SHORT GENEOLOGY

- ***Amtrak Reform and Accountability Act of 1997 (P.L. 105-134)***

  - **Section 410: blanket federal consent to compacts among states with "an interest in a specific form, route, or corridor of intercity rail passenger service (including high speed rail service)."**

  - **Compacts may "promote the provision of such service," including retaining/commencing service, assembling rights-of-way, and performing capital improvements."**

  - **Financing powers include: accepting contributions from state or local government or "a person"; using any state or federal funds available for intercity passenger rather service, other than Amtrak funds; short-term borrowing using notes, bond issuance, and financing "by other means permitted under federal or state law."**

- ***Legislative History***

  - **Two predecessor bills (H.R. 1788, H.Rep. No. 104-299), (H.R. 2447, H.Rep. No. 105-251) each contained identical language, same as enacted provision except current law deleted "construction and rehabilitation of. . .intermodal passenger facilities" as a listed intercity rail passenger activity.**

  - **Real source of statutory model: aviation statute consenting to multistate compacts to construct or operate airports.**

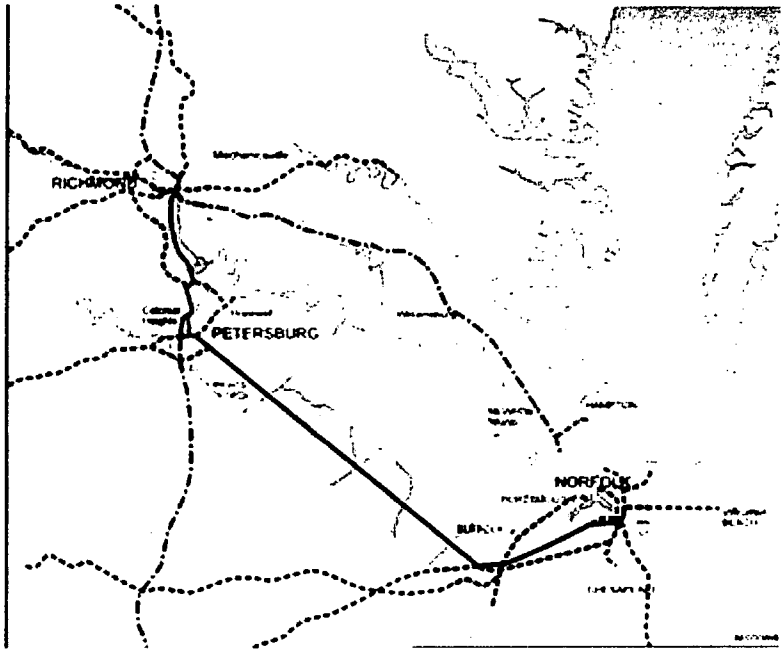
    - **Current provision [49 U.S.C. 40124] enacted in 1996, is very general: "Congress consents to a State making an agreement, not in conflict with a law of the United States, with another State to develop or operate an airport facility."**

    - **Current aviation law is apparently a recodification [P.L.104-287, sec. 5(69)(A), Oct. 11, 1996] of a more specific aviation provision on which all subsequent rail passenger compact provisions were modeled.**

- **Policy rationale**
  - **repeal of Amtrak monopoly would empower states to shop for the best provider of rail passenger service**
  - **infrastructure improvements and multistate cooperation require long-term binding arrangements, as shown by Gulf Coast corridor experience.**
  - **Same premises are behind use of interstate compacts as the state-level management paradigm for infrastructure improvements to be financed under H.R. 2950 (RIDE 21).**

Richmond to South Hampton Roads High-Speed Rail Feasibility Study

FINDINGS AND RECOMMENDATIONS



DRPT
Leading Virginia to Greater Mobility
Department of Rail and Public Transportation

Virginia Department of
Rail and Public Transportation

April 2002

In 2000 The General Assembly of Virginia directed the Department of Rail and Public Transportation (DRPT) to conduct a study to determine the feasibility of implementing high speed rail service between Richmond and South Hampton Roads using the existing railroad tracks that parallel U.S. Route 460. Item 525, Section N (Page 402) of the FY 2001 Appropriations Act states that:

> "Any funding provided to Route 460 Improvements from Suffolk to Petersburg shall include the necessary feasibility, environmental and demand analyses for consideration of high speed rail."

The purpose of this study is to determine the feasibility of providing direct high speed rail service from Richmond to South Hampton Roads via Petersburg and Suffolk using existing rail lines. The study is a "Fatal Flaws" analysis which is directed to determine if there are conditions which would make high speed rail service extremely difficult or impractical to implement. The main objectives of the proposed service are to minimize the end-to-end rail travel time and maximize capacity in order to provide fast, frequent, reliable and comfortable passenger service, and to maintain and enhance the ability of the host railroads to move freight in the same corridor.

The study includes three major tasks:

- An analysis of the engineering feasibility of operating high speed rail to South Hampton Roads along the existing Norfolk Southern and CSX rail lines. This task includes the selection of a preferred route and the identification of station locations.

- A projection of the potential ridership demand and revenue for the proposed service. This task includes the analysis of several different service scenarios with varying levels of frequency and speed.

- An survey of environmental conditions along the selected alternative route to determine the potential for major environmental issues. Issues addressed include: water and wetland resources, cultural resources, threatened and endangered species and wildlife, superfund sites, air, noise, public parks, recreation areas, wildlife refuges and historical properties.

Conclusions

The analysis of current and projected railroad operations and facilities on the Richmond–South Hampton Roads Corridor has led to the following conclusions:

- **Feasibility of high-speed service:** Reliable high-speed passenger train service between Richmond and South Hampton Roads is a feasible goal **provided** that requisite infrastructure improvements are constructed.
- **Travel Times - Richmond to South Hampton Roads:** Scheduled trip times, Main Street Station to Norfolk terminal, decreases as the maximum authorized speed increases, ranging from 1-hour 43 minutes at 79 mph, to 1-hour 35 minutes at 90 mph, to 1-hour 31 minutes at 110 mph. Travel times between Richmond and Newport News, at 79 mph, is 1-hour 30 minutes.
- **Total Trips – South Hampton Roads to Richmond to Washington to Northeast Corridor:** Total trips increase significantly as the maximum speed and frequency of South Hampton Roads service increase. By the year 2025 Newport News-only service, without speed or frequency increases, would total 240,200 passengers annually. The addition of the South Hampton Roads service would increase the annual ridership to 508,100.
- **Protection of all freight and passenger services:** Computerized simulations of the operations of all users of this Corridor (freight and Amtrak) have identified a number of specific infrastructure changes that would provide the capacity to reliably handle all existing and projected services. Even with these changes, close scheduling and dispatching coordination among operators—extending to the Washington - Richmond and Richmond - Raleigh Corridors and other contiguous routes—would be necessary to optimize the use of the improved facility and preserve the dependability and marketability of all passenger and freight operations.
- **Need for further analysis:** Between Newport News and Richmond, on the existing CSXT line, the affect on ridership of altering service frequency, increasing maximum authorized speeds, and providing sufficient capacity to reliably operate the enhanced service, should be evaluated to assist in the prioritization of passenger rail funding in the Richmond to Hampton Roads corridor.
- **Need for further engineering:** Further detailed engineering would be needed to verify the constructibility of the various improvements, particularly for three challenging areas: the changes required through Petersburg, the track connection at Brico, and the station and track changes required between Algren and the proposed South Hampton Roads terminal station in Norfolk.
    - **Preferred Route Through Petersburg – Florida and SEHSR Raleigh and Charlotte trains:** Recently, it has been recommended that the north – south route for these intercity and high-speed trains be revised from that initially recommended in a study prepared for the FRA. Rather than restoring the S Line between Centralia and Burgess, it has been determined that intercity and SEHSR trains would operate on an upgraded A Line between Centralia and South Collier. Trains destined for points on the A Line would continue southward, while S Line trains would utilize a restored Burgess Connection between South Collier and Burgess to access the S Line to Raleigh. Ettrick would remain the location of the intercity passenger station.
    - **Preferred Route Through Petersburg – South Hampton Roads trains:** There are three options that appear to justify further study:

1. Dunlop connection
2. Ettrick connection
3. North Collier connection

Each of these options possess positive attributes, but each raises concerns in terms of cost, circuity, and station location. If there is to be one station, the more direct the route to South Hampton Roads, the more circuitous the routes to the south, and vice versa. For example, a downtown Station would require A and S Line trains to use connections from the NS Main Line to continue south.

If a new high bridge, and a direct route to Collier is selected for SEHSR, The South Hampton Roads alternatives might require either:

1. Dunlop connection - a separate station,
2. Ettrick connection - a separate bridge, or
3. North Collier connection - avoiding the Halifax Road overpass at North Collier, an additional main track on the NS Belt Line between North Collier and Poe, and a new interlocking East Poe to avoid the need to provide turnouts on the superelevated curve at Poe.

The *Dunlop Connection* and the *Ettrick Connection* fulfill the planning requirements to reduce passenger train conflicts with NS freight operations in Petersburg, but each requires an additional Appomattox River Bridge. Although the Dunlop Connection requires a less-expensive bridge, it requires a restored right of way (that raises substantial neighborhood issues), and a second station (if the other trains continue to use a station on the A Line. The *North Collier Connection* can overcome conflicts with freight operations only at greater expense to provide some additional trackage and interlocking improvements. Further study is required to determine the extent of these tradeoffs.

- **Necessary commitments of the involved parties:** Implementation of the development concept, described in this report, for the Richmond–South Hampton Roads Corridor will require:
  - The commitment of the Commonwealth of Virginia, and other affected parties to obtain funding for the recommended improvements, to progress the necessary engineering work on a timely basis, and to arrange for any needed environmental/historic documentation; and
  - Officials of the Commonwealth of Virginia, the freight railroads, and local governments to close or upgrade as many highway-rail grade crossings as possible on this route.

  Cooperation of all parties is essential if the benefits of high-speed rail service are to be achieved.

Recommendations

The Richmond to South Hampton Roads High Speed Rail Feasibility study demonstrates that modern, fast passenger service is feasible in the study corridor. There are no "fatal flaws" that will prevent implementation of the service, but a substantial capital investment will be needed.

- **Improvements should be incremental.** A significant capital investment will be needed to make the necessary connections, upgrade the track and construct station facilities in order to allow trains to run at convention speeds (maximum speed of 79 mph). A staged implementation plan should prioritize projects and lay out a reasonable schedule for implementing service at conventional speeds, then continuing to make improvements to allow high speed operations.
- **Frequency matters.** This study clearly demonstrates that frequency of service is at least as important as speed in attracting riders to the service. Efforts should be made build capacity in order to maximize the frequencies as early in the implementation process as possible.
- **Cost is a direct function of speed.** The capital costs required to implement passenger service will increase significantly as the speed of the service is increased. As Norfolk Southern states in their policy on passenger service (See the Appendix to the Executive Summary) "Railroading is expensive. 110 mph railroading is very expensive." This study does not analyze operating costs, but it is clear that the cost of maintaining facilities and operating trains at higher speeds is substantially more expensive than convention speed operations.

Next Steps

Extensive additional study and engineering will be needed to precisely define the scope of the proposed service improvements. In order to move this service proposal forward, the following actions should be taken:

1. **Additional study is needed to determine a preferred routing through Petersburg**. This study identifies three possible alignments through Petersburg. The Ettrick Connection is the alternative most favored by the localities. All three alternatives will involve significant capital investment in new rail infrastructure, including a new or rebuilt bridge across the Appomattox River. Further study is necessary to determine which of these alternatives will best serve South Hampton Roads trains and provide the best connections with the existing Amtrak service and the proposed Southeast High Speed Rail service.
2. **Additional marketing analysis is needed.** This study does not compare high speed rail service in the Route 460 corridor with the adopted proposal for service improvements on the Peninsula. In order to determine the relative benefits of improved service on the Peninsula and the proposed service to South Hampton Roads, a comprehensive marketing study of the entire Hampton Roads region should be conducted. This study should include a comprehensive analysis of intercity travel patterns for the whole region and look at a variety of service scenarios that test high speed rail service on both sides of Hampton Roads. The study must also include an analysis of potential service to South Hampton Roads utilizing the proposed rail tube in the new Third Crossing tunnel.
3. **A phasing plan must be developed.** This feasibility study provides cost estimates only for the full proposed rail network. Costs were not estimated for the incremental service levels tested in the ridership analysis. A substantial portion of the estimated improvements will be necessary to implement the service at any speed: the Petersburg connection must be

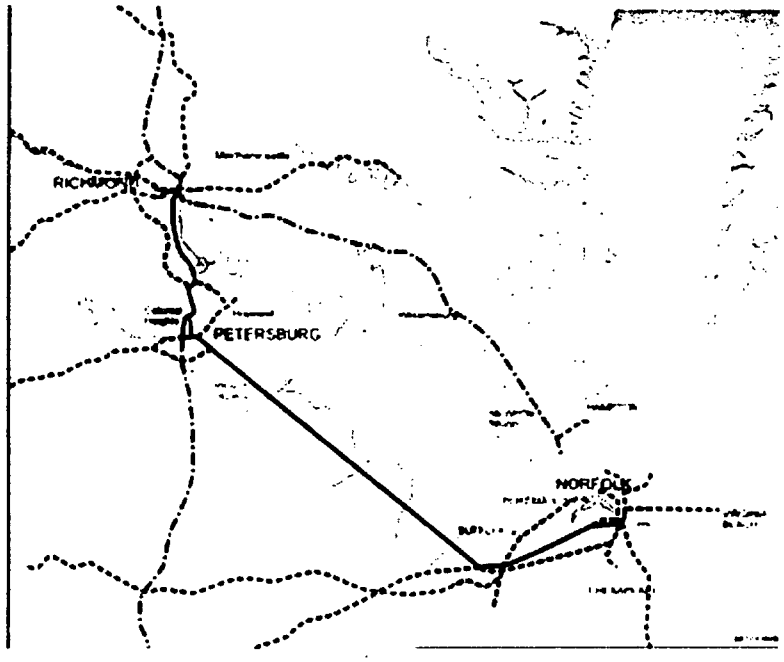
constructed and track expansions must be built to provide the necessary capacity for additional passenger trains. However some of the identified improvements, such as signal upgrades, will not be necessary for lower speed services. A phasing plan will identify the specific projects that are needed in order to accomplish the proposed intermediate levels of service.

4. **An estimate of operating costs must to be developed.** The scope of work for this feasibility study did not include an analysis of operating expenses. A detailed analysis of the operating costs of the various service scenarios should be included in any future study. This analysis is necessary to determine the full cost implications of proposed rail service and to help determine the most efficient service alternative.

5. **Further negotiations with the railroads are needed.** CSX and Norfolk Southern have vital concerns about the impact of proposed passenger service on their freight business in the corridor. The railroads want to insure that enough capacity is provided to allow for them to maintain and grow their freight traffic without any impediment from the passenger trains. The railroads all also concerned about liability and safety issues. Both CSX and Norfolk Southern have developed passenger rail policies which state that passenger trains operating in excess of 90 mph must have a dedicated track. The Virginia Department of Rail and Public Transportation acknowledges this policy. We recognize that this issue has a major effect on high speed rail proposals throughout the country and will it will be addressed on a national level. The Department will work with the railroads to reach an agreement for service that is acceptable to all parties.

Richmond to South Hampton Roads High-Speed Rail Feasibility Study

EXECUTIVE SUMMARY



DRPT
Leading Virginia to Greater Mobility
Department of Rail and Public Transportation

Prepared for:
Virginia Department of
Rail and Public Transportation

Prepared by:
PARSONS

April 2002

Introduction

The findings of the Parsons Transportation Group (PTG) team's Engineering Feasibility Analysis of the Richmond to South Hampton Roads corridor are summarized in this document. The draft Report is submitted to DRPT and the Technical Advisory Committee for review and comment. Topics addressed in the draft Executive Summary include:

- Assessment of current conditions;
- Analysis of critical locations;
- Projection of future traffic and capacity requirements;
- Preliminary identification of improvements;
- Overview of environmental constraints;
- Analysis of ridership and revenue potential; and
- Capital Cost Estimates for the improvements.

The analysis of the rail infrastructure of the study area has identified a program of improvements that would be necessary to accommodate frequent passenger trains operating at speeds of up to 110 mph.

Proposed Richmond To South Hampton Roads High-Speed Rail Service

The Virginia Department of Rail and Public Transportation (DRPT) contracted with the Parsons Transportation Group (PTG) to evaluate the potential for high-speed rail service in the Richmond-Petersburg-South Hampton Roads Corridor. The study evaluated the requirements, and developed an overall long-range track configuration, alignment plan, and operating plan that would support the requirements of all potential users of the rail line. The corridor may be considered a natural extension of the Southeast High-Speed Rail Corridor (SEHSR)[1] running from Petersburg to the South Hampton Roads area. The route would extend between Main Street Station in Richmond and a terminal station near the Harbor Park baseball stadium in downtown Norfolk. It would make use of a combination of CSX Transportation (CSXT) and Norfolk Southern (NS) rail lines;[2] CSXT between Richmond and Petersburg and in the Hampton Roads area; and NS between Petersburg and Norfolk.

The proposed Richmond - South Hampton Roads high-speed rail service would provide stations located conveniently to Norfolk, Virginia Beach, and other communities south of Hampton Roads. The current bridge-tunnel link between the Newport News Amtrak station and south side of Hampton Roads, a connecting bus, provides a somewhat circuitous and often congested route to Norfolk and Virginia Beach. New

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[1] The Parsons Transportation Group (PTG) has recently completed two related studies, of the Washington-Richmond corridor and the Richmond-Petersburg-Raleigh-Charlotte corridor, for the FRA. The studies were performed in coordination with DRPT, NCDOT, Amtrak, CSXT, and NS.

[2] The potential for utilizing trackage owned by short line railroads in the South Hampton Roads area also has been evaluated as part of the study.

stations on the south side would require much shorter and more reliable access times and make service convenient to more communities.

A variety of alternative south side station locations have been evaluated. Key Hampton Roads markets include:

- Downtown Norfolk,
- Downtown Portsmouth,
- Virginia Beach,
- Norfolk Naval Base,
- Other Norfolk destinations,
- Other Portsmouth destinations,
- Chesapeake, and
- Suffolk.

Downtown Norfolk and Portsmouth are relatively compact markets that could be served by a station located in one of these areas. The remaining markets are spread over a much larger geographic area and would be best served by a "suburban" station with good access to the highway system.

The Existing Services

A varied network of surface transportation options exists in the James River Corridor, between Richmond and Hampton Roads. However, public transportation is limited. Amtrak currently operates conventional rail service providing two round trips per day between Richmond and Newport News, with Thruway bus service between the Newport News station, Norfolk and Virginia Beach. These trains also serve Williamsburg as an intermediate stop between Richmond and Newport News. In 1999, a total of about 110,000 passengers were served at Newport News (including those using the connecting bus service) and about 45,000 passengers were served at Williamsburg. Most of these passengers travel to/from Washington, New York, and other locations in the Northeast Corridor. Service on the south side of the river is extremely limited, with only one Carolina Trailways bus scheduled, and no Amtrak service. Bus service on the north side of the river ranges in travel time from 1-hour 45 minutes to 2 hours 50 minutes between Richmond and Norfolk.

To effectively and efficiently develop a market, the following critical tasks were undertaken to ensure that informed choices are made: ridership forecasts were developed; operating scenarios were analyzed; facility options were evaluated; and potential environmental constraints were analyzed.

Rail Passenger Service in Virginia

The DRPT is actively pursuing significant increases in intercity rail passenger service throughout the state. All of the corridors being evaluated include Richmond's Main Street Station as the hub for these services. Presently, Main Street Station is closed, although Amtrak service to Newport News uses the eastern-most station tracks. The City of Richmond has purchased the station from the Commonwealth and is currently renovating the facility. The city is working with DRPT and Amtrak to re-institute rail passenger service into and through the station.

Amtrak's Staples Mill Road Station, located almost 15 minutes by rail north of Main Street Station, is the only rail passenger station presently serving Richmond.

Amtrak trains to points south of Richmond stop at Staples Mill Road Station, but utilize the CSXT A Line (the former Atlantic Coast Line route) to reach Petersburg, VA. Once Main Street Station is re-opened, all passenger trains, with the exception of Amtrak's AutoTrain, would utilize the former "S" Line to reach Petersburg, VA[3].

Fundamental Requirements of NS and CSXT - To Be Fulfilled Before New Passenger Service Begins

Both NS and CSXT submitted comments[4]. NS's stated position is that prior to initiation of new passenger service on their tracks, the proposed operation must:

- Improve safety of all rail operations in the area;
- Be transparent to freight operations, i.e., sufficient infrastructure must be provided to enable freight trains and passenger trains to operate without delay to either, and to allow for the growth of both;
- Furnish sufficient indemnity for liability; and
- Compensate NS for the use of its asset with a level of return similar to that of freight trains.

In addition, NS and CSXT state that they will retain control of dispatching of trains on all tracks over which their freight trains will operate after inauguration of the high-speed passenger service.

The Corridor Today

Location

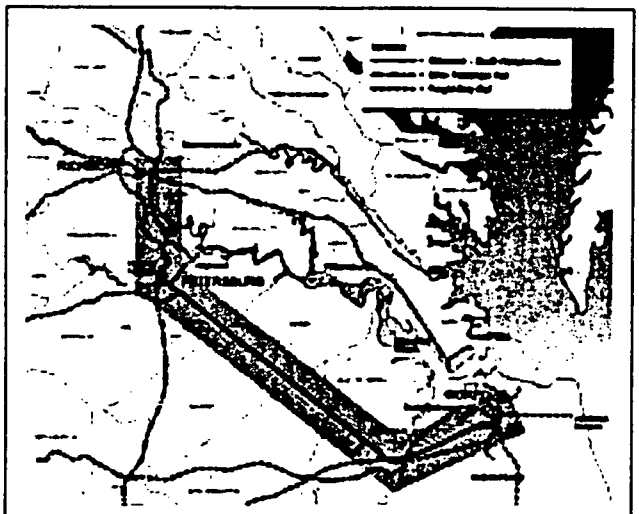


Figure 1: Richmond–South Hampton Roads Corridor

The study corridor connects Richmond and South Hampton Roads via Petersburg and Suffolk (Figure 1). In 1995 the Commonwealth requested that the United States Secretary of Transportation expand the federally designated SEHSR Corridor to include a link from Richmond to Hampton Roads. This designation is not specific to any particular rail line and will be applicable to whichever corridor is selected as the route for high-speed rail service to the Hampton Roads metropolitan area.

Length and ownership

[3] PTG presently is under contract to the FRA to determine the requirements to re-institute rail passenger service on the "S" Line. Performed in cooperation with DRPT, NCDOT, Amtrak, and CSXT, the study will define an alignment that would utilize the "S" Line to a point just north of the Appomattox River in Petersburg.

[4] , NS comments are attached as Appendix A.

The proposed rail route of the Richmond–South Hampton Roads Corridor extends for 105 miles between Main Street Station, Richmond[5] and Park Avenue (Formerly Lovett Avenue) in Norfolk, Virginia. CSXT and NS are the primary owners of the existing rail infrastructure. CSXT owns the line segments between Richmond and Petersburg and between Suffolk and Algren (Bowers Hill); NS owns the segments between Petersburg and Suffolk, and between Algren and Norfolk.

Trackage and Track Conditions

The route primarily has two tracks except for three segments of single-track, in Petersburg, between Suffolk and Algren, and between Algren and South Norfolk. The owner railroads have maintained the line in a condition satisfactory for the current designated operating speed class wherever necessary.

Alignment

The alignment has numerous long stretches of tangent track that would not constrain passenger or freight train performance.

Signaling

The automatic block signaling system that is installed almost the entire length of the route—although safe for existing speed levels—will not support passenger train speeds in excess of 79 mph. The existing signal system does not include continuous cab signaling and automatic train control features, similar to those of the Northeast Corridor, required by Federal regulations to exceed 79 mph. Therefore, a significant amount of upgrading would be necessary for high-speed rail service.

Highway-Railroad Grade Crossings

Like most proposed high-speed corridors, Richmond–South Hampton Roads contains numerous public and private highway-rail at-grade crossings. Almost all the public crossings have flashing lights, gates, and warning bells. The private crossings generally have crossbucks only. Every effort should be made to upgrade or install enhanced protective devices, and/or close or grade-separate as many grade crossings as possible. As a minimum, every crossing will be protected with active warning devices over which passenger trains operate at speeds greater than 80 mph.

Stations

In the Richmond area, Amtrak trains presently stop at Staples Mill Road Station, located north of downtown Richmond. The City of Richmond is restoring, in three phases, the centrally located Main Street Station as an intermodal passenger facility, which will become the station for intercity trains. Passenger service is currently offered at Ettrick (Petersburg area) by Amtrak intercity trains operating between New York City and North Carolina and Florida also stop at Ettrick, for the Petersburg area.

[5] This is not now an operational station but will be reopened under pending plans.

Users and Services

The proposed Richmond–South Hampton Roads passenger rail service would use what is a primarily freight corridor, over which Amtrak trains to North Carolina and Florida presently operate between Centralia and Petersburg. Amtrak provides two distinct lines of service in this corridor:

- Long-distance— trains serving intercity and leisure travel; and
- Auto Train—a specialized service carrying passengers and their motor vehicles between Northern Virginia and central Florida.

Freight

CSXT operates freight trains between Richmond and Petersburg on both the A Line and the remaining segment of the S Line (the former Seaboard Airline Railroad, and between Suffolk and Portsmouth. NS operates trains between Petersburg and Norfolk. Both railroads also serve local shippers.

Freight operations are much more variable than passenger services, in terms of scheduling, train size, train performance, and frequency in a given period of time. Freight trains vary significantly in their performance capabilities and compatibility with passenger operations. For example, unit trains of coal and grain generally have a lower horsepower-to-tonnage ratio and poorer performance than more time-sensitive operations. Thus, a general merchandise or intermodal train ordinarily takes less time to clear a given route segment than a unit coal train.

The need to efficiently manage traffic during daylight hours will become critical in the future. Not only will rail passenger travel increase, but CSXT and NS have projected higher levels of freight traffic than currently operate over these heavily utilized routes.

Areas of Special Complexity

Except for the CSXT A Line, the rail lines involved in the study essentially have been freight-only lines for more than 30 years. Development of a reliable high-speed route has required an analysis of numerous locations and stretches of rail line to define a network that reliably would support projected future freight and passenger operations.

The evaluation of current conditions and potential improvements to support high-speed passenger services to South Hampton Roads has been coordinated for consistency with planned improvements for the *SEHSR Corridor* (Richmond-Charlotte, NC) services, particularly in the common Richmond—Petersburg section. Both high-speed services must be planned and designed to:

- Provide cost effective improvements necessary to increase the capacity of existing rail lines;
- Provide one station in the Petersburg-Ettrick-Colonial Heights area that can serve all current and proposed passenger trains (South Hampton Roads Service, SEHSR Service, and current Amtrak Service);
- Coordinate train schedules in the "shared" corridor among the three services; and
- Minimize conflicts with freight operations.

The S Line, from Main Street Station to Centralia

The South Hampton Roads High-Speed service would utilize the CSXT S Line between Richmond, VA, and Centralia. Previous studies for the *SEHSR Corridor* have identified improvements to the S Line necessary to operate high-speed passenger service. Combined with signal system improvements, this route would provide entry into the restored Main Street Station in downtown Richmond, VA, for all passenger trains operating from the south.

Centralia to Petersburg

A third track, designated for passenger use, would be constructed on the east side of CSXT's A Line between Centralia and one of several proposed diverging points on the north side of Petersburg.[6] This added track would be the preferred track for passenger operations, both north- and southbound, and would provide passenger trains access to the S Line to Richmond without crossovers and conflicts with CSXT's primary freight operations on the A Line.

Petersburg

Where and how passenger trains between Richmond and South Hampton Roads would pass through Petersburg is the key critical issue to be addressed. Direct passenger rail access from Richmond to South Hampton Roads has not existed for years. Recent developments and construction make re-institution of the route difficult, but not impossible. Five different route alternatives have been identified, each having different impacts on operations, and each requiring different levels of capital investment to construct. The route selection criteria were:

- Provide one station in the Petersburg-Ettrick-Colonial Heights area that can serve all current and proposed passenger trains;
- Minimize operating conflicts with freight trains;
- Avoid operating ***passenger*** trains through busy freight yards;
- Minimize the capital cost of bridge, structures, and additional tracks required; and
- Provide segments of track where passenger trains can run unimpeded.

The five connection alternatives, discussed below, were named:

- North Collier Connection,
- Secoast Connection,
- West Connection,
- Ettrick Connection, and
- Dunlop Connection.

The first two options would use the NS Belt Line, passing south of Petersburg. The other three would use the older NS Main Line. The Main Line appears to have an advantage in avoiding the considerable amount of freight traffic on the Belt Line. Using

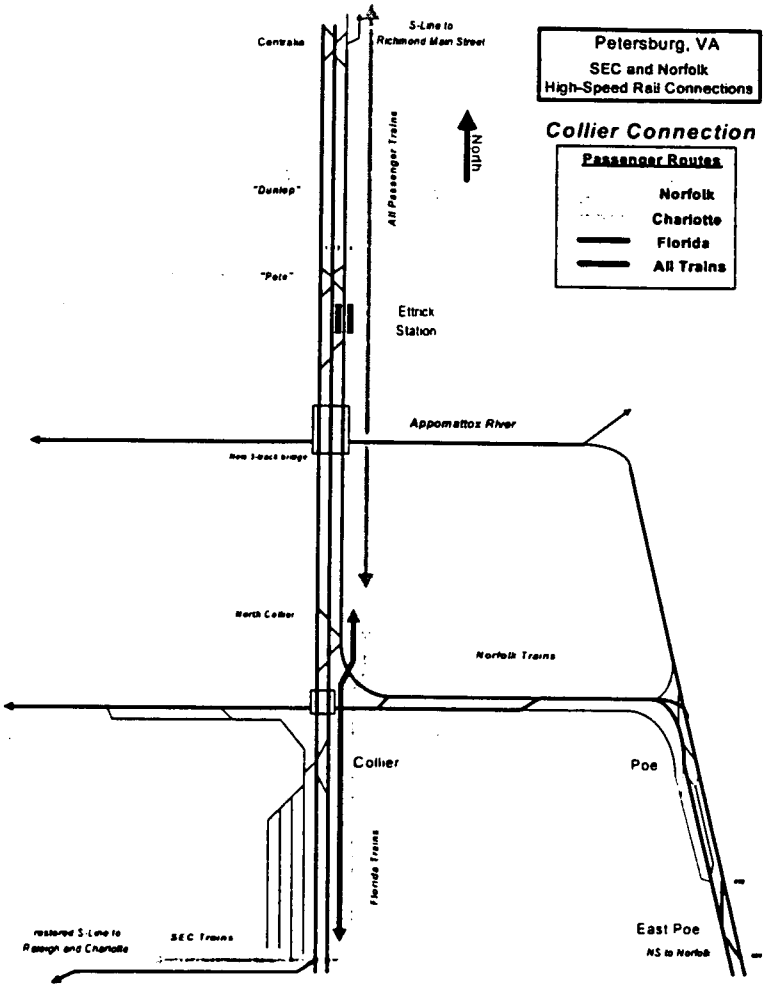
[6] The construction of this third track eliminates the need to rebuild the old S Line between Centralia and Petersburg (Ettrick) previously planned for the *SEHSR Corridor*. The alignment is described in the draft *Potential Improvements to the Richmond – Charlotte Railroad Corridor* Report prepared by PTG for the FRA.

the Belt Line for passenger trains would require an additional track over the segment between North Collier and Poe.

On the other hand, it might be necessary to double-track the Belt Line in order to reduce the need to run freight trains on the Main Line. This would be affected by the level of freight traffic projected, and further study of activity and capacity would be required. Preliminary investigation indicates that the cost of upgrading either line would be approximately the same if double-tracking of the Belt Line were required.

Recently, it has been recommended that the north – south route for A- and S Line trains be revised from that initially recommended in the study prepared for the FRA. Rather than restoring the S Line between Centralia and Burgess, it has been determined that intercity and SEHSR trains would operate on an upgraded A Line through Petersburg, between Centralia and South Collier. Trains for stations on the A Line would continue southward, while S Line trains would utilize a restored Burgess Connection between South Collier and Burgess to access the S Line to Raleigh. Ettrick would remain the location of the intercity passenger station.

Figure 2: North Collier Connection



North Collier Connection

The *North Collier Connection* would involve building a track connection, just north of Collier Yard, in the northeast quadrant from the CSXT A Line to the NS Petersburg Belt Line. This could be the least complicated of the five alternatives to construct, depending on the difficulty in interfacing with the Halifax Road grade separation, currently under construction. Initial investigation indicates that it could be built entirely east of the highway project, but further study is necessary. This connection would allow the continued use of the existing Petersburg passenger station at Ettrick, north of the Appomattox River.

Disadvantages

The connection might be complicated by the interface with the new highway overpass for Halifax Road. The development of the adjacent property is a potential physical impediment. While relatively simple to build, the *North Collier Connection* would require an additional main track on the NS Belt Line between North Collier and

Poe. A new interlocking would have to be built on straight track at East Poe to avoid the need to provide turnouts on the superelevated curve at Poe.

The Secoast Connection

The *Secoast Connection* is a logical outgrowth of the proposed restoration of the S Line for SEHSR service to Charlotte, NC. If the S Line is restored north of Burgess, a connection to the NS Petersburg Belt Line would be made in the northeast quadrant at Secoast, where the S Line would cross over the Belt Line. This concept would require construction of a new bridge over the Appomattox River for the S Line, upstream from the current CSXT A Line Bridge, and restoration of the S Line[7] southward from that point. A connection in the northeast quadrant at the intersection of the S Line and the NS Belt Line would enable South Hampton Roads trains to traverse the S Line from Ettrick to the connection, then use the NS Belt Line to go eastward.

Disadvantages

The connection would take right-of-way from the Virginia State University experimental farm for the connecting track from the Ettrick Station to the bridge. Similar to the North Collier Connection, the Secoast Connection would require the South Hampton Roads passenger trains to utilize the NS's Belt Line. It would require an additional main track on the NS Belt Line between Secoast and Poe. A new interlocking would have to be built on straight track at East Poe to avoid the need to provide turnouts on the superelevated curve at Poe. Furthermore, more of the S Line would have to be restored, including the crossing of Washington Street, and a new Appomattox River bridge that would not be available to A Line trains.

The West Connection

The *West Connection* would connect a restored S Line to the NS Main Line through Petersburg, instead of the Belt Line. A low-level bridge would be constructed for the S Line about one-half mile upstream from the existing A Line bridge, with a low-speed connection to the NS Main Line on an eight-degree curve from the S Line. This connection would retain the existing Ettrick station and would not require changes to CSXT freight and Amtrak long-distance operations south of Petersburg.

Disadvantages

A bridge that would enable the S Line to go under both the NS Main Line and Washington Street would require a steep approach on the north bank, and a bridge deck that would almost be at the level of the river. The connection would take right-of-way from the Virginia State University experimental farm for the track from the Ettrick Station to the bridge, and would require a 30 foot deep cut through the center of the farm to descend to the level necessary to pass under the NS Main Line. Although the bridge would be lower and less expensive to build than any high level bridge for either the A line or S Line, this would be offset by the need to tunnel under the NS Main Line in order to make the connection to it, and the fact that the bridge over the river would not be available for A Line trains. The connecting track from the S Line onto the NS Main Line would require a sharp, slow speed eight-degree curve. The Bridge over the Appomattox River that would be required for this connection, is located considerably west of the existing CSXT A Line Bridge. It would add about two miles distance over any other South Hampton Roads alternative.

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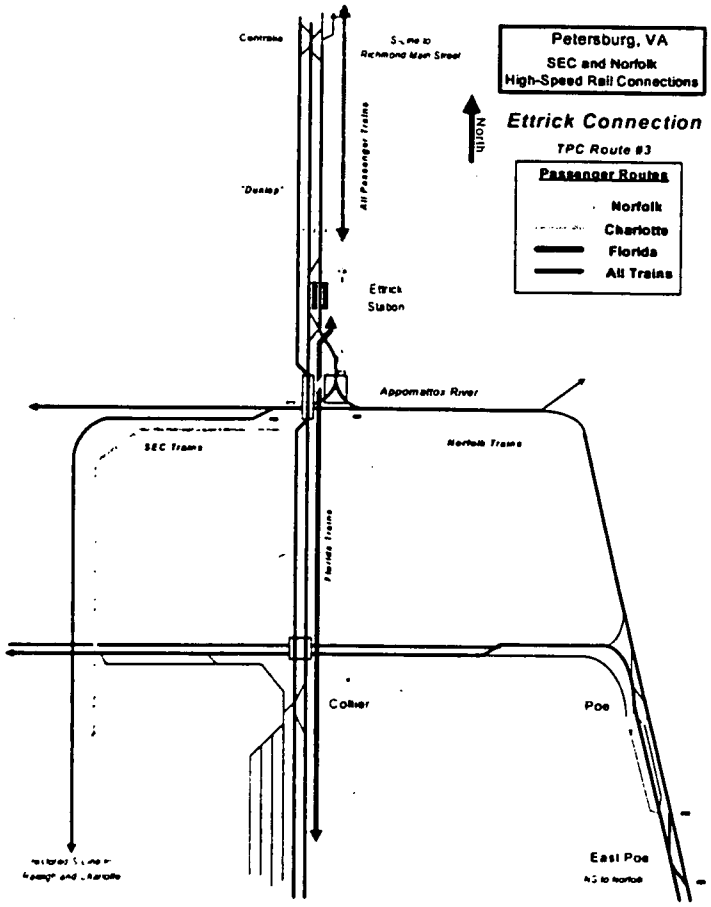
[7] Improvements defined in the draft Richmond to Charlotte Report.

The *West* Connection would require construction of a new platform at the Ettrick Station, for the use of Charlotte and South Hampton Roads trains, as well as a third track. Because South Hampton Roads and S Line trains would use a different platform from A Line trains, underground or overhead passageways and elevators would be required for access. Finally, as with the Secoast Connection, a greater portion of the S Line would have to be restored.

Figure 3: Ettrick Connection



Ettrick Connection

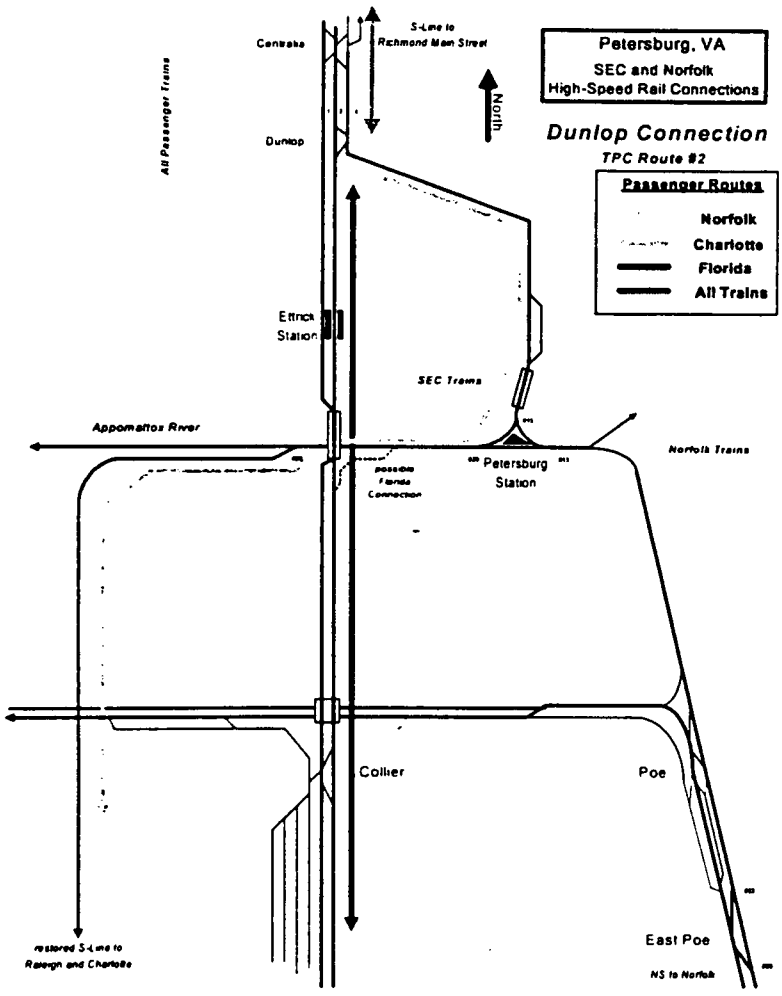
Further consideration resulted in the development of alternatives that would use the NS Main Line, rather than the Belt Line, while simplifying the construction requirements of the connection. The *Ettrick Connection* was developed to retain the operating benefits of using the A Line and the Ettrick Station and the NS Main Line. The *Ettrick Connection* consists of a track on the east side of the A Line, beginning south of Ettrick Station, that descends to the level of the NS Main Line across the Appomattox River. A low level-bridge would be constructed to connect to the NS Main Line, eastward. Optionally, the bridge could provide a Wye connection to the NS Main Line, westward, for Raleigh-bound S Line trains. The *Ettrick Connection* eliminates the need for a more-expensive high bridge, for either the S Line or a multiple track replacement

for the A Line. It retains the existing station, and provides a passenger train route eastward to South Hampton Roads that does not require use of the NS Belt Line.

Disadvantages

The connection would take right-of-way from the Virginia State University experimental farm for the connecting track from the Ettrick Station to the bridge. The size and degree of curvature required to build the connection would require lower speed operations through the approach tracks' curves and switches connecting to the NS Main Line. Should the S Line be included, it must be restored north of Burgess, and construction of a more complex bridge with a "Wye" connection to the NS Main Line in both directions would be required, as well as a grade-separated crossing of Washington Street.

