

Issues Facing the Highway Industry

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Today I would like to give you an overview of some of the issues facing the highway industry, the states and the highway program in general. Things are going to change. They are going to change technically and legislatively, and there are going to be changes in the way that government and industry do business. It is important for us to help these changes happen and not just let them happen. We will all benefit from them, but government and industry will have to work closer together to bring about these changes or it will be business as usual.

Overall, in this country, in the last several years, there has been a slip in what I would call a quality of work ethic. This has happened in the industrial area and across the board. For a while it looked as if we were going to accept mediocrity in many areas. I believe that has changed, though, and there is a different climate. I see a new emphasis in the country on quality. We demand it, we want it and industry has to produce quality to get public confidence and public acceptance.

Automobiles are a good example. Our cars are getting better. They are better than they were ten years ago — domestically produced cars as well as foreign. They have better brakes, they're safer, and more dependable. Of course they are also much more expensive, but have longer warranties. I think that automobiles, whether produced in the U.S. or abroad, are quality products. People have come to expect that quality, and they have shown they are willing to pay for it.

In the highway business, quality means a high performance pavement — a smooth ride, on a long lasting and safe pavement. Here, again, we have slipped. So, the good news is that there is a change in the quality ethic. The bad news is that in the highway business we can not or will not get the quality we want using our current business style. Both the public and private sectors want quality. It is a mutual goal that we are simply going to have to attain if we are going to meet the traffic demands of today and tomorrow. Achieving that is easier said than done. We will need good materials, good specifications, trained personnel, plus a change in the attitude of government and industry, and a change in the way we do business with each other.

Our traditional methods (method specifications, low bid mentality and, sometimes, adversarial relationships) are really no incentive to the private sector. Thus the contractor has no reason to do much more than meet the specifications that are laid on him — no reason to improve quality, to innovate. In fact there is a dis-incentive in many cases. We've all heard "contractor, you bid it you build it." Many people are really not interested in doing it any differently, and that goes for both sides — public and private.

In the thirty plus years that I have been involved in the highway industry, there has been little or no innovation by the private sector in equipment or materials to improve the product. There has been some innovation to improve productivity

but nothing to improve the product. Why? Probably because there's no incentive. The result is that a valuable resource — the private sector — is being under-utilized in the whole equation. The contractor on a construction job for many years was just a mechanic, and that is a waste of half the equation. We need the best efforts and talents of all parties if we are going to build a high performance highway. We need a cooperative venture between industry and government, not an adversarial one.

We are going to have to change the way we view each other. The private sector has to get more involved, and the government has to let the private sector get more involved in the equation. Now, probably, among the first innovations we will see is a different way of letting contracts in the public sector. This is not going to be across the board. It is not going to be rapid, but it is coming. These changes may include, for example, incentive and dis-incentive clauses, both for quality and time. These clauses are no longer rare. Several states use them. Some states are experimenting with bidding both time and dollars and alternative scenarios for completing the project. The design-construct method, which has been used primarily in Europe, but also in the United States to some extent, is being considered. In fact, Florida is currently experimenting with that concept.

There is another possibility in changing the way we do business, which is used commonly in other fields from automobiles to toasters. I'm talking about the design, construct, warranty or design, construct, maintain method. This method of doing business gives the private sector strong incentives to do quality work, because if it isn't quality, it's their responsibility for some set period of time. Unfortunately, this concept is generally not permitted under today's rules of public contracting.

There is a Transportation Research Board task force that has been working for about eighteen months, looking at contracting practices both here and abroad. They are examining how these practices affect quality and price. Moreover, they are exploring improvements we might make in the public and private sector in awarding public contracts. The report should be completed by the spring of 1991.

The Federal Highway Administration plans to initiate an experimental project late in 1990 that permits some variations from the traditional contracting methods. This includes awarding and administering contracts. According to people in FHWA, this will be purely voluntary for the states. Some members of the contracting industry (the private sector) have reacted negatively to this, and are against it.

In my view of the world, I believe we should all give it a chance. Let's see what the new system looks like. I don't want to supplant the competitive bidding process, and I don't want the letting of public contracts to become political. Yet, there must be better ways to do business that will improve the quality of our products by providing the incentive to do so. I believe we should take a chance and try some of these innovative techniques.

An obvious first step in innovation, short of completely changing the way we do business, is to implement a Quality Assurance/Quality Control (QA/QC) method. Indiana is currently using QA/QC for asphalt pavements and will begin to use it for concrete pavements in 1991. Because of reduced staffing levels at the state level, especially in field inspection forces, QA/QC is becoming more and more accepted. Approximately one-half of the states are using it.

