

# **BGL Rail Associates**

## **A Recommended Approach to Funding the Estimated Capital Investment Needs of the Northeast Corridor Rail Infrastructure**

**Prepared For The Amtrak Reform Council**

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## **PART I**

### **ALTERNATIVE FUNDING SOURCES FOR ESSENTIAL INFRASTRUCTURE IMPROVEMENTS TO THE NORTHEAST INTERCITY RAIL CORRIDOR**

#### **BACKGROUND**

The Northeast Corridor (NEC or Corridor) passenger railroad system is the most heavily traveled segment of the nation's intercity rail passenger system. In addition to Amtrak's high speed premium trains (Acela Express), Metroliners and lower cost Acela regional and Northeast direct intercity trains, nine rail commuter agencies use various segments of the NEC and its station facilities to serve heavily populated cities and regions in the Northeast and Mid Atlantic states. More than 350 intercity and 1240 commuter train movements occur daily on various segments of the NEC. Several hundred thousand passengers, intercity and commuter, travel the NEC rail system daily. In addition, less frequent freight service, provided by CSX, Norfolk Southern and the Providence & Worcester, serves auto plants, coal burning utilities and other major freight shippers on certain segments of the NEC.

Amtrak owns, maintains and operates much of the Northeast Corridor. The NEC is approximately 460 miles long with an infrastructure of from two to six tracks at differing locations. More than half of Amtrak's national ridership is on the corridor along with approximately 100 million commuters annually. The 226-mile link between New York and Washington is perhaps the most heavily used railroad, in terms of train movements, in the United States. In this segment, Amtrak operates its high-speed Acela Express service that competes for track schedule time with more than 100 other Amtrak trains, almost 200 New Jersey Transit trains, more than 150 Southeastern Pennsylvania Transit Authority (SEPTA) trains, over 40 Maryland (MARC) rail commuter trains. It also must accommodate Virginia Railway Express (VRE) trains for off peak storage needs and track time moving south out of Washington Union Station.

Amtrak acquired its ownership of major segments of the Northeast Corridor in 1976, during creation of Conrail as part of the restructuring of the northeast freight rail system following the financial collapse of Penn Central and six other northeast and mid-west rail corporations. In addition, Amtrak assumed ownership of the 103-mile segment between Philadelphia and Harrisburg; the 62 miles of track between New Haven, CT and Springfield, MA; and about 12 miles of track near Albany, NY.

The states of New York and Connecticut jointly own a 57-mile track segment between New Rochelle, New York, and New Haven, Connecticut. The Commonwealth of Massachusetts owns a segment of the NEC from the Rhode Island state line to Boston. Amtrak has sole or a shared ownership interest in major passenger and yard facilities including Ivy St. Yard and Union Station in Washington; 30<sup>th</sup> St. Station in Philadelphia,

the North and East River tunnels; Penn Station and Sunnyside Yard in New York and other maintenance of way and locomotive and passenger car servicing facilities.

The NEC has a long history as the most traveled and most capital-intensive rail passenger line in the nation. The Pennsylvania Railroad began running electrified trains between Washington and New York in 1935. Unlike the European rail systems, which were rebuilt after World War II, many of the components of the NEC's electrification system date to the original installation. The electrification power system and catenary design have not been upgraded to fully support, without costly breakdowns, the higher speed, multiple users and high density train movements required for today's operation and for future growth.

## **NORTHEAST CORRIDOR FUNDING PROGRAMS**

In the 1980's, through the congressional appropriations process, Federal funding was earmarked for the Northeast Corridor Improvement Project, which resulted in a major and wise step toward creating a high-density, high-speed intercity rail corridor. Installation of continuous welded rail, concrete ties, enhanced drainage, stabilized roadbed, improved track switching turnouts and high speed interlockings, rehabilitated bridges, rehabilitated tunnels, and elimination of most highway/railway grade crossings supported the introduction of 125 mph service speeds on much of the corridor between Washington and New York.

In 1991, Congress provided funding to electrify 157 miles of the NEC between New Haven and Boston under the Northeast High-Speed Rail Improvement Project. The completed project provides an electrified, high-speed rail line between Washington and Boston. It also eliminated the need for a change of locomotives from electric to diesel, or vice versa, at New Haven. The Northeast Corridor Improvement Project was financed through mortgage notes issued by the federal government, due in the year 2975.

The above-the-rail cost of providing rail passenger service on the Corridor is the most cost effective in the Amtrak system. However, the ownership responsibility of maintaining and improving the infrastructure of the Northeast Corridor causes a strain on Amtrak's resources, consumes an enormous amount of management resources, has negative impact on Amtrak's bottom line, and has led to a substantial deterioration in the physical condition of the NEC over the past four years.

Prior to the mid 1990's, most federal transportation dollars were allocated to the various modes of transportation through the appropriations process. At that time it made sense that Amtrak's infrastructure needs could, at times, successfully compete for funding with other transportation modes through the Congressional appropriations process. In fact, a significant amount of federal support was appropriated for capital investment in the Northeast Corridor through the Northeast Corridor Improvement Project (NECIP) and the Northeast High-Speed Rail Improvement Project (NEHRIP).

## NEC FUNDING LIMITATIONS

The advent of federal guaranteed spending programs (i.e., TEA 21 and AIR 21), created new additional spending categories or “firewalls”, under the Budget Enforcement Act, which effectively prohibited the Appropriations Committees from reducing those spending levels in the annual appropriations process. These new programs essentially created mandatory spending programs within the discretionary caps. As a result, the majority of budgetary resources for transportation appropriations are “guaranteed” by federal legislation and protected by legislated points of order. The effect of these guarantees are now impacting non-covered transportation programs like infrastructure funding for the Northeast Corridor, which is forced to compete within the appropriations process for leftover funding.

According to the committee's report (H. Rept. 107-108), accompanying the transportation appropriation for fiscal year 2002 (H.R. 2299), the committee expressed concern that “bills such as TEA 21 and AIR 21 skew transportation priorities inappropriately while leaving safety-related operations in the FAA, Coast Guard and FRA to scramble for the remaining crumbs.” If the current situation continues, obtaining appropriated funds through this process for all the essential infrastructure needs in the Northeast Corridor will be almost impossible.

The level of funding for full development of the NEC has been known for some time. In its first report to the Amtrak Reform Council, BGL Rail Associates reviewed all the current studies and analyses of critical funding requirements for both fire and life safety purposes and essential infrastructure improvements. After reviewing various materials and discussions with knowledgeable officials at Amtrak and other sources, we concluded that the cost of infrastructure improvement for the NEC would be in the order of \$20 billion, or an average of \$800 million per year for the next 25 years, although the fire and life safety requirements need to be addressed in the next few years.

As we have noted, current federal funding limitations provide no mechanism for allocating sufficient, specific federal resources for the Northeast Corridor. Funds appropriated for Amtrak are not earmarked for the NEC. Amtrak’s appropriations in recent fiscal years have been in the range of \$520 million per year, approximately half of what is authorized for appropriations. That amount is provided to support the operations of the national system and all its capital and operating needs. Under that funding level, capital funding for investments in the NEC is virtually non-existent.

For fiscal year 2002, Amtrak received a \$521 million Federal appropriation. For cash purposes, Amtrak received 60 percent of its 2001 appropriation, 40 percent of the 2002 appropriation and \$240 million realized from the sale-leaseback of its ownership interest in New York's Penn Station concourse. Amtrak had to cover a cash loss of \$585 million which included \$183 million of excess Railroad Retirement System costs, leaving limited funds to cover debt requirements, equipment overhaul, and other capital costs. No funds were available for new capital programs, environmental mitigation, and other legally required spending.

As the owner of the NEC, Amtrak would likely require an additional appropriation of \$300 million more than what was appropriated for 2002, plus an additional \$800 million to cover the full annual cost of the major rehabilitation program necessary to the future viability of NEC operations.

In our view, the “firewalls” created in the Budget Enforcement Act will prevent the Federal appropriations process from being a realistic source of funding for all aspects of an upgraded Northeast Corridor improvement program. Those concerned about the vitality of the Northeast Corridor as a critical, national transportation asset must begin to develop alternative sources of funding. Federal, state and private sector users have to work together to avoid serious deterioration of the corridor's infrastructure and service capability. Operational safety will also become a growing concern if the downward spiral of investment continues. Doing nothing will guarantee a decline in service and, later, a much larger program cost if intercity, commuter and freight operations are to grow and safely attain a higher level of service throughout the NEC.

If the appropriations process is unable to provide the resources for the Northeast Corridor infrastructure needs, safety and operational reliability needs will require other federal options to be pursued. This could include tax incentives, economic stimulus funds, homeland security funds, transportation trust accounts or other more radical alternatives like directing the Army Corps of Engineers to undertake major bridge projects on the Corridor.

Whatever funds may be provided to improve the Northeast Corridor infrastructure it is critical that safeguards be included to assure that these funds are dedicated to the capital projects in the corridor. In the past (according to the DOT/IG January, 2002 report, p. 53), when Amtrak had a large base of capital funds,(for example the \$2.2 billion of TRA funds), they allocated indirect and overhead costs which were initially recorded to the company's operating expenses and then “transferred” to capital projects through the application of an overhead rate to capital project-related labor and material expenses. As a money losing operating company and one that is also responsible for infrastructure investments, there will be temptation to shift some of the operating expenses to capital projects, thereby losing the full impact of the capital dollars available for infrastructure improvements.

