

Railroads**High Speed Railroads1**

As population and travel increase, use of the extra capacity of the railroads in the crowded Eastern Seaboard becomes more important.

The federal government is considering whether and how to stimulate greater use of rail between metropolitan areas along the Seaboard.

Transportation Action9

In the New York metropolitan area, the states and federal government continue to work out ways to maintain and improve the commuter railroad network within a framework of total transportation planning. Progress in transportation planning and maintaining commuter service is reported and analyzed.

High Speed Railroads

The following Regional Plan Association statement was presented to the United States Senate Committee on Commerce—at the Committee's invitation—by Vice-Chairman Amory H. Bradford, June 15, 1965:

Introduction

We strongly favor the bill before you, S 1588, which authorizes the Secretary of Commerce to undertake research and development in high-speed ground transportation. The transportation requirements in the Northeast Corridor between Washington and Boston, which now accommodates 150,000 daily trips between the New York Metropolitan Region and other metropolitan areas, will increase more rapidly than population over the next twenty years, and we expect population to rise about 30 percent. Providing facilities to handle this demand involves a choice among additional airports, additional highway lanes and increased rail use, which would occur with higher rail speeds. We believe that the research proposed in S 1588 will demonstrate that these transportation needs can be met most efficiently through high-speed rail service.

Until recently, the federal government invested in various forms of transportation separately—in high-speed expressways, in research and development of new aircraft and air traffic controls, in airports, in river navigation and ocean transport. Now, with the Mass Transportation Act of 1964 and with the bill before

you, the federal government seems, very wisely, to be looking at transportation as a whole. This requires investigating the most efficient ways of moving people and goods, not simply improvements in particular modes of transport, each looked at separately.

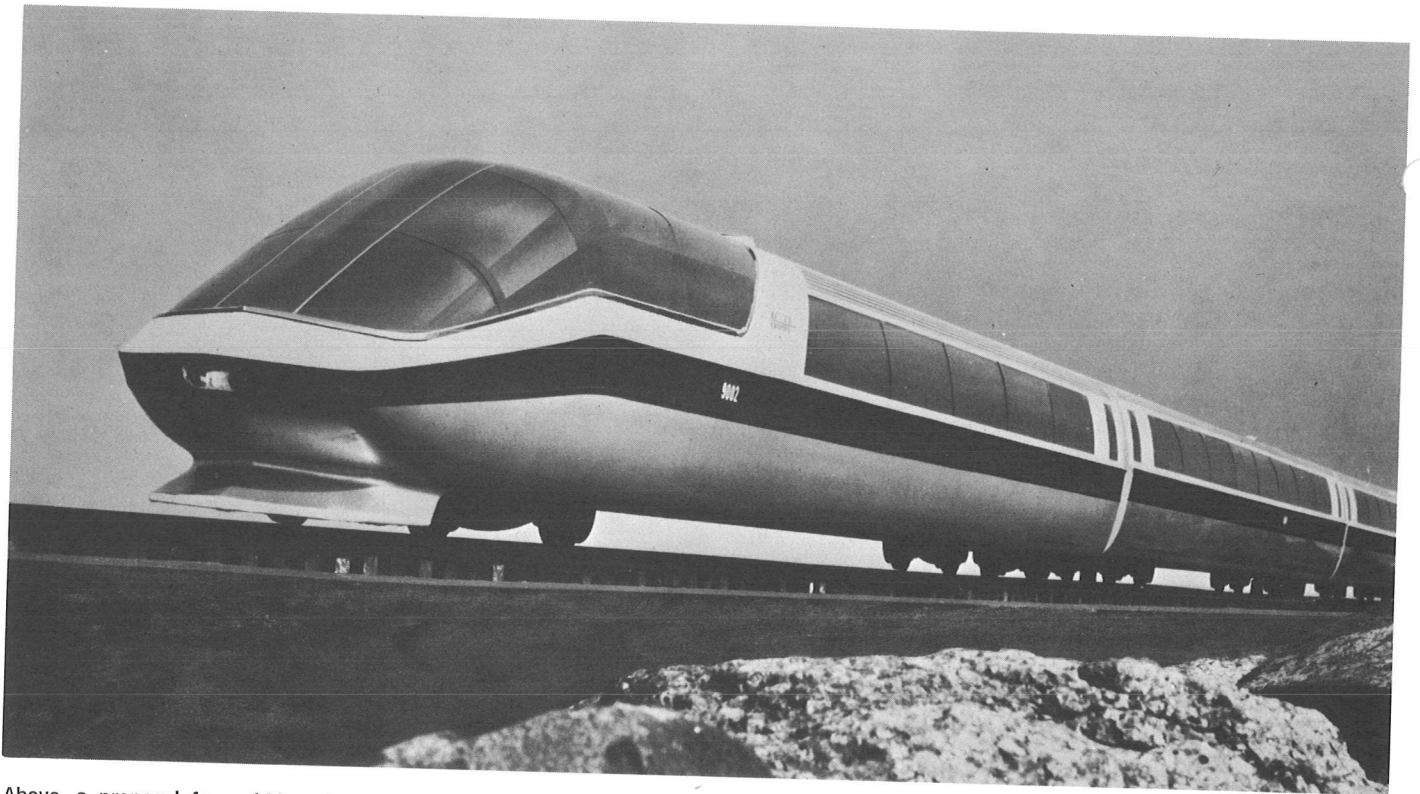
Regional Plan became interested in the potential of high-speed rail transportation along the Northeast Corridor in 1960 while conducting a study on Commuter Transportation for this Committee.* Travel patterns in our own metropolitan area had become entangled with those of other metropolitan areas in the Corridor, and projected population growth promised to entangle them more. Furthermore, the planning of transportation and land use for the New York Region will become increasingly affected by Northeast Corridor transportation.

Conclusions

Regional Plan Association has continued to consider this issue over the last four years and has discussed it with those doing research on Boston to Washington transportation for the Commerce Department. We conclude that the research and development program provided by this bill is sound, but we strongly urge that certain guidelines be established either in the legislation or through this Committee's report to achieve the following objectives:

