INTRODUCTION

Everyone in this room is part of a great enterprise. Motor vehicle transportation employs one out of every five men and women in this country. It accounts for at least one fifth of the economic vitality of the United States. It provides the unparalleled mobility that enables Americans to select their own lifestyles, and to enjoy the rewards of hard work and the countless attractions of our beautiful country.

The success of this complex and overwhelmingly successful system of motor vehicle and highway transportation represents an act of faith, and the confidence that comes from having faith rewarded.

Our motor vehicle transportation system operates because of a faith in technology, in the machinery that enables us to go. Every American expects that the thousands of parts that go together to make up an automobile or truck or bus will fit together, are well made, and can be relied upon—for thousands and thousands of miles, on command.

We have faith in the distribution and supply system that makes it possible for a motorist anywhere in the United States to get just about anything he needs to keep his vehicle moving.

We have faith as well in the laws and gadgets—and ultimately the people—that enable 154 million vehicles to operate together with reasonable safety and efficiency.

And we have faith that the four million miles of roads and streets that crisscross our country, connecting farms, markets, towns, and neighborhoods, will work right. We have shared a faith over the years that the road system would change to meet the changing needs of American commerce and living patterns. Until recently that faith was well placed.

The contributions of highway improvements to the general increase in mobility and confidence in automotive travel were many and measureable. An analysis of forty-seven interstate highway corridors in 1971 showed time savings of anywhere from 16 to 50 percent between cities where interstates had been substantially completed. On one route,
I-15 between Salt Lake City and Las Vegas, there was a sixty percent time saving.

Travel time savings within metropolitan areas were dramatic as well. Perhaps the most spectacular improvement came in San Diego where interstate roads and freeway connectors more than doubled peak hour speeds over a nine-year period from 18 to 39 miles an hour. In the Los Angeles area, whose vehicle registration is greater than that of 45 states, freeway construction and improvements to arterial roads increased overall peak hour speeds 25 percent in the first few years of the 1960s. Midday travel studies beginning in the 1930s showed a 30 percent improvement by 1960, even though vehicle registrations more than tripled.

We are all familiar with the safety improvements brought about by highway construction in the 1950s and 1960s. For example, when World War II ended in 1945, the fatality rate on our highway systems was seven times greater than today's interstate fatality rate.

DETERIORATION OF ROAD CONDITIONS

But our feelings of confidence in constant improvements on our road system began to diminish in the early 1970s under a combination of rapidly increasing construction costs and delays brought about by environmental requirements. While some improvements continued to be measurable, the picture became more mixed as other road conditions began to deteriorate. During the first half of the 1970s, while the number of roads in poor physical condition did not increase, there was a substantial slide from good to fair in the quality of many pavements. While urban area peak hour operating speeds continued to improve, some rural arterial speeds began to drop and there was an increase in congestion.

The Department of Transportation has pointed out that in the latter part of the 1970s and the early 1980s we could probably expect increased pavement deterioration and the need for expenditures to maintain existing facilities in reasonable shape. This decay is particularly apparent on the older portions of the interstate highway system which were absorbed into the system in the 1940s and 1950s. Some 1700 miles of such roads require extensive upgrading to meet full Interstate standards.

Perhaps the most dramatic evidence that all is not well comes from surveys of bridge conditions. Three quarters of the bridges in the United States are now over 45 years old while average bridge life is normally considered to be forty years. A bridge falls down just about every other day somewhere in the United States. Even on the Federal-aid highway system, bridge conditions are far from acceptable. About one out of every six of the quarter million Federal-aid highway bridges is struc-
turally deficient or obsolete in terms of its safety characteristics. The picture is probably worse off the Federal-aid system.

What is occasionally tossed off humorously as the pothole problem goes a lot deeper than visible potholes. Over the last ten years we have been eating into the earlier capital investment in our highway systems. In the railroad industry, this same practice contributed to the collapse of the Penn Central and to failures in other northeastern and midwestern railroads.

The decay of our road network concerns all Americans, not just those who make a living in highway transportation. Three years ago, the American Farm Bureau Federation reported that the transportation share of food marketing and distribution costs was seven percent. In less than three years this has risen to ten percent. For certain agricultural products, particularly those shipped from the west, transportation costs can range from a third to a half. A rise in those costs has a dramatic impact on market basket prices. According to the Department of Agriculture, over a five-year period during the middle 1970s, the transportation share of the overall food marketing bill rose about twenty five percent.

