DEPUTY SECRETARY OF TRANSPORTATION MORT DOWNEY
*ENGINEERING NEWS RECORD* INTELLIGENT HIGHWAY CONFERENCE
MCLEAN, VIRGINIA
DECEMBER 2, 1993

I want to thank Howard Mager (*ENR* publisher) for that introduction and for inviting me here.

This Conference's subject "Building America's Smart Highways" proves that *Engineering News Record* is not merely a chronicler of the industry but a leader in innovative ideas.

Amid all the talk today about "leveraging" our investments in transportation infrastructure and technology, one fact stands out: Intelligent Vehicle Highway Systems are really the perfect transition between our past and the future.

The big questions are: how do we harness IVHS technology and direct our limited resources to transportation infrastructure in ways that will do the most public good? What is the key benefit we aim to provide America's transportation users, the customer-owners of this government?

The answer is "mobility." America is the most mobile society on earth. We have access to more motor vehicles -- 825 for every 1,000 man, woman and child in this country. We use those vehicles more often, 680 million trips daily, and for longer distances -- 10,500 miles a year -- than any people have ever done in history.

I believe we can use transportation infrastructure investment -- especially the dollars we expect to invest in IVHS -- to improve that mobility, to revitalize our nation's economy and to lay the groundwork for long-term, sustained growth.

President Clinton, as you all know, has been fighting for greater investment in transportation infrastructure from the first day of his campaign. The President and Secretary Peña share an equally strong commitment to harnessing technology to improve our transportation system.

Indeed, we all recognize the need to invest. At the same time, we are all keenly aware of the budgetary restraints that all levels of government face in "bridging" the infrastructure investment gap. That's why the President is seeking greater private sector engagement, minimal bureaucracy and maximum "leverage" in his major initiatives. Put in these terms, I think we may find that IVHS will give the public excellent return on the dollar.

It came as a surprise to me but I'm sure not to you, that IVHS is not a new concept. Army engineers were experimenting with a remotely operated motor vehicle in the early 1920's. Engineers of that era dreamed about automated route guidance between New York and Boston.

And some of you may remember the Federal Highway Administration's work on the Electronics Route Guidance Systems in the 1960s. This early IVHS effort withered away because of a 15-year lack of funding. During that time the U.S. lost an early chance to lead the world in IVHS technology. President Clinton is determined to see that this does not happen again -- because we understand that IVHS holds tremendous promise in achieving many of the Administration's priorities in transportation.

First, investing in IVHS will spur our economy and create jobs. It will create new industries and consumer markets. It will put applicable defense technologies to civilian uses. And it will help move freight more efficiently.

Second, IVHS can save lives by making vehicles and roads safer.

Third, IVHS technologies can enhance car pool and transit services that serve to meet clean air standards. These technologies can also dramatically reduce congestion on our streets and highways, which benefits both the environment and the economy.

Fourth, the Administration is committed to transportation research and development as a long-term source of American jobs. IVHS research, including our new cooperative relationship with three IVHS Research Centers of Excellence -- The University

of Michigan, Texas A&M and Virginia Polytechnic Institute -- serves that end.

Fifth, IVHS will improve overall U.S. productivity by helping to integrate all modes of transportation into a seamless intermodal system for moving goods and people. If you visit a typical airport, rail marshalling yard, off-loading area or trucking terminal you will see people waiting hours and containers waiting days for the next transfer. This productivity drain should disappear when advanced IVHS systems enable us to improve mobility.

The applications of IVHS -- ranging from night vision sensors and in-vehicle navigation and safety systems to automated traffic control -- are limited only by the realms of the imagination. And IVHS can help us solve some of the most urgent transport issues of today.

For example, with the adoption of the North American Free Trade Agreement, traffic congestion at the U.S.-Mexican border will increase even beyond what it is today. Currently about 80 percent of the freight between Mexico and the United States is moved by truck and 60 percent of the U.S.-Canadian freight moves by truck.

