JAMES L. OBERSTAR FORUM on Transportation Policy & Technology

2004

TRANSPORTATION IN RURAL AMERICA ... CHALLENGES AND OPPORTUNITIES

A Summary Report



ABOUTTHE FORUM

TO THE READER,

This report summarizes the third James L. Oberstar Forum on Transportation Policy and Technology. Over two days, we examined the many challenges and opportunities ahead for transportation in rural America, especially as our state and national leaders forge a new plan to fund our nation's transportation system for years to come.

In addition to our special co-hosts at the University of Minnesota Duluth, we owe much of this forum's continued success to the dozens of new and returning state and national transportation policymakers and professionals, who, following the lead of Congressman Oberstar, participated with energy and intellectual vigor. As a result, their wisdom and experience again precipitated ideas sure to improve our transportation system, in particular by reaffirming the need for continued commitment to transportation in rural America and its changing social and economic landscape.

We hope the ideas assembled in this report contribute to the development of meaningful and lasting advancements in transportation.

> Robert Johns Director, Center for Transportation Studies



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.

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JAMES L. OBERSTAR FORUM

on Transportation Policy & Technology March 14–15, 2004

Introduction TRANSPORTATION IN RURAL AMERICA

Regional and national transportation officials, policymakers, and professionals joined U.S. Rep. James L. Oberstar on March 14–15, 2004, to discuss the challenges and opportunities facing transportation in rural America. This was the third meeting of the transportation policy and technology forum named after Oberstar and hosted by the University of Minnesota Center for Transportation Studies. This year's forum, co-hosted by the Northland Advanced Transportation Systems Research Laboratory, was the first held at the University of Minnesota Duluth campus.

Oberstar headlined the two-day event, which featured USDOT assistant secretary for transportation policy Emil Frankel. USDOT deputy administrator Sam Bonasso (Research and Special Programs Administration) and associate administrators Rose McMurray (Federal Motor Carrier Safety Administration) and A. George Ostensen (Federal Highway Administration) also participated in the forum. Many other state and national leaders attended (see list on inside back cover). In addition, the two-day event included welcoming words from UMD vice chancellor for academic administration Vince Magnuson, UMD vice chancellor for finance and operations Greg Fox, and Duluth mayor Herb Bergson. CTS director Robert Johns served as master of ceremonies.

"To support the evolving rural economy we must continually tune our transportation system to meet rural needs," Oberstar said, opening the invited-only portion of the forum with a historical context of transportation in rural America. "We have to think about modes of transportation, how they affect rural areas, and what the implications are for the future."



Following Oberstar's opening remarks, University faculty members shared the latest perspectives in rural transportation research, and three USDOT administrators focused on rural transportation issues, especially safety, during a roundtable discussion. USDOT administrators and other invitees also took part in the forum's conversation circle, featuring satellite-style seating around an inner ring of chairs designated for speakers. With guidance from consultant Kathy Stein, discussion themes evolved as new members entered the circle and others exited.

Assistant Secretary Frankel led off a policy discussion panel that included Congressman Oberstar and Mn/DOT deputy transportation commissioner Douglas Differt. Frankel identified the issue of connectivity as critical for personal travel in isolated rural areas.

After Frankel's keynote speech to begin the portion of the forum open to the public, a panel of top transportation executives shared industry insights and responded to questions from the audience. Oberstar and moderator Robert Johns were joined by Paul Foley, CEO of MAIR Holdings, Inc.; Larry Naake, executive director of the National Association of Counties; Chris Zeilinger, assistant director of the Community Transportation Association of America; and James M. Foote, executive vice president of sales and marketing for Canadian National Railroad.

At the conclusion the event, Oberstar briefly summarized the forum's main themes and expressed his hope that the forum be known as "a place where ideas can clash in a thoughtful and constructive way." Finally, the congressman offered his ideas for helping rural communities thrive.

> This report summarizes the main events of the two-day forum on transportation policy and technology. More information about this and previous Oberstar forums may be found online at www.cts.umn.edu/oberstarforum.

