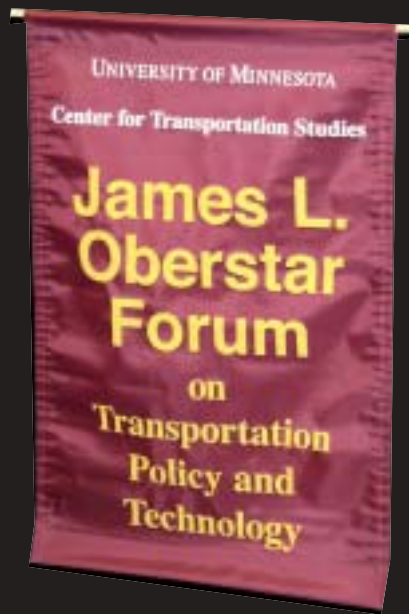




INTERMODAL TRANSPORTATION: THE POTENTIAL AND THE CHALLENGE



A Summary Report
2003



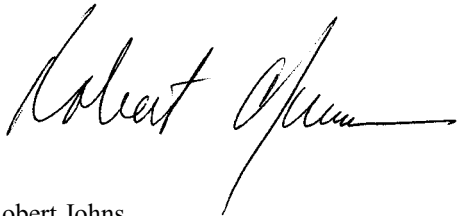
June 2003 To the Reader

This report summarizes the second James L. Oberstar Forum on Transportation Policy and Technology. Over two days, we explored the challenges and opportunities in intermodal transportation, addressing both passenger and freight movement.



Of course, we owe much of this forum's continued success to the dozens of new and returning state and national transportation policymakers and professionals, who, heeding Congressman Oberstar's call to realize the benefits of sharing ideas, participated with enthusiasm and determination. As a result, their wisdom and experience again elicited ideas sure to benefit our transportation system by improving the modal connections involved in moving people and goods.

We hope the ideas in this report lead to meaningful and lasting advancements in the way we live and work.



-Robert Johns
Director, Center for Transportation Studies

About the Forum

The James L. Oberstar Forum, hosted by the University of Minnesota's Center for Transportation Studies, was created to examine and improve national transportation policy by facilitating an open exchange of ideas and experiences among state, national, and international leaders in transportation and academia. The forum is named after Minnesota Congressman James L. Oberstar, a long-time leader in creating national transportation policy and establishing research and education programs in transportation technology.

Oberstar, now serving in his 15th term as the representative from Minnesota's 8th Congressional District, is the senior Democrat on the House Transportation and Infrastructure Committee.

Contents

Introduction	1
Intermodal Transportation: The Potential and the Challenge	2
U of M Researchers Discuss Intermodal Economics and Design Implications	4
USDOT Administrators Discuss Ways to Define and Improve Intermodal Roles	5
Discussion Circle Aims for 'More Perfect Union'	6
Policy Panel Explores Challenges of Funding Intermodal Efforts	8
Public and Private Stakeholder Differences Emerge as Key Intermodal Hurdle	9
KEYNOTE—2003: The Year of Transportation	10
Panel Discusses the Impact of Intermodalism	11
Oberstar: Thinking Intermodally Stems From Sharing Ideas	12

The James L. Oberstar Forum on Transportation Policy and Technology March 16-17, 2003

Regional and national transportation officials, policymakers, and professionals joined Minnesota Congressman James L. Oberstar on March 16-17, 2003, to discuss improving intermodal connections for passenger and freight transportation. It was the second meeting of the James L. Oberstar Forum on Transportation Policy and Technology, hosted by the Center for Transportation Studies at the University of Minnesota.

Rep. Oberstar headlined the event, which featured Associate Deputy Secretary of Transportation Jeffrey Shane. Also participating in the forum were Minnesota Lt. Gov. Carol Molnau, and USDOT administrators Marion Blakey (Federal Aviation Administration) and Mary Peters (Federal Highway Administration), and deputy administrator Sam Bonasso (Research and Special Programs Administration). In addition, many other state and national leaders attended, including American Association of State Highway and Transportation Officials executive director John Horsley and Transportation Research Board executive director Robert Skinner. CTS director Robert Johns served as master of ceremonies.

"Intermodalism is more than just a 'buzzword' or the flavor of the day among transportation policymakers," Oberstar said, kicking off the forum by laying out a broad vision for the nation's transportation system while casting a sharp eye toward the coming reauthorization of federal transportation funding. "We need to think in intermodal terms as we engage in long-range planning for our transportation infrastructures."

Following Oberstar's opening remarks, University faculty members presented the latest perspectives in

transportation research and several USDOT administrators reported on the state of their respective modes during a roundtable discussion. Forum invitees also took part in a unique conversation circle. The innovative dialogue format, which was a successful element of last year's forum, incorporated satellite-style seating around an inner ring of chairs designated for speakers.

During a policy discussion panel with Mn/DOT deputy commissioner Doug Differt and USDOT's Jeffery Shane, Oberstar stressed the need to do better in terms of delivering projects or risk losing public confidence in the investment. "It is government that has the overarching view of bringing parties together."

Molnau, who also serves as Mn/DOT commissioner, and Christine Maziar, University executive vice president and provost, kicked off the portion of the forum open to the public. In a keynote address following their remarks, Shane cited the critical role freight transportation has played in making the U.S. economy one of the most efficient in the world. But he stressed the need for improving intermodal links for passenger travel and providing consumers with more travel choices. In addition, Shane dubbed 2003 a unique year for transportation.

Finally, Oberstar joined a mixed panel of mostly freight and passenger transportation executives to swap ideas and field questions from an audience of more than 200.

This report summarizes the main events of the two-day forum on transportation policy and technology.



Intermodal Transportation: The Potential and the Challenge

By James L. Oberstar

I am pleased that this year's forum focuses on a subject that I feel is at the core of our effort to reinvest in our nation's transportation infrastructure: intermodalism. Intermodalism is more than just a "buzzword" or the flavor of the day among transport policymakers. We need to think in intermodal terms as we engage in long-range planning for our transportation infrastructures; and we will need to think in those terms for a long time to come.



