The following is a summary of the speech delivered by Francis B. Francois.

The American Association of State Highway Transportation Officials (AASHTO) functions in all five transportation modes: aviation, highways, public transportation, railroads, and waterways. However, the great bulk of activity is in the highway arena. That is as it should be because the nation’s highway system is the glue that holds all the other modes together, and it is so important to our transportation.

This paper discusses the highway system as it exists, the history of it, and the prospects for tomorrow. How important is the highway system? According to the latest statistics gathered by the Federal Highway Administration (FHWA), 86 percent of all personal travel in this nation is done on a highway. Public transportation is about 2.8 percent. The massive aviation industry is important, but it constitutes only 8.5 percent. School buses carry about 1.8 percent of our personal movements. About 34 percent of our personal travel is to earn a living, 30 percent of it is for family and personal business, 30 percent of it is for social and recreational purposes, and 4 percent of it is for civic, educational, and religious purposes. As for the movement of goods, about 90 percent of it now occurs on the nation’s highway system.

However, this does not mean that the railroad and the waterway systems are not important. The railroads are now essentially trunk lines; their old branch lines, for the most part, are gone. The railroads are thus transcontinental or regional carriers that are hauling bulk goods, serving as the "land bridge" across the nation, carrying single-stacked or double-stacked containers from one ocean to the other. We may have even more need for that in the future than we have had in the past.

In recent years, we have had a tremendous increase in the number of vehicles and the number of drivers. In 1960, America had about 85 million licensed drivers; in 1986 we had 158 million. In 1960, we had 71 million vehicles on our roads; in 1986, we have more than 177 million. We have 0.9 licensed drivers per vehicle. In fact, the average worker has 1.34 automobiles available to him or her. The mileage driven by these automobiles is increasing, also. It used to be that owning a second car would decrease the mileage driven by the first car. Today, one must go through at least four cars before there is any drop off in the mileage driven by any one of them. For the last 20 years, we have been using up the capacity we built into much of our highway system.

In total, this nation has about 3.8 million miles of streets, roads, and highway. Of that 3.8 million miles, about 850 thousand miles (a small percentage) constitute
the federal-aid system. Only these 850 thousand miles get any money at all from the federal-aid highway program. The remaining 3 million miles are paid for entirely by state government, cities, counties, and townships. In 1986, in order to construct, build, maintain, and operate that 3.8 million mile highway system, the nation spent a total of $64 billion. Most of that $64 billion came from the states, 51.9 percent; from local governments came 24.4 percent, and from the federal government came 23.7 percent. In 1986, that 23.7 percent totaled $15.25 billion. The federal government, important as it is for capital projects, funds less than 25 percent of the total revenue that is used for state and local roads and highways in this nation.

It was around 1893 when we created the first state highway agencies in this nation. That was also the year when the first American automobile hit the road, and Massachusetts was the state. It was also the year when the federal government put its first money, $25 thousand, into the nation’s highway system for road research. During the early 1900s, state after state followed the lead of Massachusetts and New Jersey and created state highway agencies. In 1914, AASHTO was created.

In 1916, the first federal-aid highway bill was passed. Congress argued that year about several highway issues. The states who were big donors at that time, mostly eastern states, argued that it was unconstitutional for the federal government to give any money to highways. They did not want their money going out to the midwest.

The issue that had great implications for the history of the program was whether the federal government should build a system of federal highways, or instead support the states in building highways that would then constitute a national system. When the debate ended, the latter approach was adopted by Congress. That is, the states would set the priorities, would choose the routes, would own the highways, would do the planning, building, and maintenance of them, and the federal role would be to support that activity technically and with some funding. That is still the basic structure of the federal-aid highway program.

The 1916 act did not specify where the money would be spent within a state; it simply gave the states money. The states proceeded to spend that money where they wanted to, and no system was emerging. In 1921, the law was amended to require designation of a highway system. Each state was allowed to designate up to 7 percent of its mileage, and that is the backbone of what we now know as the primary highway system of this nation.

In the 1920s, AASHTO became involved in a number of things, including the numbering of the federal highway system. In the 1930s, Congress created the farm to market road program and started the urban assistance program. In 1938, a report was delivered by the Bureau of Public Roads to the Congress and to the President about the possibility of creating a major system of highways interconnecting cities and states. That report was the origin of the Interstate highway system as we now know it. In the mid 1940s, Congress authorized the Interstate system but did not fund it until 1956.

