II. ISSUES GOING FORWARD

In considering options for restructuring Amtrak, the Council identified a number of core issues for reform:

- What does the future look like for intercity rail passenger service in America? Where can it best compete with other modes of transportation? How can rail and other modes best complement one another?

- How can the program be improved to increase its real and perceived value to customers, employees, lawmakers, and other stakeholders? How can it be designed to incorporate incentives for efficiency?

- What role must the freight railroads play if intercity passenger service is to improve? What steps must be taken to ensure that passenger improvements do not come at the expense of diminished ability of the freight railroads to play their vitally important role in the economy?

- How much will the new program cost? What capital and operating subsidies will be needed? What are the potential sources of funding, and which are most appropriate? And who should bear these costs?

- What experience has there been, both domestic and international, with rail reform? What lessons are to be learned and what mistakes avoided?

Each of these is discussed below and was considered in the Council's deliberations.

A. THE SHAPE OF INTERCITY PASSENGER RAIL SERVICE

An effective system of intercity rail passenger services has three components: short-distance corridor trains, long distance trains and intermodal connections to link rail service with other modes of transportation. Today, most Amtrak riders – 82 percent – use short-haul corridor trains, many of which receive state operating support. These are the fastest-growing element of the intercity rail passenger system. The other eighteen percent of Amtrak's riders use Amtrak's national network of inter-corridor long-haul trains. In contrast, the long-haul network experiences poor financial performance and uneven service quality. It is losing both riders and money. Both of these elements of the passenger system are important, however, because the Amtrak Reform and Accountability Act directs the Council to submit an action plan for a 'restructured and rationalized national intercity rail passenger system,' which integrates both corridor and long-haul trains. A third element must, in the view of the Council, be added to the other two, and that is an effective intermodal system that connects and integrates all modes of passenger transport – rail, bus, auto, and air.

1. High-Speed Corridors

The past several years have seen a groundswell of state and local support for expanding intercity rail service. Interest is focused primarily on developing high-speed (or higher-speed) service along densely populated urban corridors. Through ISTEA and TEA-21, eleven corridors in 33 states and the District of Columbia have been designated as candidates for high-speed rail development. Several federal legislative proposals have been advanced to fund corridor development through the issuance of bonds, but, despite garnering considerable interest and support, none has been approved by Congress. High-speed rail initiatives outside the Northeast Corridor include:

- **California** has announced a $10 billion, 20-year plan to increase train speeds and add passenger and freight capacity along existing freight rights-of-way in the Capitol, Coast, Pacific Surfliner and San Joaquin corridors. California projects that the planned improvements will increase ridership 300 percent and be significantly more cost effective than comparable highway investments. California's existing rail program – the most extensive state-supported rail program in the country – has been highly successful and may offer a model for the development of additional corridors. In FY2001, California provided over $60 million in state subsidies to support corridor train operations. Ridership on California corridor trains has risen 27 percent in the past three years, to 3.5 million riders in FY2001.

- **The Midwest Regional Rail Initiative** is a nine-state initiative for the development of a $4 billion hub and spoke system based in Chicago and connecting Chicago with Milwaukee, Minneapolis, St. Louis, Kansas City, Indianapolis, Cincinnati, Cleveland, Detroit and a number of other Midwestern cities. MWRRI estimates that when fully operational, the network will carry 9.6 million passengers per year, generating approximately half of the train miles of Amtrak's current system. Although still awaiting federal financial support for the project, MWRRI, in cooperation with Union Pacific, has begun upgrading the line between Chicago and St. Louis.

- **In the Pacific Northwest,** Washington and Oregon have plans to increase train speeds along the Cascades corridor to 110 miles per hour. Since 1992, the states, Amtrak and the freight railroads have committed nearly $600 million toward the project. In 1999, the state of Washington purchased two trainsets made by Talgo at a cost of $20 million; Amtrak purchased a third trainset for the service. The Talgo equipment features advanced tilt technology that permits the train to approach curves without reducing speed. Ridership on the Cascades corridor has risen 25 percent in the past three years.

- **In Pennsylvania**, years of work are near to producing an agreement for joint state-Amtrak funding of some $150 million in improvements to the Keystone Corridor. In FY2001, over one million passengers rode Amtrak's two Keystone Corridor routes: Route 14 between Philadelphia and Harrisburg and Route 42 between New York and Harrisburg. About 650,000 of the riders originated and/or terminated between Philadelphia and Harrisburg.

