

from the March 2006 Transportation Improvement Forum

Driving Economic Growth











Dear Partner in Transportation Improvement:

Our nations' surface transportation system is in crisis. A serious lack of funding, deteriorating infrastructure and rising congestion threaten America's economy and our status as a world leader.

The gap between the revenues we have and the investments we need to make, just to keep our highways in their current condition, is more than \$1 trillion over the next two decades.

This is not news. What is news is that there is no nationwide outcry for concerted action to address the problem. Our lack of investment and the congestion that results is like a thief in the night. Rather than robbing our mobility all at once, it steals a little each day until our quality of life has been irreparebly damaged.

In the summer of 2005, we all witnessed the flooding and near disappearance of New Orleans due to Hurricane Katrina. Much of the damage to that region of our country could have been prevented by patient and persistent investment in the levy system and other measures to strengthen the infrastructure of the Gulf Coast. But we as a nation deferred those investments, to disastrous effect.

The transportation crisis we face in the coming years will be the equivalent of 1,000 Katrinas in terms of lost jobs and productivity and damage to the U.S. economy — stemming from congestion, gridlock and the sheer inability to move in our urban areas at all times of the day and night. We have allowed the proverbial levees of our surface transportation system to remain in disrepair far too long. The time to act is now.

That's why we convened the Transportation Improvement Forum in California in March 2006. We did it to let the world know we care about our nation's transportation system and we're willing to fight to bring it back from the brink of death.

In August 2005, Congress passed and the President signed into law the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Among other things, that Act created a National Surface Transportation Policy and Revenue Study Commission to research and present options to Congress on what our nation's future transportation system should look like and how it should be funded.

We present to the Commission this report on our Forum as a clear articulation of the challenges facing America's transportation system and a blueprint for making that system work once more.

The challenges are many but we need not face them alone. We are leaders in delivering mobility through our expertise in transportation finance, technology, management, operations and customer service. We the members of the International Bridge, Tunnel and Turnpike Association and our friends stand ready to assist the Commission in any way we possibly can.

Sincerely,

James L. Ely, Ph.D.

Presiding Officer, Transportation Improvement Forum First Vice President, International Bridge, Tunnel and Turnpike Association Executive Director and CEO, Florida's Turnpike Enterprise

Table of Contents

Executive Summary	2
Setting the Stage	6
The Participants	8
Evidence of the Growing Challenge of Congestion and Inadequate Funding	10
Toward a Purpose Driven Transportation Policy	12
Freight: A Key Barometer of Economic Health	14
The Changing Face of the American Workforce	15
Bottlenecks in Surface Transportation	16
Institutional Fixes: Thinking Outside the Coffin	18
The Marketplace: a Source of Solutions	20
Conclusion	22



Executive Summary

On March 20-21, 2006, the International Bridge, Tunnel and Turnpike Association hosted its first ever "Transportation Improvement Forum" in Santa Monica, California. On the first two days of spring, more than 150 transportation practitioners, scholars, business executives, and city, state and federal government officials came together to focus on what must be done to solve the most critical problems in surface transportation in the U.S. and articulate a coherent vision for an effective, productive, well-funded surface transportation system across modes.

The significance of meeting in Southern California was lost on no one. As an independent country, California would be the fifth largest economy in the world. And the combined Port of Los Angeles/Long Beach — which many of the transportation leaders visited the day before the conference — is the fifth busiest port in the world. But Southern California is also home to the worst traffic congestion in America. All the more reason to hold IBTTA's first Transportation Improvement Forum in this paradoxical cradle of economic growth and gridlock.

In the course of the two-day Forum, transportation leaders acknowledged that while the United States boasts the largest economy in the world, it also suffers from a huge surface transportation investment deficit. The gap between the funds we have and the funds we need just to keep our highways in their current condition over the next 20 years is more than \$1 trillion.



Several major themes emerged from this Forum:

- 1. WEAKNESS OF THE FUEL TAX. The fuel tax is rapidly losing its position as the dominant means of funding surface transportation, and we must find alternatives that are more efficient and equitable.
- RISE OF DIRECT USER FEES. Direct user fees including tolls, variable pricing, congestion charging and road use metering — hold enormous promise for filling the funding gap or even supplanting the fuel tax over time.
- 3. COMMERCIALIZATION AS AN OPTION. Because both public and private entities have a stake in guiding transportation investments, commercialization of the transportation network through "Regional Mobility Corporations" is one possible option to leverage the "public service" features of governmental entities and the "profit and efficiency motives" of commercial enterprises.
- 4. THE KEY ROLE OF FREIGHT. Freight movements must be central to surface transportation planning because U.S. freight volumes will nearly triple over the next two decades. Freight planning must also include issues associated with cross border freight movements. With 10 federal agencies involved in regulating and managing freight movements, greater coordination of freight planning must be a priority to avoid the problems of stove piping.
- 5. INVOLVING KEY CUSTOMERS IN DECISION-MAKING. Key customers of the road network, including automobile users and trucking companies, already feel burdened by the investments they have made in the existing highway network and are demanding measurable improvements in service quality and availability as a precondition for further investments. These constituencies must be an integral part of the discussions about how future investments will be made and the level of those investments.