1. Immediately, the federal government should work with the railroad companies and rail equipment manu-

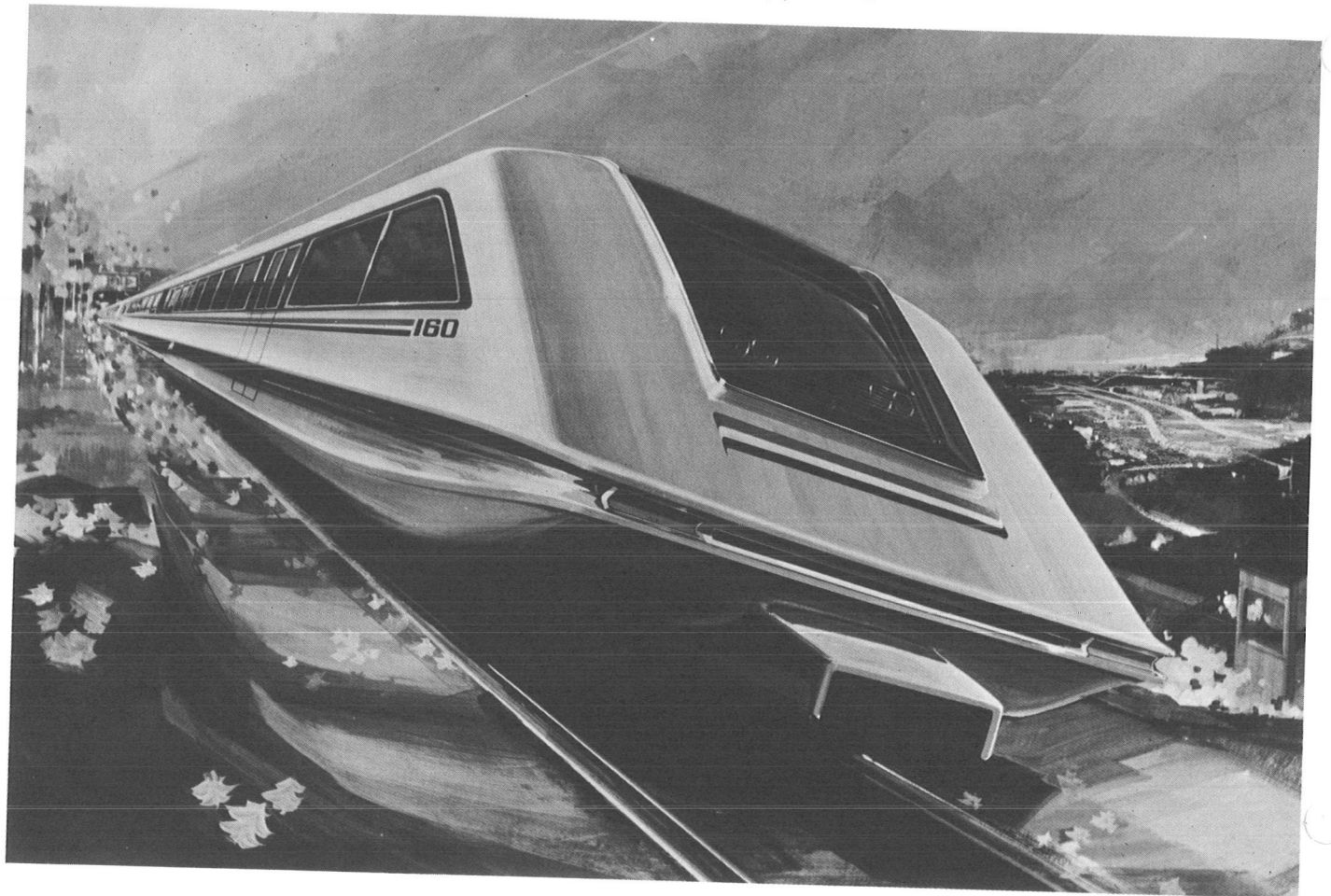
* See pp. 13-14



Above, a proposal for a 160 mph train developed by the Budd Company. The train would consist of self-propelled, multiple-unit cars powered by electric motors (or by aircraft turbine engines in non-electrified territory) and would use airsprung

suspension and other technical innovations, many of them developed for the Bay Area Rapid Transit District. The manufacturer claims that prototype equipment can be delivered within eighteen months after he receives the contract. In concept, the train

is similar to those operating now on the Japanese Tokaido line. The General Steel Industries' St. Louis Car Division has proposed similar equipment, shown below.



facturers to develop a) conventional railroad trains capable of top speeds of 150-160 miles per hour and b) a plan for roadbed improvements and realignments following existing rail rights of way between Washington and New York to provide *two hour schedules* as soon as feasible, hopefully by 1970-2. Speeds would be increased gradually over the five years ahead as new equipment is introduced and the right of way is improved. It seems advisable to begin modernization with the southern half of the system because the cost and disruption caused by right of way improvements will be less than between New York and Boston and the number of potential riders is greater.

2. The high-speed equipment, when developed, should be introduced between New York and Boston. There are more expensive roadbed improvements and more difficult route choices north than south of New York which will require more time, but plans for them should proceed under the proposed legislation.

3. Research and development on radically new forms of ground transportation, such as pneumatic tubes, should receive a lower priority because such systems have not yet been tried and there is little prospect of their becoming operational in less than fifteen to twenty years. Improved speeds on conventional rail systems can be achieved promptly enough to avoid uneconomic air and highway expansion, which would be required if ground transportation speeds are not improved within the fifteen to twenty year period. Research and development of the new systems should go forward but not at the expense of immediate improvements in the speeds of conventional rail transportation.

Advantages of speeding ground travel

Already, about 150,000 trips are made each day between the New York Metropolitan Region and other metropolitan areas in the Northeast Corridor. These trips will increase substantially with or without high-speed ground transportation. We believe that rail transportation can accommodate many of these trips at far less cost than other travel modes.

We emphasize the two-hour travel time between Washington and New York because slower rail schedules would not divert a significant number of air travellers and faster rail speeds would be uneconomical to achieve. If door-to-door trip time by air and rail were equal, many present air travellers (Table 1) would switch to rail.

Table 1
Transportation between Major Urban Areas
in the Northeast Corridor, 1962-63

	Between New York and		
	Washing- ton, D.C.	Phila- delphia	Boston
Average Distance (miles)	230	90	225
Total Passengers	11,175	19,725	11,725
By Railroad			
Scheduled Time	3:35	1:45	4:15
Elapsed Time ^a	4:00	2:15	4:40
Fare (½ wk-day rnd. trip)	\$10.65	\$4.30	\$10.43
Passengers (est. wk-day)	1,575 (14%)	5,400 (27%)	1,275 (11%)
By Air			
Scheduled Time	1:05	:33	1:00
Elapsed Time ^a	2:15	1:30	1:55
Fare ^b	\$18.00	\$12.39	\$16.00 ^c
Passengers (average day)	3,300 (30%)	225 (1%)	4,250 (36%)
By Auto			
Freeway Time	4:15	2:00	5:00
Cost ^d	\$11.75	\$5.41	\$11.43
Passengers (est. wk-day)	4,000 (36%)	12,000 (61%)	4,800 (41%)
By Bus			
Scheduled Time	4:10	2:00	5:10
Elapsed Time ^a	4:35	2:25	5:35
Fare (½ wk-day rnd. trip)	\$7.43	\$3.20	\$6.95
Passengers (est. wk-day)	2,300 (20%)	2,100 (11%)	1,400 (12%)

^a To and from central business district origin and destination, not allowing for waiting time at terminal.

^b Airline fare only; bus and/or taxi to and from airport is additional.

^c \$14.00 on stand-by shuttle (no guarantee of seat).

^d 8¢ per mile plus tolls, 1.8 passengers.

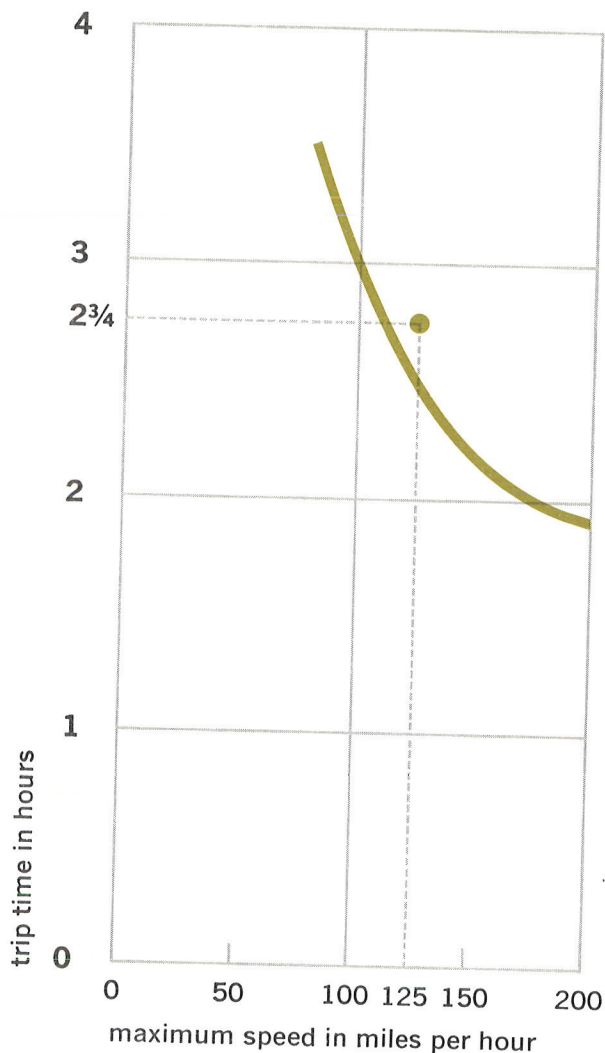
About 20 percent of the commercial aircraft landings and departures during peak hours at the three major New York Region airports are to or from Boston, Washington or intermediate points, about 10 percent to or from the South and 10 percent to or from the North. Therefore it is quite possible that the diversion to rail of much of this air travel would postpone for some time the need for a fourth major airport in the New York Region. Preliminary studies show that a two-hour railroad schedule could be achieved between New York and Washington for less than the cost of a fourth major airport in the New York Region.

Postponing an additional airport saves operating as well as capital costs. The airlines and the operating government agencies have to add staff for each airport they serve. In addition, there are costs of ground transportation to the new airfield.