- **Other Initiatives** are underway in **New York, Florida, North Carolina** and other states to increase train speeds and frequencies, often with significant planning and capital and operating commitments by the states.

High-speed corridor services can be cost and time competitive with other modes of transportation for short-distance travel. For trips of approximately 250 miles or less, Amtrak operating expenses appear to be lower than prevailing air fares.[11] In these short-distance lanes, take-off and landing fees, baggage handling service, and other fixed trip expenses tend to drive up airline ticket prices.

Rail travel can also be time-competitive with air and vehicle travel in shorter distance markets, depending on the average train speed with intermediate station stops. The maximum speed planned for most US high-speed rail corridors is 110 miles per hour, since this speed can be accommodated on existing railroad rights-of-way. Average speeds with station stops, will be closer to 70-80 mph. At these average speeds, rail can compete with air travel up to distances of 150-200 miles. Non-stop trains moving constantly at the maximum speed of 110 miles per hour could compete up to 300 miles.[12]

Travel Times (hours) for Selected Train Speeds

	TRIP DISTANCE						
AVERAGE SPEED (miles per hour)	100 miles	150 miles	200 miles	250 miles	300 miles	350 miles	400 miles
60	1.7	2.5	3.3	4.2	5.0	5.8	6.7
70	1.4	2.1	2.9	3.6	4.3	5.0	5.7
80	1.3	1.9	2.5	3.1	3.8	4.4	5.0
90	1.1	1.7	2.2	2.8	3.3	3.9	4.4
100	1.0	1.5	2.0	2.5	3.0	3.5	4.0
110	0.9	1.4	1.8	2.3	2.7	3.2	3.6

Train time the same or less than flight time plus one hour
Train time the same or less than flight time plus two hours

Corridors of about 125 miles or less in length connecting major metropolitan areas may offer some of the best opportunities for rail development, since there are high travel volumes between such city pairs and often little commercial air service. The Philadelphia – Baltimore, Washington – Baltimore, Philadelphia – New York markets and, to a lesser extent, the Baltimore – New York market have limited air service and account for 40 percent of Amtrak's ridership between Washington, D.C. and New York.[13]

[11] Based on a comparison of air fares in selected markets with the operating expenses reported by Amtrak in its FY2000 Route Profitability System, or RPS, report.

[12] For these short-distance flights, an average flight time (with boarding and deplaning time) of one hour has been assumed.

[13] The American Travel Survey for 1995 shows the following metropolitan area city pairs 125 miles or less apart having at least one million person trips per year: San Diego – LA/Long Beach; San Jose – Sacramento; San Diego – Riverside/San Bernadino; Philadelphia – Harrisburg/Carlisle; Sarasota/Bradenton – Lakeland/Winter Haven; Tucson – Phoenix/Mesa; Portland/Vancouver – Eugene/Springfield; Riverside/San Bernadino – LA/Long Beach; Philadelphia – New York; San Francisco – Sacramento; Philadelphia – Baltimore; Houston – Beaumont/Port Arthur; Santa Barbara/Santa Monica/Lompoc – LA/Long Beach; Riverside/San Bernadino – Orange County; Tulsa – Oklahoma City; Philadelphia – Atlantic City/Cape May; Columbus – Cincinnati; Milwaukee/Waukesha – Chicago; Washington – Richmond; Indianapolis – Cincinnati.

Corridor trains, defined in this report as trains having an average rider trip length of 300 miles or less, are Amtrak's best performers. Nineteen million passengers, or 82 percent of Amtrak total ridership in FY2001, rode corridor trains (versus 18 percent on long-haul trains such as the California Zephyr and the Sunset Limited). Incremental revenues on corridor trains have been growing faster than expenses, a move in the right direction for Amtrak. With many states providing operating subsidies for corridor trains and the profitability of the Acela service on the Northeast Corridor, corridor trains as a whole showed a profit of $239 million on direct train expenses in FY2001 compared to a loss on direct train expenses of $269 million for long-haul trains (excluding depreciation).[14] Corridor trains showed a loss of $191 million on a full cost basis, compared to loss of $581 million on long-haul trains in FY2001. With the majority (82 percent) of the riders and lower operating losses, corridor trains have lower operating losses per passenger. (See the chart on the next page.)