on a strong a lack infrastructure and growing

- **OVERCOMING INSTITUTIONAL BARRIERS.** The arrival of the 50th 6. anniversary of the Interstate Highway System has brought a renewed awareness of the deficiencies of the current scheme for funding and managing highway development. We must move aggressively to overcome the barriers to the creation of net new revenues and develop new institutions to support a more efficient transportation system.
- PUBLIC EDUCATION CAMPAIGN. While the public is aware on some level that 7. the surface transportation system is failing, it is not yet motivated enough to take concerted action to force change. A key step in solving the crisis, therefore, should be a multi-faceted education campaign that outlines the current problems and the costs and benefits of potential solutions. Such a campaign would help motorists make the connection between transportation and the quality of their every-day lives and inspire them to urge policy makers to fix the problems and make necessary investments in transportation. It is widely believed that politicians lack the will to raise taxes, but some presenters expressed the view that voters may be more supportive of tax hikes or new tolls if they better understood the importance of transportation — what it means to the economy, global competitiveness and most important, their quality of life. A grassroots effort may be necessary to convince lawmakers that supporting such measures is not political suicide.
- 8. **LEADERSHIP.** The problems of the current system have been clearly documented. Most of the participants agree that the nation's economy depends on a strong transportation system, but the system is in crisis because of a lack of funding, deteriorating infrastructure and growing congestion. Several presenters urged that SOMEONE needs to stand up and take a leadership role in bringing about change instead of continuing to talk about the problem. Even if that means a small coalition as opposed to one organization, company or individual, most presenters seemed to agree that positive change will not happen without solid, visionary leadership.

More than 30 transportation and business organizations sponsored this Forum

including associations representing road builders, state departments of transportation, metropolitan planning organizations, state legislators, county engineers, retailers, public transit and others. There was tacit agreement that we need to work in concert to create and advance a political strategy to make the changes necessary to increase transportation funding and improve transportation policy making. As U.S. patriot Benjamin Franklin said on signing the Declaration of Independence, "We must all hang together, or assuredly we shall all hang separately."

The following letter appeared on the editorial page of the Los Angeles Times on the first day of the Transportation Improvement Forum, March 20, 2006. The writer refers to Governor Schwarzenegger's infrastructure bond initiative and the reasons why the state legislature rejected it.

The Times' analysis of the failure of the infrastructure bond (March 17) quotes GOP strategist Kevin Spillane as saying that average voters feel little passion about infrastructure and would prefer that state leaders focus on schools, healthcare and jobs. Perhaps that is the real failure — to help the public see the fundamental link between infrastructure and the high quality of life we take for granted.

Last summer, we watched an entire city wither before our eyes without the water supply, power, communications and mobility that modern infrastructure provides. In California, any number of factors could cause critical systems to fail and cascade into a New Orleans-level disaster. But we remain skeptical of calls for increased investment to maintain existing systems and build new ones. The task of ensuring the reliability of our many critical systems will be long, arduous and costly.

Perhaps the next step should be to convince the public that infrastructure does matter so they demand that officials invest wisely in our critical systems.

RICHARD G. LITTLE, Los Angeles The writer is director of USC's Keston Institute for Infrastructure.

Average voters feel little passion about infrastructure.

The task of ensuring the reliability of our many critical systems will be long, arduous and costly.

Transportation Improvement Forum March 19-21, 2006 Santa Monica, California



Setting the Stage

In the opening session of the Forum, speakers representing the toll industry and state government set the stage for later presentations by talking about some of the larger themes that will drive positive change in surface transportation funding and policymaking.

In opening remarks, **Mr. Ely** said he had witnessed tremendous deterioration in America's surface transportation system during more than three decades of public service.

"I guess the best analogy for America's transportation system is that of a fifty year old patient who, in her youth, was young and vibrant. Now, the patient over time has congested arteries, resultant stress, high blood pressure and lethargy. For the next two days, all of you in this room are the attending physicians who will have an opportunity to diagnose our patient, share your prognosis and prescribe a remedy."

Mr. Jones talked about the frustration that most transportation professionals feel because of the inadequate level of funding which has led to the deterioration in road infrastructure and rise in traffic congestion. He used the term "barely contained insanity" to refer to the frustration people feel at the inability to increase funding levels and change transportation policymaking.

"We see barely contained insanity in the white-knuckle grip of commuters who are trapped behind the wheel in stop-and-go traffic because the highway system on which they are riding has exceeded the limits of its capacity. Limits that were reached a decade ago.

"And we hear barely contained insanity in the angry rants of state governors and DOT secretaries whose transportation budgets are spent — literally and figuratively. Indeed, the transportation needs are so great that these same DOT secretaries could easily spend all of their transportation revenues for the next 10 years — TOMORROW — and still not eliminate their enormous backlog of projects.

"The goal of this Transportation Improvement Forum is to transform this insanity into RESOLVE. We resolve to look insanity squarely in the eye and, without blinking, to embrace a new vision with reason, purpose, and accountability."

Mr. Sedlik talked about Governor Schwarzenegger's infrastructure bond initiative and its recent rejection by the state legislature. He noted that it is very difficult to be in favor of infrastructure improvement at the moment. He added, however, that California has a

Pictured from top to bottom: Jim Ely, Patrick D. Jones, Barry R. Sedlik and Mike Krusee.

population of 37 million today and will add 11 million new residents in the next decade and a half.