TRANSPORTATION IN RURAL AMERICA— CHALLENGES AND OPPORTUNITIES

By James L. Oberstar

Just over 100 years ago, rural America was synonymous with agriculture, and also with poverty. It was largely the same as it had been at the time of the American Revolution. Horses performed most of the physical work on farms and were the means of transportation from farm to town.

In 1885, there were only four registered automobiles in the United States, but, by 1929, there were more than 26 million. This truly was a revolution in rural transportation. The automobile greatly reduced the loneliness and isolation of farm families, and it gave them a new, more reliable form of moving their goods and themselves to market—reliable ... at least most of the time. We've all seen pictures of a team of horses pulling a car out of the mud, conditions that led rural leaders to advocate better roads for the countryside. These initial efforts "got the farmer out of the mud," created farm-to-market roads to move crops to customers, and otherwise changed rural life.

Rural roadway networks continued to evolve, weaving the nation together with a fabric of paved roadways, most of them with only two lanes. By the 1950s, you could travel across rural America with relative, but time-consuming, ease. Then came one of the greatest developments in transportation: rural and urban construction of the interstate highway system—a vastly safer roadway, a significant increase in speed, a wider range of market opportunities, and greater accessibility.

Recent national trends

Rural areas continue to change, just as they have throughout the past 100-plus years. From 1950 to 1990, most rural counties nationwide saw declines in population, although this trend was reversed during the 1990s. Between 1990 and 1997, most rural counties actually experienced substantial growth.

Agricultural-based rural economies still exist in many regions of the country, but with their own personality and their own mix of economics and industry. Rural economies have also changed substantially during past decades. By 1980, jobs in rural manufacturing outnumbered agricultural employment by three to one. In addition to manufacturing, service industries such as tourism and retirement services have also been growing in rural areas.

The shift from agricultural employment is the result of technology improvements, crop science, and farm management—all of which have boosted productivity—which, in turn, led to farm consolidation, decreases in farm employment, and a surplus in farm labor. This trend has forced rural labor markets to shift to other economic sectors.

Recent Minnesota trends

Nationwide, the Bureau of the Census tells us, 21 percent of the population lives in rural areas. Here in Minnesota, 29 percent of our citizens live in rural areas—1.4 million people.

WE ARE CHALLENGED TO BUILD ON THE PAST, TO UNDERSTAND THE DYNAMICS OF THE PRESENT, AND TO PEER OVER THE HORIZON TO THE FUTURE TO ADAPT, INNOVATE, AND PROTECT THE BEST OF RURAL LIFE.

Rep. James L. Oberstar

For more than five decades, Minnesota's population has shifted from extensive resource-based economic activity in rural areas to job opportunities in urban areas. The social and economic changes include a greater geographical separation of home and workplace, smaller families, more labor force participation by women, more single-person households, more discretionary income, and more free time to engage in shopping, recreation, and other leisure-time pursuits.

Serving rural America's transportation needs

The success of our rural roadway system has also created new challenges: a rural society structured around the automobile; landuse patterns that depend on a vehicle for mobility; and isolation again—for the elderly, young, and low-income people who do not have access to the automobile.

The changing economies and changing demographics of rural America clearly have transportation implications. While rural jobs several decades ago were mostly on the farm, our rural population today must have transportation to jobs that are located in the next town, the next county, or beyond. In addition, many have more free time to engage in shopping, recreation, and other leisure-time pursuits. All involve more trips, longer drives, and a demand for greatly improved surface transportation.

Rural highway safety

Nationwide, a disproportionate number of injuries and fatalities occur on rural highways. In Minnesota, rural areas report an even higher percentage of roadway fatalities—69 percent, compared to the national average of 61 percent. Part of the explanation is that 48 percent of vehicle-miles traveled (VMT) in Minnesota occurs in rural areas, whereas the national average of rural VMT is 39 percent.

Many of those roads were built in the early 20th century and have changed little since then. Some were built before good practices in geometric highway design were developed. Many have seen substantial increases in traffic volume over the years. Much of the rural local and collector roadway system has narrow shoulders—or no shoulder at all, blind intersections, or poor sight distance. Motorists from urban areas and other unfamiliar drivers may not perform well on these "substandard" roadways. Weather conditions, such as snow, fog, and sleet, combined with dated roadway design, also contribute to the problem.