Fast rail service also would be likely to obviate the need for some additional expressway lanes between urban centers. Even though long distance auto trips are relatively few in number, they require—because of their length—a very substantial portion of the vehicle miles of highway capacity.

In addition to probable cost savings, an equally important advantage of high-speed rail service is the saving of valuable urban space. Airports take a

Chart 1
New York — Washington
Trip Time vs. Maximum Speed



Cutting total rail trip time between New York and Washington involves: (1) raising the top speed and (2) improving the roadbed, particularly straightening curves, so that the train can run at top speed for longer periods.

This chart shows how total trip time would be reduced for each increment of top speed, assuming that 70 percent of the track mileage between New York and Washington were rebuilt with minimum curve radii of 2 miles and that five intermediate stops were made.

The present top speed between New York and Washington is 80 mph and the fastest trip with five stops is 3 hours 35 minutes. As the chart shows, this could be reduced to 2 hours and 5 minutes with 160 mph top speed and 70 percent of the track rebuilt. Any faster top speed does not save much total trip time but adds sharply to the cost.

Immediately, the Pennsylvania Railroad hopes to raise maximum speed to 125 mph and to prepare 22 percent of the track for top-speed operation, giving a run of 2 hours and 45 minutes (dot on chart).

In an engineering report to the Department of Commerce, Louis T. Klauder estimates that the capital cost of basic improvements to track and structures will amount to \$200 million for 2½ hour trip time, \$270 million for 2¼ and \$570 million for 2 hours. An additional \$90 million or so would be needed in all three cases for grade crossing elimination, station improvements, and high-speed cars. Pennsylvania Railroad spokesmen suggest that these figures are high—that a 2 hour schedule might be achieved for \$250 million.

tremendous amount of space. Kennedy International Airport, for example, is bigger than the whole central business district of Manhattan where 2½ million people work and a population almost equal to the whole population of Chicago comes for business or pleasure every day. Similarly, Washington's Dulles International Airport, with its exclusive approach highway, takes up almost a third as much area as the whole District of Columbia. Furthermore, increasing noise is pushing satisfactory urban development back ever further from airports.

In much of the Northeast Corridor, added highways and airports mean substantial disruption in human lives—disruption that is meeting growing resistance by those affected. In this most urbanized, most densely developed section of the country, even those not directly affected by a particular transportation project are raising questions of whether we can continue to devote more and more space to transportation. Railroads, particularly where the rail right of way is already available, are most economical of scarce space.

This assessment of the efficiency of rail service in the Corridor does not presuppose that all Boston to New York to Washington trips would be made by rail. Indeed, most of these trips would continue to be made by auto, as they are today. But during peak periods, even a few thousand people moving by rail instead of highway means a great deal of highway space and bus terminal capacity saved, and—as we have suggested—eliminating the bulk of New York to Boston and New York to Washington flights could be the difference between needing a fourth major airport in the New York area immediately or later.

Why federal initiative

The federal government has a stake in developing high-speed rail service because it is generally committed to assuring facilities for the alternatives: automobile and air travel. Therefore, it is reasonable for the federal government to examine comparative costs of travel modes and assure that the most efficient is available.

Conceivably the service might be profitable for a private corporation, but it seems unlikely that a railroad company would seek or find research and development capital for this project. A major reason is that federal policies of the past have provided the impetus for automobile and air travel to outstrip rail travel. It was federal initiative that provided the splendid Interstate Highway system, sharply increasing

The New York Times, July 30, 1962

200-M.P.H. Rail Service Proposed for Northeast

Regional Planning Group Says Airline Passengers Should Be Diverted on Short Hauls to Save Air Space

The diversion of passengers from planes to 200-mile-an-hour trains on short hauls along the Northeastern Seaboard was suggested yesterday by the Regional Plan Association.

The object would be to conserve "precious air and airport space" in the densely populated urban complex stretching from Boston to Washington.

In a report, the association also noted that some Northeastern states were not looking after their outdoor recreational needs. It said this was a result of a lack of interstate planning and a tendency of most states to avoid "picking up the check" for needed recreational facilities.

The report, signed by thirty planners representing eight

theory that the area was a basic economic unit, the common use of outdoor recreational areas, and transportation. It was agreed that the two most pressing problems were transportation and outdoor recreation.

The report said a "modernized, high-speed rail system from Boston to Washington might possibly save precious air and airport space by diverting short-haul air passengers to railroads." It said that air space "would be left for long-distance service which cannot be matched on the ground."

The group agreed that modernizing the present rail system was more practical than "experimenting with radically different kinds of rail systems," such as monorails.

Roadbeds Would Be Standard. Among other things, it foresaw automated passenger trains attaining speeds up to 200 miles an hour on improved, standard roadbeds.

It was agreed, however, that more facts were needed "to determine whether a major study of a high-speed rail line would be fruitful." There also was a consensus that any high-speed rail line would ultimately depend on future decisions made in Washington.

Congress is not expected to

act this year on President Kennedy's railroad plan, which would increase Federal aid to urban rail commutation and reduce the Government's role in intercity transportation.

In Washington yesterday, a spokesman for the Federal Aviation Agency acknowledged that the air lanes over megalopolis were extremely crowded. He agreed with the report's description of them as "precious" and stressed that their conservation was an urgent matter.

On June 1 Senator Claiborne Pell introduced in the Senate a resolution looking to the establishment of a multi-state authority to improve railroad passenger service along the Northeastern Seaboard.

The Rhode Island Democrat's proposal would have an eight-state authority acquire, modernize and operate railroad passenger facilities from Boston to Washington.

Eastern Airlines said it needed to take passengers out of planes. A spokesman said that Eastern's financially successful shuttle serving Boston, New York City and Washington had an "unlimited capacity and that the shuttle's saturation point had never been reached in normal operating conditions."

The spokesman said that airport congestion at the Wash-

ington end of the megalopolis would be relieved this fall with the opening of Dulles International Airport.

Turning to outdoor recreation, the report said there was "competition among many states to avoid" their financial responsibilities, "each hoping that neighboring states will pick up the check."

It said that the 35,000,000 people who lived in the megalopolis shared the same outdoor facilities. For example, the report said that residents of northern Connecticut went to Cape Cod while southern Connecticut "was inundated by New York State residents seeking beachfront."

Jones Beach on Long Island was found to serve persons living as far South as Baltimore.

With this in mind, the report suggested user fees at state parks and beaches, multi-state planning and the possible joint acquisition and development of parkland.

As for land development, the report cited duplication in present and future regional plans affecting the New York-Philadelphia and Baltimore-Washington areas. It suggested joint consultation.

The Washington Post, June 16, 1965

High Speed Rail Held Vital to Eastern Area

Boston-D.C. Line Seen Halting Decay of Cities

By Jack Eisen
Washington Post Staff Writer

A high-speed railroad line proposed along the Eastern Seaboard was portrayed yesterday as a powerful weapon against decay in the string of older cities from here to Boston.

Amory Bradford, a newspaper executive and vice president of the Regional Plan Association of New York, told a Senate Commerce subcommittee that the rail service would restore vitality to communities bypassed by shuttle airplane service.

Bradford supported a bill that would authorize research and development of high-speed rail service mainly along existing lines.

Sees 2-Hour Schedule

He expressed a hope that two-hour schedules could be operated between Washington and New York by 1972, with Boston service coming later. Such trains would reach top speeds of 150 to 160 miles per hour.

Bradford suggested that research and development on new forms of ground transportation, such as pneumatic tubes, should be assigned a lower priority since they would come later.

A statement accompanying Bradford's testimony noted that of 12,550 daily travelers between Washington and New York in 1963, the largest number—4800—went by auto-

mobile. Airlines accounted for 3300, buses for 2900 and the railroad for 1550.

Strengthen City Centers

One big problem, Bradford said, is that the airlines fly over intermediate cities, while fast trains would serve them and strengthen their centers.

"Federal policy and most metropolitan plans throughout the country aim at renewing and strengthening city centers," he said.

Moreover, Bradford contended, the service would become a magnet for development, giving more shape to what is fast becoming a sprawl across broad stretches of countryside.

Sen. Thruston B. Morton (R-Ky.), who presided at the hearing, suggested that Washington's suburbia could best be served by establishing a station at the Capital Beltway. This would be easily accessible from all parts of the metropolis.

Bradford agreed, but warned that too many stops along the route would stretch the time of the trip.