## **INFRASTRUCTURE NEEDS**

In January 2000, Amtrak published a report identifying the short and long-term infrastructure improvements needed along the South End (Washington-New York) of the NEC. The short-term covered years 2001 to 2005. The long-term needs covered years 2006 to 2025. The following is a summary of that report.

- Life Safety/Mandatory: Includes projects principally focused on raising the South End of the corridor up to modern standards of design and meeting building code

requirements with particular emphasis on completing life safety improvements to rail tunnels at Baltimore and New York.

- Operational Reliability: Includes projects that deal in large measure with clearing the backlog of deferred maintenance and capital improvements. Deferred maintenance and limited capital investments have caused the increase in slow orders and reduced service reliability of the operations of all users. Essential improvements in this category include track and bridge structures, signals, and electric traction. According to Amtrak, failure to address these basic needs, “will result in a steady deterioration of the infrastructure, reduced on-time performance, lower operating speeds, deteriorating customer service and a severe transportation mobility problem for the Northeast.”
- High-Speed Rail: Achieving maximum operating speeds of 150 mph with improved track configurations and platform realignments, upgraded interlockings and high-speed crossovers, modern traction power systems, and new, modern catenary are the focus of this category. In addition, completion of the Advanced Civil Speed Enforcement System signal system for high-speed operations, which is required by FRA, plus a variety of other elements necessary to 150 mph operations are included.
- Shared Benefits: This category includes the major infrastructure improvements of importance to all users of the corridor. They include the renewal of the electric traction power system, replacement or rehabilitation of key bridges and tunnels critical to operations on the corridor, completion of the Penn Station construction project in New York and the infrastructure improvements designed to achieve faster trip time goals.
- Commuter/Freight Capacity. This category includes capital investments identified by commuter and freight users of the corridor designed to allow efficient and reliable operation on the NEC.

The Amtrak report estimated the short and long-term costs as follows:

(\$Millions)

Category	Short Term	Long Term
Life Safety/Mandatory <sup>1</sup>	311.7	342.4
Operational Reliability	1,243.2	3,574.8
High Speed Rail	457.9	286.0
Shared Benefits	971.8	4,137.1
Commuter/Freight Capacity	205.6	521.6
<b>TOTAL</b>	<b>\$3,190.2</b>	<b>\$8,861.9</b>

Total South End Infrastructure Needs To 2025 is \$12.1 billion in 2000 dollars.

<sup>1</sup> In December 2000, the DOT/IG issued a report updating the cost estimates for the fire/life safety improvements. The revised estimate was set at \$898 million over nine years.

Amtrak is in the process of completing a similar analysis of the North End of the Northeast Corridor. Details of these estimates are not yet available, but rough estimates have been developed. Operational reliability will require rebuilding aging structures such as the bridges over the Thames and Niantic Rivers, which are approaching the end of their useful lives. Improvements to expand capacity, safety and reliability will be necessary on the NEC between New Rochelle, NY, and New Haven, CT, where Metro-North Commuter Railroad also operates. This section of the NEC is owned by the States of New York and Connecticut and operated by MNCRR, an agency of the Metropolitan Transportation Authority. Metro North and Amtrak have an agreement that will allow additional slots for Acela trains in exchange for Amtrak making capital improvements that will accommodate those trains.

Based on the review of various materials and discussions with knowledgeable officials at Amtrak and elsewhere, it is estimated that even with the completion of electrification east of New Haven and other major infrastructure improvements on the North End in recent years, a substantial continuing investment in the infrastructure there will be required. The South End Report estimated that simply to maintain operational reliability (including deferred maintenance recovery) on segments of the NEC other than the South End itself would cost \$1.75 billion over the period. The Penn Station complex, which is not clearly defined in either the North End or South End reports, has infrastructure costs that are in the range of \$4.3 billion over the next 20 years. The New Haven-Springfield line, assuming no growth, has a cost estimate of \$150 million. The Keystone Line (Philadelphia-Harrisburg) is estimated at \$500 million<sup>2</sup> and the Empire Corridor (New York-Albany) is estimated at \$350 million. Corridor-wide, there are estimates for non-line related infrastructure investments that are in the range of \$1 billion over the next 20 years. In all, the total estimated costs for the entire Northeast Corridor could be in the range of \$20 billion over the next 25 years.

Most of the cost estimates for the Northeast Corridor are from Amtrak studies and reports. The identified needs could be higher or lower depending on who performs the analysis. Many users of the corridor have suggested that an outside, independent analysis either confirming or modifying the Amtrak estimates would provide the Federal government with a higher level of confidence over what needs to be invested. Such an analysis could be done with a grant from the Department of Transportation to a qualified and experienced engineering firm. There are some that would argue that the traffic levels on the corridor would prevent an aggressive construction schedule and would limit the amount that could be spent to roughly \$300 million per year, if service is to be maintained without significant disruption. The historically erratic and inconsistent feast or famine availability of capital for the corridor has made planning a long range and cost efficient program of infrastructure improvements nearly impossible.

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<sup>2</sup> Pennsylvania's Department of Transportation and Amtrak are close to finalizing an agreement under which each will fund half of an initial capital improvement project to increase speeds to 110 mph at an estimated cost of \$150 million.

If federal and state policy makers could agree on one policy that would improve the prospects of a cost effective, public investment in the NEC infrastructure, it would be to establish a consistent, baseline funding arrangement that could be relied on over the long term. A reliable, predictable funding source would support a viable NEC infrastructure improvement program. Lacking such a funding arrangement, it will be impossible for whatever entity is responsible for the NEC infrastructure improvements to enter into arrangements with the users of the corridor for cost sharing of capital investment. Despite Amtrak's efforts to successfully negotiate joint-capital funding agreements with NEC states and/or commuter authorities, Amtrak's financial problems and funding shortfall have forced it to delay a number of joint capital funding projects. A list of the projects impacted is identified in the recent DOT/IG report (page 52, table 25).

## **COMMUTER RAILROAD OPERATIONS ON THE NORTHEAST CORRIDOR**

The multiplicity of users, frequency of service, variation in train speeds, track and station limitations and peak hour congestion points, combine to make the NEC an extremely complex operation. Achieving a workable balance in the frequency of intercity and commuter train movements, while accommodating freight services in critical areas of the corridor, demands close coordination among all the users. As the owner and intercity operator of much of the corridor, Amtrak bears most of the coordination burden.

A week day, Saturday and Sunday listing of all single-move intercity and commuter train movements on the NEC was provided by Amtrak's office of planning and scheduling. The listing is shown in APPENDIX A, along with several graphs that identify congestion points and the multiple users of the corridor. The train movement lists do not add to a total since most train movements serve multiple stations.

Not unexpectedly, the varying demands of each service segment often create a “my-train-your-train” competition when schedules change, new services are added, or disruptions in track availability are caused by infrastructure improvements and heavy maintenance programs.

Interviews were held with Amtrak, commuter agencies and freight users. The agencies interviewed are listed in APPENDIX B. Commuter and freight users generally agreed that the Corridor is operated as efficiently as possible, given capacity and physical constraints. Some complained about the frustrations of dealing with Amtrak's bureaucracy. However, all users expressed the need for increased capacity to permit smoother operations and growth. In order to better accommodate current services as well as promote growth, they emphasized the need for major infrastructure improvements. Among these are fire and life safety improvements to the New York and Baltimore tunnels; higher track speeds; modern electric traction systems with a change to European style, constant tension catenary; elimination of certain curves, construction of island platforms at BWI and Metro Park stations; and additional track and connections to support more freight use without interfering with high-speed, high-frequency passenger movements.

Since many states and commuter authorities have easier access to capital funding than operating funds, Amtrak has attempted to reach agreements with users of the NEC for more capital in lieu of higher access fees. In the current fiscal year Amtrak will receive approximately \$90 million in access fees and \$32.4 million in capital contributions from all users of the NEC for a total contribution of \$122.4 million. Those amounts are expected to grow to increase to \$95.8 million and \$42.4 million in FY 2003. Access fees and contributions to capital by each user-agency are shown in APPENDIX C. Not all users of the corridor have agreed to capital contributions, and in some cases, there may be agreements in place that have not yet been implemented. At this point, Amtrak has received capital contributions from MARC, New Jersey Transit, VRE and DelDOT. The current users of the Northeast Corridor are as follows:

- Virginia Railway Express - VRE
- Maryland Area Railroad Commuter - MARC.
- Southeastern Pennsylvania Transit Authority—SEPTA
- New Jersey Transit – NJT
- Long Island Rail Road
- Metro North Commuter Railroad
- ConnDOT
- Metropolitan Boston Transportation Authority—MBTA
- Freight Railroads on the Northeast Corridor (Norfolk Southern, CSX and Providence & Worcester) operating in the states of Rhode Island, Massachusetts, New Jersey, Pennsylvania, Delaware, Maryland and the District of Columbia.

## **POSSIBLE FUNDING OPTIONS FOR NEC INFRASTRUCTURE**

Many world political leaders in Asia and Europe have concluded that demographic, environmental and economic pressures make the development of modern rail networks vital to their countries' future and have committed to make the appropriate capital investments. In the United States, some policy makers conjure up images of the railroad industry as the smoke-belching locomotive and the creaky wooden passenger car. However, today's railroad technology makes these images as outdated as those of the biplane and the Model-T.