Figure 4: Dunlop Connection



The Dunlop Connection

The last alternative, the *Dunlop Connection*, would involve restoration of the original Atlantic Coast Line Railroad route from Dunlop to Petersburg, including reconstruction of the superstructure of the old railroad bridge over the Appomattox River and restoration of the Wye connection with the NS Main Line. Should the S Line be restored north of Burgess, separate platforms for South Hampton Roads and Charlotte trains would be required along with a connection to the restored S Line from the NS Main Line. Should the A Line trains be routed to the downtown station in Petersburg, construction of The *Battersea Connection*, between the NS Main Line and the A Line, south of the Appomattox River bridge would also be required. This connection would skirt the grounds of the Battersea Mansion, for which the connection has been named, and enable all Amtrak trains to reach a single downtown Petersburg station, permitting the Ettrick station to be closed. If the Battersea Connection should prove to be infeasible, a single station that could serve all trains would have to be located north of Dunlop. The *Dunlop Connection* requires a less-expensive bridge to cross the river, and permits the use of a single passenger station for all Amtrak trains in downtown Petersburg.

Disadvantages

The Battersea Connection would require a tight 5-degree curve and a 1.75-percent grade to connect the NS Main Line to the A Line, limiting speed to 40 mph. The connection would require a bridge over the abandoned S Line and a substantial fill to avoid the mansion.

Development and new highway construction has compromised the alignment in the vicinity of Dunlop. Portions of the old right-of-way have either been sold or have been encroached upon. Community opposition in Colonial Heights and Pocahontas would be likely. A Line and S Line trains would have to operate over a short segment of the NS Main Line, requiring cooperation between CSXT and NS dispatchers.

NS Main Line between Petersburg and Suffolk

The NS Main Line between Petersburg (Poe) and Suffolk (Brico) is the primary location for potential operational conflicts. High-speed passenger trains would be overtaking slower freight trains and a primary goal of the study is that high-speed train operations be transparent to freight train operations. Optimizing the Richmond – South Hampton Roads trip time for passenger rail service on a consistent basis – while preserving and enhancing the dependability of the NS freight operations – would require improvements that would increase rail capacity at strategic locations. Reduced trip times and improved capacity would enable the high-speed service to operate reliably without adversely affecting, or being delayed by the large number of long freight trains.

Three strategies were pursued in designing the plant and operations to minimize the probability of schedule conflicts in this critical segment of the corridor:

1. Create track connections, modify interlockings, and make additional operational improvements that would result in segments of track where freight and passenger train conflicts would be minimized in Petersburg (west end) and at Suffolk (east end);
2. Provide a passing siding of sufficient length in the most effective location—a third track to be used by freights—where a passenger trains could overtake and pass a slower train without either train being required to stop;
3. Design passenger schedules so that trains traveling in opposite directions "meet" in terminals or "pass" at locations where freight operations would not be disrupted.

Petersburg to Poe

Using the NS's Main Line through downtown Petersburg (the West, Dunlop, and Ettrick Connections), permits the high-speed South Hampton Roads trains to avoid the yard operations at Poe, where the Belt Line joins the Main Line. Offsetting this advantage might be the need to construct a second track on the Belt Line, by connecting the existing sidings, to allow NS to avoid using the Main Line. This would create a passenger route through Petersburg having minimal interface with freight operations. The Belt Line would continue to be the primary NS freight line, bypassing downtown Petersburg.

Connecting the A Line to the Belt Line (the North Collier and Secoast Connections) would route high-speed passenger trains through an area of heavy freight activity. It appears that the following would be required:

- an additional main track on the NS Belt Line between North Collier and Poe, and
- a new interlocking built on straight track at East Poe, to avoid the curve at Poe.

Given their higher speeds, passenger trains would occupy the shared, 48.3 mile Poe-Brico main line segment for as little as: 27 minutes at 110 mph; 33 minutes at 90 mph; and 37 minutes at 79 mph. A 45 mph freight train would take 65 minutes to cover this distance.

The high rate of passenger train speed also would mean that any delay to freight trains held up from entering the Poe-Brico segment would be minimal, since the passenger trains would reach the line segment at speed and accelerate away from the freight trains.

Poe Interlocking and Yard

NS has a small yard and a busy automobile unloading facility at Poe, both of which require freight trains to stop and work for substantial time intervals. These freight trains occupy the siding at Poe, and often occupy the eastbound main track. The NS's heavy use of the Belt line, the congestion that arises from trains stopping and working at the CSXT interchange or at Poe Yard, and the possible need to add track capacity to the Belt Line to maintain quality freight service, indicate that an additional track would be needed on the Belt Line, between North Collier and Poe, on which to move passenger trains.

If the passenger trains were operated on the Main Line, a second track on the Belt Line, consisting of the existing sidings connected by additional track, might be required.

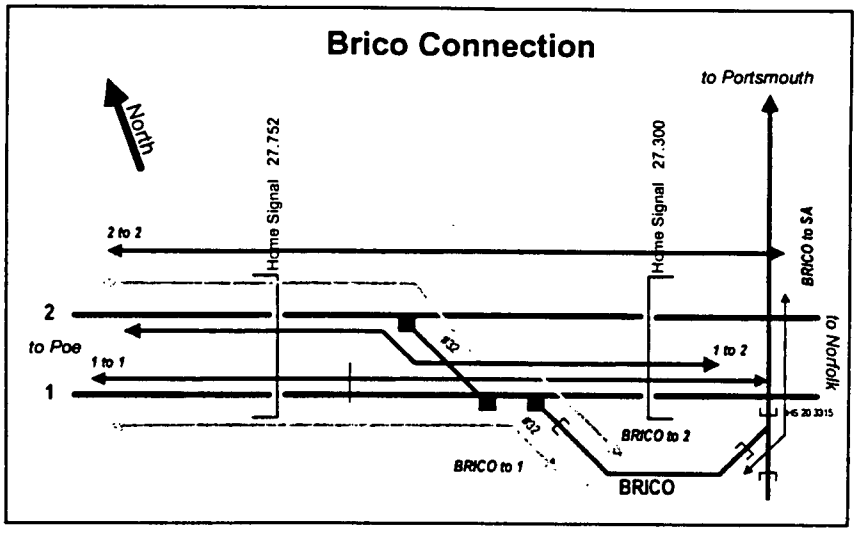
Further study will be necessary to make either of these determinations.

Suffolk to South Norfolk – The Brico Connection

The possibility of establishing high speed passenger service on the CSXT line from Brico to Algren, thence on the former Virginian Railroad (VGN) from Algren to South Norfolk, has been examined as an alternative to avoid the heavily used NS main line wherever possible. This diversion would require a new high-speed connection at Brico, just west of Kilby, VA, west of Suffolk, to connect the NS Main Line with the CSXT Portsmouth Subdivision. This connection would remove the passenger trains from the NS Main Line at this location, enabling them to bypass the terminals and yards at Suffolk and Portlock (South Norfolk).

Located 3 miles west of downtown Suffolk, Kilby is where the double track NS main line crosses over top of the former VGN right of way, as well as the CSXT Portsmouth Subdivision. U.S. Highway 58 crosses over all three railroads on two overhead bridges, at a 90-degree angle to the NS main line. A connection between the CSXT and NS lines exists in the southwest quadrant, but it is of no benefit for passenger train movements between South Hampton Roads and Petersburg. The large earthen fill of approaches to the U.S. 58 highway bridges precludes a potential connection in the preferred northeast quadrant. The recommended alternative is a loop (jug handle) connection in the southwest quadrant from the NS Main Line, from Petersburg, to the CSXT Portsmouth Subdivision, to Portsmouth.

Figure 5: Brico Connection



Access to Norfolk Terminal

The recommended route for the high-speed passenger service into the Norfolk Terminal minimizes conflicts with freight operations inside the busy terminal area by avoiding the NS Main Line in favor of the less traveled CSXT Portsmouth Subdivision and the former VGN line.

The CSXT Portsmouth Subdivision offers a tangent track, with a few easy curves and few grade crossings. The Portsmouth Subdivision intersects the NS's VGN line at Algren.

Bowers Hill Station

The Hampton Roads markets outside of Norfolk and Portsmouth cover a large geographic area and would be best served by a "beltway (suburban)" station with good access to/from the highway system, particularly I-264 and the Hampton Roads Beltway (I-64/664). The benefit to both modes of the interface of rail passenger service and major regional highways has been successfully demonstrated at the New Carrollton, MD station, located north of Washington, DC. The present New Carrollton rail station, constructed in the early 1980s, has proven to be an effective traffic generator.

An analysis of the rail-highway interface has led the study team to conclude that a station located just east of the Algren track connection, at the crossing of Homestead Road, near the Bowers Hill post office, would best serve the projected travel market.

Access to Downtown Norfolk

Operation over the NS's "V-Line" (former Virginian main line) between Algren and South Norfolk separates the passenger operation from the bulk of NS's freight movements on their main line into Norfolk. The single track VGN line between Algren (V15.5) and South Norfolk would require rehabilitation, but is a straight, well-engineered right of way. It includes a draw-span bridge over the Southern Branch of the Elizabeth River, on the Inland Waterway. This is an unavoidable crossing, as the NS Main Line has its own drawbridge over this navigable waterway a few miles further south. At South Norfolk (V2.3), the passenger route would re-enter the NS main track. It is recommended that the passenger route be restricted to the westbound Number 2 main track over Bridge 5 into Norfolk.

South Hampton Roads Passenger Terminal

Alternative Terminal Locations

Downtown Norfolk and Portsmouth are relatively compact markets that could be served by a station located in either one of these areas. The historic N&W Norfolk Terminal station was located in downtown Norfolk, on Water Street near the Eastern Branch of the Elizabeth River. The historic SAL Station building in downtown Portsmouth still exists, however, rail access to the station location is restricted by recent development and passenger access to downtown Norfolk would require a transfer to another mode. Considering that neither site is currently available, it appears that a downtown Norfolk station site near the Harbor Park baseball stadium would be desirable. The proposed location is at the east (compass north) end of Bridge 5, immediately adjacent to the parking lot for the stadium. The site is the closest available location to downtown Norfolk.

The station tracks need to be accommodated in the 1500 feet of space between Bridge 5 and the grade crossing for Park (formerly Lovitt) Avenue. The station could share parking with the stadium, and enjoys good highway access, and public transit services, being served by the downtown bus network and, ultimately, the planned light rail line. The site's singular drawback is its relatively small size, and the inability to provide either a maintenance/servicing facility for Amtrak at the location or a convenient Wye track or turning loop where trains can be "turned" to return to Richmond.

As of this time a location to store and service trains in Norfolk has not been identified. An efficient storage yard and maintenance facility in the vicinity of the proposed Norfolk Passenger Terminal would be necessary to properly clean and inspect trains. Further evaluation of train operations through the area, and potential locations, would be required to finalize the location.

Service Goals

All operators and sponsors—intercity passenger, commuter, and freight operators—intend the services on the Richmond-South Hampton Roads Corridor in the target planning year, 2025, to be operated at higher levels of traffic, and be more reliable than those operating on the Corridor at present. The envisioned mix of services is presented in Table 1 and described below.

Table 1: Railroad Services Envisioned for 2025 on the Richmond–South Hampton Roads Corridor

Service	Route	Number of Daily Train Movements			
PASSENGER		**Richmond to Petersburg**	**Petersburg to Suffolk**	**Suffolk to Bowers Hill**	**Portlock to South Hampton Roads**
Corridor	North Carolina—Northeast Corridor	**8**	**0**	**0**	**0**
Corridor	South Hampton Roads-Richmond/Washington/Northeast Corridor	**12**	**12**	**12**	**12**
Long-distance	Florida—Northeast Corridor	**8**	**0**	**0**	**0**
Auto Train	Lorton, Virginia—Sanford, Florida	**2**	**0**	**0**	**0**
Total Amtrak		**30**	**12**	**12**	**12**
FREIGHT					
Intermodal Trains		**14**	**14**	**0**	**0**
Coal trains + Empties		**12**	**10**	**4**	**10**
General Merchandise Trains		**16**	**10**	**0**	**0**
Local Trains		**4**	**2**	**0**	**0**
Light Power		**0**	**0**	**0**	**20**
Orange Juice		**2**	**0**	**0**	**0**
Trash		**6**	**0**	**0**	**0**
Total CSXT/NS Freight		**54**	**36**	**4**	**30**
GRAND TOTAL Richmond — South Hampton Roads Corridor		**84**	**48**	**16**	**42**

A corridor-type of high-speed intercity passenger train service would be the most appropriate to operate between Richmond and South Hampton Roads. **Train service** reliably linking Richmond (Main Street Station) and South Hampton Roads **in less than 90 minutes** by 2025, with two intermediate stops would satisfy this demand.

The 2025 service would include six daily round trips, including:

- South Hampton Roads - New York trains (four round trips), and
- South Hampton Roads - Washington trains (two round trips).

Hampton Roads service would also include two Newport News – Northeast Corridor trains.

Methodologies

Sources included reports prepared by the FRA, data provided by the Virginia Department of Rail and Public Transportation, filings before the Surface Transportation Board, track diagrams, maps, equipment specifications, and other engineering and ownership documentation. Limited field investigations took place to verify existing conditions. Also, the study team met with appropriate State, local, CSXT, NS, and VRE officials to assess the status of their respective plans, and to assemble a consensus list of possible projects that would assist all operators to meet their service goals.

The analysis compared the services as presently envisioned by the operators for 2025, with the fixed plant as configured today and as upgraded with various carefully ordered combinations of improvements. The analysis focused on two questions:

- Can individual trains meet their trip-time goals, irrespective of other traffic?
- Can all the services operate in combination at intended speeds and schedules over the Corridor, while still meeting their reliability imperatives?

To answer the first question, the study team used a computer model known as a train performance calculator (TPC) to model the operation of a single train, with defined performance characteristics, over a traffic-free railroad with profile, alignment, and maximum speeds as specified for each segment. The train performance calculator was applied to prototypical freight, intercity passenger, and commuter trains, to assess their optimal performance over the Corridor under different sets of conditions. However, it must be remembered that the mere physical possibility of operating a given train over a given right-of-way at a given trip time offers no assurance that a combination of services can reliably operate on the Corridor.

To answer the second question, the study team applied detailed simulations—modeling sophisticated, random variations in operating conditions and performance—to the full spectrum of freight, intercity passenger, and commuter services on the Richmond–South Hampton Roads Corridor. These simulations assessed the impacts of changes in both schedules and fixed plant capabilities on all services operating simultaneously over a hypothetical seven-day test period.

Taken together, the TPC runs and the detailed operating simulations permitted the analysts to compare intended schedules, optimal running times, and expected performance for all services. The effects of alternative schedules and fixed plant capabilities were evaluated through numerous model runs. By these means the study team developed a preliminary list of potential projects and priorities that would meet the trip time and reliability goals of the study. This report synthesizes the results of investigations to date and defines a plan that can serve as a basis for further design, environmental work, and partnership and financial development for the Washington—Richmond Corridor.

Investment Requirements

The analysis yielded a preliminary list of projects that would provide the proposed level of service to South Hampton Roads. This list of projects assumes that the freight railroads, as owners of the fixed plant, will continue to maintain the proposed corridor tracks in the state of good repair that characterizes the main line portions from Richmond to Suffolk to Algren. For that segment, therefore, the investment requirements contained in this report **do not** include replacement in kind of key existing track components (ties, rail, and the like)—in railroad parlance, "program maintenance."

On the other hand, for the segment between Algren and South Norfolk, this report provides for a significant upgrade, with replacement of rails, ties, and other track components to assure safe, expeditious passenger and freight service. Signal investment requirements are subsequently addressed.

This study has emphasized train operations and related facilities, and therefore has confined itself to identifying only a few of the many issues related to stations; cost estimates for all station improvements have not been developed. The corridor partners will, however, need to devote significant resources to this topic if rail service in the corridor is to be optimized. The provision of marketable (and potentially profitable) station facilities, parking, and amenities will merit careful attention and focused investment in the preparation of a development plan for the South Hampton Roads Corridor.

Description Of Improvements

Table 2 provides a preliminary list of projects, and their costs, that would fulfill the service goals of the recommended high-speed rail service. Improvements include the construction of segments of additional track, and the reconfiguration of switching locations (interlockings) to optimize operating flexibility and provide the capability of making simultaneous train crossover movements (parallel moves). This expanded capacity reduces the impact of the projected intercity and commuter passenger service increases, and maintains the quality of freight service on the line, thereby making the increased passenger service attractive to NS and CSXT, the owner/operators.

Table 2: Description of Improvements

Project	Description	Estimated Cost[8]
Centralia to Dunlop Third Track	Construct third track east of the present CSXT A Line between Centralia and Dunlop.	**$24.09**
Dunlop through Petersburg to Poe: The costs of three potential options are summarized	Ettrick Connection	**$37.57**
	Dunlop Connection	**$40.38**
	Collier Connection	**$82.03**
NS Petersburg Belt Line, Poe to Jack	Construct second track on Belt Line.	**$21.65**
NS Main Line: Poe to Brico	Create additional flexibility by the installation of three new, or reconfigured, universal interlockings and a 12.6-mile center siding in this segment of extended tangent track. Interlockings would be located in this track segment at: *East Poe* (N76.1); *Disputanta* (N69.2); *Waverly* (N59.7); *47 Crossover* (N46.8); and *Wight* (N37.3).	**$49.65**
Brico Connection: NS Main Line to CSXT Portsmouth Sub	Construct a 1.8-mile connection between the NS Main Line and the CSXT Portsmouth Subdivision at Brico (N27.3). Brico Interlocking, at the north end of the connection would enable northbound trains to access both Main Line tracks. A new interlocking on the Portsmouth Subdivision at the east end of the connecting track would enable passenger trains to move from the connecting track to the CSXT Portsmouth Subdivision would be the straight, high-speed route, while a 45 mph route would be provided for CSXT trains.	**$6.09**

[8] Fully loaded constant 2000 dollars, in millions.

Project	Description	Estimated Cost[a]
CSXT Portsmouth Sub and NS Virginian Main: Brico Connection to Bowers Hill Station to South Norfolk	Upgrade the CSXT Portsmouth Subdivision to support high-speed rail service. The 14.6-mile segment would remain single tracked with a 2.3-mile siding at the east end. At Algren the route to the former Virginian Main would be the straight route and the route to Portsmouth would be 45 mph. Upgrade the former Virginian Main to support the proposed high-speed rail service. A 2.3-mile siding would be located west of the proposed Bowers Hill station. The siding was placed to support the meets that occur with the proposed schedules on the single-track in the vicinity of Bowers Hill Station.	**$35.39**
NS Main Line: South Norfolk to Norfolk	Upgrade the connection from the Virginian to the Main Line – South Norfolk. Revise NS Junction. Construct station tracks in the 1500 feet of space between Bridge 5 and the Park (Lovitt) Avenue grade crossing. Two station tracks would be located adjacent to the Line to the Lamberts Point.	**$5.70**
Norfolk Passenger Terminal	Station platforms would be located on the west or downtown Norfolk-side of the double-track NS Lamberts Point Line. The platforms would be located adjacent to the station tracks.	**$10.00**
Ettrick Station	Revise Ettrick Station to accommodate third track and revised operation	**$4.37**
Bowers Hill Station	A single-track beltway station would be located at Bowers Hill, about two miles east of Algren.	**$4.3**

Project	Description	Estimated Cost[8]
Maintenance Facility: Norfolk	Construct an efficient storage yard and maintenance facility in the vicinity of the Norfolk Passenger Terminal to ensure that passengers are provided safe, reliable, and clean trains. Provide sufficient yard storage capacity to handle overnight layovers for trains scheduled to depart Norfolk the next day, and to store equipment to be maintained. Further evaluation of train operations through the area and potential locations would be required to finalize the location.	
Signal System Upgrade	Upgrade the signal system to efficiently handle increased train traffic on the Corridor and to permit improved intercity passenger service with greater safety. These improvements also would enable freight service to safely and efficiently operate on the same tracks. A cab signal system (necessary to operate passenger trains at speeds greater than 79 mph), a new block layout, and new signal aspects would be incrementally installed to accommodate speeds up to 110 miles per hour[9]. Block spacing would anticipate increased train speeds. Reverse signaling would be installed throughout the corridor.	**$16.98**
Diesel Locomotive Upgrade	The installation of cab signals would require that all NS and CSXT locomotives operating on the South Hampton Roads corridor be equipped with Automatic Train Control (ATC).	**$20.00[10]**
Intercity Rail Fleet	The passenger equipment to be utilized would be compatible with SEC operations as well as NEC electrified operations north of Washington – a locomotive change would be required at Washington.	
TOTAL	**Total corridor improvements using the Ettrick Connection in Petersburg. Does not include storage facility or passenger equipment requirements.**	**$235.79**

[9] The braking distance for a 110 mph passenger train is essentially equal to that of a 60 mph freight train.

[10] Assumes 250 locomotives, actual number not available.

Ridership And Revenue Forecasts

The ridership and revenue forecasts for rail service from Richmond to South Hampton Roads were developed using information originally assembled for the Southeast High Speed Rail Study in 1996 and recently updated by AECOM for the North Carolina DOT and Amtrak. In addition, data from the 1996 Hampton Roads Crossing Study were obtained from VDOT to supplement the Southeast HSR study travel base.

The model used for this analysis is an adaptation of a spreadsheet model that has been used in many applications for Amtrak and Georgia and North Carolina DOT's to evaluate intercity rail alternatives. The spreadsheet models were developed based market research and physical data such as highway networks, socio-economic variables, and service characteristics of public modes.

The study team examined nine service alternatives for passenger rail service to Norfolk along the existing CSXT lines from the existing Richmond- Staples Mill station through Richmond's Main Street station to Petersburg, then along the Norfolk Southern line from Petersburg to Norfolk. The alternatives vary with speed (79 mph to 110 mph) and frequency (one to six daily round trips). The exhibit below provides a summary of the alternatives operating characteristics between Newport News / Norfolk and the Richmond Main Street Station.

Table 3: Alternative Specification Summary

Alternative	Maximum Allowed Speed*	Frequency		Travel Time	
		Newport News – Richmond	Norfolk-Richmond	Newport News – Richmond	Norfolk-Richmond
BASE	79 mph	2	0	1:30	
1	79 mph	2	1	1:30	1:43
2	90 mph	2	1	1:30	1:35
3	79 mph	2	2	1:30	1:43
4	90 mph	2	2	1:30	1:35
5	79 mph	2	4	1:30	1:43
5A	79 mph	4	4	1:30	1:43
6	90 mph	2	4	1:30	1:35
7	110 mph	2	4	1:30	1:26
8	110 mph	2	6	1:30	1:26

* between Richmond and Norfolk only; speeds between Richmond and Newport News remain at a 79 mph maximum allowed speed in all alternatives

Ridership and revenue forecasts were prepared for each of the nine alternatives for forecast years of 2010 and 2025. A summary of forecast results for 2025 are included in the table below. The trips reported in the table correspond to trips between Hampton Roads, Petersburg, Richmond, Washington DC, and the Northeast Corridor.

The forecast results show a consistent increase in performance measures as the speed and frequency of service increases. The low frequency alternatives have low incremental ridership gains because the new service does not provide a significant improvement over the existing Newport News service. As the speed and frequency of the South Hampton Roads service increases the incremental ridership and revenue increase significantly.

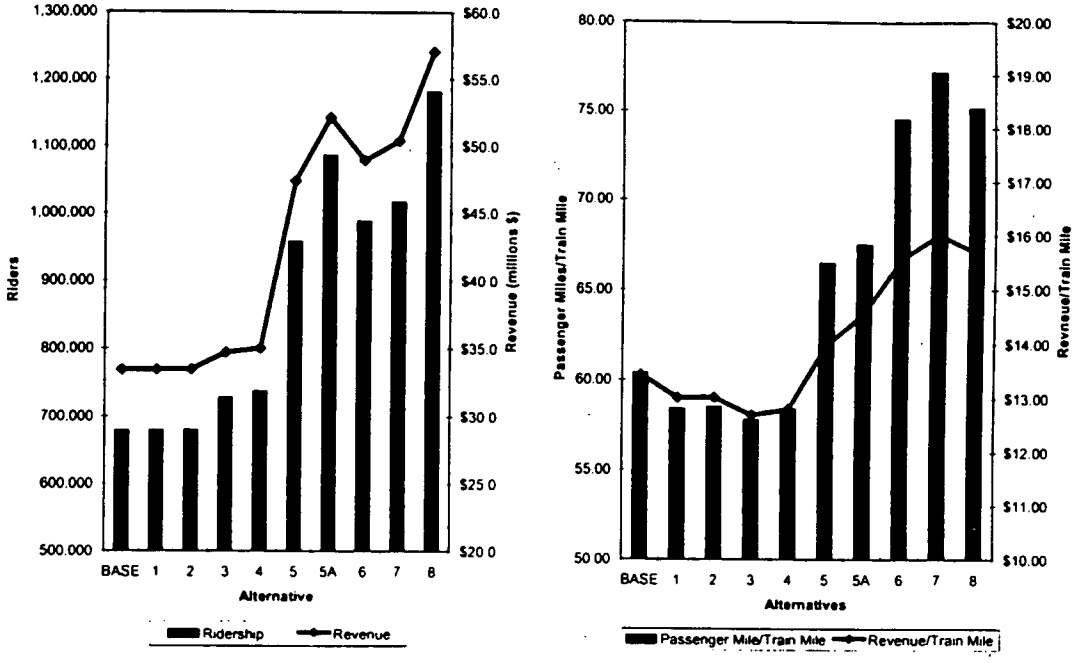
Table 4: Summary of Forecast Results for 2025

Alt	Total Riders	Total Revenue (millions $)	Passenger Miles (millions)	Train Miles (millions)	Revenue/ Train Mile	Pass Mi/ Train Mile
Base	678,700	$33.430	150.200	2.486	$13.45	60.4
1	679,100	$33.450	150.260	2.570	$13.01	58.5
2	679,500	$33.460	150.450	2.570	$13.02	58.5
3	728,000	$34.700	158.110	2.734	$12.69	57.8
4	737,000	$35.010	159.800	2.734	$12.81	58.5
5	957,800	$47.390	225.420	3.391	$13.98	66.5
5A	1,086,600	$52.150	241.940	3.584	$14.55	67.5
6	988,400	$48.960	234.530	3.146	$15.56	74.5
7	1,017,000	$50.400	242.860	3.146	$16.02	77.2
8	1,181,500	$57.060	273.420	3.638	$15.68	75.2

It is important to note that the ridership and revenue increase at a faster rate than train miles for most of the higher frequency and speed alternatives. The following charts display forecasted riders and revenue and passenger miles and revenue per train mile. These charts illustrate the benefit of faster and more frequent service. Revenue per train mile increases from the base in all alternatives except for alternatives with low frequency. Passenger miles per train mile also generally increase after falling slightly in the low frequency alternatives.

The slightly lower performance of Alternatives 3 and 4, relative to Alternatives 1 and 2 as well as Alternative 8, relative to Alternative 7, reflects the diminishing return of additional frequencies as the timetable of trains expands. Because of the more than seven (7) hour running time between Norfolk and New York, it is not practical for all of the new Norfolk train frequencies operate north of Washington – they would depart or arrive at the end point station at a poor time of day and/or conflict with other Northeast Corridor operations. This is the case with the additional frequency provided in Alternatives 3 and 4 and one of the two additional frequencies provided in Alternative 8.

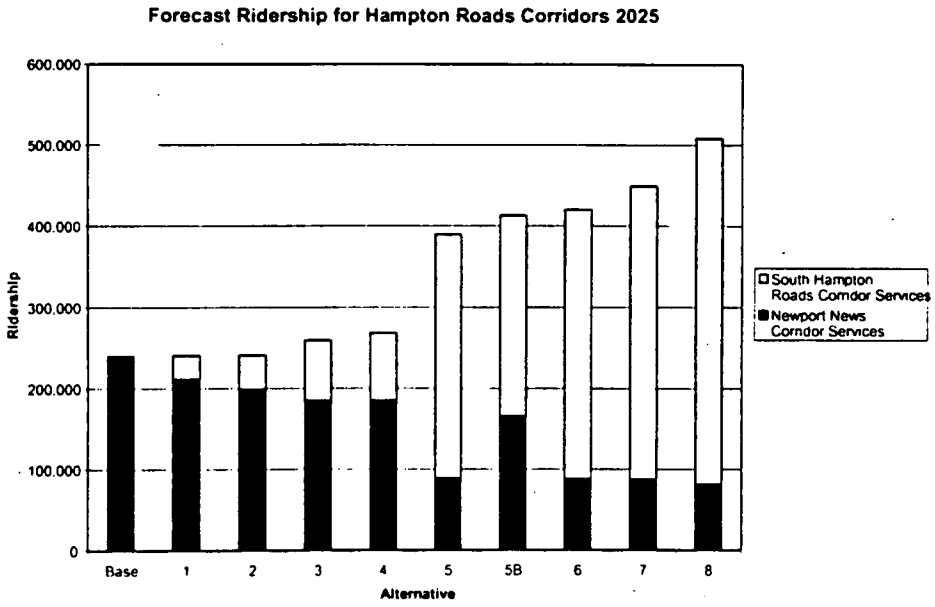
Table 5: Forecast Results and Performance Measures for 2025



The next exhibits show ridership and revenue to/from the Hampton Roads area, served by the existing Newport News/Williamsburg corridor services and the new South Hampton Roads corridor service. As these exhibits show, there is an overall increase in ridership and revenue to/from the Hampton Roads area as the combined service frequencies and travel times improve across the service alternatives. Similarly, the exhibit shows the increasing diversion of ridership/revenue from the Newport News/Williamsburg corridor services, as passengers shift to the improved frequencies and travel times along the South Hampton Roads corridor service to/from Richmond and point north.

Table 6: Hampton Roads Rail Ridership and Revenue for 2025

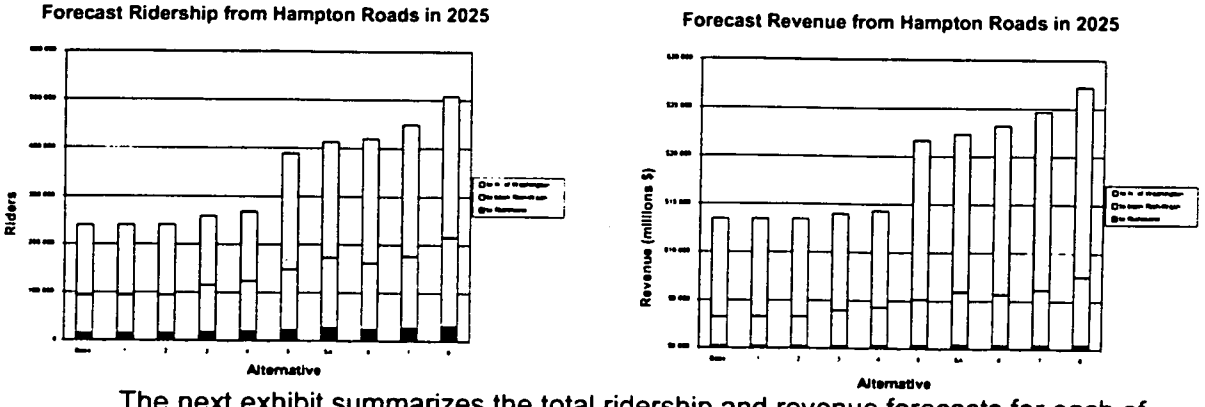
Alt	Newport News / Williamsburg Corridor Services		South Hampton Roads Corridor Services		Hampton Roads Total	
	Riders	Revenue (millions$)	Riders	Revenue (millions$)	Riders	Revenue (millions$)
Base	240,200	$13.460			240,200	$13.460
1	211,800	$12.460	28,800	$1.020	240,600	$13.480
2	199,500	$11.970	41,500	$1.510	241,000	$13.480
3	185,900	$11.380	73,300	$2.650	259,200	$14.030
4	185,900	$11.380	82,300	$2.960	268,200	$14.340
5	89,000	$4.870	300,800	$16.780	389,800	$21.650
5A	166,100	$9.190	247,100	$13.150	413,200	$22.340
6	88,200	$4.840	332,200	$18.380	420,400	$23.220
7	88,000	$4.830	361,000	$19.830	449,000	$24.660
8	81,800	$4.590	426,300	$22.660	508,100	$27.250



Another important characteristic of the Hampton Roads area ridership and revenue forecasts is their north-end origin-destination. The exhibit below provides a graphical

illustration of the relative significance of Hampton Roads ridership and revenue to/from Richmond, points north of Richmond to as far as Washington, and points north of Washington. As the exhibits show, very little Hampton Roads ridership and revenue is associated with travel to/from Richmond and, as in the base, most ridership and, in particular, revenue is associated with trips to/from points beyond Washington.

Table 7: Relative significance of Hampton Roads ridership and revenue to/from Richmond, points north of Richmond



The next exhibit summarizes the total ridership and revenue forecasts for each of the alternatives including the above figures for the Hampton Roads area as well as impacts between Petersburg/Richmond and points north. As the exhibit shows, ridership and revenue also increase as new frequencies are introduced at Petersburg and, in some alternatives, Richmond.

Table 8: Hampton Roads, Richmond, and Other Markets Rail Ridership and Revenue for 2025

Alt	Hampton Roads		Richmond/Petersburg & markets to the north		Total	
	Riders	Revenue (millions$)	Riders	Revenue (millions$)	Riders	Revenue (millions$)
Base	240,200	$13.460	438,500	$19.970	678,700	$33.430
1	240,600	$13.480	438,500	$19.970	679,100	$33.450
2	241,000	$13.480	438,500	$19.970	679,500	$33.460
3	259,200	$14.030	468,800	$20.670	728,000	$34.700
4	268,200	$14.340	468,800	$20.670	737,000	$35.010
5	389,800	$21.650	568,000	$25.740	957,800	$47.390
5A	413,200	$22.340	673,400	$29.810	1,086,600	$52.150
6	420,400	$23.220	568,000	$25.740	988,400	$48.960
7	449,000	$24.660	568,000	$25.740	1,017,000	$50.400
8	508,100	$27.250	673,400	$29.810	1,181,500	$57.060

Initial Overview Of Environmental Constraints

Because the alternatives under consideration are located almost entirely within existing or abandoned rail rights or way, environmental impacts are anticipated to be minimal. Limited environmental documentation should be required for most of the corridor. Categorical Exclusions should be sufficient in areas that are free of environmental constraints and where only operating changes or minor capital improvements within existing rights-of-way are proposed. In many segments of the corridor, environmental constraints may be present within the buffer analyzed, but the use of only existing tracks would also limit the need for extensive environmental documentation. More detailed environmental analyses would have to be completed to determine the full level of documentation required.

A summary of the environmental resources and potential constraints within the 300-foot buffer of the proposed HSR right of way is provided in Table 9 The resources included in this summary table would not necessarily be affected by the construction and implementation of HSR between Richmond and South Hampton Roads.

Several geographic areas of environmental concern where more detailed environmental documentation is expected to be necessary have been identified. The areas of environmental complexity where there is a potential for environmental impacts or difficulty in obtaining permits include:

- Crossing of the Appomattox River at Petersburg – New bridges would be required for all connections. The construction of the new bridges could permanently alter floodplains and historic districts and temporarily impact aquatic habitats in the Appomattox River. Further investigation would be necessary to determine the nature and degree of these effects. The Dunlop Connection would also require construction of a connection within the boundaries of the Battersea Historic District for Florida-bound trains.
- Brico Connection – New construction would be required for the connection of the existing Norfolk Southern (NS) line, which runs northwest-southeast, to the CSXT line, which runs west-east at its junction with the NS line. This connection may displace wetlands and residences near Kilby.
- Waverly – provisions of service and potential for noise and vibration impacts to residential areas adjacent to the railroad and low-income or minority populations that may be disproportionately affected.
- Station Construction at Bowers Hill – Although construction would avoid most environmental resources, there are potential impacts on traffic, public safety, and the nearby Great Dismal Swamp National Wildlife Refuge and the Hampton Roads Wetland Mitigation Bank.
- Crossing of the Great Dismal Swamp National Wildlife Refuge– the potential for noise or vibration impacts in close proximity to a significant natural resource, 4(f) property, and sensitive habitats that support rare, threatened, and endangered species.
- Noise Impacts in Chesapeake and South Norfolk – as the corridor approaches the cities of Chesapeake and Norfolk, several neighborhoods and residential areas are in close proximity to the tracks. Noise studies would be necessary to determine any effects.

Table 9: Summary Matrix of Environmental Resources and Constraints Assessed Within 300 Feet of the HSR Right of Way

Number of Existing Resources and Potential Constraints	**HSR Corridor with Dunlop Connection**	**HSR Corridor with Ettrick Connection**
Noise-Sensitive Receptors[1]	8	8
Stream Crossings	29	29
Wetlands (ac)	576.6	584.4
Floodplain Crossings	27	27
Threatened and Endangered Species	34	34
Wildlife Refuges	1	1
Traffic (total number of road crossings)	129	133
Above-Grade Crossings	25	24
At-Grade Crossings	98	101
Below-Grade Crossings	6	8
Community Facilities and Services (Total Resources)	19	19
Schools	2	3
Religious Institutions	6	5
Cemeteries	5	5
Airports	1	1
Landmarks	4	4
Parks and Recreational Areas	1	1
Transportation (bus) terminals	0	0
Government/Municipal Buildings[2]	0	0
Historic & Archaeological Resources[3]	4	5
Hazardous Waste Sites[4]	16	16

[1] Number of Category 3 receptors within 150 feet of existing lines.
[2] Including Town Capital Buildings, Town Halls, Courthouses, Libraries, Police, Auditoriums, Police Stations, Fire/Rescue Stations, Hospitals.
[3] Listed on or eligible for listing on the National Register of Historic Places.
[4] Located within 2 miles.

Additional environmental analysis would be needed to determine the interactions of the proposed corridors and these environmental constraints. Limited environmental documentation may be required if changes to existing railroad rights-of-way to implement the proposed rail service are minimal. However, from an overview perspective, the locations listed above could have the most complex environmental

issues within the corridor. Once more detailed design information is available, further environmental information would be prepared to determine the significance of impacts. None of these concerns, however, represents a "fatal flaw" for the Richmond to South Hampton Roads HSR.

Conclusions

This analysis of current and projected railroad operations and facilities on the Richmond–South Hampton Roads Corridor has led to the following conclusions:

- **Feasibility of high-speed service:** Reliable high-speed passenger train service between Richmond and South Hampton Roads is a feasible goal **provided** that requisite infrastructure improvements are constructed.
- **Travel Times - Richmond to South Hampton Roads:** Scheduled trip times, Main Street Station to Norfolk terminal, decreases as the maximum authorized speed increases, ranging from 1-hour 43 minutes at 79 mph, to 1-hour 35 minutes at 90 mph, to 1-hour 31 minutes at 110 mph. Travel times between Richmond and Newport News, at 79 mph, is 1-hour 30 minutes.
- **Total Trips – South Hampton Roads to Richmond to Washington to Northeast Corridor:** Total trips increase significantly as the maximum speed and frequency of South Hampton Roads service increase. By the year 2025 Newport News-only service, without speed or frequency increases, would total 213,500 passengers annually. The addition of the South Hampton Roads service would increase the annual ridership to 492,100.
- **Protection of all freight and passenger services:** Computerized simulations of the operations of all users of this Corridor (freight and Amtrak) have identified a number of specific infrastructure changes that would provide the capacity to reliably handle all existing and projected services. Even with these changes, close scheduling and dispatching coordination among operators—extending to the Washington - Richmond and Richmond - Raleigh Corridors and other contiguous routes—would be necessary to optimize the use of the improved facility and preserve the dependability and marketability of all passenger and freight operations.
- **Need for further analysis:** Between Newport News and Richmond, on the existing CSXT line, the affect on ridership of altering service frequency, increasing maximum authorized speeds, and providing sufficient capacity to reliably operate the enhanced service, should be evaluated to assist in the prioritization of passenger rail funding in the Richmond to Hampton Roads corridor.
- **Need for further engineering:** Further detailed engineering would be needed to verify the constructibility of the various improvements, particularly for three challenging areas: the changes required through Petersburg, the track connection at Brico, and the station and track changes required between Algren and the proposed South Hampton Roads terminal station in Norfolk.
    - **Preferred Route Through Petersburg – Florida and SEHSR Raleigh and Charlotte trains:** Recently, it has been recommended that the north – south route for these intercity and high-speed trains be revised from that initially recommended in a study prepared for the FRA. Rather than restoring the S Line between Centralia and Burgess, it has been determined that intercity and SEHSR trains would operate on an upgraded A Line between Centralia

and South Collier. Trains destined for points on the A Line would continue southward, while S Line trains would utilize a restored Burgess Connection between South Collier and Burgess to access the S Line to Raleigh. Ettrick would remain the location of the intercity passenger station.

- **Preferred Route Through Petersburg – South Hampton Roads trains:** There are three options that appear to justify further study:
  1. Dunlop connection
  2. Ettrick connection
  3. North Collier connection

  Each of these options possess positive attributes, but each raises concerns in terms of cost, circuity, and station location. If there is to be one station, the more direct the route to South Hampton Roads, the more circuitous the routes to the south, and vice versa. For example, a downtown Station would require A and S Line trains to use connections from the NS Main Line to continue south.

  If a new high bridge, and a direct route to Collier is selected for SEHSR, The South Hampton Roads alternatives might require either:
  1. Dunlop connection - a separate station,
  2. Ettrick connection - a separate bridge, or
  3. North Collier connection - avoiding the Halifax Road overpass at North Collier, an additional main track on the NS Belt Line between North Collier and Poe, and a new interlocking East Poe to avoid the need to provide turnouts on the superelevated curve at Poe.

  The *Dunlop Connection* and the *Ettrick Connection* fulfill the planning requirements to reduce passenger train conflicts with NS freight operations in Petersburg, but each requires an additional Appomattox River Bridge. Although the Dunlop Connection requires a less-expensive bridge, it requires a restored right of way (that raises substantial neighborhood issues), and a second station (if the other trains continue to use a station on the A Line. The *North Collier Connection* can overcome conflicts with freight operations only at greater expense to provide some additional trackage and interlocking improvements. Further study is required to determine the extent of these tradeoffs.