Raps Plans Agencies

When Bradford recommended that the administrators of the fast rail system be required to consult with land planning agencies, Morton had some astringent comments about such agencies in the Washington area.

"We've got more planning commissions around Washington than a dog has fleas," Morton said. As a result, "they get arguing among themselves" and projects do not get built. If it were up to planners such as these, Morton added, the 1972 date recommended by Bradford probably would be pushed back to the year 2000.

The New York Times
July 15, 1965

High-Speed Railroads

To the Editor:
I read with interest your June 30 editorial "The Northeast Rail Corridor."

I share the position of the Regional Plan Association that improved rail facilities are the most economical answer to the added transportation needs of the Northeast Corridor in the immediate future. In recent testimony before the Senate Commerce Committee on legislation to authorize research of various possible high-speed ground transportation systems for the Boston-Washington corridor, I urged that development of high-speed (150 miles-per-hour) passenger railroad service in the corridor be undertaken forthwith.

Research on unconventional ground transportation systems should by all means be pursued, but not at the expense of feasible, short-term speed-ups.

I think that a real demand for rapid and modern passenger train service exists, especially between Boston, New York and Washington and major intermediate points, including Philadelphia. Successful operation of high-speed railroads in the Northeast Corridor would, I feel sure, be extended to other congested intercity corridors such as Philadelphia-Pittsburgh and Pittsburgh-Cleveland, and this advance would be a major step toward the eventual development of more exotic forms of rapid ground transport systems.

HUGH SCOTT
U.S. Senator from
Pennsylvania
Washington, July 7, 1965

The New York Times
June 30, 1965

The Northeast Rail Corridor

Plans for developing high-speed rail transportation in the Northeast Corridor between Boston and Washington are advancing in the capital. The Administration has asked Congress for \$90 million to finance a three-year research program. Included would be a 150-mile-an-hour electrically propelled train; twenty miles of reinforced track on the main line of the Pennsylvania, south of Trenton, where it could be tested, and self-propelled gas turbine cars on the New Haven between Boston and Providence.

The Pennsylvania Railroad is willing to invest \$10 million of its own money in this program. It can hardly be expected that the bankrupt New Haven will put up substantial funds, but as a matter of enlightened self-interest its trustees should cooperate also to the extent its strained resources permit.

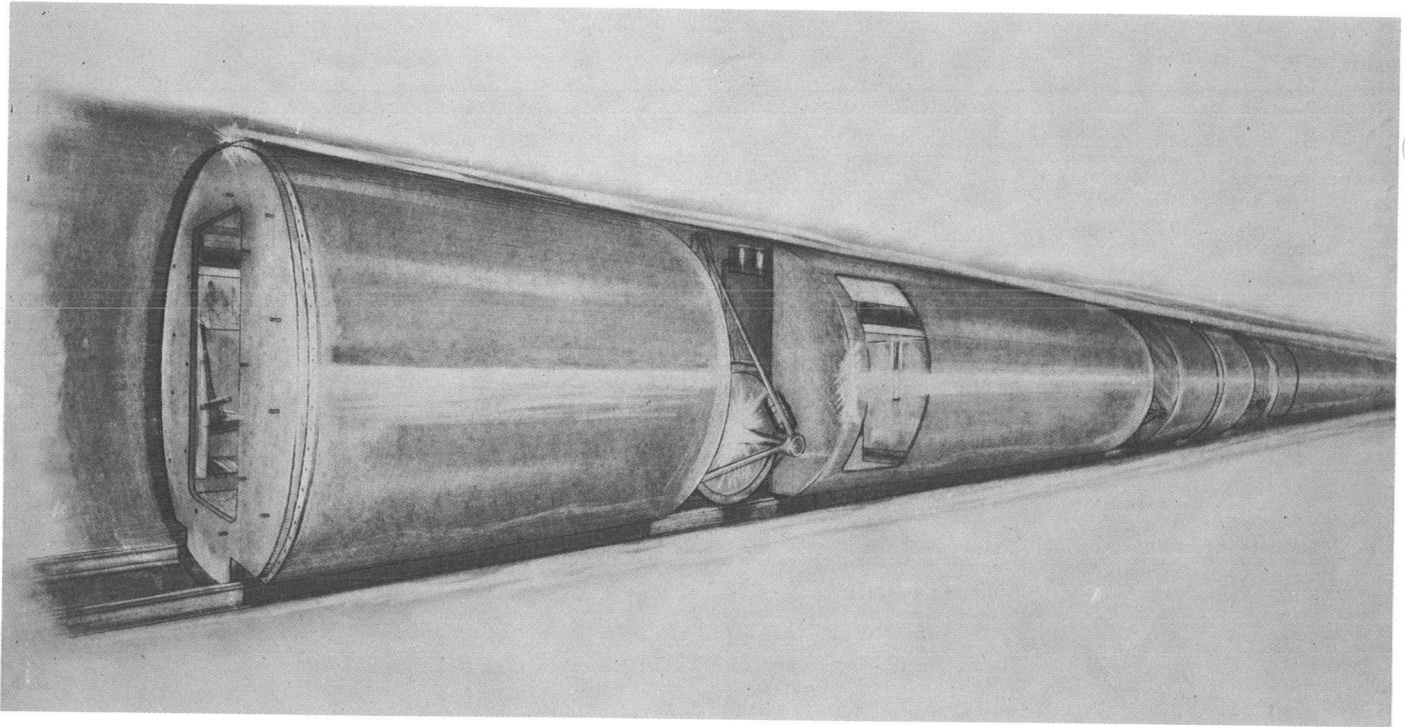
The Regional Plan Association reports that the Northeast Corridor, with about a fifth of the nation's population, will have 30 per cent more people within twenty years. Transportation requirements will rise even more rapidly.

Meeting these conditions will necessitate a choice among additional airports, additional highway lanes and increased rail speeds. The Regional Plan experts are convinced that the added transportation needs can be most economically answered by improved rail facilities. They urge that a two-hour schedule between New York and Washington be put into operation as soon as feasible, with 1970-72 as the hoped-for target. More expensive roadbed improvements and more difficult route choices are involved in extending the high-speed operation to Boston, but that, too, should be pushed.

Of special interest is the Regional Plan's argument that establishing high-speed rail travel in the Northeast Corridor might postpone for some time the need for a fourth major airport in the New York metropolitan area. About 20 per cent of the commercial aircraft landings and departures at the present New York airports are to or from Boston, Washington and intermediate points. If much of this relatively short-haul travel took place by rail, there would be tremendous savings, not only in money but also in the space that would otherwise be devoted to new air facilities and expressway lanes.

While the most direct beneficiary of the program would be the Northeast Corridor, the research would clearly be in the national interest. President Johnson has predicted that by the end of the century the population of the metropolitan areas across the nation will have doubled. The high-speed rail program will eventually benefit all of them.

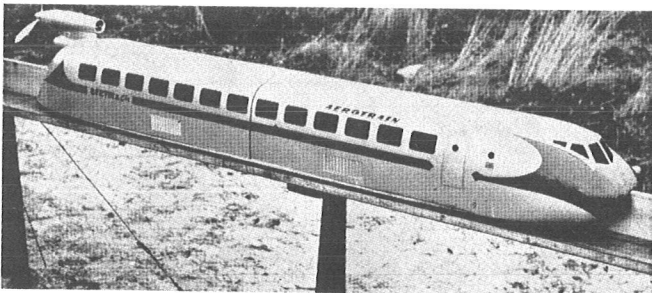
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Underground pneumatic tube train proposed by L. K. Edwards, formerly of the Space Systems Division of Lockheed Aircraft Corporation. Powered by a combination of gravity and air pressure, the vehicle would operate at top speeds of approximately 500 mph between city centers in deep-

level tunnels bored through bedrock. It could make the New York to Washington run, with three intermediate stops, in 45 minutes. The vehicle exterior shown on the drawing would never be seen by passengers who would enter the train as one enters an elevator. This concept, described in detail

in the August 1965 **Scientific American**, is one of the most promising of the very high speed ground transportation proposals recently publicized. Massachusetts Institute of Technology is studying various kinds of very high speed ground travel and is expected to expand research.



This propeller-driven train, expected to travel at 250 mph on a cushion of air, is being developed by the French government.

the average speed of intercity automobile travel. It was federal initiative that telescoped several generations of aircraft into a handful of years.