Earlier this week a *New York Times* article and picture titled "Streets of Laredo" illustrated the problem of trucks backed up at the border. I have no doubt

that dollars will be spent in new highway construction at our international borders, but a wise investment may be in IVHS technology to automate the process of moving those trucks through the border crossings. NAFTA will challenge us to use IVHS technology along international borders. When it comes to measuring the safety and weights of trucks and the condition of their drivers, the technology is available.

As many of you know, we are giving IVHS top priority as a tool to accomplish these and other goals.

But the task will not be easy. The road to full use of IVHS technology is fraught with impediments -- challenges such as liability issues, human acceptance, technical standards, mere coordination of a dramatic national movement and simply buying an IVHS system. Rapid pace change already has placed strains upon the traditional highway procurement process. All these challenges and many more must be met.

To smooth the process, we are establishing a new Joint Intelligent Vehicle Highway Systems Program office to direct all intermodal IVHS policy. This new Office -- located within the Federal Highway Administration -- will be headed by a Director who is also designated as the Department's Executive Agent for overall management and oversight of the national IVHS program.

To give this new Office the full power of the Department, policy direction and coordination will come directly from the Secretary and the highest levels of all modes of surface transportation. We will accomplish this through an IVHS Management Council, chaired by the Deputy Secretary, which just happens to be ... myself.

The Council will provide leadership, generate strategies and act as liaison to other government agencies in conjunction with the Joint IVHS Program Office. The new Council is proof positive of our strong commitment, not only to IVHS but to making IVHS and the whole of our national transportation system intermodal.

The IVHS Management Council will decide on major policy issues and approve the budget and program recommendations of the Joint IVHS Program Office. Its members will include the Associate Deputy Secretary, most assistant secretaries and administrators of all surface transportation modes.

But I can tell you right away that regardless of the clout we at the federal level put behind IVHS, its long-term success will depend upon an unprecedented level of cooperation between the public and private sectors.

A model of successful public-private partnership in transportation is the one between DOT and IVHS America. This group, which is chartered as a Federal

Advisory Committee, deserves real credit for the remarkable progress of IVHS in the past two years.

Members have provided technical expertise, marketing skills and private sector financial support.

With that help, we've been able to move forward with a strategic plan that includes a National IVHS Program, an Automated Highway System, and a National Commercial Vehicle Network.

Forty operational tests are under way today and I can tell you this: From the early operational test on the Santa Monica Freeway to those 40 tests currently in progress, IVHS has proven to be driver friendly.

The multi-state HELP Crescent demonstration project is already accumulating the important data needed to develop the National Commercial Vehicle Network. It will provide vital data on instrumented trucks and weigh stations operating along a corridor from Texas to British Columbia.

In Denver, the Regional Transit District's "smart bus" system is using information supplied by Global Positioning System (GPS) satellite receivers to provide bus location information to transit dispatchers. This translates into increased efficiency, ridership and passenger safety.

In Orange County, California, a privately developed toll road under construction (SR-91) proposes to use automated vehicle identification systems to apply congestion pricing by time of day and by vehicle occupancy.

In Orlando, the TravTek project used sophisticated in-vehicle computers along with GPS satellite receivers to monitor the vehicle's location and provide drivers with valuable route guidance information. TravTek has had strong and favorable consumer response.

And, in Eastern Massachusetts, a phone-based privately operated traffic information reporting system called SmarTraveler generated 130,000 calls during its first 2 1/2 months of operation.

These are just some of the creative ways IVHS technology is affecting the way we do business.

In a time of shrinking budgets, the same creativity and commitment that sparked IVHS is needed to develop new ways to finance infrastructure investment.

The Intermodal Surface Transportation Efficiency Act presents us with major new opportunities for transportation investment in the post-Interstate era. These opportunities enhance our flexibility between highway and transit funds, authorize states to mix federal-aid and private toll-road financing, and

encourage states to contract with private firms for engineering and design services. ISTEA also emphasizes IVHS partnerships.

We are looking hard at ways to increase the availability of resources from the private sector -- and we are finding them.