2. Long Distance Trains

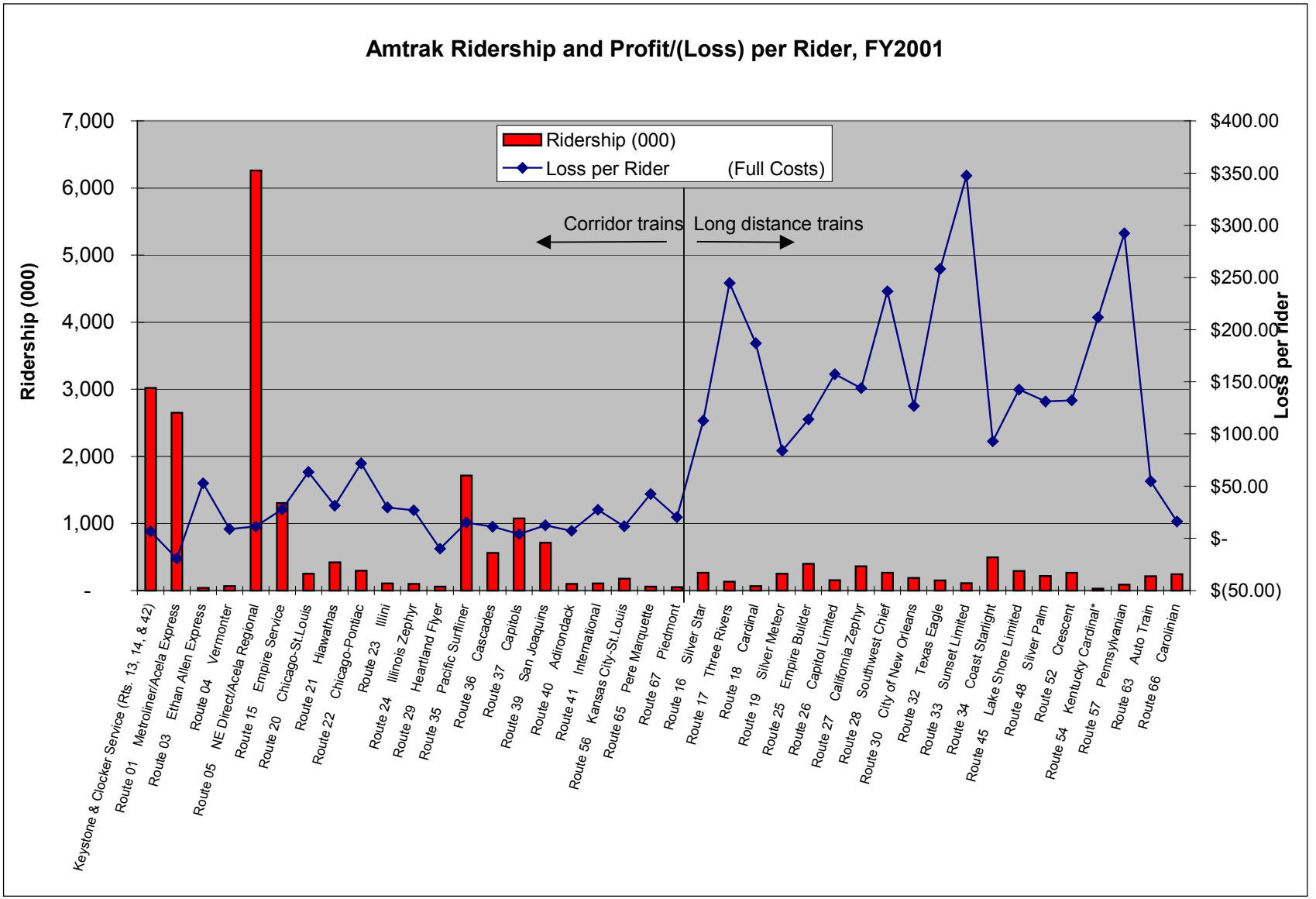
Amtrak's long-haul overnight trains are part of the national network and serve to connect local and corridor trains with regional and national routes. These long-haul routes, however, are responsible for the largest share of Amtrak's direct losses from train operations.

Recognizing the difficulties of the long-haul network, the Council has recommended that:

- There should not be any unfunded mandates for passenger rail service. If Congress wishes to mandate the operation of unprofitable services, it should operate them under contract, which would provide adequate funding of these operations while at the same time introducing incentives for the trains to operate efficiently.