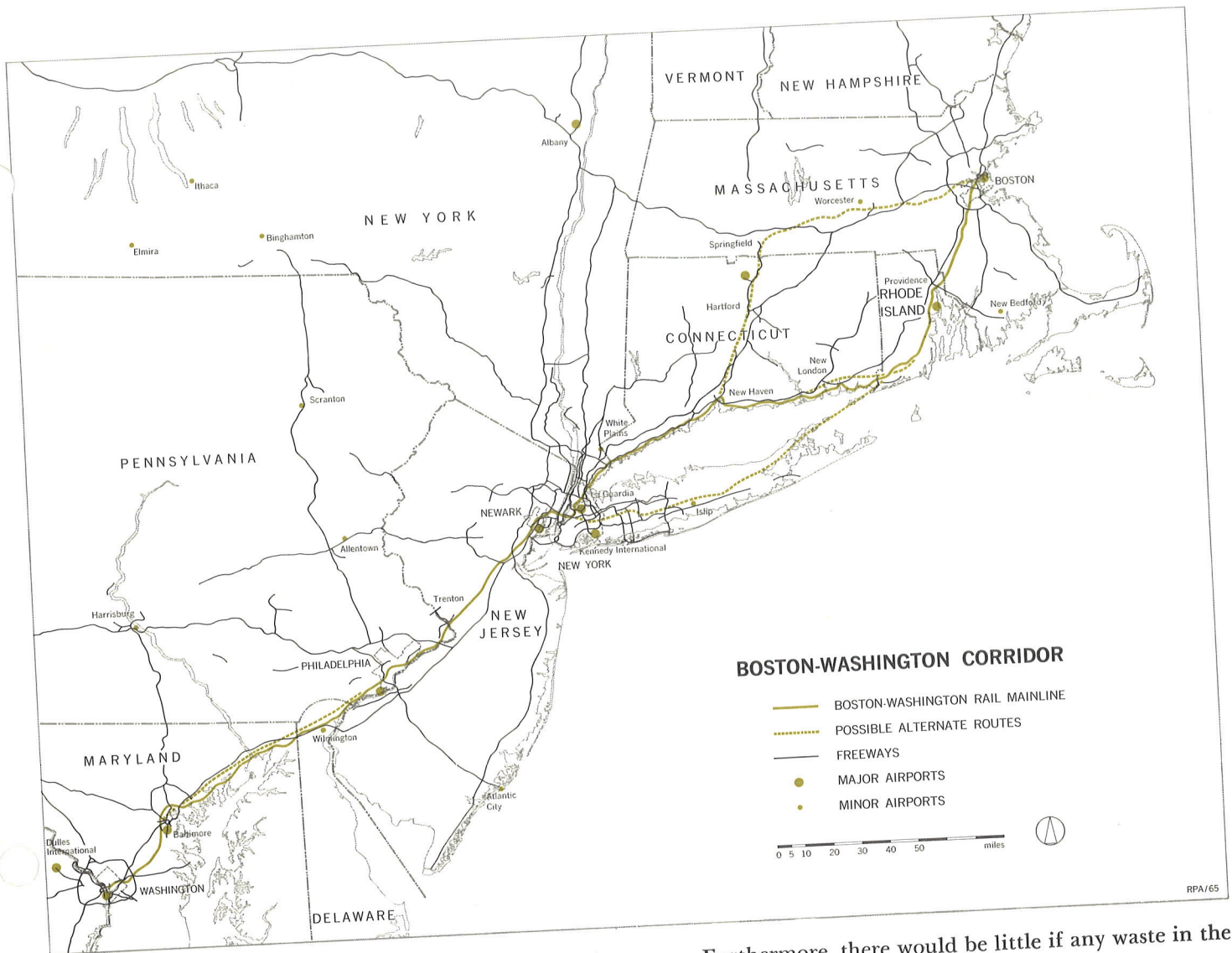
In addition to research and development, construction and equipment funds will be needed, but these can be provided within the framework of present federal policy as established in the Mass Transportation Act of 1964.

This project can be considered of national significance not only because nearly 20 percent of the nation's population lives in the Corridor, but also because it would demonstrate a system that can be applied elsewhere, like the other transportation demonstration projects which Congress supports. High-speed rail might prove valuable, for example, along the Cali-

fornia coast, in the Ohio Valley and along the Great Lakes.

Why modernize conventional rail?

We have heard proposals for giving first priority in applying research funds to a radically new transportation system at or below ground level for the Northeast Corridor, leaving the present railroad system as it is. These proposals are based on the assumption that a totally new transportation technique can be in operation within a decade if only enough technological research money is invested in it. With successful space ventures following one on the other, it would be foolhardy to close our eyes to such a possibility. But our experience in dealing with major physical developments in the New York Region leads us to expect that the introduction of radically new technology will take longer than a decade. The kind of major innovation in travel being discussed requires a whole new right of way, probably a new kind of corporation to run it and large-scale financing. Most of all, the technological problems to be encountered with a completely new system are still unknown. A Massachusetts Institute of Technology study estimates that the construction of a prototype test facility alone could cost \$2 billion. It



seems unlikely that all the problems can be solved and the system placed in operation in less than fifteen or twenty years.

With conventional rail, the technology has been pioneered, and the basic right of way and corporate structure are in existence. We know what is possible and when and approximately what it will cost.

Prompt initiation of faster, better ground transportation in the Northeast Corridor is important because of the many transportation decisions dependent on it that are now being made. Particularly, airports and bus terminals are likely to be expanded in the Corridor unless it becomes certain that two-hour rail service from New York to Washington will be available soon. We could expect that these decisions would be affected by a definite commitment to speed railroad service to two hours. On the other hand, it seems unlikely that those responsible could be persuaded to postpone needed expansion on the possibility that a totally new transportation conception would be operating in half a generation.

Furthermore, there would be little if any waste in the modernization and improvement of a conventional rail system even if it were used for only a few years before a radically new system replaced it. The new trains could be used for intercity travel in other urban corridors before the new technology was installed there, or they could be used between and within metropolitan areas of this Corridor. The improved roadbed could benefit both freight and commuter service.

Major planning considerations

Regional Plan became interested in Northeast Corridor transportation because it strongly affects the development pattern of the New York Region. The following potent planning effects of high-speed rail service within the several metropolitan areas of the Corridor are offered as examples of what should be considered in the detailed planning for rail modernization. They underline the importance of the research and development proposed in S 1588, and the need,

recognized in the bill, for consultation and cooperation with all federal departments and agencies involved. We would also recommend consultation with appropriate state governments and agencies.

First, high-speed rail service will strengthen the centers of the older cities in which it stops. Federal policy and most metropolitan plans throughout the country aim at renewing and strengthening city centers.

Second, we can expect attractive rail service to draw urbanization toward the rail line, giving more shape to what is fast becoming a sprawl across broad stretches of countryside. Part of the increased orderliness of development would result from increased use of commuter railroads, which the Northeast Corridor high-speed system seems likely to encourage. This is because the commuter lines will benefit from technological research and the general publicity and interest that high-speed rail would stimulate and because any connections between the Corridor system and commuter rail service would add to commuter rail use. Tying the high-speed train into a metropolitan commuter network would feed passengers in both directions. It would make it just about as convenient and much faster to travel to another metropolitan area by train as by car, even from a suburb to a suburb.

Third, because of the magnetism that high-speed rail stops will exercise in urban development, the choice of routes is very important. Route decisions should not be made solely on the basis of lowest initial cost. Other costs and benefits can far surpass these.

For example, between Boston and New York, the urbanized corridor splits three ways—via Long Island and a bridge to Providence; via New London and Providence; via Hartford, Springfield and Worcester. In the choice lie considerations of speed, cost, potential ridership and effect on urban development. The cost of an extremely long bridge from Long Island to New England is the great unknown in the complicated equation. If the bridge proves feasible, the Long Island-Providence route has many advantages. It would be 12 miles shorter than the Connecticut shoreline route; the terrain is flat; the Long Island Rail Road bed is straight and level. Furthermore, suburban Long Island has about as many people already as all of Connecticut and soon will have many more. Finally, fast rail service probably would have a good effect on urban development on Long Island, where there is little discipline imposed by topography.