California must continue to invest in infrastructure to handle the increased demand on its transportation system. Governor Schwarzenegger has organized his cabinet departments into work groups to avoid the silo mentality and to encourage the state's top officials to look at issues in a coordinated and comprehensive way. Road funding is an important issue, and the governor intends to use public-private partnerships to leverage bond financing.

Mr. Krusee endorsed the concept of toll financing and criticized the utility and equity of fuel taxes. He argued that we shouldn't impose tolls or do concession agreements just because we can. He said we should use tolls and other user fees because they are more fair. He argued "Think of it this way. You have a house. You have worked all your life and paid off its mortgage. It is worth hundreds of thousands of dollars. But you have twenty years left to live. So what do you do with it? You could get a reverse mortgage, spend all the money on yourself, die, and leave your kids with the debt. Or, you can live within your means and leave them an asset: a house free and clear to live in, or give them options for their lives with the money from selling it.

Public officials face the same choice: what are we going to leave for the next generation?

So here is the lesson we have learned: Tax roads are depreciating liabilities. They are like an old car. It costs more and more to maintain it and it is eventually worthless and in need of costly replacement.

Toll roads are the appreciating asset of a business. It pays for itself and becomes more valuable over time. Like any profitable, revenue-generating business, it provides its owners (the public) with wealth and options for growth.

States that choose to live exclusively off the gas tax are leaving the next generation a debt, a decrepit system and no options for their future.

We in Texas have chosen instead to leave our children with an appreciating asset, a functioning economy, and funded options for their future. We are proud of it."

-Mike Krusee

the gas tax is unfair, inefficient and inequitable and pointed out that if Texas funded public education the way it uses gas taxes to fund roads, the courts would throw it out.

He urged the delegates to look at transportation as a utility. He also likened the investment in roads to your investment in a home.

Jim Ely is the Director and CEO of Florida's Turnpike Enterprise and First Vice President of IBTTA. He presided over the Forum. **Patrick Jones** is Executive Director of the International Bridge, Tunnel and Turnpike Association. **Barry Sedlik** is the Undersecretary and Senior Advisor for Economic Development in the Business, Transportation and Housing Agency of the State of California. **Mike Krusee** is a Representative in the Texas House of Representatives and Chairman of its Transportation Committee.

The Participants

Evidence of the Growing Challenge of Congestion and Inadequate Funding

Martin Wachs, Ph.D., is Director of the Transportation, Space and Technology Program of the RAND Corporation. Until the end of 2005 he was Professor of Civil & Environmental Engineering and Professor of City & Regional Planning at the University of California, Berkeley, where he most recently served a six-year term as Director of the Institute of Transportation Studies. **Tim Lomax, Ph.D., P.E.**, works within the Mobility Analysis Program at the Texas Transportation Institute. **Ed Mortimer** is Director, Transportation Infrastructure, U.S. Chamber of Commerce, and Executive Director, Americans for Transportation Mobility.

Toward a Purpose Driven Transportation Policy

Joseph M. Giglio, Ph.D., is Professor of Strategic Management in the Graduate School of Business at Northeastern University.

Freight: A Key Barometer of Economic Health

Martin E. Robins, is Director of the Alan M. Voorhees Transportation Center, Edward J. Bloustein School of Planning and Public Policy at Rutgers University. **Michael Huerta,** is Senior Vice President and Managing Director, ACS State and Local Solutions

The Changing Face of the American Workforce

Ken Morefield, P.E., is National Transportation Director for Jacobs Civil, Inc.

Pictured from top to bottom: Martin Wachs, Ph.D., Tim Lomax, Ph.D., P.E., Ed Mortimer, Joseph M. Giglio, Ph.D., Martin E. Robins, Michael Huerta and Ken Morefield, P.E.

Bottlenecks in Surface Transportation

Tim Lynch is Senior Vice President, Federation Relations and Strategic Planning for the American Trucking Associations (ATA). **Steve Lenzi** is Senior Vice President of Public Affairs of the Automobile Club of Southern California. **James LaBelle** is Deputy Director of Chicago Metropolis 2020 and leads policy development in the areas of freight, land use, growth, and transportation. **Thomas F. Jensen** is a Vice President in the Washington, DC, office of United Parcel Service (UPS).

Institutional Fixes: Thinking Outside the Coffin

Mary Peters is National Director for Transportation Policy and Consulting for HDR, Inc., and former Administrator of the Federal Highway Administration of the U.S. Department of Transportation. **Allan Rutter** is Executive Director of the North Texas Tollway Authority. **Steve Heminger** is Executive Director of the Bay Area Toll Authority and the Metropolitan Transportation Commission. **Ronald Kirby** is Director of Transportation Planning for the Metropolitan Washington Council of Governments.

The Marketplace: a Source of Solutions

Bob Poole is Director of Transportation Studies for the Reason Foundation. **Gary Hausdorfer** is Chairman and CEO of Cofiroute USA. **Grant Holland** is Senior Associate for Wilbur Smith Corporation. **Christopher Voyce** is a Division Director in the Corporate Finance Division of Macquarie Securities (USA) Inc.