The Northeast Corridor is one of the most heavily traveled corridors in the U.S., and is the only true high-speed passenger corridor currently operating in the United States. Although the federal government made significant investments in the Northeast Corridor during the 1970's and 80's, Amtrak's appropriations during the past decade failed to

achieve the level of capital investment necessary to keep the NEC in a state of good repair. The recent report from the Department of Transportation Inspector General (1-24-02) states that there is “an estimated \$3 billion backlog of ‘state of good repair’ needs in the Northeast Corridor,” which is the source of major and growing delays of Amtrak and commuter trains in the Northeast Corridor. According to the report, the minutes of delay for Amtrak trains “rose nearly 75 percent between 1998 and 2001.”

Given the volume of commuter traffic on the Northeast Corridor, any policy change that results in the Northeast Corridor being controlled and operated by an entity other than Amtrak, would naturally look to the commuter authorities or the states to assume responsibility for much of the infrastructure costs that will be required for the corridor. However, most (if not all) commuter authorities would argue that the funding made available to them through the federal government and state governments is insufficient to cover their current needs. Despite the fact that transit will receive \$6.7 billion in federal funding for FY 2002 (a 7.8 percent increase over prior year funding), there are many transit projects that will be left unfunded. Nevertheless, the constraints on federal appropriations may force capital funding needs of the NEC to come from guaranteed accounts like the Mass Transit Account of the Highway Trust Fund. .

In interviews with commuter authorities, none would support using the Mass Transit Account as a source for funding Northeast Corridor Infrastructure, unless the account was supplemented with additional funds for that purpose. It is highly unlikely that the federal government would entertain shifting any funds from the Highway Trust Fund into the Mass Transit Account to address this need. In fact, the President’s Budget for FY 2003 includes an obligation limitation of \$22.6 billion for the Federal-aid Highway Program in FY 2003, \$9.2 billion lower than FY 2002. This change would have dramatic consequences for the program and could spike job losses due to delays in highway construction projects, delaying the recovery of the economy.

In addition, these changes could significantly affect future highway funding by reducing the funding baseline for highways that will be used by Congress as the starting point for the next reauthorization of TEA 21. There is no question that states will be concerned about these revenue shortfalls and will no doubt seek solutions to address these shortfalls. One such action could be to ask House and Senate appropriators to offset any negative Revenue Aligned Budget Authority (RABA) shortfall by increasing the obligation limitation in FY 2003 to levels consistent with past TEA 21 program levels, possibly by drawing down from Highway Trust Fund balances. More recently, there has been support voiced in Congress for restoring approximately \$ 4 billion of the RABA-caused shortfall. This is within the authority of the appropriators. The Highway Trust Fund has a sufficient balance to support increases notwithstanding reduced revenue estimates. This decline in available funding is important because it demonstrates how difficult it would be to try to address the NEC infrastructure needs within the Mass Transit Account of the Highway Trust Fund.

Some have suggested that another way to deal with these projected shortfalls would be for the federal government to consider increasing the federal fuel tax to accommodate the

program reductions that states can anticipate. Fuel prices have been so erratic in the past few years that most people would not have difficulty adjusting to a one to five cent increase. Although it is unlikely that the current Administration would support any increase in fuel taxes as a solution, some in Congress may be forced to take drastic steps to avoid the negative impact on the economy that a significant reduction in highway projects would have—including increasing fuel taxes or shifting those fuel tax revenues that go toward the General Fund to the Mass Transit Account. For example, currently 2.3 cents of the fuel tax on gasohol goes toward the General Fund. Shifting these resources could provide a small but dedicated source of funding for rail infrastructure.

The disposition of the Northeast Corridor must take into consideration the needs of all the users. In some cases, Northeast Corridor states may be interested in assuming the responsibility of ownership for parts of the corridor that are critical for their commuter operations. For example, some Northeast Corridor states have expressed an interest in assuming responsibility and, perhaps, ownership of some portions of the corridor. Pennsylvania may have access to more resources and a stronger interest in upgrading the Harrisburg line (Keystone Corridor) than does Amtrak. New York and/or New Jersey may have an interest in taking over the Penn Station Complex, including Sunnyside Yards. Because Amtrak has been unable to obtain the necessary capital to address the significant capital needs of the Penn Station complex (estimated to be in excess of \$4 billion over the next 20 years), the future disposition of the corridor may need to take into consideration the interests of states like New York and/or New Jersey in assuming the responsibility for that station complex. Clearly, states are in a more favorable position to access the type of funding for the necessary infrastructure requirements than is Amtrak. New York already is responsible for that portion of the corridor (57 miles owned jointly with Connecticut) that is heavily used by Metro North. That section of the corridor has not deteriorated. New York and Connecticut have been far more successful in providing for the necessary capital requirements for the sections they own than those sections not owned by the state.

Assuming there will be no single federal or state funding source to address the capital needs of the Northeast Corridor, other creative means could be taken to address the infrastructure needs. For example, one of the larger capital costs that must be addressed on the South End of the corridor is the replacement of the electric traction system, estimated to be approximately \$800 million dollars. With the federal government seeking to adopt an energy policy that would create Regional Transmission Organizations (RTO's), it is conceivable that a northeast RTO may be interested in entering into a partnership to either take ownership or develop a long term lease arrangement of the electric traction infrastructure in the corridor in exchange for construction of a new electric traction system as well as new transmission lines to meet the needs of electric customers in the northeast. Such a partnership may be able to take advantage of recently enacted rail infrastructure programs like TIFIA. Amtrak is in the process of seeking “economically beneficial opportunities” for replacement of the electric traction system through the formation of a partnering arrangement. Although no such arrangement has yet been accomplished, this remains a viable alternative funding option for one of the major capital requirements on the corridor.

## **FUNDING OUTLOOK**

The U.S. economic slump that began in mid-2000, which was exacerbated by the events of September 11, has left the federal government and most state governments facing budget deficits and difficult decisions about which programs get funded and which will not. While the federal government has more room to maneuver than many of the states that have constitutional requirements to balance their budgets, recent public statements appear to indicate that the federal budget for fiscal year 2003 will be geared to add funding for defense and homeland security, leaving many existing federal programs or proposed programs on an austere budget or with no funding at all.

Given this difficult economic environment, finding resources to fund the multiple infrastructure needs of the Northeast Corridor will be difficult. On top of the general economic woes, the U.S. Treasury now estimates that state governments may lose \$8.2 billion in federal transportation funds next year because of declining fuel tax collections. This bleak financial picture will only add to the challenges of the long ignored Northeast Corridor needs. Hopefully, as most economists predict, this economic downturn is just a temporary condition and government deficits will be eliminated in the short term. For the time being, the best strategy to address these needs will be to look toward a variety of funding options including federal, state and private sources. For the purpose of this report, it is assumed that some public entity other than Amtrak will be responsible for infrastructure improvements.

### **Federal Sources**

Federal appropriations could be used to help address the fire and life/safety needs of the NEC. Despite the constraints of the appropriations process, the federal government has a responsibility to assume some role in addressing life/safety issues on an interstate transportation infrastructure like the NEC, particularly since it has been the de facto owner for 25 years. Even if the federal government is only able to provide \$100 million per year and commit to a multiple number of years, it will provide some assurance for rail planners that the funds will be there to design and implement these projects. The most recent DOT/IG report suggests that Congress should “ earmark ” funds designed to address safety and security-related needs. With the administration’s budget expected to place a great deal of weight on the need to fund projects that are critical to homeland security, it may be prudent for DOT and/or Amtrak to expand the infrastructure list of corridor projects addressed in S. 1550 to include additional NEC projects that may fall into that category. Given the urgent needs of the Northeast Corridor infrastructure, there may be ways for the appropriations committees in Congress to breach the so-called “firewalls” to address these needs. As was demonstrated during the closing days of the last Congress, when there is an urgent need to address infrastructure (like the New York tunnels) that may be related to security, the federal government has the ability to provide funding even when it may result in deficit spending.

Transportation Infrastructure Finance Assistance and Innovation Act (TIFIA) was authorized in TEA 21 and was designed to provide secured loans, lines of credit and loan guarantees to public and private sponsors of major surface transportation projects. Part of the strategy to address these capital projects should be to encourage partners that have an interest in the safety and reliability of the NEC. These partners could include states, commuter authorities, freight railroads, Regional Transmission Organizations, "design and build" partnerships with engineering firms, real estate developers, airlines, airport authorities and Amtrak.

The Railroad Rehabilitation and Improvement Financing Program (RRIF) is another partner-based funding source. The freight railroad industry is expected to support provisions in T&I Committee Chairman Don Young's RIDE-21 legislation that would increase the amount of low-interest loans and loan guarantees available from \$3.5 billion to \$35 billion for this program. The bill would also eliminate "overly restrictive regulatory requirements" that have constrained implementation of the program. Such a change could provide the NEC with another possible funding option for critical joint use projects, particularly for those projects that could enhance the capacity for additional freight traffic.

### **Federal Legislation**

The Administration and Congress could enact new legislation that would provide capital for NEC infrastructure.