The effect of the high-speed railroad on urbanization can be inferred from the fact that travel time to Manhattan from Orient Point, at the tip of Long Island, would be little longer than the travel time of thousands of railroad commuters today. In other words, largely vacant or near-vacant areas 50-100 miles or more from Manhattan probably would be urbanized if easy connections could be made to this high-speed system.

The Connecticut shoreline route has the advantage of traditional rail connections between Boston and New York; its rail system needs the boost that this new service would provide. But the cost of straightening tracks for high-speed service would be very great. And the population along the route is not large or growing as rapidly as Long Island's. Via Hartford, the population to be served is greater than along the Connecticut shore route, but the distance is greater, too, and the topography is not easy.

Fourth, handling of freight and interference with waterway traffic also will be affected by the new high-speed rail system. This means that between New York and Washington, the Baltimore & Ohio and Reading rights-of-way must be considered along with the Pennsylvania's in planning the total rail system.

In sum, we have no easy answer to the question of route; but we hope that the choice will be made in consultation with *land planning agencies* as well as transportation experts.

Postscript

Senate Backs 3-Year Test Of High-Speed Rail System

**Proposal of President Is Sent to House—
\$90 Million Project Designed to Link
Big Cities, With Start in East**

By The Associated Press
WASHINGTON, July 23—Department, which would be
The Senate passed by voice vote given authority to contract with
today the Administration's \$90 million private industry to develop more
million, three-year program to economic intercity transporta-
develop

Since this testimony was given, the Senate passed S 1588, which authorizes the Department of Commerce to continue studying high-speed railroad passenger service in the Northeast Corridor. The bill is now before the House Committee on Interstate and Foreign Commerce, which has completed hearings on the bill and has scheduled an executive session to consider it early in August.

Transportation Action

Regional planning

The Tri-State Transportation Committee, governmental planning body for the New York metropolitan area, has been made an official interstate Commission to 1969 by the legislatures of New Jersey, New York and Connecticut after four years of legislative debate and negotiations among the states.

With the Commission, this Region is eligible for highway and full public transportation grants from the federal government. Also, if the Commission certifies state or local park plans within the Region, they become eligible for 30 percent instead of 20 percent federal funds. Increasingly, federal aid to urban areas is predicated on the existence of a metropolitan planning process by an official agency, such as Tri-State has become.

Tri-State has operated since August 1961 by agreement of the three governors, using federal highway research funds set aside for transportation planning, federal planning grants and state funds from a variety of sources.

Commuter rail agencies

New York State's legislature has established a Metropolitan Commuter Transportation Authority by a decisive vote, 50 to 5 in the Senate and 111 to 28 in the Assembly. The agency has full power to maintain and modernize commuter rail service and to join with the other states of the Region in a consolidated commuter operation. It also could be integrated with New York City transit. Governor Rockefeller proposed the new agency, signed the bill into law June 1, and named his Secretary, William J. Ronan, Chairman of the new Authority for eight years—parttime and unpaid while he remains in his state position, fulltime at \$45,000 thereafter.

The agency's five members, one from Westchester, two from Nassau, one from Manhattan, plus Ronan, can operate or assure the operation of any form of public

transportation in the New York State portion of Regional Plan's Region: Westchester, Rockland, Orange, Putnam, Dutchess, Nassau and Suffolk Counties. It can set up subsidiary public corporations when efficacious; a subsidiary could, for example, own and operate the Long Island Rail Road, which the State is negotiating to purchase. On the other hand, the Authority could contract with a private corporation; newspaper reports suggest the New York Central might operate New Haven commuting under contract with the new Authority and possibly the Pennsylvania might operate the Long Island under contract.

The New York legislature, in its last session, allocated \$85 million to the commuter railroad problem—\$65 million for purchase of the L. I. R. R., \$10 million for the MCTA, \$5 million for continuing Tri-State Transportation Commission and \$5 million for purchase of new cars for the New Haven Railroad.

Agreement has been reached among Connecticut, New York and the federal government to finance New Haven commuter service without curtailment through the Connecticut Transportation Authority and New York's MCTA.

Two New Jersey railroad companies, the Erie-Lackawanna and Jersey Central, continue to warn that their commuter losses are a serious drain on their ability to maintain freight service; they are asking for higher state subsidies. The state, in turn, has begun negotiations with the federal government for a demonstration grant for the Erie-Lackawanna under the 1964 Mass Transportation Act and recently submitted a formal application to the administrator of the Act, John C. Kohl. Although New Jersey was the first state in the Region to subsidize rail service directly—through its Highway Department—after finding that it was a better transportation investment for commuters than additional highways, the state's financial situation has blocked Highway Department plans for modernizing and cost cutting.

However, the Aldene Plan of Highway Commissioner Dwight R. G. Palmer, under which Jersey Central trains will connect with Pennsylvania Railroad trains and with PATH (Port-Authority Trans-Hudson, the former H & M Tubes) in Newark rather than to a fund-draining ferry from Jersey City, will be completed in October 1965 and should save the Jersey Central a substantial portion of the \$7 million a year it claims to be losing now on commuter operations. The federal government has just granted \$3.6 million to the Jersey Central for completion of the Aldene Plan under the 1964 Act. The New Jersey Highway Department sees station validation of tickets, new high-density cars and electrification as the most important steps for cost cutting.

Should the Erie-Lackawanna and Jersey Central commuter service be separated from the rest of their operations, as Regional Plan has suggested and the two lines have requested, it is possible that the Pennsylvania will be asked to operate both of them under contract with the State.

Several bills have been introduced in the New Jersey legislature to establish rail agencies; one would set up a comprehensive public transportation commission with wide operating powers but uncertain revenue sources.

Under the 1964 federal Act, New York State's purchase and modernization of the Long Island would be eligible for federal aid—two-thirds of the capital investment that cannot be expected to be repaid from fares, as determined by the federal administrator. More federal appropriations would be needed than have yet been voted to fulfill the Act, but the principle of federal aid for capital improvements has been approved and as applications come in from all over the country, it seems likely that further appropriations will be passed.

So far, though, the proposals for federal aid to keep the New Haven, Erie-Lackawanna and Jersey Central commuter trains running have been based, not on the capital aid provisions of the 1964 Act, but on the demonstration grant provisions, which are aimed at trying out various ways of improving service and gaining riders or cutting costs. This is the only federal money available for operating as opposed to capital funds; however, judicious investment in capital improvements can save substantial operating costs and in some cases probably can eliminate operating deficits.

Recently, in fact, a private organization, the New Haven Commuter Study Group, hired transportation engineers De Leuw, Cather & Associates to study the

possibility that modernization and rationalization of New Haven Railroad commuter service could result in a profitable enterprise. According to the study, service would have to be eliminated on 172 of the 272 miles of track now served; 22 of the 40 stations now in use would be eliminated, some by consolidating stations closer than two miles apart. New trains with faster acceleration and automatic doors, high-level platforms for faster loading, automatic fare collection and modern maintenance shops would further cut costs. The present fare structure could be maintained. The study estimates a profit of \$1.6 million a year from \$19.5 million gross revenues.

Where operating deficits persist after modernization, the New York State Authority can make up rail service losses with profits on related operations, which legally could include construction and rental or sale of housing or commercial property over rail rights of way or operating of commercial enterprises, parking lots and feeder buses in conjunction with rail service. Non-transportation facilities of the Authority are subject to local ordinances, and condemnation for them must be approved by the municipality.

Where total income does not equal operating expenses plus repayment of revenue bonds sold for purchase and modernization, the Authority is required to certify its needs annually through the governor to the legislature, which is pledged to appropriate enough to make up the shortage. The provision is intended to assure bond purchasers.

Connecticut recently pledged about 20 percent of the return from the state's utility tax to aid the New Haven, an estimated \$4 million a year for rail investment. In the same act, the Connecticut Transportation Authority was enlarged from five to nine members with the addition of four legislators.

New Jersey has not provided a continuing system for assuring operating and bond repayment funds, and it will need a new agency if revenue bonds are to be used for capital improvements. Otherwise, the Highway Department can fulfill necessary state functions if it has sufficient legislative appropriations.

