

U.S. DEPARTMENT OF TRANSPORTATION
OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20590

REMARKS PREPARED FOR DELIVERY BY ALAN S. BOYD, SECRETARY OF
TRANSPORTATION BEFORE THE SUBCOMMITTEE ON TRANSPORTATION OF
THE HOUSE INTERSTATE AND FOREIGN COMMERCE COMMITTEE, ROOM 2318,
RAYBURN HOUSE OFFICE BUILDING 10:00 A.M. WEDNESDAY, JUNE 12,
1968, ON H.R. 16024

Mr. Chairman, Members of the Committee, I appreciate
the opportunity to appear before you on the extension
of the High Speed Ground Transportation Act proposed
by H.R. 16024.

The bill would extend the Act for one year and
establish June 30, 1970, as the expiration date of the
Act. Other procedural amendments would take account of
the establishment of the Department of Transportation and
the transfer to it of elements previously in the Department
of Commerce.

A more substantive change is the amendment to Section
7 which would clarify the authority to acquire necessary
real property by purchase, lease, or grant and to construct,
make repairs, or furnish necessary support facilities.
This clarification is necessary in order for the Department
to acquire a test site for the development of advanced
ground transportation systems. The amendment would not
change in any way the prohibition now in the Act against
the Secretary's acquisition of any interest in any line
of railroad.

The bill which the Administration proposed provided for a two-year extension of the High Speed Ground Transportation Act. We believe the two-year extension is essential to orderly planning and execution of the program.

The High Speed Ground Transportation Act was passed in 1965 with a sense of urgency that the demand for transportation in the urbanized intercity corridors which have grown up about the Nation will far exceed our present capability to handle it. The purpose of the Act was to try through research, development and demonstrations to stimulate alternative modes of transportation which could better handle high volumes of movement in densely populated regions.

Today there is an even greater sense of urgency than there was in 1965. Travel volumes have increased at a greater rate than predicted and the period of time before we will completely run out of transportation capacity in the Northeast Corridor has been shortened. The growth in air transportation has been most dramatic. Between 1962 and 1966, intercity air passenger miles in the United States nearly doubled. Intercity passenger miles by all modes increased by more than 17 percent.

In the Northeast Corridor the problem of congestion is now critical at several major airports. According to Federal Aviation Administration estimates, delay time at J. F. Kennedy, Newark, LaGuardia, Washington National, Boston and Philadelphia airports in 1965 amounted to 49,000 hours. Estimates indicate that at three airports - Kennedy, LaGuardia and Newark - there will be an increase in delay time from 33,000 hours annually in 1966 to 133,000 hours in 1970 and the delays will become very much larger by 1975 if nothing is done to expand capacity.

Estimates by the Bureau of Public Roads indicate that highway travel on intercity routes in the Northeast Corridor will almost double between 1965 and 1985 and that approximately \$2 1/2 billion will be needed just on the intercity portion of the Corridor highway system. The total cost to Federal, state and local authorities of all street and highway construction in the Northeast Corridor for the same 20-year period is estimated at more than \$33 billion. These new facilities will have to be accommodated into what is already the most heavily developed region in the country - 14 percent of the Nation's total road mileage is concentrated on less than 2 percent of the land area.

As income levels go up, we can anticipate that transportation demand will continue to expand at a very rapid rate. There is no doubt that most of the cost of meeting this demand can be, and should be, imposed on the users of these services. In today's economically and technologically complex world, however, the direction which the development of new systems and the improvement of the old should take is not clear. Research and development, testing and demonstrations should be carried on in several directions until we begin to see clearly the most useful and productive path.

It is unrealistic to expect completely private sponsorship during this experimentation phase. The costs are too high and the risks are too great. Government must provide the seedbed and must stimulate and encourage involvement by private firms. This is essentially what this program has tried to do and, I believe, has done with a high degree of success. We estimate that over the 3-year period, Federal appropriations of \$52 million have been met by \$75 to \$100 million of expenditures and commitments by private firms.

The Office of High Speed Ground Transportation has direct responsibility for the Northeast Corridor Transportation Project under my general authority to carry out research and development in intercity transportation, and has responsibility for the research and development and demonstrations in high speed ground transportation under the Act of 1965. In carrying out its responsibilities, the Office of High Speed Ground Transportation has retained essentially a task force orientation to the problems of transportation in urbanized regions. Close integration and coordination has, therefore, been maintained between the Northeast Corridor Transportation Project and the research and development and demonstration activities pertaining to high speed ground transportation systems.

The High Speed Ground Transportation Act of 1965 authorized appropriations of \$20 million for FY 66, \$35 million for FY 67, and \$35 million for FY 68 for research, development and demonstrations in high speed ground transportation and for the national transportation statistics program. Of the authorized \$90 million, \$52 million have been appropriated.

I should like to describe briefly what we have accomplished since the High Speed Ground Transportation Act was passed. The major categories of activity have been research and development, and demonstrations.

Section 2 of the High Speed Ground Transportation Act authorizes the Secretary of Transportation "to contract for demonstrations to determine the contributions that high-speed ground transportation could make to more efficient and economical intercity transportation systems." The purpose of demonstrations, carried out under the Act, is "to measure and evaluate, such factors as the public response to new equipment, higher speeds, variations in fares, improved comfort and convenience, and more frequent service." In connection with contracts for demonstrations under the section, the Secretary shall "provide for financial participation by private industry to the maximum extent practicable."

Within this pattern of objectives, two rail passenger service demonstrations were set up for the Northeast Corridor. One was to operate between New York and Washington and the other between New York and Boston. A third demonstration of auto-on-train service between Washington, D.C. and Jacksonville, Florida was planned and partly funded. The three demonstrations would help to determine the role that rail passenger service, based on generally contemporary technology, can play in transportation in the future. In both the New York-Washington and New York-Boston demonstrations substantial improvements in rail passenger service were to be made. Terminal to terminal times were to be reduced, new equipment was to be acquired, and roadbeds and stations were to be upgraded.