- If a national system is retained, it should more closely reflect current travel patterns. Atlanta – Florida, for example, is a heavily traveled corridor that is effectively not served by Amtrak. Amtrak's reservations system routes passengers traveling between Atlanta and Jacksonville or Orlando, Tampa, or Miami through Washington, D.C. Passengers traveling between Atlanta and Tallahassee and the other cities in the Florida panhandle are routed through New Orleans.

[14] Based on Amtrak's Route Profitability System report for FY2001. See Appendix V for details on individual routes.


Amtrak Ridership and Profit/(Loss) per Rider, FY2001
Ridership (000)
Loss per Rider (Full Costs)
Corridor trains
Long distance trains
Ridership (000)
Loss per Rider
7,000
6,000
5,000
4,000
3,000
2,000
1,000
-
$400.00
$350.00
$300.00
$250.00
$200.00
$150.00
$100.00
$50.00
$-
$(50.00)
Keystone & Clocker Service (Rts. 13, 14, & 42)
Route 01
Metroliner/Acela Express
Route 03
Ethan Allen Express
Route 04
Vermonter
Route 05
NE Direct/Acela Regional
Route 15
Empire Service
Route 20
Chicago-St.Louis
Route 21
Hiawathas
Route 22
Chicago-Pontiac
Route 23
Illini
Route 24
Illinois Zephyr
Route 29
Heartland Flyer
Route 35
Pacific Surfliner
Route 36
Cascades
Route 37
Capitols
Route 39
San Joaquins
Route 40
Adirondack
Route 41
International
Route 56
Kansas City-St.Louis
Route 65
Pere Marquette
Route 67
Piedmont
Route 16
Silver Star
Route 17
Three Rivers
Route 18
Cardinal
Route 19
Silver Meteor
Route 25
Empire Builder
Route 26
Capitol Limited
Route 27
California Zephyr
Route 28
Southwest Chief
Route 30
City of New Orleans
Route 32
Texas Eagle
Route 33
Sunset Limited
Route 34
Coast Starlight
Route 45
Lake Shore Limited
Route 48
Silver Palm
Route 52
Crescent
Route 54
Kentucky Cardinal*
Route 57
Pennsylvanian
Route 63
Auto Train
Route 66
Carolinian

- Franchising should be considered for the long-distance trains or for the expensive dining car and sleeper services associated with these trains. Private operators may be able to provide these services at lower cost or earn higher revenues with innovative services, thereby reducing required subsidies.

3. Intermodalism

The third element vital to the success of intercity rail passenger service is the existence of seamless links to other modes of transportation. In today's passenger rail environment, it is simply not possible in many instances to travel from origin to final destination on Amtrak without transferring to a bus, an automobile or an airplane.[15] While Amtrak lists nearly 300 cities in its timetable as having connecting bus service, Amtrak and Greyhound actually share only 55 stations nationwide, and Greyhound has all of its bus operations in only about 35 of those 55 stations shared with Amtrak.[16] For the other 20 or so stations shared by Amtrak and Greyhound, only a portion of the Greyhound buses stop at Amtrak stations, reducing the value of the intermodal connection. Making most connections, therefore, involves a taxi or bus ride, adding cost and time to the trip and making rail a less attractive travel choice. There is also little joint ticketing or coordination of schedules between Amtrak and other modes[17], a distinct disadvantage for Amtrak when so many trips involve intermodal connections.

One bright spot is California. There, the state Department of Transportation funds any deficits from providing connecting rail-bus service, and Amtrak contracts with bus operators (generally smaller bus companies) to provide connecting bus service with Amtrak's corridor trains under contract requirements of the state of California. Buses are waiting at Amtrak stations when the trains arrive. Connecting bus revenue accounted for 5 percent of Amtrak's revenue in California in FY2001.

The Council strongly supports the development of more and better intermodal connections, including connections between high-speed corridor trains and other commuter and long distance trains. Sharing stations, services and information will make rail travel more convenient and enjoyable. Sharing stations would also reduce Amtrak's station-related costs, currently over $100 million annually. The Council believes these efforts should be guided by four principles developed by the National Center for Intermodal Transportation:

> "CONNECTIONS. All modes must be connected with one another to accomplish the convenient, expeditious, and efficient movement of commodities and people.
> CHOICES. The intermodal network should offer choices, allowing its users to select the mode that can most efficiently satisfy their transportation needs.
> COORDINATION. The transportation infrastructure must be planned, designed, and built in a way that brings the modal networks sufficiently close together so that connections can

[15] Amtrak serves a relatively small number of town and cities. Amtrak currently has about 530 stations, for example, compared to Greyhound's 3,500 stations.

