



DEPARTMENT OF TRANSPORTATION

NEWS

FEDERAL HIGHWAY ADMINISTRATION

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REMARKS BY FEDERAL HIGHWAY ADMINISTRATOR
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MID-YEAR MEETING OF THE AMERICAN TRANSIT
ASSOCIATION AT ST. PAUL, MINNESOTA, JUNE 2, 1970.

"Highways and Public Transportation"

Let me thank you for inviting me to be on your program today, and for giving my associate, Ralph Bartelsmeyer, a similar opportunity at your recent San Francisco meeting.

I think we should speak to one another as partners in the urban transportation business. The highway program needs public transportation, and public transportation needs highways. It is as plain as that.

But ours is more than a partnership of necessity; it is a partnership that is very much in the public interest. The economic and social progress of American's cities and towns depends in no small way on what we, working together, can accomplish for the mobility of our urban citizens.

The dictionary defines a canard as an extravagant or absurd report set afloat to delude the public. If ever there was a tired old canard it is the one about "highways versus mass transit." That's bunk, and its burial is long overdue.

As far as I am concerned, there never has been an adversary relationship between the highway program and public transportation. After all, public transportation travels on highways in every city that has public transportation -- by means of buses. Moreover, modern concepts of rail transit assign a complementary role to highways in the collection and/or distribution of passengers. Highways, then, serve the needs of public transportation.

So, please, let's forget the mischief-makers who would like to stir up a fuss, and turn to our mutual problems. They are apparent enough.

Urban travel, expressed in vehicle miles, has been doubling every 20 to 25 years, which is about twice the rate of urban population growth. Urbanization is continuing. Today, 70 percent of the population lives in urban areas. By 1985 probably 80 percent of the people will live in urban areas. Today, there are 105 million motor vehicles on the nation's roads and streets. By 1985 we expect to have 146 million.

It is true that the private automobile provides a tremendous amount of personal mobility and that it has contributed enormously to the American urban-suburban lifestyle. Presently, about 92 percent of all personal travel (in person miles) in our urban areas of 50,000 or more population is by automobile.

But it is inconceivable that all of the personal mobility needs in our urban areas will ever be met by the private automobile alone. It is

simply not feasible, for one thing. And it would not be desirable, for another.

It follows, then, that if we are going to cope with urban growth and maintain mobility, public transportation will have to play a significant and hopefully a growing role.

President Nixon's Public Transportation Assistance Bill faces up squarely to this fact of life. As you know, it would provide \$10 billion over a 12-year period to aid in improving and expanding urban mass transportation.

The Federal Highway Administration enthusiastically supports this bill. We endorse without reservation its approach, which looks to all possible modes -- rail transit, bus transit, or others still to be developed -- to improve urban mobility.

Let me assure you that we welcome the contributions that rail rapid transit can make to meeting our urban travel demands. Wherever it can do the most efficient job of moving people, we want to see it built. We want to work closely with rail transit in the urban transportation planning process. And we want to cooperate, to the extent of our statutory authority, in accommodating rail transit in highway rights-of-way wherever planning indicates its desirability, as we have done in Chicago and San Francisco, for example.

Parenthetically, I should add that encouragement of rail transit to relieve particularly severe pressures on the highway system, as in the

case of downtown commuting, in no way relieves highway officials of their responsibility for maintaining an adequate highway and street system to accommodate the many other urban needs for the movement of people, goods, and services. Rail transit is no substitute for the vast majority of transportation performed on urban highways.

So, let us not deceive the public with the idea that rail transit is a universal panacea. Its applications are extremely limited -- generally to those high density corridors in our largest metropolises -- for reasons which you, as the operating experts, understand better than anyone. Even here, there must be a highway facility also provided because some of the person-trips, all of the goods movement, and all of the service functions must be provided by highway vehicles.

In the absence of an immediately foreseeable alternative, better bus transit is the only reasonable solution to our public transportation needs, and this is the situation in at least 95 percent of our urban areas where 75 percent of our urban population resides.

In all but a handful of our largest cities, public transportation today is already being provided exclusively by buses on highways and in all probability will continue to be provided by this mode. Buses, in fact, account for about three-fourths of the nation's urban mass transportation, on a person trip basis, and thus the majority of public mass transportation even today is being operated in total dependence on the contribution made by an improved highway network.

I would like to devote the remainder of my time to a discussion of the role of buses in urban highway transportation and what we in the highway program are doing to make bus transit more effective.

Contrary to what I sometimes hear, we don't build highways for their own sake. We provide them as a means to move people, and their goods and services. And our efforts over the years have been pretty successful. In 1968, highways in our urban areas of 50,000 or more population afforded the public 700 billion person miles of travel.

That is a staggering figure to contemplate anytime you are tempted to think that urban traffic is grinding to a standstill. Buses, incidentally, provided 41 billion miles -- or 6 percent -- of that total.