- **Necessary commitments of the involved parties:** Implementation of the development concept, described in this report, for the Richmond–South Hampton Roads Corridor will require:
  - The commitment of the Commonwealth of Virginia, and other affected parties to obtain funding for the recommended improvements, to progress the necessary engineering work on a timely basis, and to arrange for any needed environmental/historic documentation; and
  - Officials of the Commonwealth of Virginia, the freight railroads, and local governments to close or upgrade as many highway-rail grade crossings as possible on this route.

Cooperation of all parties is essential if the benefits of high-speed rail service are to be achieved.

Appendix A

COMMENTS AND LETTERS

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February 20, 2002

Mr. Alan Tobias
Rail Passenger Project Manager
Virginia Department of Rail and Public Transportation
1313 East Main Street, Suite 300
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Dear Alan:

This letter follows the January 24, 2002 meeting of the Technical Advisory Committee for the South Hampton Roads High Speed Rail Study, which was held at the Virginia Diner in Wakefield. At that meeting, Norfolk Southern raised a number of questions concerning the Study's omissions and understatements. As you requested, we are sending our concerns to you in this letter.

This Study, as with all studies of emerging high-speed corridors, is conceptual. By this we mean that no funding exists for implementation. Until serious money develops to construct infrastructure, we at Norfolk Southern will continue to regard this and all similar studies as hypothetical exercises.

Even so, the Study should attempt to put a realistic cost on implementing high-speed rail passenger service between Petersburg and Norfolk. Understating the cost misleads our decision makers and it places Norfolk Southern in the unfair position of appearing to hype the cost of a project.

We are not hyping the cost of the project. We are asking the Virginia Department of Rail and Public Transportation (VDRPT) and its consultant, Parsons Transportation Group (PTG), to include costs and factors that so far have been understated or omitted.

Any further studies will certainly need to include these costs, so it's better to acknowledge them now than to surprise everyone unpleasantly in the future.

Specifically, the cost estimates (which were distributed at the January 24 meeting) for preparing Norfolk Southern's line for 110 mph operation between Petersburg and Norfolk do not appear to consider key items, including the following:

Cab signals - under federal law, our freight locomotives must be outfitted with this equipment if passenger trains operate in excess of 79 mph. The cost of equipping our locomotives will be borne by the high-speed rail (HSR) project. The draft Study did not include a cost for this equipment.

Grade crossing improvements - in previous comments to VDRPT and to PTG, we have stated our requirement that all grade crossings over which passenger trains operate in excess of 79 mph must have active warning devices or must be closed. We do not believe that these extra costs are included in the draft Study.

Additional mainline track - in the past, we have stated unequivocally that NS requires any passenger train operating above 90 mph to do so on separate, dedicated tracks. The cost of constructing and equipping such a track is not included in draft Study.

Compensation for use of private property - the draft Study makes no acknowledgement that NS must be compensated for the use of its asset. This compensation includes use fees, additional maintenance costs, and purchase or lease of right-of-way, among other considerations.

Dispatching - NS will continue to dispatch all tracks over which its freight trains operate after inauguration of passenger service.

Transparency - while this word is mentioned in the draft Study, it is not defined. Norfolk Southern will consider passenger train operation only if it is "transparent" to freight operations. We define transparency as the provision of sufficient infrastructure for passenger trains and freight trains to operate without delay to either, and to allow for the growth of both.

Delay to freight trains - the draft Study acknowledges that delay to freight trains would be "minimal". We have maintained all along that delay to freight trains is not acceptable, however minimal.

Liability - no one has begun to address this issue. Indemnifying Norfolk Southern for 110 mph passenger operation will open a whole new universe for our respective attorneys to explore. Based on our experience with commuter authorities, the cost to the passenger carrier of indemnifying NS will be substantial.

Railroading is expensive. 110 mph railroading is very expensive. As the ridership analysis presented in the draft Study indicates, huge growth occurs with increases in frequency, not speed. The implication is that four round trips a day at 79 mph are more cost-effective than four round trips a day at 110 mph.

As always, Norfolk Southern continues to be receptive to discussions of passenger service -- including projects such as South Hampton Roads HSR -- as long as the discussions remain realistic and include our concerns.

Sincerely,

Bill Schafer

Bill Schafer
Director - Corporate Affairs

Cc: Mike Holowaty, Parsons & Transportation Group

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April 18, 2002

Mr. Alan C. Tobias
Rail Passenger Project Manager
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Richmond, VA 23218-0590

Dear Alan:

We have reviewed the April 2002 draft executive summary of the Richmond to South Hampton Roads High-Speed Rail Feasibility Study. As with the previous drafts of this Study, we continue to be dismayed that many of our suggested changes have not been acknowledged or incorporated.

As a starting point, the Study should incorporate all of the principles outlined in our April 17, 2002 open letter to "Planners of Passenger Train Projects" (attached). Most of these principles have been communicated to you a number of times in the past.

Norfolk Southern is the owner of much of the right-of-way over which the proposed passenger trains will operate, and we do not agree with some of the findings and recommendations in the Study. We suggest the following changes:

- Page 6 -- the section pertaining to "Highway-Railroad Grade Crossings" should state that any corridor over which passenger trains operate in excess of 79 mph will be "sealed", as is being done between Charlotte and Greensboro, North Carolina. For further information on "sealed corridors", please contact Paul Worley at North Carolina's Department of Transportation.

- Page 7 ("Freight") -- we prefer the following wording in the second paragraph (changes shown in italics): "For example, unit trains of coal and grain generally have a lower horsepower-to-tonnage ratio and *slower acceleration/deceleration characteristics* than more time-sensitive operations. Thus, a general merchandise or intermodal train ordinarily takes less time to *travel* a given route segment than a unit train."

- Page 16 ("Petersburg to Poe") -- we suggest changing the wording in the fourth paragraph to indicate that passenger trains operating in excess of 90 mph will require their own dedicated tracks, and in the fifth paragraph to indicate that "sufficient capacity must be provided to avoid delay to freight trains entering the Poe-Brico segment."

- Page 18 ("Access to Downtown Norfolk") -- we request that you indicate that a third mainline be provided from South Norfolk to east (geographic north) of Bridge 5 to retain the present two-track mainline capacity for exclusive freight use.

- Pages 21-22 ("Investment Requirements") -- it is okay to assume that Norfolk Southern will maintain its existing mainline tracks to FRA Class 4 standards. Additional costs, such as upgrading and adding tracks and signals for passenger operations and maintaining them to higher passenger standards, will be borne entirely by the passenger operators.

- Page 22 ("Description of Improvements") -- please change the wording in the last sentence to read: " . . . thereby making the increased passenger service *acceptable* to NS and CSXT, the owner/operators".

- Page 23 (Table 2: Description of Improvements) -- under "NS Main Line: Poe to Brico", sufficient funds should be shown here for separate mainline tracks that will be needed if passenger train speeds exceed 90 mph. Additional costs that are not part of the total but should be mentioned include:

    - Reconnecting and restoring to service Bridge 5A in Norfolk
    - Service tracks and turning facilities for the passenger trains

- Page 25 (Table 2) -- under "Signal System Upgrade", this item is greatly understated because it does not acknowledge the additional passenger tracks that Norfolk Southern will require if passenger train speeds exceed 90 mph. No signal system permitting passenger trains and freight trains to operate on the same track where passenger train speeds exceed 90 mph is acceptable to Norfolk Southern. This has consistently been our position in our previous comments to you on this issue. Under "Total", the following wording should be added: "Does not include storage facility or passenger equipment requirements *or upgrades necessary for 110 mph operation or use fees paid to right-of-way owners."*

- Page 33 (Conclusions - Protection of all freight and passenger services) -- this section should state that the right-of-way owners are the final arbiters of the capacity needed to accommodate the proposed passenger services, irrespective of the findings of consultant's computer simulations.

Please contact me if you wish to discuss any of these issues further.

Sincerely,

Bill Schafer

CC: Jim McClellan
Bruce Wingo
Gordon Mott - CSXT

Norfolk Southern Corporation
Corporate Affairs
2001 Market Street, Suite 29
Philadelphia, PA 19103

Bill Schafer
Director – Corporate Affairs
215-209-4287 – Direct Ring
215-209-4286 – Fax

April 17, 2002

To Planners of Passenger Train Projects:

Norfolk Southern welcomes the opportunity to work with state departments of transportation, high-speed rail advocates, and transit and commuter authorities to develop new or additional passenger rail services. We look forward to moving your projects forward as long as they remain realistic and include our concerns.

Because of the popularity of passenger train proposals, we believe that you should be aware of some of the principles that will underlie any discussions we hold with planners. These principles are intended to protect our "factory", which is the track and right-of-way needed to produce our product – the present and future transport of freight – and to protect the interests of our owners and employees. We foresee major segments of our business – particularly the movement of truck trailers and containers – growing significantly in the coming years as highways become more congested.

These principles refer only to conventional intercity or commuter passenger services and high-speed rail projects. Additional conditions will apply to light rail and other public transit ventures. To discuss any of the following issues further, please call me at the number above.

CONVENTIONAL AND HIGH SPEED PASSENGER

Passenger studies of emerging corridors by definition are conceptual. By this we mean that no funding exists for their implementation. Until serious money is available to construct infrastructure, we at Norfolk Southern will continue to regard passenger studies as hypothetical exercises.

Studies should put realistic costs on implementing rail passenger service. Understating costs misleads decision-makers and it places Norfolk Southern in the unfair position of appearing to inflate the costs of a project. Far from overstating costs, we ask public agencies and their consultants to include costs and factors that will be required, but are frequently understated or overlooked. Let's include items we know will be necessary to passenger rail now to avoid surprising everyone unpleasantly in the future.

Studies must acknowledge that NS owns its corridors and is entitled to fair compensation for their use. We maintain them and we pay taxes on them. Please don't assume that the use of our capacity and our asset is "free". Instead, please acknowledge in your studies and reports that we are entitled to a fair return if you want to use the corridor for passenger trains.

We will require new passenger train service to pay higher use fees than Amtrak pays today. Please do not use "Amtrak incremental cost" factors in estimating the operating costs of new passenger services. Amtrak was entitled to special rights in return for relieving the freight railroads of intercity passenger train operation over thirty years ago. There is no relationship between the Amtrak rates and a fair, commercial return for use of private assets.

Passenger train operation must be "transparent" to our freight operations. We define transparency as the provision of sufficient infrastructure for passenger trains and freight trains to operate without delay to either, and to allow for the growth of both.

Delay to freight trains by passenger trains, however minimal, is unacceptable. Sufficient infrastructure must be furnished so that each type of train can operate without getting in the other's way. The common assumption that a proposed passenger train will impose "minimal interference with freight operations" is a non-starter.

Liability will be a major issue. Based on our experience with commuter authorities, the cost to the passenger carrier for indemnifying NS is substantial. We will accept no new or expanded passenger operations without adequate liability protection.

Cab signals for freight locomotives will be required if the top speed for passenger trains is above 79 mph. Be prepared to equip the NS freight locomotive fleet with additional cab signal and other safety apparatus, and to pay for and maintain any additional signal infrastructure required by speeds in excess of 79 mph.

Dispatching will remain with NS for all trains operating over NS tracks after inauguration of passenger service.

HIGH SPEED CORRIDORS

High-speed corridors require careful planning. If the federal government designates a corridor as "high speed", NS will automatically assume that mainline tracks dedicated solely to high speed trains will someday be built in the same corridor as our existing mainline tracks. Provisions must be made for the separate high-speed tracks throughout the corridor, especially in urban areas. Highway or railroad overpasses/underpasses, when built with public funds, must allow space for the additional tracks.

NS will require dedicated tracks for passenger trains operating in excess of 90 mph. No heavy-duty rail freight line has 110-mph passenger trains operating over it today. Where

freight trains do operate over 110-mph track (Northeast and Empire Corridors, for example), the penalties imposed on freight trains are substantial. In a heavy-duty freight environment (Cleveland-Chicago is one example), high-speed passenger trains must operate over tracks dedicated to their use.

Railroading is expensive. 110 mph railroading is very expensive. As most ridership analyses indicate, the greatest growth occurs with increases in frequency, not speed, which would seem to imply that four round trips a day at 79 mph are much more cost-effective than four round trips a day at 110 mph.

City of Newport News

Department of Engineering
2400 Washington Avenue
Newport News, Virginia 23607

Tel (757) 926-8611

Fax (757) 926-8300

OFFICE OF THE DIRECTOR

February 12, 2002

Virginia Department of Rail and Public Transportation
Attn: Alan Tobias
113 E. Main Street, Suite 300
P.O. Box 590
Richmond, VA 23218-0590

Re: Richmond – South Hampton Roads High Speed Rail Study

Dear Mr. Tobias:

The following will represent the City's comments to the Draft Ridership and Revenue Forecasting Report, Environmental Overview Draft Report and the Draft Executive Summary. Our primary issue focuses on the attempted comparison of this high-speed rail corridor with the Newport News-Richmond high-speed rail corridor. It was our understanding that this study was to focus on the feasibility of putting high-speed rail in the Route 460 corridor and to determine if there was a fatal flaw to the concept. If a comparison between the two rail corridors were needed, it would be scheduled in the future. This should continue to be the focus of the study with mention, for informational purposes only, of a high-speed rail corridor between Newport News and Richmond, which is presently served by twice daily Amtrak service at a maximum speed of 79 miles per hour that would compete for the Hampton Roads ridership.

If more historical information is needed about the Newport-News to Richmond corridor, please reference the I-64 Major Investment Study completed in June 1999. The rail component of the Locally Preferred Alternative consisted of a service frequency of eight trains per day per direction, a maximum operating speed of 110 miles per hour resulting in 66 minutes of travel time with stops at 6 stations or express service, stops at only 3 stations, of 53 minutes.

Draft Ridership and Revenue Forecasting Report

Page 4 – I assume Silver Star, Silver Meteor and Palmetto are the names of trains or train routes. I am not sure if there is some significance in naming the trains if you do not know anything about these trains or their routes versus just saying rail passenger surveys.

Page 5 – Income, is this per person, per household, median family, business income, or industrial income?

Page 7 – Highway Cost (full/incr) - What is full versus incr?

Page 10 Exhibit 8 – I would take out the comparison to Newport News-Richmond.

Page 11 Exhibit 9 – I would take out the Newport News-New York Trains and focus on the Norfolk trains. I assume the Base is existing and all the Alternatives are future.

Page 12 Exhibit 10 – Again I would focus on the Norfolk trains and take out the Newport News trains.

Page 13 Exhibit 11 – Again I would focus on the Norfolk trains and take out the Newport News trains. The only thing this table tells me is that maximum speed really is not a factor in travel time in the market so why even consider the significant expense of upgrading to 90 mph or 110 mph if there is no significant travel time saving? Focus on frequency versus speed.

Page 15 Exhibit 12 – Again I would focus on the Norfolk and Sunray station versus the Newport News and Williamsburg stations.

Page 17 Exhibit 13 – Define Passenger Miles, Train Miles, Ridership/Train Mile and Passenger Miles/Train Mile.

Page 18 Exhibit 14 – What does "incremental" mean in this table?

Page 23 Exhibit 19 – Again focus on the Norfolk station not Newport News.

Page 24 Exhibit 20 – Leave out the Newport News Corridor. Page 8 of the meeting handout seems to be a table of the same information but the information in the table is different. Which is correct?

A stronger point might be made of the desire for Hampton Roads passengers to reach a destination north of Richmond, the Northeast Corridor, and not Richmond itself. It must also be more strongly pointed out that there are limited slots of time available for rail passenger service from Richmond to the Northeast Corridor, thus limiting the number of direct trains from Hampton Roads to the Northeast Corridor, the desired destination.

Environmental Overview Draft Report

No comments.

Draft Executive Summary

Page 5 – Signaling. Additional discussion is needed here to give the reader an order of magnitude of the expense to upgrade the corridor and the equipment to be used on the corridor for high-speed service.

For this level of study I have no problem not making some decision over the routing through Petersburg. Suffice it to say as the study does that there is a viable route through Petersburg.

Page 12 – NS Main Line Between Petersburg and Suffolk. The study states, "...a primary goal of the study is that high-speed train operations be transparent to freight train operations." This cannot just mean adjusting passenger train travel around freight but adjusting freight around passenger travel such that both can function within the corridor. In the highway environment the mix between trucks and cars can be deadly so there has been some discussion to forcing trucks to make deliveries at night when car travel is at its minimum. So to, rail freight could move at night if passenger rail service was heavy during the day.

Page 15 – Alternative Terminal Locations. I strongly support the Downtown Norfolk station near Harbor Park. Sharing parking with the stadium, being near Downtown, access to the bus facilities and future light rail make this a great site if it can all be worked out.

Page 22 – The first paragraph states, "In all the scenarios, the service provided between Richmond and Newport News remains constant at current levels with two round trips per day and a maximum allowed speed of 79 mph. All scenarios assume that the proposed Hampton roads Crossing bridge/tunnel is not in place." The comparison with Newport News-Richmond should be eliminated, focusing just on the Norfolk-Richmond corridor, as the purpose of the study was not to perform a comparison between the two corridors but to see if the Route 460 corridor was feasible.

Page 27 – Need for further analysis. Presently the State prioritization of passenger rail service to Hampton Roads from Richmond is via Newport News. Further study is needed if this prioritization is to be changed or whether there is justification for both services.

Page 28 – I take exception to the second half of the last sentence. Parsons seems to be speaking for the Commonwealth, which it should not do.

For there to be any chance of political success or financial funding, the project will of course have to begin with 79 miles per hour service and limited frequency. Frequency should then be increased before attempting to increase speeds. In order to avoid spending money for capital improvements that have to be ripped out for higher speed service in the future, consideration should be given to implementing capital improvements for the 110 miles per hour service whenever financially feasible.

Dick Beadles, Virginia High Speed Development Committee, in his letter to you dated January 23, 2002, has a number of valid rail related comments and because of his vast rail experience, has stated them much better than I so I will not attempt to repeat them. I, however, am not ready to support getting a new consulting team, just making continuing modifications to the study and reports should be adequate.

Based on the comments from Bill Schafer, Norfolk Southern, the Route 460 rail corridor may have two fatal flaws. While the first is not fatal to rail passenger service, the extreme cost of 90 and 110 mile per hour service may be fatal to passenger service at speeds higher than 79 miles per hour. The second is only fatal if there is no way to run rail passenger service at any speed, at times and frequencies demanded by riders, in the corridor without impacting on freight rail service. It is critical that the two, freight and passenger rail, co-exist; both modes have to be flexible with the other.

Sincerely,

Mostafa A. Sabbah, Ph.D., P.E.
Director of Engineering

MAS:TMS:psb

pc: Special Projects Engineer, T. Slaughter

Virginia High Speed Rail Development Committee
5101 Monument Avenue
Richmond, Virginia 23230

April 17, 2002

Mr. Alan Tobias
VA Dept. of Rail & Public Transportation
1313 East Main Street, Suite 300
P. O. Box 590
Richmond, VA 23218-0590

Re: April, 2002 Version of Executive Summary,
RIC-SHR Rail Corridor Study by Parson Transp. Group, et. al.

Dear Alan:

Once again, and regrettably on my part, I have a schedule conflict and will not be able to attend the April 25 meeting of the Technical Advisory Committee relative to the Richmond - South Hampton Roads rail corridor study.

Although I do have some technical comments, which I will endeavor to get to you in advance of the meeting, I also have some "non-technical" comments and suggestions, which I believe to be of even greater importance.

Listed below are my summary conclusions and observations, based upon the above-referenced work product:

1. While I personally would not chose to use your "fatal flaws" characterization of this study and its findings, it is both remarkable -- and fortuitous -- that despite having to absorb unrealistically ***high*** (and probably unsupportable) freight train projections, ultra-conservative ***low*** passenger demand projections, and seemingly very generous preliminary engineering estimates, rail passenger service to South Hampton Roads turns out to be operationally feasible and quite cost-effective.

2. While further study and refinement will obviously be necessary in the future, such work is not, in my view, our highest priority as a next step.

3. Our most pressing need is to agree, as a region (Hampton Roads), that both sides of Hampton Roads warrant modern, direct, inter-city rail passenger service at the earliest possible date. We -- speaking of VHSRDC -- would hope that a consensus would emerge for achieving the foregoing, with the following stipulations: (i) that the Peninsula should be given first priority, and (ii) that the need to serve South Hampton Roads is more important to the Commonwealth than service to North Carolina, without prejudice to the latter.

4. This study, with all of its limitations and imperfections, makes it quite clear that the most prudent and cost-effective approach to achieving future high-speed rail development, regardless of how high, high-speed service is to ultimately be in the future,

and regardless of the desirability of having HSR-restricted rail trackage, is to start with 79-mph maximum ("conventional") rail passenger service. What is most important, in the beginning, is to have frequent departures, modern equipment, and user-friendly service that is highway competitive both as to convenience and travel time.

Note: I suspect that few non-technical readers of the report will automatically grasp that the projected 2025 condition (as to projected train traffic volumes) and > 79-mph speeds are the controlling "drivers" of cost estimates and "critical" freight rail interface hurdles.

5. Even without laying claim to natural disaster and Homeland Defense evacuation capabilities to be derived from implementation of the "5A" service levels, the estimated price tag for the projected service is a transportation bargain for Hampton Roads.

It is time we placed these issues squarely in the hands of the region's elected leaders, and other public-policy makers at both the State and Federal levels.

In my judgement, the very worst thing we could do would be to get bogged down in another premature technical study prior to making some fundamental policy decisions.

Bold leadership is needed.

Sincerely,

Richard L. Beadles, Vice President
VA High Speed Rail Development
Committee.

cc: Technical Committee e-mail list.

Richmond to South Hampton Roads High Speed Rail Feasibility Study

Prepared by

Parsons Transportation Group

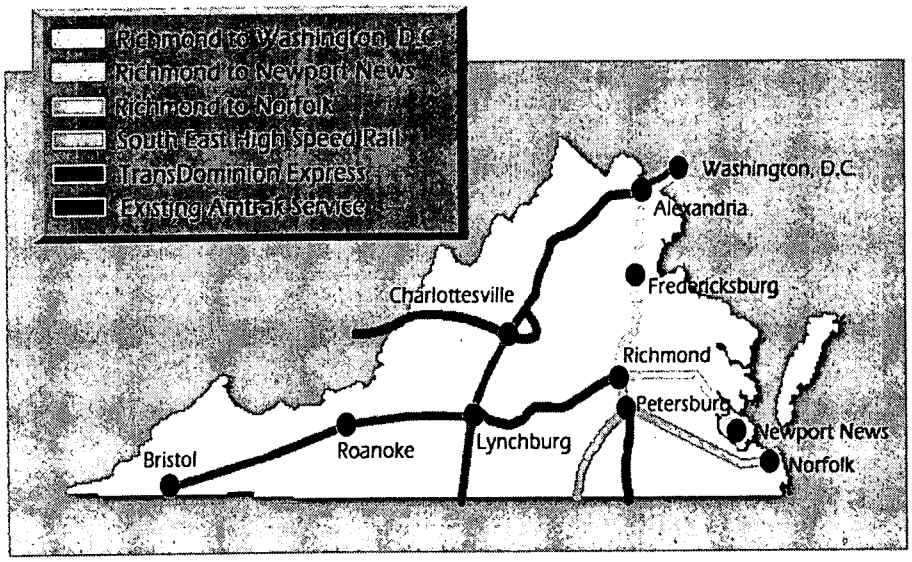
For

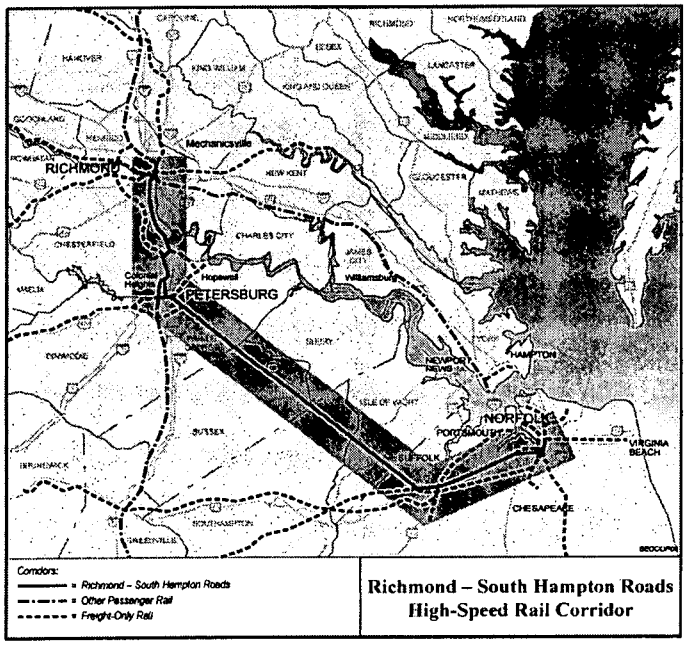
Virginia Department of Rail and Public Transportation

DRPT
Leading Virginia to Greater Mobility
Department of Rail and Public Transportation

April 2002

Virginia Rail Passenger Service Plan





Richmond – South Hampton Roads High-Speed Rail Corridor

Major Tasks

"Fatal Flaws" analysis of service in the U.S. Route 460 corridor to determine if high speed rail service is feasible.

- **Task 1** – Engineering
- **Task 2** – Environmental Overview
- **Task 3** – Ridership and Revenue Forecasting

Study Findings

- High speed rail service is feasible in the study corridor if a substantial investment is made in the rail infrastructure.
- Total estimated cost: $236 Million.
- Recommended route includes stations in Petersburg, Bowers Hill and Norfolk – Harbor Point.
- Frequency of service has more impact on ridership than increased speed.

Study Recommendations

- Additional study is needed to determine a preferred routing through Petersburg.
- Additional marketing analysis is needed to determine the relative benefits of improved service on the Peninsula and new service to South Hampton Roads.
- A phased implementation plan should be developed.
- Operating costs need to be developed.
- Further negotiations with the railroads is needed.

L'Enfant Plaza Station Study

Prepared by

Parsons Transportation Group

Under the Direction of the

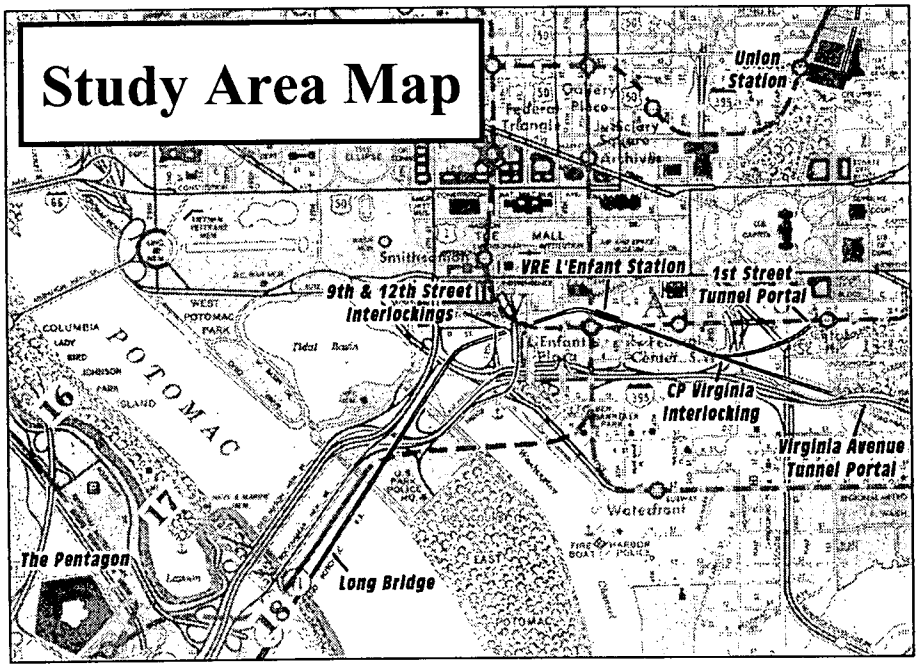
Virginia Railway Express

And the

Virginia Department of Rail and Public Transportation

March 2002

Study Area Map



Issues Addressed in Study

- Need for a freight lead track into the Virginia Avenue Tunnel.
- Need for platforms serving both passenger tracks leading into 1st Street Tunnel.
- Need for additional platform capacity to handle existing and projected passenger loads.

Issues Addressed in Study
(Continued)

- Need to provide capacity for possible MARC/VRE run-through service
- Need to provide direct access from VRE station to Metro station

Existing Conditions

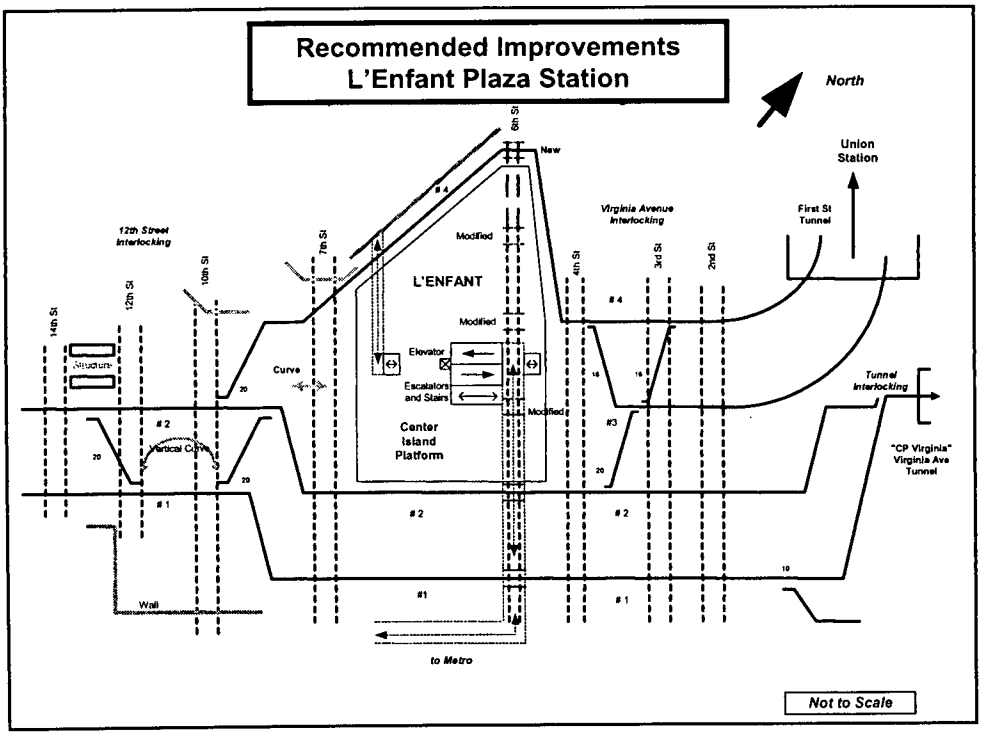
- Two tracks in area are insufficient to handle existing freight and passenger service.
- Construction of 3rd track – freight lead to Virginia Avenue tunnel – is included in the Memorandum of Understanding.
- VRE's side platform limits flexibility of service by commuter trains.

Existing Conditions
(Continued)

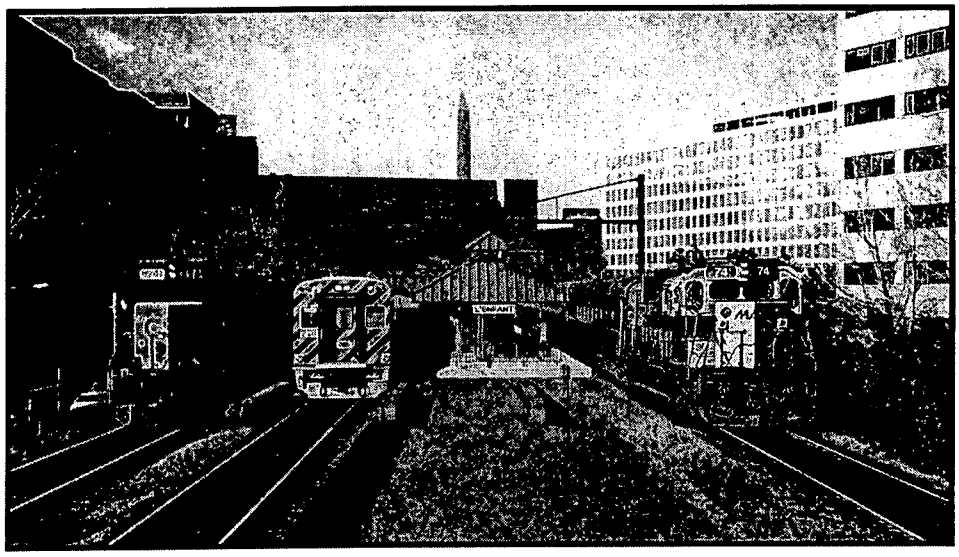
- Access to Metro station is indirect using city streets and sidewalks.
- L'Enfant Plaza station will be key destination of the proposed VRE/MARC run-through service.

Recommended Improvements

- 900-foot long, 44-foot wide center island platform
- High level platform
- Installation of escalators
- Street level access east & west of 6th Street
- 6th Span added to 6th Street bridge
- Cost of Rail improvements: $3.7 M
- Cost without direct Metro access: $23.7 M
- Cost with direct Metro access: $42.1 M



View of Proposed Station



Memorandum of Understanding

Improvement and Service Enhancement Schedule

PHASE	PROJECTS	TRAINS ADDED	DATE
I	■ AF Interlocking	■ Special Mid-Day VRE Train M-Th ■ 1 Regular Mid-Day VRE – F only	4Q '01
II	■ L'Enfant 3rd Main ■ Arkendale Crossovers	■ 1 Regular Mid-Day VRE Train M-F	1Q '03
III	■ Franconia 3rd Main ■ Consolidation of Dispatch Functions	■ 1 Round Trip Fredericksburg VRE Train	4Q'03
IV	■ SRO-RO 3rd Main ■ Fredericksburg-XR 3rd Main ■ Ellet Crossovers ■ Completion of Quantico Bridge	■ 1 Round Trip Manassas VRE Train ■ 1 Round Trip Fredericksburg VRE Train	4Q '04

Amtrak Acela Holding Its Own

Fri Apr 12, 4:57 AM ET

By JUSTIN POPE, AP Business Writer

BOSTON - Seven months after the terrorist attacks, Amtrak's high-speed Acela Express train appears to be running neck-and-neck with the Delta and US Airways shuttles along the heavily traveled Boston-to-Washington corridor.

Backed-up airport security lines, fear of flying, and the comforts of the new train are among the reasons given for the steadily growing number of business travelers trying the 15-month-old Acela service.

The train, which serves Boston, New York and Washington, got a big boost after Sept. 11. And according to the best available records from Amtrak and the airlines, the advantage appears to be holding, with the shuttles yet to rebound fully from the terrorist attacks.

The attacks, though tragic, "did give us the opportunity to showcase our product and the amenities we offer," said Amtrak spokeswoman Karen Dunn. She said Acela ridership is 5.5 percent ahead of projections for the current fiscal year.

Still, Acela's initial projections of 3.9 million annual riders at full capacity look rosy. And nobody knows how Acela Express will fare once the novelty wears off and airport lines shrink. Amtrak also faces enormous financial problems.

Acela ridership stood at 96,037, or 218 passengers per train, in August, the month before the attacks. It jumped to 201,176, or 340 per train, in October, according to Amtrak figures. The numbers dipped in the fall as the airlines rebounded and Reagan National Airport near Washington reopened, but they passed 200,000 again in February and last stood at 219,917, or about 300 per train.

There are 304 seats on every Acela train. Ridership can be higher than 304 because some seats are used more than once as passengers get on and off at various points.

The airlines do not release shuttle statistics, but Bureau of Transportation Statistics filings show that last December, Delta and US Airways reported 215,366 passenger boardings on the shuttle routes, down from 330,040 in December of 2000.

Airline figures for the first three months of this year are not available. But both airlines acknowledge that traffic remains below its pre-Sept. 11 level.

The airlines are trying to respond.

US Airways spokesman David Castelveter said an express security line has passenger check-in down to 20 minutes. Delta is tripling its number of electronic check-in kiosks and rebuilding its shuttle terminal in Boston.

"We need to convince our customers that the airport experience really is something that can be hassle-free," Castelveter said.

Acela Express trains use an advanced tilting system to take turns at higher speeds. But because of track conditions, they reach 150 mph for only 18 miles in Rhode Island and Massachusetts, and go no faster than 135 mph between Washington and New York.

That cuts less than 30 minutes off both routes, compared with Amtrak's more conventional trains, to about three hours, 30 minutes on the New York-Boston run and 2:44 between New York and Washington. So Amtrak has tried to lure customers with comfortable seats, leg room and audio outlets.

Amtrak runs 10 daily Acela Express round-trips between New York and Boston and 13 between Washington and New York. The airlines offer 14 to 17 round-trips daily.

A next-day, same-day return Acela ticket between Boston and New York cost $236 on Amtrak's Web site this week. A comparable flight on both airlines cost $411.

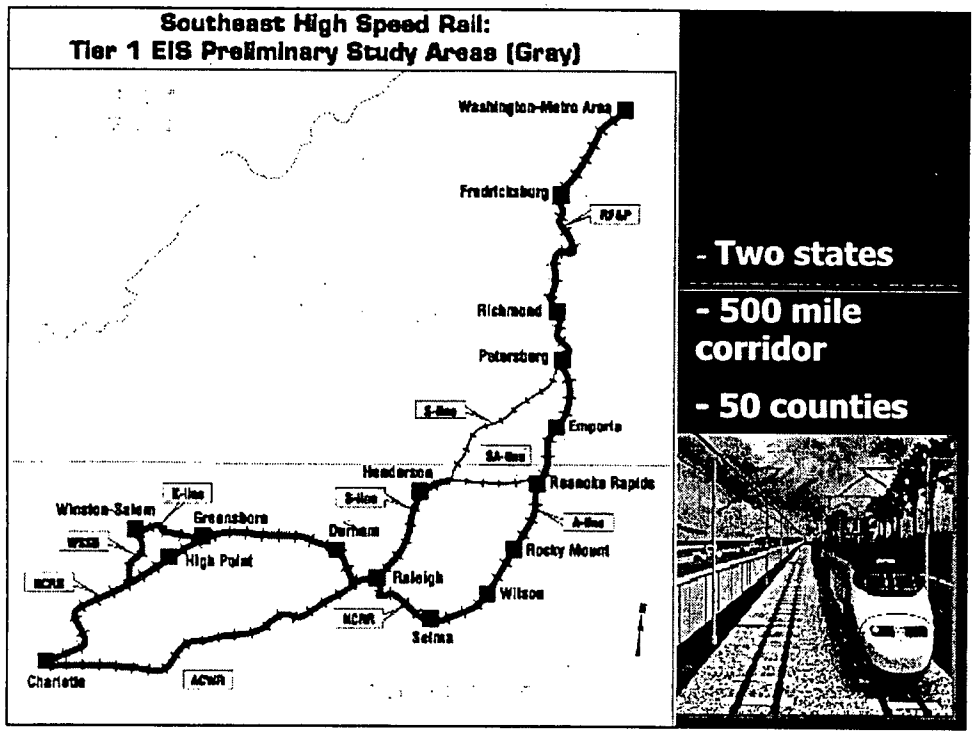
For business travelers, Sept. 11 altered the train-versus-plane equation.

"It boils down to, `How much time is it going to take when I leave my office in Boston to when I arrive in New York?'" said Thomas Nulty, president of Navigant International, an Englewood, Colo.-based company.

Kevin Mitchell, chairman of the Business Travel Coalition, said research shows that among business travelers who have cut back flying 25 percent or more, 56 percent cited airport hassles as the No. 1 reason, followed by costs at 27 percent. Safety was a distant third.

David Loevner, a money manager at a Somerville, N.J., company, said it was both a "spirit of adventure" and long lines at the airport that led him to try Acela on a recent trip to Boston. He found room to work, a "quiet" car for those seeking tranquility, and a voucher for free travel that almost made up for a two-hour delay.

He called it a good experience, "even if you don't want to work, if you just want to nap or look out the window and reflect."