1. Bond Measures that would finance major construction projects in the corridor. During the first session of the 107<sup>th</sup> Congress, a variety of bills that would provide bonding authority to meet infrastructure needs were proposed. It is not likely that Congress will settle on any one piece of legislation until it is clear what the fate of Amtrak will be. Whatever the outcome, it is clear that any bonding measure should be designed to help meet the needs of the NEC.
2. Economic Stimulus proposals are likely to surface again. Such legislation could include tax cuts that promote growth in the economy and job creation. The private sector may be more inclined to undertake certain rail projects that have a common public good in the Northeast Corridor if the tax code had incentives for them to do so. The freight rail industry is expected to submit a legislative request that would support the enactment of legislation that would provide tax incentives, such as rail investment tax credits, or tax-exempt financing for certain qualified rail projects. Private sector railroads are also expected to seek funding for rail infrastructure through the issuance of tax-exempt indebtedness. Freight users of the corridor may be willing to undertake capital projects that would expand capacity of the NEC for freight users, if such a provision were enacted into law.
3. Expanding the flexibility of current transportation trust funds to include NEC projects that are designed to reduce congestion on other modes. One of the hallmarks of TEA 21 included the flexibility provisions that allowed states to

“flex” funds allocated to their states for transportation projects that were their highest priority. Both the Surface Transportation Program (STP) and the Congestion Mitigation and Air Quality Improvement program (CMAQ) have flexibility provisions. However, federal law does not clearly stipulate whether railroad projects would be eligible for the flexible funds. The next round of TEA 21 should make clear that, at a minimum, the NEC would be eligible for such flexibility. In addition, these funds could be supplemented by shifting the current portion of gasohol taxes that are contributed to the General Fund to an account that would be authorized to flex funds for rail projects.

4. Since the September 11, terrorist attacks public fear and concern about air travel has increased. In addition, increased security requirements have led to significant delays, making short distance air travel less desirable. The location of airports that are adjacent to the Northeast Corridor open up the possibility that the Airport and Airway Trust Fund could be as flexed along the lines of the policy established in TEA 21 and in a way that would help airports reduce the amount of slots consumed by short distance flights when a high speed rail corridor can provide a competitive alternative. The funds in the Airport and Airway Trust Fund are used to meet obligations for airport improvements but are limited to the confines of the airport grounds. An expanded use of these funds in a way that would allow construction of a rail connection to a high-speed rail line could be beneficial to the traveling public, the airports and the Northeast Corridor. Current constraints on funding for the NEC have prevented the advancement of center Island platforms at BWI, a major congestion point on the NEC. The BWI rail station has become an integral part of the airport operation and better coordination on funding projects could substantially improve the operation of both the airport and the rail operation.
5. Federal transportation funds are often used for civil works projects that are under the Army Corps of Engineers. There is some precedent for the Corps to undertake bridge projects that are over navigable waters to meet the necessities of rail or highway traffic. There are three bridges in the state of Maryland that fall into this category on the NEC that traverse the Susquehanna, Bush and Gunpowder rivers.

### **State Participation**

- Expand the NEC states' role through a broader based ownership-control institutional mechanism. Today, the NEC states invest state and federal transit funds in corridor segments providing specific value to communities and citizens for essential commuter services. A larger and more significant role for NEC states could lead to a more coordinated funding program and improved coordination of operations and schedules among all users.

## **Freight Users**

- Freight users of the NEC envision growth in the important Northeast-Mid-Atlantic market, particularly in higher-speed intermodal operations. Current freight use of NEC facilities is constrained by track speed limitations and access periods. State and Federal policy could encourage freight users to invest in additional facilities to improve their services, enhance capacity and further minimize conflicts with intercity and commuter services could justify and attract private sector investment. The State of Delaware has recently resolved a congestion point on the NEC by reaching an agreement with Norfolk Southern to share the cost of a capital project that met both the needs of the state and the railroad.

## PART II

### RECENT DEVELOPMENTS AND CONCLUSIONS

#### THE GROWING CRISIS AT AMTRAK

Against the backdrop of the Amtrak Reform Council Findings and Action Plan, Amtrak, the nation's intercity rail passenger operator and owner of the Northeast Corridor infrastructure, by any measure is in an extreme state of financial crisis. The corporation is burdened with \$4 billion in debt, with interest expense expected to more than double in 2002, a significant backlog of capital needs and is enduring a continuing annual cash loss of nearly \$600 million. With the recently announced departure of its CEO, Amtrak is like a rudderless ship in turbulent waters. Its future is dependent upon the federal appropriations process in which the trend for discretionary spending programs, like Amtrak, has been on the decline.

While Amtrak has achieved some growth in ridership and revenues, every dollar in new revenue is offset by \$1.05 in additional costs, according to the U.S. DOT Inspector General's analysis. Amtrak announced that it plans to shut down the entire long-distance network unless Congress approves \$1.2 billion in federal grants for FY 2003. If funding is limited, Amtrak may discontinue as many trains as necessary at the beginning of FY 2003 (October 1, 2002). The Administration has proposed a subsidy of \$521 million for the next fiscal year as a "placeholder" until a more definitive policy decision is made as to the future of intercity rail passenger service. By all accounts, the \$521 million level of funding would be insufficient to continue the system as it exists today.

#### CONGRESSIONAL RESPONSE

**1. Hearings:** A series of congressional hearings were held in the House and the Senate following the finding of the Amtrak Reform Council that Amtrak, as currently structured, cannot become self sufficient and will require continued Federal operating subsidies. In testimony before Congress, the Department of Transportation Inspector General concurred that "Amtrak has not succeeded in implementing enduring financial improvements of the magnitude necessary to attain and sustain self-sufficiency in and beyond 2003". In fact, no Congressional witness that appeared before any committee was able to present any evidence that the Amtrak structure, as it exists today, can be "self-sufficient". The ARC's Action Plan for Congress to deal with the crisis included, notably, a recommendation to separate the Northeast Corridor from Amtrak ownership as a means to focus and facilitate public and private capital investment in the Corridor. The ARC also recommended that Congress consider competitive franchises as a means of preserving intercity rail passenger service on the most traveled routes of Amtrak's national system at the lowest possible cost.

The Administration has not yet made known its public policy position on how to resolve the current Amtrak crisis but expects to outline for Congress a set of principles rather

than specific legislation. In testimony before Congress, witnesses for the Department of Transportation indicated that they first needed to understand some basic questions including:

- What kind of system is needed – Regional or National?
- What will the system cost?
- How will the costs of the system be met?
- How can a new or revitalized system be more efficient?
- Should the current institutional structure be changed to resolve issues like track access and safety?
- What is politically feasible/possible within the current budget environment?

Although there appears to be a general consensus among those in Congress charged with Amtrak oversight responsibility that additional resources may be necessary, no such unanimity exists on what the delivery system would be or on how Amtrak should be structured. There are some in Congress who say that without a national system, there will be no Amtrak. Others indicate that it only makes sense to operate a series of regional corridors. Still others say that the operating losses of the national system are not the problem; they say that any system of passenger rail will require substantial and continuing capital funding. While few argue that the cost of preserving and enhancing rail passenger service has been and will continue to be costly, there is no agreement on where the resources will come from or if Amtrak should be the recipient. With Amtrak's authority to obtain appropriations set to expire at the end of this fiscal year, a number of bills pending in Congress propose various ways to address the Amtrak crisis.

## **2. Reauthorization Legislation:**

a. S. 1958, The Rail Passenger Service Improvement Act, introduced by Senator John McCain –

1. Creates an Office of Rail Passenger Development and Franchising within FRA with the power to access freight railroads;
2. Requires Amtrak to create at least three subsidiaries—Operations, Maintenance and Reservations;
3. Requires Amtrak to redeem outstanding common stock;
4. Requires Amtrak to cover “avoidable costs” on each route it operates;
5. Requires the transfer of the Northeast Corridor to the Secretary;
6. Creates an Amtrak Control Board;
7. Expands flexibility of Highway Trust Funds;
8. Authorization includes:
  - \$510 million for general security
  - \$898 million for tunnels
  - \$400 million in FY 2003 for operations, declining to \$100 million in FY 2006
  - \$400 million per year for capital grants for four years
  - \$500 million per year for Northeast Corridor improvements for four years

This bill includes many of the recommendations made by the Amtrak Reform Council.

- b. S. 1991, The National Defense Rail Act, introduced by Senator Hollings –
- Title I authorizes \$360 million for Amtrak security assistance;
  - Title II requires the development of a national high-speed ground transportation policy and would authorize \$1.55 billion for planning, research and implementation;
  - Title III defines a national rail passenger transportation system and includes an authorization of \$4.1 billion per year for rail passenger service;
  - Title III also would establish a new Board of Directors;
  - Title IV authorizes \$35 billion in loans or loan guarantee coverage for infrastructure improvements and security enhancements.

Both of these bills depend heavily on obtaining funds through the appropriations process. Some Members of Congress who serve on the Appropriations Committee have expressed concern that those resources may not be there. For example, in considering Amtrak's request for \$1.2 billion in FY 2003 appropriations to keep the current system running, Senator Patty Murray, Chairman of the Senate Transportation Appropriations Subcommittee, stated at a recent hearing, "As a member of the Budget Committee and Chairman of this Subcommittee, I don't see where that kind of money is going to come from."