I would be the first to concede, however, that urban highway transportation is performing well below its potential for moving people. The strain on highway capacity comes, as everyone knows, when the people-moving demand is highest -- that is, during the daily morning and evening peak-hour commuter load.

The solution lies in increasing the efficiency of highway facilities -- in getting more people-moving capacity out of them.

For this reason highway officials have a special interest in a mass people-mover and highway vehicle, the bus. As one of our highway engineers wrote, nearly 20 years ago:

"The transit vehicle, while it is moving, is a much more efficient user of street space than a private car and the improvement of the transit system stands high in the work to be done for the relief of traffic congestion."

One bus can carry, and usually does, 50 passengers in peak hours, but to transport the same number by car typically requires 30 to 35 vehicles, since about 70 percent of the cars in rush-hour traffic carry a single occupant. Putting it another way, one freeway lane can move about 2,000 cars or 3,000 people an hour. The same 3,000 people can be moved in 60 buses.

Theoretically, according to our Highway Capacity Manual, 940 buses could move about 50,000 persons in one hour on a single freeway lane, traveling at 33 miles an hour, with 3.8 seconds headway. The bus-freeway combination, then, has a potential for true rapid mass transit, a potential which exceeds the present demands and forecast demands in all but a very few instances.

Certainly if one bus keeps 30 vehicles off the streets, or if 60 buses keep 2,000 off the streets, we get more efficient use of our highways. Congestion is decreased, capacity is increased, and safety is enhanced. These 2,000 vehicles are the maximum hourly capacity of a whole lane of freeway.

Further, bus transit offers a means to accelerate the flow of traffic and movement of people without resorting to expensive highway reconstruction projects. Major highway improvements in urban areas present gigantic engineering, financial, and social problems because of the difficulty of going through built-up areas and the often inevitable necessity to uproot people and businesses. In all probability, there will be no

further freeways built in our central core city areas other than those now under construction or planned. This is all the more reason to concentrate on getting the highest capacity from the system we will have when these freeways are completed.

We have long felt in the Bureau of Public Roads and the Federal Highway Administration that the basic urban freeway systems we are providing are an invaluable resource for assisting public transportation. Effectively handled, buses on freeways can offer the type of rapid transit needed to lure motorists away from their cars during the peak-load commuting hours, particularly.

We have been seeking ways in which the highway program can help promote this development. In the early 1960's we determined that Federal-aid highway funds could participate in the reservation of lanes for exclusive bus use under certain conditions.

We re-emphasized this position later in urging our regional administrators "to seek out opportunities to participate in improving transit service and to aid in any way possible in bringing it about." In this connection, we have approved separate or preferential bus lanes; even busways on their own separate rights-of-way.

In our planning requirements and other documents we have spelled out our clear intent "to give full recognition of public transportation in the planning, design, and operation of urban highways."

In our new Federal-aid program for traffic operations improvements in urban areas, we include in the items eligible for funding such things as separate bus lane controls and lanes for loading transit passengers, including platforms and shelters.

We are working closely with the Urban Mass Transportation Administration on a number of special projects and studies aimed at making transportation more responsive to the needs of the public.

As a result of our emphasis on encouraging public transportation, we are now engaged in a number of projects which I should like to describe.

One that has attracted nationwide attention is on Shirley Highway (Interstate 95), now undergoing reconstruction as a prime link between the exploding suburban areas of northern Virginia and the nation's capital. Since last September, two reversible lanes running a distance of four miles have been used exclusively by buses during morning rush hours. This saves 12 to 18 minutes running time, and has so far boosted ridership 15 to 20 percent.

But this is just one phase of a project that ultimately will run 11 miles. Construction already is well underway on a temporary bus roadway on another section of Shirley Highway closer to the District of Columbia. When completed, it will give buses an at least equal time advantage with autos for the line-haul portion of the trip.

A study which evaluated all travel in the corridor has determined the feasibility of providing for exclusive or preferential bus use of highway

lanes not only during the improvement of Shirley Highway, but after the reconstruction is completed. It foresees the need for an additional 100 buses to handle an expected diversion of 5,500 or more riders over the next five years. This is the equivalent of 2 full lanes of freeway.

Associated with the reserved bus lane proposals are recommendations for fringe parking, new bus routes, and a downtown Washington circulation plan. Successful implementation of all facets of the recommendations requires coordination of the Virginia and District of Columbia highway departments, transit operators, transit regulatory agencies, as well as the Federal Highway Administration and the Urban Mass Transportation Administration within the Department of Transportation.

Fringe parking facilities, which I just mentioned, now are eligible for Federal assistance under the Federal-aid Highway Act of 1968. This Act authorized a demonstration program under which States may acquire land alongside Federal-aid highways for the construction of fringe parking stations to be coordinated with existing or planned public transportation facilities.