In 1956, the federal highway trust fund was established. Federal gasoline taxes were imposed at a level believed high enough to raise the money that would be needed to build the Interstate highway system. In 1959, the federal gasoline tax was raised to 4 cents per gallon. The next raise came in 1982, when it increased
to the 9 cents that we now have. During the 1960s and the 1970s, the highway trust fund was a marvelous mechanism for raising money. The Interstate highway program was up and running, and other highway programs were funded out of the trust fund, also. The highway program seemed to have endless resources. We began to burden it with social programs of various kinds until some projects were more similar to housing relocation and renewal projects than highway projects. Throughout that period of time and until now, with Congress enacting a series of reauthorization bills, the Interstate highway system and the highway trust fund that was created to support it have been the mainstay of the federal-aid highway program.

This history brings us to 1986 and the need once again for Congress to pass a new highway and transit bill that would finish the Interstate construction program and allow us to move into the next era. That bill proved very difficult to enact in the Congress. Finally, in 1987 the congress did pass it, the President vetoed it, and the Congress then overrode the veto last April by one vote. The Surface Transportation and Uniform Relocation Assistance Act (STURAA) of 1987 is now in place.

The problems encountered in passing the STURAA of 1987 indicated to all concerned that the old consensus we have had in the federal-aid highway program since the mid 1950s has come unglued, in part because the Interstate highway system is finished in much of the nation. The senators and congressmen from those states see little reason to put more money into something their states would not benefit from. Also, the bill was in trouble because the needs in the growth states far exceed the money that they may receive through the normal formula programs of the federal-aid highway program, and because members of the House of Representatives today spend more time functioning as ombudsmen for the needs of their districts than working on national issues.

The demonstration project problem that we now have in the federal-aid highway program emerged from these problems. Until 1982, an example of a demonstration project might be that a new material needed to be tested, and a specific piece of highway in the federal-aid highway program would be set aside to test it as a "demonstration". Now, demonstration projects really only demonstrate the ability of a congressman to get money for his district. The next federal-aid highway bill, if there is one, may consist of nothing but demonstration projects by individual members of the Congress. This would totally undercut the basic concept of the federal-aid highway program, as a state program supported by the federal government allowing the states to make priority judgments as to where and when projects should be built. Individual members of Congress want to program those projects themselves.

Overall, at the federal level, 1980 was the high water mark of federal domestic programs in the current era. When President Reagan came to office, he set about to change the national priority processes and to remove the federal government from many domestic programs. A tremendous amount of devolution or shifting back of programs to the state and local governments has occurred over the last eight years under the Reagan administration. Public transportation is one example. In 1980, the federal transit program reached a peak of about $4.6 billion, and in the special session of Congress that year a bill was nearly passed that would have doubled the transit program. In 1988, the federal transit program is down
to $3.2 billion, and it will probably stay at about that level over the next few years, although the administration would like to cut it to about $1.8 billion.

In the meantime, the states have become deeply involved in the support of public transportation. Collectively, the states last year put about $3.3 billion into transit. In other words, the state support for public transportation now is larger than federal support nationwide, a trend that evolved over the last seven or eight years.

In 1980, the federal government operated Conrail; Conrail is now in the private sector.

Also in 1980, the federal government provided money to Amtrak for both capital replacement and operations. Amtrak has been capped at about $600 million for eight years; they have bought no new cars during that period of time, and they now have an accumulated need of about 600 new railroad cars.

The aviation and the motor carrier industries were deregulated in the late 1970s and the early 1980s. As a result, both industries are flourishing in new ways. Aviation saw cut-rate airlines and the freedom of deregulation double the number of air passengers, and the number of people moving by air in this nation is about to double again in the 1990s. The result is a need for new airport facilities, which is basically unmet in much of the nation. The last new major airport to open was Dallas-Fort Worth in 1974. Denver is considering a new one, Arizona is considering one midway between Phoenix and Tucson, but for now we must live with the airport capacity that we have. The air traffic control problem is large, and more money will go into that area.

As for the highway program, the total amount of federal money in the federal-aid highway program was about $15.6 billion in 1986. In 1987, the amount dropped to about $13.2 billion, or about $2 billion less than in 1986. The President's budget, which went to Congress a few weeks ago, proposed total outlays this year of about $12.3 billion (a billion dollars less than last year and $3 billion less than two years ago). The budget approved by the Congress last year on the highway program had an obligation ceiling level of $11.78 billion; the one that was sent to Congress last week, $11.198 billion (about $600 million less than the year before). The trend is a decrease in federal funding, but needs and overall funding have not decreased.