[16] The number of Amtrak stations served by Greyhound buses (55 in total, including approximately 35 that are the only Greyhound facilities in the towns) was provided to the Council by Greyhound Lines, Inc. on January 18, 2002.

[17] Amtrak has established joint ticketing with United Airlines for Amtrak trips combining travel by rail in one direction and by air in the other. Amtrak has also partnered with a cruise line for rail-cruise vacations in the Caribbean. On January 17, 2002, Amtrak and Continental Airlines announced joint ticketing and code sharing through the new Amtrak train station at Newark International Airport, which is scheduled to begin in mid-March of 2002.

be made relatively effortlessly. In addition, transportation providers must coordinate their schedules to reduce dwell time between intermodal movements.
COOPERATION. There must be cooperation and collaboration among transportation providers and governmental agencies at the federal, state, and local levels to ensure that the needs of the users for seamless service are realized."[18]

Intermodalism also offers broader, more general benefits for our transportation system. As stated by the National Commission on Intermodal Transportation,

> "The benefits of a National Intermodal Transportation System are enormous. Intermodalism offers the promise of: (1) lowering overall transportation costs by allowing each mode to be used for the portion of the trip to which it is best suited; (2) increasing economic productivity and efficiency, thereby enhancing the Nation's global competitiveness; (3) reducing congestion and the burden on overstressed infrastructure components; (4) generating higher returns from public and private infrastructure investments; (5) improving mobility for the elderly, disabled, isolated, and economically disadvantaged; and (6) reducing energy consumption and contributing to improved air quality and environmental conditions."[19]

The Council endorses the Commission's conclusions. It also recommends that Congress give state and local governments more flexibility in how federal funds are used so that they can make the best overall transportation decisions rather than the best decisions for each mode.

B. LEVERAGING IMPROVEMENTS IN INTERCITY PASSENGER RAIL PERFORMANCE

The most important issue in improving America's national intercity rail passenger system is making the existing funding more effective by introducing efficiencies into the design and operation of the system of services. More efficient services will be better-managed services, and better management will bring with it the needed focus on market penetration and on improving the quality of the service. Because of the direct political pressures that, throughout its 30-year history, have affected Amtrak's major management decisions, introducing efficiency has not gotten the attention it deserves.

Efficiency affects the financial and operational performance of all of Amtrak's trains. These issues revolve around very high overhead costs, the structure of services, and low frequencies of service, causing less efficient use of personnel and equipment. This is particularly true for corridor trains. Infrastructure conditions and costs affect the efficiency of Amtrak's Northeast Corridor and other corridor operations, and its long-haul trains.

The following types of improvements can be implemented to improve efficiency:

---

[18] National Center for Intermodal Transportation, A New Transportation Agenda for America in the aftermath of 11 September 2001, November 2001, pp. 3-4.

[19] National Commission on Intermodal Transportation, Toward a National Intermodal Transportation System, final report, September 1994, p. 3.

Substantial reductions in overhead costs, to which Amtrak has been very resistant, are the quickest way to reduce costs. With about 2,900 non-agreement employees, Amtrak is overstaffed. As an indication of the level of overstaffing, when fully implemented, the proposed Midwest Regional Rail Initiative will operate a system of trains that will be equivalent to half of the number of train-miles of service that Amtrak operates today. The Midwest, which is negotiating with Amtrak to operate these services, will require that the operation be financially insulated from Amtrak's other business operations and that Amtrak operate the system with less than 350 non-agreement employees, less than an eighth of Amtrak's total complement of non-agreement employees. There is no reason why Amtrak could not implement, at its own initiative, a program of overhead cost reductions for its system operations. It has tended to pay little attention to this issue, providing in its business plans for increases in overhead costs that are greater than expected increases in revenues.

Structuring services to increase productivity of passenger equipment and crews is another important element in improving efficiency, principally for corridor trains. More trips per day, within the terms of safety regulations and labor agreements, will lower unit costs, and, if the increased number of trips results in increased frequencies of service, rail travel will likely become more attractive in the marketplace.

Together, lower overheads and improved service structure will reduce train-mile costs. In the Midwest and in Florida, Amtrak has subscribed to plans that would have them operating trains at less than $30 per train-mile, which is less than half of the train-mile costs that are incurred, on average, by the trains in Amtrak's current system.