The House of Representatives has yet to introduce an Amtrak Reauthorization bill but has under consideration several bills like HR 2950, The Rail Infrastructure Development and Expansion Act for the 21<sup>st</sup> Century ("RIDE 21"). This legislation would provide \$36 billion in tax-exempt bonds for high-speed rail development, \$35 billion in loans and loan guarantees for freight and commuter rail improvements. Also pending in the House is HR 3166, Rebuild America: Financing Infrastructure Renewal and Security for Transportation Act of 2001, which provides for tax credits for Amtrak bonds. While neither of these bills attempts to restructure Amtrak, they do provide resources for railroad infrastructure and may be part of the answer for addressing the backlog of capital needs for the Northeast Corridor.

Even if Congress is able to enact an authorization bill, it will be subject to the spending levels in the Budget Resolution that is still working its way through Congress. At this point, the House and Senate appear to be very far apart on a number of budget priorities, including Function 400, Transportation. It is the Budget Resolution that establishes an allocation for the Appropriations Committee, which then subdivides the amount among its subcommittees. Given current economic conditions and the fact that the federal government is once again facing a budget deficit, it is unlikely that the transportation function of the federal budget will be able to expand enough to accommodate the \$1.2 billion that Amtrak is seeking.

Given the complexity of closing the gap between the various proposals to reauthorize/restructure Amtrak and the uncertainty in the budget process, it is very possible that Congress will not be able to reach a consensus on an Amtrak re-authorization bill this year. Without an authorization bill and the prospect of a deepening

financial crisis at Amtrak, the House and Senate appropriations committees are likely to be responsible for determining the short-term fate of Amtrak.

**3. Appropriations Process:** The fundamental problem with any program dependent on federal appropriations is that the federal budget process is evolving into one in which “mandatory spending” is consuming larger and larger portions of the budget. The reality is that the Transportation Appropriations Subcommittees have been hamstrung by federal legislation that provides guaranteed spending for certain transportation programs. The allocation of about 75 percent of federal transportation resources is now predetermined by the provisions of AIR 21 and TEA 21. Consequently, non-covered transportation programs (like Amtrak) are forced to compete with funding for Coast Guard, FAA safety, FRA, and a variety of other programs within the transportation appropriations process for whatever is left over.

Fiscal Year 2003 transportation funding will be particularly difficult for the Transportation Appropriations Subcommittees because the Administration’s budget request proposes a 9 percent reduction in transportation spending, due in large part to the automatic adjustments in highway spending based on anticipated receipts from Federal highway user taxes. As reflected in recent proposals, Congress will almost certainly restore a significant portion of the highway shortfall and meet most of the Coast Guard and Aviation security needs, thus squeezing transportation funding further, and making it even more difficult for programs that fall into the non-guaranteed spending category.

At this stage, it does not appear that there will be resources to provide Amtrak with its request for \$1.2 billion. And, unless there is a significant upsurge in the economy and a return to budget surpluses, subsequent fiscal years will be equally difficult for intercity rail funding given the "firewalls" that protect highway, transit and aviation spending. Asking the Appropriations Committees to provide more funding for Amtrak in this environment is risky because it places too large a burden on committees that simply will not have the resources to meet these needs no matter how urgent they may be. Proponents of rail passenger service will need to be much more creative about finding alternative funding sources outside the federal appropriations process.

## **PART III**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **NORTHEAST CORRIDOR INFRASTRUCTURE VS. AMTRAK'S NATIONAL SYSTEM OF INTERCITY RAIL PASSENGER SERVICES**

Recent Congressional hearings and reports from outside watchdog groups have attempted to shine a bright light on the true costs of operating Amtrak's national system. One conclusion is that the cost of owning the Northeast Corridor comes at a very high price. A continuing concern among some in Congress is that rail passenger service in the Northeast Corridor receives favored treatment and funding while other routes of Amtrak's national rail network suffer from an inequitable funding formula and therefore have higher risks of being discontinued or substantially reduced in frequency. Recently, Senator Patty Murray (D-WA) expressed her concern by saying,

“Amtrak owns the Northeast Corridor. The vast majority of federal capital dollars that the railroad has received has gone into the Northeast Corridor. Even so, this corridor is in desperate need of between \$3 billion and \$5 billion just to maintain the current level of service. Over the next decade, it may require as much as \$20 billion.”

The DOT Inspector General also told the House Appropriations Committee that the operating subsidies for non-NEC routes and services is "chump change" compared to the capital needs of the Northeast Corridor. As long as Amtrak owns the Northeast Corridor it will be responsible for the lion's share of the infrastructure costs associated with the corridor. And, as mentioned earlier, getting those resources out of the appropriations process may be impossible.

If funding the infrastructure maintenance and capital costs of the NEC is one of the biggest obstacles to solving the problem of funding rail passenger service, it makes some sense to separate these costs from Amtrak's train operations. The removal of the infrastructure costs from Amtrak's books would have an immediate and positive impact on its operating budget. The real problem is how to pay for the infrastructure costs of the Northeast Corridor. Amtrak would perform much better if it were only an operating company and not also burdened with the responsibility to get whatever funds it can out of appropriations to address the needs of the Northeast Corridor infrastructure.

#### **CURRENT OPERATIONS AND FUNDING OF THE NORTHEAST CORRIDOR INFRASTRUCTURE**

The policy decision on how to fund the NEC, which is a national transportation asset, must consider the fundamental questions of: 1) who owns the Corridor, 2) who benefits from the Corridor, and 3) how it can be placed in the hands of an entity that would enhance its ability to access sufficient capital, including private sector participation?

Amtrak, through the appropriations process, has not and will not generate a sufficient level of funding. Ironically, those sections of the NEC that are not owned by Amtrak receive far more funding for essential infrastructure needs than those that are owned by Amtrak. In fact, over the past four years, the DOT/IG reports that Amtrak has spent only about \$325 million on track maintenance out of the \$540 million minimum required for operational reliability, a shortfall of about \$215 million. Commuter agency owners of NEC properties are able to access alternative funds and are more consistent about implementing the necessary infrastructure maintenance and capital improvement expenditures. Connecticut, for example, has a ten-year capital expenditure program, funded at \$100 million per year, for the 46 miles of the NEC that it owns.

While Amtrak has worked with commuter agencies in the Northeast Corridor to share some of the capital costs where there is a joint benefit, the DOT/IG has told Congress that the terms of these partnerships are “inconsistent, and some entities have contributed substantially to the growth and operation of passenger rail while others have benefited from service without contributing anything.” The Inspector General suggested that a better job must be done in identifying and allocating “the costs of capital and operating investment according to the benefits realized by stakeholders.”

On page 9 of Part I of this report, we discussed the commuter operations on the Northeast Corridor and the various agreements each have with Amtrak for their operations on the Corridor. Amtrak received a total contribution of \$122.4 million in access fees and capital contributions for fiscal year 2001. BGL Rail met with selected commuter and freight users of the corridor to discuss their arrangements with Amtrak. While agreements with Amtrak vary, generally the commuter users of the corridor pay an access fee that is tied to “incremental costs” and the freight users of the corridor pay a “fully allocated cost” access fee. The capital contributions are negotiated with individual users and are, in principle, based on how the benefits accrue to the individual users.

The recent history of funding Northeast Corridor infrastructure clearly demonstrates that Amtrak has not been able to obtain the resources it needs from the federal appropriations process. Further, it is unlikely that the budget environment will improve sufficiently in the out years for federal transportation appropriations to meet the almost \$1 billion of annual funding that will be required for the next two decades. One fact is clear – as long as Amtrak owns the NEC, it will be responsible for the infrastructure improvements. Clear historical experience tells us that this approach does not and will not work.

## **RECOMMENDED APPROACH TO NEC FUNDING**

An effective and new approach must be found to effectively fund the capital needs of the Corridor. The approach we recommend is to separate the Corridor infrastructure from Amtrak: 1) so that the funds that NEC operations generate can be plowed back into the infrastructure; 2) so that through the states there is the possibility of accessing funds from the guaranteed spending programs of the Highway Trust Fund; and 3) so that a systematic program can be developed to exploit a variety of other sources of incremental funding to satisfy the substantial and ongoing maintenance and investment needs of the Corridor.

## 1. Separating Operations from Infrastructure

Amtrak has always lost money on its passenger operations. It should not have to shoulder the burden of being responsible for generating capital funds and managing the NEC infrastructure. Equally important, whatever funds are generated for NEC capital improvements should, indeed, be used for that purpose. The DOT IG suggested in its January 2002 report that when Amtrak has an infusion of capital dollars, it uses capital to offset operating losses and makes poor business decisions. Thus, owning the Northeast Corridor and experiencing operating losses leads the company to make decisions that are not in the long-term best interest of the Corridor and its users, like the decision to mortgage Penn Station for 16 years to help meet a three-month shortfall in cash. The current Amtrak structure is not the most efficient or effective way to maintain the vital infrastructure resource of the Northeast Corridor.

## 2. Using The Flexible Provisions of The Highway Trust Fund

The current short fall in federal fuel tax revenue of approximately \$8 billion dollars is not only bad for highway infrastructure, it could also have a devastating impact on the flexible provisions of TEA 21. Programs like the Surface Transportation Program (STP) and the Congestion Mitigation & Air Quality (CMAQ), which are the primary vehicles used to flex funds for other modes, will not stand a chance to fund other infrastructure modes (such as rail passenger) unless Congress agrees to make up for the shortfall of the fuel tax revenues. If Congress addresses the highway funding shortfall issue, the flexible provisions of the Highway Trust Fund are more likely to be used for alternative modes, enhancing the chance that some elements of the infrastructure needs of the NEC may be funded through these programs.

