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HIGHWAYS AND TRANSIT: A PARTNERSHIP

ADDRESS BY FEDERAL HIGHWAY ADMINISTRATOR
F. C. TURNER AT THE 90TH ANNUAL MEETING
AMERICAN TRANSIT ASSOCIATION, DALLAS, TEXAS,
OCTOBER 6, 1971

In the year 1908, I was born in a house about two miles from where we meet today in this hotel, which was not then in existence. My father was a locomotive fireman for the Katy Railroad and he lived near the railroad yards so that he could walk to work, since there were no transit lines of any kind that stretched between his house and his place of employment, and we certainly didn't own or have access to one of the few automobiles then in existence.

A few years later, he took his young family to Denison, Texas, about 90 miles north of here, for a better job opportunity. Here I began my first remembered association with mass transit when a streetcar line was being constructed in the dirt street in front of the house in which we

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lived. I can recall vividly how my sister and I would put straight pins and nails on the tracks for the trolley car to run over and flatten into letters of the alphabet to form our initials.

A few years later, the then prospering railroad industry offered another and better job opening and my father moved to Fort Worth, the city which then claimed to be "where the west begins." There again, I saw a new streetcar line extended to reach out closer to the area where we then lived. I walked to and from the end of that trolley car line and rode it countless times -- certainly into the thousands.

The Evans Avenue car line was a major part of my life. It was the only link to downtown for our once-a-year shopping expeditions to get ready for school, for other occasional shopping, such as Christmas time, to attend church, and as I grew older, to take my girl to a downtown picture show.

Such a system, while it was perhaps the best in existence, and served us reasonably well under the conditions of that time, provided only a very elemental way of moving about in the city. You didn't make many trips for shopping because it required nearly an all day expedition to go to town and back, and thus it had a measureable impact on retail sales volumes. Although the fare was only five cents, with half-fare for children under 12, free under 7, it was, in the economic pattern of the 1920's, an important item in our family's budget.

Neither did it do much to encourage me to take my girl on a date, because trolley car riding was certainly "public" transportation as well as "mass" transportation. And if I was dating a girl who lived somewhere else than in my immediate neighborhood, it was really a test of her attractiveness, when the only transportation system available required me to ride to downtown, transfer to another line that radiated out to part of the city to get her, then get back on the trolley car and ride back to the picture show downtown, and reverse the process to take her home. Eventually I would get back to my own home on the last trolley at about 1 A.M. , at the end of four transit rides and six fares paid. It made for a long evening. Oh, well, there weren't any double-features in those days -- and the system worked, because in the process -- and even in spite of it -- I found and married the finest girl in town and we've lived happily ever after -- just like the story books say.

Now I recite these personal details of my private life -- even revealing to you my age -- not just to be reminiscing here in my hometown area, but to indicate to you that I have some personal experience, gained as an actual customer by which to make judgments about what it is that the customer requires in transportation, and the kind of system we as planners must provide if we are to meet those needs. These early experiences have been continued through the whole extent of my adult life during all of which I have been a constant transit customer on a regular basis in a number of cities where my career has taken me. And that career has been entirely devoted to study of, and active and responsible

participation in meeting the transportation needs of people. One thing clearly stands out: our transportation system must be able to meet ever changing customs and conditions, and be responsive to customer needs.

The vitally important point to recognize as we give intensified consideration in 1971 to public mass transportation needs of the city of today is: what is it that we should provide to have the best total transportation system? The system of two generations ago which I rode is gone -- completely gone -- because it could not provide the transportation which is required today. And so I say that as we talk glibly today in such terms as systems analysis, and urban planning, and transportation needs of the elderly and the young, we must be certain that we are planning toward a transportation mode and system that people -- the customers -- need -- and will use -- to best satisfy their needs.

For example, there is an argument often heard that we must provide mass transit facilities in our cities in order to move the aged, the young, the handicapped, and the poor. This conclusion seems to me to be a pretty flimsy justification for such a system if this is our only reason for it. The elderly can't get on and off of fast scheduled buses or trains, or fight their way in the crowds that surround such a facility; nor can they trudge up or down stairs and long waiting platforms or walk several blocks to the bus line. Even if they did or could, such transit as we generally

know it in most cities seldom would carry them to the places where they want to go. And so they depend in most cases on their children or friends to personally take them by auto to their destinations. And the same thing occurs with the handicapped. Those too young to drive are driven by their parents -- or they have access to their own private mass transportation system for most of their needs, paid for with public tax money -- the school bus system, which numbers several times as many vehicles as public transit has. For the poor, it would be cheaper to just issue them a car, or give them taxi coupons, like food stamps than to provide an expensive system for them alone.

Today's cities are being built and are growing differently from those at the turn of this century -- with their large satellite shopping centers and stores in suburbs that rival even the parent stores of downtown. Banks, churches, recreational activities -- yes, even the few picture shows that are left -- are now located out in the neighborhoods in larger numbers than in the downtown center. The whole configuration of cities is changing. Therefore transportation must similarly change to fit this new pattern. If it does not it cannot economically survive -- nor can it provide the required transportation service.