CAUSES IN ROAD NETWORK DECAY

How did our road situation come about? To a substantial degree the problem has not been one of simple neglect. By and large, the decay in our highway transportation system has stemmed from deliberate public policies which are now beginning to be questioned. One of the root causes has been inflation in highway construction. Highway construction costs have doubled in the last five years. In some years the construction cost index rose between 35 and 40 percent.

Basic underfunding is another main cause. The federal contribution to highway construction and maintenance is about one quarter of all of the funds available. The federal tax rate on motor fuels, the main source of revenue, has not increased since 1959. At the same time, investments in other forms of transportation by the federal government have increased dramatically. For 15 or 20 years, transportation has accounted for about three percent of the federal budget. About two-thirds of that, or perhaps slightly more, was for highways. At the present time, while transportation funding remains at around three percent of the federal budget, barely half is for highways. National transport priorities have clearly changed.

A reduced highway priority has occurred at the same time that federal policies on environmental and social improvements have raised the inherent costs of highway transportation. Housing relocation requirements, highway beautification rules, protection of sensitive ar-
cheological and aesthetic sites, as well as a downpour of new permit requirements, have all raised the cost of highway construction. Delays occasioned by these outside influences have added to the ravages of inflation by lengthening the highway design and construction process.

Over all, our own studies at the Highway Users Federation have shown that over a recent ten-year period all levels of government have substantially reduced highway investment relative to highway use. For example, in constant dollars, we now invest roughly two cents per ton-mile of freight compared to four cents ten years ago. Similarly, we now invest about three-quarters of a penny per vehicle mile of passenger travel, about half what it was ten years ago. A recent Department of Commerce analysis shows that we are now spending about eight or nine percent of general funds for highway purposes in the United States. This is the lowest figure since such statistics were first gathered in 1902.

In effect, starting in the teens and twenties we accumulated substantial capital stock in our road system. Beginning in about 1970 we began to disinvest the capital stock of our highway system. That disinvestment can be hidden for a time, but only for a time.

Some of the reduction in highway progress stemmed from the confrontation politics of the late 1960s and 1970s. For a period of about six years beginning in 1970, the highway support community had its hands full simply protecting highway programs and funding from drastic reductions. It was a long and bitter fight, but by and large it was won by the pro-mobility forces. In spite of attacks on state constitutional provisions protecting highway user funds only a few states abandoned such protection. At the federal level during the middle 1970s when many highway supporters thought it would be impossible to save the Highway Trust Fund, only minor amounts of potential diversion were allowed. As a matter of fact very little real diversion of highway funds to other purposes has occurred. The intensive effort to save highway programs took attention away from the fact that those programs were being threatened by forces other than purely political ones.

PUBLIC POLICY OPTIONS

If the 1970s could be characterized as a period of inattention to the underlying problems of highway investment, the 1980s may well see a turnaround. At this moment there is no real agreement within the highway community on how to do this best. Let me touch on some of the policy options that lie before us—options we are going to have to agree on so those who have faith in the future of automotive mobility can help guarantee that the roads are there for us as time goes by.
Neglect

One public policy which might be embraced is the policy of continued neglect. A couple of months ago the Wall Street Journal reported on the formation of the Big Apple Pothole and Sidewalk Protection Corporation by the New York State Trial Lawyers Association. The Big Apple Pothole Corporation is out now, busily counting all the potholes on New York City's 6,200 miles of streets. Last year the city passed an ordinance that will bar lawsuits against the city for neglect of road work unless the city receives 15 days prior notice of a road defect. To make sure that the city receives such notice, the Big Apple Pothole Corporation will locate every pothole and notify the city so that if an accident occurs the city can be sued. As it stands, the city currently faces a backlog of 35,000 personal injury cases, with total claims for injuries and property damage totaling 1.6 billion dollars in 1979 alone. Apparently the position of the city is that it is better public policy to make it difficult to be sued for neglecting road work, than it is to fix the roads. This would be funny if it weren't so sad.

Deliberate neglect of our road systems is one public policy that no one in the highway transportation community can embrace.