James L. Oberstar

In this Congress, the Committee on Transportation and Infrastructure will reauthorize the highway and transit programs, the aviation programs, and, hopefully, the hazardous materials transportation program and Amtrak. I am also hopeful that we will enact rail infrastructure legislation that will finally commit meaningful resources to develop high-speed rail systems similar to those in the rest of the industrialized world, and reinvest in our nation's freight rail system. All together, these infrastructure efforts could total one-half trillion dollars!

This investment will also provide a badly needed jumpstart to the American economy. According to the Federal Highway Administration, each \$1 billion of Federal funds invested in infrastructure creates approximately 47,500 jobs and a total of \$6.2 billion in economic activity. In addition, this investment in our transportation infrastructure will play a vital role in enhancing our national productivity. Through a combination of public and private investment and by relaxing the regulatory framework, our transportation system has become dramatically more efficient. We are moving more goods and more people far more efficiently than ever before.

But these gains can easily be lost if we do not continue to invest and to invest wisely. We will need to take a more holistic approach to our transportation investment strategy than we have in the past. We must think beyond highways, airways, railways, and ports independently and, instead, focus on the interdependencies between the various modes—think intermodally.

Barriers to Intermodalism

As we discuss "intermodalism," I think it is important to understand what we mean by intermodal transportation. I have used "intermodal" to describe coordinated interchanges between two or more modes to complete a movement, particularly when the trip could have been made by a single mode. In this light, inter-

modal movements involve either the physical transfer of people or individual items from one mode to another, or the transfer of one loaded transport vehicle or container from one mode to another to continue the journey.

If intermodalism is so beneficial, why don't we have more of it? What obstacles are in the path of improving intermodal connectivity in this country? There is certainly a growing need for intermodal solutions as key elements of our transportation system—especially our air and highway infrastructure—become increasingly congested.

There are several persistent obstacles to expanding intermodalism. First, there is considerable intermodal competition; competitors often find it difficult to cooperate. A related obstacle is the tendency of the individual modes to focus on their own operations often to the disadvantage of potential intermodal partners. A third barrier is the stovepipe organizational structure of public transportation agencies, including the U.S. Department of Transportation. A fourth barrier is the way we fund the infrastructure of several of the principal transport modes—trust-fund financing through user fees, ticket taxes, or some other user charge. Finally, cost is the fifth obstacle because intermodal projects are often large ones—I call them mega-projects.

Intermodalism and TEA-21 Reauthorization

In this Congress, we will enact the successor to TEA-21 (Transportation Equity Act for the 21st Century) and it is my hope that this new bill will restore the intermodal theme that was so prominent in ISTEA (Intermodal Surface Transportation Efficiency Act of 1991). This bill must pay greater attention to funding projects that encourage travelers and shippers to rely on modes that are less congested, more environmentally friendly, and more efficient. We need to focus more attention on

major projects that can produce benefits across the modes of transport, such as boring a rail (freight) tunnel under New York Harbor to allow rail freight traffic to go directly to Brooklyn and Long Island or developing rail as an alternative to truck transport along the I-35 corridor in Texas.

There are many other projects that would qualify as being in the national interest, but whose costs lie beyond the range of traditional funding mechanisms. These projects cannot be funded by state and local governments alone, and the private sector will not invest sufficiently to produce the desired public benefits. I believe that we need to create an Intermodal Mega-Projects program to address these needs and I hope to include this program in TEA 21 reauthorization.

Intermodalism and Intercity Passenger Travel

At the outset, I said intermodalism goes beyond freight issues. We need to think intermodally about intercity passenger travel as

"We can either wait until crippling congestion drives us to this point or we can begin to address the problems now."

well. In the summer of 2000, before the economic downturn and before the tragedy of September 11, America's airports and airways were experiencing unacceptable levels of congestion. Nearly one-fourth of commercial air flights were either delayed, diverted, or cancelled, while on the ground, people were spending countless hours behind the wheel stuck in traffic. Air traffic congestion currently has abated, but the Federal Aviation Administration forecasts that by 2015 air travel will grow to 1 billion passengers, up from 690 million today.

Long delays and frustration will come with the return of air travel demand. As part of our reauthorization of the Aviation Investment and Reform Act for the 21st Century (AIR-21), we are committed to making the investments in our nation's airports and air traffic control systems to mitigate congestion problems. But to be perfectly honest, there is only so much that can be done to expand airport capacity. We need alternative approaches that will allow us to squeeze out more capacity from our existing aviation infrastructure. I believe that this can be done by thinking intermodally.

In Europe and Japan, high-speed rail carries the majority of travelers making intercity trips of less than 400 miles. These nations have made a conscious decision to reserve scarce airport capacity for international and intercontinental trips. In America, we have not yet come to grips with our aviation system capacity dilemma. Even with all its faults and limitations, we have the world's premier aviation system. But it has been, and soon will be again, strained to the breaking point. We need to think beyond aviation investment solutions—we need to think intermodally. Like the Europeans and the Japanese, we need to make a serious commitment to the high-speed rail alternative to replace short- and medium-distance air travel.

Moving Ahead on Intermodalism

Our nation faces critical transportation investment needs that will be all the more difficult to solve because of the current state of the economy. The economic recession has slowed tax receipts and the Bush tax cuts have further exacerbated the budget problem. Surpluses have been replaced by mounting deficits for as far as the eye can see. Securing sufficient monies to meet our transportation investment needs will be a struggle—a struggle I intend to wage with all my being. Scarcity of available resources also means that it is more important than ever that shippers and travelers be able to select the best combination of modes to meet their needs—that is, they need to have intermodal options.

It can be done. Public-private partnerships can be formed that can launch intermodal projects that will generate profits for private firms and social benefits for the society at large. The

Alameda Corridor is a good example of this approach. This 20-mile rail trench from the Port of Long Beach to the rail yards further inland eliminated dozens of grade crossings and greatly facilitated rail traffic through the streets of Los Angeles and



Long Beach. This \$2.5 billion project was built using a combination of public and private sources.