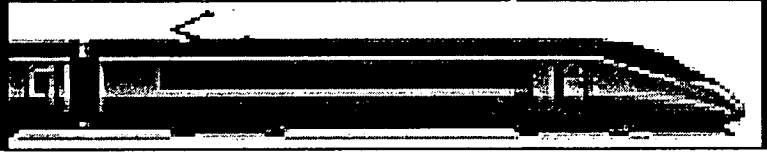


Purpose and Need

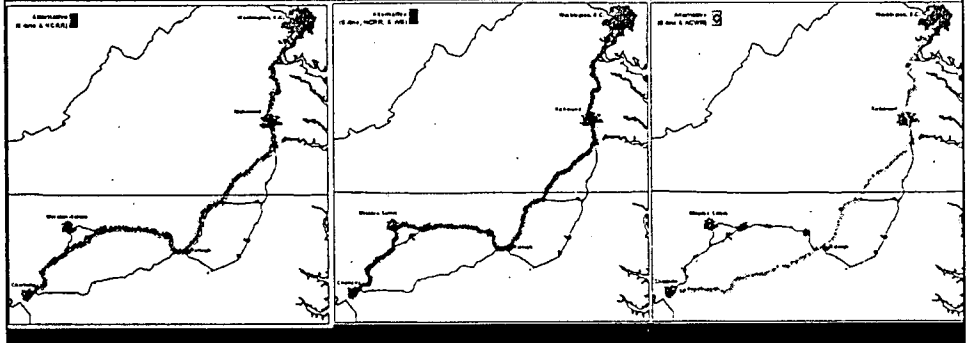
- Improved transportation choices
- Ease existing and future congestion
- Improving safety and energy effectiveness
- Reducing air quality emissions
- Improving transportation efficiency with a minimum of environmental impacts

Approach

- Incremental upgrade of existing system
- Fossil fuel locomotives
- 110 mph maximum authorized speed
- Four round trips per day between Charlotte and Washington
- Four additional round trips per day between Charlotte and Raleigh

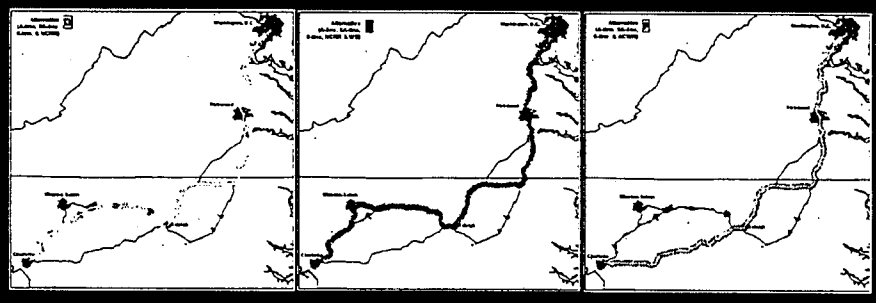


Study Area Alternatives



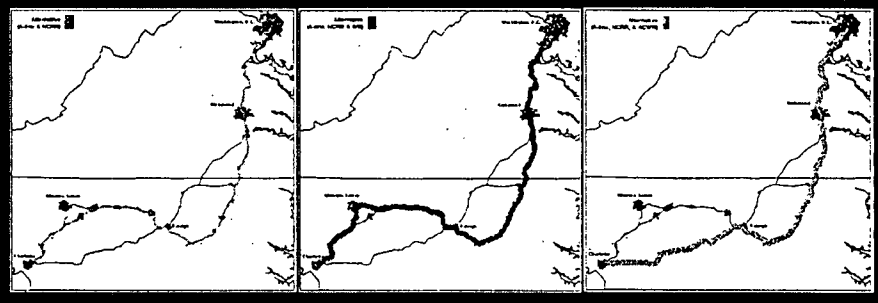
Alternative A	Alternative B	Alternative C
S-line + NCRR	S-line + NCRR + WS	S-line + ACWR

Study Area Alternatives



Alternative D	Alternative E	Alternative F
SA-line + NCRR	SA-line + NCRR + WS	SA-line + ACWR

Study Area Alternatives



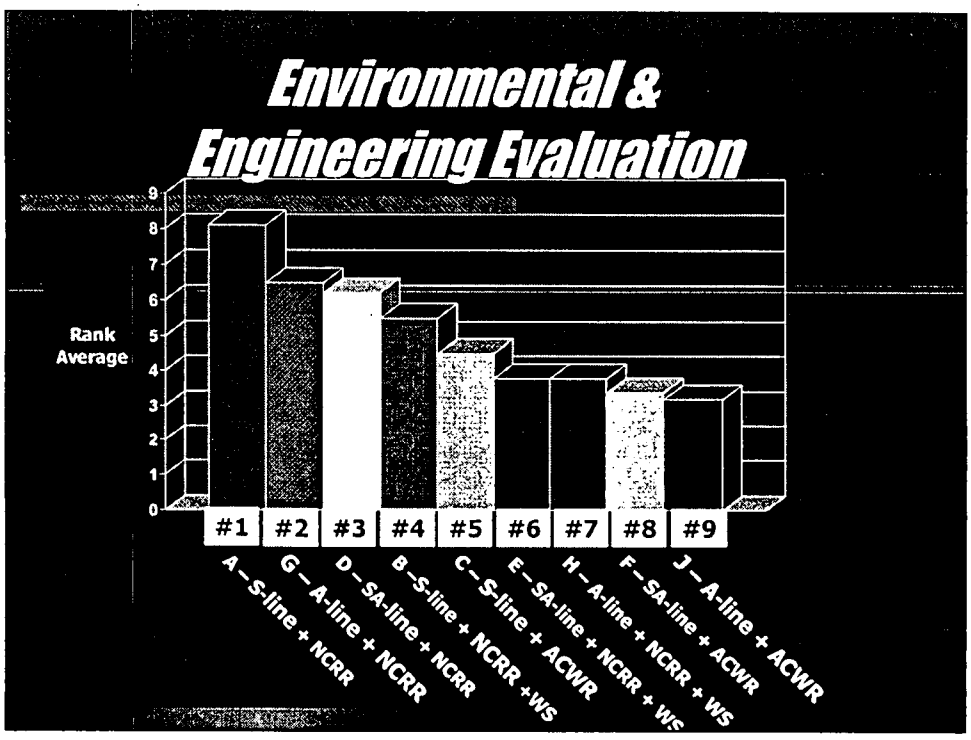
Alternative G	Alternative H	Alternative J
A-line + NCRR	A-line + NCRR + WS	A-line + ACWR

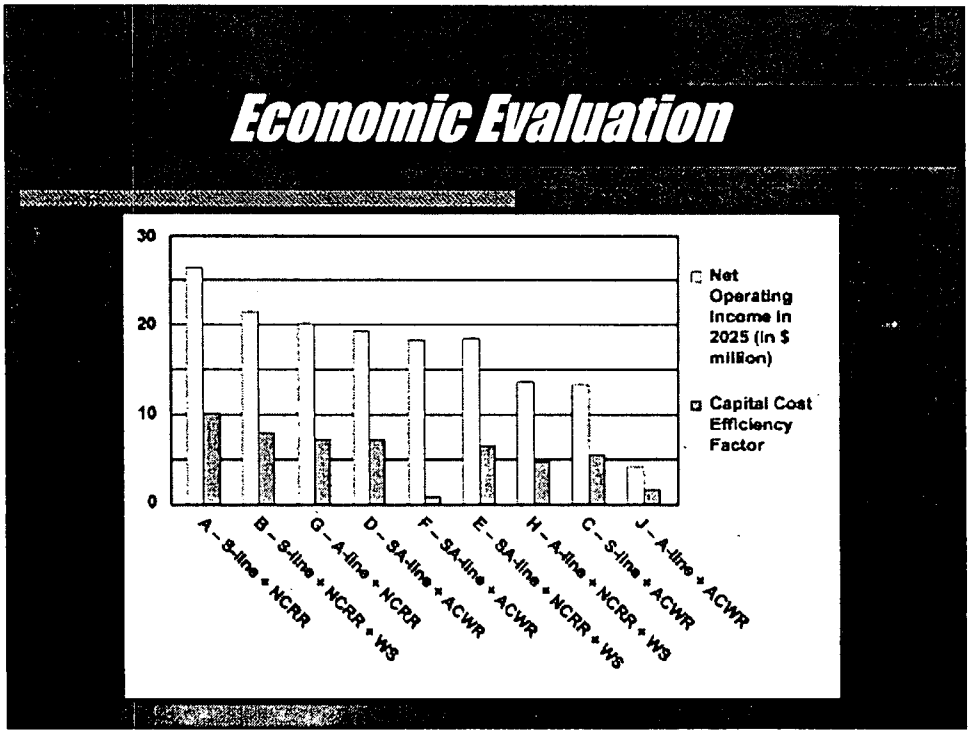
Evaluation Approach

- Environmental issues
- Engineering issues
- Economic viability
- Public & agency input

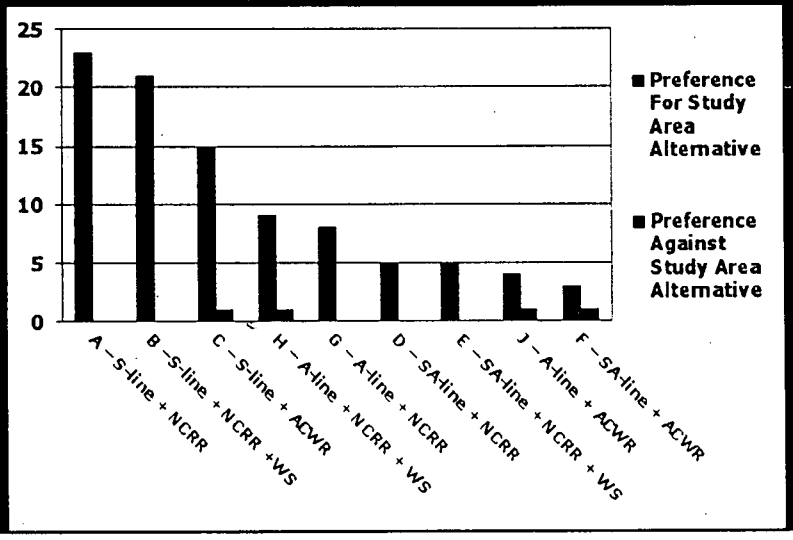
Evaluation Approach

Key Purpose and Need Factors	*Criteria For Assessment*
Improved transportation choices	• Annual ridership • Possible breakout of potential ridership
Ease existing and future congestion	• Annual diversions in 2025
Improving safety and energy effectiveness	• Net energy reduction • At grade crossings – number and condition
Reducing air quality related emissions	• Air Quality – Reduction in NO_x
Improving transportation system efficiency, with a minimum of environmental impacts	• Average total travel time • Net operating income • Capital cost efficiency factor • Environmental complexity index • Engineering/Operations complexity index


Environmental & Engineering Evaluation
Rank Average
0
1
2
3
4
5
6
7
8
9
#1
#2
#3
#4
#5
#6
#7
#8
#9
A – S-line + NCRR
G – A-line + NCRR
D – SA-line + NCRR
B – S-line + NCRR +WS
C – S-line + ACWR
E – SA-line + NCRR + WS
H – A-line + NCRR + WS
F – SA-line + ACWR
J – A-line + ACWR

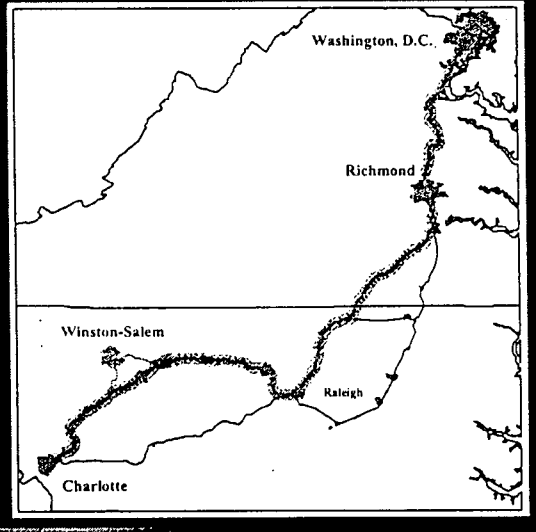

Economic Evaluation
0
10
20
30
Net Operating Income in 2025 (in $ million)
Capital Cost Efficiency Factor
A – S-line + NCRR
B – S-line + NCRR + WS
G – A-line + NCRR
D – SA-line + ACWR
F – SA-line + ACWR
E – SA-line + NCRR + WS
H – A-line + NCRR + WS
C – S-line + ACWR
J – A-line + ACWR

Public/Agency Input

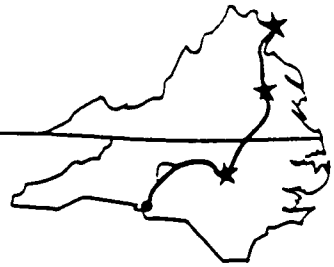


Recommended Alternative " A plus"

(Alternative A plus Alternative B)



SOUTHEAST HIGH SPEED RAIL www.sehsr.org
c/o NC Department of Transportation
1553 Mail Service Center, Raleigh, NC 27699-1553
919-733-4713



Date: March 21, 2002

Contacts: Julia Hegele, NCDOT 919-733-4713 ext. 247
Tamara Neale, VDOT 804-786-6458

Route selected for high-speed trains in the Southeast

Trains traveling up to 110 miles per hour from Washington, D.C. to Charlotte, North Carolina came one step closer to reality today as North Carolina Transportation Secretary Lyndo Tippett and Virginia Transportation Secretary Whitt Clement announced the preferred route for the Southeast High Speed Rail Corridor.

Following nearly three years of intensive environmental study and significant public involvement, the secretaries announced the two states would work together to develop high-speed rail from Washington, D.C. to Richmond, South Hill, Henderson, Raleigh, Greensboro and Charlotte. The route also will include a connection to Winston-Salem.

"Communities throughout both states expressed enthusiastic support for the project and told us they want high-speed rail," said Tippett. "But nowhere was that support more obvious than in the Winston-Salem area. It makes good economic sense to include them."

The environmental study evaluated nine possible routes examining potential impacts on air quality, wetlands, historic sites, parks, communities and businesses. The report also assessed the engineering feasibility, revenue, ridership, costs, public and agency input for each alternative. The analysis indicates the route that stretches from Washington, DC to Richmond, South Hill, Henderson, Raleigh, Greensboro and Charlotte would have the best potential for high-speed rail service while having the fewest environmental impacts. Strong potential ridership and cost-recovery, along with tremendous public and business support, lead the departments to include a connection to Winston-Salem, as well.

"Today's corridor selection marks a critical first step to bring high-speed rail to the Southeast," said Clement. "Although this project has a long way to go before going to construction, we are moving in the right direction to provide more travel options to the public, help ease future congestion and improve overall transportation efficiency within this busy corridor."

The North Carolina Department of Transportation and Virginia Department of Rail and Public Transportation held 52 information workshops, 18 formal public hearings and 14 small group meetings to discuss the project and solicit public input. The agencies also conducted numerous interviews with community leaders in both states. More than 80 percent of the feedback from both states indicated support for high-speed rail. Mayors, Chambers of Commerce and other business groups echoed that support and worked together to tout the economic and quality-of-life benefits of a high-speed rail system.

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SOUTHEAST HIGH SPEED RAIL

Study Area Alternatives

Recommendation Report

Southeast High Speed Rail

Tier I, Draft Environmental Impact Statement

Date of Approval	Secretary Whittington W. Clement, VDOT
Date of Approval	Secretary Lyndo Tippett, NCDOT

March 5, 2002

Executive Summary

The proposed Southeast High Speed Rail (SEHSR) project involves the development, implementation, and operation of high speed passenger rail service in the approximately 500-mile travel corridor from Washington, DC through Richmond, VA and Raleigh, NC to Charlotte, NC.

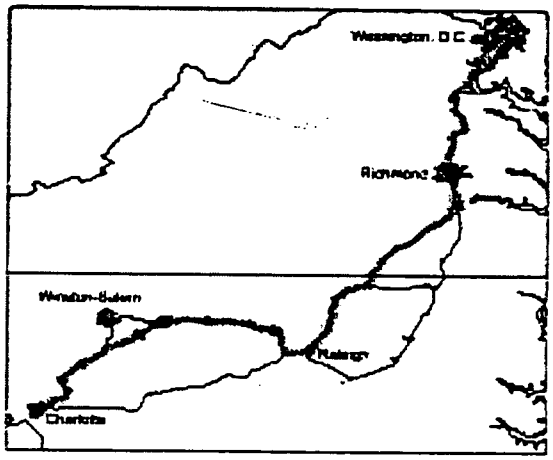
A 10-year long alternatives development process resulted in the identification of nine alternatives. The impacts to both the human and natural environments were minimized by utilizing the existing rail infrastructure and rail rights-of-way. The initial capital investment required by the system was also minimized by using existing infrastructure. The purpose of the proposed SEHSR project is to reduce travel time for intercity passenger rail service.

In August 1999, the North Carolina Department of Transportation Rail Division (NCDOT) and the Virginia Department of Rail and Public Transportation (VDRPT) initiated a tiered environmental study process of the nine alternatives. In August 2001, the agencies, in cooperation with the Federal Railroad Administration (FRA) and the Federal highway Administration (FHWA), issued a Tier I Draft Environmental Impact Statement (DEIS) on the project. This report summarizes the key findings and comments on the DEIS and identifies the recommended alternative for the Final Environmental Impact Statement (FEIS). The Tier I DEIS is a regional/statewide study, not corridor specific, and as such does not seek agency permits. Following issuance of the FEIS and the Record of Decision (ROD), Tier II studies will commence at the local/corridor level of the recommended alternative and address appropriate environmental and engineering factors.

After a comprehensive analysis of the DEIS and the comments received on it, NCDOT and VDRPT have identified Alternative A (NCRR & S-line), modified with passenger connectivity to Winston-Salem (Alternative B) as the alternative that best meets the project's purpose and need while minimizing environmental impacts (hereafter termed "Alternative A-Plus"). The agencies also recommend that the Alternative A portion be developed first and that the Alternative B portion be developed in conjunction with the efforts of the Piedmont Authority for Regional Transportation (PART), as appropriate. PART is responsible for coordinating the regional transportation system in the counties around the Winston-Salem connection. The reasons for the selection of the Alternative A-Plus include:

- Minimizes potential impacts to wetlands and threatened & endangered species, with moderate levels of potential environmental complexity, and strongest agency support, while providing;
- The highest level of service: highest projected annual ridership, largest combined trip diversions from auto and air to rail, with competitive total travel time;
- Second best net reduction in NO_x emissions and overall net energy use reduction;
- Best operating cost recovery; and
- Highest level of public support.

Figure 1
Recommended Alternative
A-Plus (Alt. A + Alt. B)



Although not a part of the SEHSR corridor recommendation, staff recommends the continued support and facilitation of conventional service along the existing Amtrak route from Raleigh to Richmond (A-line through Rocky Mount, NC), and the protection of the southern route (the ACWR) for potential future development.

Project Description

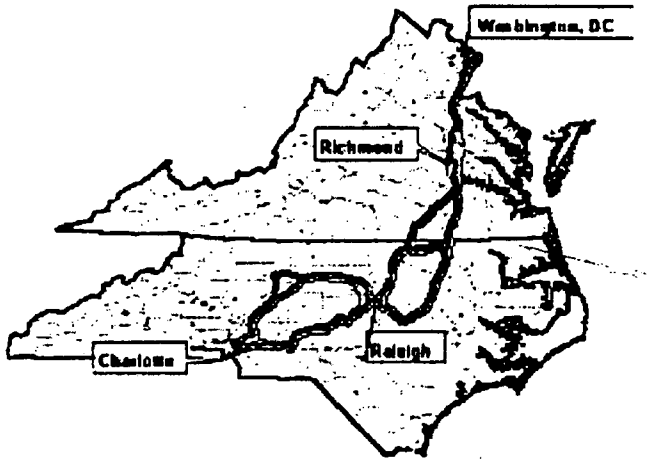
The proposed Southeast High Speed Rail (SEHSR) project examines corridors connecting Washington, DC to Charlotte, NC, via Richmond, VA and Raleigh, NC for the purpose of implementing higher speed passenger rail service. The corridors consist of existing railroad rights-of-way. Because these are shared corridors, any implementation of higher speed passenger rail service must also facilitate freight movement and other existing uses of the corridors.

The primary motivation for the proposed rail service is captured by the following key statements from the Purpose and Need sections of the DEIS:

- Providing the traveling public – particularly special populations such as the elderly and the disabled – with improved transportation choices;
- Helping ease existing and future congestion (air, highway, passenger rail) within the corridor;
- Improving safety and energy effectiveness within the transportation network;
- Reducing the overall air quality related emissions per passenger mile traveled within the corridor; and
- Improving overall transportation system efficiency within the corridor, with a minimum of environmental impact.

Figure 2 shows the combined study areas for the SEHSR.

Figure 2
SEHSR Study Area



Background and Legislative History

The proposed SEHSR project is part of a plan by the US Department of Transportation (USDOT) and the states to develop a nationwide high speed rail network. Authorization for a program of national high speed rail corridors was included in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA-PL 102-240, Section 1036) and continued in the Transportation Equity Act for the 21st Century (PL 105-178, Section 7201). In 1992, the USDOT designated the SEHSR Corridor as one of five original national high speed rail corridors.[1] Further extensions to the corridor in 1998 added connections into South Carolina, Georgia, and Florida.[2]

Since the initial corridor designation, the Federal Railroad Administration (FRA) and the Federal Highway Administration (FHWA) have worked with North Carolina and Virginia to facilitate development of rail transportation options. In early 1998, FRA, FHWA, NCDOT, and VDRPT entered into a joint Memorandum of Understanding to coordinate and document each agency's respective roles and responsibilities in developing environmental documentation of the rail programs in both states.

The SEHSR program is identified for funding in the FY 2000-2006 NCDOT Transportation Improvement Plan and in the Virginia Department of Transportation (VDOT) FY2000-2005 Six-Year Improvement Program. Both Virginia and North Carolina have conducted specific studies to plan for high speed rail.[3] In addition, both states are undertaking improvements along some routes under study to address existing conventional passenger and freight rail needs in safety and operations.

Project Approach

Based on the findings of earlier feasibility studies[4], NCDOT, VDRPT, FRA, and FHWA, focused on Incremental High Speed Rail (HSR) to formulate and analyze the SEHSR project in the DEIS.[5] This approach minimizes the impacts to both the human and natural environments by utilizing the existing rail infrastructure and rail rights-of-way. By using existing infrastructure, the initial capital investment required by the system is also reduced.

Although the rail facilities already exist in most locations, the Incremental HSR approach would require improvements at various locations within the travel corridor. These improvements would accommodate higher passenger train speeds and increase the capacity of the infrastructure to

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[1] The designated corridor extended from Washington, DC to Charlotte, NC via Richmond, VA and Raleigh, NC. This designation allowed federal monies to be spent on improvements to the existing rail system in order to achieve high speed rail service.

[2] The USDOT designated an extension of the SEHSR from Richmond to Hampton Roads in 1996. In 1998, the USDOT extended the corridor into South Carolina, Georgia, and Florida. Further extensions in 2000 added corridor connections in Georgia and Florida.

[3] Examples of studies conducted include:

The Transit 2001 Commission, North Carolina, appointed in September 1995 (recommendations for improving public transportation in the 21st century; resulted in goal to reduce rail travel times between Raleigh and Charlotte to two hours from 3.75 hours).

Potential Improvements to the Washington – Richmond Corridor, FRA, 1999 (establishment of infrastructure improvements needed to accommodate mix and volume of services projected for 2015).

Washington, DC to Richmond, VA Passenger Rail Study, VDRPT, 1995 (evaluation of future demand, revenues, needed improvements, and cost projections for alleviating congestion and implementing high speed rail).

Preliminary Engineering and Feasibility Study for Additional High Speed Track, Washington, DC to Richmond, VA to the North Carolina State Line, VDRPT, 1992.

[4] Feasibility Study Summary & Implementation Plan, NCDOT – Rail Division, April, 1999.

[5] High Speed Ground Transportation for America, US DOT – Federal Railroad Administration, September 1997.

handle additional passenger and freight rail traffic. This incremental approach for SEHSR would utilize fossil fuel train sets capable of speeds up to 110 mph where safe and practical.[6]

Since the SEHSR could potentially be funded with federal funds and may require federal permits, the Environmental Impact Statement (EIS) process was required, pursuant to the National Environmental Policy Act (NEPA). Because of the magnitude of the study area and the conceptual level of project detail, the NCDOT, VDRPT, and the federal partners chose a Tiered EIS[7] as the appropriate process for environmental documentation.[8]

The SEHSR Tier I Draft EIS provides an overview of the travel corridor and study area alternatives. Approved state transportation plans and programs were the primary context for the transportation analysis. Environmental data was derived from the most current, readily available sources and used to analyze potential environmental impacts within the study area. Based on the findings and recommendations contained in the Tier I document and the Record of Decision, subsequent, more detailed Tier II analysis and documents will be completed as appropriate for the proposed actions.

Agency Coordination and Public Involvement

Together, the NCDOT Rail Division and VDRPT worked with federal agencies, freight railroad companies, state resource and regulatory agencies, and the public to allow for early and on-going input on the SEHSR project.

At the federal level, FHWA and FRA were chosen as the lead federal transportation agencies. Because of an existing Memorandum of Agreement (MOA) in Virginia, the US Coast Guard, the US Army Corps of Engineers, and the US Fish & Wildlife Service agreed to participate as formal cooperating agencies. A Notice of Intent to prepare a Tier I Environmental Impact Statement was published in the Federal Register on August 5, 1999.

The SEHSR team developed a scoping process to gather input from federal and state agencies with areas of responsibility relevant to the project and from the public who are in some way affected by the project. The SEHSR Tier I EIS scoping process was composed of the following:

- Informal communications with agencies about the project – regulatory and resource agencies received informal letters and phone calls in July 1999 to introduce the project concept, prepare for the upcoming tiered EIS process, and provide an early chance to ask questions, seek clarification, and provide input.

[6] High Speed Ground Transportation (HSGT) has been defined by the United States Department of Transportation (USDOT) as ground transportation service that is time competitive with air and automobile travel on a door-to-door basis, in the range of 100 to 500 miles. Source: *High Speed Transportation for America*, USDOT – Federal Railroad Administration, September, 1997.

[7] As described in 23CFR 771.111[g] and CEQ regulations 1502.20 & 1508.28.

[8] When conducting an environmental impact analysis, two types of documents can be developed: a program-level document or a project-level document. A program-level document (Tier 1) is typically performed when a large physical area is being addressed for a proposed project, or when a new program is being introduced that may have far reaching effects. A program-level document typically looks at general environmental conditions and general levels of impact. This is because site-specific details have not yet been identified or designed. A project-level document is performed when a specific project is being looked at in detail. Under this type of analysis, detailed impacts are quantified and analyzed and potential mitigation measures are identified. Sometimes a broad, general document (Tier I) is followed by a number of more detailed documents (Tier II). This is called a tiered approach.

- Formal joint bi-state scoping meeting – a full project overview was presented at the joint bi-state scoping meeting on October 12, 1999. The input from this meeting, provided by oral comments and written comments submitted after the meeting, helped to direct the study efforts of the project team.

- Information briefings and small-group meetings – meetings for regulatory and resource agencies were held in both states to familiarize them with the project and to obtain their input on their key issues. Small group meetings were also held with interested organizations along the corridor in both states.

- Written data and input requests – written requests for data regarding planning efforts within the study area were made of planning directors and school boards. Coordination with State Historic Preservation Officers (SHPOs) was conducted mainly through telephone conversations and meetings.

- The formation of an Advisory Committee – an advisory committee was formed to facilitate sound decisions and to insure input from a broad range of stakeholders in both states (Metropolitan Planning Organizations; Planning District Commissions; local, state, and federal transportation officials; Amtrak; freight railroads; and regulatory and resource agencies). The Committee met in March 2000 to receive a project overview, to ask questions, and to provide input. It reconvened in November 2000 for review and input concerning the Draft *Purpose & Need Statement* and the Draft *Study Area & Modal Alternatives Analysis* Report, and again in late July/early August 2001 to review the DEIS. In December 2001, the Committee met for a review and discussion of the Tier I DEIS key findings and recommendations. The Committee has also reviewed this Recommendation Report.

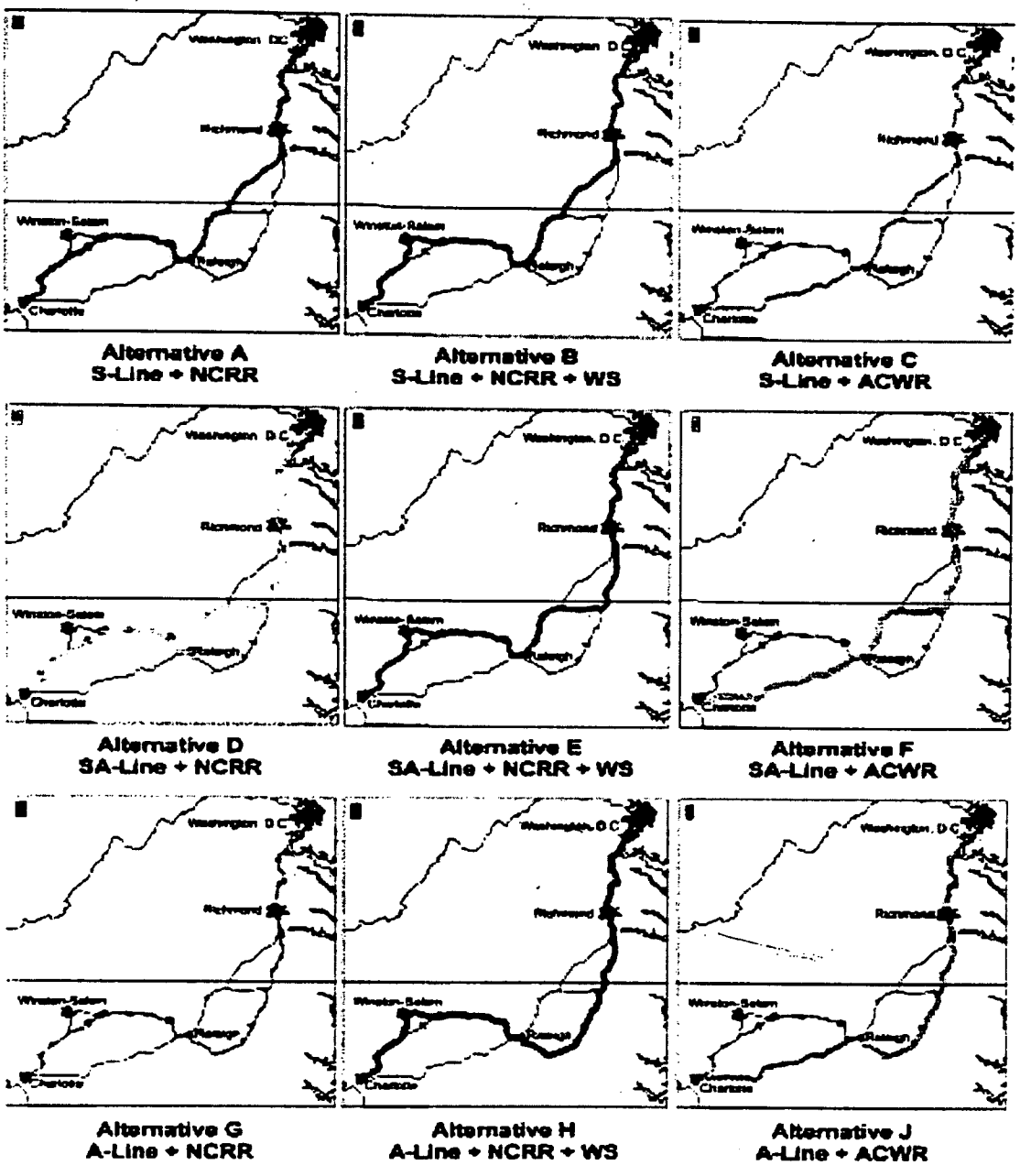
- Public Involvement Program – a proactive public involvement program was conducted to ensure the integration of community feedback through the entire process. The public involvement program will continue to function throughout the life of the project. Pre-DEIS public involvement in the study area included:

    - Almost 7,000 people were contacted, in order to complete a 1,200-sample public opinion survey to determine opinions and concerns about potential high speed rail service and to help shape outreach approaches and techniques.
    - Direct mailings were sent to more than 225,000 addresses along the corridors in both states.
    - Twenty-six public workshops were held to provide a project overview and to view display maps of the entire study area, as well as detailed maps related to specific workshop locations.
    - Community outreach tools, including the SEHSR Web site, project hotline, mobile display units, newsletters, and fact sheets were developed to inform the public about the project.
    - Media outreach was extensive, including media kits, follow-up calls, and editorial board briefings, to increase the visibility of the project.
    - Community outreach research was comprised of environmental justice analysis and community leadership interviews to develop strategies to involve underrepresented groups in decision-making.
    - Public feedback was recorded at workshops, through the project hotline, mail-in comment forms, and in interviews.

Study Area Alternatives

Based on previous feasibility studies, and the interactive scoping process, the states with their federal partners identified nine study area alternatives and a "no build" scenario. The study area alternatives are approximately six miles wide[9] and centered on existing rail rights-of-way as shown in Figure 3 below.

Figure 3
Study Area Alternatives

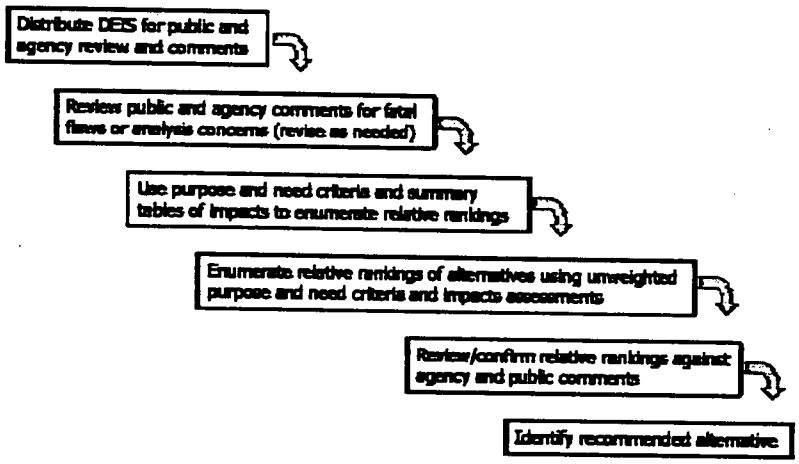


[9] An exception to the 6 mile width is the study corridor north of Richmond VA up to Doswell VA. Here the study area includes both the old C&O line and the old RF&P main line. Only the RF&P was used for analysis.

PROCESS FOR EVALUATING STUDY AREA ALTERNATIVES

To evaluate the study area alternatives and determine a preferred alternative(s) for recommendation in the Final Environmental Impact Statement, the following "waterfall" process was used:

Figure 4
Process for Evaluating Study Area Alternatives



The "waterfall" process was a methodical and sequential means for:

1. Receiving and addressing comments (public, freight railroad, agency, etc.);
2. Correcting for fatal flaws in the analysis or for disqualifying an alternative (as appropriate);
3. Using the purpose and need criteria and the summary table of impacts to enumerate the relative rankings of the nine alternatives;
4. Reviewing the relative rankings of the alternatives against comments received; and
5. Identifying the recommended alternative.

The first step of the evaluation process begins in the next section with a discussion of the extent of public and agency comments.

Public Comments

Up to the release of the DEIS in August 2001, public comments were recorded at workshops, through a hotline, with mail-in comment forms, and in interviews. Between 500 and 600 comments were received. Over 250 of these were substantive feedback, e.g. identification of community concerns. The remaining comments were requests for further project information. The types of issues brought forth through public feedback include:

- Safety, noise, vibration, and impact on property values,
- Mix of commuter and freight rail and increased congestion,
- Access to high speed passenger rail service, and
- Impact on tourism and preservation of historic districts.

In August, 2001, the DEIS was made available to the public and other interested parties for their review and comment at 18 locations. Public hearings on the Tier I DEIS were also held in these cities. The Executive Summary of the DEIS was available on the project web site, and CD's of the full document were made available upon request. The following table shows dates and cities of public hearings and viewing locations for the DEIS document.

Table 1
Public Hearing and DEIS Viewing Locations

Hearing Date	City and Viewing Location	Hearing Date	City and Viewing Location
9/18/01	Durham, NC NCDOT Division 5 Office	10/23/01	Salisbury, NC NCDOT Division 9, District 1 Office
9/20/01	South Hill, VA South Side Planning District Commission	10/25/01	Emporia, VA Emporia City Hall
9/25/01	Sanford, NC Lee County Manager's Office	10/30/01	Winston-Salem, NC NCDOT Division 9 Office
9/27/01	Wilson, NC NCDOT Division 4 Office	11/1/01	Greensboro, NC NCDOT Division 7 Office
10/2/01	Roanoke Rapids NCDOT Division 4, District 1 Office	11/7/01	Richmond, VA VDOT Office, Colonial Heights, & the Richmond Planning District Commission
10/9/01	Henderson, NC NCDOT Division 5, District 3 Office	11/8/01	Petersburg, VA Crater Planning District Commission
10/11/01	Springfield, VA Northern Virginia District Office	11/13/01	Raleigh, NC NCDOT Division 5, District 1 Office
10/16/01	Star, NC Star Municipal Building	11/20/01	Fredericksburg, VA VDOT District Office
10/18/01	Charlotte, NC NCDOT Division 10, District 2 Office	12/10/01	Raleigh/Cary Area, NC NCDOT Division 5, District 1 Office

At each hearing, the public was provided the opportunity to give comments on the Tier I DEIS verbally, in writing, to a certified court recorder, or by mail within 10 days of the public hearing date. A total of 784 comments were received as a result of the Tier I DEIS public hearing process.

Public comments were reviewed and analyzed to determine the public's overall support of or opposition to SEHSR. Six hundred and fifty comments were supportive with only eleven comments opposed. The following table shows the distribution of these comments.

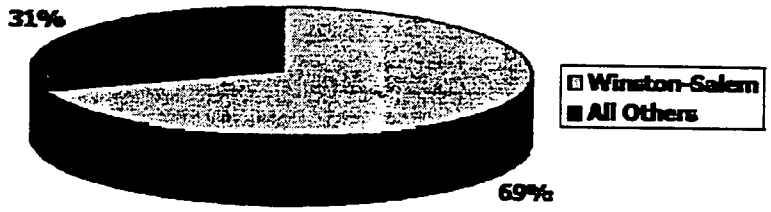
Table 2
Public Comments: Support and Opposition for SEHSR

Location	For	Against	Other	Total
Winston Salem, NC	449	1	6	456
Henderson, NC	36	2	6	44
Roanoke Rapids, NC	24	1	5	30
South Hill, VA	19	0	1	20
Springfield, VA	19	0	26	45
Wilson, NC	19	0	3	22

Location	For	Against	Other	Total
Greensboro, NC	18	0	3	21
Cary, NC	12	0	1	13
Durham, NC	9	1	16	26
Charlotte, NC	9	0	2	11
Raleigh, NC	9	0	6	15
Richmond, VA	8	0	24	32
Salisbury, NC	8	0	2	10
Star, NC	4	6	4	14
Petersburg, VA	3	0	13	16
Fredericksburg	2	0	3	5
Sanford, NC	2	0	2	4
Emporia, VA	0	0	0	0
Totals	***650***	***11***	***123***	***784***

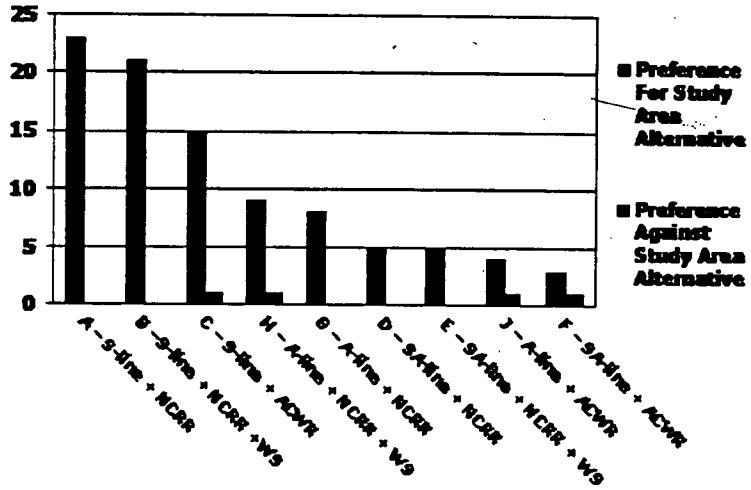
Of the 650 supportive comments, over two thirds supported the alternatives that would pass through the Winston-Salem area (Alternatives B,E,H). Figure 5 further illustrates this support.

Figure 5
Public Comments: Support for SEHSR



39 comments expressed a preference for or against a specific study area alternative; Figure 6 shows the distribution of preferences for or against specific study area alternatives.

Figure 6
Public Comments: Preferences for Study Area Alternatives



The following table shows the distribution of public hearing comments by proximity to the public hearing locations and by the topic of comment.

Table 3
Summary of Tier I DEIS Public Comments By Location and Topic

Comments By Location	Number of Comments
Cary	13
Charlotte	11
Durham	26
Emporia	0
Fredericksburg	5
Greensboro	21
Henderson	44
Petersburg	16
Raleigh	15
Richmond	32
Roanoke Rapids	30
Salisbury	10
Sanford	4
South Hill	20
Springfield	45
Star	14
Wilson	22
Winston Salem	456
Total	***784***

Comments By Topic	Number of Comments
Cost	21
Cultural Resource Impact	4
Natural Resource Impact	7
Noise	5
Project Schedule	3
Property Impact	14
Public Involvement	8
Record Opinion	466
Safety	10
Service Features	119
Stops	90
Other	37
Total	***784***

About 83 percent of the general public who provided comments on the DEIS was favorably disposed to the overall proposed SEHSR project. Only one percent of the commenting general public opposed the project.

Agency Comments

Through the advisory committee process, as well as other direct communications, regulatory and resource agencies were engaged to facilitate sound decisions and to ensure input on the SEHSR project. These agencies were involved in the review of each key product as the document process moved forward. As part of the DEIS distribution process, over 50 federal, state, regional, and local agencies received copies of the DEIS for review and comment.

Agencies in both states have been supportive of the tiered environmental process. This process has given the agencies a big picture look at the future work, and allowed their input from the very earliest planning stages. Thirteen agencies provided comments on the SEHSR Tier I DEIS. Other agencies indicated they will wait until more detailed information is available at the Tier II level to review and comment on the proposed project. Table 3 shows the nature of comments provided by regulatory and resource agencies.

Table 4
Summary of Resource and Regulatory Agency Comments

	Preference for Specific Alternative(s) to carry forward	Further Study/ Coordination with Agencies in Tier II	Further Analysis/ Clarification Needed in FEIS	Recommend maximum use of existing ROW	Possible Impacts	No specific comment
U.S. Department of Army, Corps of Engineers, (Virginia)	✓[10]			✓		
U.S. Department of Army, Corps of Engineers, (North Carolina)	✓[11]			✓		
U.S. Department of Agriculture, Natural Resources Conservation Service						✓
U.S. Department of the Interior, Ecological Services – Virginia Field Office						✓
U.S. Department of the Interior, U.S. Fish and Wildlife Service		✓		✓		✓
Environmental Protection Agency, Region III NEPA Compliance Section			✓[12]			
National Oceanic and Atmospheric Administration					✓[13]	
Dept. of Transportation, Federal Hwy. Administration – Virginia Division	✓[14]		✓[15]			
Federal Emergency Management Agency		✓				
Northern Virginia Regional Commission						✓
Virginia Dept. of Historic Resources		✓				
Virginia Dept. of Environmental Quality				✓		
North Carolina Division of Water Quality	✓[16]					

10 The Corps of Engineers (VA) recommends either A,B,C,D,E, or F be carried forward in the FEIS.
11 The Corps of Engineers (NC) recommend Alts. A or B, based on minimizing environmental impacts and maximizing operating efficiency.
12 The EPA suggests providing a summary of each alternative to make clear which alternative appears best from an operational standpoint, which is potentially the most disruptive to communities; or which alternative may be the most impacting to natural resources (note: this data appears in the document in table form, but not in a narrative summary by alternative). In addition, the EPA recommends a more detailed analysis of the following issues in FEIS: (1) noise and vibration; (2) the potential magnitude of disturbances associated with crossings of state and federal Scenic Rivers.
13 The National Oceanic and Atmospheric Administration expressed concern about possible impacts to geodetic control monuments by the proposed SEHSR.
14 FHWA-VA expresses a preference for Alternative C.
15 FHWA-VA asked for additional clarification concerning impact of existing service if Alt. C is developed.
16 The North Carolina Division of Water Quality recommended that Alternatives B, E, or H be carried forward for further study.