We don't yet have all the tools we need for an excellent QA/QC program. What we need are specifications that truly relate to performance. I don't believe we have those yet. We need sampling and testing programs that reliably predict performance in a timely manner. I don't believe we have those yet either. Often the tests lack precision, or they are not repeatable. Some of our specification tolerances are pretty tight, and we are not sure that they relate to performance. We hope that the Strategic Highway Research Program (SHRP) will produce the specifications and tests that we need to make this QA/QC method more acceptable.

The most important part of this whole QA/QC endeavor, or the different ways of letting contracts, is that they have to be approached as cooperative ventures between agency and industry. It should not be looked at as a pay adjustment scheme to transfer all financial risk and uncertainty to the contractor. If it's done that way it will fail. If done properly, these new methods can produce material benefits to the agency, the contractor and the public — our customers.

I would like make a few comments on the future highway program, the Highway Trust Fund and the deficit. The current federal-aid highway act, passed in 1987, expires in 1991. We will then need a new federal highway act. It's that simple. What kind of an act should we have? What should it look like? With the Interstate substantially complete, should the federal-aid program be overhauled? I believe it should, and there is a lot of effort currently underway looking at how the program should be structured.

In fact, there are several efforts going on. The American Association of State Highway and Transportation Officials (AASHTO) has an effort. The Highway Users Federation has a major effort. The Federal Highway Administration, the National Governor's Association and the National Association of County Engineers all are looking at the new highway act and how it should be structured. I could continue on through the alphabet. The debate is going to heat up over the next year on how this new federal highway program should work.

These debates will involve rural versus urban interests, state vs. local interests and, of course, the overall question of the federal interest. All of these debates lead up to how to cut the pie. That is the wrong issue. The real issue is how big is the pie before we cut it? I think that all interested parties should work to increase the size of that pie before they try to decide who gets which piece.

The pie, as they say, is the Highway Trust Fund. The current federal-aid program operates at about \$13.4 billion a year. The existing Trust Fund can support (without an increase in taxes) a program of \$18 billion to \$19 billion a year from 1992 to 1996. This can be done by using the current revenues and spending down the balance in the Highway Trust Fund. So, it doesn't make much sense to get involved in debates on how the program should be structured until we are sure — all of us — that the funds will be there to support a strong federal-aid program.

Therefore, our mission should not be to determine how the basics of the highway program ought to look, or how the funds should be distributed. Our mission is simply to get commitments from Congress and the Administration that highway user fees will be fully available for highway purposes. If that is done, it will be relatively simple to reach a consensus on what our future highway program will look like. If that is not done, then we're merely fighting over scraps.

We often get side-tracked with the rather esoteric, academic debates about whether or not Trust Fund expenditures or the balance of the Trust Fund adds to, detracts from, or has nothing to do with the deficit. That is really not the issue. Trust Fund moneys and highway user fees should be spent on highways. They were collected for that purpose. There are needs out there that are getting worse.

Anyone, from the President, to Congressmen, to state representatives, to county commissioners and mayors, will agree that the highway system is the backbone of our economic well-being. If everyone believes that rhetoric, then they ought to support increasing expenditures to the extent permitted by law. How do we pull this off? There really is no easy answer. It's going to be extremely difficult. One idea we have all heard that has been tried before is to get the Trust Fund off budget. That means that expenditures for the Federal Highway Program would not be counted as expenditures for deficit purposes. There is some hope of that this year, as there is an effort to get the Social Security Trust Fund off budget. This may well go through, and perhaps we can then ride the coat-tails of that effort. If it happens though, Gramm-Rudman-Hollings will have to be extended considerably into the future, and the whole budget process will probably have to be revised.

Social Security income over expenditures for this fiscal year will be approximately \$60 billion. If that money is taken out of the computation for the deficit, that automatically increases the deficit by \$60 billion, or about 33 percent of the target. Any change in the way Congress and the Administration use the Trust Fund, and any large increase in federal funding will have to have strong grass root support from both industry and governmental interests. This support will need to be militant and continuous. The big question is, how to arouse the American public to action? I don't know. I don't have the answer. I wish I did.

Clearly, we are in a very volatile environment with many changes, challenges and opportunities. To meet these, as I mentioned before, requires close cooperation and communication between industry and government in research, design, construction and getting our message to Washington to increase our federal funding. We all have common goals: better highways and high-performance highways at optimal cost. We should work out our problems together. We should recognize innovation and encourage it, not stifle it. We have to recognize each other's roles and respect them. There is really no heavier burden than great opportunity, and we are looking at a decade of great opportunity.