Will we move ahead on intermodalism? Will we build the mega-projects needed to facilitate intermodal transfers? I remain optimistic, but I believe several things must happen—not all of them good—for progress to be made over the next two decades. First, the cost of congestion must continue to rise. Virtually all forecasters anticipate that congestion and delay will increase. As frustration and costs mount, the pressure to address the congestion problem by finding more efficient solutions will drive us to action.

Second, we must make institutional changes at both the Federal and state DOT's. Serious commitments to intermodalism within these departments must be made if the governmental commitment is to go beyond lip service.

Finally, we need to develop a separate funding source for intermodal mega-projects. I am working with many other members of Congress and interested groups to develop funding mechanisms to address intermodal needs, especially ways to enhance rail intermodal projects. Railroad investment is key to many intermodal solutions, and today the nation's freight railroads barely earn enough revenue to maintain the existing infrastructure much less expand it to meet new demands.

The question is not so much if we will move toward a greater reliance on intermodalism, but when we will. We can either wait until crippling congestion drives us to this point or we can begin to address the problems now. I intend to lead the fight for solutions today.

The complete text of Congressman Oberstar's speech may be found online at www.cts.umn.edu/oberstarforum.

U of M Researchers Discuss Intermodal Economics and Design Implications

Two leading transportation researchers from the University of Minnesota offered the latest perspectives in intermodal transportation research on a panel moderated by CTS associate director Laurie McGinnis. In his presentation “Coffee, Tea, or What: Intermodal Freight Policy,” professor of applied economics Gerard McCullough explained that while there is economic rationale for freight intermodalism—mainly, the increasing congestion on highways and railways—there are several economic impediments that hinder its development.

One major obstacle, McCullough observed, is that railroads’ margins on intermodal freight are thin or nonexistent and managers therefore are not eager to invest in this service. In fact, considerable downward pressure on freight rates in both the railroad and trucking industries makes it unrealistic to expect that either industry will invest significant amounts in intermodal facilities. According to McCullough, these price pressures and other factors also make it difficult for trucking and railroad companies to cooperate and thus, difficult to fully embrace intermodalism.

McCullough described the trucking/railroad relationship using two economic principles. Economic gross substitutes, he explained, are goods such as coffee and tea: if the price of one increases, more of the other is demanded. On the other hand, economic gross complements are goods such as coffee and cream: if the price of one increases, less of the other is demanded. Railroads, he said, are substitutes for trucks in markets where shipment sizes are large but can be complements in markets where length of haul is significant. Since public policies—such as user fees and weight limits—strongly influence the relative costs of the two modes, policymakers will also influence the amount of intermodal traffic and investment. The call to action now, McCullough said, is to think about new ways for shippers, carriers, and policy makers to work together to design an effective national intermodal system which may require changes from how these markets have been traditionally regulated and subsidized.

In his presentation “Community Design: Multimodal and Intermodal,” Lance Neckar, professor of landscape architecture, summarized his research on design approaches as they relate to policy approaches for creating integrated, intermodal landscapes. Neckar emphasized that intermodal freight and passenger systems, though internally connective as spatial entities, must occupy separate spaces in the city. Integrated approaches, for example, must consider the scale of freight operations in relation to neighborhoods in central-city intermodal yards. Moreover, new, integrated approaches involve natural systems embedded in the

infrastructure of transportation—such as hydrological systems—that previously have been considered externalities to transportation designs. By better understanding the externalities of transportation, Neckar contends, we can find a more comprehensive way to use a shared regional resource, such as water. Today, water is a critical underpinning of all settlement but is treated by conventional design, paradoxically, as a waste byproduct of urban and suburban development. New efforts to create intermodal connectivity could provide an integrative infrastructure to conserve this resource for future generations.

In order to move from the current design model in the Twin Cities, Neckar suggested a new model of dispersed, but concentrated patterns of suburban growth connected by redundancy of modes. This design model involves clustering and connecting points of service, production, and consumption in multi-use areas. While there are some problems—including financial—



Laurie McGinnis, Gerard McCullough, and Lance Neckar

with this model, Neckar believes the biggest problem is the fact that our national policy should be about regional competitiveness and efficiency. But, he pointed out, the fact that land use is actually decided locally often conflicts with broader policies. In Minnesota, for example, transportation systems are largely a matter of state planning and construction, and the taxation system requires complex multiple agency agreements with no comprehensive regional authority in charge from start to finish.

Neckar said that the federal role ought to be creating and administering policy in a way that supports integrative environmental designs, which increase efficiencies across modes and are systemically based, not just decorative add-ons. He suggests that such an integrated approach could use geographic information systems, or GIS, to develop place/environmental-specific evaluations that add value. He adds, however, that the level of detail and the ‘coverages’ of many GIS systems are not detailed enough to ensure the best comprehensive solutions. Therefore, he concludes, the design process must be expanded to review and identify composite values and costs, such as air, water, and public health, for large-scale, multi- and intermodal projects.

The slide presentations mentioned in this article may be found online at www.cts.umn.edu/oberstarforum.

USDOT Administrators Discuss Ways to Define and Improve Intermodal Roles

Three administrators from the operating administrations of the U.S. Department of Transportation (DOT) each gave a “state of the mode” address, with regard to intermodalism, in a roundtable discussion moderated by CTS assistant director Cheri Marti. FAA administrator



Cheri Marti

Marion Blakey acknowledged the difficult times currently facing aviation and said that, though U.S. airlines are in great peril at the moment, the advantages of intermodalism will make a difference in the industry in the long run. Despite the challenges, the aviation industry has achieved major improvements with regard to equipment and infrastructure. Many of the hard won successes are a result of the FAA’s two funding programs, the Airport Improvement Program (AIP) and the Passenger Facility Charge Program (PFC), which are used by airports to finance airport—and intermodal—development.