The first project undertaken under the provisions of the Act is a facility near the intersection of the Garden State Parkway and Route 27 in New Jersey. It will be part of a new commuter railroad station of the Penn Central line in Woodbridge. It is estimated the fringe parking lot will serve about 725 daily commuters to the New York area, and up to 400 passengers to Philadelphia and Washington.

Other fringe parking proposals include facilities for railroad commuters and car poolers in Stamford, Connecticut, and for express bus service in West Hartford, Connecticut.

Getting back to projects aimed at making roads more productive, a demonstration project is to get underway in Seattle this year involving use of express buses on six miles of Interstate 5 in the heart of the city. At the residential end a parking lot will accommodate 550 cars. At the downtown end, the buses will use an exclusive on-off ramp, and for pickups in the evening rush hour, an exclusive wrong-way lane on a one-way street. The anticipated time for the entire run is 18 to 20 minutes, compared with 30-40 minutes under the present bus setup.

In California there is a proposal involving the San Bernardino Freeway in the Los Angeles area. It calls for an exclusive bus roadway, partly in the median and partly adjacent to Interstate 10 for a distance of approximately 12 miles. The cost has been placed somewhere in the neighborhood of \$36 million, and a study has been authorized to explore the possibility of making changes that will reduce the cost.

A two-year feasibility study of a proposed bus roadway as part of a bus rapid transit system in Milwaukee County, Wisconsin, is nearing completion. The plan envisions a system whereby buses would circulate in residential areas to pick up commuters, use a network of freeways in outlying sections, then enter an exclusive bus roadway about five miles long which would parallel Interstate 94 and proceed to the Milwaukee

central business district. The study will develop preliminary designs for the bus roadway, central business district distribution systems, fringe parking facilities, and a downtown bus terminal. It has been estimated that Interstate 94 would be relieved of thousands of cars daily by motorists shifting to the system.

The Federal Highway Administration and the New Jersey Department of Transportation are evaluating a proposal to establish an exclusive bus lane on six-lane Interstate 495 approaching the Lincoln Tunnel into New York City.

It was first proposed that a wrong-direction lane be used only for buses during peak hours so as not to deprive cars of a much-needed lane's capacity. But a consultant's report concluded such a reversible lane would be unsafe. The possibility of reserving one of the lanes in the right direction for exclusive bus use now is being actively pursued.

We recognize that reserving a lane exclusively for buses during peak hours poses the problem as to whether sufficient buses will use the lane to warrant restricting it to bus traffic. We are aware that in most cases where freeways are congested there are not now enough buses to make it worthwhile to bar other vehicles entirely. As a result, we are sponsoring a study with the Urban Mass Transportation Administration, and the Office of the Secretary of Transportation, to determine the feasibility of reserving freeway lanes for buses and car pools. The car pools could fill the gaps between the buses. Included in the study will be a determination of how many passengers a car pool would have to carry to make it eligible to drive on the exclusive lane.

Too low an occupancy level could permit too many cars to use the lane, thereby running the risk of slowing traffic. Too high a level might not allow enough cars to use the lane efficiently.

We also are working with UMTA on the Department's "Urban Corridor Demonstration Program," which will test a variety of combinations of improvements in congested travel corridors in larger cities through the concerted use of available DOT programs. Two million dollars in planning funds, which do not require matching, recently were released to 11 urban areas for this purpose.

Improvements to be considered will focus on improved bus transit through use of exclusive or preferential lanes, with special ramps and turnoffs, and collection and distribution improvements will be considered as an integral part of the plan.

In summing up, I would like to emphasize that the Federal Highway Administration views the transportation task within urban areas as one of moving people and goods and services rather than vehicles alone. In an attempt to improve mobility, more consideration must be given to preferential treatment of buses and high occupancy cars since they carry many more persons per lane than the typical private automobile at the present time.

In order to make buses and public transportation in general attractive to both present and potential users, travel time must compare favorably with the private auto. Exclusive or preferential use of highway lanes by

buses is a way to achieve this. We must also make sure that public transportation is both comfortable and convenient, and dependable.

To achieve our objective of increased urban mobility, the Federal Highway Administration is assisting in construction of highway facilities for preferential treatment of buses where this is found practical. We will continue to coordinate our activities with the Urban Mass Transportation Administration, the agency responsible for direct financial assistance for the purchase of transit equipment, such as buses. Working together, our two administrations can solve simply and effectively traffic congestion now plaguing our urban areas.

You in the transit industry can make invaluable contributions to improving the quality of public transportation. Many of the desirable improvements are of an operational nature, and rest in your hands. We on the Federal level and you on the local level can work cooperatively for the benefit of a mobile society that is in urgent need of more public transportation.

Thank you.