Methods and equipment improvements

While public policy and financing arrangements were being worked out by the three states, new approaches to railroad service, equipment and operating methods were evolving. New York City and Nassau County continue to study ways of integrating Long Island Rail Road and



"The most luxurious interior ever provided for a rapid transit vehicle," according to its prospective manufacturer, General Steel Industries. This car was designed for the Bay Area Rapid Transit District. It will be air conditioned, have a new type of suspension and run on resilient, all-welded rails to provide more comfort and quiet than present rail transit lines do.

subway service and providing a hybrid rail system with comfort and capacity midway between commuter rail and subway for inner Nassau and outer Queens, which would help relieve present Queens subway congestion and shorten the long trip times of subway riders from outer Queens. (See REGIONAL PLAN NEWS # 71-72, December 1963, "Rail Transit Plans.")

San Francisco's new transit authority has released photographs of designs being worked on for its new system, emphasizing drawing room comfort at 80 mph. Closer to home, one-third of the new fleet of PATH cars ordered by the Port of New York Authority has been put into service. The rest will be running by the end of summer.

Automatic fare collection, which seems to offer large labor-saving possibilities, is being tested on the Long Island under a federally aided demonstration grant and will be tested for the San Francisco system. The New York Central is rearranging schedules and ticket prices to simplify ticket checking.

Summary: where we stand

A permanent solution to the railroad commuter crisis seems to be near. All three states have accepted the fact that the only alternative to commuter rail service—additional highway capacity, bus terminals and parking space—would be more expensive and disruptive.

New York and Connecticut now have authorities

which can finance both operations and capital improvements and can operate the commuter service if necessary. New York State has announced its intention of modernizing the Long Island Rail Road to cut costs while improving service.

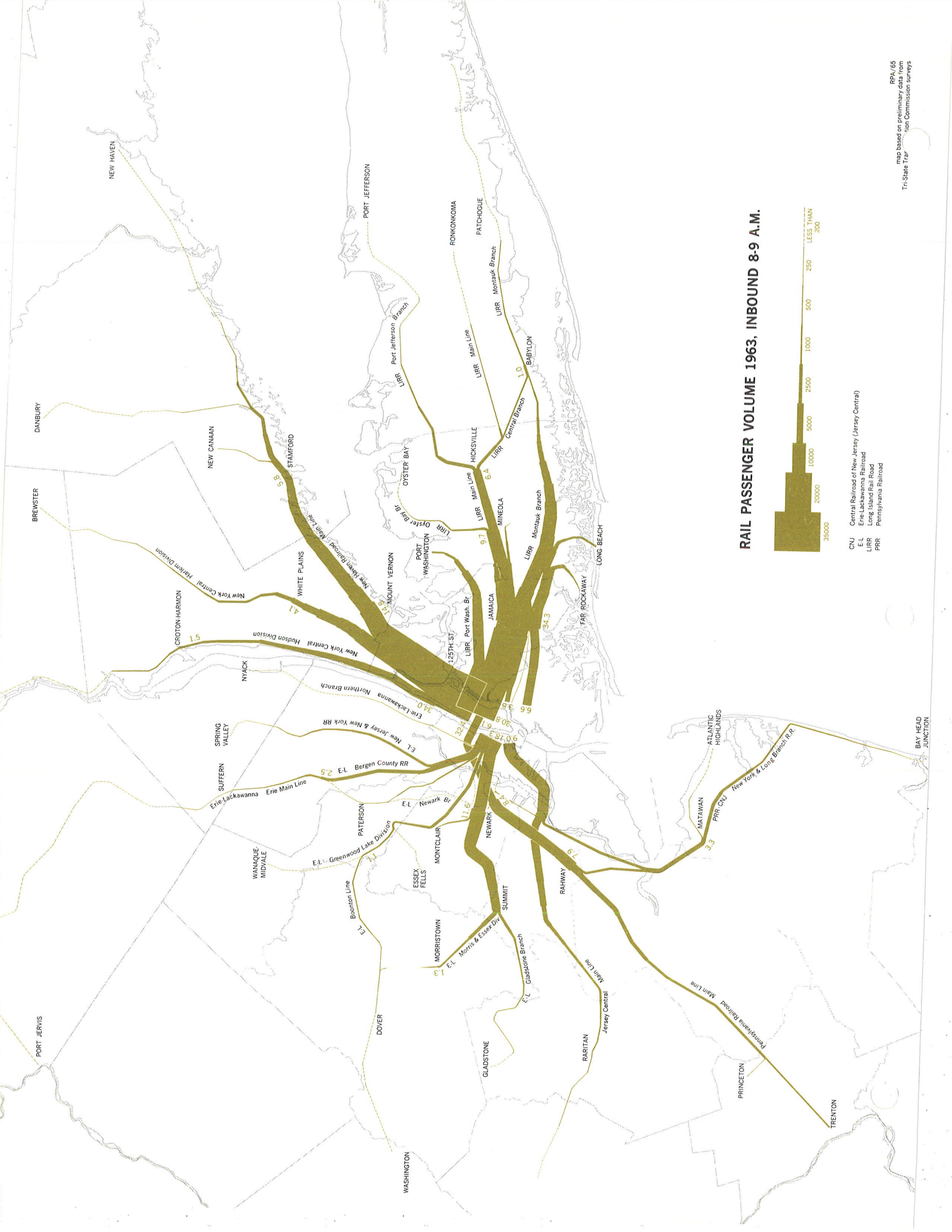
New Jersey has been subsidizing its railroads for commuter service, and under present authority the Highway Department can do anything needed except issue revenue bonds. Both the New York and Connecticut agencies can work together and with other states.

Furthermore, the federal government has accepted responsibility for public transportation financing, basically for capital investments.

Finally, these agencies have the advice of a metropolitan transportation planning commission, which looks not only at the whole Region's transportation but also at land-use projections.

The steps that brought us here

BOTH RAIL AND RUBBER FOR THE SUBURBS. Regional Plan Association has worked toward stable rail service for the journey to work since the 1929 Regional Plan. While encouraging the population of the New York area to spread out more as the automobile allowed, and while calling for a great system of highways (which remains more extensive than any other metropolitan area's), the 1929 Plan recognized the necessity for rail service for rush hours, to get people to work.



RAIL PASSENGER VOLUME 1963, INBOUND 8-9 A.M.



- CNJ Central Railroad of New Jersey (Jersey Central)
- E.L. Erie Lackawanna Railroad
- LIRR Long Island Rail Road
- PRR Pennsylvania Railroad

When the depression struck, just after the Plan was published, many highways in the Plan were built in order to pump federal works funds into the economy. But rail transit was considered private enterprise, and private enterprise then had no funds for capital expansion.

Little change in the Region's development took place in the slow-moving 'thirties. As suburbanization exploded in the late 'forties, postwar automobile shortages and lack of shopping or other facilities in many new suburbs kept the suburban railroads fully occupied.

POSTWAR: A THREAT TO RAILS. But Regional Plan observed an embryonic threat to continued suburban rail travel. A 1951 report called for "an objective study . . . to appraise the present policy of allowing the railroad systems to remain static, while concentrating investment in vehicular traffic arteries leading into Manhattan." The suburban trend toward auto trips to work might weaken railroad financing and service without eliminating the need for commuter rail, the study warned. Some riders turned to their cars because railroad service and equipment were deteriorating. Many new jobs were scattered and could not be reached by rail. And the use of railroads during non-rush hours, when every rider adds to profit, was declining as shopping centers spread to the suburbs and suburbanites bought more cars.

Regional Plan suggested that the Port Authority carry out the necessary study if it were not already too committed to rubber-tired facilities.

A STUDY WAS MADE in the mid 'fifties under the Metropolitan Rapid Transit Commission, a temporary New York-New Jersey organization backed by the Port Authority. Regional Plan provided land-use data and analysis for the study, under contract. The Commission concluded that a continuing transit district should be formed by the counties of both states concerned with cross-Hudson travel and that the district should first present a general plan for constructing, operating and supporting transit from Northeastern New Jersey to Manhattan and then be empowered to build and operate it.

The Commission and study director recognized that far more information would be needed to begin building or reorganizing New Jersey-to-Manhattan commuting, but they were confident that (1) commuter rail service must be maintained, though the best mixture of bus and train was not yet clear, (2) a public subsidy for rail service was needed and justified and (3) a means

for better distribution of rail and bus passengers in the economic core of the metropolitan area—including Newark, Hudson County and Manhattan—was essential. The Commission proposed a rail transit loop to provide this distribution.