Better-managed, more efficient operations, are more likely to lead to higher service quality, which is being provided today by rail passenger operations designed, funded, and supervised by states, such as those Amtrak operates under contract for California, Oregon, and the state of Washington. This improved quality includes better on-time performance, better-maintained equipment, and better on-board food service operations. In addition, the states are more apt to design train operations that have more effective rail-bus connections for travelers than Amtrak provides throughout its own system. And many of the states take over responsibilities for marketing, reservations, and ticketing, to assure better market penetration and better customer service.

Unlike the airline industry, for which the Congress has prescribed a strict regime to ensure that its customer service is satisfactory, there is not any federal agency to which Amtrak passengers can report poor service quality. Amtrak's service quality is known to be uneven; Amtrak's own service quality guarantee program is experiencing three times the number of claims that Amtrak had initially forecast. The Council believes it would be appropriate for the Congress to consider establishing an oversight mechanism, perhaps similar to that applied to the airline industry, for reviewing the quality of customer service provided by Amtrak.

Franchising can introduce efficiencies into train operations. Amtrak today operates and maintains commuter trains under franchise agreements with several public agencies. Experience with franchising both domestically and internationally confirms that major savings – as high as 50 percent in some cases – can be achieved. Franchising is a promising option for the long-haul

trains, or at least for the expensive dining car and sleeper services associated with these trains.[20] Private operators, providing higher levels of amenities, augmented by better operating discipline, may be able to provide these services at lower cost and earn higher revenues, thereby reducing required subsidies.

Improving corporate structure will simplify missions and make it easier for the management teams of separate train operating and infrastructure companies, insulated from political interference by the NRPC, to focus effectively on their core businesses. The train operating company, with a board that looks like the board of a major airline or other passenger operating company, will focus on market and revenues, within the structure of performance measures prescribed in its funding agreement. The regionally-based board of the NEC infrastructure company will ensure that all of the revenues from both track usage fees and from non-operating sources will be dedicated to the operation, maintenance, and improvement of the NEC infrastructure. Such a board will also be more likely to ensure that the company's management structure is compact and efficient, and that business policies ensure that competitive bidding and other efficient business practices are used to lower costs and improve efficiency wherever possible.

Designing program funding to incorporate incentives for efficiency is essential. Properly structured funding can be a lever to achieve improved efficiency. In exchange for stable and adequate funding for intercity rail passenger capital and operating needs, the Congress should introduce performance improvement requirements for passenger operations. The Council also believes, with respect to operating subsidies, that there should not be any unfunded mandates. If Congress determines that Amtrak should continue to operate money-losing routes, it should first ensure that measures are taken to introduce efficiencies to minimize operating losses, including allowing franchising as a way of minimizing operating losses. Ultimately, however, it must adequately fund these services under specific contracts between the NRPC and the operating company or a franchise operator.

C. THE COUNCIL'S PERSPECTIVE ON THE U.S. FREIGHT RAILROAD INDUSTRY

Outside the Northeast Corridor, much of which is owned by Amtrak, our nation's intercity rail passenger operations move virtually exclusively over 22,000 miles of track owned by the American freight railroad industry. It is therefore clear that rail passenger service outside the NEC cannot improve without the active involvement and cooperation of the freight railroad industry.

---

[20] Between August 1999 and December 2001, a noted rail expert, Charles W. Hoppe, took it upon himself at his own expense to ride 35,000 miles on many of the trains in Amtrak's long-haul network, as well as a number of Amtrak's short-haul trains. He sent reports of each trip to Amtrak's top management. In December 2001 he published a compilation of his trip reports and an assessment of his overall experiences. His assessment concluded: (1) an Amtrak long-haul passenger has less than a 50 percent chance of having a satisfactory experience; (2) much of the equipment on the long-haul trains is old and in a poor state of repair; (3) the operating loss imposed on Amtrak by the long-haul trains is large (in the range of $600 million per year); and (4) it is doubtful that it would make economic sense for the federal government to invest in rehabilitating or replacing the fleet of equipment for these services. His recommendation was that, if the Congress determines that it is important for the long-haul trains to remain in the national system, the long-haul trains should be operated under competitively-bid franchises.