Airport ground access is one area in which the FAA has played a key role in intermodalism. Blakey explained that in 1996, the FAA collaborated with the Federal Highway Administration (FHWA) to create the Intermodal Ground Access to Airports planning guide, which, according to airport operators, has had significant influence on how airports and ground shippers work together.

While Blakey highlighted several other FAA-sponsored intermodal programs, she contends there is more to intermodalism than “huge capital programs.” FAA leadership in technology and research is routinely shared with other modes, she noted, and this technology transfer plays an important role, especially in safety and efficiency.

Samuel Bonasso, deputy administrator with the DOT’s Research and Special Programs Administration (RSPA) observed that, indeed, much has been accomplished in bringing various transportation modes together. The efficiencies already realized in intermodalism have boosted the U.S. economy through transportation productivity to the benefit of people in both urban and rural areas throughout American and around the world, he says. He also admits there is room for improving and fine-tuning the intermodal systems, but feels there first must be a clear vision of what the critical paths for moving goods and people are and the transportation industry must work to make smarter, smoother, and faster connections between modes.

“As our economy recovers, its expansion and sustainability will depend on our ability to increase capacity,” Bonasso explained. “Intermodalism represents the best opportunity of doing that.” He was careful to warn, however, that the intermodal systems which enable efficient movement of goods might also allow

terrorists to damage America; therefore, security must be an essential piece of our entire transportation system. Safety and security are hand-in-glove, and what is not safe is not secure, he noted.

Mary Peters, FHWA administrator agreed that having a solid, responsive transportation system is essential for the U.S. to remain competitive in the global market. The concern is that while our transportation system has been reliable to date, congestion, along with various other issues, threatens the system and increases costs. For example, it already costs freight carriers between \$145 and \$190 per hour to have a truck stuck in congestion, and Peters fears the industry will “hit the wall” (in terms of productivity gains) if the problem isn’t fixed soon.

For this reason, the FHWA is working with various freight interests and freight stakeholders to better understand emerging issues and to coordinate policy and technical responses. Peters indicates that while the phrase, “Freight doesn’t vote, so it doesn’t get planned,” was true in the past, the FHWA has taken great strides to make sure freight stakeholders are at the table today and their voices heard. The FHWA, in keeping with its responsibilities as defenders of the homeland, also works

While the phrase, “Freight doesn’t vote, so it doesn’t get planned,” was true in the past, the FHWA has taken great strides to make sure freight stakeholders are at the table today and their voices heard.

—Mary Peters, FHWA



Marion Blakey, Sam Bonasso, and Mary Peters

with the private sector to define, deploy, and test cost-effective standards and technologies that enhance freight productivity and security both domestically and internationally. Moving forward, Peters suggests the need to re-think the systemic issues in order to effectively deal with intermodality. “We must shift our focus from the supply side and focus more on the demand side,” she concluded.

Discussion Circle Aims for 'More Perfect Union'

Forum invitees took part in a unique conversation circle. The innovative dialogue format, which was a successful element of last year's forum, incorporated satellite-style seating around an inner ring of chairs designated for speakers. Discussion themes evolved as new members entered the circle and others exited.

AASHTO's John Horsley, for instance, suggested that the UPS model is one good example of what transit can learn from freight. UPS, he says, epitomizes good service to the customer, simplification of trips, and customer confidence that a package can be tracked and will arrive on time. This model could be used with transit in which the entire transit trip—including buses, trains, and airplanes—is packaged together.

Speakers also discussed a variety of transportation success stories including a value pricing project in California that takes advantage of underused high occupancy vehicle (HOV) lanes. Lee Munich, director of the Hubert H. Humphrey Institute's State and Local Policy Program explained the program in which people can pay to drive alone in certain HOV lanes. The revenue generated is then used to improve transit in that corridor. The results of this value pricing project include an increased number of car pools, improved transit systems, and high approval ratings from HOV lane users. Even



those drivers who do not use the HOV lanes benefit from less congested main lines caused by the shift of some drivers to the HOV lanes. Munich suggested that pricing strategies might also be used to deal with the increasing truck traffic on congested highways.

One of the most interesting facets of the dialogue was the repetition of similar ideas among representatives from different modes. For example, several speakers suggested the need to get away from the current fragmented transportation planning

process and work toward one that supports coordination among all transportation modes. "If we want multi-modal and intermodal systems to work, we have to force the planning process from a grassroots level," offered Paul Skoutelas, CEO with the Port Authority of Allegheny County, Pennsylvania. "That way each intermodal facility is planned and built with the others in mind."

In addition to the analogous ideas that emerged, a variety of differing points of view also surfaced. On one hand, for example, David Levinson, assistant professor of civil engineering, called for a more decentralized funding model in which local governments bear local costs rather than relying on federal funds for such projects. "At the local level, we're constantly going to Washington with our hands out to get

federal money. We need to think broadly about how to get out of this system," Levinson argued. He noted that in the late 1700s and early 1800s, many transportation systems were private, but had subscriptions and stock ownership by the local government. "These private companies knew their local market and knew the benefits of the system to that market. There

wasn't any federal involvement," Levinson explained. "Because the benefits were local, the costs were borne locally."

On the other hand, Cecil Selness, acting director of Mn/DOT's Freight and Commercial Vehicle Operations, said the benefits of a local transportation project are not only realized at the

local level. "Although the Alameda Corridor project is a California project, its benefits stretch nationally," Selness asserted. "Alameda is important to Minnesota and to the ability of goods to move into our state in a timely fashion."

"Transportation fulfills each one of the directives in the preamble. This vision ought to drive the future of intermodalism. A 'more perfect union' would not be possible without intermodalism."

—Sam Bonasso, RSPA



The free-flowing dialogue elicited a variety of other ideas as well. For example, Natalio Diaz, director of the Met Council’s transportation services, said he’d like to see more policy decisions coming from Washington. On the other hand, Elliot Perovich, an Anoka County transportation analyst, supported stronger local control when establishing policy.