Last year, for example, the municipal bond market hit its highest level ever for new bonds issued. Surface and air transportation financing comprised the third largest segment of this market. The trend in the municipal market is up and then up some more, from less than $100 billion issued in 1983 to about $250 billion in 1992. Even further growth is expected this year.

The transportation bond market has grown even faster with transportation issues more than quintupling between 1983 and 1992 (from about $5 billion to over $26 billion).

Clearly private transportation finance is a growth industry. The increase in private financing reflects the expanded use of a wide range of financial tools provided by ISTEA.

The Vice President's National Performance Review suggested that ISTEA be amended to allow the use of federal funds to serve as capital reserves to guarantee debt.

As many of you know, ISTEA already allows the states to loan the federal share of highway construction money for private toll roads.

The Vice President's proposal would go one step further, and authorize grant recipients to use federal formula grant funds as capital reserves to back debt financing for eligible projects, including transit projects.

We're also exploring securing transportation debt issues in the same ways as home mortgages; creating government sponsored entities such as Sallie Mae and federal infrastructure banks to make loans and loan guarantees.

In closing, I want to underscore that a new day has dawned at the U.S. Department of Transportation. The Clinton Administration is building a wide range of public-private partnerships -- from defense conversion to worker-training to IVHS.

Whenever it makes sense to enlist the help of private sector partners, we embrace the opportunity to do so. In an era of constrained budgets these partnerships may be the only way of achieving our national goal of a safe, environmentally sensitive, and efficient transportation system across this great land, and the development of the infrastructure that will carry us with pride into the next century.

**As the author, Daniel Boorstin has said, "travel has become the universal catalyst. It has made men think faster, imagine longer and want passionately."**

**Today we can dream big dreams of travel technology and count on those becoming a reality. We can speak passionately of the future of surface transportation because we have a man in the White House who believes in IVHS, who understands the value of new transportation technology, and is willing to work in partnership with states, cities and private business to create America's 21st Century transportation system.**

**Thank you very much.**

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**OUTLINE**
**DEPUTY SECRETARY OF TRANSPORTATION MORT DOWNEY**
**CENTER FOR TRANSPORTATION STUDIES LUNCHEON**
**MASSACHUSETTS INSTITUTE OF TECHNOLOGY**
**BOSTON, MASSACHUSETTS**
**DECEMBER 3, 1993**

## 1. INTRODUCTION

- **I want to thank Yosef Sheffi for that introduction and for inviting me here.**

- **And to congratulate you on the Public Partnership Program which is truly an outstanding example of collaborative technology transfer and training.**

## 2. SUBJECT: PROGRESS REPORT ON GOALS OF CLINTON ADMINISTRATION AND HOW WE AIM TO USE TRANSPORTATION TO ACCOMPLISH THEM.

- **Not a year-end report because we haven't been in office a year and already:**

  **-- Budget showing fiscal responsibility** – emphasize bad news
  **-- NAFTA**
  **-- Health Care**

  Broad achievements of the Administration - DOT playing a significant role

- **Using transportation as the engine to get our economy moving and create jobs.**

  **-- Improve national productivity & competitiveness**
  **-- Intermodalism**
  -- Trade – Guangjoh, SLSDC, TFCC, Hwys, FAA

  NHS/NTS
  Airline Commission
  Maritime Reform
  International Routes/Negot
  American Airlines
  LAX

- **Means more and better investment in transportation infrastructure**

  **-- 94 Appropriations Bill** – More $, less earmarks, criteria, 3J
  **-- Partnerships with Private Sector** – Investment vehicles
  ~~FF~~ FTA Privatisation

- Continued ~~stress~~ dedication to safety
  - Rail accidents
  - NHTSA/Health care linkage

- **Emphasis on technology and R & D**

  **-- High speed rail** /maglev  AAS Commercial Space  GPS
  **-- IVHS**
  ~~**-- Collaboration with universities**~~

- **Defense conversion** – DoT inclusion in TRP

  **-- many defense technologies have transportation applications** — Comp. bridge, Jaws of Life, Maritime, AEGIS, Computers

- National Security: border control (drugs + immigrants);
- **Humanization of transportation** – Pro Transit, Emergency Response - Floods
- **Environment** - Air Quality (Plnng Reqs + Conformity); **OPA**; Clean Car
- Reinventing Government - downsizing, customer Focus (ISTEA outreach), working smarter, regulatory reform

3. **CONCLUSION**

- **Administration that knows how to get the job done and is committed to working in partnership with state and local governments, academia, the private sector to use all our resources -- both human and technological.**

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- Using transportation as the engine to get our economy moving and create jobs.

