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INSTITUTE OF TRANSPORTATION ENGINEERS
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Thank you Alan Gonseth (International President of Institute) and Morey Rothenberg (Chairperson) for the invitation to join you today.

Being an engineer myself, I feel right at home with you. I know what it's like to be working late on an assignment when the computer's crashed, the calculator is out of batteries, and the coffee mug is empty -- all while the clock is ticking away precious minutes.

I know of the hard work, especially the years in school needed to get your degree. Many of your friends choose careers that required less education -- and often more financial reward -- but you stayed the course and became a creative problem solver: an engineer. But those long hours pouring over books and taking endless exams was necessary. Your training as engineers is indispensable to the transportation revolution taking place throughout our country today.

You don't just design bridges or coordinate traffic flows, you link up America: you increase our competitiveness as a nation ... you build a solid foundation for future generations to travel on.

It's a hard but rewarding profession and this nation -- and especially this Department -- couldn't get along without your knowledge or expertise or innovative way of thinking.

Let me now share with you a curious episode from American naval history which also included some creative thinking on the part of a group of sailors.

In 1937, during the Japanese assault on China, the *U.S.S. Mindanao* was bottled up on the Pearl River just outside of Canton. It remained there for six months -- unmolested, but still not free to head out for the ocean.

Bored crewmen made a joke out of their situation by logging the same weather report every day -- noting that the sky was clear except for a single cloud directly above the ship. What they didn't know, however, was that these weather reports were being radioed to Washington. And, in due course, the captain of the ship received a coded message from naval headquarters: **"Proceed 500 yards up river and get out from under that damned cloud!"**

Getting out from under that cloud is exactly what I want to talk to you about today. The "cloud" in this case is the myth that the Bush Administration has not been an active agent of change.

Under the President's dynamic leadership, we've seen momentous changes taking place throughout the globe: the signing of new dramatic arms reduction treaties ... the dissolution of the Soviet Union ... the rebirth of the Baltic states ... Operation Desert Storm ... the liberation of Kuwait.

Without the President's policies no one today could say with certainty that Eastern Europe and the former USSR would be free today. That Kuwait would not be the 19th province of Iraq. Or that we would be on the brink of signing an historical free trade agreement with Mexico. One which will create the largest and richest free-trade zone in the world and send our exports skyrocketing. Without the President's direct involvement, I doubt if any of these events would have happened.

The Mexican free trade agreement is but one example of how our President is building a safer world and a stronger America. At home, he's brokered new legislation on clean air, civil rights, affordable housing, education, child care, and transportation. And now he's working hard to push through the Congress tax incentives for R&D ... measures to allow first-time home buyers to tap their IRA accounts ... major tort reform ... America 2000 and a G.I Bill for children ... and urban enterprise zones.

The President has set an agenda that will make America the most competitive nation in the world. And although our economy continues to grow more slowly than we would like, indicators are improving. Look at the trend lines: GDP has increased for five straight quarters ... inflation is under control ... the stock market is at record highs ... corporate profits are up.

Most importantly, we have as a stimulus for growth a re-energized national transportation system. No nation today can function efficiently or effectively in global markets unless it has the most modern, innovative and intermodal transportation network technically possible.

That's why the President is the champion of maritime reform and trucking deregulation. That's why he's taken the lead in opening the skies for aviation competition. And that's why he's fought so hard for enactment of the Intermodal Surface Transportation Efficiency Act --- I call it ISTEA.

ISTEA is simply the most revolutionary piece of transportation legislation to come down the pike since President Eisenhower's Interstate Highway System. It's a \$155 billion piece of legislation that will pump new investment into the economy over the next six years. And it's a piece of legislation that can't possibly be set in motion without your expertise as engineers.

Again, as engineers you're doers and problem solvers. You're absolutely indispensable to ensure that the promise of ISTEA becomes a reality. So if you're an environmental, or traffic, or electrical, or structural, or any type of transportation engineer we need your expertise. And not only in constructing new facilities, but in transportation planning, operations, and maintenance as well. We need you quite simply to help "engineer" everything from traffic congestion relief, to improving our environmental quality and safety.