One novel proposition, from Samuel Bonasso, deputy administrator with RSPA, suggested that the vision behind everything that happens in this country is actually stated in the preamble of the United States constitution. “Transportation fulfills each one of the directives in the preamble,” Bonasso said. “This vision ought to drive the future of intermodalism. A ‘more perfect union’ would not be possible without intermodalism.”

Throughout the session, talk of the new, global economy, and how to compete in it, seemed to be a consistent thread. G. Alexander Taft, executive director with the Association of Metropolitan Planning Organizations, reasoned that our ability as a nation to compete internationally is fundamentally dependant on what goes on in metropolitan regions. “The congestion we talk about is found mainly in metro areas,” he said. “We need a system that encourages regional cooperation and delivers projects. Perhaps we need to direct more funds to the metropolitan level.” Along with that, he added, is the need to make sensible decisions and to have accountability and performance measures for those decisions.

Davis Helberg, executive director with the Duluth Seaway Port Authority spoke of the problem he has with the inability to respond with projects in time to meet current needs. “Many of our locks need immediate repair,” Helberg explained. “We’ll be lucky if we get these made by 2020. We’re building systems that won’t be done for decades.”

Ronald Lifson, vice president and general manager for LDI Fibres, Inc., agreed, adding—as others before mentioned—that the private sector does move faster than the public sector. “I keep hearing talk about the need for public investment, but without private investment we don’t get anything.” How then, he asked, do we obtain private investments and have public investment support the process rather than be a lead investor?

The issue of partnerships was also woven throughout the conversations. On the research front, Dan Murray, director of research with the American Transportation Research Institute, reported several major partnerships already forming among various transportation modes to conduct inter-

modal research. He cited an example in which a freight operator is working with a technology company to collect real-time tracking information in order to measure and identify traffic bottlenecks and report performance more accurately. “Modes that previously competed against each other are now getting together in the name of research,” he explained.

At the end of the session, Congressman Oberstar indicated that the value pricing discussion struck a particular chord with him, and he urged the group to think about the value of such a strategy in determining which modes have precedence. In carrying that idea further, Oberstar explained how national dollars are redistributed according to a formula that can be changed according to changing needs. “Without this, some states would have nothing,” he said, “while others would have a great deal.” Oberstar

closed the discussion noting his delight with the depth of the conversations, but also acknowledging the lingering need to tie up many loose ends.

“I keep hearing talk about the need for public investment, but without private investment we don’t get anything.”

—Ronald Lifson, LDI Fibres, Inc.



Policy Panel Explores Challenges of Funding Intermodal Efforts

CTS director Robert Johns moderated a lunchtime policy panel featuring Jeffery Shane, USDOT associate deputy secretary, Mn/DOT deputy commissioner Douglas Differt, and Congressman James Oberstar.

Opening the dialogue, Shane offered his suggestions for ways the federal government can facilitate intermodalism. He acknowledged, first, that many intermodal connectors are not being kept up to the same extent as the rest of the national highway system. “We’ve been talking here [at this forum] about the importance of intermodal connections, but the reality is state governments are not spending money on intermodal connectors,” he declared. While there is nothing at the federal level preventing states from investing in intermodal connectors, Shane revealed his hope that the federal government will work to find more effective ways of encouraging states to invest in intermodal connections and make it more profitable to do so.

Federal loan guarantees may be one way to encourage such investments. Although the federal government has limited resources, the key, Shane said, is figuring out how best to leverage the resources at all levels of government and even in the private sector. “One thing the government can do effectively is guarantee financing,” Shane explained. “This dramatically lowers financing costs and encourages the private sector to participate in projects they might not otherwise have interest in.”

Putting up raw capital is also an element of federal leadership, Shane offered. However, he added, in order to justify these investments, the federal government should first figure out why the project approval process takes so long, and then streamline the process to minimize delays. “We cannot afford the increased costs delays cause. We have to make decisions quicker,” Shane maintained, “even if the decision is no.”

In the case of the Alameda Corridor project, Shane explained that this successful intermodal project materialized because a group of people in the state, local, and private sectors came together and, with a little facilitation from the federal government, exercised enormous creativity. “Where there is a will there is a way,” Shane contended. “Bring your ideas to the federal government. Don’t march off to defeats of your own making just because the words of the statutes don’t seem to be tailored to something that is badly needed.”

From the state perspective, Differt said that Mn/DOT’s most pressing issue revolves around the state’s current budget crisis. Mn/DOT is also wrestling with the requirement to get local consent for various projects and the lengthy process involved in doing so. “We very much appreciate the streamlining effort Jeff [Shane] talked about,” Differt said, adding that while Mn/DOT designates some projects to counties and cities, there also must be more joint powers agreements with private companies. “As we decrease what we have at Mn/DOT to function and deliver programs, we need more help, more partners,” Differt explained. The challenge, he said, is that private sector partners are often reluctant to share proprietary products in a public bidding situation. “We need to find a way to protect their [private] investments and have unsolicited proposals we can choose from without violating our open laws.”

Next, Congressman Oberstar offered several international examples of huge transportation-related projects that move from start to finish in the same time smaller U.S. projects are still waiting to get off the ground. He stressed the need of govern-

ment to do better in terms of delivering projects or risk losing public confidence in the investment. With intermodalism, he added, all of the players must come together, enter into dialogue with each other, and come to understand the benefits each brings. This is possible, Oberstar predicted, without com-

“The reality is state governments are not spending money on intermodal connectors.”

—Jeffrey Shane, USDOT



Douglas Differt, James Oberstar, Jeffrey Shane, and Robert Johns

promising the needs of each stakeholder. “We can do things concurrently—not sequentially—and bring vested parties together at the outset of a project to overcome problems and conclude the job within a reasonable time,” he said, adding, “It is government that has the overarching view of bringing parties together.”

Public and Private Stakeholder Differences Emerge as Key Intermodal Hurdle

Through various discussions and panels held at the 2003 Oberstar Forum, several driving forces emerged supporting the need for an intermodal transportation system. In a working-lunch presentation to forum invitees, Steve Lockwood, vice president with engineering firm Parsons Brinckerhoff and assigned the task of summarizing key themes that emerged at the forum, identified those driving factors, which include increasing global competition, growing congestion, and reliance on just-in-time logistics. Lockwood also described the intermodal objectives he gleaned from the forum, which aim to reduce costs and improve service via mode optimization, and to make more efficient use of existing intermodal facilities.