  -- Improve national productivity & competitiveness
  -- Intermodalism

- Means more investment in transportation infrastructure

  -- 94 Appropriations Bill
  -- Partnerships with Private Sector

- **Emphasis on technology and R & D**

  **-- High speed rail**
  **-- IVHS**
  **-- Collaboration with universities**

- **Defense conversion**

  **-- many defense technologies have transportation applications**

- **Humanization of transportation**

- **Environment**

## 3. CONCLUSION

- **Administration that knows how to get the job done and is committed to working in partnership with state and local governments, academia, the private sector to use all our resources -- both human and technological.**

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**TALKING POINTS**
**PUBLIC-PRIVATE PARTNERSHIPS SEMINAR**
**DEPUTY SECRETARY OF TRANSPORTATION MORTIMER DOWNEY**
**WASHINGTON, D.C.**
**DECEMBER 6, 1993**

## A. Demands for Infrastructure Funding Compel Partnerships

* **This is a timely and important meeting, given President Clinton's emphasis on rebuilding America's infrastructure to ensure our economic competitiveness.**

* **Growing travel demand and an aging infrastructure have increased the need for maintenance and improvement of roads and bridges.**

* **Public funding can't always meet the full demand: new federal funding is limited because of the commitment to balance the federal budget and the need for fuel tax revenues to help with deficit reduction.**

* **Moreover, other important policies could limit future growth in fuel tax revenues (alternative fuel tax advantages, measures to control VMT).**

* **Private or public-private toll roads, bridges, and tunnels have a long history in the U.S., although they've been deemphasized over the past 30 years in favor of fuel tax-supported facilities.**

* **Today, public-private partnerships for highway funding, operation, and development provide an attractive alternative, and are one of a number of innovative ways to develop and finance projects.**

* **We're looking hard at ways to increase the availability of private sector resources - and finding them. Last year, the municipal bond market hit its highest level ever for new bonds issued, with transportation financing comprising a third of the market.**

* **Transportation issues have quintupled over the past nine years, to over $26 billion. At $11 billion, highways comprise the largest portion of this, having increased from $750 million in 1983 to $11 billion by 1992. Mass transit also has grown, from less than $2 billion to over $5 billion.**

* **Recent changes in technology, such as vastly more efficient toll collection, and state and federal laws have increased the possibilities, and increased travel could create markets sufficient to ensure an adequate return on private investment.**

## B. Impacts of ISTEA and Technology

* **ISTEA expands the availability of Federal-aid to include more new toll road construction, reconstruction of current toll facilities, and the reconstruction and conversion of free roads to toll roads at up to a 50 percent federal share. (80 percent for certain bridges and tunnels.)**

* **In addition, the CMAQ guidance explicitly makes public-private partnerships an eligible activity in the drive for improved air quality.**

* **ISTEA provides opportunities for states to enter into cost-sharing arrangements with the private sector. It permits extensive private participation in these projects, increasing leveraging of public funds.**

* **Several states have enacted or are considering legislation permitting toll road development by public-private partnerships. Nine (Arizona, California, Colorado, Florida, Missouri, Texas, Minnesota, Virginia, and Washington) have such laws, and others are considering them.**

* **ISTEA offers potential for new financial technology, including Federal-aid funding of state-level loan funds for private and cooperative projects. States can now work with private entities to develop concessions, franchises, and such contractual arrangements as loans and grants. ISTEA establishes a level playing field for funding options.**