Because of ISTEA, employment opportunities for engineers are opening up all over this nation -- from coast to coast. In Idaho, the state department of transportation is looking to hire 18 new engineers. In my home state of Massachusetts, the state highway department is facing a shortage of engineers due to early retirements. They need to immediately hire 70 new engineers, and have plans to hire 30 more. And in neighboring New Hampshire, the state DOT has hired 15 additional engineers and technicians to help accelerate the work. And there are plenty of more examples of how ISTEA is creating good and exciting jobs for transportation engineers.

Now, when I say that ISTEA constitutes a revolution in transportation, I'm not exaggerating. It shatters the old mold. It's a piece of legislation that introduces two new words to the government's lexicon ... "intermodal" and "efficiency." Before ISTEA, surface transportation thinking was very parochial. People saw only their narrow area of responsibility. There was little communication between the different modes -- 'modal myopia' dominated the landscape.

ISTEA changes all that. It tells people in highways to think about mass transit, rail, aviation, shipping. (Examples: National Airport, Huntsville) This is the meaning of intermodalism. It means that all different modes of transportation must come together to form a seamless transportation network. A network that will allow people and products to move from one mode to the other smoothly, without congestion or interruption. The Institute of Transportation Engineers has always been ahead of the curve in thinking intermodally -- and I applaud your foresight and action.

ISTEA is also revolutionary because it gives power back to the states and local communities -- and it offers flexibility. Highway funds can now be shifted to transit programs, to safety programs, or to wetland mitigation. Omaha, Nebraska, for example, is planning to use highway funds to purchase buses.

Under ISTEA, state and local planners and engineers -- those who really know what's needed in their communities -- can now have a greater role in making decisions. You have real flexibility in coming up with solutions rather than being limited by federal constraints.

To see that you get the needed funds to get the job done, I'm doing all I can to make sure ISTEA money gets out of the pipeline. I've been working closely with the governors to see that the money is obligated quickly and responsibly before the end of the fiscal year. And we're encouraging states experiencing financial difficulties to use the temporary waivers on state and local matching funds for both transit and highway projects.

How are we doing so far? As of August 4th, the states have obligated over \$12 billion of federal aid highway funds -- that's almost 76 percent of 1992 funding. Individual states range from virtually 100 percent (South Dakota) to about 35 percent (Hawaii).

We're not giving out money for "business as usual" thinking, however. We want you to excel in what you do so well -- creative problem solving.

Now engineers are devising new ways to give bridges, planes and other structures their own nervous systems, muscles and brains to allow them to sense problems and correct them. Imagine a bridge design where special sensors act as nerves, warning of stress and corrosion. And where metals called "shape memory alloys" serve as tendons and muscles, flexing themselves to compensate for structural weakness.

This is innovative transportation engineering at its very best, and we need more of it -- especially in the area of Intelligent Vehicle Systems. And let me here congratulate today's Achievement Award winners -- *TravTek* -- for their hard working team effort and brilliant application of IVHS technology. Back in March, in Orlando, I had the pleasure of driving a car using the TravTek system, and I can honestly say it was a test drive into the future.

IVHS engineering -- which is partly supported by ISTEA funding -- is already making a difference in the way we transport goods across the country. For example, specially equipped trucks traveling from British Columbia down I-5 to California, and then eastward along I-10 to Texas, can now drive the entire way without having to stop at weigh stations or ports of entry -- all the information will now be collected electronically.

As ISTEA also open doors for private sector partnerships in the building and operating of our transportation infrastructure, there will be further opportunities for you in innovative private sector projects -- such as tollways.

Before I close, I also want you to think creatively in another area -- education. I want you to think of new ways to attract tomorrow's crop of engineers: the young people who must design and manage the transportation system of the 21st century.

The launching of TRAC -- the Transportation and Civil Engineering Careers Center pilot program -- is a great start. This joint project between DOT, your Institute, and similar associations should help inspire young men and women to come into this rewarding and challenging profession. But more needs to be done to ensure that this generation passes the torch of knowledge to the next generation of transportation engineers.

In closing, I've mentioned how the President and this Administration has been an active agent of change -- in international affairs ... domestic policy ... our nation's transportation system.

So, like the *USS Mindanao*, let's get out from under that cloud and see all that is right with America. And how we, as engineers -- as one of the nation's top problem solvers -- can play a constructive role in bringing about a better tomorrow.

Thank you ...

Let's now open the floor to questions.