In carrying out the Washington-New York demonstration, the Department entered into a contract with the Pennsylvania Railroad - now Penn-Central. Under the contract the railroad was to acquire a fleet of not less than 28 and not more than 50 new MU cars capable of sustained speeds of up to 150 mph. The railroad was to upgrade its roadbed to very high standards specifically set out in the contract; to build high level platforms at Wilmington, Baltimore, and Washington, D.C.; to retrain personnel to be utilized in the new service and to operate the new trains on schedules of not more than three hours between Washington and New York. The consideration to be paid to the Penn-Central Railroad for the performance of the contract was \$9.6 million. The Penn-Central Railroad was to bear all costs which, excluding the Government's contribution, were estimated at the time of the signing of the contract to be between \$20 and \$25 million. The contract also provided that the Department of Transportation would be able to collect data on passenger movement on board trains between New York and Washington prior to and during the demonstration.

The conduct of the demonstration between New York and Boston posed a different situation. There the New Haven Railroad has been in bankruptcy for 7 years. The Department of Transportation had to take full responsibility for the conduct of the demonstration. Early in 1966 the Department contracted with United Aircraft for the lease of two trainsets for a two-year period at a cost of \$1.7 million. The Department agreed to pay maintenance costs for the two-year period which would amount to \$2.8 million. We estimate that the operating and other costs will be approximately \$5 million, thus the total cost of the New York-Boston demonstration will be about \$9.5 million. Some of this expenditure may be returned through revenue sharing arrangements with the New Haven Railroad.

From the New York-Boston demonstration we expect to make a determination of the prospective usefulness of equipment which can operate at a substantially higher speed than conventional equipment over curved roadbed. If this equipment is successful and is attractive to the public it may be tried out in short and intermediate rail passenger hauls through many areas of the country. It offers the prospect of substantially upgrading service at minimum cost.

Both the Washington-New York and New York-Boston demonstrations have been delayed beyond starting times we originally hoped for. Very clearly we were unduly optimistic about the time that would be required for the design, building and testing of new equipment. In both cases the equipment is a substantial advance in the state of the art. United Aircraft TurboTrains are relying on turbine power for propulsion and have adopted an advanced suspension system. The cars for the Washington-New York demonstration, built by the Budd Company, are electronically the most complicated ever built. They will have a sustained speed capability of 150 miles per hour and will have automatic controls of speed, braking, and wheel slide. If the speed requirement of 150 miles per hour had not been imposed, it is probable that the cars could have been built much more quickly. This would have precluded the possibility in the future, however, of advanced improved performance with better roadbed.

The target dates for the start of the demonstration were set to convey a sense of urgency in the program. When it was apparent that the project would not meet these target dates, I called a meeting of the major industry participants in the demonstration program. At that meeting I suggested that all of us form a task force to identify and establish the priority of the unresolved technical problems. The task force identified these as follows:

- (1) Electronic maintainability;
- (2) Wheel thermal stress under specified deceleration when using air brakes alone;
- (3) Pantograph-catenary current collection stability at high speed during winter months, particularly under the remaining light wire; and
- (4) Acceptability of ride quality.

The task force found that many of the individual problems which delayed the demonstration had been identified by the contractors and that substantial resources were now being devoted to their resolution. The task force also found that all concerned with the project - Government, railroad, car builder, and equipment operator - were overly optimistic with respect to the planning and scheduling, given the magnitude and complexity of the project. The task force concluded that a reliable demonstration could be initiated within 7 months given prompt action in the major problem areas.

The implementation of the task force report is now being planned by all concerned.

It should be perfectly clear that the hold up in the delivery of equipment for these demonstrations has been completely without funding costs to the Government.

In completing this discussion of the demonstrations, I should like to commend the Penn-Central Railroad and the rail supply firms involved in the construction of equipment for the demonstrations. The rail industry and the rail equipment industry have clearly not enjoyed financial prosperity since the end of World War II. Yet the firms involved here have been willing to commit sizeable resources to research and development and to the improvement of their engineering and production capability. This has been done, moreover, with the prospect of only a relatively small Federal financial participation.

The research and development in high speed ground transportation has proceeded more slowly than anticipated at the time of the passage of the High Speed Ground Transportation Act. Almost all of the reduction in appropriations has been taken by this activity. Nevertheless, in addition to specific advances in technology in several areas, the program has marked out the general directions for research and development in high speed ground transportation for the future. Work has been done in systems engineering, research and development in high speed rail operation, research and development in new high speed ground systems, and research and development in tunneling, power pick-up, and guideway surveillance. Among the accomplishments of the program are the construction of 4 rail research cars which have been operated under test conditions at speeds of 150 mph on upgraded roadbed; the design and current construction of a 2,500 horsepower linear electric motor; the development of designs for tracked air cushion vehicles; and breakthroughs in tunneling technology. These accomplishments will lead to the building of test vehicles, guideways, and propulsion systems and ultimately to commercial demonstrations.

The work in the high speed ground transportation program has been done with a total authorized staff for the first 2 years of 27. This was increased for fiscal year 1968 to 34.

I should like to request that a detailed "Statement in Explanation of Request for High Speed Ground Transportation Legislative Extension" prepared by the Office of High Speed Ground Transportation be entered into the record. This statement is intended to provide detailed information in review of the program and in explanation of work which remains to be done. It outlines the major areas in which the new authorizations which we have requested will be obligated.

I strongly urge upon this Committee the passage of H.R. 16024, with the amendments proposed.

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