## C. What DOT/FHWA are Doing to Help

* **DOT and FHWA have sponsored two previous meetings on public-private partnership opportunities under ISTEA, with informative proceedings published.**

* **FHWA has two ongoing research projects reviewing current partnering practices and procedures, identifying barriers and strategies for overcoming them, and providing technical assistance.**

* **DOT is actively considering a wide range of additional options to meet infrastructure needs. Ideas suggested include revolving funds, loans, loan guarantees, credit enhancements, and capital reserves to further stimulate investment.**

## D. The Future of Infrastructure Partnering

* **USDOT looks to private participation in some or *all* aspects of infrastructure projects: origination, financing, construction, operation, and maintenance.**

* **We will work with the states and private sector to overcome legal and institutional (planning process coordination) barriers.**

* **The Administration views the private sector as a critical partner in developing innovative and efficient solutions to public policy problems, and wants to facilitate its involvement.**

* **Vice President Gore's National Performance Review stresses the need to rely more on market incentives, and less on new programs, as we reinvent government.**

* **This isn't an abdication of public responsibility, but a recognition that government can't do it all alone.**

* **From defense conversion to worker training to transportation, the theme of new public-private partnerships is consistent in the Clinton Administration's approach.**

* **ISTEA answers the challenge of meeting national infrastructure needs by expanding the spectrum of available resources and offering opportunities for creative involvement by new parties. We hope that the states and the private sector will seriously examine the potential of these partnerships.**

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TALKING POINTS PREPARED FOR
DEPUTY SECRETARY OF TRANSPORTATION MORT DOWNEY
NATIONAL CAPITAL AREA INTERNATIONAL AUTO SHOW
WASHINGTON, D.C.
DECEMBER 22, 1993

- I'd like to congratulate Geof Pohanka (show chairman) on this outstanding event.

- I'm delighted to join Robert Eaton (Chrysler and AAMA Chairman), Andy Card, (AAMA President), Phil Hutchinson (Association of International Manufacturers President) and all of you in opening this best ever 52nd Washington Auto Show.

- This event is historic not only because it marks a milestone -- yesterday was the 100th anniversary of the American automobile -- but also because it launches a bright new future.

- This is a future marked by a partnership between the Clinton Administration and the auto industry.

- We share the most basic goals -- creating new jobs, opening markets, spurring new technology, increasing the efficiency of our transportation system and improving America's environment.

- And this still young partnership has heightened our national enthusiasm for:

  -- the "Quality Car" which many of you celebrated on the Mall in April.

-- the "Safe Car" which more and more often is the feature of advertising and consumer interest.

-- the "Smart Car" -- some early versions are exhibited here as we move forward together on Intelligent Vehicle Highway Systems, IVHS, an Administration priority, limited only by the realms of the imagination ... Smart cars that will relieve congestion, improve safety and best of all please the customer.

-- and as soon as we can produce it, the "Clean Car"-- a revolutionary commitment by the Big 3 to a government/industry research partnership to develop a vehicle that will lead the whole world into the next century ... into a cleaner environment.

- As we look out over seven acres of exhibits of technological wonders from all over the world, this is the time for all of us to recognize -- as this Washington Auto Show does so magnificently -- that ours is a truly international auto industry.

- Not only are U.S. jobs tied to foreign auto manufacturers who have invested in this country but we live and do business in an increasingly global marketplace as approval of the North American Free Trade Agreement -- NAFTA -- and the General Agreement on Tariffs and Trade -- the GATT -- proved.

- Those two agreements of 1993 dramatized the international aspects of our economy.

- NAFTA and the GATT open up whole new vistas of trade -- two-way trade -- for the United States.

- So, as we tour the exhibits and enjoy the technology that is ours today as American consumers, let us look with confidence to the future.

  -- A future marked by a strong competitive auto industry leading our economy with increased sales, technology not yet dreamed of, an industry in harmony with the environment and in partnership with the Administration in Washington.

  -- We share in partnership both the challenges and the rewards of a free market and a people committed to excellence.

- Thank you very much.

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