Pictured from top to bottom: Tim Lynch, Steve Lenzi, James LaBelle, Thomas F. Jensen, Mary Peters, Allan Rutter, Steve Heminger, Ronald Kirby, Bob Poole, Gary Hausdorfer, Grant Holland and Christopher Voyce.



Evidence of the Growing Challenge of Conge

California will raise almost as much money for transportation purposes from local option sales taxes as it does from the fuel tax.



What if there were no Highway Trust Fund? In all likelihood we would improve what we do, how we do it and how we talk about it. **Dr. Wachs** (moderator) emphasized that the fuel tax has suffered huge losses in purchasing power at the state level. Because of this and other factors, traffic congestion and the amount of time spent traveling is rising over time. He noted that California will raise almost as much money for transportation purposes from local option sales taxes as it does from the fuel tax. In real terms, receipts from the state gas tax have fallen below 1970s levels and sales taxes are making up the difference. One of the reasons for the popularity of the local option sales tax in California is that voters are able to select fixed terms for the tax as well as the specific projects on which to spend the tax.

Dr. Lomax talked about the results of TTI's 2005 Urban Mobility Report of which he is a co-author. The headlines are: Congestion is growing; we need a range of solutions; the current situation affects the future; and everyone has a role in the solution, including agencies, citizens, businesses and private owners. In 1982, collectively we endured 700 million hours of delay on our nation's roadways; by 2003, the total hours of delay had risen to 3.7 billion hours. Congestion is getting worse in cities of all sizes. And the total congestion "invoice" for the 83 urban areas studied in 2003 is \$63 billion.

What are the solutions? According the 2005 Urban Mobility Report, "The problem has grown too rapidly and is too complex for only one technology or service to be 'the solution.' The increasing trends also indicate the urgency of the improvement need. Major improvements can take 10 to 15 years and smaller efforts may not satisfy all the needs." So TTI recommends "a balanced approach — begin to plan and design major capacity increasing projects, plans or policy changes while immediately relieving critical bottlenecks or chokepoints, and aggressively pursuing operations improvement and demand management options that are available."

Dr. Lomax raised this hypothetical question: What if there were no Highway Trust Fund? If that were the case, our decisions about transportation would be more complicated because highway spending would have to compete with other needs. On the other hand, we would also spend more time talking about the benefits of a sound transportation system. In all likelihood we would also improve what we do, how we do it and how we talk about it.

Moving forward, he urged transportation practitioners to adopt a clear set of goals and a message — consensus, goals and spending go together. Transportation leaders need to deliver projects and service reliably, be accountable and involve the business community. In the short term, do the "small" things well: eliminate crashes and improve road signals, maintenance, bottlenecks and accountability.

stion and Inadequate Funding

Mr. Mortimer talked about the U.S. Chamber Foundation's Future Highway and Public Transportation Finance study. The purpose of the study was to identify funding mechanisms to meet national surface transportation investment needs over the next 25 years.

First, and not surprisingly, the study found there is a massive national funding gap for highway and transit needs. In the period 2006-2015, there is a \$507 billion gap between existing revenues and cumulative needs to maintain the current system, and a \$1.1 trillion gap between revenues and needs to improve the system.

Second, the Highway Trust Fund (HTF) could be in deficit as early as 2008, well before the end of the SAFETEA-LU authorization period. Related to this finding, the study also concluded that motor fuel tax revenues are vulnerable in the long term. The study predicts that in the period 2015 to 2020, the growth in fuel tax revenues will erode as alternative fuels and non-petroleum powered vehicles capture a larger share of the market.

Third, the study recommended the following short-term solutions to close the revenue gap and prevent the HTF from going into deficit: index the Federal motor fuels tax, capture the interest on trust fund revenues and encourage the use of tolling, private participation in infrastructure investment and other forms of innovative finance.







Finally, in the long-term the study recommends that states and local governments implement a two-tier, mileage-based transportation revenue system. Tier 1 would be a state-based vehicle-miles-of-travel (VMT) fee charged for all miles driven; and Tier 2 would be a local option VMT fee charged for miles driven on congested roadways to price and manage congestion.

Concluding his presentation, Mr. Mortimer emphasized that the federal government is NOT the solution. And, addressing the transportation practitioners in the audience, he said "if you provide transportation options that provide predictability, people will step up to tolling." In the period 2006-2015, there is a \$507 billion gap between existing revenues and cumulative needs to maintain the current system, and a \$1.1 trillion gap between revenues and needs to improve the

system.

The Highway Trust Fund (HTF) could be in deficit as early as 2008, well before the end of the SAFETEA-LU authorization period.



Toward a Purpose Driven Transportation Policy

This process begins by establishing independent regional mobility corporations in our major metropolitan regions where traffic problems are most severe.

Dr. Giglio delivered the keynote address at lunch on March 20, 2006. He challenged the delegates to consider new models for transportation finance and to look beyond the narrow interests of individual modes and regions. Here is an excerpt from his speech:

In this talk, I have outlined a three-step process for applying pricing to the nation's roadway system.