The American freight railroad industry is widely regarded as the most effective freight railroad system in the world. The nationwide track network that five major and hundreds of smaller railroad companies own, maintain, and pay taxes on, supports the movement of about 40 percent of the intercity ton-miles of freight that move in US intercity commerce.[21] Profitable, private sector companies carry this freight. Moving this freight is the most important function of the US rail network. If this freight were on the roads, it would add to the heavy and worsening road congestion around our major metropolitan areas and in the heavily traveled intercity highway corridors around the country. It would also lower the productivity of our economy by making it more costly to transport freight. The continued health of the freight railroad industry is vital to the US economy.

In recent years, as their freight traffic has grown constantly during the period of sustained economic growth, America's private freight railroads began to encounter congestion on their track networks. This was a new phenomenon for a rail system that had been slimming down its network since economic deregulation of the railroads was enacted in the Staggers Act of 1980. Adding new passenger trains on freight tracks will require – in many instances – investments to increase the capacity of the freight railroads' networks.

An effective program to promote the healthy growth of intercity rail passenger service should provide for infrastructure improvements on the freight railroad network where passenger trains need to travel. These infrastructure improvements should ensure that the introduction of expanded passenger service does not diminish the ability of the freight railroads to operate efficiently. Payments for improvements would appropriately be allocated to government agencies for public benefits to passenger service and to private railroads for benefits that inure to them. This kind of a program for infrastructure improvement would clearly provide benefits to both passenger and freight traffic. It would be a win-win solution.

D. PROGRAM COST ESTIMATES

The cost to fund intercity rail service will be considerable. How much funding will be needed depends on (1) the scope of the program; (2) the extent to which the efficiency of train operations can be improved through incentive-based funding, operating contracts, and franchising; and (3) the pace of investment to develop high-speed rail corridors.

1. Operating Subsidies

Annual operating subsidies for Amtrak's existing network, as it is operated by Amtrak, are estimated at $600 million annually (excluding existing state subsidies), based on Amtrak's cash operating loss in FY2001.[22] To the extent Amtrak's costs continue to grow faster than its revenues, the required subsidy could be higher. New high-speed corridor services could also significantly increase federal and state exposure to subsidies for operating losses.

State subsidies in support of Amtrak operations are now close to $125 million annually. These subsidies help support newer train operations, primarily corridor services, that are not part of the national network. It is Amtrak's practice to negotiate state support for new services to cover its

[21] This modal comparison includes railroads, motor carrier, pipeline, barge and air carriers. Railroads carry approximately 53% of combined rail and truck ton-miles.

[22] Cash losses on train operations are closer to $800 million, but are offset by non-train profits of about $200 million.

incremental losses. With these state subsidies – and the operating profits of Amtrak's Acela Express service – corridor trains as a whole nationwide show a $239 million profit on direct train expenses.[23]

Eliminating long-distance trains, which carry 18 percent of Amtrak's riders and are responsible for 75 percent of Amtrak's operating losses, could reduce operating subsidies by about $270 million per year if all direct train expenses could be avoided; additional savings would be possible if some route and overhead costs could be eliminated. The Amtrak Reform Council takes no position on what routes should be operated other than recommending that Congress adequately fund the desired network and do so under a contractual or franchise arrangement administered by the NRPC that would eliminate the unfunded mandates.

The Council's plan would minimize operating subsidies by creating incentives for cost containment and efficiency either through operating contracts with Amtrak or franchising. The plan also recommends that after a transition period, federal operating subsidies be limited to long-distance trains that are part of the historical national network; states would bear the cost of operating subsidies for corridor services, including new high-speed services.

2. Capital Needs

Developing new high-speed rail corridors and maintaining the NEC will require significant federal capital investment in partnership with the states and the freight railroads. There is a shortage of needed capacity on certain segments of the freight railroad network if it is to accommodate additional passenger and freight traffic. To build new high-speed corridors, it may be necessary to add an additional main line (perhaps including an entirely new right of way) the length of the corridor and install centralized traffic control. The need to build new track, rather than modify existing track, will add significantly to initial project construction costs.

In February 2001, Amtrak released a 20-year capital needs report. The report presents two scenarios, one representing the "minimal investment" needed to support Amtrak's current services and a second plan identifying capital needs to significantly increase service. Amtrak's growth plan includes "all passenger rail services under study and/or development by the states and Amtrak. It contains high-speed corridor projects and some long-distance and point-to-point service."[24] According to Amtrak, the amount needed to maintain current service is $23.6 billion over 20 years, while the total capital cost of the growth scenario is another $73.6 billion. Thus the total need, according to Amtrak, approaches $100 billion.[25]

Under Amtrak's plan, $28 billion would be spent on the Northeast Corridor, including $10 billion to address the Penn Station tunnels, upgrade the south end of the Corridor between New York and Washington, and maintain other existing services. The balance, $18 billion, would be applied to growth projects. Off the Northeast Corridor, $70 billion would be spent over the 20-year period mostly to develop high-speed rail along the federally designated corridors.