Generally, the states have been keeping pace with the needed revenues. Indeed, the rate of increase of revenues in the states is greater than the federal increase was through 1986, and the federal rate is now decreasing. In 1980, total state highway receipts in this nation were $29.7 billion. By 1986, that amount had increased to $45.9 billion. In 1980, the federal government accounted for 33.8 percent of those revenues; in 1986, 28.9 percent and dropping. The split as to what that money is used for has remained about the same. About one-half of the money is used for capital projects, and about 15 to 20 percent is used for maintenance. The highway programs in this nation over the years have been "pay as you go", and essentially that is still true. Nationwide, about 7 percent of highway revenue goes to service bond debt, and that is quite low compared to many other capital infrastructure programs.

The National Council on Public Works Improvement has made a report to the President and to the Congress. It is from a very prestigious commission that has been at work for more than a year, has evaluated several elements of the
nation's infrastructure, and has given grades to them. Overall, the highway system nationwide gets a C+. The commission found that, although the highway trust fund has a sizable cash balance, spending for system expansion has fallen short of needs in high growth urban and suburban areas; many roadways and bridges are aging and require major work; and, the needs of most rural and small systems exceed available resources. Other grades were: mass transit, C-; aviation, B-; water resources, B; water supply, B-; waste water, C; solid waste, C-; and, hazardous waste management, D.

Recognizing that we are in a time of change, that the old consensus has come unglued, and that we must do something new, about a year ago AASHTO initiated the Transportation 2020 Program. We are still in phase one of the program. Phase one has three ongoing basic information gathering activities. One activity is an effort by the professionals in states, cities, and counties to evaluate the future transportation system requirements of this nation from a professional standpoint. Much of our work is already done in the highway area, and it shows that to maintain the current status of the federal-aid highway system will require much more money than is now planned for the period of time between now and 2020.

A second activity is a series of public forums that are being held in the 50 states with the help of the state departments of highways and transportation and, in most states, with the help of the Highway User Federation or such other highway user organizations as are sponsored by an Advisory Committee on Highway Policy, created by AASHTO, of which Les Lamb is chairman. Mr. Lamb is also president of the Highway User Federation, and his organization fully supports him and his chairmanship of the ACHP. Of these forums, more than 45 of them have been held. A national report will be prepared evaluating what the users perceive as the needs of the nation's highway system, transit systems, and the other elements of our surface transportation network.

The third activity will occur in late June when a Transportation Research Board (TRB) conference on the future will be sponsored by AASHTO, the Federal Highway Administration, and the National Association of Regional Councils. The conference is intended to bring together some of the best futurists we can find to discuss fuel, the economy, vehicles, the make-up of our population, and our probable transportation needs in the years 2000 to 2020.

All the information from phase one will be fed into another organization that AASHTO helped to create, known as the Transportation Alternatives Group (TAG). It is comprised of 12 national organizations working together, including such organizations as AASHTO, the National Governor's Association, the National Association of Counties, the National League of Cities, and the U.S. Conference of Mayors. The TAG will take this information and draw up some alternative approaches to meeting our surface transportation needs. In the spring of 1989, under this phase two effort we hope to draw together a program that would lay out the roles that the national, the state, the local governments, and the private sector might play to meet our perceived national surface transportation requirements through the year 2020.

As to the alternatives that might evolve in phase two of the Transportation 2020 Program, one possibility is to continue with the kinds of federal and local programs that we now have. However, given the trend in the federal program, we know that it will not meet our needs. As I have noted, the total expenditure level
in 1986 was about $64 billion. By 1990, the total expenditure level probably will be about $80 billion, but the federal support in the form of the federal-aid highway program is, at best, flat through 1991. From all indications, it is headed downward and may be less than 20 percent of the total by 1990. The state and local government share will need to rise if our needs are to be met.

In addition, the recent tendency of the Congress to program its projects through a great number of demonstration projects, rather than having the states and their local governments do the programming, makes us question whether the federal program will be useful in future years.

As to other alternatives, I hear general support for our federal program to maintain the Interstate highway system as the principal national means of moving goods and people. The Interstate highway system in mileage is a very small percentage of our overall highway system, but it carries 20 percent of our traffic, and a very important 20 percent it is. The system is vital to this nation, and no one argues that it must be maintained. Also, I hear general support for maintaining federal support for research and for planning activities, due to the belief that these may not happen otherwise.

There is some support in most states for an expansion of the national highway network. The major arterial highway system is of national highway significance, and there is strong support for these highways in the growing states.