Many agencies had positive comments about the extent of coordination during the document preparation and review process. The review by the agencies did not reveal, from their perspective that any regulatory or other environmental "fatal flaws" exist in any of the nine alternatives evaluated.

EPA recommends additional analysis of two topics: potential receptors and the potential impacts of noise and vibration in communities; and an estimation of the potential impacts due to disturbances of state and federal scenic rivers. These issues will be addressed in the FEIS, and in the Tier II effort when more corridor-specific information is available. The comments of FHWA-VA division office on the issues of estimated ridership for Alternative C will be addressed within the FEIS. In depth review of the issues raised by both agencies does not alter the analysis of the recommended alternative.

Assessment Criteria

The assessment criteria for evaluating the study area alternatives were based on the five key factors of the SEHSR project purpose and need. Tables ES-6, *Operational and Physical Characteristics Summary Information for Study Area Alternatives*, and ES-20, *Summary of Potential Impacts and Benefits of the Study Area Alternatives*, from the Executive Summary document of the Tier I DEIS were used as the information sources for the evaluation criteria (see appendix). The following table shows the criteria that were used to assess each purpose and need factor.

Table 5
Evaluation Criteria for Selecting a Recommended Alternative

Key Purpose and Need Factors	Criteria Used in The Assessment
Providing the traveling public – particularly special populations such as a the elderly and the disabled – with improved transportation choices	• Annual Ridership
Helping ease existing and future congestion (air, highway, passenger rail) within the corridor.	• Annual Diversions in 2025
Improving safety and energy effectiveness within the transportation network	• Net energy reduction (fuel gal/yr.) • Number of at grade crossings
Reducing the overall air quality related emissions per passenger mile traveled within the corridor	• Air Quality – Reduction in NO_x
Improving overall transportation system efficiency within the corridor, with a minimum of environmental impacts	• Average Total Travel Time • Net Operating Contribution • Capital Cost Efficiency Factor[17] • Environmental Complexity Index • Engineering and Operations Complexity Index

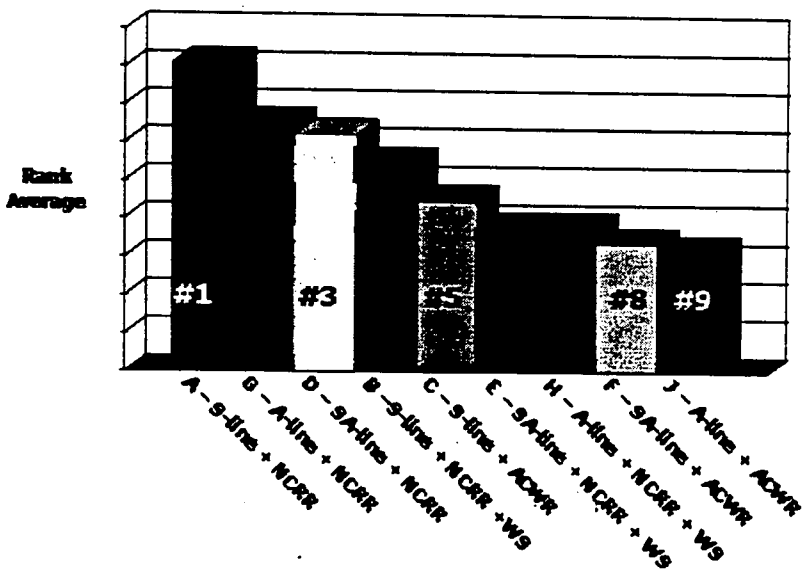
[17] The Capital Cost Efficiency Factor was calculated by dividing the net operating contribution in 2025 by conceptual capital cost and multiplying the result by a factor of 1000.

Of the criteria used in the assessment, six refer to operating/engineering characteristics. Three refer to a composite index or individual environmental factors and one refers to public safety. The emphasis on the operating characteristics is due to the requirement that the recommended alternative be a viable business alternative with a minimum of environmental impacts.

Comparison of the Nine Study Area Alternatives

Each study area alternative was scored on a scale of one to nine (with nine being a higher, or more favorable, ranking) on each of the evaluation criteria shown in Table 5. An unweighted average score was computed for each study area alternative to determine rank averages. The results of this process are shown in Figure 7.

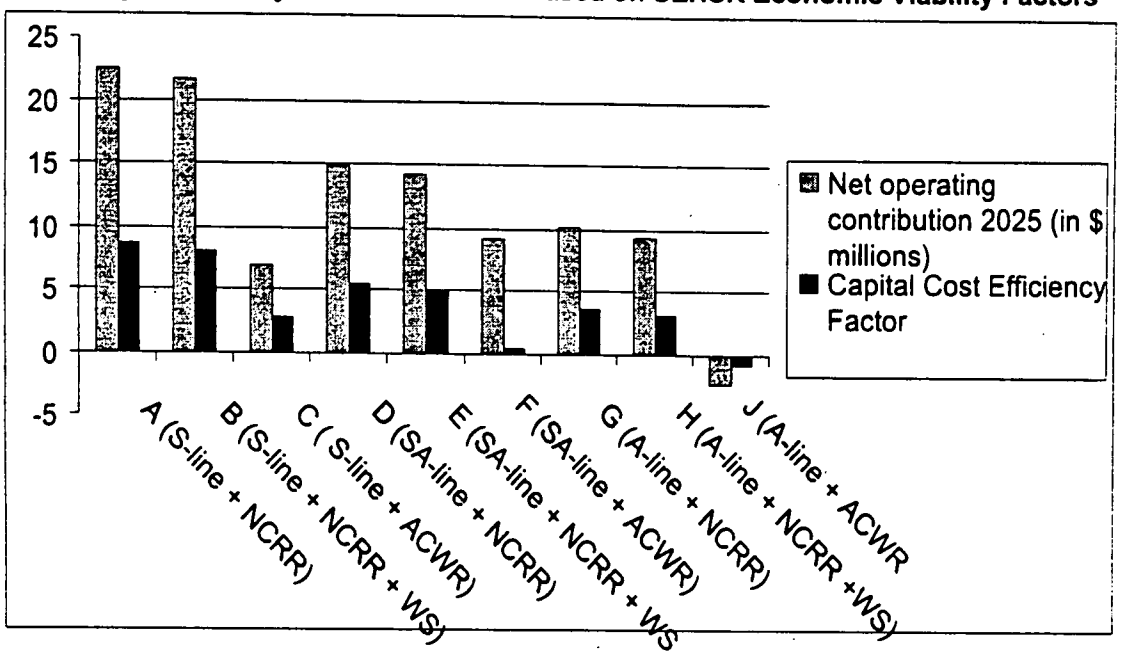
Figure 7
Relative Ranking of Study Area Alternatives



Alternative A ranks highest because it is the best of all nine alternatives for five of the 10 assessment criteria, namely annual ridership, annual air to rail diversions in 2025, net operating contribution, capital cost efficiency, and areas of engineering complexity. Alternative A is second best for four of the 10 criteria, namely annual auto to rail diversions in 2025, net energy reduction, net reduction in NO_x emissions, and average total travel time for the route. From a permitting standpoint, Alternative A is among the lowest for potential wetland impacts and has the lowest potential impacts to threatened & endangered species. Alternative G ranks best in three of the ten criteria, namely annual auto to rail diversions in 2025, net reduction in NO_x emissions, and net energy reduction.

The SEHSR projects's "business case" requires the recommended alternative to be economically viable. In order to determine relative economic viability (between the different study areas), study area alternatives were examined based on the potential net operating contribution[18] and the conceptual capital cost[19]. The net operating contribution did not assume any income from ancillary services such as express mail. The net operating contribution is comparative only, and not intended to predict actual future revenue which will be dependent upon future operating conditions and requirements. The capital cost efficiency factor is the net operating contribution divided by the conceptual capital cost and multiplied by 1000. This gives a form of a benefit/cost ratio for comparison between the different alternatives. Figure 8 shows the comparison of study area alternatives based on these two elements.

Figure 8
Analysis of Study Area Alternatives Based on SEHSR Economic Viability Factors



At this point, Alternatives A, B, D, and G are the most viable candidates for the recommended alternative based on their highest relative ranking using the purpose and need factors (Figure 7).

[18] Ticket revenues were based on ridership derived from the KPMG Ridership/Revenue Model. The model assumed four daily round trips between Charlotte, Raleigh, Richmond, Washington, and New York, and four daily round trips between Charlotte and Raleigh, for a total of eight daily round trips between Charlotte and Raleigh. Each train assumes a consist of two diesel locomotives, five coaches, and one cafe-lounge car. Net Operating Contribution is the revenue generated less the operating expenses for each routing. Operating expenses were projected using cost factors developed in the Amtrak Intercity Business Unit State Pricing Model. The base year for all expenses is 1997, and they have been inflated to 2000 dollars using Amtrak inflation rates ranging from three to five percent annually.

[19] Conceptual costs were based on using current cost factors applied to a conceptual engineering design (approx. 10% engineering level) with a 60% contingency added.

Of the four alternatives, Alternative A and Alternative B show the strongest potential for economic vitality (see Figure 8).

Alternative A and Alternative B also minimize potential wetland impacts. Alternative A offers a moderate level of environmental complexity (6), this is the level of difficulty required to avoid or minimize environmental impacts in a certain area. It ranks second highest in net energy reduction and net reduction in NO_x primarily because it offers service along the most populated areas of the NCRR and it offers the greatest combined passenger diversion from auto and air to rail. Alternative B is similar to alternative A, but has some increased environmental complexity (8) due to grade issues in the Winston Salem area. Alternative D, has the lowest level of environmental complexity (5), but also has the greatest potential impact for prime farmland, protected species, and estimated residential relocations. Alternative G has a moderate level of environmental complexity (7), but has potentially greater impacts to wetlands, which are more prevalent in eastern North Carolina.

Given the complexity of avoiding and/or mitigating for significant wetland acreage, substantial protected species, and prime farmland impacts, Alternatives A and B are the environmentally preferred among those candidates satisfying the purpose and need criteria and economic viability requirements.

Consideration of Public and Agency Comments

From Figure 6, it is clear that Alternative A has the highest level of public support from those individuals expressing a preference among the nine alternatives. From Figure 5, 69 percent of the comments received indicated a desire for passenger service to the Winston–Salem area, which is satisfied through Alternative B. The primary difference between Alternative A and B is the connecting service to the Winston-Salem area. Alternatives A & B also received the most support from those regulatory/resource agencies that expressed support for specific alternatives.

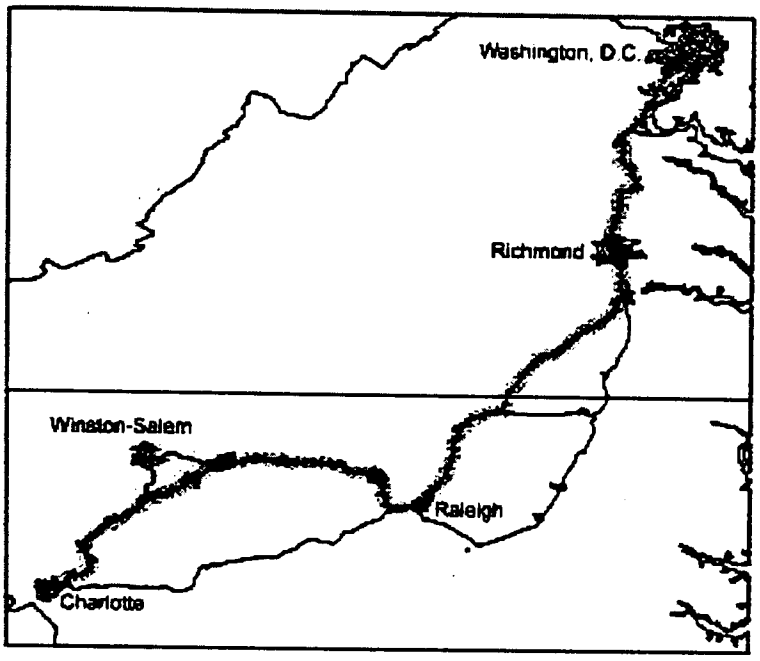
Recommended Study Area Alternative(s)

The general analysis indicates a strong case for Alternative A. In addition, public comment, agency comment, and economic viability suggest strong consideration for Alternative B. Therefore, an Alternative A - plus (Alternative A plus Alternative B, which provides passenger connectivity to Winston-Salem, see Figure 9) is recommended for the FEIS and Tier II analysis. Alternative A would be developed first, with Alternative B developed in conjunction with the efforts of the Piedmont Authority for Regional Transportation (PART) as appropriate. PART is responsible for coordinating the regional transportation system in the counties around the Winston-Salem connection. The primary reasons for the selection of Alternative A-Plus include:

- Minimizes potential impacts to wetlands and threatened & endangered species, with moderate levels of potential environmental complexity, and strongest agency support, while providing;
- The highest level of service: highest projected annual ridership, largest total annual trip diversions from auto and air to rail, with competitive total travel time;
- Second best net reduction in NO_x emissions and overall net energy use reduction;
- Best operating cost recovery; and
- Highest level of public support.

Although not a part of the SEHSR EIS corridor recommendation, staff recommends the continued support and facilitation of conventional service along the existing Amtrak route from Raleigh to Richmond (A-line through Rocky Mount, NC), and the protection of the southern route (the ACWR) for potential future development.

Figure 9
Recommended Alternative: Alternative A-Plus



States for Passenger Rail Coalition

National passenger rail policy statement

1. Passenger rail service is essential to the nation

- An enhanced intercity passenger rail system is an important mobility alternative, especially for regional corridors, in the face of increasingly congested highway and aviation systems.
- The events of September 11 and their impact on transportation reinforce the importance of passenger rail service as an essential part of the national transportation network.
- States support incremental improvements in regional passenger rail corridors to expand ridership, with increased speeds up to 110 MPH and additional frequencies on routes.

2. Federal funding in partnership with states is essential for passenger rail

- States have taken, and will continue to take, a lead role in the planning and development of expanded and enhanced regional passenger rail corridor services. However, the states cannot proceed on these systems without a federal-state funding partnership similar to existing highway, transit and aviation programs.
- The most critical need in this partnership is a dedicated federal funding program to fund capital investments – infrastructure and equipment – to maintain and enhance regional passenger rail service.
- The states have strongly supported the legislative proposals such as the High Speed Rail Investment Acts of 2000 and 2001 (S. 250, H.R. 2329), Rail Infrustructure Development and Expansion Act for the 21st Century (H.R. 2950) and the National Defense Interstate Rail Act (S. 1991). However, based on known state plans, long-term funding needs are more than the $12 billion proposed in the Act.
- Given a strong federal funding mechanism, the states are willing to provide a fair cost-share for capital investment in expanded and enhanced passenger rail services.
- Many corridor services are expected to achieve operational self-sufficiency upon full implementation. At the same time, the states will need transitional operating support from the federal government while plans and projects are being built and during start-up periods for new services.
- Long distance train service provides interconnectivity among regional corridors and essential service to communities along the way. However, the federal government should be fully responsible for providing operating and capital support for long distance trains.

3. States need to assume key institutional roles in passenger rail development

- The states need to play a significant role in the implementation of any future federal funding program. In particular, states seek a strong role in project selection and project management that builds on the expertise already developed in this area.

- States have partnered with Amtrak for the operation, development and financial support of existing corridor services. The states have a large stake in the successful restructuring of Amtrak, and need to be closely involved in these discussions.

- Partnerships also must be developed with the nation's freight railroads to insure that their concerns are addressed and that federal and state investments in passenger rail development also provide benefits to freight service.

NORTHEAST CORRIDOR INFORMATION SHEET

TYPICAL PASSENGER TRAIN TRAFFIC
WEEKDAYS (Revenue Trains Only)

LINE SEGMENT	AMTRAK	COMMUTER	PSSGR TOTAL
BOSTON, MA - South Station - *MBTA*	28	174	202
PROVIDENCE, RI - *MBTA*	24	24	48
PROVIDENCE-NEW LONDON	24	0	24
OLD SAY BROOK, CT - *Shore Line East Service*	38	28	66
SPRINGFIELD - NEW HAVEN (Springfield Line)	14	0	14
NEW HAVEN - *Metro North, Shore Line East*	34	78	112
STAMFORD - *Metro North*	34	242	276
NEW ROCHELLE - QUEENS	34	0	34
NEW YORK EAST RIVER TUNNELS- *LIRR*	130	521	651
EMPIRE SERVICE (Upstate New York)	16	0	16
NEW YORK HUDSON RIVER TUNNELS - *NJ Transit*	104	224	328
NEWARK, NJ - *NJ Transit*	104	248	352
METROPARK, NJ - NJ Transit	104	188	292
NEW BRUNSWICK, NJ - TRENTON - *NJ Transit*	104	84	188
TRENTON - SHORE (PHILA) - *SEPTA*	104	62	166
SHORE - ZOO (PHILA) - *SEPTA, NJ Transit*	104	164	268
HARRISBURG LINE	18	187	205
30TH ST STATION - PHILADELPHIA	100	1	101
PHILADELPHIA - MARCUS HOOK, PA - *SEPTA*	82	59	141
WILMINGTON, DE - *SEPTA / DELDOT*	82	37	119
WILMINGTON - NEWARK, DE - *SEPTA / DELDOT*	82	20	102
NEWARK, DE - PERRYVILLE, MD	82	0	82
PERRYVILLE - BALTIMORE - *MARC*	82	14	96
BALTIMORE - WASHINGTON - *MARC*	82	44	126
WASHINGTON TERMINAL - *MARC, VRE*	82	109	191
WASHINGTON, DC - ALEXANDRIA, VA - *VRE*	20	31	51
ALEX. - MANASSAS - *VRE*	4	18	22
ALEX. - FREDERICKSBURG - *VRE*	18	13	31
FRED. - RICHMOND	18	0	18
RICHMOND - NEWPORT NEWS	4	0	4

SELECTED AMTRAK NEC STATIONS
2001 ANNUAL BOARDINGS / ALIGHTINGS

BOSTON, MA	942,000	NEW YORK, NY	8,175,000
BOSTON, MA - BACK BAY	163,000	PHILADELPHIA, PA	3,579,000
ROUTE 128	220,000	LANCASTER, PA	263,000
PROVIDENCE, RI	337,000	WILMINGTON, DE	694,000
NEW LONDON, CT	110,000	BALTIMORE, MD	843,000
HARTFORD, CT	143,000	BWI, MD	528,000
NEW HAVEN, CT	370,000	WASHINGTON, DC	3,149,000
STAMFORD, CT	216,000	RICHMOND, VA	169,000

*NOTE: WEDNESDAY USED FOR COUNTS

December 11, 2002

MEMORANDUM

TO: NC Members of VA/NC High Speed Rail Commission

FROM: Senator Wib Gulley, Co-Chair
Representative Nelson Cole, Co-Chair

RE: Committee Meeting Notice

There will be a meeting of the VA/NC HSR Commission on Tuesday, January 7, 2003 in Richmond, Virginia from 10:00 a.m. until lunch. A detailed agenda with building and room will be sent at a later time.

If you have any questions, please give Giles Perry a call at 919-733-2578.

NC/sjs

Posted 11-Dec-02

cc: Press
Committee Record ✓
Interested Parties

Virginia-North Carolina High-Speed Rail Commission
January 7, 2003 Richmond, Virginia
10:00 a.m.—12:35 p.m.
Capitol Grounds
Virginia General Assembly Building
Senate Leadership Conference Room

Suggested Agenda

10:00 a.m.	Welcome and Introductions John Watkins, Virginia State Senate, VA Chairman J. Paul Council, VA House of Delegates, VA Vice-Chairman
10:10 a.m.	Virginia Activities Karen J. Rae, Director, VA DRPT
10:20 a.m.	North Carolina Activities David D. King, Deputy Secretary for Transportation, NC DOT
10:30 a.m.	Update on Environmental Impact Statement Patrick B. Simmons, Director, NC DOT Rail Division
10:40 a.m.	Perspective on Public—Private Partnerships Bill Schafer, Director of Strategic Planning, Norfolk Southern Corporation Lyman M. Cooper, Regional Vice President, CSX Transportation
10:55 a.m.	Federal Legislative Prospects Caitlin Hughes, Federal Programs Coordinator NC Washington Office *or* David Ewing, Federal Programs Coordinator, States for Passenger Rail Coalition
11:10 a.m.	Video Presentation: High Speed Rail on the West Coast John Watkins, Virginia State Senate Virginia Rail Policy Institute, Dick Beadles, Interim Director
11:30 a.m.	High Speed Rail Development Forms of Governance Giles Perry, Staff Attorney North Carolina General Assembly
Noon	Discussion, Commission's Work 2003 Plan John Watkins, Virginia State Senate J. Paul Council, VA House of Delegates Wib Gulley, NC State Senate Nelson Cole, NC House of Representatives
12: 30 p.m.	Summary and Plans for Next Meeting Members
12:35 p.m.	Adjournment

Virginia – North Carolina High Speed Rail Commission

Meeting Minutes
January 7, 2003

The meeting of the Virginia / North Carolina High Speed Rail Commission was called to order by the Virginia Chairman Senator John Watkins. Senator Watkins welcomed everyone and thanked them for attending. Introductions were then made around the room.

Karen Rae, Executive Director for the Virginia Department of Rail & Public Transportation spoke about the Virginia activities. She said that a Memorandum of Understanding has been completed with CSX and Norfolk Southern relative to projects to be done on the Richmond to Washington corridor. Funds in the amount of $65 million have been made available by the Virginia General Assembly to help eliminate bottlenecks in the corridor. The rehabilitation of Main Street Station has had strong support and is moving ahead. There are still things to be done in order to increase train capacity in Richmond. In developing a high-speed rail plan, we are looking at ridership and cost. The Bristol Trans-Dominion Express is moving forward and we are looking at high-speed rail in the Route 460 corridor to Hampton Roads. Virginia is working closely with North Carolina on an Environmental Impact Study from Washington to Charlotte, NC for high-speed rail. We are looking at an incremental approach to higher-speed rail.

Senator Watkins asked about the Environmental Impact Statement to Hampton Roads. George Conner said VDOT is looking at the Environmental Impact Statement on The Route 460 Corridor.

Delegate Paul Councill from Franklin serves on the Route 460 Corridor Committee.

David King, Deputy Secretary of Transportation, NC DOT, spoke about the North Carolina activities. He said the States were disappointed with the capital assistance that has been made available to the States. We need a federal source of capital assistance to States for rail projects and the collaboration of the freight railroads. The State of North Carolina has been working with the North Carolina Railroad between Raleigh and Charlotte on $25 million in improvements. North Carolina is looking at speed, safety and reliability in future rail projects. North Carolina has just opened a rail station in Selma, a station will open in High Point this summer in Greensboro in 18 months, and a new station in Burlington in May. They have purchased the land for a major station in Raleigh and a regional rail system is being developed in Charlotte. The Piedmont Service operated by Amtrak needs major equipment rehabilitation.

Patrick Simmons, Director, NCDOT Rail Division, spoke on the Environmental Impact Statement. He passed out a pamphlet on the Draft Implementation Plan that

indicated that the original Corridor Designation was in 1992, the Memorandum of Understanding between Virginia and North Carolina was signed in 1997 the Tier I Environmental Impact Statement was started in 1999, and the Record of Decision designated the Corridor in 2002. He then explained the different segments of the Corridor.

Senator Wib Gulley from Durham explained the North Carolina tax on vehicle registration. It is collected on State registration and the Municipalities may have add-ons. The State registration is $20 for DMV, $5 for Local up to a maximum of $45. Charlotte has an additional ½ cent sales tax.

Delegate Councill said that Alberta wanted a station located in the Town. George Conner said that consideration would be given to stations along the line.

Bill Schafer, Strategic Planning, Norfolk Southern, spoke about Public Private Partnerships. He commented about Virginia and North Carolina being ahead of other states. Norfolk Southern welcomes the opportunity to discuss passenger service but they must protect their freight business. Intercity and commuter trains are easier to deal with than high-speed trains. Norfolk Southern requires a separate track for passenger trains over 90 miles per hour. Lines that have the best rail growth are the best candidates for high–speed passenger rail. One big item of concern is indemnification. Norfolk Southern would be interested in operating rail passenger service if it makes them money. One of the challenges that face the states is that of funding. There must be a dedicated funding source. Norfolk Southern could assist with the funding by legislative contacts and by contributions toward a project. They will support public initiatives that lead to better freight and passenger services.

Lyman Cooper, Resident Vice President, CSXT, spoke about Public Private Partnerships. He essentially agreed with Bill Schafer about the Public Private Partnerships and said that they think the "S" line can be a "win-win" situation for them and the states and the localities.

Jay Westbrook was introduced as the Assistant vice President for Passenger Operations and Planning and would be the contact person for passenger rail.

Karen Rae said she would like to see the Commission work on liability caps.

David Ewing, Federal Programs Coordinator, States for Passenger Rail Coalition, spoke about the Federal Legislative Prospects. He said we were looking for a dedicated source of capital for passenger rail. The issuance of Tax Credit bonds may have some promise. TEA21 increased funds for highway and transit by 40%. It is due to be reauthorized by the end of September. Liability costs are skyrocketing and we need to pursue it with the Senate Commerce Committee.

Karen Rae said that Amtrak has said that the cost of rail passenger service for Virginia would be $5 million.

Dick Beadles, Interim Director of the Virginia Rail Policy Institute, said they were non-government business people who function as "cheer leaders" for high-speed passenger rail. He said that rail passenger supporters had not made their case. Railroads do not have the line capacity for freight and passenger. Need to pursue intermodal. He handed out a pamphlet titled "Virginia Rail Policy Institute".

Giles Perry, Staff Attorney for the North Carolina General Assembly, spoke on High Speed Rail Development Forms of Governance. He handed out a paper on "High Speed Governance Structures" and a draft bill for a North Carolina-Virginia High Speed Rail Compact. He said that North Carolina advocates to set up a compact to go forward. He said there are a number of ways to do things – depending on the amount of detail and organization.

Pat Simmons said he feels that the compact is the way to go.

Senator Gulley asked why the compact is better than an authority.

Senator Watkins said that a compact is a mechanism recognized by the U. S. Congress.

Delegate Rollison said we should not limit this to high-speed passenger rail but should include all kinds of rail.

David King said the existence of a compact would be on the checklist of what they would be looking for at the House Infrastructure Committee.

Senator Watkins said he feels that this Commission should develop a language that could be used in legislation to be introduced next year for the development of a compact.

The following are points that were brought up in the discussion of the Committee Work Plan for 2004:

- Follow up on last year's visit with Congress.
- Pat Simmons: Need regular meeting times.
- Delegate Rollison: Need to work with National Congress of States.
- Delegate Councill: wants to consider station in Brunswick County.
- Senator Gulley: Where do other regions of the country stand? What do they have that we don't? What do we have that they don't? Would it help to add the other Southern States?
- Be specific about our plan.
- Need to look at what we actually need.
- Keep an eye on lines being abandoned and try to preserve them.
- North Carolina has a law on the books that allows them to purchase railroad right of way.

- Need projections of how many trains a day will be needed in 50 years.

Meeting adjourned at 12:25 PM.

Addendum:

These minutes were prepared by the Virginia staff of the Virginia/North Carolina High Speed Rail Commission.

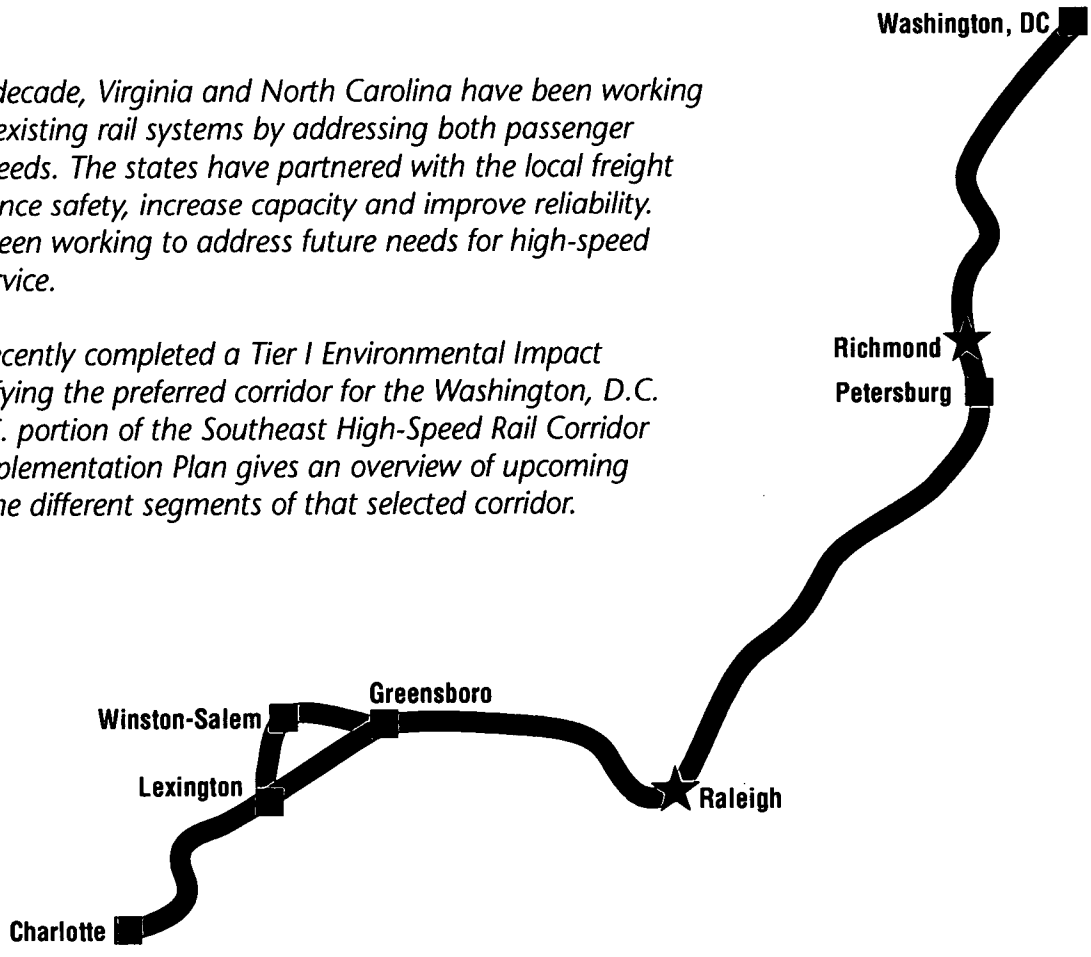
DRAFT IMPLEMENTATION PLAN

for Southeast High-Speed Rail Washington, DC to Charlotte, NC

OCTOBER 2002

During the past decade, Virginia and North Carolina have been working to improve their existing rail systems by addressing both passenger and freight rail needs. The states have partnered with the local freight railroads to enhance safety, increase capacity and improve reliability. They also have been working to address future needs for high-speed passenger rail service.

The two states recently completed a Tier I Environmental Impact Statement identifying the preferred corridor for the Washington, D.C. to Charlotte, N.C. portion of the Southeast High-Speed Rail Corridor (SEHSR). This Implementation Plan gives an overview of upcoming activities along the different segments of that selected corridor.



BACKGROUND

In 1992 the U.S. Department of Transportation designated five potential regional high-speed rail corridors across the country. The Southeast High-Speed Rail Corridor would extend high-speed rail service south, from Washington to Richmond, Va., Raleigh and Charlotte, N.C. The SEHSR corridor was later expanded and is now part of a more comprehensive national plan *(see map on back).*

In 1997, the USDOT reported* that the Southeast High-Speed Rail corridor, when connected with the existing Northeast Corridor, could generate more revenue than any other proposed high-speed rail route in the country. They estimated that the SEHSR route could generate $2.54 in benefits for every dollar spent to develop and operate it and it would be the only such route to cover its operating costs from passenger revenues.

Establishing a federal/state funding partnership will facilitate project development.

**"High Speed Ground Transportation for America," 1997, USDOT*

WASHINGTON, DC TO PETERSBURG

(Collier Yard)

(Passenger service currently operates on this section)

Step 1
- Improve crossovers
- Add third track as appropriate
- Replace and expand bridges
- Upgrade track to Class V
- Improve Richmond Main Street Station access
- Perform preliminary engineering and environmental work from Collier Yard to Centralia

Time frame: within 5 years

Step 2
- Add third and fourth track as appropriate
- Improve rail infrastructure from Collier Yard to Centralia

Time frame: within 8 years

WINSTON-SALEM CONNECTION

(No passenger service currently operates on this section)

Step 1 Winston-Salem to Greensboro

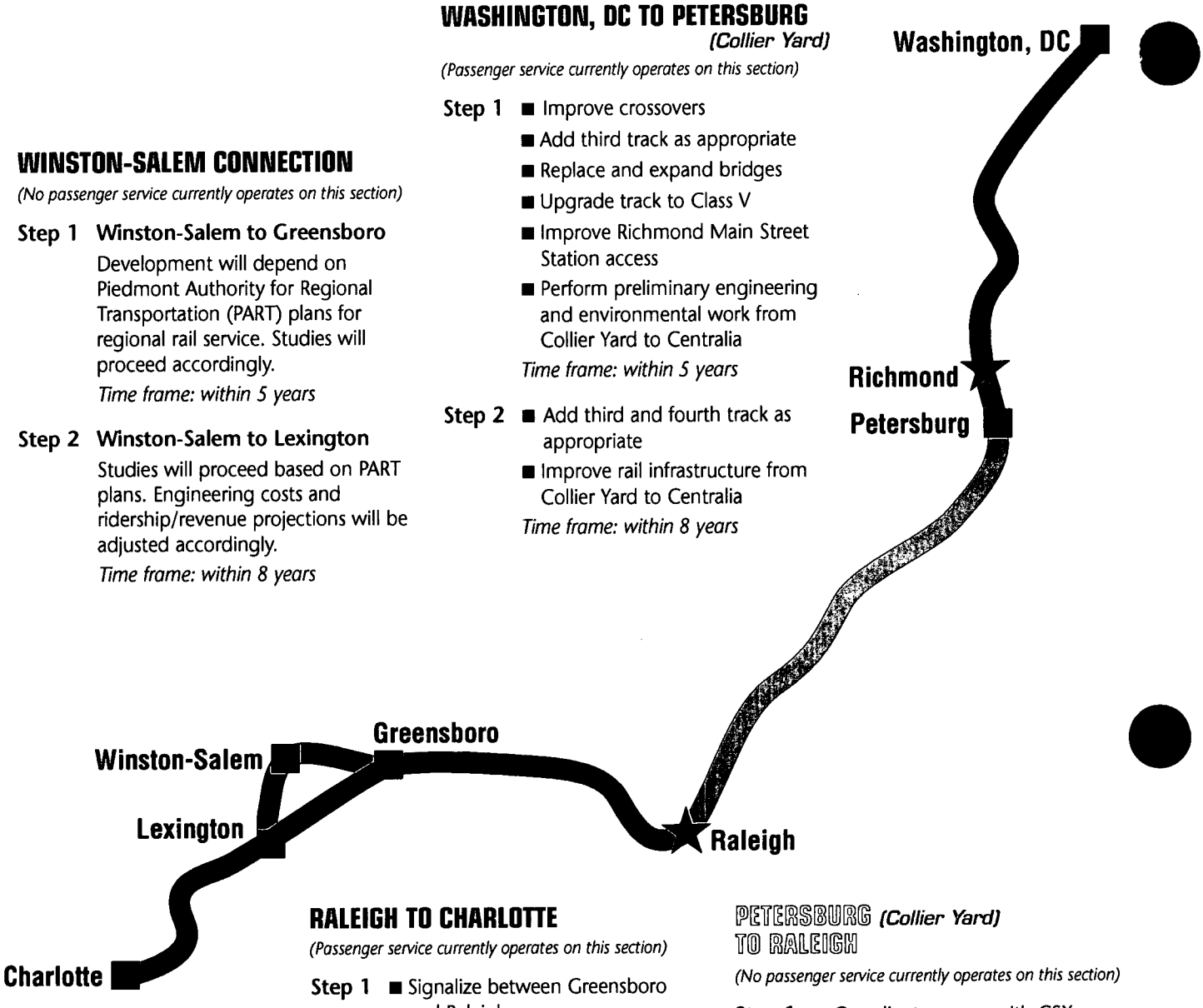
Development will depend on Piedmont Authority for Regional Transportation (PART) plans for regional rail service. Studies will proceed accordingly.

Time frame: within 5 years

Step 2 Winston-Salem to Lexington

Studies will proceed based on PART plans. Engineering costs and ridership/revenue projections will be adjusted accordingly.

Time frame: within 8 years



RALEIGH TO CHARLOTTE

(Passenger service currently operates on this section)

Step 1
- Signalize between Greensboro and Raleigh
- Improve crossings
- Increase spirals & super elevation

Time frame: within 2 years

Step 2
- Extend sidings
- Replace double track
- Increase spirals & super elevation
- Realign numerous curves
- Improve crossings

Time frame: within 5 years

Step 3
- Add third track as appropriate

Time frame: within 10 years

PETERSBURG *(Collier Yard)* TO RALEIGH

(No passenger service currently operates on this section)

Step 1
- Coordinate access with CSX
- Prepare Environmental Impact Statement

Time frame: within 5 years

Step 2
- Begin preliminary engineering

Time frame: within 8 years

Step 3
- Restore track and signals

Time frame: within 10 years

WASHINGTON, DC TO PETERSBURG *(Collier Yard)*

Most of this 137-mile segment shares right of way with CSX's main line ("A-Line") that is used by 40-50 freight trains and 10 Amtrak passenger trains daily. Virginia Railway Express (VRE) commuter service also operates over this line between Fredericksburg and Washington. A feasibility study is underway to determine if the former C&O line from Richmond north to Doswell, VA can be developed for passenger rail service.

For several years, the Virginia Department of Rail and Public Transportation, VRE, Metro, CSX and Amtrak have been working together to improve the A-Line from Richmond to Washington to ease traffic flow through this crowded area. The agencies have rebuilt the interlocking near the Potomac River, expanded sidings for the Auto-Train facilities at Lorton, built a third track through Potomac Yard, rehabilitated several bridges, tunnels and stations, and improved signals. The agencies have improved and eliminated various grade crossings and will add a double track bridge at Quantico Creek, as well as additional projects to expand capacity.

Even with these improvements, capacity on this stretch of railroad is still near saturation. To accommodate the freight and passenger growth needs of all users and institute high-speed passenger service, a third track will need to be built in phases between south Alexandria and Richmond. Tracks also will need to be upgraded to accommodate 110 mph speeds.

PETERSBURG *(Collier Yard)* TO RALEIGH

This 128-mile route segment was once the Seaboard Air Line Railroad main line ("S-Line") between Raleigh and Richmond. The Raleigh to Norlina portion is an active CSX freight line with two to four daily freight trains. CSX took the Norlina to Petersburg section out of service in 1985 and removed all the track and signals. The first priority for developing this segment is to reach an agreement with CSX to use the corridor. After completing environmental documentation, most of the track infrastructure from Norlina to Petersburg will have to be rebuilt. Reconstructing this portion of track not only will benefit high-speed rail operations, but also will help relieve traffic congestion on CSX's parallel main line ("A-Line").

The Triangle Transit Authority (TTA) plans to construct a double track commuter line along the same right of way from Raleigh toward Wake Forest. The main tracks in this section also will be upgraded to accommodate higher speeds and a train control signal system will need to be installed.

RALEIGH TO CHARLOTTE

This 174-mile portion of the SEHSR route is owned by the North Carolina Railroad (NCRR) and operated under a trackage rights agreement by the Norfolk Southern Railway (NS). The Greensboro to Charlotte section is Norfolk Southern's busiest rail line in the state with up to 40 freight trains a day. Four to six passenger trains also run between Raleigh and Charlotte and three or more transit authorities could eventually share portions of this right of way. In addition, CSX freight trains run between Cary and Raleigh.

Significant stretches of double track were removed between Charlotte and Greensboro in the late 1950s to save maintenance costs. These single-track sections greatly hinder freight flow and delay passenger trains. To provide sufficient track capacity and improve schedule reliability, the double tracks will need to be replaced and curves realigned. Although the Greensboro to Raleigh segment is not as busy, this single-track line also needs improvement as it is very curvy, lacks train signals and adequate passing sidings.

The NCDOT, NCRR and NS are now constructing a $24 million improvement program that will add a train control system, install some double tracks, extend several sidings, and realign and super elevate curves so that trains can operate at higher speeds. These improvements are a building block to higher speed operations. Speeds up to 110 mph are possible but would require stretches of dedicated third track to separate freight and high-speed passenger trains for safety.

WINSTON-SALEM CONNECTION

Service to Winston-Salem would be provided over the Norfolk Southern "K-Line" between Greensboro and Winston-Salem and the Winston-Salem Southbound (WSSB) from Winston-Salem to Lexington. Both lines carry two to four freight trains per day and have complex engineering and environmental issues that must be resolved before either line can be used for passenger service.

The Greensboro to Winston-Salem line has higher priority for improvement because the Piedmont Authority for Regional Transportation (PART) has chosen this as its first commuter rail route. Studies will focus on developing rail service in this narrow right of way and eliminating multiple grade crossings. The NCDOT and PART will work together to plan and develop joint transit and intercity passenger use in this segment.

Future passenger use of the WSSB line would allow for a better north-south flow of service through Winston-Salem, but would involve completely rebuilding and reconfiguring the track to intersect with the NCRR in Lexington.

STATIONS

North Carolina and Virginia have begun rehabilitating or expanding many passenger stations during the past decade. Historic stations have been rehabilitated in Salisbury, High Point, Greensboro, Raleigh, Main Street Station in Richmond, Fredericksburg and Alexandria. Conceptual studies have been completed for the Winston-Salem Union Station renovation.