Conclusion

Our nation's rural areas—their demographics and economies—are in the path of monumental change, with significant effects on the rural transportation structure. Past investments in transportation dramatically improved rural America. We are challenged to build on the past, to understand the dynamics of the present, and to peer over the horizon to the future to adapt, innovate, and protect the best of rural life so that the 59 million rural Americans can enjoy enhanced mobility, a good quality of life, and a safe transportation system. I am ready for the challenge, and I ask that all of you join me in creating the solutions.

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



U RESEARCHERS EXAMINE DYNAMICS OF A CHANGING RURAL LANDSCAPE

Faculty members from the Twin Cities and Duluth campuses of the University of Minnesota and from the University of Wisconsin–Superior showcased their diverse transportation-related research projects and shared perspectives with important implications for rural transportation during a panel discussion moderated by James Riehl, dean of UMD's College of Science and Engineering.

First, UMD electrical and computer engineering professor Taek Kwon described general issues surrounding rural transportation. Most significantly, he noted that rural economies today are more diverse than in the "old days" and include not only agriculture and natural resources but mixes of industry and service as well.

With these changes, Kwon explained, come challenges. Expanded trading and just-in-time manufacturing, for example, demand an efficient rural transportation network, but 40 percent of county roads are inadequate. Also, the fatality rate in rural areas is more than twice that of urban areas, but funds for rural transportation have steadily decreased. In addition, approximately 95 percent of rural residents depend on personal vehicles because of a lack of public transportation. Rural senior citizens often have no option but to continue to drive, putting themselves and others at risk.

Despite these and other challenges, Kwon feels we can improve and expand rural road systems, improve road safety, and improve intercity access for freight and mobility for people, in part through continued rural intelligent transportation systems (ITS) research. Specifically, he explained, ITS can provide more efficient highway operations, quicker response to traffic accidents, and more efficient transit operations and vehicle fleet management, and even reduce run-off-the-road and weather-related accidents.

Next, UMTC applied economics professor William Gartner discussed the increase of tourism as an economic base in rural communities and how this trend ties into his current research on the impact rural airports have on rural economies. "Rural economies have become quite vibrant because they have more economic activity to support them," Gartner said. "Tourism is one of those activities, but it's very competitive. The limited research today tells us that the infrastructure we've set up to move goods from rural America into urban areas is different than what tourists are looking for. We're developing rural communities on the backs of industrial centers and trying to turn them into tourist communities, and in some cases we're not doing a very good job."

In Gartner's current study of small airports, which includes both general aviation and scheduled commercial air service, he is developing a model to estimate the economic impact of these rural



Taek Kwon, William Gartner, and Richard Stewart

airports. This model will allow airports to determine, for example, the impact of a gain or loss of scheduled commercial service in a rural community.

"We know these airports have a role to play in tourism development in Minnesota and in rural America. The extent of that role is not yet known, but we're working to figure that out."

UW-Superior transportation and logistics associate professor Richard Stewart outlined the many forces involved in changing rural transportation, including the emergence of a global marketplace, a changing rail infrastructure, highway congestion and conditions, rural demographic changes and needs, and rural transportation funding issues.

More and more, rural communities are exporting agricultural products and raw materials to the rapidly developing Asian markets. But gateway congestion is a growing concern. "If these gateways become constricted, we'll cease to have a functioning network system," Stewart warned. "We don't usually think of rural areas as having congestion, but if we don't get reauthorization funding, many rural roads will be exceeding their capacity."

According to Stewart, coping with congestion is one reason that intermodalism is an increasingly important component for rail, but he noted that growth is limited due to equipment balance and rail capacity. Agricultural movement of products by container continues to grow, he said, but the river transportation infrastructure needs high-cost upgrades. "We're paying close attention to Europe's use of short sea service, which involves containerized movement on barges," he explained. "It's a good concept and is working well in Europe, but there's virtually no funding in the United States to support it."