- :: This process begins by establishing independent regional mobility corporations in our major metropolitan regions where traffic problems are most severe. These corporations would take over all responsibility for roadways in their regions and be owned by partnerships of government, private firms and passive investors. They would support themselves by implementing user charges on their region's limited-access highways, based on a pricing structure that can generate enough revenue to meet all of their region's roadway needs.
- :: The next step would be for regional mobility corporations in adjacent metropolitan regions to form jointly owned subsidiaries to take over responsibility for the rural transportation corridors that link them together. These subsidiaries would implement motorist user charges on the Interstate highways in these corridors to generate the revenue necessary to meet its roadway needs. As this concept spreads across the country, virtually all roadways would eventually become supported by motorists through user charges. Ending forever their dependence on fuel taxes and the general tax revenues of state and local governments. Able to generate the funds required to make the nation's roadways a spur to economic growth rather than a constraint.
- :: The third step is the most radical. It involves using some of the revenue generated by motorist user charges as a source of funds to help support other surface transportation modes. There is no sensible reason why freight shipments that can be moved by rail should burden the roads except that the nation's privately owned freight rail network currently lacks the capacity to accommodate more freight shipments and can't generate the funds on its own to support more capacity. The same is true of mass transit systems in major metropolitan regions. They could take many commuter trips off urban roadways during high demand periods if they had sufficient capacity which they can't currently afford to build. Motorist user charges represent the only new source of transportation revenue. Doesn't it make sense to use some of it to help support complementary surface transportation systems rather than mindlessly struggle to build more roadway lane miles ad infinitum?



One of the most obvious advantages of these regional mobility corporations is their ability to generate significant amounts of equity cash by selling shares in the private sector. This reduces their need to issue debt for capital reconstruction and expansion. Therefore, they take the next step beyond the traditional public authority model by having a financial structure that is both equity-based and debt-based. Just like any large modern business enterprise.

This is a sensible idea on its face, and the technology is already in place to put it to work.

But it is only an idea. To turn it into reality demands intelligent and aggressive leadership to craft the kind of political strategy that this vision requires. One of the critical goals of this strategy is to bring Congress and the White House on board for the legislation needed to provide the flexibility to implement user pricing on the nation's highways where it is applicable, and to involve the federal government in a broader spectrum of capital loan and loan guarantee programs.

Where is this leadership to come from?

From my perspective, it should come from those of you who are already in the business of selling roadway access to motorists. Your successful track record building and operating toll bridges, toll tunnels, and toll turnpikes gives you the know-how to implement your basic concept of self-supporting roadways on a national basis. And in the process, turn the American roadway system into one of the most important contributors of its future economic growth.

But let's face it. You are not the only candidates for this leadership mantle. Competitors include the various private firms who are buying up existing toll roads on a piecemeal basis (as in Chicago and in Indiana) and seeking state franchises to build from scratch entirely new toll road corridors. Their agendas are simple and transparent — to gain control of income-producing roadways as a basis for maximizing stockholders wealth. In this context, better transportation for the nation may tend to be something of an afterthought.

You must decide whether to let these or other competitors win. At stake is the future of your business and who ends up controlling the nation's surface transportation future.

One of the most obvious advantages of these regional mobility corporations is their ability to generate significant amounts of equity cash by selling shares in the private sector.

Freight: A Key Barometer of Economic Health

Management of freight has not been as efficient as one might expect. Indeed, 10 different federal agencies are involved in the management of goods movement.

PierPASS uses a peak-hour fee to shift truck traffic to new off-peak hours. In the first two months of operation, PierPASS has achieved the two-year goal of 20 percent reduction in truck congestion. **Mr. Robins** (moderator) based his remarks on "Principles for a U.S. Public Freight Agenda in a Global Economy," an article he co-authored with Anne Strauss-Wieder which was published as part of the Brookings Institution Series on Transportation Reform in January 2006.

To emphasize the importance of freight to the economy, Mr. Robins noted that there had been a doubling of container traffic at the ports of Los Angeles/Long Beach and the ports of New York/New Jersey between 1995 and 2004. And between 1988 and 2004, the United States experienced a quadrupling in rail intermodal traffic. But the public management of this freight has not been as efficient as one might expect. Indeed, 10 different federal agencies are involved in the management of goods movement.

Based on his article, Mr. Robins outlined "a recommended set of guiding principles for establishing and managing a freight agenda for public sector agencies. These principles would:

- Use a systems approach to organize government's freight agenda; move away from single mode approaches and structure government funding sources to address intermodal projects.
- Promote meaningful coordination and cooperation among public agencies to advance the freight agenda.
- Encourage meaningful coordination and collaboration among public agencies and private sector freight operators."

Mr. Huerta discussed a very practical approach to address some of the freight congestion problems in our nation. He described a program administered by his company called "PierPASS" which is designed to relieve congestion at the Ports of Los Angeles and Long Beach. PierPASS, a technology based fee collection system, uses a peak-hour fee to shift truck traffic to new off-peak hours of 6 p.m. to 3 a.m. Monday through-Friday and 8 a.m. to 6 p.m. on Saturday. In the first two months of operation, PierPASS has achieved the two-year goal of 20 percent reduction in truck congestion. With PierPASS in place, 35 percent of daily container traffic now moves in off-peak hours, and peak-hour traffic on the 710 freeway is down 24 percent according to an independent study.