## 3. Exploiting Sources of Incremental Funding of NEC Infrastructure Needs

The capital needs of the Northeast Corridor are substantial and cannot be met in any single year or from any single source. Continuing to depend on the appropriations process, which has very little flexibility to find additional resources, will only lead to continuing deterioration of the Corridor. There is also no incentive to spend funds efficiently under the current Amtrak structure with ineffective oversight by post-audit congressional hearings, and GAO and DOT/IG analyses.

Even if more funds were authorized for the NEC, the chances of more funds being appropriated are not good. Our analysis of capital needs and the likely sources of funding indicates that only through a coordinated program of new ownership with broad participation of users can the NEC users expect to achieve the operating level the NEC requires and that the region's transportation needs justify. A change in ownership is essential because Amtrak has demonstrated that it cannot obtain the level of funding necessary out of federal appropriations. Participation of all owners and users in the identification of logical funding sources can result in a concerted effort to achieve a multi-year capital improvement program using multiple sources of funding. We offer the

following as examples of some of the sources that could be considered to support the multi-year NEC improvement program.

- Establish a separate NEC infrastructure organization by transferring the Corridor to the Secretary or to a separate authority made up of states, US DOT, freight railroads that use the corridor, and the intercity passenger train operating company that uses the corridor. Establishing such an entity would open up additional opportunities for federal, state and local funding.
- Bond authority in legislation currently pending before Congress appears to have bipartisan support and is a logical source for addressing some of the critical Northeast Corridor infrastructure projects. Some changes may be necessary to pending legislation to allow individual corridor states to issue bonds for NEC infrastructure work that is not related exclusively to high-speed rail. This is true of guaranteed loan programs such as those currently pending in H.R. 2950 and S. 1991, which would be effective if states used their discretion to exercise those programs.
- Tax incentives for public interest rail projects like those being proposed by the Association of American Railroads could generate private sector investments in the NEC and take some pressure off the appropriations process to find all the funding required.
- Creative partnerships with private sector entities such as "design and build" agreements with engineering construction firms and Regional Transmission Organizations could be a means to build much needed electric transmission lines in the Northeast. Such partnerships could implement the \$800 million catenary replacement program on the south end of the corridor. One legislative proposal in the Energy bill pending before Congress would authorize \$130 million for the development of a more energy efficient locomotive. A similar policy approach could be used as an incentive to encourage the development of electric traction technology for all the electric trains that operate in the NEC. Existing railroad guaranteed loan programs could be used to finance such projects on a user payback basis. There are numerous consumers of electric power on the corridor that, over time, would provide a sufficient stream of revenues to pay off the capital investment.
- Turning over portions of the corridor that are used primarily by commuter authorities (like the Penn Station Complex) to local commuter authorities would shift many of the associated maintenance costs and capital expenditure requirements that are now dependent on federal appropriations to other sources.
- Reauthorize the Northeast Corridor Improvement Project (NECIP) to provide federal funding for life safety/security concerns on the corridor.
- Expand the flexibility provisions in TEA 21 and similar flexible provisions in the Aviation Trust Fund where NEC improvements would relieve capacity and congestion restraints of major highways and airports. The NEC serves cities with

four of the seven most congested airports in the U.S., and parallels Interstate 95 for large sections. Today, the NEC's operations help reduce regional congestion on highways and airports and justify flexibility in how these programs assure the availability and value of an alternative mode of transportation.

## **ADDITIONAL RECOMMENDATIONS**

Not taking a creative and aggressive approach to resolve the capital needs of the Northeast Corridor would be a serious and costly mistake in national transportation policy. From our analysis of NEC program and cost data, and interviews with the major users of the NEC infrastructure, we are convinced that the first essential step toward preservation and enhancement of the NEC is to place the ownership in the hands of an entity other than Amtrak. A Federal corporation, a combination of state entities or a combination of Federal and state agencies, would give the Northeast Corridor better access to alternative funding resources and a broader understanding by all government policy makers of the transportation value of the NEC to the nation and the region it serves. At the same time, Amtrak's national system's operations would benefit from not having the NEC capital requirements coupled with the network's operating needs, when seeking operating assistance from Congress and the states. We recommend the following actions:

- Transfer the NEC infrastructure to the Department of Transportation;
- Authorize the Secretary of Transportation to contract for an outside engineering analysis of the NEC's infrastructure needs and the associated costs and develop a five-year maintenance and capital investment program;
- Authorize the Secretary to identify portions of the corridor (if any) that should be turned over to local authorities;
- Require the Secretary to report back to Congress in one year on funding options to be considered for NEC infrastructure improvements.

TYPICAL PASSENGER TRAIN TRAFFIC WEEKDAYS* (SEPT. 29,2001 TIMETABLE)				
LINE SEGMENT	AMTRAK	COMMUTER	PSSGR TOTAL	
BOSTON - BACK BAY	36	173	209	
BOSTON-DORCHESTER BR.	0	49	49	
BACK BAY - FORREST HILLS	32	132	164	
FORREST HILLS - READVILLE	32	72	104	
READVILLE - CANTON JCT	32	72	104	
CANTON JCT - ATTLEBORO	32	34	66	
ATTLEBORO - PROVIDENCE	32	26	58	
PROVIDENCE-NEW LONDON	32	0	32	
NEW LONDON - OLD SAYBROOK	32	12	44	
OLD SAYBROOK - MILL RIVER	32	28	60	
MILL RIVER-NEW HAVEN	46	28	74	
SPRINGFIELD - NEW HAVEN	12	0	12	
NEW HAVEN - CP261	40	76	116	
CP261 - CP257	40	89	129	
CP257 - CP241	40	111	151	
CP241 - STAMFORD	40	176	216	
STAMFORD - CP216	40	242	282	
CP 216 - HAROLD	40	0	40	
HAROLD(SSYD) - NEW YORK	129	521	650	
EMPIRE CONNECTION	28	0	28	
NYP - SWIFT	107	226	333	
SWIFT-NEWARK	107	207	314	
NEWARK - HUNTER	107	254	361	
HUNTER - UNION	107	190	297	
UNION - COUNTY	107	99	206	
COUNTY - TRENTON	107	84	191	
TRENTON(XMO) - SHORE	107	62	169	
SHORE - ZOO	107	165	272	
ZOO - 30TH ST(LL)	114	29	143	
30TH ST(LL) - PHIL	85	1	86	
PHIL COMPLEX	85	137	222	
PHIL - MARCUS HOOK	85	61	146	
MARCUS HOOK - WILM.	85	37	122	
WILMINGTON - PERRYVILLE	85	20	105	
PERRYVILLE - BALTIMORE	85	14	99	
BALTIMORE - WASHINGTON	85	44	129	
WASH. - ALEXANDRIA	20	30	50	
ALEX. - MANASSAS	4	18	22	
ALEX. - FREDERICKSBURG	18	12	30	
FRED. - RICHMOND	18	0	18	
RICHMOND - NEWPORT NEWS	4	0	4	
30TH ST - ZOO	22	261	283	
ZOO - OVERBROOK	22	123	145	
OVERBROOK - BRYN MAWR	22	101	123	
BRYN MAWR - FRAZER	22	86	108	
FRAZER - DOWN./THORNDALE	22	48	70	
DOWN./THORNDALE - LANCASTER	22	2	24	
LANCASTER - HARRISBURG	22	0	22	
*NOTE: WEDNESDAY USED FOR COUNTS				