Shipping on the Great Lakes also faces fundamental problems, including vessel age and lock size limits. But, Stewart said, if funding was available to widen locks by 25 feet, capacity on the seaway could be increased by 20 percent. "In the long run, if we aren't able to fund the rural transportation infrastructure, a lot of our rural areas will be at a market disadvantage in the global trading world."

More information about Professor Gartner's airport project may be found online at www.tourism.umn.edu/research.

SAFETY AND SECURITY DOMINATE USDOT ADMINISTRATORS' DISCUSSION

In a roundtable discussion moderated by CTS director Robert Johns, three administrators from the operating agencies of the U.S. Department of Transportation presented their perspectives on rural transportation and briefly described their agencies and how each interacts with rural communities.

Sam Bonasso, deputy administrator with the Research and Special Programs Administration (RSPA), discussed RSPA's wide range of responsibilities. One of RSPA's most significant duties is monitoring and regulating hazardous material transportation across all modes, including pipelines. He acknowledged specifically that pipelines do impact rural economies and that public confidence in the pipeline network is both a challenge and an opportunity. "We have an aging pipeline infrastructure, much of which is in rural America," he said. "The challenge is to keep it working to make sure our economy keeps running."

Another piece of RSPA's efforts involves security. It's hard to imagine a terrorist event without hazardous materials being involved, Bonasso said, adding that the transportation of such materials isn't always an easy thing to secure. "We can't just put armor plate on everything—it costs money to secure these things," he explained. "This has become a significant issue in every town throughout the United States."

One positive initiative relating to hazardous material security is a new regulation requiring all hazardous material shippers to have a security plan. For example, this includes farmers and ranchers who transport fertilizers. "At first this was a shock to them," Bonasso said, "but we've worked with farming communities on this issue and have emphasized the significant role farmers and ranchers have in keeping their communities and our country safe and secure."

Rose McMurray, Federal Motor Carrier Safety Administration (FMCSA) associate administrator, explained that the primary mission of her agency is to reduce crashes, injuries, and fatalities involving large trucks and buses. "In 2002, highway crashes resulted in \$32 billion in medical costs—that's the same amount the Federal Highway Administration spent on building and maintaining roads," she reported. "We are really motivated to decrease these accidents and want to strike the right balance of regulation and movement of goods and people."

With the trucking industry representing 8 percent of the United States' gross domestic product and motor coaches moving more passengers than rail and air combined, achieving this mission requires a number of approaches. First, McMurray said, FMCSA



Sam Bonasso, Rose McMurray, and A. George Ostensen

wants to find ways of getting unsafe trucks and buses off the highway by utilizing more enforcement capabilities. "We also want to increase fines," she added. "Today, the maximum fine is \$10,000—that's not enough. Some 'unsafe' companies actually see that as a cost of doing business, so we want to increase fines by 150 percent per event."

Second, she said, FMCSA wants to provide more money for states to hire additional inspectors tasked to help get bad drivers off the road. "We want officers paid out of motor carrier money and want to enable them to handle general traffic enforcement. In the future, we hope reauthorization will give us a more effective hand in making the highway safer for everyone by letting only safe trucks and motor coaches on the roads."

A. George Ostensen, associate administrator for safety with the Federal Highway Administration (FHWA), shared his thoughts on some of the issues confronting his agency and a few ways FHWA is working to help reduce the number of highway fatalities.

In rural areas, half of all accidents are single vehicle, run-off-theroad crashes. "People leave the roadway and bad things happen especially in rural areas," he said. "We need to find a way to leverage technology today to help reduce fatalities."

Successfully reducing the number of highway fatalities, Ostensen added, requires a comprehensive approach to highway safety that includes the driver, the vehicle, and the roadway. He explained that FHWA is working toward comprehensive solutions, for example, by partnering with the American Association of State Highway and Transportation Officials to create a guide for addressing runoff-the-road accidents. The agency is also intent on decreasing road departures through the use of rumble strips and will soon implement an interactive highway design tool that incorporates alternative highway designs with a safety focus.