However, the most challenging projects are those multi-modal stations that facilitate seamless transfer among the various modes of transportation. Richmond's Main Street Station is one example. The three-phase renovation project for the station that serves the central city will be completed in 2006.

In North Carolina, planning has just begun for the new Raleigh multi-modal station, but elements of it and the Durham multi-modal station must be completed before TTA begins service in 2007. Renovation of the transit portion of the historic Greensboro station is almost complete, while rehabilitation of the rail passenger portion is now underway. One of the largest projects in development is the new Charlotte multi-modal station in the uptown business district. Design and property acquisition have begun, with completion anticipated by 2008.

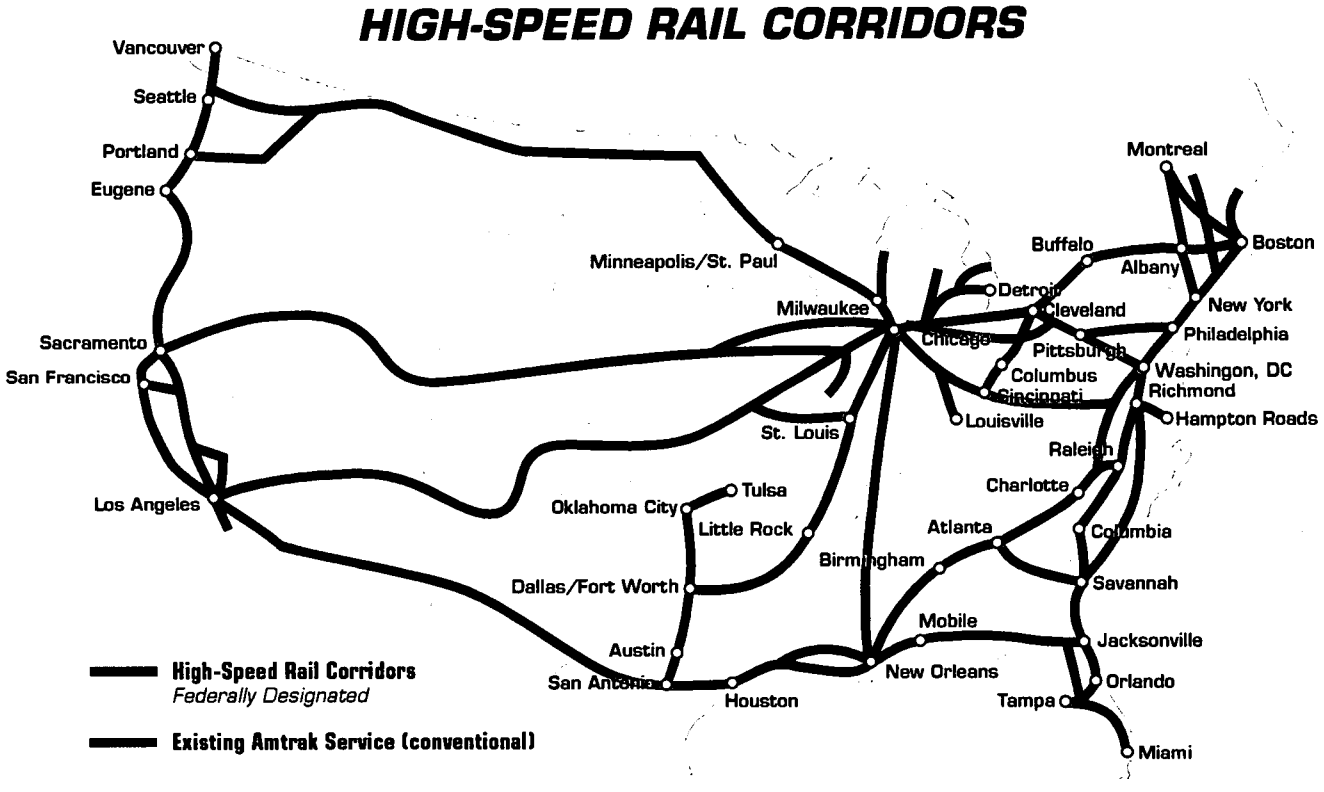
EQUIPMENT AND SERVICE IMPROVEMENT

While infrastructure improvements are critical to high-speed rail development, new train sets also are necessary to bring high-speed passenger rail service to the Southeast.

At least eight high-speed train sets will be needed for service between Charlotte and Washington, D.C. Each train would have a capacity of about 280 passengers in first class and coach, with space for 24 additional passengers in lounge and dining facilities. The train would be powered by two high-speed locomotives (one at each end).

Rail travel between major cities in North Carolina and Virginia, as well as to the population centers along the Northeast Corridor, would be much more convenient and reliable. The high-speed trains, coupled with major infrastructure and capacity improvements, would reduce travel times between Raleigh and Charlotte to between 2 – 2.5 hours. Travel time between Richmond and Raleigh would be shortened to between 2.5 – 2.75 hours. In North Carolina, additional round trips would be added between Raleigh and Charlotte.

As improvements are made and travel time is reduced, ridership along the SEHSR corridor will increase and frequencies will be added. Service expansion to Hampton Roads, VA, Greenville/Spartanburg, S.C., Altanta and Macon, GA also are being studied.



High-Speed Rail
Governance Structures

Virginia-North Carolina Interstate High Speed Rail Commission
Richmond, Virginia
Tuesday January 7, 2003

A. Introduction:

1. **What structure is appropriate to continue efforts to develop high-speed rail in North Carolina and Virginia?**
   Options include:
   a. Continuation of existing study committee.
   b. Creation of a single or multi-state authority.
   c. Creation of a compact between States.

B. Examples of high-speed rail related entities:

1. **California**
   1993 Intercity High Speed Rail Commission Established
   -directed to study feasibility and advisability of high-speed rail in California.
   -detailed technical studies and public input program conducted.
   -final report recommending creation of an Authority issued in 1996.
   1996 California High Speed Rail Authority Established
   -new State administrative entity.
   -created by legislature to plan for the construction, operation, and financing of a Statewide, intercity high-speed passenger rail system.
   -9 members, 2 appointed by the Speaker, 2 by the President of the Senate, 5 by the Governor.
   -small State funded core staff.
   -all environmental planning and engineering work performed under contract.
   -Authority **issued business plan in 1999**.
   -California State budget for FY 2000/2001 included

$25 million for EIS work.

-2002/2003 California State budget included additional $7 million for complete the draft EIS on plan by August 2003, and California legislature authorized a **2004 referendum on a $9.95 billion general obligation bond** issue to cover the State's anticipated share of the San Francisco to LA segment of the system.

2. Florida

1984-2000 activity

-multiple studies and failed development efforts concerning high speed rail.

2000 - Florida voters approved a Constitutional amendment

-the amendment directed the Legislature, the Cabinet and the Governor to "proceed with the development of" a high speed ground transportation System.

2001 - Florida Legislature creates the Florida High Speed Rail Authority

-new State administrative entity to "locate, plan, design, finance, construct maintain own operate administer and manage" the high speed rail system in the State.

-9 member commission, 3 appointed by the Governor, 3 by Senate, 3 by Speaker of the House.

-administrative support provided by the Florida DOT.

-Authority issued report in 2002, including a preliminary feasibility study.

3. Midwest Interstate Passenger Rail Compact

Midwest Rail Initiative study

-1996-2000 Midwest rail Initiative studies undertaken by nine Midwestern states.

Midwest Interstate Passenger Rail Compact

-Compact enacted by required minimum number of States and thus became effective in 2002.

-Members so far: Indiana, Missouri, Minnesota, North Dakota, Nebraska, and Ohio.

-Compact Commission has 4 members from each state – two appointed by the governor of each state, two by the legislature.

-Stated purpose of the Midwest Compact:
  -Promote development and implementation of improvements and long-range plans for intercity passenger rail service in the Midwest;
  -Coordinate interaction among Midwestern state officials, and among the public and private sector at all levels (federal, state, and local); and
  -Support current state efforts being conducted through state DOTs.

C. Federal Law Affecting Interstate Compacts

1. Constitution

-Compacts are agreements between states that bind them to the compact's provisions. The consent of Congress is required to form a compact, if the compact affects a power delegated to the federal government or alters the political balance within the federal system [Article I, Sec. 10, US Constitution, as interpreted by *Virginia v. Tennessee* 148 US 503 (1893), affecting the boundary between the two States].

2. Federal Code

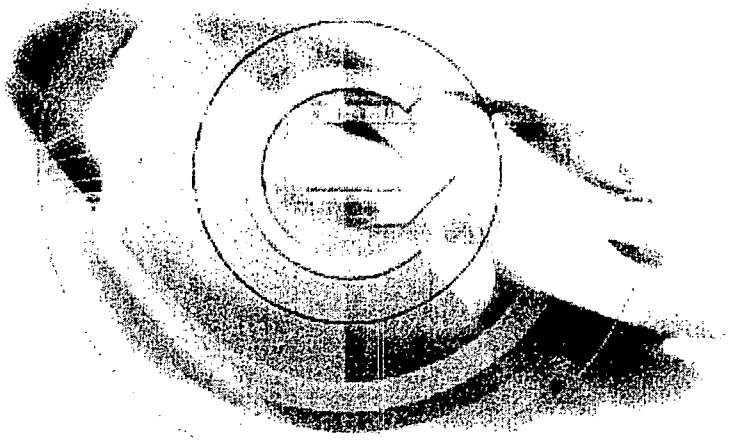
-Recently enacted federal law "preapproves" compacts between states concerning interstate high speed rail service (49 USC 24101).

D. Draft Compact for NC-VA compact (attached, see below)

E. Background Attachments

1. 1999 California High Speed Rail Authority business plan.
2. 2002 California high speed rail update.
3. 2000 Florida Constitutional Amendment on High Speed Ground Transportation.
4. Florida High Speed Rail Authority 2002 report summary.
5. Midwest Interstate Passenger Rail Compact summary.
6. Example of enacted Midwest Interstate Passenger Rail Compact from Missouri.
7. Federal law authorizing interstate rail compacts.
8. Draft North Carolina-Virginia High Speed Rail Compact legislation.

CALIFORNIA DEC 99 BUSINESS PLAN



EXECUTIVE SUMMARY

A high-speed train system is the logical next step in the development of California's transportation infrastructure.

Based on the best data available, a high-speed train system will return twice as many benefits to the state's citizens as it costs. In 20 years, the system is projected to carry 32 million intercity passengers annually, transport another 10 million commuters, generate nearly $900 million in revenues, and return a surplus to the state of more than $300 million.

Moreover, research indicates nearly two-thirds of Californians already endorse building a high-speed train system and would be willing to pay for its construction.

Legislative Mandate

The California High-Speed Rail Authority was created by the state Legislature in 1996 to develop a plan for the construction, operation and financing of a statewide, intercity high-speed passenger rail system.*

The Authority consists of nine members — five appointed by the Governor, two by the Senate Rules Committee, and two by the Speaker of the Assembly.

The Plan

With the assistance of the nation's best consultants in engineering, ridership forecasting, transportation economics and financing — as well as engineers and manufacturers of high-speed train systems around the world — the Authority has developed a plan to make high-speed train travel a reality in California.

The plan describes a 700-mile-long high-speed train system capable of speeds in excess of 200 miles per hour on dedicated, fully-grade separated tracks with state-of-the-art safety, signaling and automated train control systems. The system would serve the major metropolitan centers of California in 2020.

To meet its legislative mandate, the Authority also describes a vision of how this system would operate. The analytical work for this plan represents the most comprehensive review of statewide intercity travel yet undertaken. When considered in conjunction with the 20-year plans of the state's municipal planning organizations, it provides a detailed picture of the state's future transportation needs.

* Chapter 796 of the Statutes of 1996; SB 1420 Kopp and Costa.

This business plan does not suggest that a high-speed train system should be built in a vacuum and at the exclusion of meeting other important transportation needs over the next two decades. Instead, the business plan offers a way to approach the intercity travel needs of nearly 50 million Californians, which will only succeed to the extent that the state's freeways, airports and conventional rail systems are also enhanced. The existing transportation infrastructure will be more efficient and productive with high-speed trains, which will rely on the freeway, highway, urban transit, and conventional rail networks for access.

Other agencies at the federal, state, and local levels are preparing plans and programs to improve the existing transportation infrastructure. The focus of this business plan is on how to implement a high-speed train system that will work with other improvements to meet the mobility needs of California in the new century.

An investment in a high-speed train system should also be viewed within the context of what the state and its subdivisions will raise and spend on transportation over the next 20 years. Assuming the current rates for fuel and sales taxes dedicated to transportation purposes, California will generate nearly $220 billion in the next two decades. And, based on current plans and programs, this amount would enable California to manage congestion so it will not worsen.

By comparison, the high-speed train system's $25 billion capital cost represents only a fraction of what will be spent in transportation, yet promises significant benefits for a much larger population.

Successfully developing a high-speed train system will also require adopting a different mind-set than that which has shaped the planning, building and operating of trains for over a half-century.

Rather than seeking to realize primarily social and political objectives that require substantial public subsidies to construct and operate, the mind-set that drives the development of the high-speed train system should focus on returning substantial financial, economic and environmental benefits for whatever public and private investments are made. Failure to apply this new mind-set will place the high-speed train system in jeopardy of needing greater public capital and requiring operating subsidies.

Options and Recommendations

After two years of careful and thorough analysis, the Authority is pleased to state that building a high-speed train system is a smart investment for the people of California.

Because of the high-growth rate and urbanization in various areas of the state, the environmental phase of the high-speed train network should begin immediately in order to preserve the necessary right-of-way for track and stations. Failure to do so will increase costs substantially and delay reaping the benefits.

While the Authority has sufficient information and analyses to conclude that a high-speed train system is a smart investment and should proceed, the next step in development should be carrying out a program environmental impact report (EIR). This phase is the logical and appropriate next step for the following reasons:

- The further engineering and environmental analyses that are part of the initial environmental phase of the project will define with greater specificity the high-speed train technology, corridors and station locations included in this plan.
- The official input of federal, state and local agencies about the project (which is required during this phase) will help further hone the capital costs of the project — even though we are assured by the best technical advisors in the world that the system can be built for the $25 billion estimate included in this plan. It is reasonable to anticipate that the federal government would become a financial partner in this project, reducing the capital needs to be borne by the California taxpayer.
- The financial plan will benefit from substantive discussions with the private sector about investing in the project. Potential investors will be most interested in how the ridership and revenue projections compare with those of other agencies and their assessment of the future. For example, the business plan assumes annual growth in intercity air and auto travel of 2.5% and 1.3%, respectively. The Federal Aviation Administration applies an annual growth rate of 3.5% for air travel, and the Federal Highway Administration applies an annual growth rate of 2.0% to highway travel. In addition, the business plan does not assume increases in airport congestion or airfare over the next 20 years over what they are today. Ridership and revenues would be substantially higher if growth rates in airfares and air and highway congestion approach or exceed those used by the above agencies. Higher revenues that result from more congestion or increased airfares would reduce the investment the people of California will need to make.

The Authority recommends that the Governor and the Legislature take the following actions to start the state toward a 21st century passenger train network worthy of California's needs, desires, and aspirations.

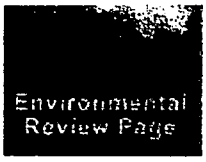
- Initiate a formal environmental clearance process with a state-level program environmental impact report (EIR)/federal-level Tier I environmental impact statement (EIS) on the high-speed train network described in this plan. At the conclusion of the program EIR/Tier I EIS, decision makers can re-evaluate funding options and strategies based on more detailed analyses and information. The financial commitment required to initiate this process is $25 million over the next two years. If the project is deemed viable at the conclusion of this phase, an additional $350 million would be required over the following three to four years to achieve full environmental clearance and achieve a 30 percent level of engineering design. The Authority, or its successor, would then have the option to entertain

proposals from the private sector to enter into a design-build contract and a franchise with the private sector to operate and maintain the system.

- Increase funding and accelerate planning and programming for intercity and commuter rail improvements that can provide enhanced, higher-speed service to Californians earlier and ultimately become part of the high-speed train network. These improvements should occur concurrent with the environmental studies and engineering work on the high-speed train network.
- Begin an aggressive statewide effort to increase federal funding for both conventional and high-speed trains in California. In addition, this effort should include working with the Federal Railroad Administration (FRA) and high-speed train manufacturers to resolve safety and compatibility issues.
- Encourage state, regional and local entities to include high-speed trains in their planning for the future.

In the following pages, the business plan summarizes the Authority's work on defining a high-speed train system, developing patronage and revenue forecasts, establishing the benefits of a high-speed train system, determining how it will integrate with other modes of travel, funding the project development and construction of the system, and gaining the input of Californians as to what they would like to see included in a high-speed train system.

What's New



The California High-Speed Rail Authority (Authority) is the state entity responsible for planning, constructing, and operating a high-speed train system serving California's major metropolitan areas. The Authority has a nine-member policy board and a small core staff. All environmental, planning, and engineering work is performed by private firms under contract with the Authority.

The Authority is preparing a program-level Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) for a 700-mile high-speed train system serving Sacramento, the San Francisco Bay Area, the Central Valley, Los Angeles, the Inland Empire, Orange County and San Diego. High-speed trains would be capable of maximum speed of at least 200 miles per hour with an expected trip time from San Francisco to Los Angeles in 2 hours and 30 minutes. The Authority is the lead state agency for the state EIR, and the Federal Railroad Administration (FRA) is the lead federal agency for the federal EIS. The Authority and the FRA have jointly completed a scoping process, the evaluation of numerous options for routes and stations, and a screening process. The approval of the Screening Report is a major milestone in the program-level EIR/EIS process. The Authority has greatly reduced the number of alignments, station locations and types of high-speed trains to be further investigated. More detailed engineering and environmental impact analyses are currently being carried out on the remaining alignments and station locations, and environmental impacts are also being estimated for the system alternatives.

Senate Bill 1856, Authored by Senator Costa, passed the Assembly with a 59 to 16 vote on Thursday, August 29th and also passed the Senate on Friday, August 30th with a 27 to 6 vote. On September 19, 2002, Governor Davis signed SB 1856. This bill authorizes a $9.95 billion general obligation bond for the November 2004 ballot. $9 billion would create the State's share of the construction costs for the San Francisco to Los Angeles segment of the high-speed train system as presented in the Authority's business plan. The remaining $950 million would be dedicated to feeder rail programs to the high-speed rail system.

Senate Bill 796, Authored by Senator Costa, passed the Senate on Friday, August 30th, with a 26 to 9 vote and was also signed by Governor Davis on September 19, 2002. This bill eliminates the Authority's December 31, 2003 sunset date.

The 2002/2003 State Budget signed by the Governor on September 5, 2002, included $7.05 million for the Authority to prepare the draft program EIR/EIS. The draft program EIR/EIS will be available to the public in August 2003. The final program

EIR/EIS will be completed by the end of 2003.

The next Authority meeting will be held on January 28, 2003, in San Francisco, there will not be an Authority meeting in December 2002.

For more information and reports regarding the Authority's Program EIR/EIS:

- Screening Report (4/15/02)
- Tunneling Summit Summary (pdf, 111 KB)
- Quantm Alignment Optimization Report Summary (pdf, 674 KB)
- Project Description (pdf, 352 KB)
- Program Environmental Process (pdf, 1.07 MB)
- Draft Purpose and Need Statement (pdf, 1.02 MB)
- Environmental Review Page

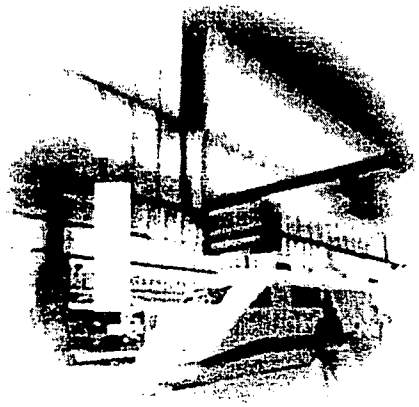
- For more information on SB 1856 and SB 796, please see the California State Legislature website www.leginfo.ca.gov.

Search

Amendment to the Florida Constitution
Article X, Section 19
High Speed Ground Transportation System

To reduce traffic congestion and provide alternatives to the traveling public, it is hereby declared to be in the public interest that a high speed ground transportation system consisting of a monorail, fixed guideway or magnetic levitation system, capable of speeds in excess of 120 miles per hour, be developed and operated in the State of Florida to provide high speed ground transportation by innovative, efficient and effective technologies consisting of dedicated rails or guideways separated from motor vehicular traffic that will link the five largest urban areas of the State as determined by the Legislature and provide for access to existing air and ground transportation facilities and services. The Legislature, the Cabinet and the Governor are hereby directed to proceed with the development of such a system by the State and/or by a private entity pursuant to state approval and authorization, including the acquisition of right-of-way, the financing of design and construction of the system, and the operation of the system, as provided by specific appropriation and by law, with construction to begin on or before November 1, 2003.

Summary of Findings, Recommendations and Actions



As required by Title XXVI, Chapter 341.821-341.822, the Florida High Speed Rail Authority (FHSRA) presents findings, recommendations and actions related to the implementation of a High Speed Rail system in the State of Florida.

Findings

The major findings of the FHSRA to date (through December 2001) are as follows:

1. The Authority finds, based on preliminary ridership, revenue and cost estimates for the corridor, and subject to more detailed engineering, environmental and ridership studies currently underway, that the first segment of a high speed rail system in the St. Petersburg – Tampa – Orlando corridor can have operating revenues that exceed operating costs and meet Federal Railroad Administration (FRA) standards of commercial feasibility. The Authority further finds, based on the same preliminary studies and subject to more detailed work underway, that the economic benefits of high speed rail to the residents and visitors of the State of Florida exceed the costs of the initial segment. Future segments that extend service to the large populations of Southeast Florida and other urban areas should produce similar, or better results.

2. The Authority finds that the segment from St. Petersburg to Tampa needs more study than the segment from Tampa to Orlando, and that the construction on the Tampa to Orlando segment may be feasible to begin in November 2003 – as mandated by Article X, Section 19 of the Constitution of the State of Florida – with construction on the St. Petersburg to Tampa segment beginning in 2005.

3. The Authority finds that it is in the best interests of the state to evaluate the high speed rail system in the context of a statewide system that will benefit the residents and visitors to the State of Florida. To support this finding, the Authority has adopted a Vision Plan that identifies five urban areas in the state that could be linked with a high speed rail system.

4. The Authority finds that a high speed rail system can be implemented using private funds exclusively for operations and maintenance of the system, and a mixture of private and public funding for construction of the infrastructure and on-going capital requirements.

5. The Authority finds that all major modes of passenger transportation in the State of Florida have had their infrastructure elements constructed using public funding at different levels. These modes include highways, transit systems, airports, and seaports.

6. The Authority finds that federal funding is an essential component of financing a high speed rail system, and should be vigorously pursued.

7. The Authority finds that it is in the best interests of the State not to choose or recommend a specific technology for the project. This should be determined competitively based on standards that will be developed by the Authority.

8. The Authority finds that corridors requiring major right-of-way acquisitions may not begin construction before November 2003, as mandated by Article X, Section 19, and that to meet this date, the first construction segment will likely be located in the existing highway and/or rail corridors.

9. The Authority finds that when high speed rail crosses motor vehicle traffic, these crossings should be vertically separated (grade-separated).

10. The Authority finds that in order to develop a high speed rail system, it must comply with the National Environmental Protection Act (NEPA) and all applicable state and federal rules that apply to the planning and construction of a high speed rail system.

11. The Authority finds that in order to construct a high speed rail system, either in the median of an Interstate highway or along an existing railroad, it must coordinate with the Federal Railroad Administration, the Federal Highway Administration, CSX Corporation, AMTRAK and others to develop appropriate rules and conditions for safe operation of a high speed rail system in these environments.

12. The Authority finds that an investment-grade ridership study for high speed rail from St. Petersburg to Orlando is essential to the project, and that this study needs to be conducted in 2002. A similar study needs to be expedited for the extension to Miami.

13. The Authority finds that intermodal connections at the planned high speed rail stations are critical to the success of the system. The Authority further finds that the FHSRA must have a role in working with local communities to develop appropriate feeder systems such as light rail.

14. The Authority finds that investments in high speed rail must be encouraged from those who would benefit, including local communities and private developers. The Authority further finds that the FHSRA must have a role in working with these entities to maximize their participation in funding of the project.

15. The Authority finds that it must implement a flexible procurement process for this project and that the Design-Build-Operate-Maintain and Finance (DBOM&F) procurement method can be structured to allow the necessary flexibility.

Recommendations

Based on the Authority's actions and findings to date, the Authority offers the recommendations that follow to the Governor and the Legislature of the State of Florida.

1. The Authority recommends that the Legislature of the State of Florida

approve the Authority's amended funding request for FY 2002-2003.

2. The Authority recommends that the Legislature of the State of Florida amend Title XXVI, Chapter 341.821-341.822 during the 2002 legislative session to provide the Authority with authorization to procure, seek funding, engage in rule making, use state-owned right-of-way and other measures consistent with the Authority's mission.

3. The Authority recommends that any state funding for this project should not affect projects included in the FDOT's adopted work plan. The Authority further recommends that the existing Transportation Outreach Program (TOP) is a viable source for funding due to its historical genesis from previous high speed rail funding sources.

4. The Authority recommends that a Request for Qualifications (RFQ) and/or Letters of Interest (LOI) be issued early in 2002 to pre-qualify potential providers for the initial segments of high speed rail system between St. Petersburg, Tampa and Orlando.

5. The Authority recommends that a report of the Authority's findings, recommendations and actions be provided to the Legislature in January of 2003.

Actions

1. The FHSRA held its first meeting in Tallahassee on July 16, 2001. At this meeting, the Authority elected its Chairman, Vice-chairman, Secretary and Treasurer. Members of the Authority are:

   - Frederick Dudley, *Chairman*
   - John Browning, *Vice-Chairman*
   - Norman Mansour, *Secretary*
   - Lee Chira, *Treasurer*
   - William Dunn, P.E.
   - C. C. "Doc" Dockery
   - James "Skip" Fowler
   - Leila Nodarse
   - Heidi Eddins
   - Thomas Barry, Jr., P.E. *(ex-officio)*

2. The Authority conducted meetings in six locations throughout the state to receive input, testimony and public opinion. Panel discussions were held with technology representatives, environmental groups, and transportation agencies. Meetings were held in Tallahassee, Orlando, Tampa, Lakeland, St. Petersburg and via statewide teleconference.

3. The Authority selected and contracted with a General Consultant to support the activities of the Authority.

4. The Authority selected and contracted with a Project Development and Environmental (PD&E) Consultant to prepare preliminary engineering and environmental studies. These studies are underway.

5. The Authority has advertised for contract executive staff.

6. The Authority has prepared and submitted this report to the Florida legislature.

The Midwest Interstate Passenger Rail Compact

Bringing Together State Leaders from Across the Region to Advocate for Passenger Rail Improvements

What are the purposes of the Midwest Interstate Passenger Rail Compact?

The main purposes of the Compact are to promote, coordinate and support regional improvements to passenger rail service:

- Promote development and implementation of improvements and long-range plans for intercity passenger rail service in the Midwest;
- Coordinate interaction among Midwestern state officials, and among the public and private sector at all levels (federal, state and local); and
- Support current state efforts being conducted through state DOTs.

Why does the Midwest need a compact to achieve these purposes?

The Midwest needs a unified voice to advocate at the federal, state and local levels for frequent, convenient, cost-effective passenger rail service. The development of a modern passenger rail service is an integral component of the intermodal transportation infrastructure needed to move people and goods quickly, safely and economically in the 21st century. But this essential transportation component has not received the attention currently afforded to air and road developments and improvements.

Our region is the ideal candidate for high speed passenger rail service, with all major metropolitan cities within the 100-500 mile range of the Chicago Hub. Midwestern states need to come together and declare with one voice that improvements in passenger rail are critical and necessary. The Midwest Interstate Passenger Rail Compact provides structure and legitimacy to such a voice.

With reauthorization of both the Transportation Equity Act for the 21st Century (TEA-21) and Amtrak due in 2003, it is more important than ever for state leaders in the Midwest to advocate for the federal funding necessary to build a strong passenger rail system in our region.

Which states are eligible to join the Compact?

The states of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota and Wisconsin are eligible to join the Compact. Other states may also be declared eligible to join, upon approval of the commission that was created when the Compact became effective.

When did the Compact become effective?

According to the Compact language, the Compact became effective when enacted into law by three eligible states: during their respective legislative sessions in 2000, the states of Indiana, Minnesota and Missouri passed the Compact, and they have subsequently been signed into law.

Who makes up the commission's membership?

Four resident members of each state that has enacted the Compact are appointed to the commission. The governor of each state appoints two members and legislative leaders appoint two members.

The governor shall appoint:

- The governor or a designee;
- A member of the private sector

The legislature shall appoint:

- One member from each legislative chamber (or two legislators from any unicameral legislature)

What is the progress of the Compact to date?

The Compact became effective on August 28, 2000, after having been enacted into law in Indiana, Minnesota and Missouri. North Dakota and Nebraska became the fourth and fifth states to enact the Compact during their respective legislative sessions in 2001. In July, 2002, Ohio became the sixth state to join the Compact. As other eligible states continue to pass enabling legislation, they will become members of the commission.

The Midwest Interstate Passenger Rail Commission (MIPRC) held its first meeting of 2002 in Chicago on February 16 and will hold a second meeting in the fall. In addition to other advocacy efforts, the MIPRC has been active in developing a unified "Midwestern voice" for promoting passenger rail funding at the federal level. Commissioners and their allies have traveled to Washington, D.C. several times to meet with Midwestern Members of Congress and other leaders to help secure the future of our nation's passenger rail system and to advocate for federal funding to advance the Midwest Regional Rail Initiative, a nine-state effort to improve the efficiency and frequency of passenger rail service in the region.

How can I find out more about the Compact and its progress?

The Midwestern Office of The Council of State Governments is serving as secretariat to the Midwest Interstate Passenger Rail Commission. Contact Laura Kliewer, the Commission's director (630/810-0210, lkliewer@csg.org), for more information.

Updated 10/30/02

Missouri Revised Statutes

Chapter 680
Transportation Services
Section *680.175*

August 28, 1997

Interstate high speed intercity rail passenger network compact.

680.175. The "Interstate High Speed Intercity Rail Passenger Network Compact", as consented to by the United States Congress in Public Law 98-358, is hereby ratified, enacted into law and entered into by the State of Missouri with all other states legally joining therein in the form substantially as follows:

INTERSTATE HIGH SPEED

INTERCITY RAIL

PASSENGER NETWORK COMPACT

ARTICLE I--POLICY AND PURPOSE

Because the beneficial service of and profitability of a high speed intercity rail passenger system would be enhanced by establishing such a system which would operate across state lines it is the policy of the states party to this compact to cooperate and share jointly the administrative and financial responsibilities of preparing a feasibility study concerning the operation of such a system connecting major cities in Ohio, Indiana, Michigan, Pennsylvania, Illinois, Missouri, and any other State which subsequently becomes a participant through enactment of the compact.

ARTICLE II--COOPERATION

The states of Ohio, Indiana, Michigan, Pennsylvania, Illinois, Missouri and all other states which subsequently enter into this compact, hereinafter referred to as "participating states", agree to, upon adoption of this compact by the respective states, jointly conduct and participate in a high speed intercity rail passenger feasibility study by providing such information and data as is available and may be requested by a participating state or any consulting firms representing a participating state or the compact. It is mutually understood by the participating states that such information shall not include matters not of public record or of a nature considered to be privileged and confidential unless the state providing such information agrees to waive the confidentiality.

The participating states further agree to:

(A) Make available to each other and to any consulting firm representing the member states or the compact such assistance as may be legal, proper and available, including, but not limited to personnel, equipment, office space, machinery, computers, engineering and technical advice and services; and

(B) Provide such financial assistance for the implementation of the feasibility study as may be legal, proper and available.

ARTICLE III--INTERSTATE RAIL

PASSENGER ADVISORY COUNCIL

There is hereby created an interstate rail passenger advisory council, the membership of which shall consist of three representatives from each participating state. One representative shall be a member of the senate of the participating state, appointed by the president pro tem of the senate of such state, one representative shall be a member of the house of representatives of the participating state, appointed by the speaker of the house of representatives of such state, and one representative shall be from the state's railroad industry, appointed by the governor of the participating state. The members shall select designees who shall serve in the absence of the members. The advisory council shall meet within thirty days after ratification of this agreement by at least two participating states and establish rules for the conduct of the advisory council's business.

The Advisory Council shall coordinate all aspects of the high speed intercity rail passenger feasibility study relative to interstate connections and shall do all other things necessary and proper for the completion of the feasibility study.

ARTICLE IV--EFFECTIVE DATE

This compact shall become effective upon the adoption of the compact into law by two or more of the participating states. Thereafter, it shall enter into force and effect as to any other participating state upon the enactment thereof by such state.

This compact shall continue in force with respect to a participating state and remain binding upon such state until six months after such state has given notice to each other participating state of the repeal thereof, such withdrawal shall not be construed to relieve any participating state from any obligation incurred prior to the end of the state's participation in the compact as provided herein.

ARTICLE V--CONSTRUCTION AND

SEVERABILITY

This compact shall be liberally construed so as to effectuate the purposes thereof. The provisions of this compact shall be severable and if any phrase, clause, sentence, or provision of this compact is declared to be contrary to the constitution of any participating state or of the United States, or the applicability thereof to any government, agency, person, or circumstance is held invalid, the validity of the remainder of this compact and the applicability thereof to any government, agency, person or circumstance shall not be affected thereby, if this compact shall be held contrary to the constitution of any participating state, the compact shall remain in full force and effect as to the remaining states and in full force and effect as to the state affected as to all severable matters.

(L. 1991 S.B. 173 § 1)

*The Interstate High Speed Intercity Rail Passenger Network Compact has been adopted by the following participating states: Ohio 1979 Michigan 1979 Pennslyvania 1980 Illinois 1980 Indiana 1981 New York 1989 Missouri 1991

FEDERAL LAW

SEC. 410. INTERSTATE RAIL COMPACTS.

(a) CONSENT TO COMPACTS.—Congress grants consent to States with an interest in a specific form, route, or corridor of intercity passenger rail service (including high speed rail service) to enter into interstate compacts to promote the provision of the service, including—

(1) retaining an existing service or commencing a new service;

(2) assembling rights-of-way; and

(3) performing capital improvements, including—

(A) the construction and rehabilitation of maintenance facilities;

(B) the purchase of locomotives; and

(C) operational improvements, including communications, signals, and other systems.

(b) FINANCING.—An interstate compact established by States under subsection (a) may provide that, in order to carry out the compact, the States may—

(1) accept contributions from a unit of State or local government or a person;

(2) use any Federal or State funds made available for intercity passenger rail service (except funds made available for Amtrak);

(3) on such terms and conditions as the States consider advisable—

(A) borrow money on a short-term basis and issue notes for the borrowing; and

(B) issue bonds; and

(4) obtain financing by other means permitted under Federal or State law.

49 USC 24101

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 2003

S D

BILL DRAFT 2003-RW-2 [v.4] (12/9)

(THIS IS A DRAFT AND IS NOT READY FOR INTRODUCTION)
1/4/2003 6:15:34 PM

Short Title: NC-Va High Speed Rail Compact. (Public)

Sponsors: .

Referred to:

A BILL TO BE ENTITLED

AN ACT TO ESTABLISH THE NORTH CAROLINA-VIRGINIA INTERSTATE HIGH-SPEED RAIL COMPACT.

The General Assembly of North Carolina enacts:

SECTION 1. Chapter 136 of the General Statutes is amended by adding a new Article to read:

"Article 18

North Carolina-Virginia Interstate High Speed Rail Compact

"**§ 136-220 Compact Established.**

The North Carolina-Virginia Interstate High-Speed Rail Compact is hereby enacted into law and entered into with the State of Virginia, upon that State's concurring action, and in accordance with federal law authorizing the compact.

"**§ 136-221 Agreement.**

The states of North Carolina and Virginia agree, upon adoption of this compact:

(1) To study, develop and promote a plan for the design, construction, and operation of interstate high-speed rail service through and between points in the States of North Carolina and Virginia, and adjacent States.

(2) To coordinate efforts to establish high-speed rail service at the federal, State, and local governmental levels;

(3) To advocate for federal funding support for the establishment of high-speed interstate rail service within and through North Carolina and Virginia.

(4) To provide funding and resources to the North Carolina-Virginia High-Speed Rail Compact Commission, if funds are available and are appropriated for that purpose.

"**§ 136-222 Commission Established.**

(a) Commission.--The North Carolina-Virginia High-Speed Rail Compact Commission is hereby established to carry out the purposes of the Compact.

(b) Members, terms – The Commission shall be composed of five members from each participating State; two appointed by the General Assembly upon recommendation of President Pro Tempore of the Senate, two appointed by the General Assembly upon recommendation of the Speaker of the House of Representatives, and one appointed by the Governor.

(c) Chair – The chair of the Commission shall be designated from the membership for a term of one year, and shall alternate between the member states

(d) Meetings and reports.—The Commission shall meet at least twice each year, at least once in each member State, and shall issue a report of its activities each year.

(e) Funds—The Commission may utilize funds appropriated to it or received from federal sources for its operation and activities.

(f) Expenses of Members.-- North Carolina members of the Commission shall receive per diem, subsistence and travel allowances in accordance with G.S. 120-31., G.S. 138-5, or G.S. 138-6, as appropriate.

(g) Staff –Primary staff to the Commission shall be provided the Department of Transportation of each Member State.

SECTION 2. This act becomes effective when it becomes law.

September 24, 2003

MEMORANDUM

TO: VA/NC Interstate High-Speed Rail Commission Members

FROM: Giles Perry, Staff Counsel

RE: Committee Meeting Notice

There will be a meeting of the VA/NC Interstate HSR Commission on Wednesday, October 1, 2003, at 10:00 a.m. in Raleigh, NC at the Legislative Building in Room 1124. It should last until approximately 2:00 p.m. with a lunch break in the Legislative Cafeteria.

Parking for non-legislative members of the commission is available in the visitor parking deck #75 located on Salisbury Street across from the Legislative Office Building. Parking is also available in the lot located on the corner of Jones and Wilmington Streets (enter lot from Jones Street) across from the State Archives and History Building (see enclosed map or go to http://www.itpi.dpi.state.nc.us/vvisits/city.html on the Internet). The cost for visitor parking is $.50 per hour or $4.00 per day and is reimbursed with a parking receipt that is submitted with your travel reimbursement form.

Please advise Suzanne Smith at (919) 733-5779 or e-mail at Colela@ncleg.net if you will be unable to attend.

GP/sjs

Posted 24-Sept-03

cc: Press
Committee Record ✓
Interested Parties

Agenda

Virginia-North Carolina
Interstate High-Speed Rail Commission

October 1, 2003
10:00 AM – 2:00 PM
Room 1124, Legislative Office Building
Raleigh, NC

I. **Welcome and Introductions**

II. **Congressional Legislation Review and Potential Impacts on Virginia and North Carolina**
David Ewing, States for Passenger Rail Coalition

III. **S-Line Public Private Partnership**
Lyman Cooper, Regional Vice President and Anne Chettle, Director of Federal Affairs, CSX Transportation

IV. **Work Program Discussion**
- **Strategic Plan to Establish a Federal Partnership**
- **Action Plan on CSX S-line**

Members of the Commission

V. **Lunch Break—*Legislative Cafeteria***

VI. **Update on Virginia Activities**
- **Statewide Plan**
- **Rail Plan**
- **Service Extensions**
- **Richmond to Washington and I-81**

George Conner, Director of Rail Transportation, Virginia Department of Public Transportation and Rail

VII. **Update on North Carolina Activities**
- **Trainsets and Stations**
- **Charlotte to Atlanta-Macon**
- **USDOT Office of Inspector General Analysis of federally-designated high speed rail corridors**

David King, Deputy Secretary North Carolina Department of Transportation

VIII. **Tier II Environmental Study, Raleigh to Richmond**
David Foster, PE, Rail Environmental Engineering Manager, North Carolina Department of Transportation

IX. **Discussion of Next Meeting Date**

X. **Others matters, Adjourn**

MINUTES

VA/NC INTERSTATE HIGH SPEED RAIL COMMISSION
Wednesday, October 1, 2003
10:00 a.m.
Room 1124, Legislative Building
Raleigh, North Carolina

The VA/NC Interstate High Speed Rail Commission met on Wednesday, October 1, 2003, at 10:00 a.m. in room 1124 of the Legislative Building in Raleigh, North Carolina. The following members were present: Senator Wib Gulley, Co-chair; Representative Nelson Cole, Co-chair; Representative Jim Crawford, Representative Mitch Gillespie, Senator Linda Garrou, Mr. Bill Kincheloe, Senator Frank Ruff, Delegate Leo Wardrup, Senator John Watkins, and Delegate John Welch. Senators Kay Hagan and Kenneth Stolle asked for an excused absence. A visitor registration sheet is included and made part of these minutes. Representative Cole introduced Dick Beadles and Nancy Finch in the audience who are members of Virginians for High Speed Rail, Jay McArthur, assistant general manager for Amtrak and Don Stewart, a member of the Secretary of Transportation for North Carolina's Rail Advisory Council.

Representative Nelson Cole presided and called the meeting to order and welcomed the members, especially those traveling from Virginia. He asked all Commission members present to then introduce themselves.

The minutes from the last meeting, January 7, 2003, held in Richmond, Virginia, were approved. Delegate John Welch moved to accept them as printed. Senator Gulley seconded and the motion passed.