APPENDIX A

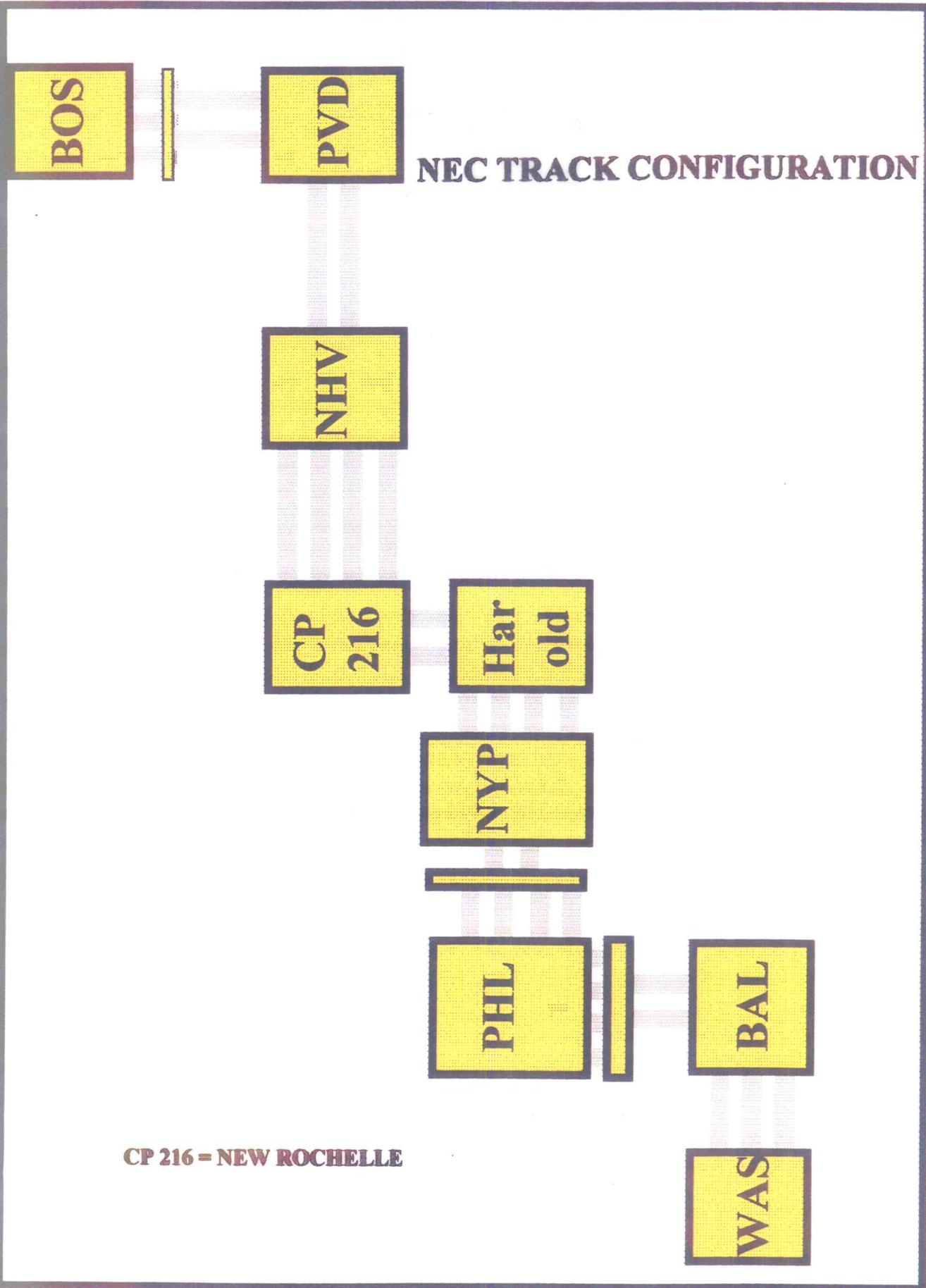
OCHELLE

**TYPICAL PASSENGER TRAIN TRAFFIC  
SATURDAYS (SEPT. 29, 2001 TIMETABLE)**

LINE SEGMENT	PSSGR			
	AMTRAK	COMMUTER	TOTAL	
BOSTON - BACK BAY	28	74	102	
BOSTON-DORCHESTER BR.	0	0	0	
BACK BAY - FORREST HILLS	24	55	79	
FORREST HILLS - READVILLE	24	18	42	
READVILLE - CANTON JCT	24	18	42	
CANTON JCT - ATTLEBORO	24	18	42	
ATTLEBORO - PROVIDENCE	24	18	42	
PROVIDENCE-NEW LONDON	24	0	24	
NEW LONDON - OLD SAYBROOK	24	0	24	
OLD SAYBROOK - MILL RIVER	24	0	24	
MILL RIVER-NEW HAVEN	36			
SPRINGFIELD - NEW HAVEN	12	0	12	
NEW HAVEN - CP261	32	0		
CP261 - CP257	32	N/A		
CP257 - CP241	32	N/A		
CP241 - STAMFORD	32	N/A		
STAMFORD - CP216	32	N/A		
CP 216 - HAROLD	32	0	32	
HAROLD(SSYD) - NEW YORK	95	na		
EMPIRE CONNECTION	24	0	24	
NYP - SWIFT	70	127	197	226
SWIFT-NEWARK	70	105	175	207
NEWARK - HUNTER	70	131	201	254
HUNTER - UNION	70	95	165	190
UNION - COUNTY	70	51	121	
COUNTY - TRENTON	70	51	121	
TRENTON - SHORE	70	36	106	
SHORE - ZOO	70	98	168	165
ZOO - 30TH ST[LL]	74	28	102	29
30TH ST[LL] - PHIL	62	0	62	
PHIL COMPLEX	62	111	173	
PHIL - MARCUS HOOK	62	35	97	61
MARCUS HOOK - WILM.	62	12	74	
WILMINGTON - PERRYVILLE	62	0	62	
PERRYVILLE - BALTIMORE	62	0	62	
BALTIMORE - WASHINGTON	62	0	62	
WASH. - ALEXANDRIA	17	0	17	
ALEX. - MANASSAS	2	0	2	
ALEX. - FREDERICKSBURG	17	0	17	
FRED. - RICHMOND	17	0	17	
RICHMOND - NEWPORT NEWS	4	0	4	
30TH ST - ZOO	12	123	135	
ZOO - OVERBROOK	12	53	65	
OVERBROOK - BRYN MAWR	12	53	65	
BRYN MAWR - FRAZER	12	53	65	
FRAZER - DOWNINGTOWN	12	25	37	
DOW./THORNDALE - LANCASTER	12	0	12	
LANCASTER - HARRISBURG	12	0	12	

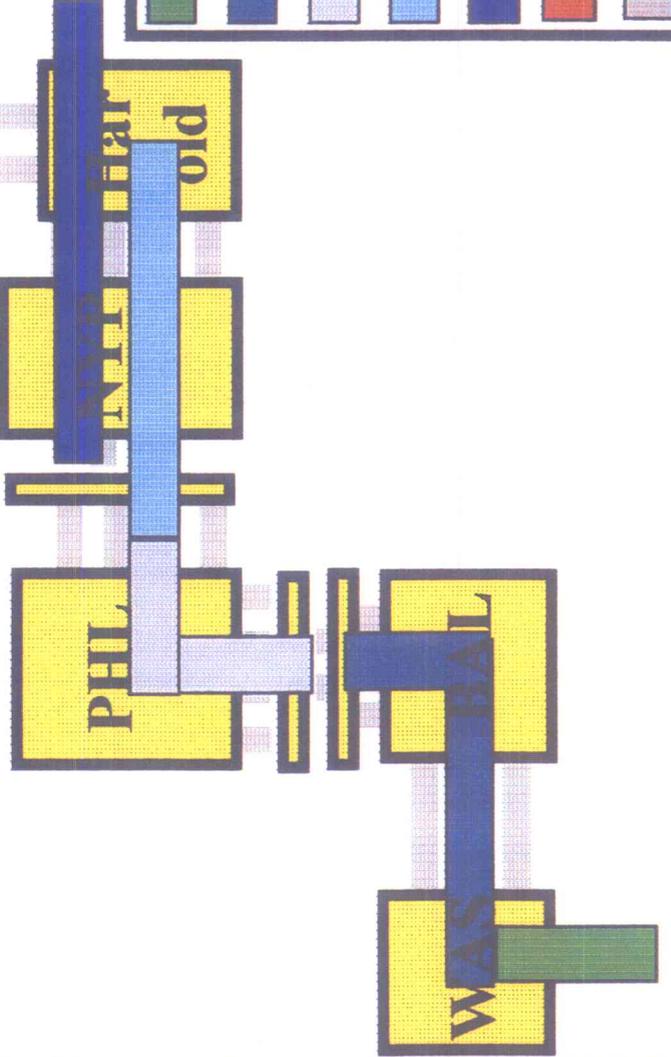
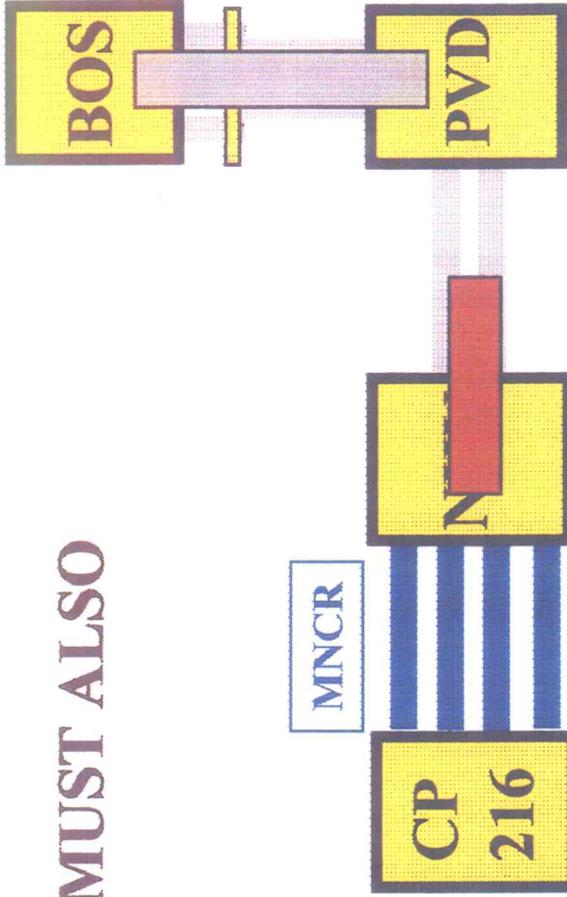
**TYPICAL PASSENGER TRAIN TRAFFIC  
SUNDAYS (SEPT. 29,2001 TIMETABLE)**