In his parting words, Ostensen urged audience members not to wait until an accident happens to become passionate about highway safety. "Wear your seatbelts," he implored. "It is a lifesaving technology."

CONVERSATION CIRCLE PONDERS WAYS TO GIVE RURAL AMERICA ITS DUE

Invitees once again took part in the forum's conversation circle, featuring satellite-style seating around an inner ring of chairs designated for speakers. This unique format has been a successful component of the past two forums. With guidance from consultant Kathy Stein, discussion themes about rural transportation issues and policies evolved as new members entered the circle and others exited.

"Rural America is more than roses, soybeans, and mining," began Blue Earth County commissioner Colleen Landkamer. "It [also] involves the single parent who needs reliable transportation to get to jobs and day care."

Chris Zeilinger, an assistant director with the Community Transportation Association of America, agreed. "It's hard to be a single parent with no car in a small town," he said. "We can't afford to write these people off—that's the old way. We owe it to our rural citizens to work on transportation, and for most of the issues in rural areas, the solution is a bargain compared to those in urban areas."

Early in the discussions, participants acknowledged that rural transportation is often directed by a flawed notion that what works for urban areas will work for rural communities. This may be due, in part, to fewer representatives from rural areas going to Washington. As a result, the way programs are crafted and funds are dispersed has shifted dramatically away from rural needs.

For example, former Mn/DOT commmissoner Elwyn Tinklenberg, president of the Tinklenberg Group, pointed out how transportation has become more focused on congestion issues. "That kind of thinking won't work to address the key needs of rural America," he said. "Some transportation funding strategies only work well in highly congested corridors, leaving rural areas in a vulnerable funding situation."

John Chell, executive director of the Arrowhead Regional Development Commission, added that, in terms of federal and state public policy, "we may be 20 years behind where the market is. If we want to compete in this global community, we have to change some of these policies that used to work but are now outdated."



According to Alan Steger, a division administrator with the Federal Highway Administration, three areas have significant implications for setting public policy. The first has to do with the efforts during the last 15 years to push decision-making down to the local level. Second, urban sprawl is polarizing the public around the issue of transportation. The third area involves truck size and weight laws. "Rural industries are particularly sensitive to the changes in shipping," Steger said, "but the highway system is a constraint to achieving economies of scale."

CTS director Robert Johns called for a more strategic approach to developing transportation systems in rural areas. "We should be very strategic about where we need heavy-duty roads and facilities," he suggested. "We also should learn from what's happening in urban areas and do a better job of coordinating land use in growing rural centers."

Several participants spoke about their frustrations regarding transportation funding and financing. David Johnson, transportation associate with the National Association of Railroad Passengers (NARP), directed his comments to rail, noting how currently there is no way to pay for rail investments nationally. "Railroading is the most capital-intensive industry in the U.S.," he explained. "Railroads actually have a disincentive to invest. Is there somewhere we can strike a balance between proper federal investment in regular-speed rail and high-speed service without industry re-regulation?"

"If a community can see the justification for a professional sports team, why can't it see the economic value that occurs for highspeed rail or an airport?" added Paul Foley, president of MAIR Holdings, Inc.

Adolph Ojard, executive director of the Duluth Seaway Port Authority, weighed in on waterborne transportation, stating that the efficiency of the system is great but that it is using old

IF A COMMUNITY CAN SEE THE JUSTIFICATION FOR A PROFESSIONAL SPORTS TEAM, WHY CAN'T IT SEE THE ECONOMIC VALUE THAT OCCURS FOR HIGH-SPEED RAIL OR AN AIRPORT? technology. "The last investment made in the Great Lakes system was in 1966," Ojard said. "There is no money going into the system, even though the system is moving more and more goods."

The conversation turned to ways the public and private sectors can work together to sustain small urban and rural economic vitality. Thomas Horan, a visiting scholar with the University's Humphrey Institute of Public Affairs, suggested the need to consider the unique aspects of rural areas that could improve rural life and be a showcase for urban areas. "There are some aspects of rural life that could be the beds of innovation and could be more innovative than in metropolitan areas," he explained.