PierPASS is significant because it is a private sector solution to a public problem. The system has support from both shippers and the unions and has reduced truck idling and pollution.

The Changing Face of the American Workforce

Mr. Morefield began his presentation by asking whether the U.S. workforce can meet the growing demand to deliver the nation's transportation program. He noted a confluence of forces in the U.S. economy and transportation that could affect the answer to this question:

- :: Privatizing or outsourcing toll agency engineering, operations and administrative functions;
- :: Outsourcing various projects and functions overseas; and
- :: Changes in the engineering graduation rates at U.S. universities.

Mr. Morefield noted that India and China together are graduating more than three times as many engineers annually as the United States. This development, combined with the current trend to outsource certain business functions to private or overseas firms, suggests that transportation owners and operators will have to adapt to new ways of doing business. These trends may have less influence on what the American workforce ultimately looks like than on the functions they perform in the future.



India and China together are graduating more than three times as many engineers annually as the United States.



Bottlenecks in Surface Transportation

With respect to where the funding comes from, we in the trucking industry are not ready to relegate fuel taxes, registration fees and special permit fees to the dustbin of history The presentations by Tim Lynch, Steve Lenzi and Tom Jensen were reminiscent of the scene in the 1976 movie Network in which fictional television news commentator Howard Beale, portrayed by actor Peter Finch, looks into the camera to tell his television audience how bad things are. At the end of this commentary, Beale tells his viewers, "I want all of you to get up out of your chairs...and go to the window, open it, and stick your head out and yell, 'I'm as mad as hell, and I'm not going to take this anymore!'"

Well, it wasn't that angry. But Messrs. Lynch, Lenzi and Jensen made it clear that the constituencies they represent have invested hundreds of billions of dollars in highways and are reluctant to invest more without assurances about how and where the money will be spent.

Mr. Lynch (moderator) made the case that the trucking industry is a huge part of the U.S. economy and hauls 88 percent of the nation's freight bill. "With respect to where the funding comes from, we in the trucking industry are not ready to relegate fuel taxes, registration fees and special permit fees to the dustbin of history." He noted the National Highway System is 160,000 miles of roads — representing less than 4 percent of the total road network — but handles 75 percent of all truck freight. He added that while ATA and its members are concerned about where highway money comes from, they are increasingly concerned about where it goes. Too much of it, in his view, is diverted to non-highway purposes. If the trucking industry is expected to make a bigger investment in highways, then it needs reassurance that the money it pays now in fuel taxes will go to fund highways.

Mr. Jensen emphasized the size, scale and importance of UPS as an intermodal carrier of freight by land, sea and air. He noted that UPS is the largest customer of every Class I railroad in the country. He said he is especially interested in movements that are land-sea-land, because this is where UPS will experience its biggest growth in years to come.

Mr. Lenzi described California as the fifth largest economy in the world and Southern California as the twelfth largest. Southern California will add a city the size of the Chicago metropolitan area to its population in the next 10 years. And the ports of Los Angeles/Long Beach will triple their cargo volumes in the next 20 years.

Mr. Lenzi emphasized that what's happening in Southern California is critical to the rest of the country because it feeds the nation's freight stream. The map on this page shows the volume of truck freight movements from southern California to the rest of the country. Mr. Lenzi stated that fuel excise taxes should remain the mainstay of highway funding for the next 20 years.

In conclusion, Mr. Lenzi referred to an Auto Club report entitled "The Quiet Crisis," which looks at transportation problems in California and possible solutions. The report makes five key recommendations for dealing with the state's transportation future:

- 1. Southern California must have additional road capacity—including new roads, increasing the efficiency of current roads and improving maintenance to improve safety and travel time.
- 2. Improvements must be made in automobile use—including reducing energy use, continuing to meet clean air goals and using technology to make vehicles safer.
- 3. Better alternatives to the automobile must be found—including new and flexible forms of public transit.
- 4. California needs to improve its decision-making processes for transportation.
- 5. California needs to get more from its transportation investments and provide more resources for transportation.

"The Quiet Crisis" points out that California's congestion rate is 65 percent higher than the national average and is increasing by 10 percent annually. In Southern California alone, drivers spend 50 to 140 hours a year stuck in traffic jams at a cost of up to \$2,500 in wasted time and fuel.

Mr. Labelle reported on the work of Chicago Metropolis 2020, which was created by the Commercial Club of Chicago in 1999 to ensure economic opportunity for all and make the Chicago region work in the long term. His remarks focused on the institutional and policy changes that need to be made for Chicago transportation to succeed. The four major changes include the following:

- 1. Organize government for coordinated action.
- 2. Invest in "freight centers" to prevent congestion.
- 3. Create an efficient freight road network.
- 4. Expand rail's capability to move freight.

What's happening in Southern California is critical to the rest of the country because it feeds the nation's freight stream.