Changes in urban and suburban living have caused radial lines which are oriented entirely to the center of the city -- whether they be rail or bus lines -- to become a minor factor in providing any substantial relief to today's transportation needs, because trips to the central core

city area in every metropolitan area in the Nation today are but a minor fraction of the total trips in the area -- and by minor, I mean that they are between 5 and 15 percent of the total. The remaining vast majority of other trips occur totally outside of the central city -- or downtown -- and the infinite combinations of routings and schedules required by today's urban citizenry dictates that any transportation system must provide flexibility of route, destination and schedules. That's why fixed route systems which are basically spoke lines attached to a downtown hub, have such a hard time financing themselves in the fare box -- and if they cannot support themselves at the fare box, then isn't this a good warning that they may be failing to provide that service which the customer wants? The customer need must always govern what kind of a transportation system we plan. And even though we finance and build a transportation system -- of any kind -- and subsidize its operation, if it doesn't meet the customer's needs, he still won't use it as long as he can find something else that will better meet his needs. That's why he uses his auto even if it does cost more, or is less efficient; because it better meets his overall needs -- whatever these may be. There's a fundamental lesson for us here if we will only listen to it, and learn from expensive experience of past years.

Any transportation system we plan -- which is, after all, a sub-system of our total social framework -- must also take into

account all of our transportation needs and not just our center city commuter needs -- such needs, for example, as freight shipments, and the necessary movement of goods and services, with direct access to our own individual front door whether we live in a single or a multi-family dwelling.

The first characteristic which planners must face squarely is the fact that people want personal mobility; freedom of movement to go when and where they desire. This has been true throughout history; it did not begin with the invention of the automobile nor even with the wheel itself. Long before the invention of the automobile, people rode through the city streets on the backs of donkeys, and horses; or in horse-drawn carriages -- to attain personal mobility beyond that provided by their own two feet.

City streets have always been an essential to provide individual access to homes, apartments, the market, places of employment, and so on. And people have always preferred to have their own individual means of transportation by which to use these streets -- perhaps even more so today than at any other time in history. They have always used the best mode that was available, and today that best mode for most people happens to be the automobile. Nothing better has yet come along, and until it does, we must build our backbone transportation system around the street and the automobile and its cousins of the bus and truck variety. The important point is that our transportation

planning must accept and recognize this elemental fact of human behavior and build a system compatible therewith.

As the cities have become increasingly crowded, people have moved farther and farther from the center of the city in quest of a home, with its own private yard. Most of our people don't want to live in European-style flats or apartment blocks. The resulting suburbs that are a part of every urban area in the country are frequently described in derogatory fashion by some planners as "urban sprawl." They decry this "urban sprawl" as inefficient, and say that something drastic should be done about it; such, for example, as curbing peoples' opportunities to live in this "urban sprawl" fashion by controlling the use of land, or a person's choice of transportation mode.

We can concede that urban sprawl is not the most efficient or economic arrangement from the narrow viewpoint of the planner alone -- and admit that traffic movement is increased by spatial dispersion of housing and employment, but a clear majority of Americans prefer this lifestyle; and if that is the way we want to live in a democratic society, what is wrong with that? Isn't it one fundamental example of the opportunity to exercise an individual choice which which makes us America? All indications are that urban sprawl is likely to become even more prevalent in the years ahead rather than less.

So, simply putting large amounts of money -- or even a small amount -- into mass transit won't automatically solve the problem unless

the service it provides will meet the needs that exist -- and where and when they exist, even if it should cost more or create other problems.

One basic approach would be to alter one of the basic planning and zoning concepts, by mixing suburban type single-family residential and commercial land-use zoning in order to place housing and employment centers closer together, and thus reduce travel distances and times. We already do some of this in the suburbs in the form of massive regional shopping centers, so-called clean industrial parks, or clusters of office buildings. Closer to the central areas of our typical city of today, we could rebuild the old fringe areas surrounding our core areas with "New-Towns-In-Town," thus decreasing the required travel miles between home and job while at the same time restoring these generally dilapidated areas to pleasant neighborhoods, and increased taxation bases.

While our highway facilities in most urban areas generally perform pretty effectively, we are not getting anywhere near the persons-moving capacity out of them during rush hours that they are capable of providing. That is because there are too many low-occupancy cars in the same corridor at the same time.

There is of course one standard solution to this problem: get more people out of their individual cars -- particularly one occupant cars -- and into some form of mass transit in the most heavily traveled corridors during the peak periods each day.

What characteristics must our planned mass transit system have, to

meet the needs of our urban-sprawl-oriented society with a majority of our citizens desiring their own personal mobility? My answer is that it must closely approach the service provided by the auto with its personal mobility characteristics.