Taking a more technology-related approach, ITS Institute director Max Donath sees transportation as more than just the concrete. "Wireless communication is a critical part of transportation," he said. "But the problem in this country is that we don't have 100 percent deployment of digital communication. There are opportunities we aren't tapping because of this. In rural areas, people often know everyone within 20 miles. Using wireless technology, people could sign up for rides, say, if they know that 'Jack' is driving up the highway—he could pick up people along the way. We don't have that luxury in urban areas."

Admittedly playing devil's advocate, NARP's Johnson asked how to best address people who say "you've chosen to live in rural America, so you need to pay the price; why burden the rest of us?" In response, Tim Worke, highways and transportation division director with Associated General Contractors of Minnesota, emphasized the need to ensure individual citizens can relate to transportation and its benefits. "If we can't relate it back to the individual via benefit," Worke said, "then they won't support it."

To Lee Munnich, director of the Humphrey Institute's State and Local Policy Program, one general concern is finding ways to keep the spotlight on rural policy issues. "We need to think about how rural transportation relates to other rural issues that relate back to the metropolitan area—things like health care, safety, and economic development—areas where transportation has a direct effect and where transportation leaders could think about doing a better job of keeping the focus on rural issues on an ongoing basis. How do we create a demand for action that makes sense?"

As topics evolved, many different ideas were tossed around. For instance, University applied economics professor Jerry Fruin proposed that there are simply too many rural roads. "We should be thinking about how to reduce the road infrastructure in areas where the population is declining," he said.

As he concluded the discussions, Congressman James Oberstar latched on to Fruin's suggestion as an example of challenging the status quo and inspiring a healthy debate with fresh ideas. "Jerry has provoked some real thought with his transforming idea on getting rid of some roads," Oberstar said, welcoming the idea to the discussion without endorsing its substance. "So let's take that idea, along with the many others we've talked about here, as points of reflection and ask 'what will work?""

THE LAST INVESTMENT MADE IN THE GREAT LAKES SYSTEM WAS IN 1966. THERE IS NO MONEY GOING INTO THE SYSTEM, EVEN THOUGH THE SYSTEM IS MOVING MORE AND MORE GOODS."

Adolph Ojard, Duluth Seaway Port Authority



RURAL AMERICA'S TRANSFORMATION EMERGES AS KEY THEME

In a working-lunch presentation to invited guests, Steve Lockwood, vice president with engineering firm Parsons Brinckerhoff, summarized emergent themes from this year's various forum panels and discussions, many of which related to the key findings in his background white-paper report on rural transportation.

One of the main hurdles for rural transportation discussed at the forum is that most transportation policy, analysis, and technology focuses on urban transportation. Despite assumptions to the contrary, what works for urban areas does not usually work for rural areas, too. Rural America, which encompasses communities that range from isolated settlements to urban fringe developments, has a unique set of characteristics that require unique solutions.

In recent decades, rural communities have undergone, and continue to see, a major transformation, resulting in a complicated mix of old and new. Rural American communities are shifting from an agricultural-based economy to economies increasingly driven by manufacturing, resource extraction, and tourism. In addition, rural communities, more than ever, are connected to and affected by the global economy.

According to Lockwood, these changes have added familiar urban mobility problems to the traditional concerns of rural isolation and distance. "The transformation of rural America has left us with a diverse mix, which makes it difficult to generalize about what the rural transportation problem is," Lockwood said. He added that these changes have created several stresses and challenges, among which include the problem of maintaining and improving the rural infrastructure, varied operational and service issues, as well as an array of safety problems. Each of these, in turn, has introduced a distinct set of transportation challenges for each mode.

For example, though rural communities today have many young, old, and disabled citizens, no transportation overlay exists to serve their needs. In fact, Lockwood noted, nearly two-thirds of all residents in rural communities have few, if any, transportation options. Highways are seeing increased auto-dependent travel based, in part, on new employment mixes and an increase in service trips. The reduction of freight rail service has created increased truck traffic—including larger and heavier vehicles—on rural highways. These patterns, among others, Lockwood says, have imposed new traffic-capacity and safety burdens on the rural highway systems.