“In order to develop an intermodal system, there needs to be a range of different types of improvements to both line haul and transfer points,” Lockwood said. He noted, however, that improvement activities themselves have specific impacts at the community level, and several intermodal improvement projects currently going on throughout the country are controversial.

Chief among the challenges facing intermodalism is the difficulty in bringing all of the stakeholders, both in the public and private sectors, together. There are several significant differences between public and private players that make joint solutions difficult. First, the private sector has a short time horizon. Implementing major capital improvements in the transportation arena tends to be a rather drawn out process, and by the time a plan is “ready to go,” a private player may have become uninterested in participating. “It can be difficult to keep private sector players at the table for the amount of time the public sector is accustomed to having,” Lockwood explains. “There has been a lot of streamlining discussion at the federal level, and perhaps the next round of federal transportation legislation will move us one step further.”

Another issue is the inability to clearly define who the beneficiaries are of intermodal projects and at what scale. Lockwood states, for example, that there is no systematic review process at the national, regional, or local scale of what the freight problems are or what the intermodal challenges and opportunities are. Without such a process, it is difficult to forge policy at any level. “There is definitely the challenge of getting some type of



alignment at different scales,” Lockwood says. “Many of the intermodal challenges at the local level seem to be quite different from one another as you move from region to region.”

There are other hurdles with regard to the market and the rates of return that the private sector expects, as well. Incremental approaches that often make sense in the private sector may make the public sector uncomfortable, and in the eyes of many private sector players, intermodal projects require big capital investments but offer long payback terms and narrow margins. Lockwood cited the Alameda Corridor project in California and the Minnesota Intermodal Railroad Terminal (MIRTS) project in Rosemont as examples of public/private partnerships that have generated important lessons on the types of financial instruments that work for both private and public players.

“There are some innovative and flexible finance options available,” Lockwood explained. “Many people are not aware of just how flexible most federal highway and transit aid is because these funds are typically used only for traditional projects,” he said. “There are, in fact, very few federal constraints, and there is a lot more flexibility than is generally understood.”

With regard to the question of how to best integrate freight, in general, and intermodal, specifically, into the state and regional planning process, the discussions and panels suggest a need to be more multimodal and to go beyond the old “three Cs” (continuous, cooperative, and comprehensive) to include communications and connections. “We might also consider a stronger mandate than is currently part of the planning regulation with regard to focus on freight,” Lockwood offered.

While progress has been made in surfacing the many issues facing intermodalism, there has not been much progress in coming up with actionable solutions, Lockwood noted, adding however, that this forum “is a big step forward in doing just that.”

Steve Lockwood's slide presentation may be found online at www.cts.umn.edu/oberstarforum.



Steve Lockwood

2003: The Year of Transportation

By Jeffrey Shane

While we have made a great deal of progress in those 12 years since the passage of the Intermodal Surface Transportation Efficiency Act of 1991—or ISTEA, it is also clear that there is much left to be done. We shouldn't shy away from comparisons to the systems established in other countries—but instead should look carefully at the successes enjoyed elsewhere and learn from them.



Jeffrey Shane

We have one of the most efficient economies in the world, driven in large part by a freight transportation network that has enabled U.S. businesses to save billions of dollars each year and be much more responsive to their customers through the use of just-in-time delivery systems. Now we need to search for more effective incentives to improving intermodal links for passenger travel, providing consumers with a broader array of travel choices.

2003 is a unique year for transportation. For the first time in recent memory—maybe the first time ever—Congress will have a chance to reauthorize our aviation, surface and intercity passenger rail programs in a single session. For that reason, teams at the Department of Transportation have been working hard for several months to develop proposals for reauthorizing these programs. I can provide a glimpse of what you can expect from the Administration.

Surface Reauthorization

The Department's surface reauthorization proposal will build upon the legacies of ISTEA and its successor, TEA-21. The top priority in the Department's surface reauthorization bill will be safety. In an effort to improve intermodal connections, we will also focus a great deal of attention in our proposal on facilitating freight and goods movement.

Imagine what would happen if we suddenly shut down our entire freight rail system and moved all that cargo to the highways. Well, some predict that as early as the year 2010, you won't have to imagine it. The increase in freight moving on our nation's highways will be equal to twice the amount of freight that was being carried on our entire rail network in 1998. That's why, if we don't improve our intermodal connections at ports and freight terminals around the country, we will see even more congestion on our highways and—more important—a net deterioration in our quality of life.

One related option we will also be exploring is “short sea shipping,” a concept that some feel could do a great deal to ease congestion on our nation's highways and rail lines by taking advan-

tage of underused capacity in the coastwise maritime sector. Finally, we will continue our efforts to be good stewards of the environment while improving the review process for major projects of national and regional significance.

Aviation Reauthorization

As someone who has been in and around the aviation industry for decades, I can tell you with some authority that this is the most challenging time we have ever faced as policy makers. Our airline industry is in the most serious financial crisis it has faced in its entire history. I am confident that the airline industry will eventually be able to right itself and return to profitability. Our aviation reauthorization proposal will be designed to help the industry regain its vitality while retaining safety as our top priority.

Intercity Passenger Rail Service

Secretary Mineta has made a commitment to work with Congress to ensure that intercity passenger rail takes its place as an essential component of our intermodal system. We continue to work within the Administration to refine our ideas, but Secretary Mineta has articulated a number of basic principles that serve as our guide. These include introducing carefully managed competition to provide higher quality rail services at reasonable prices and establishing a long-term partnership between the States and the Federal government to support intercity passenger rail service.

Addressing our intercity passenger rail system in the same, time-honored way we have run our other transportation programs—giving state and local decision-makers a far more prominent role—will help us to enhance the quality and vitality of the system. Laying out a new vision for our nation's intercity passenger rail will certainly not be easy, but the question we should be asking ourselves is: if not now, when?