Institutional Fixes: Thinking Outside the Coffin

Ms. Peters (moderator) compared the current transportation crisis to the parable of the boiling frog. If you put a frog into room temperature water and then gradually heat the water to boiling, the frog will acclimate to the increasing temperature of the water until it ultimately boils and the frog dies. Alternatively, if you place a frog directly into boiling water, the frog will immediately jump out. The transportation crisis in which we find ourselves has come upon us very gradually over a long period of time, and we are about to be boiled to death.

Building on the boiling frog analogy, **Mr. Rutter** attributed the current crisis in funding to a collection of structures, institutions and processes that worked very well in growing the Interstate Highway System and transit. Unfortunately, these structures and processes created a "Freeway-Transit Industrial Complex" (FTIC) which is institutionally and financially rigid and not very nimble in adapting to changing circumstances. Outside the FTIC, toll roads are tolerated but not advocated and gas taxpayers want free access to roads. In addition, railroads are privately owned and averse to public funding, but there isn't much railroad expansion potential. He advocates a future transportation system in which funding sources are more like streams instead of silos. His wish for the future of transportation funding is that we don't simply get more money to invest, but that we also invest more wisely.

Mr. Heminger gave a very interesting explanation of why politicians may be so reluctant to raise taxes, either fuel taxes or any other type of tax. During the campaign for president George Bush, Sr. made the pledge, "Read my lips: no new taxes"; he then broke that promise and was not reelected. Many politicians today see that experience as a cautionary tale.

Mr. Heminger argues that in failing to raise the gas tax or provide greater support for tolling, we are turning our backs on the user fee principle. He cited the recently released TRB Special Report 285, "The Fuel Tax and Alternatives for Transportation Funding," as evidence that tolls ought to be a bigger part of the transportation funding mix.

The TRB report identifies several examples of criteria, or tests, to evaluate highway funding alternatives. The four main criteria are adequacy, equity, efficiency and simplicity. In Mr. Heminger's view, tolling meets all four criteria quite well.

The Interstate Era meant "build highways"; the Post-Interstate Era meant "build anything BUT highways"; and the Post-Post-Interstate Era means "manage what you've built." Among the many high points of Mr. Heminger's presentation were an excellent short history of toll roads in the United States and a chronology of transportation funding devolution efforts in California. He also presented three useful transportation paradigms and their defining characteristics. The Interstate Era meant "build highways"; the Post-Interstate Era meant "build anything BUT highways"; and the Post-Post-Interstate Era means "manage what you've built."

Mr. Kirby talked about the changing roles and responsibilities of various levels of government in transportation decision-making. In terms of the federal role, he notes that the dramatic increase in earmarking has created much controversy. Regarding the state role, he describes the states as "overcommitted and underfunded" and says they are hard-pressed to meet capacity needs. In terms of local government, they are taking more responsibility to address capacity needs. They are also playing a bigger role in raising new revenues through local bonding, local sales taxes and developer fees and proffers. He further notes that the public is increasingly receptive to tolling to support new capacity. He finished by suggesting that evolutionary changes would probably take precedence over revolutionary ones, but that a change from the status quo for the federal and state roles seems essential.

A change from the status quo for the federal and state roles seems essential.





The Marketplace: a Source of Solutions

What if people were willing to part with some portion of the \$63 billion each year to bypass congestion? \$30 billion a year could fund at least \$300 billion worth of solutions.

Opening the session as moderator, **Mr. Poole** recited Texas Transportation Institute's \$63 billion figure for the annual cost of congestion and said, "This is an opportunity. What if people were willing to part with some portion of the \$63 billion each year to bypass congestion? \$30 billion a year could fund at least \$300 billion worth of solutions. In other words, the government looks at the current situation as a huge problem (and it is). But the marketplace sees it as a great opportunity." In other words, we should not be looking at the current situation as an obstacle but as an opportunity.

Mr. Hausdorfer repeated the theme of many of the speakers that the U.S. highway system has deteriorated over the years because of inadequate investment. He pointed to two examples—the 91 Express Lanes in California and the I-394 Express Lanes in Minneapolis—to suggest that private investment in transportation and congestion charging are two important components of the solution to our transportation woes.

He made the following observations and recommendations:

- :: There is no "free" solution to our surface transportation problems.
- :: Government must stop being an impediment to transportation improvements through partisan bickering.
- :: We must use convincing, quantitative evidence to demonstrate to the public why tolls are a solution.
- :: We must help elected officials understand that public-private partnerships and tolling are the only alternatives to higher taxes and congestion.
- :: We must create a long-term strategic plan for transportation involving federal, state, local and private sector input.
- :: We must help the public understand that private investment in public infrastructure is a good thing. The state of Indiana did not "sell" its toll road system. It permitted a private consortium to lease its toll roads as an investment for 75 years. The city of Chicago did the same thing. The U.S. government encourages foreign investment by making our bonds available worldwide.

Government must stop being an impediment to transportation improvements through partisan bickering.



Mr. Holland described a growing trend in the United States to marry managed lanes with bus rapid transit (BRT). The hoped-for result is higher throughput in key transportation corridors and reduced congestion for users of both automobiles and bus transit. Another benefit, of course, is an additional source of funds to support both modes of travel.

He cited numerous operational examples of this managed lane-BRT combination including the SR 91 Express Lanes in Orange County, California; I-15 managed lanes in San Diego; and the I-10 (Katy Freeway) managed lanes in Houston. There are also a number of planned projects including managed lanes on I-75 in Atlanta, I-95 in Miami, and I-25 in Denver.