LINE SEGMENT			PSSGR	
	AMTRAK	COMMUTER	TOTAL	
BOSTON - BACK BAY	29	43	72	
BOSTON-DORCHESTER BR.	0	0	0	
BACK BAY - FORREST HILLS	25	27	52	
FORREST HILLS - READVILLE	25	14	39	
READVILLE - CANTON JCT	25	14	39	
CANTON JCT - ATTLEBORO	25	14	39	
ATTLEBORO - PROVIDENCE	25	14	39	
PROVIDENCE-NEW LONDON	25	0	25	
NEW LONDON - OLD SAYBROOK	25	0	25	
OLD SAYBROOK - MILL RIVER	25	0	25	
MILL RIVER-NEW HAVEN	37			
SPRINGFIELD - NEW HAVEN	12	0	12	
NEW HAVEN - CP261	33	N/A		
CP261 - CP257	33	N/A		
CP257 - CP241	33	N/A		
CP241 - STAMFORD	33	N/A		
STAMFORD - CP216	33	N/A		
CP 216 - HAROLD	33	0	33	
HAROLD(SSYD) - NEW YORK	102	N/A		
EMPIRE CONNECTION	25	0	25	
NYP - SWIFT	77	127	204	226
SWIFT-NEWARK	77	102	179	207
NEWARK - HUNTER	77	131	208	254
HUNTER - UNION	77	93	170	190
UNION - COUNTY	77	49	126	
COUNTY - TRENTON	77	49	126	
TRENTON - SHORE	77	36	113	
SHORE - ZOO	77	98	175	165
ZOO - 30TH ST[LL]	81	28	109	29
30TH ST[LL] - PHIL	67	0	67	
PHIL COMPLEX	67	104	171	
PHIL - MARCUS HOOK	67	28	95	61
MARCUS HOOK - WILM.	67	0	67	
WILMINGTON - PERRYVILLE	67	0	67	
PERRYVILLE - BALTIMORE	67	0	67	
BALTIMORE - WASHINGTON	67	0	67	
WASH. - ALEXANDRIA	19	0	19	
ALEX. - MANASSAS	4	0	4	
ALEX. - FREDERICKSBURG	17	0	17	
FRED. - RICHMOND	17	0	17	
RICHMOND - NEWPORT NEWS	4	0	4	
30TH ST - ZOO	12	105	117	
ZOO - OVERBROOK	12	35	47	
OVERBROOK - BRYN MAWR	12	35	47	
BRYN MAWR - FRAZER	12	35	47	
FRAZER - DOWNINGTOWN	12	1	13	
DOW./THORNDALE - LANCASTER	12	0	12	
LANCASTER - HARRISBURG	12	0	12	

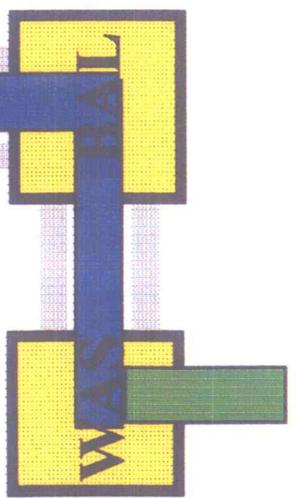


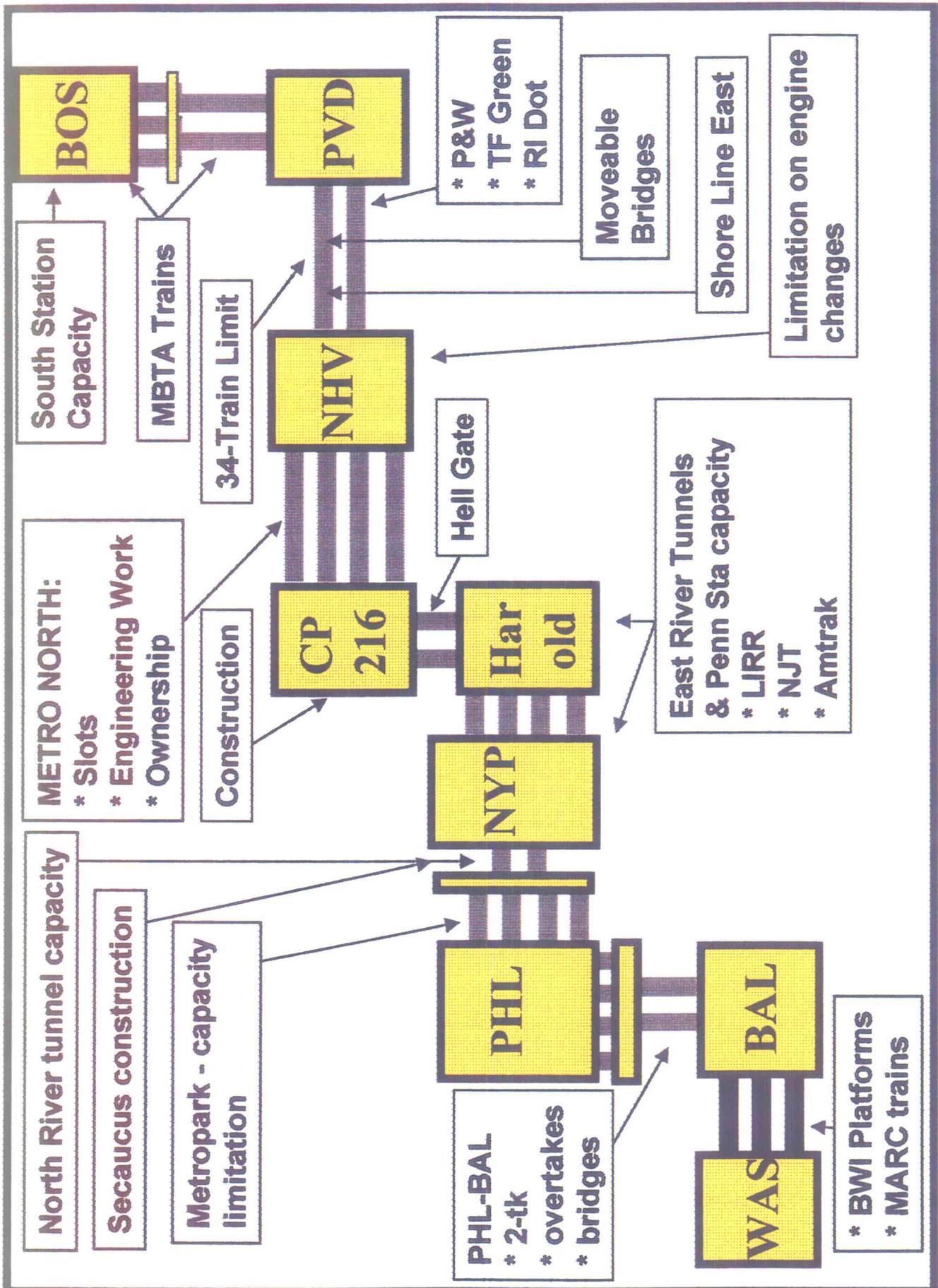
**CP 216 = NEW ROCHELLE**

# COMMUTER CONFLICTS MUST ALSO BE RESOLVED.



VRE	MARC	SEPTA	NJ TRANSIT	LIRR	SHORE EAST	MBTA





North River tunnel capacity

Secaucus construction

Metropark - capacity limitation

METRO NORTH:  
 \* Slots  
 \* Engineering Work  
 \* Ownership

Construction

South Station Capacity

MBTA Trains

34-Train Limit

PHL-BAL  
 \* 2-tk  
 \* overtakes  
 \* bridges

East River Tunnels & Penn Sta capacity  
 \* LIRR  
 \* NJT  
 \* Amtrak

Hell Gate

\* P&W  
 \* TF Green  
 \* RI Dot

Moveable Bridges

Shore Line East  
 Limitation on engine changes

\* BWI Platforms  
 \* MARC trains

## **APPENDIX B**

1. January 4, APTA, briefing on BGL assignment and general views of APTA on NEC intercity and commuter matters.
2. January 4, CONEG, NEC states' concerns regarding funding for NEC infrastructure improvements.
3. January 14, Maryland DOT, MARC use and financial contributions to NEC.
4. January 18, MetroNorth Commuter Railroad, funding of NEC portion owned by MNCR
5. January 23, New Jersey Transit, financial contributions NJT has made to those portions of the corridor used by NJT.
6. January 24, Amtrak, Office of Planning & Scheduling, complex issues regarding scheduling of multiple users and congestion points on NEC corridor.
7. January 25, Norfolk Southern, NS' operating agreement and contributions to Amtrak for use of NEC.
8. January 28, PennDot, Pennsylvania's contributions to infrastructure on Harrisburg Line.
9. January 28, MARC, Amtrak-MARC's contract to pay for operating commuter service and use of NEC facilities.

**APPENDIX C**

**FY 2003 (millions)**

<b><u>Agency</u></b>	<b><u>Access</u></b>	<b><u>Capital Contribution</u></b>	<b><u>Total</u></b>
ConnDOT	.8	--	0.8
LIRR	6.6	--	6.6
MARC	8.1	5.0	13.1
MBTA	10.2	--	10.2
NJT	30.0	35.0 <sup>1</sup>	65.0
SEPTA	21.8	--	21.8
VRE	.9	1.6	2.5
DelDOT	2.5	.8	3.3
Freight	<u>14.9</u>	--	<u>14.9</u>
Total	\$95.8	\$42.4	\$138.2
<b>(FY 2002</b>	<b>\$90.0</b>	<b>\$32.4</b>	<b>\$122.4)</b>

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<sup>1</sup> The capital contribution for NJT in FY2002 was \$25 million.