---

[23] Corridor trains are defined as Amtrak routes with an average rider trip of 300 miles or less. Revenues and costs are drawn from Amtrak's Route Profitability System Report for FY2001.

[24] National Railroad Passenger Corporation, Investing in the Future of Passenger Rail – Long-Term Capital Plan, February 2, 2001, p. 42.

[25] Appendix III summarizes Amtrak's twenty-year capital plan.

In essence, Amtrak's plan calls for spending $5 billion per year on the passenger rail program using a combination of federal and state funding. Adding the annual operating subsidy would bring the total to approximately $6 billion annually, a sum that may be unrealistic given funding constraints at all levels of government.

The size of these projected capital spending levels compared to Amtrak's funding of about $25 billion in its first 30 years, and the preponderant portion of the funding that is for infrastructure improvements, make it clear why the Council is recommending that Amtrak's government program administration functions, its train operations, and its real property infrastructure assets be separated and restructured. There must be effective government oversight to ensure that funds of this magnitude are properly accounted for. There must also be assurance that infrastructure funds are spent on needed infrastructure improvements, and not diverted to operating expenses.

E. AMERICAN AND INTERNATIONAL EXPERIENCE WITH RAIL REFORM

The establishment of Amtrak by the US government was one of the first major railroad restructuring programs in the worldwide realm of railroading. It is important to note, however, that the establishment Amtrak was incidental to the need to lift the burden of some $500 million in annual passenger service losses from the nation's freight railroads, which were in perilous financial condition. The Rail Passenger Service Act of 1970 was followed closely by the Regional Rail Reorganization Act of 1973, which established a federal program to restructure the seven bankrupt railroads in the northeastern quadrant of the United States, the largest of which was the Penn Central.

Through a very difficult but ultimately successful program, the United States Railway Association (USRA), a special purpose government agency, reorganized and rationalized rail service in the Northeast and Midwest through the creation of Conrail, a company that was privatized through a public stock offering in 1986. Rail reorganizations, to be effective, take time. Deregulation of the US railroads in 1980, which included a substantial liberalization of merger procedures, led to a massive reorganization in the US freight railroad industry, conducted principally in the private sector, making them currently the most efficient freight railroad system in the world.

Internationally, significant restructuring of freight and passenger rail service on every continent has occurred during the past fifteen years.[26] The number of countries pursuing reform and the extent of change has been remarkable.

While each country has tailored reforms to its particular circumstances, certain trends and similarities stand out. In general, reform follows financial crises and the need to reduce large government subsidies.[27] Reform has generally been aimed at improving efficiency and market responsiveness, often through the introduction of competition through concessions or franchises.[28]

---

[26] See Appendix VI

[27] The Council's primary source of information on international reform has been the World Bank and the case studies published on its website.

[28] Concessions make the concessionaire responsible for train operations and infrastructure maintenance; franchises involve only responsibility for train operations.

And many countries, including those of the European Union, have separated infrastructure from train operations, either through separate accounting or separate operating and infrastructure entities. The reforms recommended by the Amtrak Reform Council are well within the bounds of the types of changes implemented internationally.

Several recurring themes in both US and international railroad reform experience apply to Amtrak:

- Rail restructuring takes time, on average between six and twelve years. In Japan, ten years passed between the time restructuring was initiated and the listing of the first passenger company on the Tokyo exchange. In Sweden, rail restructuring was initiated in 1988; twelve years later it entered a second phase with the division of the operation group into six independent entities. Closer to home, the planning and privatization of Conrail, begun in 1973, was not completed until 1986.

- The restructuring process should be managed by an independent group or agency at arm's length from the railroad. Experiences in other countries suggest that railroads being restructured are often resistant to change, an obstacle to reform and innovation, and as such cannot be relied upon to restructure themselves. The agency or group managing the restructuring process plays an important role in managing the performance of the existing and the new operators, designing franchises or concessions, managing conflicts between political and policy objectives, and driving forward the process of reform.

- Assets and liabilities of the existing railroad must be restructured to reflect new franchise units and to help ensure that new franchises will be viable. This could mean writing off some Amtrak debt or renegotiating repayment terms.