Increased Productivity of Available Funds

A second policy option is to increase productivity of the funds already available. Some steps in this direction are already underway and others have been in effect for a long time. Two years ago the highway support community pushed for new Federal-aid provisions which shift unused interstate construction funds from "slow" states to "fast" states. This program has speeded up interstate completion by as much as two years in some of the faster moving states. Not only does this provide road users with better roads sooner but it reduces the impact of inflation.

Other improvements in productivity can be expected in road maintenance and urban travel. Most states are upgrading their maintenance management so that there is better use of personnel and greater use of modern technology. In addition, a number of cities are rediscovering the delights of better traffic management as a way to increase capacity and service at low cost.

More productive use of limited resources has also been behind the growth of so called 3-R programs, the rehabilitation, restoration, and resurfacing of highways, as an alternate to new construction. This is a dollar stretcher aimed at saving the basic existing road system with minor improvements as an alternative to new construction. There's a limit to this, of course, since it's possible to spend all funds for this work, which would give us a second class road system in tip-top share. Sooner or later, major new improvements do have to be made.
Selective Improvement

Another policy option is to be more selective about where road improvements are made, to reinvest heavily in the most important highways. About 60 percent of the travel in America is on ten percent of our roads. About four-fifths of the travel is on one-fifth of the roads. That one-fifth is, generally speaking, the Federal-aid highway system. The concept of functional classification, the grouping of roads according to predominant use, has long guided intelligent highway investment. General practice has been to steer our biggest investments to the busiest road systems.

As it happens, however, there are powerful forces working in a contrary direction. Congress recently dictated that some Federal-aid funds be spent off the Federal-aid highway system on roads of less importance. The best example of this is the so-called off-system bridge program which requires that some federal funds be spent on bridges off the Federal-aid highway system. While the off-system bridge problem is severe, it may be so extensive that it could drain too much money from major roads.

The same issue prevails at the state and local level. If funds remain short, we have to decide whether we're doing to bandage the entire road network or try to do a good job on a limited part of the system. There is no agreement on this point, although highway users have generally held firm in their support of functional classification and the need to give the greatest attention to those few miles which provide the greatest amount of service—typically the interstate highway system and the principal arterial roads that connect with it. I personally support this philosophy, but it is only a partial solution to the problem of disinvestment.

Reinvestment in Highway System

The fourth general policy option that lies before us is to dedicate ourselves to reinvestment in our highway system and possibly other transport systems as well. During the middle 1970s it was heresy to talk about increasing money for road work. It was contrary to the social wisdom of the times. However, in the last couple of years we've seen a real turnabout in attitudes toward highway funding at the state and local levels. This turnabout stems not from a new love affair with motor vehicles, as much as from a growing awareness of the practical problems of rundown roads. Organized highway users have been prominent in bringing these problems to the attention of state and local legislators.

Our recent study of state highway finance shows that in 1979 ten states increased highway user taxes—the fastest pace of user tax increase in about a decade. This was in spite of the so-called Proposition 13 mood of the country which affected many other tax matters. Even more
recently, during November's local elections, every highway bond issue—or highway related vote was successful; a confirmation of the recognition of highway problems in spite of concern over increasing taxes.

There's also a move toward considering more flexible highway user taxes. This reflects a common understanding of the widening gap between travel and travel-related highway revenue. The highway support community is divided at this moment on the wisdom of variable or flexible taxes and over the next several months we are going to have to come together. It seems to me that several principles might be embraced which would make variable taxes reasonably palatable. There should be some sort of cap on such taxes to insure periodic review by state legislators. Tax increases must be related to specific programs of improvement, agreed to ahead of time by administrators, legislators and the public. And we ought to move not simply in the direction of recreating a parallel between highway travel and highway user income, but also to overcome the existing gap between what we have and what we need. If we fail to do this we will simply carry along many current, unmet needs.

The policy options that lie before us are not mutually exclusive. Different ones may apply under different circumstances and in different places. Reinvestment in our highway transportation system, as well as other transportation systems, is simply one of the public policy issues that we hope to address in a study currently being funded by many Federation members and other groups, and conducted by the National Chamber Foundation. It's important that transportation reinvestment be a priority not just of the transportation community but of the whole business community of the country. Deteriorating roads are a problem not only for highway user organizations or for the companies that supply highway products and services. Every industry or business is affected. There isn't a citizen who doesn't stand to gain if we can overcome the problems of potholes, pennies and politics.