As to the rest of the highway program, I am hearing that lumping the remainder of the federal funds together into a large block grant, giving it to the states, and letting them and their local governments administer it would make everyone the happiest. If that cannot be done, then some say the money should be given back entirely to the states; in other words, turn back becomes a big issue.

There are three kinds of turn back: turn back of the federal fuel tax itself so that it may be levied back home; turn back of the revenue only so that the federal government collects the tax as agents of the states and then gives it to them; or, a combination of these two schemes. Nationwide, the governors are looking at keeping a part of the fuel tax at the federal level to keep the Interstate system in good condition and turning back everything else to the states. That option does not have strong support in the states yet, but the support is growing given the uncertainties of funding in Congress, the growth of the balance in the highway trust fund, further imposition of federal sanctions on the highway program, and other problems.

Finally, there is the option of simply turning all federal funds back, so that there would be no federal-aid highway program at all. The federal highway trust fund must have fuel tax and other user fee revenues to exist. The taxes that support the federal highway trust fund will continue for two years after 1991, which is when the STURAA highway program ends. That two-year period is necessary to pay off the many highway projects that have been started. An act of Congress is required to extend the user taxes beyond 1993. If Congress chooses not to do so, the highway program ends. We need to understand that we are not guaranteed a federal-aid highway program, but it is probable that some kind of program will emerge by 1991 or 1992.

We are trying to keep Congress involved in the Transportation 2020 effort, but other things are happening that have their attention. For example, the Congress is worried about funding "infrastructure". Last week, Senator
Moynihan introduced an infrastructure bill in the Senate. The bill allows state and local governments to group a number of their infrastructure programs into a state revolving bond fund. They would get a small bonus from the federal government for building their own projects, through bonds or borrowing. The bill also creates a special discretionary infrastructure fund that would be funded by the interest earned on the federal-aid highway trust fund, the aviation trust fund, and the waterways trust. In other words, the transportation user fees would be used for more general infrastructure purposes.

There is some support on Capitol Hill for the philosophy that another federal-aid highway program may not be necessary, that such an infrastructure bank that allows the state and local governments to decide what they want to build (i.e., jails, highways, water, sewage) may suffice.

We will elect a new President this fall, but that new President will not really have a clean start. The deficit issue is real. It will not be resolved this year, and probably not in the first term of the next President. Federal program options, excepting a massive tax increase, are very limited. The national debt issue will influence every federal program for the next five to ten years.

The debt situation is worse than what we have been led to believe, in at least two degrees. The economic growth projections that both the administration and the Congress have been using recently are very high compared to what has been happening, which means that this year’s national debt increase may not be $140 billion but closer to $160 or $180 billion; and, masking part of the national debt are things like counting the $10 billion balance in the highway trust fund and tens of billions of dollars in the Social Security trust fund as assets. The Social Security trust fund has a very large balance, a balance that is intended to grow much larger by the year 2000, when many will start drawing on it. Then it will run out of money. The national debt is a very serious problem that will curtail new programs.

In addition, there are those who want to use the gasoline tax to reduce the national debt: these include senators and congressmen; Alan Greenspan, the chairman of the Federal Reserve Board; Time magazine; and, a lot of other press. There will be great pressures next year to do just that. This raises a basic issue: Are we going to continue with highway user fees dedicated to the purpose for which they were collected, which is what the highway gasoline tax is all about, or do we convert that tax, as is done in Europe and the rest of the world, into a general government revenue? If we do the latter, I believe we will see much larger fuel taxes than in the past, and highways will be dependent on general funding as is true in most other nations in the world. Those opposing such a change include AASHTO, the states, and the highway user groups nationwide. Other factors will weigh in, and Congress and the next President will have to decide.

It is possible that in 1989 and 1990, Congress may take up a highway and transit bill and an infrastructure bill and pass them. It is more likely that the Congress convening in January, 1991 will enact the new programs.

The highway system and all the nation’s surface transportation system, is absolutely vital to America. Without it, the lifestyle that we have created and the economy, both domestic and international, could not survive.

This nation always has been a mobile nation. Today, if you do not like where you are living, you get into your automobile and drive to another place. That mobility is the key to the freedom of America, and we cannot let it suffer.
The one thing that is certain about America, is that there will be change. Looking back 200 years or ahead 200, one could take a snapshot at any given point in time and two weeks later there will be a change. There is no "it is done" end to our highway and other transportation programs. They must constantly evolve, and they are evolving now. Ahead are challenges, and we can and must meet them.