Revitalizing DOT

Our new challenge at the Department of Transportation is to focus the passion and commitment that went into creating the TSA on a new mission—one that will help us to achieve a truly intermodal transportation system as foreseen by those that created the Department back in 1967. The opportunities presented to this Secretary, given the creation of Department of Homeland Security and the reauthorizations we have before us this year, are tremendous. It will allow us to be architects of the future of our transportation sector, and give us a chance to shape major long-term policy questions about the future of our aviation system, the relationship between different modes of transportation, and the safety of our nation's highways.

The complete text of Jeffrey Shane's keynote remarks, given during the public portion of the forum, may be found online at www.cts.umn.edu/oberstarforum.

Panel Discusses the Impact of Intermodalism

A rare assembly of top transportation executives representing a variety of modes in both freight and passenger transportation weighed in on the implications of intermodalism for both Minnesota and the nation during the portion of the forum open to the public. The panel, moderated by CTS director Robert Johns, included: Donald Schneider, chairman of Schneider National, Inc.; Paul Skoutelas, chief executive officer of the Port Authority of Allegheny County; William Berry, vice president of intermodal for the Canadian National Railway Company; Gerry Brown, president of Cargo Carriers, Inc.; and Peter Bell, chair of the Twin Cities Metropolitan Council.

“It’s important for us [in the transportation industry] to think about why we do what we do,” Schneider urged. “The effectiveness within the transportation industry allows us to serve millions and millions of people worldwide.” While the industry has grown and logistics costs have gone down in recent years, Schneider reported, the ongoing challenge in the transportation industry is meeting an increasing customer demand to consistently have the goods they want when and where they want them. Schneider asserted that his firm is “mode neutral” and subscribes to the notion that in order to keep costs down and get products to their destinations on time, shippers need to use the right mode for the job. “Rail is far more economical than truck where there is density,” Schneider explained. “In those areas, we’re happy to use rail and spread out the shipments to lines that aren’t as heavily used.”

Without a doubt, Skoutelas observed, both ISTEA and TEA-21 played a significant role in the industry’s growth across all modes throughout the last decade. He indicated specifically that transit use reached record levels. In moving forward toward creating an even better, intermodal transportation system, Skoutelas maintained there are several key questions yet to be discussed and answered, namely: Do we build roads or invest in public transit? What levels of investment strike the best balance? What is the right technology? What is the objective? It is the blend of these issues, and others, Skoutelas said, that takes us to the right answer.

Prior to the decade-long stretch of industry growth, there was a time throughout much of the 70s, when the future was not so

bright for the railroad industry. With passage of the Staggers Rail Act of 1980, Berry recalled, the picture of railroads was changed in the form of railroad deregulation, and many rail companies did experience healthy growth. However, he cautioned, unless there are additional policy changes regarding intermodalism, the railroad industry will realize a mere four to six percent annual growth in coming years. With forecasts indicating freight transportation will double in the next 20 years, Berry’s concern is that this level of growth is not enough to handle the increasing demand. The real issue today, he said, is what role the American people see for intermodal. “Whatever that vision is should be reflected in the policy.”

In acknowledging the predicted freight growth, Brown reported that the barge industry is largely underused despite the fact that, excluding pipelines, barges offer the cleanest, safest, and most fuel efficient mode of transportation. He noted, too, that the barge industry has been involved in intermodalism from its beginning. “We don’t pick up goods from the source or deliver shipments to the final source,” he said. “We depend on both truck and rail, and we have highly efficient facilities to make this happen.” The barge industry has done an excellent job of standardization, which, Brown explained, helps run an efficient, intermodal system. “This efficiency is vital in a business, such as ours, that moves the basic building blocks for our country.”

“In 1985, I had 56 white-collar and clerical employees, and I had 409 dry-cargo barges. In 2003, I have 1,088 barges and 24 employees. We did this largely with technology, but also with faster, better, smarter ways of doing things,” Brown added. “I wonder if the people-moving business isn’t as good at wringing cost out of the business. I just offer that as a simple observation.”

During his presentation, Bell explained that the Met Council’s most significant challenge is dealing with huge budget shortfalls. Despite the state’s current deficit, however, Bell said that the Pawlenty administration is in favor of “smart” transit and will support any mode of transit that moves the largest number of people most efficiently. In terms of making intermodalism work, Bell supports a strong working relationship among modes, maximizing technology, and including labor in the process.



Oberstar: Thinking Intermodally Stems From Sharing Ideas

In his closing remarks, Congressman Oberstar reflected on the two-day forum, which, he observed, provided an unprecedented opportunity for dialogue among representatives from various transportation modes. He referred to the 3 Cs—communication, coordination, and connectivity—as the key to intermodalism and to moving our transportation system forward, but even more important to the effort, he added, are events such as this forum, where ideas are shared among transportation professionals and administrators, new ideas are generated, and people are motivated to think in an inter-related way. “We don’t do enough of this,” he said. “We do far too much thinking individually and concentrating each on our own mode without realizing the benefits of sharing ideas.”

While the value each mode contributes to the national economy is evident, Oberstar proclaimed, what is not so clear is the added value the interrelationship of these modes creates. In order for the U.S. to remain competitive in the global arena, modes must be joined and connections maximized so that goods and people can move efficiently. “In a \$10 trillion economy, we gain in productivity just from transportation,” Oberstar explained. “The U.S. economy is too big for an inefficient transportation system. We must extract the efficiencies out of each mode and join those efficiencies in ways that make each mode interdependent with the others while improving our quality of life.”

One way of doing this is through what Oberstar calls his “livability concept,” something he hopes to incorporate in the successor to TEA-21. The plan he briefly outlined would require every state DOT to employ a livability coordinator. This person would be responsible for fostering an integrated approach to all transportation development by bringing together key stakehold-

ers including land use managers, representatives from various modes, and those from the destination side. “We need to develop a livability strategy within our transportation system which would then allow us to make broad plans for the wisest investments that provide the greatest flexibility,” he said.