Rural airports also have realized significant negative impacts due to deregulation, airline reorganization, the economics of operating small aircraft, rising fuel prices, and the events of 9-11. "There's been a decline in services," Lockwood said, noting that air service is essential to the economic viability of today's transformed rural communities.

RURAL COMMUNITIES OFFER UNIQUE QUALITIES AND OPTIONS DIFFERENT FROM THE DOMINANT METROPOLITAN CULTURE.



Steve Lockwood, Parsons Brinckerhoff

What's more, pipelines have their own issues as urban sprawl converts previously isolated, rural areas—where pipelines are located—to heavily populated areas.

Other themes touched on during the panels and discussions dealt with the potential for technology and the ability of ITS, or intelligent transportation systems, to address some of the rural transportation issues. The growing use of wireless communication, for example, is increasing the viability of remote field devices, such as variable-message signs and camera surveillance. There are technologies becoming available for more effective railroad gradecrossing protection, fog detection, speed and animal warnings, and construction work-zone speed management. New systems are also coming on board to help reduce the number of rural accidents and to improve incident response when accidents occur.

"We're currently pushing the technology envelope in many ways, but state transportation policy is critical to progress in these areas," Lockwood stated, adding that currently technology "is not an identified program area in most state DOTs. Addressing these issues in policy priorities and programs is essential to serious progress."

Lockwood urged metropolitan planners to pay attention to what's happening in rural America. "It's important to provide something unique for our country," he said, "and rural communities offer unique qualities and options different from the dominant metropolitan culture."

Clearly, he added, public policy has not caught up to the rapid change in rural America. "At the national level, rural travel demand is not well-understood, and there is very little research focused exclusively on rural passenger needs within the USDOT context or among the state and local government associations," he explained. "Agricultural and social-service entities, together with rural-transit providers, appear to have the clearest picture of rural needs, though some recent state transportation-planning exercises have included survey and stakeholder participation approaches that fill these knowledge gaps locally."

Steve Lockwood's white paper on rural transportation may be found online at www.cts.umn.edu/oberstarforum.

POLICY PANEL CONNECTS DOTS AND MORE TO MEET RURAL TRANSPORTATION NEEDS

CTS director Robert Johns moderated a lunchtime policy panel featuring USDOT assistant secretary for transportation policy Emil Frankel, Mn/DOT deputy commissioner Douglas Differt, and Congressman James Oberstar.

"There are special things about rural America and its transportation needs," Frankel opened. "However, there's no consistency about what that is." He added that because rural America includes very different elements—from isolated farming communities to urban fringe developments—the issue of connectivity seems to be very critical.

But the connection across modes is something with which the USDOT continues to struggle. "There are institutional and funding barriers as well as technological issues at play here," Frankel admitted. "We need to ensure that people in isolated areas can get from their homes by whatever means, connect to another mode, and do for personal travel what the private sector—UPS, for example—has done for moving goods."

He noted also that developments occurring in transportation policy take on a different significance in rural America, especially when it comes to safety. "Secretary Mineta is greatly committed to safety, and this is reflected in SAFETEA—there's a reason for the acronym," Frankel said, adding that telecommunications and technology advances also provide tremendous promise for dealing with some of the safety problems.

He acknowledged, too, that finance is a general transportation problem. "We need to think of innovative financing—besides the gas tax—and identify as many different public and private capital sources as we can."

Next, Differt offered his thoughts from a Minnesota perspective. "[Mn/DOT] today is different. The people are different and the structures are different," he said. "But rather than call this 'restructuring,' we like to say we are putting together a DOT for the future." But even with these changes, Differt noted that a challenge for rural transportation is that the transportation demands in the metro area are so big and expensive that they continue to overshadow the needs of rural areas.

According to Differt, the more streamlined Mn/DOT has worked to develop new partnerships with industry, contractors, counties, and cities to better facilitate project design and delivery, which he believes is providing better service to rural areas.