CONGRESSIONAL LEGISLATION REVIEW & POTENTIAL IMPACTS ON VIRGINIA & NORTH CAROLINA

Representative Cole then introduced Mr. David Ewing, a member of the States for Passenger Rail Coalition (see Attachment #1). He outlined the course of action for the federal fiscal year 2004. He indicated that we needed to find a way to get a dedicated source of capital for investment in rail infrastructure, stations and equipment. He also wants to look at efforts within the federal legislative landscape to make rail projects eligible for funding under existing federal aid highway and transit funds as well as the projects specific efforts. Two distractions that could keep us from focusing on rail and capital would be Amtrak's ongoing day-to-day operating crisis and the possibility of re-regulation of the freight rail industry. Both of these distractions would have adverse effects to create capital for both states. The legislative vehicle that would accomplish what we need would be the reauthorization of TEA-21, the Transportation Equity Act for the 21st Century. A five-month extension until February 29, 2004 is in effect now. Mr. Ewing feels with the extension it will still be impossible to form a consensus on the bill.

If that is the case, at the end of the extension, the coalition will get a 19-month extension to file a Jobs Bill that would help the rail industry by having a rail title in the legislation that would create more jobs.

Mr. Ewing stated that the message that needs to be sent to Congress is that Virginia and North Carolina can work together and move forward. The important critical partners in that effort are the NC Railroad and the VRE to help advance the cause of getting a rail title in TEA-21. The three roles of the commission would be to serve as builders to build a core constituency, work on a network and work on a sell prospectus of policies and projects. The second role would be to be sellers for the document in Washington at the end of October when the High Speed Ground Transportation Association will be holding their meeting. National representatives will be there and it will be a good chance to network with states that have similar systems. The third role would be to be closers and to seal the deal in January in Washington. He feels that these three roles would make a substantial difference in getting the money appropriated. A brief question and answer period followed. Representative Cole asked Mr. Ewing if North Carolina and Virginia are still ahead of other states with interstate rail systems and he answered by saying they are still ahead of the curve.

S-LINE PUBLIC PRIVATE PARTNERSHIP

Representative Cole introduced Lyman Cooper, Regional Vice President for CSX Transportation and Anne Chettle, Director of Federal Affairs with CSX. Mr. Cooper talked about where the S-Line is going and indicated that negotiations are still moving forward. The next phase of the S-Line project will be to find perimeters of what is good for passenger transportation. He indicated that the commission's input is very important to this phase of the S-Line project.

Anne Chettle then spoke about the four areas where the railroads have been approached for their input or have expressed provisional interest in receiving public funding in getting involved in the public private partnership. The first area is the public private partnership, second is the reauthorization of the TEA-21 which would have freight as part of the rail state planning, third area is the Bonding Bills where there are six to eight bills in the House and Senate in Washington and the fourth area is Amtrak. CSX is still determining their position on these issues, and they are in the middle and trying to determine their future policy and what their risks would be. A brief question and answer period followed. It was noted that Norfolk Southern Railroad was not present at the meeting but hoped they will be more involved in the future.

Representative Cole briefly spoke about the Action Plan on the CSX S-line and stated that they are in step with what the commission wants them to do and are ready to play ball.

Representative Cole then called on Pat Simmons who explained the Draft Implementation Plan (see Attachment #2). This is a summary of the completed

environmental work. The Federal government gave a record of decision that would identify the routing between Charlotte, NC and Washington, DC. North Carolina worked on the south end of the line from Raleigh to Charlotte to see what the needs and issues were. These issues will be talked about more in the afternoon session.

Representative Cole then brought up the next item on the agenda, Strategic Plan to Establish a Federal Partnership. He indicated that the issues that needed to be taken into consideration at this time are having legislative staffs from both states put together a memorandum establishing the partnership between CSX, Norfolk Southern along with North Carolina and Virginia railroads. Discussion followed. Senator Gulley stated that a prospectus be put together by October 28 for the meeting in Washington, DC on that date. Pat Simmons indicated that North Carolina could send a draft to the North Carolina members by that time and Virginia indicated they could also. Mr. Simmons said that some previous work was already on the shelf. The total number of dollars from Charlotte, NC to Washington, DC was $2.7 billion with $5.5 million per mile for the 500 miles between Charlotte and Washington with the speed of the trains up to 110 miles per hour. They would also be able to give some detail on to what projects would be on which specific railroads. Mr. Simmons said he would be able to get this summary out in the form of a one-page document to the commission members by next week.

STATUS OF RAIL PROJECTS IN VIRGINIA

Representative Cole introduced George Conner, Director of Rail Transportation with Virginia Dept. of Public Transportation and Rail, who talked about Attachment #3, Status of Rail Projects in Virginia. He indicated that they are working on a statewide plan that will be completed by next year and with the draft by this November and final plan by next summer. There are seven projects within the Richmond, VA to Washington, DC corridor that they are now working on. One is the Quantico Bridge that should be completed in June 2006 and they are negotiating a construction agreement with CSX on the six other projects that would allow an additional fifteen freight trains plus passenger train service. The Main Street Station in Richmond should open fall of 2003. The Richmond Area Improvements, I-64 Major Investment Study (MIS), and the Richmond to South Hampton Roads studies are all underway. They are getting a lot of requests to have passenger rail service available to Jamestown for their 400th Anniversary celebration in 2007. DRPT is working with Amtrak to develop cost estimates for this proposed service expansion. They are still working on the Bristol Rail Passenger Service but the I-81 study is interfering with this study. They are waiting for the outcome of negotiations on these proposals to determine their potential impact on passenger rail service in the corridor. A brief question and answer period followed.

Representative Cole then announced that the commission would adjourn for lunch at this time (11:45 a.m.) and continue back at 12:30 in the same room.

Representative Cole called the meeting back to order at 12:45 p.m. He introduced David King, Deputy Secretary with the North Carolina Department of Transportation,

who gave the commission an update on North Carolina activities. He indicated that North Carolina continues to work well with Norfolk Southern on a portion of the corridor between Charlotte and Raleigh. The working relationship has been very good. The $26 million worth of work will come to an end in January or February 2004 and the work will have bought the state 32 minutes of improved running time between Charlotte and Raleigh when the project is done. The passenger train travel time when completed from Charlotte to Raleigh will be 3 hours and 15 minutes. The goal has been to be car competitive with the travel time and they are very close to that.

Mr. King then talked about the new stations that are being dedicated or ones that ground has been broken for. They are in Greensboro, Kannapolis, High Point and Burlington. Equipment options are being looked at for existing equipment at stations that are being refurbished so that modern, attractive, technologically advanced equipment will be in the Raleigh to Charlotte to Washington, DC corridor. The North Carolina DOT is engaged with South Carolina and Georgia to try to extend the corridor from Charlotte to Atlanta via Greenville, Spartanburg and on to Macon, Georgia. Mr. King indicated that the Virginia-North Carolina corridor is in the forefront because of the bi-state cooperation and the environmental work that is well under way plus the cooperation from the major pair of railroads in North Carolina and Virginia. Because of all of these things going for the corridor, everyone is hopeful that Federal funding will come from Congress.

UPDATE ON SEHSR-PETERSBURG TO RALEIGH SECTION

Representative Nelson Cole introduced David Foster, Rail Environmental Engineering Manager with the North Carolina Department of Transportation. He talked about Attachment #4, Update on SEHSR-Petersburg to Raleigh Station. He indicated that Virginia and North Carolina are working with their federal partners to build upon the Tier I Record of Decision that was received last October for the Washington, DC to Charlotte, NC corridor. See the maps included in the handout that identify the preferred study corridor that has been accepted by the Federal agencies for further study.

Mr. Foster indicated that both states are now working on a detailed Tier II DIS for the portion of the corridor between Petersburg, Virginia and Raleigh, NC. More environmental study is needed in that portion of the corridor as well as Petersburg north to Richmond to satisfy the Federal Railroad Administration's requirements, which is the key to getting the Federal funding when it becomes available. See page one of attachment #4 for the dates of the formal steps in the environment document. The Final Environmental Impact Statement would begin in January 2005, followed by a Record of Decision for the Petersburg to Raleigh section in November 2005.

DISCUSSION OF NEXT MEETING DATE FOR COMMISSION

Representative Cole opened the floor for discussion to establish the next meeting date. Discussion followed with the North Carolina and Virginia members giving their

session dates. The week of January 5-9, 2004 was decided on. Virginia will host the next meeting and they will let the members know the details at a later time. Senator Watkins of Virginia suggested that at the next meeting that the legislative staffs of both states have something in writing for the direction for the memorandum of understanding with Norfolk Southern, CSX, NC Rail and VRE and the states of Virginia and North Carolina. He also suggested that at the next meeting that both states have their framework established for the legislation needed in Congress in order to have the time it will take for the legislative process to get it adopted. Senator Gulley of North Carolina said that in three to four weeks North Carolina could have a talking paper/prospectus on what would be proposed to Congress but a signed, executed memorandum of understanding is more ambitious for now. Discussion also followed for having a document available for the members that will be in Washington, DC at the end of October attending the High Speed Ground Transportation Association meeting. Staff said they would be able to provide this.

There being no further business, Representative Cole adjourned the meeting at 1:25 p.m.

Representative Nelson Cole, Co-Chair Presiding

Suzanne Smith, Comm. Assistant

Senator Wib Gulley, Co-Chair

VISITOR REGISTRATION SHEET

VA/NC Interstate High Speed Rail Commission — October 1, 2003

Name of Committee — **Date**

VISITORS: PLEASE SIGN IN BELOW AND RETURN TO COMMITTEE CLERK

NAME	FIRM OR AGENCY AND ADDRESS
DAVID EWING	consultant Alex., Va
Nancy Smith	Virginians for High Speed Rail
DICK DEADLES	VA H.S.R.
JAY McARTHUR	AMTRAK
Jeff Mann	Amtrak
DON STEWART	SECY'S TRIC ADV COUNCIL - NCDOT
WINK Hoover	ROCKINGHAM CO. COMMISSIONER
ALAN TOBIAS	VA DEPT of RAIL & PUBLIC TRANSPORTATION
Shirley Williams	NCDOT Rail Division
George Conner	Va DRPT
Ruth Sappie	NCDOT

VISITOR REGISTRATION SHEET

VA/NC Interstate High Speed Rail Commission — October 1, 2003

Name of Committee — **Date**

VISITORS: PLEASE SIGN IN BELOW AND RETURN TO COMMITTEE CLERK

NAME	FIRM OR AGENCY AND ADDRESS
Anne Chettle	CSX Corporation Washington, DC
Lyman Cooper	CSX Corp
James McCoy	Winston-Salem Chamber
Susan Coward	NCDOT
David Foster	NCDOT - Rail

VA/NC Interstate HSR Commission Meeting: October 1, 2003

Raleigh, North Carolina

David Ewing, States for Passenger Rail Coalition

A suggested coarse of action in the form of a plainspoken, frank conversation.

Outline:

1. Happy New Year: FFY 2004

2. New Year Resolutions for Federal Rail Policy:

- A dedicated source of **capital** for investment in **rail** infrastructure, stations and equipment
- Rail project eligible for funding under existing federal-aid highway and transit categories
- Projects

3. Don't get screwed again

4. Two distractions:

- Amtrak
- Re-regulation of the freight industry

5. The legislative vehicle: Reauthorization of TEA-21

- Five month extension until February 29, 2004

6. Alliance: Structure

- Core Group-
  +VA, NC, CSX, NS:
  +Additional keys: NCRR and VRE
  + 50,000 feet
- Parallel universes:
  + Illinois: CREATE
  +PNW

7. Build, operate and maintain a network to inform and direct the effort

- Congressional delegation
- Friends
- Allies

8. Prospectus

9. Three Roles for the Commission:

- Builders
  - +Core
  - +Network
  - +Prospectus
- Sellers: 10/28-10/29 Washington
- Closers: 1/29-1/30/04 Washington

10. Measure Success

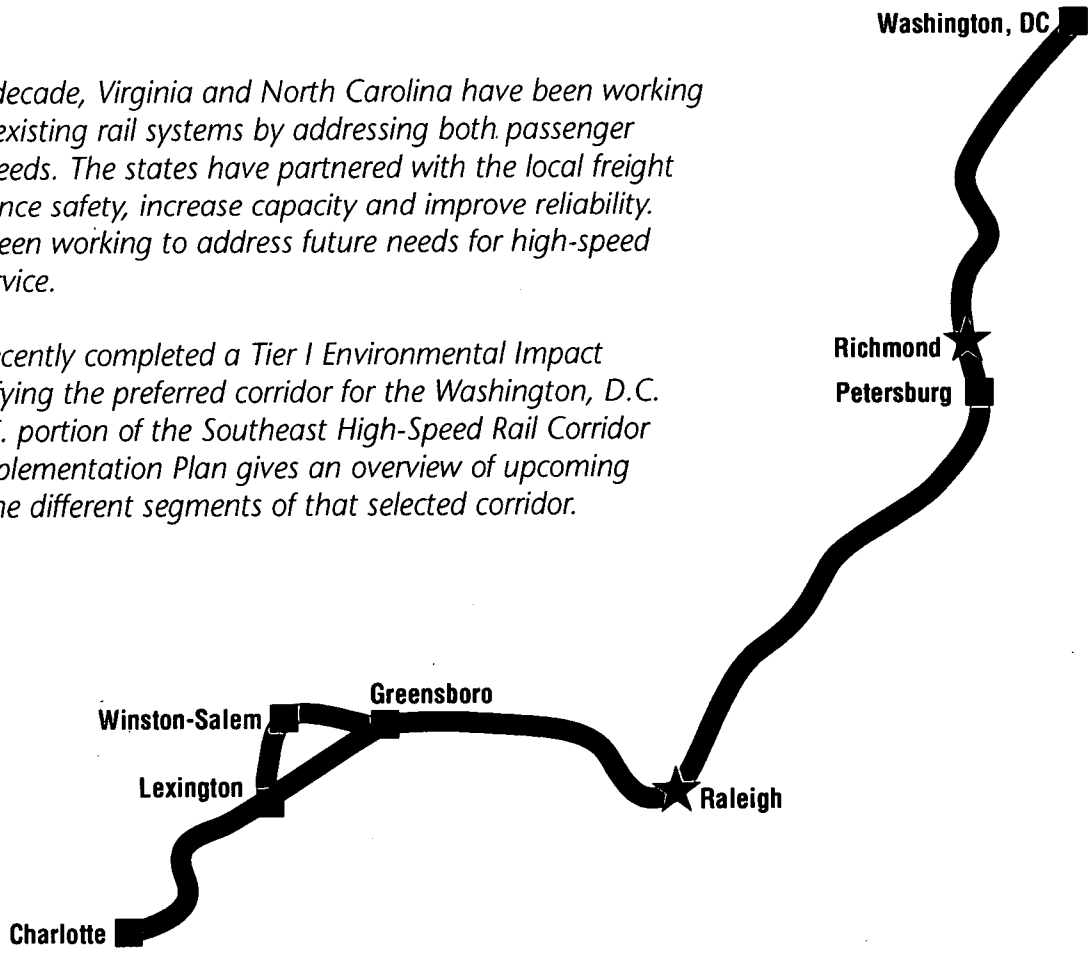
DRAFT IMPLEMENTATION PLAN

for Southeast High-Speed Rail Washington, DC to Charlotte, NC

OCTOBER 2002

During the past decade, Virginia and North Carolina have been working to improve their existing rail systems by addressing both passenger and freight rail needs. The states have partnered with the local freight railroads to enhance safety, increase capacity and improve reliability. They also have been working to address future needs for high-speed passenger rail service.

The two states recently completed a Tier I Environmental Impact Statement identifying the preferred corridor for the Washington, D.C. to Charlotte, N.C. portion of the Southeast High-Speed Rail Corridor (SEHSR). This Implementation Plan gives an overview of upcoming activities along the different segments of that selected corridor.



BACKGROUND

In 1992 the U.S. Department of Transportation designated five potential regional high-speed rail corridors across the country. The Southeast High-Speed Rail Corridor would extend high-speed rail service south, from Washington to Richmond, Va., Raleigh and Charlotte, N.C. The SEHSR corridor was later expanded and is now part of a more comprehensive national plan *(see map on back)*.

In 1997, the USDOT reported* that the Southeast High-Speed Rail corridor, when connected with the existing Northeast Corridor, could generate more revenue than any other proposed high-speed rail route in the country. They estimated that the SEHSR route could generate $2.54 in benefits for every dollar spent to develop and operate it and it would be the only such route to cover its operating costs from passenger revenues.

Establishing a federal/state funding partnership will facilitate project development.

**"High Speed Ground Transportation for America," 1997, USDOT*

WASHINGTON, DC TO PETERSBURG

(Collier Yard)

(Passenger service currently operates on this section)

Step 1
- Improve crossovers
- Add third track as appropriate
- Replace and expand bridges
- Upgrade track to Class V
- Improve Richmond Main Street Station access
- Perform preliminary engineering and environmental work from Collier Yard to Centralia

Time frame: within 5 years

Step 2
- Add third and fourth track as appropriate
- Improve rail infrastructure from Collier Yard to Centralia

Time frame: within 8 years

WINSTON-SALEM CONNECTION

(No passenger service currently operates on this section)

Step 1 Winston-Salem to Greensboro

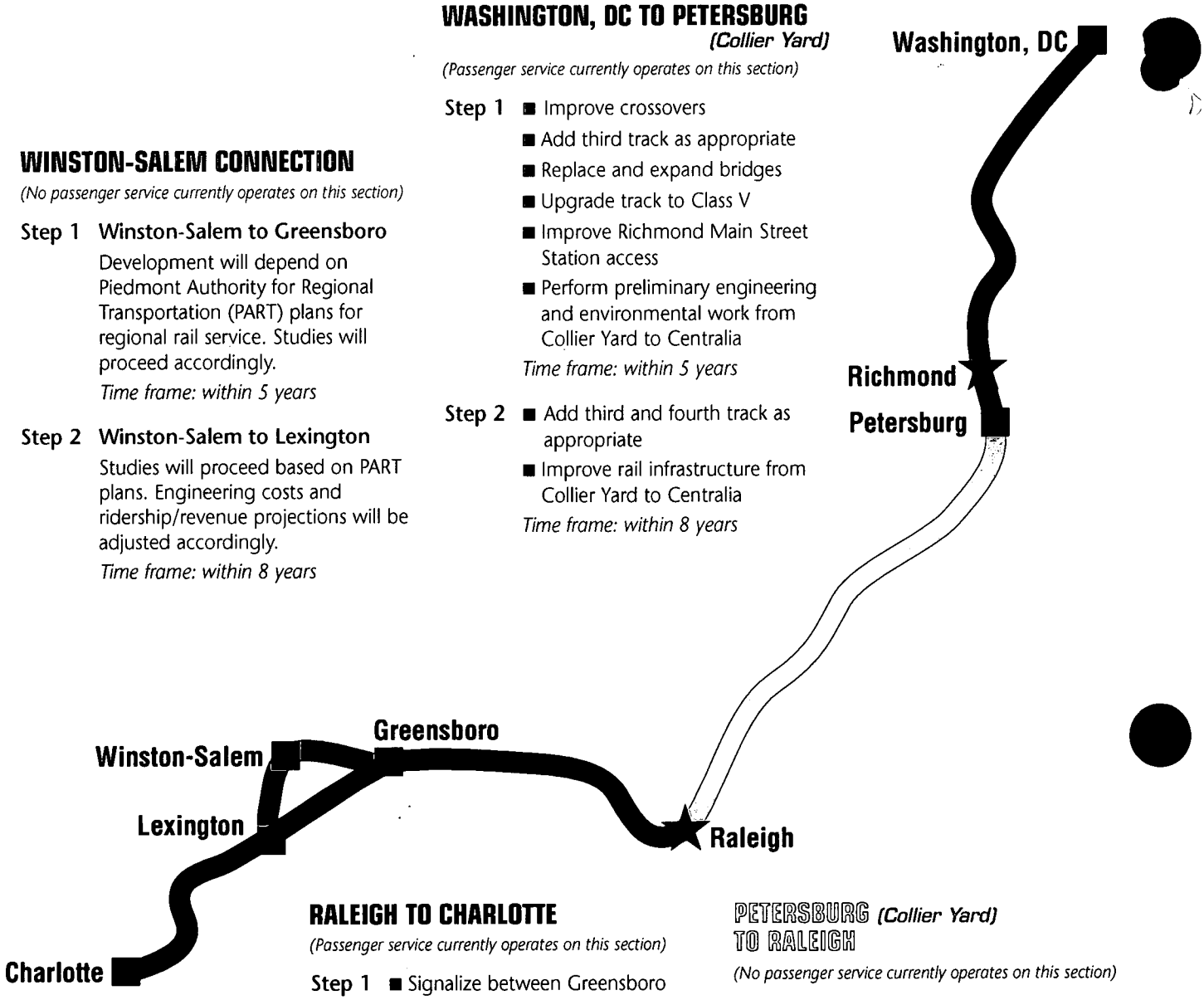
Development will depend on Piedmont Authority for Regional Transportation (PART) plans for regional rail service. Studies will proceed accordingly.

Time frame: within 5 years

Step 2 Winston-Salem to Lexington

Studies will proceed based on PART plans. Engineering costs and ridership/revenue projections will be adjusted accordingly.

Time frame: within 8 years



RALEIGH TO CHARLOTTE

(Passenger service currently operates on this section)

Step 1
- Signalize between Greensboro and Raleigh
- Improve crossings
- Increase spirals & super elevation

Time frame: within 2 years

Step 2
- Extend sidings
- Replace double track
- Increase spirals & super elevation
- Realign numerous curves
- Improve crossings

Time frame: within 5 years

Step 3
- Add third track as appropriate

Time frame: within 10 years

PETERSBURG *(Collier Yard)* TO RALEIGH

(No passenger service currently operates on this section)

Step 1
- Coordinate access with CSX
- Prepare Environmental Impact Statement

Time frame: within 5 years

Step 2
- Begin preliminary engineering

Time frame: within 8 years

Step 3
- Restore track and signals

Time frame: within 10 years

WASHINGTON, DC TO PETERSBURG *(Collier Yard)*

Most of this 137-mile segment shares right of way with CSX's main line ("A-Line") that is used by 40-50 freight trains and 10 Amtrak passenger trains daily. Virginia Railway Express (VRE) commuter service also operates over this line between Fredericksburg and Washington. A feasibility study is underway to determine if the former C&O line from Richmond north to Doswell, VA can be developed for passenger rail service.

For several years, the Virginia Department of Rail and Public Transportation, VRE, Metro, CSX and Amtrak have been working together to improve the A-Line from Richmond to Washington to ease traffic flow through this crowded area. The agencies have rebuilt the interlocking near the Potomac River, expanded sidings for the Auto-Train facilities at Lorton, built a third track through Potomac Yard, rehabilitated several bridges, tunnels and stations, and improved signals. The agencies have improved and eliminated various grade crossings and will add a double track bridge at Quantico Creek, as well as additional projects to expand capacity.

Even with these improvements, capacity on this stretch of railroad is still near saturation. To accommodate the freight and passenger growth needs of all users and institute high-speed passenger service, a third track will need to be built in phases between south Alexandria and Richmond. Tracks also will need to be upgraded to accommodate 110 mph speeds.

PETERSBURG *(Collier Yard)* TO RALEIGH

This 128-mile route segment was once the Seaboard Air Line Railroad main line ("S-Line") between Raleigh and Richmond. The Raleigh to Norlina portion is an active CSX freight line with two to four daily freight trains. CSX took the Norlina to Petersburg section out of service in 1985 and removed all the track and signals. The first priority for developing this segment is to reach an agreement with CSX to use the corridor. After completing environmental documentation, most of the track infrastructure from Norlina to Petersburg will have to be rebuilt. Reconstructing this portion of track not only will benefit high-speed rail operations, but also will help relieve traffic congestion on CSX's parallel main line ("A-Line").

The Triangle Transit Authority (TTA) plans to construct a double track commuter line along the same right of way from Raleigh toward Wake Forest. The main tracks in this section also will be upgraded to accommodate higher speeds and a train control signal system will need to be installed.

RALEIGH TO CHARLOTTE

This 174-mile portion of the SEHSR route is owned by the North Carolina Railroad (NCRR) and operated under a trackage rights agreement by the Norfolk Southern Railway (NS). The Greensboro to Charlotte section is Norfolk Southern's busiest rail line in the state with up to 40 freight trains a day. Four to six passenger trains also run between Raleigh and Charlotte and three or more transit authorities could eventually share portions of this right of way. In addition, CSX freight trains run between Cary and Raleigh.

Significant stretches of double track were removed between Charlotte and Greensboro in the late 1950s to save maintenance costs. These single-track sections greatly hinder freight flow and delay passenger trains. To provide sufficient track capacity and improve schedule reliability, the double tracks will need to be replaced and curves realigned. Although the Greensboro to Raleigh segment is not as busy, this single-track line also needs improvement as it is very curvy, lacks train signals and adequate passing sidings.

The NCDOT, NCRR and NS are now constructing a $24 million improvement program that will add a train control system, install some double tracks, extend several sidings, and realign and super elevate curves so that trains can operate at higher speeds. These improvements are a building block to higher speed operations. Speeds up to 110 mph are possible but would require stretches of dedicated third track to separate freight and high-speed passenger trains for safety.

WINSTON-SALEM CONNECTION

Service to Winston-Salem would be provided over the Norfolk Southern "K-Line" between Greensboro and Winston-Salem and the Winston-Salem Southbound (WSSB) from Winston-Salem to Lexington. Both lines carry two to four freight trains per day and have complex engineering and environmental issues that must be resolved before either line can be used for passenger service.

The Greensboro to Winston-Salem line has higher priority for improvement because the Piedmont Authority for Regional Transportation (PART) has chosen this as its first commuter rail route. Studies will focus on developing rail service in this narrow right of way and eliminating multiple grade crossings. The NCDOT and PART will work together to plan and develop joint transit and intercity passenger use in this segment.

Future passenger use of the WSSB line would allow for a better north-south flow of service through Winston-Salem, but would involve completely rebuilding and reconfiguring the track to intersect with the NCRR in Lexington.

STATIONS

North Carolina and Virginia have begun rehabilitating or expanding many passenger stations during the past decade. Historic stations have been rehabilitated in Salisbury, High Point, Greensboro, Raleigh, Main Street Station in Richmond, Fredericksburg and Alexandria. Conceptual studies have been completed for the Winston-Salem Union Station renovation.

However, the most challenging projects are those multi-modal stations that facilitate seamless transfer among the various modes of transportation. Richmond's Main Street Station is one example. The three-phase renovation project for the station that serves the central city will be completed in 2006.

In North Carolina, planning has just begun for the new Raleigh multi-modal station, but elements of it and the Durham multi-modal station must be completed before TTA begins service in 2007. Renovation of the transit portion of the historic Greensboro station is almost complete, while rehabilitation of the rail passenger portion is now underway. One of the largest projects in development is the new Charlotte multi-modal station in the uptown business district. Design and property acquisition have begun, with completion anticipated by 2008.

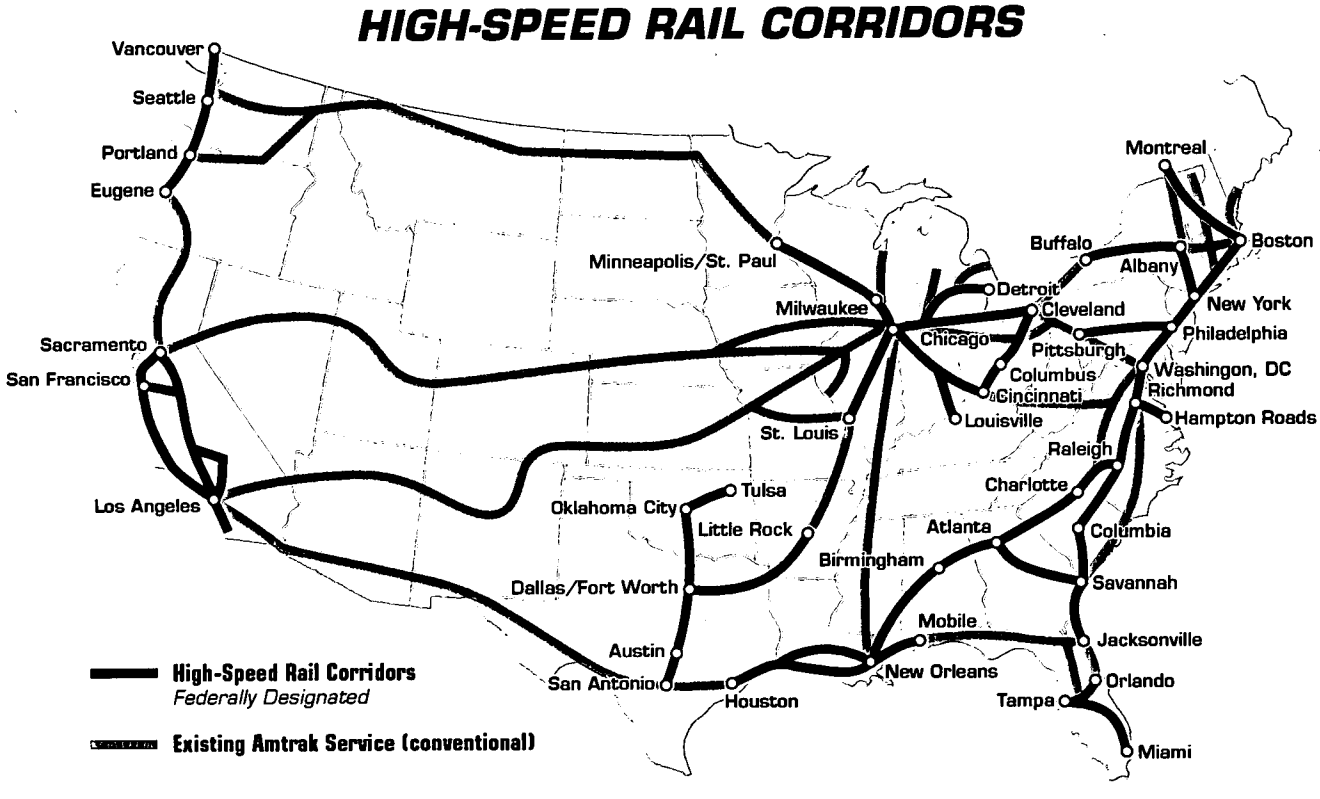
EQUIPMENT AND SERVICE IMPROVEMENT

While infrastructure improvements are critical to high-speed rail development, new train sets also are necessary to bring high-speed passenger rail service to the Southeast.

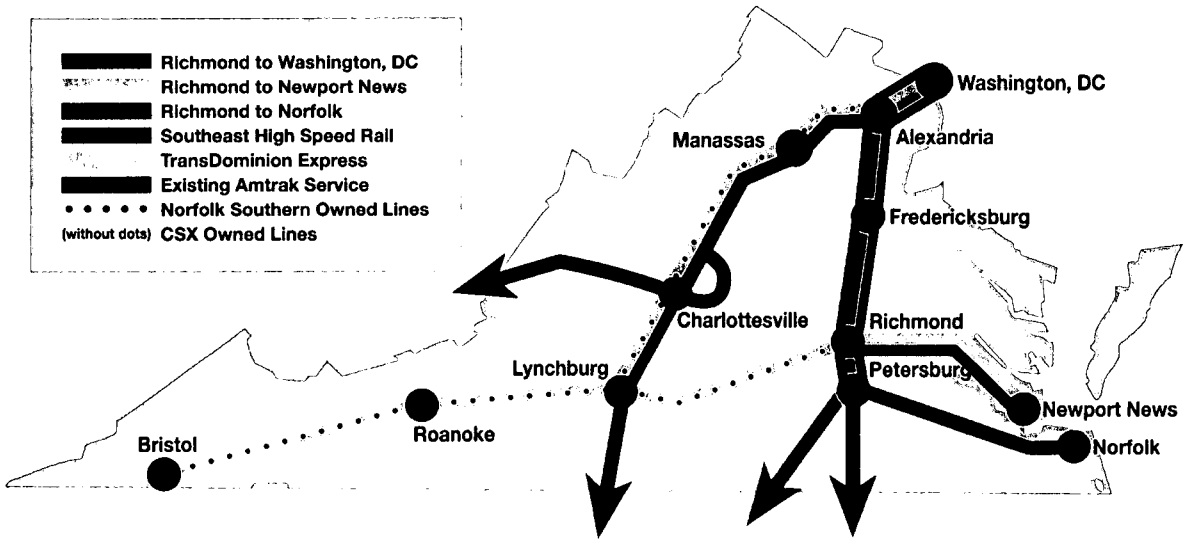
At least eight high-speed train sets will be needed for service between Charlotte and Washington, D.C. Each train would have a capacity of about 280 passengers in first class and coach, with space for 24 additional passengers in lounge and dining facilities. The train would be powered by two high-speed locomotives (one at each end).

Rail travel between major cities in North Carolina and Virginia, as well as to the population centers along the Northeast Corridor, would be much more convenient and reliable. The high-speed trains, coupled with major infrastructure and capacity improvements, would reduce travel times between Raleigh and Charlotte to between 2 – 2.5 hours. Travel time between Richmond and Raleigh would be shortened to between 2.5 – 2.75 hours. In North Carolina, additional round trips would be added between Raleigh and Charlotte.

As improvements are made and travel time is reduced, ridership along the SEHSR corridor will increase and frequencies will be added. Service expansion to Hampton Roads, VA, Greenville/Spartanburg, S.C., Altanta and Macon, GA also are being studied.



Status of Rail Projects in Virginia
October 2003



Richmond – Washington, D.C. Corridor Improvements

1. Capacity Improvements. Seven projects identified in the Memorandum of Understanding (MOU) between DRPT, CSX and Amtrak are underway:
   a. Quantico Bridge – VRE is managing the construction of a new two track railroad bridge parallel to the existing single track bridge. Design in 90% complete. Construction is scheduled to begin in July 2004 and be completed by June 2006.
   b. Six Additional Corridor Projects – The MOU identifies six additional capacity improvement projects for the corridor. Preliminary design has been completed for all of these projects and two are slated for construction in early 2004; the Arkendale crossover and construction of a third track at L'Enfant Plaza in the District of Columbia. DRPT and CSX are currently negotiating a Construction Agreement that will govern the installation of these six projects.

2. Main Street Station. The City of Richmond is nearing completion of the first phase of the renovation of Main Street Station. This phase includes the purchase of the station from the state, the renovation of the head house, parking lot construction, and the installation of a passenger platform adjacent to the tracks. When it is opened in the fall of 2003, the station will be served by two round trip trains per day.

3. Richmond Area Improvements. Significant improvements are needed to the segment of track between Staples Mill Station and Main Street Station Before additional trains can be run downtown. The Department has completed a study of the rail improvements. As requested by CSX, this study also investigates the feasibility of using an alternative route, the Piedmont Subdivision, which runs from Doswell through Hanover to Main Street Station. The final phase of this study, which will include route selection and the development of environmental documentation, will begin in the fall of 2003.

Richmond to Hampton Roads Rail Service

1. I-64 Major Investment Study (MIS) - This study was completed in 1999 and includes a comprehensive analysis of intercity rail alternatives in the Richmond to Newport News corridor. The Locally Preferred Alternative, which was adopted by the Richmond MPO, the Hampton Roads MPO and the Commonwealth Transportation Board, recommends the widening of I-64. It also recommends that rail service be upgraded by double tracking the existing CSX rail line, increase passenger train speeds to 110 mph, and increase frequencies to 8 round trips per day. The total cost of the proposed rail improvements is approximately $250 Million.

2. Richmond to South Hampton Roads - DRPT Completed a study of the feasibility of high speed rail from Richmond to South Hampton Roads via Petersburg and the U.S. Route 460 corridor. The study addressed the engineering feasibility, environmental issues, and potential ridership of the proposed service. The study, which was completed in April 2002, determined that the service is feasible, and provides recommendations for a proposed route and station stops. The total cost of the improvements recommended to obtain 90 mph service is estimated to be $235 Million.

3. Next Step - The Department will be initiating the Richmond/Hampton Roads High Speed Rail Tier I Environmental Impact Statement in October 2003.

Jamestown 2007 Rail Service

1. Jamestown 2007 Celebration - There is strong support for expanding the availability of passenger rail service in order to accommodate the increase in visitors to Virginia that is expected during the 400th Anniversary of the landing at Jamestown in 2007. DRPT is working with Amtrak to develop cost estimates for this proposed service expansion. The Richmond area improvements (discussed above) will significantly reduce the travel time for passengers going to and from Williamsburg.

Bristol Rail Passenger Service (TransDominion Express)

1. Feasibility Study - DRPT has conducted studies of the feasibility of providing rail service to Southwestern Virginia. The studies recommend providing two round trips per day between Washington, D.C. and Bristol and Richmond and Bristol utilizing modern tilt trains to provide automobile-competitive service. An additional study was done in conjunction with Norfolk Southern Corporation to look at the cost of making improvements they believe are necessary to accommodate the service.

2. Amtrak - DRPT has requested Amtrak's assistance to develop alternatives and costs for implementing some level of service in the corridor.

3. I-81 Issue - DRPT is awaiting the outcome of negotiations on these proposals to determine their potential impact on passenger rail service in the corridor.

I-81/I-95 Freight Studies

1. Study Findings – Two studies of freight diversion along the interstates have been requested by the General Assembly. These studies reveal that:
    a. The majority of the truck travel on our interstates flows through Virginia and does not begin or end its trip in the Commonwealth.
    b. Diversion of truck traffic to rail could help the highway capacity problems.
    c. It is necessary to survey shippers and truckers to determine the potential for diverting freight traffic to rail.

2. Present Study of Marketing and Rail Improvement Needs – Study is expected to be completed in October 2003. It will address rail needs for traffic moving between New Jersey and Louisiana and between New Jersey and Memphis.

3. Public Private Transportation Act (PPTA) Proposal – VDOT has received two proposals, both of which have a rail element. DRPT is assisting in the review of these proposals.

Update on SEHSR- Petersburg to Raleigh Section

Virginia—North Carolina High Speed Rail Commission
October 1, 2003
10:00 AM – 2:00 PM
Legislative Office Building
Raleigh, NC

Virginia and North Carolina are working with their federal partners to build upon the Tier I Record of Decision that was received last October for the Washington DC to Charlotte NC portion of the SEHSR corridor.