The report undoubtedly extended agreement on two principles—(1) that the economies of New Jersey and New York City are inextricably bound and dependent on good public transportation between them and (2) that public funds are needed for public transportation. But the study did not look at transportation as a whole, based on a desirable pattern of future urbanization. Nor did the report offer a financial solution that satisfied public officials.

FINALLY, COMPREHENSIVE PLANNING. In 1959, a year after the Commission reported, Regional Plan reiterated the need for a comprehensive metropolitan transportation study, including highway as well as public transportation requirements, all based on extensive land-use projections. Similar studies were completed or underway in Philadelphia, Chicago, Detroit and Pittsburgh. In the meantime, Regional Plan advised New York's mayor and the three governors, as they met to discuss commuter problems, that the rail network should be maintained as it then was for five years, during which time a comprehensive transportation study would reveal which lines were needed and what should be done with them.

In August 1961, the three governors established the Tri-State Transportation Committee, which quickly put together a large planning staff. It is now a formal interstate planning commission.

FINANCING RAIL NEEDS. In the forty years before 1960, literally dozens of plans and recommendations for improving or maintaining rail service had been issued by government or citizen organizations. All seem to have been blocked by the financing requirements.

The Port Authority tried to bring the railroads together for modernization and rationalization of operations in the early 'twenties, for example, but failed because capital funds were not available. So in 1960, when Regional Plan was asked by the Senate Interstate and Foreign Commerce Committee to report on commuter transportation problems in the New York metropolitan area, the Association focused on railroad financing.

Working with former Interstate Commerce Commission Chairman Anthony F. Arpaia, the Association concluded that only wholesale modernization and con-

solidation could halt rising costs. With an investment of \$650-\$800 million and judicious pruning of inessential, costly parts of the railroad commuter network, costs and revenues could be brought within a reasonable relationship and any continuing deficits could be handled by the states.

The federal government should provide substantial portions of the modernization capital. The report offered several reasons why federal and state participation in railroad commuter financing is justified, the principal one that there is no alternative to railroad service that would not be far more costly to the states and federal government and extremely disruptive to the families and employers in the Region.

While consolidation of the rail network offers opportunities for economy and better service, if a single railroad agency for the three states is impossible at first, individual state rail agencies operating with the aid of Tri-State planning would suffice, the report said.

The Metropolitan Regional Council, an informal association of chief elected officials of the Region's counties and major cities, supported the RPA recommendations.

Shortly after, Senator Harrison A. Williams, Jr. of New Jersey introduced a bill to provide limited federal aid for public transportation. It passed in 1961.

New Jersey already was paying its rail commuter lines to continue service.

New York then offered its credit to help its three commuter lines obtain new cars, but Regional Plan opposed this because new cars without a plan for modernization and consolidation seemed likely to inhibit the necessary solution. The New York Central accepted the credit and bought 87 new cars, but the two financially desperate lines, the New Haven and Long Island, did not. The New York Central cars were not designed for modernization (e.g., no automatic doors) nor were they interchangeable with equipment of other rail lines in the Region.

Through the New Haven crisis, Regional Plan continued to testify at hearings of state and federal legislators and to talk with rail executives, including the New Haven trustees, and civic organizations about its view of the basic solution to the rail problem.

SOLUTIONS EVOLVING. In 1964, another Williams bill, providing a more comprehensive program of federal aid to public transportation, was passed, fitting Regional Plan's 1961 recommendations to the Senate Commerce Committee.

Connecticut established its Transportation Authority in 1963, and a bipartisan bill to establish a New York rail authority was introduced in the 1965 legislature. It easily passed the Senate. A commuter association was set up for New Haven riders, the United Communities for Railroad Action, headed by Haynes Johnson, which organized support for public action.

Governor Rockefeller turned first to the Long Island which carries far more passengers than the New Haven. He accepted the recommendations of a commission he had appointed: to purchase and modernize it. He promised legislation which would relate to the New Haven as well.

Upstate legislators expressed opposition to further government involvement in rail financing and operation.

Regional Plan then issued a twelve-point argument for state and federal support for a modernized commuter rail system (see REGIONAL PLAN NEWS, # 78, May 1965, page 9), designed to show that facts now generally accepted lead inevitably to the wisdom of modernization and public support for the commuter rail system. All the railroad presidents agreed.

In a move initiated by the national Action Council for Better Cities, a group of seventy business executives, headed by Andrew Heiskell, chairman of Time, Inc., and Morris D. Crawford, president of the Bowery Savings Bank, urged immediate action in New York and New Jersey, referring to the Regional Plan arguments. Governor Rockefeller introduced his Metropolitan Commuter Transportation Authority bill, which Regional Plan, the Businessmen's Committee for Action on the Commuter Railroad Problem and the United Communities for Railroad Action endorsed enthusiastically.

The bill passed decisively, helped—we have good reason to believe—by the strong endorsement of the businessmen's group.

New Jersey still has major financing and administrative structures to formulate, and the other two states will face many policy decisions relating to service level, fares and financing. But the fundamental decision seems to have been made to modernize the railroads and to consider recommendations made by the Tri-State Transportation Commission, which is looking at transportation as a single system throughout the Region.

BOOKSHELF

The Intellectual versus the City: From Thomas Jefferson to Frank Lloyd Wright by Morton and Lucia White. Harvard University Press and the M.I.T. Press, 1962. 270 pp. \$5.50; paperback: Mentor Press, 1964, 271 pp. 75c

"Those who must live in today's American city or who like to live in it, can profit from taking seriously the urban criticism of our great writers, for it was deep and many-sided." In a fascinating study, the Whites have analyzed the persistent distrust by American intellectuals of the city and found two fundamentally contrasting stages. One is the romantic heritage, prevalent in the 19th century, which longs for a return to nature. The other, much more important, criticism reflects a concern for human values—education, individualism, easy relationships among men—which intellectuals have seen threatened by the American city in all periods, not least our own.

The Structure of the Stockholm Economy: Toward a Framework for Projecting Metropolitan Community Development by Roland Artle. Cornell University Press, 1965. 197 pp. \$6.75

By combining the traditional methods of national and regional accounting with input-output analysis, Artle was able to develop detailed balance of payments accounts for an urban region, to assess Stockholm's contribution to Sweden's national income and national revenue, and to analyze the labor and space requirements of various industries within the region. In an introduction to this new edition of his now classic study (first published in English in 1959), he sets forth a new approach, more comprehensive in scope but better suited to the limited empirical data normally available for the study of a region.

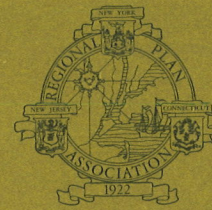
Financing Real Estate: Principles and Practices by Sherman J. Maisel. McGraw-Hill Book Company, 1965. 432 pp. \$9.50

Maisel's book is one of the best available on real estate economics, particularly because of his description of the social and economic forces which influence the real estate investor. Students of urban and regional economics will find this work of considerable interest.

It's Your Community! A Guide to Civic Development and Beautification by Henry B. Raymore and H. Stuart Ortloff. M. Barrows and Company, Inc., 1965. 240 pp. \$3.95

This book attempts to stimulate the layman's awareness of the appearance of his community and interest in its improvement. Through detailed outlines of ordinances, zoning procedures, and the functions of official agencies, the authors indicate the ways in which citizen action can be most effective.

Sarah Smith Hasbrouck



Regional Plan Association

230 West 41st Street New York, N.Y. 10036 LO 5-1714

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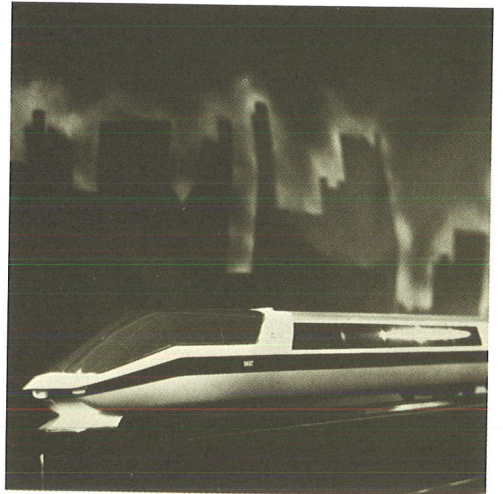
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