The key ingredient in this BRT-managed lane development is value pricing. Value pricing manages demand for scarce highway space and keeps the lanes flowing. It generates revenue to support the capital cost of building the lanes which gives the transit system the equivalent of an exclusive guideway at no cost to the transit agency. He further noted that the highway-transit cross subsidy is not an issue because motorists are voluntarily paying a toll for time savings benefits they receive.

Mr. Voyce employed all of the data and statistics about congestion and inadequate investment in U.S. highways to build a case for engaging the private sector in transportation solutions. He suggested that new sources of capital from the private sector can accelerate infrastructure development. This happens directly when private sector capital is used to finance new construction and when it allows the public sector to leverage existing funding sources for worthwhile projects that may not be financially self-supporting.

Private capital helps indirectly when the private sector investors pay to acquire existing infrastructure, freeing large amounts of public sector capital for higher-value uses such as new roads.

Anticipating questions on the subject, Mr. Voyce pointed out that the public sector must set the agenda before private capital is used. The public sector, therefore, can retain control over planning and ensure public support.

Value pricing manages demand for scarce highway space and keeps the lanes flowing.

New sources of capital from the private sector can accelerate infrastructure development. It allows the public sector to leverage existing funding sources for worthwhile projects that may not be financially selfsupporting.

Transportation Improvement Forum March 19-21, 2006 Santa Monica, California



Our nation's surface transportation system is in crisis. A serious lack of funding, deteriorating infrastructure and rising congestion threaten America's economy and our status as a world leader.

We know what the problems are. And we know how to solve them. What's missing is political will.

Our nation's transportation systems are on the verge of dramatic changes. Changes that will affect the way we design, finance, manage and operate our transportation infrastructure. New technologies and new ways of viewing transportation users as "customers" are revolutionizing the way we provide transportation in America and around the world.

Unfortunately, much of the innovation and efficiencies that these changes promise are being blocked by institutions, processes and thinking that are governed more by political expediency than vision and common sense.

We also live in an age in which we demand higher and higher levels of service yet are reluctant to pay more for the services we demand.

But we Americans are also realists. We know about wars and depression. We know about plagues and famine. We also know "there's no free lunch" and its corollary, "there are no free roads."

In the final analysis, we recognize that we must pay for the transportation improvements that are necessary to promote the economic growth, jobs and productivity that are hallmarks of our society. In short, we must invest.

As this report demonstrates, investment takes many forms. We must learn to embrace the full range of investments to keep our transportation systems strong. We must be open not only to the traditional forms of road funding, such as fuel taxes, property taxes and local option sales taxes, but also tolling, VMT fees and road pricing. As we come to see highways as not just a road but a service, we can also see the value in encouraging both public and private sector investment in our infrastructure.

The road ahead is full of opportunity. We now need the political will to allow our communities to take advantage of those opportunities.

ASSOCIATION AND ORGANIZATION SPONSORS

American Association of State Highway and Transportation Officials (AASHTO) American Road & Transportation Builders Association (ARTBA) American Public Transportation Association (APTA) American Public Works Association (APWA) American Traffic Safety Services Association (ATSSA) Association of Metropolitan Planning Organizations (AMPO) Center for Urban Transportation Research (CUTR) Construction Management Association of America (CMAA) **Environmental Defense** Hudson Institute ITS America I-95 Corridor Coalition Mineta Transportation Institute National Association of County Engineers (NACE) National Conference of State Legislatures (NCSL) National Retail Federation (NRF) **Reason Foundation** Transportation and Development Institute of the American Society of Civil Engineers

PLANNING COMMITTEE

Lisa Callahan, Kansas Turnpike Authority James Ely, Florida's Turnpike Enterprise Joseph M. Giglio, Northeastern University Gary Hausdorfer, Cofiroute USA Jim Kirwin, Raytheon HTMS Steve Mayer, Parsons Corporation Barbara Pruitt, HNTB Corporation Robert Poole, Reason Foundation With special thanks to David Ewing, Transportation Consultant



THIS PROGRAM WAS SPONSORED BY

PLATINUM SPONSORS Α C S٥ Caseta DMJM HARRIS AECOM ETC Electronic Transaction Consultants NONSTOP TOLL INNOVATION MAINE TURNPIKE R REINVENTING THE ROAD™ PARSONS BRINCKEP BRINCKERHOFF Raytheon TRANSCORE.



GOLD SPONSOR



SILVER SPONSOR

The International Bridge, Tunnel and Turnpike Association (IBTTA) is the worldwide alliance of toll operators and associated industries that provides a forum for sharing knowledge and ideas to promote and enhance toll-financed transportation services. IBTTA's more than 280 members own, operate, or support toll facilities in 35 U.S. states and in 25 countries on six continents around the world. Founded in 1932, IBTTA is driving positive change in surface transportation policy. IBTTA members represent some of the foremost thought leaders in the ongoing debate over how to improve highway transportation.





Driving Change

1146 19th Street, NW • Suite 800 • Washington, DC 20036-3725 • (202) 659-4620 www.ibtta.org