The Record of Decision confirmed the preferred study corridor between Washington DC and Charlotte NC (see map labeled SEHSR Washington DC to Charlotte NC)

Both states are now working on a detailed Tier II EIS for the portion of the corridor between Petersburg VA and Raleigh NC. The status is as follows:

Petersburg to Raleigh Section (see Vicinity Map Figure 1)

-May, 2003- Notice of Intent was issued to proceed with a Tier II Environmental Impact Statement for this section

-June, 2003- Agency Scoping meetings were held in both states

-July, Aug., 2003- Public workshops were held in both states

-Sept., 2003- Field work was begun for Threatened & Endangered species, wetlands and streams

-Jan. to Dec., 2004- Anticipated dates to complete the Draft Tier II Environmental Impact Statement and public hearings

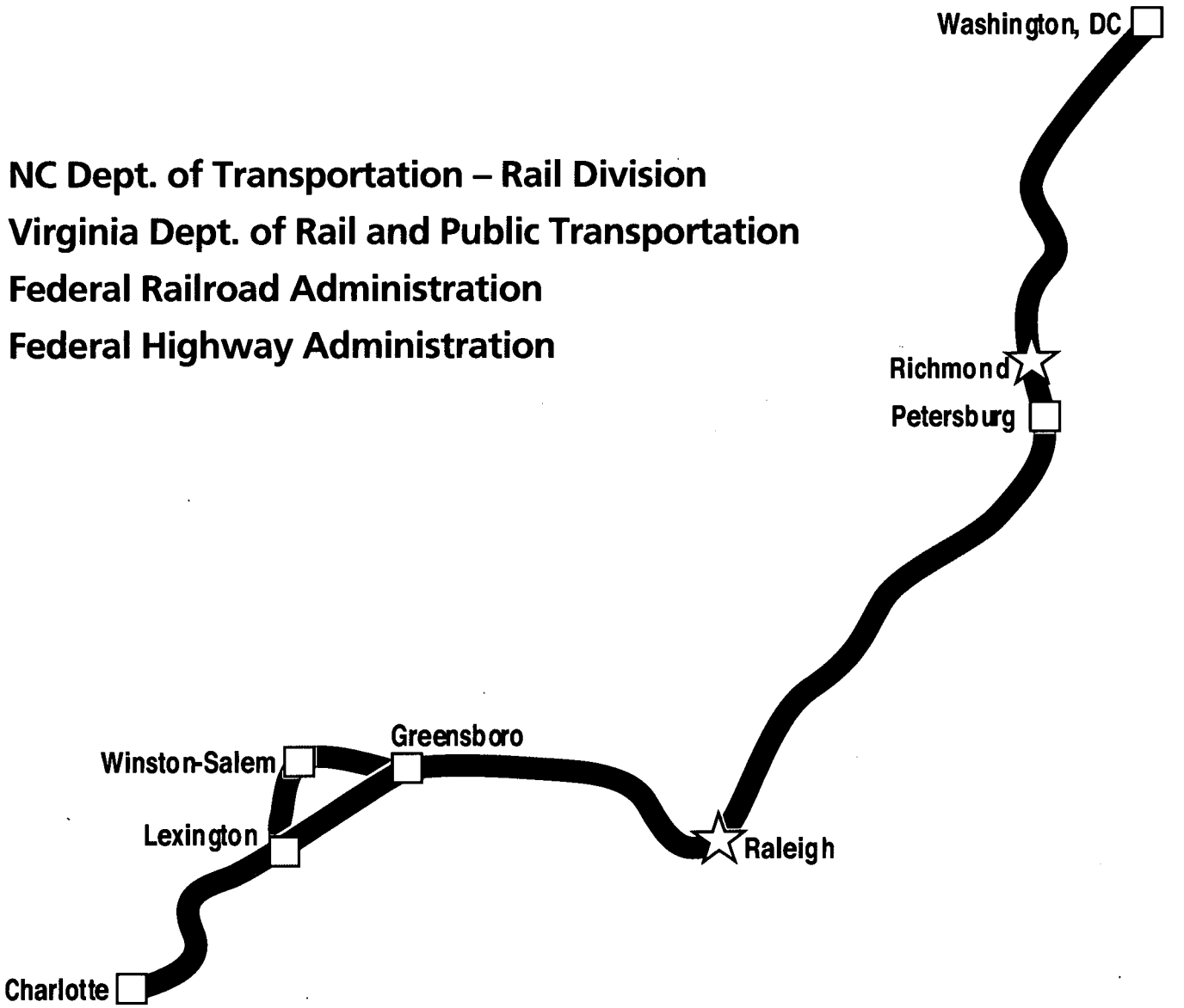
-Jan. to Nov., 2005- Anticipated dates to complete the Final Environmental Impact Statement and Record of Decision for the Petersburg to Raleigh section

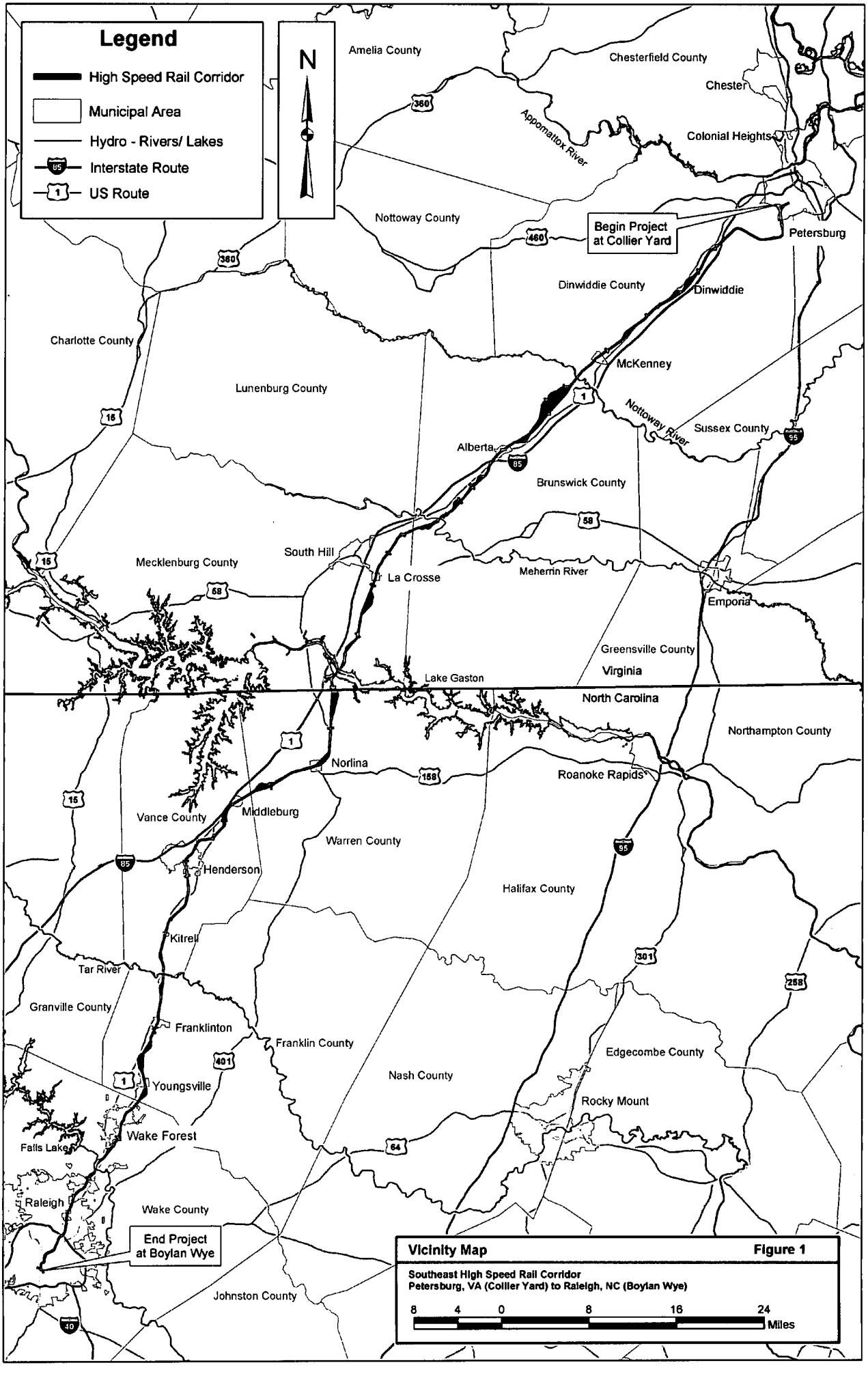
For more information, contact: David B. Foster, PE
(919) 508-1917
dbfoster@dot.state.nc.us

SOUTHEAST HIGH SPEED RAIL

WASHINGTON, DC TO CHARLOTTE, NC

NC Dept. of Transportation – Rail Division
Virginia Dept. of Rail and Public Transportation
Federal Railroad Administration
Federal Highway Administration




Legend
High Speed Rail Corridor
Municipal Area
Hydro - Rivers/ Lakes
Interstate Route
US Route
N
Amelia County
Chesterfield County
Chester
Colonial Heights
Appomattox River
Nottoway County
Begin Project at Collier Yard
Petersburg
Dinwiddie County
Dinwiddie
Charlotte County
McKenney
Lunenburg County
Nottoway River
Sussex County
Alberta
Brunswick County
South Hill
Mecklenburg County
La Crosse
Meherrin River
Emporia
Greensville County
Virginia
Lake Gaston
North Carolina
Northampton County
Norlina
Roanoke Rapids
Vance County
Middleburg
Warren County
Henderson
Halifax County
Kitrell
Tar River
Granville County
Franklinton
Franklin County
Edgecombe County
Nash County
Youngsville
Rocky Mount
Wake Forest
Falls Lake
Raleigh
Wake County
End Project at Boylan Wye
Johnston County
Vicinity Map
Figure 1
Southeast High Speed Rail Corridor
Petersburg, VA (Collier Yard) to Raleigh, NC (Boylan Wye)
8 4 0 8 16 24
Miles

December 16, 2003

MEMORANDUM

TO: NC Members of VA/NC Interstate High Speed Rail Commission

FROM: Senator Wib Gulley, Co-Chair
Representative Nelson Cole, Co-Chair

RE: Committee Meeting Notice

There will be a meeting of the VA/NC HSR Commission on Tuesday, January 13, 2004 in Richmond, Virginia at 1:00 p.m. A detailed agenda with building and room will be sent at a later time.

If you have any questions, please give Giles Perry a call at 919-733-2578.

NC/sjs

Posted 16-Dec-03

cc: Press
Committee Record ✓
Interested Parties

Agenda

Virginia-North Carolina
Interstate High-Speed Rail Commission

January 13, 2004
1:00 pm – 3:00 pm
Main Street Station
1500 East Main Street
Richmond, VA

I. Welcome and Introductions

II. Congressional Legislative Review
- Status of rail legislation
- States for Passenger Rail Coalition "Plan B" Proposal
  David Ewing, States for Passenger Rail Coalition

III. Interstate Compact Discussion
Members of the Commission

IV. Update on Virginia Activities
- Main Street Station opening
- Statewide Rail Plan
- Rail Authority Study
- I-81 Study
- Richmond to Hampton Roads Passenger Rail Study
- Washington, D.C. to Richmond Corridor status update
  Karen Rae, Executive Director, Virginia Department of Rail and Public Transportation

V. Update on North Carolina Activities
- Analysis of economic impacts of rail station rehabilitation investments
- Construction and run times
- Equipment update
- Ridership
  Pat Simmons, Director, Rail Division, North Carolina Department of Transportation

VI. Other Business

VII. Discussion of Next Meeting Date

VIII. Adjournment

Virginia-North Carolina High-Speed Rail Commission

January 13, 2004
Northern Virginia Transportation Commission
Main Street Railroad Station
Richmond, Virginia
1:00 p.m.

Meeting Summary

The meeting was called to order by Senator Watkins. The members were greeted by the Richmond City Manager and a representative of the City Council. Mr. David King and Mr. David Ewing briefed the Commission on the status of federal legislation affecting possible high-speed passenger rail service from Washington, D.C., through Virginia to Charlotte, North Carolina. The briefing, and questions and discussion that followed, focused primarily on the many ways in which rail legislation (and potential rail legislation) is very closely connected with reauthorization of the federal surface transportation program that expired in the fall of 2003, and is being continued, on a temporary basis, until the end of February, 2004. This legislation (the Safe, Accountable, Flexible, and Efficient Transportation Equity Act of 2003, usually referred to as SAFETEA), Mr. Ewing explained, is presently before the U.S. Senate. Since the measure in its present form includes virtually no funds for rail projects, meeting the hopes and expectations of the Commission will depend to a very considerable degree on the degree to which rail advocates in the Congress are successful in substituting other, more "rail-friendly," legislation before the Congress for the "rail title" of SAFETEA. Mr. Ewing pointed out that the U.S. House of Representatives appeared to be favorably disposed to such action and, if replacement of the "rail title" were successful, efforts already underway in Virginia and North Carolina could quite possibly enable the two states to be among the "first in the queue" to qualify for whatever federal funds the final measure might include. Staffs were directed to work together on developing Congressional support for rail funding.

Following these discussions, the Commission turned its attention to Virginia legislation introduced by Senator Watkins and pending before the 2004 Session of the Virginia General Assembly, that would be a first step toward the establishment of a Virginia-North Carolina interstate rail compact. This legislation, Virginia staff explained, is based very considerably on the draft presented to the Commission at its Richmond meeting on January 7, 2003. Staff explained that the legislation filed by Senator Watkins was very much a "bare bones" effort: one that would almost certainly be further refined and elaborated both in the course of the 2004 Session of the General Assembly and in the course of consideration of parallel legislation later in the year by the North Carolina legislature. In discussion among the members of the Commission, several suggested amendments were proposed that Senator Watkins offered to bring to the attention of the Virginia General Assembly as it considered his proposal. Following these discussions,

the draft was unanimously endorsed by the members present. A copy of the draft bill filed by Senator Watkins is attached.

The members next were briefed on Virginia developments by Ms. Viktoria Badger and Ms. Karen Rae. Ms. Badger explained how the reopening of the Main Street Station was a very significant development both to rail travel in Virginia and for the City of Richmond as well. The City intends the station to become the focus of a multi-modal transportation interface that will contribute significantly to the revitalization of the surrounding neighborhoods. Ms. Rae reported that the Virginia Department of Rail and Public Transportation had made considerable strides in collaboration with both CSX and Northern Southern, but that there was still a "long way to go," pointing particularly to needed improvements to the Staples Mill Station (in Henrico County, west of Richmond) and the Ashland station (in Hanover County, north of Richmond). She also referred to consideration being given to improved (or expanded) service between Richmond and Hampton Roads, either via the Interstate Route 64 corridor or the U.S. Route 460 corridor or possibly both. Del. Wardrup stated that the Third Crossing will not be constructed in the foreseeable future. Of particular interest to the members was Ms. Rae's announcement that the Quantico Bridge Project (the most troublesome "bottleneck" between Richmond and Washington) was ready to be put out to bid. Completion of this project will make it possible to operate 5 more passenger trains and 15 more freight trains in the Richmond-Washington corridor. She also stressed that even more could be done if the states had a reliable federal partner.

Mr. Pat Simmons than briefed the Commission on North Carolina activities, where major improvements are being made to railroad stations across the state. As in the case of Richmond's Main Street Station, it is expected that these stations will become hubs for economic development, making it possible and desirable for more people to live "downtown." North Carolina, he pointed out, expects, over 20 years, to get back $1.47 for every $1.00 it invests in these projects. Changes are also being made in right-of-way geometry that will reduce travel time and improve reliability of service. Virginia and North Carolina are working on a Tier 2 environmental study of the rail corridor between Raleigh and Petersburg.

Senator Gully suggested that sort form of document be prepared that would serve as a vehicle by which the Commission could "make a finding" that high-speed rail passenger service between Charlotte, North Carolina and Washington, D.C., is both desirable and feasible. It was noted that the legislation creating the Commissison did not require submission of a final report by any specific date. Following a discussion, Mr. Simmons offered to prepare a draft that the members could consider at their next meeting.

The meeting was then adjourned.

Addendum:

These minutes were prepared by the Virginia staff of the Virginia/North Carolina High Speed Rail Commission.

A BILL to establish the Virginia-North Carolina Interstate High-Speed Rail Compact.

Be it enacted by the General Assembly of Virginia:

1. § 1. Short title.

This act shall be known and may be cited as the Virginia-North Carolina Interstate High-Speed Rail Compact.

§ 2. Compact established.

There is hereby established the Virginia-North Carolina Interstate High-Speed Rail Compact.

§ 3. Agreement.

The Commonwealth of Virginia and the State of North Carolina agree, upon adoption of this compact:

1. To study, develop, and promote a plan for the design, construction, and operation of interstate high-speed rail service through and between points in the Commonwealth of Virginia and the State of North Carolina and adjacent states;

2. To coordinate efforts to establish high-speed rail service at the federal, state, and local governmental levels;

3. To advocate for federal funding to support the establishment of high-speed interstate rail service within and through Virginia and North Carolina; and

4. To provide funding and resources to the Virginia-North Carolina High-Speed Rail Compact Commission from funds that are or may become available and are appropriated for that purpose.

§ 4. Commission established; appointment and terms of members; chairman; reports; Commission funds; staff.

The Virginia-North Carolina High-Speed Rail Compact Commission is hereby established to carry out the purposes of the Compact.

The Virginia members of the Commission shall be appointed as follows: three members of the House of Delegates, appointed by the Speaker of the House of Delegates, and two members of the Senate, appointed by the Senate Committee on Privileges and Elections. The North Carolina members of the Commission shall be composed of five members as follows: two appointed by the General Assembly upon recommendation of the President Pro Tempore of the Senate, two appointed by the General Assembly upon recommendation of the Speaker of the House of Representatives, and one appointed by the Governor.

The chairman of the Commission shall be chosen by the members of the Commission from among its membership for a term of one year, and shall alternate between the member states.

The Commission shall meet at least twice each year, at least once in Virginia and once in North Carolina, and shall issue a report of its activities each year.

The Commission may utilize, for its operation and expenses, funds appropriated to it therefor by the legislatures of Virginia and North Carolina or received from federal sources.

Virginia members of the Commission shall receive compensation and reimbursement for the necessary and actual expenses as provided in the general appropriations act; North Carolina members of the Commission shall receive per diem, subsistence and travel allowances in accordance with G.S. 120-31, G.S. 138-5, or G.S. 138-6, as appropriate.

Primary staff to the Commission shall be provided by the Virginia Department of Rail and Public Transportation and the North Carolina Department of Transportation.

2. This act shall become effective upon its enactment by the Commonwealth of Virginia and the State of North Carolina, and in accordance with federal law authorizing the compact.

042222840

SENATE BILL NO. 126

Offered January 14, 2004
Prefiled January 7, 2004

A BILL to establish the Virginia-North Carolina Interstate High-Speed Rail Compact.

Patron—Watkins

Referred to Committee on Privileges and Elections

Be it enacted by the General Assembly of Virginia:

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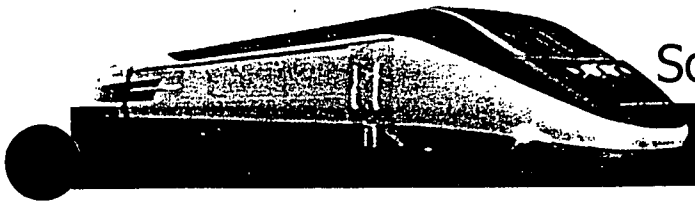


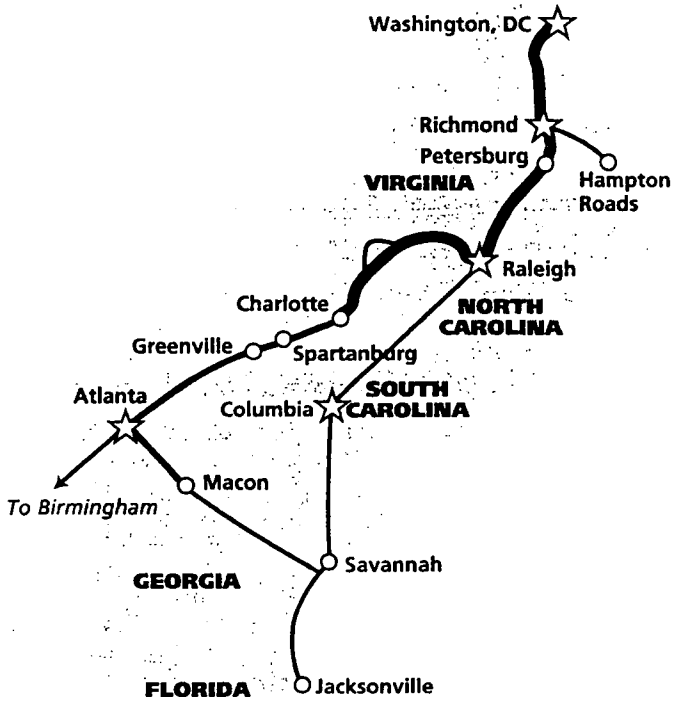
Southeast High Speed Rail Corridor

A Time to Act

Why it is needed

The Southeast has seen a tremendous increase in population and development over the last 20 years. Innovative transportation planning is needed to maintain our quality of life.

- Most of I-85 and I-95 already are congested. Widening these highways is increasingly difficult due to spreading urbanization and rising costs.
- Airport travelers continue to experience flight and security delays.
- As our population continues growing and becoming more mobile, travel will become more crowded, more expensive and more time consuming.



What it will do

Southeast High Speed trains – traveling at speeds of 90 - 110 mph - will effectively link those cities where highway and airline congestion are the greatest.

Southeast High Speed Rail will:

- Provide a convenient, efficient and affordable travel alternative to highway and air travel between cities in the Southeast and the Northeast.
- Preserve and enhance the region's quality of life.

- Provide economic and employment opportunities.
- Help revitalize urban centers.
- Save money since the cost to develop high-speed rail is much less than building an interstate highway or expanding an airport.
- Shorten rail travel time between major southeastern communities by 20-50 percent making rail travel competitive with auto and air travel.
- Transport more than 1.6 million passengers annually by 2015.

The benefits

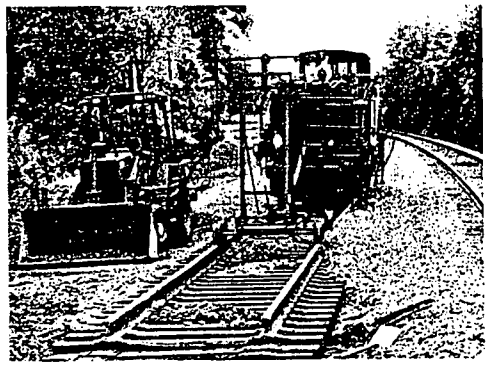
Southeast High Speed Rail will benefit local economies by attracting new businesses and providing essential access to regional and national markets, while helping to preserve the environment.

Enhance local economies*

- Generate nearly $700 million in new tax revenue.
- Generate more than $10.5 billion in new employee wages.
- Create more than 19,000 permanent full time jobs.
- Create more than 31,400 one-year jobs from construction.

Revitalize urban centers

- Bring business and leisure travelers directly to downtown, government, commercial and cultural activities.
- Redevelop station areas as mixed-use activity centers.
- Offer convenient and reliable downtown-to-downtown travel.
- Encourage public/private investment.



Improve track safety and capacity

- Add track capacity for increased passenger and freight use.
- Improve highway grade crossing safety.

Use advanced technologies

- Incorporate state-of-the-art signal systems for better traffic flow.
- Use low emission, energy efficient high-speed locomotives.
- Reduce travel times and increase passenger comfort through use of tilt train sets.

Environmentally responsible

- Improve air quality by reducing the number of vehicles on the roadway.
- Provide alternative to congested highways.
- Minimize land acquisition by using existing rights-of-way.

Minimize cost to taxpayers

- Maximize use of existing corridors to minimize construction costs.
- Leverage funds from federal programs for planning and implementation.
- Enable partnerships with local governments and the private sector.
- Estimated cost to develop high speed rail between Washington and Charlotte is $2.6 billion or an average of $5.5 million per mile.
- Projections indicate the corridor would generate revenues in excess of operating costs

* Economic and fiscal impact analysis was performed for North Carolina only.

Progress to date

North Carolina and Virginia are committed to implementing high speed rail between Washington and Charlotte to generate significant benefits in travel convenience and reliability, as well as create economic development and employment opportunities for the Southeast.

1995-2003 In partnership with the Federal Railroad Administration (FRA), Federal Highway Administration (FHWA), and Norfolk Southern (NS), every public crossing between Charlotte and Raleigh, N.C. received enhanced safety treatments or was closed. A similar program has been developed to address every private crossing. All public crossings between Richmond, VA and Washington, D.C. were upgraded to improve safety.

1998 North Carolina acquired the NC Railroad (the state owns 100% of the stock) to assure access to the Charlotte-Raleigh portion of the federally-designated high speed rail corridor.

1999 The NCDOT and NS partnered to make infrastructure investments that improve capacity, increase reliability and reduce travel times between Charlotte and Raleigh. The original schedule of 3 hours 45 minutes will be reduced to 3 hours 10 minutes by spring 2004.

1999-2003 Stations have been renovated in Salisbury, Greensboro, Burlington and Raleigh, N.C. High Point will open its newly renovated station in late 2003. New construction was completed in Cary and is underway in Kannapolis. Property was secured for a new multi-modal station in Charlotte. Planning is underway for a new facility in Durham. In Virginia, stations in Fredericksburg and Alexandria have been renovated. Main Street Station in Richmond is undergoing extensive reconstruction. Its opening in late 2003 will return passenger rail service to downtown Richmond after a 30 year absence.

2000 North Carolina and Virginia prepared a draft Environmental Impact Statement (EIS) evaluating nine possible routes that would connect Washington, D.C. and Charlotte.

2001 The Virginia/North Carolina High Speed Rail Commission was created seating legislators from both states.

2002 The Virginia Department of Rail & Public Transportation, Virginia Railway Express and CSX Transportation signed a Memorandum of Understanding outlining a series of rail capacity improvements between Washington, D.C. and Richmond; establishing a timetable for their construction; and tying the introduction of additional passenger trains to the completion of individual projects. Design has begun on the seven listed projects, which includes sections of third track, new interlockings, and a new bridge over Quantico Creek.

North Carolina completed a detailed plan of incremental infrastructure improvements leading to high speed rail operation. The prioritized investment plan identifies the costs and benefits of modernizing track, signals, stations and equipment.

The FRA and FHWA issued a Record of Decision confirming and approving the Charlotte-Washington high speed rail route. More detailed environmental analysis and preliminary engineering are underway for the Raleigh-Petersburg segment.

2003 North Carolina and Virginia begin the Tier II EIS for Raleigh-Petersburg. Discussions are underway with CSX for access to the "S-line" between Raleigh and Richmond. Tracks need to be rebuilt along portions of the corridor before high speed rail service can begin.

Investments to date

To improve existing rail service and in preparation for high speed rail in the Southeast, the states have renovated and constructed train stations, enhanced safety at railroad crossings, made track and signal improvements, and conducted preliminary engineering and environmental work along the corridor.
(Figures include investments since 1996.)

Virginia	$200 million	South Carolina	$4 million
North Carolina	$233.5 million	Georgia	$5.5 million

What's Next?

The states are working with the Congress to establish a designated federal fund to improve the existing rail infrastructure and develop high speed rail.

A federal funding partner is necessary to:

- Enhance mobility by upgrading the existing railroad infrastructure to support faster and more frequent intercity passenger services.
- Construct major new multi-modal terminals, acquire new rolling stock and locomotives and support facilities.
- Facilitate development of feeder transit for rail services into the central high speed rail spine.
- Enhance the competitiveness of rail for high-value, time-sensitive shipments to remove stress from the highway system.

Legislation will be introduced in the 2004 North Carolina and Virginia legislative sessions to form an interstate high speed rail compact.

Charlotte to Raleigh

3 hours, 30 minutes
2 hours – 2 hours, 50 minutes+

Raleigh to Richmond

3 hours• – 3 hours, 20 minutes*
1 hour, 45 minutes• – 2 hours*

Richmond to Washington

2 hours, 15 minutes*– 2 hours, 45 minutes•
1 hour, 30 minutes*– 2 hours•

Charlotte to Washington

9 hours, 15 minutes
6 hours – 6 hours, 50 minutes

Existing Passenger Train Service
Estimated High Speed Rail Trip Time

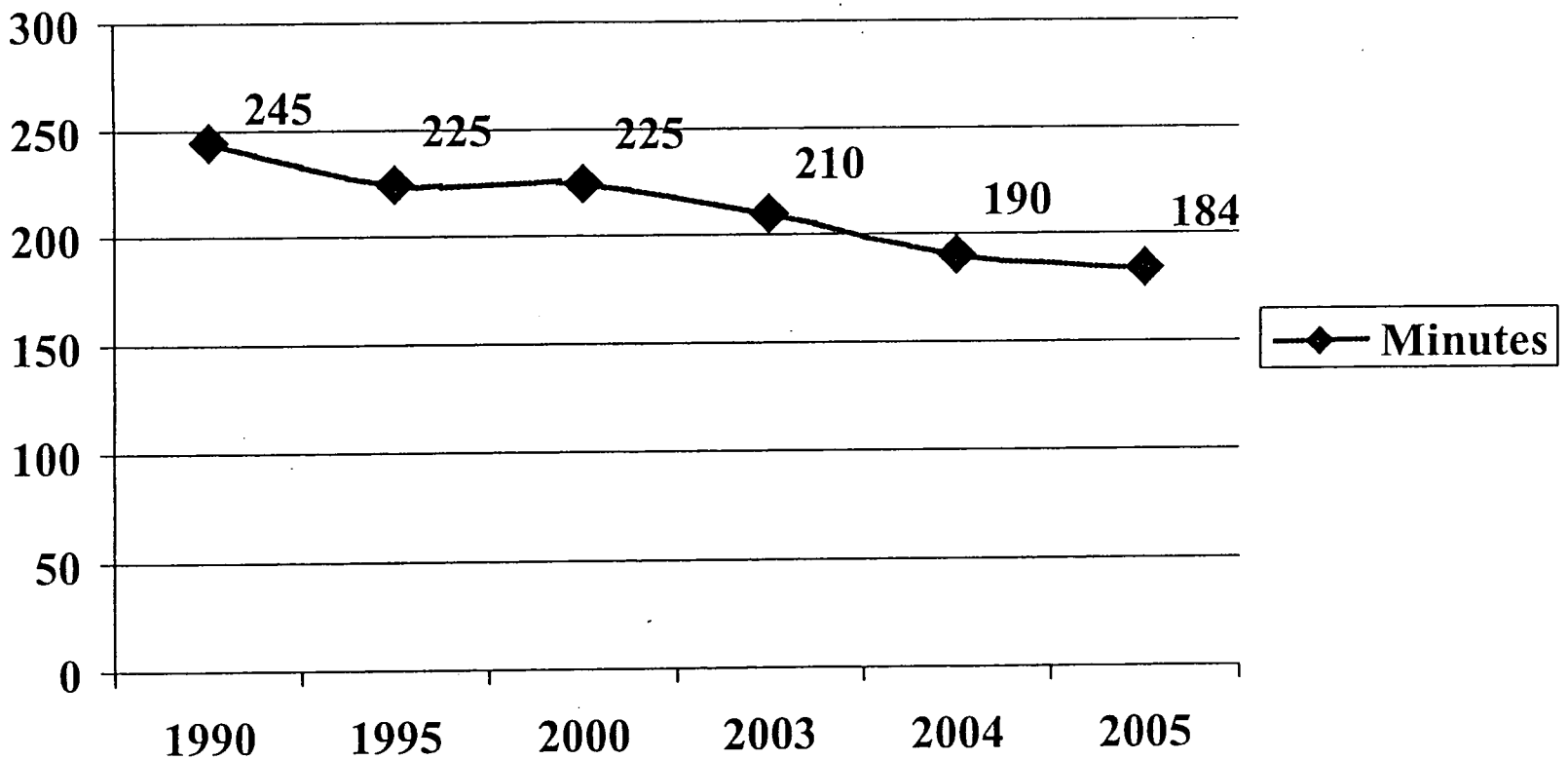
+Travel time via Winston-Salem
• Travel time to Richmond Main Street Station
* Travel time to Richmond Staples Mill Station

Estimated cost to develop the roughly 500-mile high speed rail corridor between Washington and Charlotte is $2.6 billion or an average of $5.5 million per mile. More than 1.6 million passengers will ride on the Southeast High Speed Rail corridor annually by 2015.

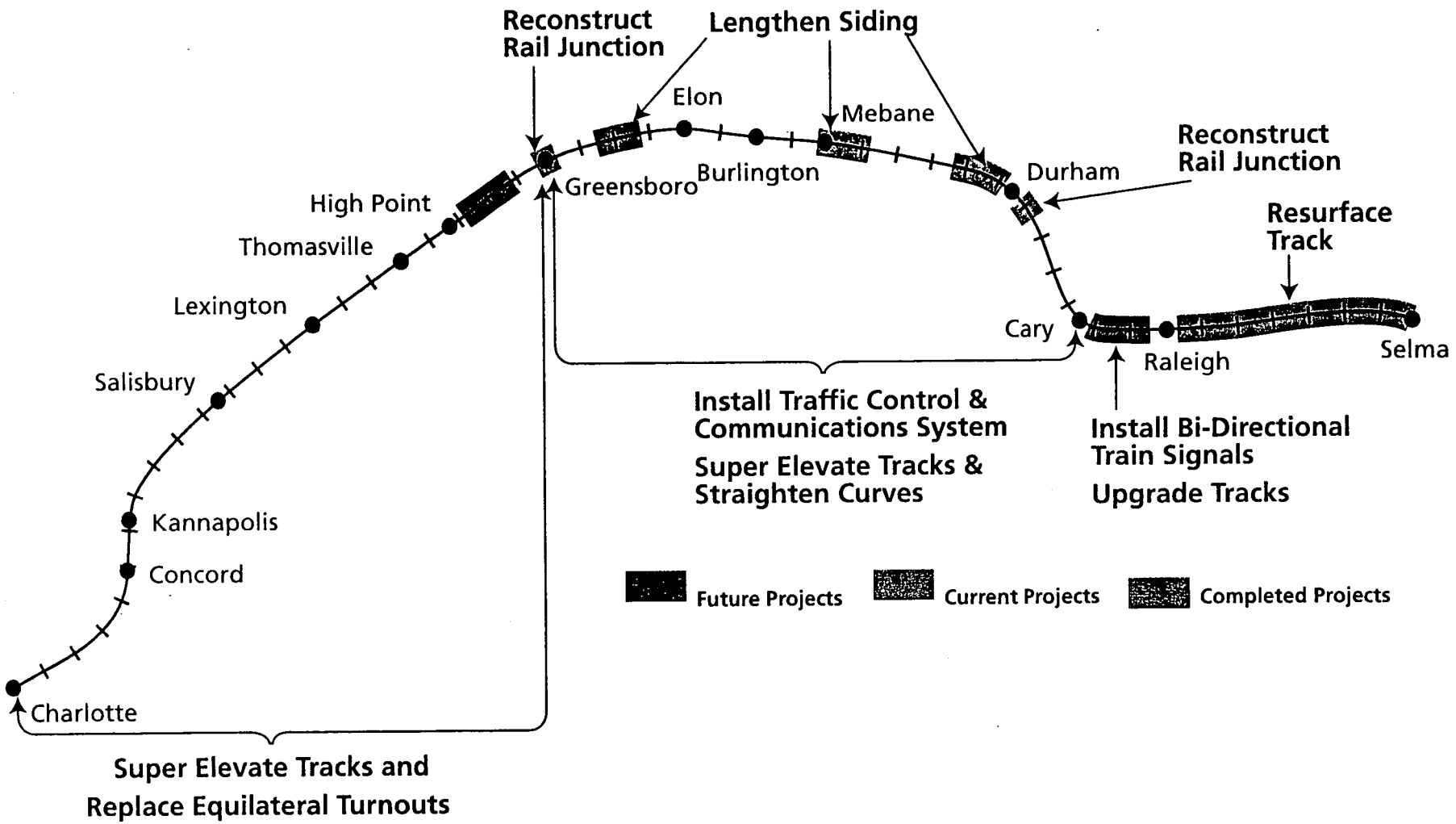
www.sehsr.org

NCDOT • November 2003

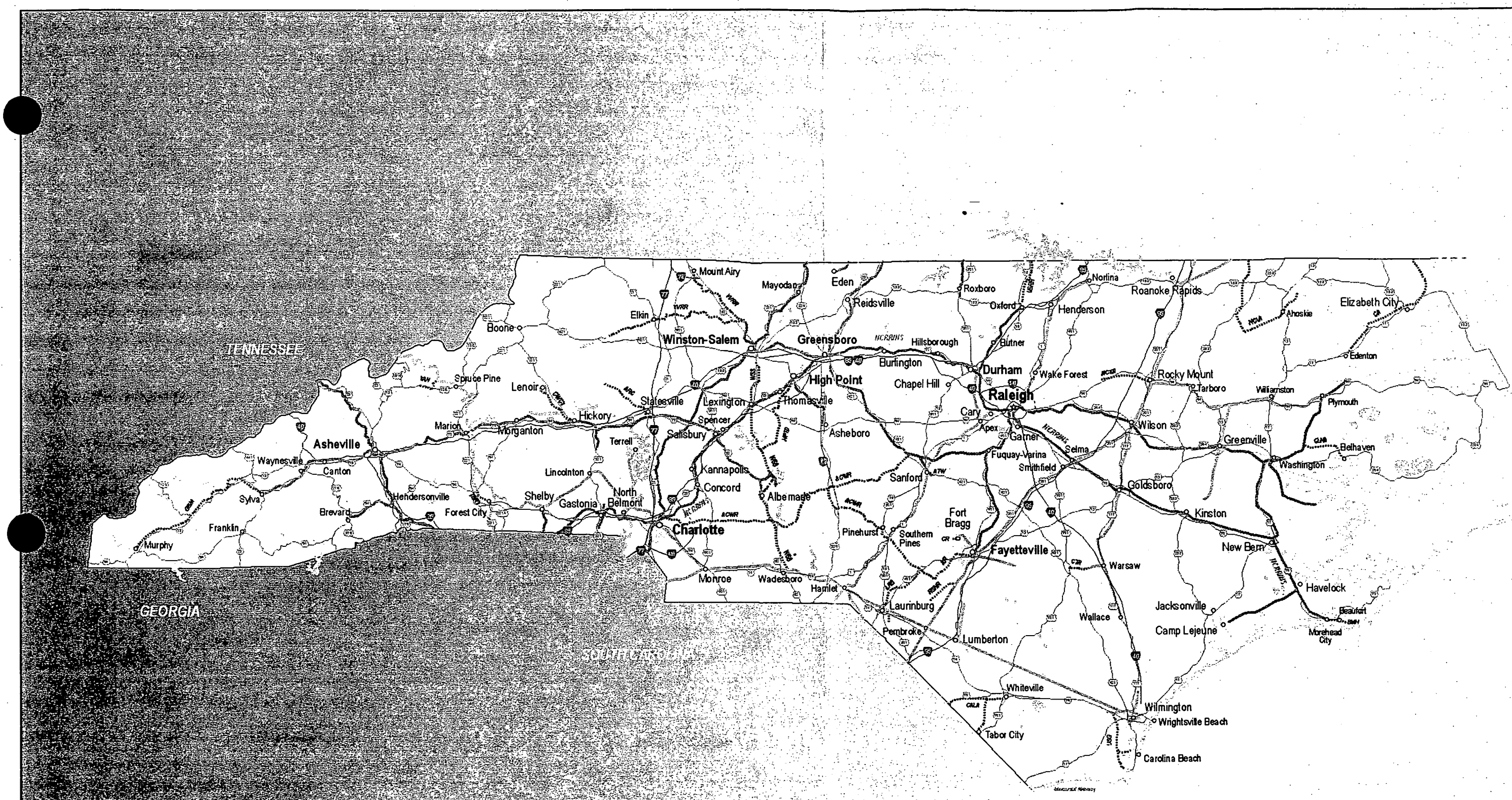
Travel Time RGH-CLT



NCRR Improvements



1/06/2004



NORTH CAROLINA RAILROAD COMPANY

North Carolina Railroad Company Corridor

- North Carolina Railroad Co.
- Norfolk Southern
- CSX Transportation
- Various Shortlines with Initals

NORFOLK SOUTHERN

Prepared by Norfolk Southern Corp. 9/2003

VIRGINIA
NORTH CAROLINA
HIGH SPEED RAIL COMMISSION

March 31, 2004

MEMORANDUM

TO: Congressman Brad Miller

FROM: NC Representative Nelson Cole, Co-Chairman
NC/VA High Speed Rail Commission

RE: Support for Rail Funding

The House is considering a Manager's Amendment to HR 3550. This amendment includes $100,000,000 annually in funding for high speed rail development.

North Carolina and Virginia have completed environmental and engineering assessments of its Charlotte-Raleigh-Richmond-Washington segment of the federally designated Southeast High Speed Rail Corridor. We are ready to implement this important interstate transportation project and we need a federal partner to do so.

Please cast your vote in support of the Manager's Amendment to HR 3550.

NC/sjs

P.O. BOX 159 • MIDLOTHIAN, VA 23113-0159 • 804.379.2063 • FAX 804.794.7238
C/O NCDOT RAIL DIVISION • 1553 MSC • RALEIGH, NC 27699 • 919.733.4713 • FAX 919.715.6580

Suzanne Smith (Rep. Cole)

From: Giles Perry (Research)
Sent: Tuesday, March 23, 2004 4:16 PM
To: Rep. Jim Crawford; Rep. Nelson Cole; Rep. Mitch Gillespie
Cc: Evan Rodewald (Fiscal Research); Bob Weiss (Fiscal Research)
Subject: VA- NC High Speed Rail Compact 2003-RWz-2 [v.7] (12/9)

mso147_.doc

Rep. Crawford; Rep. Cole; and Rep. Gillespie --

As members of the VA-NC Interstate High-Speed Rail Commission and the Joint Legislative Transportation Oversight Committee, I thought you would be interested to know that the Virginia General Assembly has enacted the VA-NC Interstate High Speed Rail Compact, endorsed by the Rail Commission at its last meeting in Richmond.

The compact is awaiting signature by the Governor of Virginia, which I am told is expected soon.

As you may recall, the compact legislation creates a permanent compact commission to study and advocate for high-speed passenger rail in the two states.

In order to be eligible for consideration in the upcoming NC General Assembly short session, a NC bill to enact the compact will need to be endorsed by a study committee.

I have attached a draft that could be considered at the next meeting of the Joint Legislative Transportation Oversight Committee, for your review.

Please let me know if you have any questions.

Giles S. Perry
Attorney
North Carolina General Assembly
Research Division
919.733.2578

GENERAL ASSEMBLY OF NORTH CAROLINA

SESSION 2003

U D

BILL DRAFT 2003-RWz-2 [v.7] (12/9)

(THIS IS A DRAFT AND IS NOT READY FOR INTRODUCTION)
3/23/2004 4:00:52 PM

Short Title: VA-NC Interstate High-Speed Rail Compact. (Public)

Sponsors:

Referred to:

A BILL TO BE ENTITLED

AN ACT TO ESTABLISH THE VIRGINIA-NORTH CAROLINA INTERSTATE HIGH-SPEED RAIL COMPACT.

The General Assembly of North Carolina enacts:

SECTION 1. Chapter 136 of the General Statutes is amended by adding a new Article to read:

"Article 18

Virginia-North Carolina Interstate High-Speed Rail Compact

"**§ 136-220. Compact Established.**

Pursuant to the invitation in 49 U.S.C. 24101 (Interstate Compacts), in which the United States Congress grants consent to states with an interest in a specific form, route, or corridor of intercity passenger rail service (including high-speed rail service) to enter into interstate compacts, there is hereby established the Virginia-North Carolina Interstate High-Speed Rail Compact.

"**§ 136-221. Agreement.**

The Commonwealth of Virginia and the State of North Carolina agree, upon adoption of this compact:

(1) To study, develop and promote a plan for the design, construction, financing, and operation of interstate high-speed rail service through and between points in the Commonwealth of Virginia and the State of North Carolina, and adjacent states.

(2) To coordinate efforts to establish high-speed rail service at the federal, State, and local governmental levels;

(3) To advocate for federal funding to support the establishment of high-speed interstate rail service within and through Virginia and North Carolina and to receive federal funds made available for rail development.

(4) To provide funding and resources to the Virginia-North Carolina High-Speed Rail Compact Commission from funds that are or may become available and are appropriated for that purpose.

"**§ 136-222. Commission Established; Appointment and Terms of Members; Chairman; Reports; Commission Funds; Staff.**

(a) Commission established. -- The Virginia-North Carolina High-Speed Rail Compact Commission is hereby established as a regional instrumentality and a common agency of each signatory party, empowered in a manner hereinafter to carry out the purposes of the Compact.

(b) Members, terms – The Virginia members of the Commission shall be appointed as follows: three members of the House of Delegates, appointed by the Speaker of the House of Delegates, and two members of the Senate, appointed by the Senate Committee on Rules. The North Carolina members of the Commission shall be composed of five members as follows: two members of the Senate appointed by the General Assembly upon recommendation of President Pro Tempore of the Senate, two members of the House of Representatives appointed by the General Assembly upon recommendation of the Speaker of the House of Representatives, and one appointed by the Governor.

(c) Chair. – The chair of the Commission shall be chosen by the members of the Commission from among its membership for a term of one year, and shall alternate between the member states.

(d) Meetings and reports. —The Commission shall meet at least twice each year, at least once in Virginia and once in North Carolina, and shall issue a report of its activities each year.

(e) Funds.—The Commission may utilize, for its operation and expenses, funds appropriated to it therefore by the legislatures of Virginia and North Carolina, or received from federal sources.

(f) Expenses of Members. – Virginia members of the Commission shall receive compensation and reimbursement for expenses in accordance with the applicable laws of that State. North Carolina members of the Commission shall receive per diem, subsistence and travel allowances in accordance with G.S. 120-31., G.S. 138-5, or G.S. 138-6, as appropriate.

(g) Staff. –Primary staff to the Commission shall be provided by the Virginia Department of Rail and Public Transportation and the North Carolina Department of Transportation.

SECTION 2. This act becomes effective when it becomes law.