Most people will walk only about a quarter of a mile to get to transit facilities. For longer distances, they will get into their car, and once in it, they are most reluctant to transfer themselves to some other mode or vehicle. So it is up to transit to provide a service that either goes to the people, or will bring the people to it.

Bringing mass transportation to the customer in the present and projected future real life situations means providing a system that causes him to have to walk only about four blocks to the transit line as a maximum, wait only a few minutes, have a seat on the conveyance, get him close to his destination, go when he wants to go, with about a half-hour travel time maximum, and still permit him to live in his urban sprawl, low density neighborhood. Certainly this is a tall order, with diametrically conflicting requirements. But our customer has found for himself a system which comes close to meeting all of these requirements -- and that is his auto. If any kind of mass transit system is going to draw him away from his present system, then it will have to approach closely to this auto-system. To me, that is what transportation planners must be thinking of -- not just the modal movement itself, and its claimed efficiency or lack of efficiency.

I've recently had the persons-moving capacity of several modes of movement analyzed with some interesting results. I calculated that buses, using only one lane of freeway, could theoretically transport 90,000 persons in one hour! With most of them seated. And so I conclude that transit buses operating on exclusive grade separated bus lanes are just about the most efficient people-movers we have, because this figure is higher than that for autos, bicycles, compact cars, pedestrians, motor-bikes, or even trains.

In total number of trips and person-miles traveled, we find, however, that all transit at present accounts for too small a percentage of the total. For example, in 1968 in all urbanized areas of 50,000 and more population, automobiles accounted for 93 percent of all trips and 92 percent of all person-miles traveled. Bus transit accounted for 5 percent of the trips and 6 percent of the person-miles traveled, while rail transit even including New York City's vast system handled only 1.9 percent of the trips and 2.7 percent of the person-miles traveled.

These figures portray what is obvious to us all: that the great preponderance of all travel in this Nation is by the private automobile, and that improved mass transit people moving facilities must be developed to relieve the urban rush hour highway congestion problem. This is the problem we are seeking to solve.

The funds which must be invested in order to build any kind of a mass transportation system are going to be very substantial amounts,

and we won't be able to afford their expenditure more often than once in a whole lifetime. So we cannot afford to make mistakes or wrong guesses. We must create a system which can adapt itself to changing times in the years ahead if our present forecasts for any reason are inaccurate. This means flexibility that will permit the system routing and scheduling and type or amounts of capital equipment to be changed. For this and many other reasons, I see the bus using our street and highway system as a mass transit complement to the truck and auto to form an overall transportation system in the vast majority of our cities. But wherever rail -- or any other type of transit mode -- can be shown to make technical and economic sense -- it should obviously be used.

We at the Federal Highway Administration, working with the State highway departments, can provide bus roadways as the means by which our highways can produce high travel speed and make the bus a truly rapid mass transit carrier. The Urban Mass Transportation Administration can provide grants to help cities obtain new, comfortable buses. You, yourselves, plus the transit commissions, must make bus-riding more convenient by creating routings and schedules which make it possible for people to take the bus without having to walk long distances to bus stops or in the case of a rail facility, the bus feeder lines must provide this kind of feeder service.

As I reported when I addressed your mid-year conference in Milwaukee this past March, as a result of 1970 legislation, both the Federal Highway Administration and the Urban Mass Transportation

Administration now have the necessary tools to work with in bringing substantial meaningful new aids to mass transit efforts.

Since that legislation was enacted the President has put forward his proposal for Revenue Sharing to include a Transportation Revenue Sharing Fund in which the airways, highway, and mass transit funding would be combined and the choice of modal use of the combined fund given to the local governmental authority. The ability of State and local authorities to determine the manner in which funding would be utilized to provide an answer to their transportation needs is an important principle and a forward step in Government. The Federal-aid highway program has operated on a local choice basis from its beginning in 1916, with all proposals for use of funds initiated by the States rather than the Federal Government. In fact, the Federal Government cannot initiate a highway project under any circumstance, and furthermore our program is more decentralized to the local level in its day to day operations and decision making than any program in being today. The success of the highway program is clearly a persuasive demonstration of the rightness of this principle which is the foundation of the President's proposal.

But decisions which are made locally under any administrative arrangement -- regardless of what it is -- must be based on complete planning information and be shown to make both technical and economic sense. We now have available adequate statutory, and fiscal, and planning tools. We must use these tools in combination with all facts

on-going transportation planning processes which are under way in every one of the 252 urban areas of more than 50,000 population to make common-sense decisions which meet the transportation needs of our customers and which they will accept. The intensity of our efforts must not be geared to the dollar size of the potential market for equipment and contracts, or man years of employment, but by the quality of transportation service we intend to provide for Mr. and Mrs. America, and their dependents, both old and young. This is the guideline which the Department of Transportation, and its constituent modal administrations, particularly the UMTA and FHWA in relation to your Association's interests, are closely following. We invite you to join with the efforts we are making to solve the urban transportation problem in which we all have a strong and common interest.

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