“We must extract the efficiencies out of each mode and join those efficiencies in ways that make each mode interdependent with the others while improving our quality of life.”

Such a livable, efficient intermodal system does not happen without the proper investments. “With modest investments, the multiplier effect is tremendous, and the productivity gains are significant,” Oberstar said. But, he warned, “those gains will be lost if we don’t make the investments, think ahead, and get the most from our transportation systems by way of developing and improving intermodalism.” He suggested that, like private investments, public sector investments ought to be market driven and have pay-off benefits. Additionally, he supports the notion of considering only investments that make the best economic sense and move the greatest number of people most cost-effectively.

With regard to federal investment in the forthcoming re-authorization bill, Oberstar indicated that the House of Representatives is seeking a 50 percent funding increase to what was TEA-21. This will create a \$375 billion program over six years and will widen the investments already made to improve the interconnectivity of transportation systems and vastly improve on safety and efficiency as well.

Finally, Oberstar offered that this forum is just a starting point for many further discussions. The charge now, he said, is to take the issues, break them down into subsets, and work on longer-range, sustaining solutions. He asked participants to think creatively about how to break through historical ways of doing things and think beyond where we are today to where we need to be tomorrow. “No other country in the world has the mobility we enjoy in the United States, but if we don’t move it ahead, if we don’t think beyond where we are today, we will surely decline. The challenge of this forum is to make sure we progress and not stand still.”



JAMES L. OBERSTAR FORUM ON TRANSPORTATION POLICY AND TECHNOLOGY

Attendees of Invitation-Only Discussions

National and Minnesota Leaders

David Balloff, Federal Aviation Administration
Stephen Barber, Federal Motor Carrier Safety Administration
Doris J. Bautch, Maritime Administration
Thomas Beaumont, National Association of Railroad Passengers
Peter Bell, Metropolitan Council of the Twin Cities Area
The Honorable Marion Blakey, Federal Aviation Administration
Samuel Bonasso, Research and Special Programs Administration
Richard Braun, Former Mn/DOT Commissioner and CTS Director
Gerry Brown, Cargo Carriers, Inc.
Fred Corrigan, Minnesota Transportation Alliance
Duane Crandall, AAA Minnesota/Iowa
Natalio Diaz, Metropolitan Council of the Twin Cities Area
Douglas Differt, Minnesota Department of Transportation
Carol Flynn, Retired State Senator
Jeff Hamiel, Metropolitan Airports Commission
Richard Harnish, Midwest High Speed Rail Coalition
John Hausladen, Minnesota Trucking Association
Davis Helberg, Seaway Port Authority of Duluth
John Horsley, American Association of State Highway and Transportation Officials
Julie Johanson, Metro Transit
Ronald Lifson, LDI Fibres, Inc.
David Mandell, Federal Aviation Administration
Dan Murray, American Transportation Research Institute
Marthand Nookala, Minnesota Department of Transportation
The Honorable James Oberstar, U.S. House of Representatives
Elliott Perovich, Anoka County
The Honorable Mary Peters, Federal Highway Administration
Brian Ryks, Duluth Airport Authority
Cecil Selness, Minnesota Department of Transportation
The Honorable Jeffrey Shane, U.S. Department of Transportation
Frank Sims, Cargill

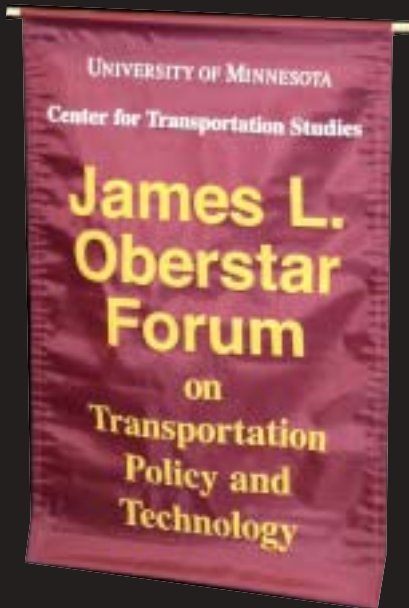
Robert Skinner, Jr., Transportation Research Board
Paul Skoutelas, Port Authority of Allegheny County
Alan Steger, Federal Highway Administration
G. Alexander Taft, Association of Metropolitan Planning Organizations
Elwyn Tinklenberg, Tinklenberg Group

University of Minnesota Participants

Robert Baker, Parking and Transportation Services
Max Donath, ITS Institute
Jerome Hajjar, Civil Engineering
Robert Johns, Center for Transportation Studies
David Levinson, Civil Engineering
Vince Magnuson, University of Minnesota Duluth
Gerard McCullough, Applied Economics, University of Minnesota
Lee Munnich, Humphrey Institute of Public Affairs
Lance Neckar, Landscape Architecture
James Riehl, University of Minnesota Duluth
Carol Wolosz, University of Minnesota Duluth

Forum Staff and Observers

Gina Baas, Center for Transportation Studies
Julie Grazier, Continuing Professional Education
Mindy Jones, Center for Transportation Studies
Steve Lockwood, Parsons Brinckerhoff
Cheri Marti, Center for Transportation Studies
Laurie McGinnis, Center for Transportation Studies
Deven Nelson, Congressman James Oberstar's Office
Kathy Stein, Howard/Stein-Hudson Associates
Teresa Washington, Continuing Professional Education



**Center for Transportation Studies
University of Minnesota
200 Transportation and Safety Building
511 Washington Avenue S.E., Minneapolis, MN 55455-0375
Phone: 612-626-1077
E-mail: cts@umn.edu
Web: www.cts.umn.edu**

**Editor: Michael McCarthy
Writer: Nancy Strege
Photographer: Nancy Johnson
Designer: Pat Rouse**

The University of Minnesota is an equal opportunity educator and employer. This publication is available in alternative formats, if requested. Printed on paper with 10% postconsumer waste.