Despite both the positive changes and net results that have occurred at Mn/DOT, one of Differt's primary concerns centers on the ability to attract experienced professionals to meet the

WE DON'T WANT TO LOSE THE VALUE OF LIFE IN SMALL-TOWN AMERICA. HOW CAN WE USE TRANSPORTATION TO CONNECT SMALL COMMUNITIES AND



MAJOR AREAS, AND HOW CAN WE USE TECHNOLOGY?

Rep. James L. Oberstar

challenges of rural and urban transportation. "We have an aging workforce," he explained. "We don't see enough civil engineers coming into the profession, and I think we really need to start a push to develop quality people and get them in here."

Finally, Congressman Oberstar weighed in with his thoughts and observations. "Although I've described this forum in the past as a 'cauldron of ideas,' I think a 'clashing of ideas' is a better way of expressing it. From this type of arena comes the basis for good policy initiatives. We're without the glare of the urgency with which the legislative committee is faced, and we can have constructive dialogue."

Oberstar described a few transportation successes seen today in Europe, noting that Europe is easier to connect than the United States, especially with high-speed rail service. "Spain, France, Italy, Germany, and Belgium are doing what we need to do," he said. "They are connecting with high volume, low cost, dependable service. They offer long-haul service to air terminals, where the value added is far greater than in short-haul service."

Oberstar also talked about the transformation of rural society, specifically citing increasing congestion, new economic activities, rural residents commuting to work, the loss of rail and air service, and the impact these changes have on rural areas. "We don't want to lose the value of life in small town America," Oberstar cautioned. "How can we use transportation to connect small communities and major areas, and how can we use technology?

"We're at the point of putting together some good and challenging ideas for transportation policy for the future that cut across the entire fabric of society," he concluded. "Let us continue to engage in discussion."



Emil Frankel and Douglas Differt

PUBLIC FORUM

Keynote Address RURAL AND URBAN AREAS MUST WORK TOGETHER

"Rural transportation is an important, yet complicated, issue," Emil Frankel, USDOT assistant secretary for transportation policy, remarked to begin his keynote address during the public portion of the forum. "Rural America is many things, not one thing," he said, "and this requires citizens in both rural and urban areas to work together for a common goal." Frankel went on to share important insights about the issues shaping the next surface transportation funding measure and outlined several core elements of the Bush administration's proposal that will most impact rural transportation.

According to Frankel, the reauthorization bill currently under consideration by Congress—formally known as the Safe, Accountable, Flexible and Efficient Transportation Equity Act of 2003 (SAFETEA)—takes a fiscally responsible approach to continuing the funding program, known in recent years as ISTEA, then TEA-21, without using fuel tax or general-fund money. "SAFETEA will build on the remarkable accomplishments of ISTEA and TEA-21," Frankel explained. "The proposed funding retains several key programs; there are also several important policy reforms contained in SAFETEA aimed at increasing highway safety and expediting highway improvements."

Within existing legislation, one of most successful programs, Frankel said, is the National Scenic Byways program, which designates roads that have outstanding scenic, historic, cultural, natural, recreational, and archaeological qualities as All-American Roads, National Scenic Byways, or the new inclusive term "America's Byways." The program also provides funding for scenic byway projects on federally or state-designated scenic byways, and for planning, designing, and developing state scenic-byway programs. "In Minnesota, which has six roads designated America's Byways, and all over the country, these byways are part of the economic fabric of urban, and particularly, rural communities," Frankel explained. "These byways help improve tourism in rural areas, which increases the amount of money flowing into communities and creates more jobs."

"Healthy people mean healthy communities," he continued. "Clearly there's a need in this country to change lifestyles. Our proposal increases funding for programs that provide for the construction of pedestrian walkways and bicycle transportation facilities and for carrying out nonconstruction projects related

HEALTHY PEOPLE MEAN HEALTHY COMMUNITIES. CLEARLY THERE'S A NEED IN THIS COUNTRY TO CHANGE LIFESTYLES.



Emil Frankel, USDOT

to safe pedestrian and bicycle use. In addition, the Recreational Trails Program provides increased funds to develop and maintain recreational trails for motorized and non-motorized recreational trail users."

"We also need to address the unique safety needs in rural America," he said. "Rural areas bear the brunt of transportation fatalities. Although safety-belt use in rural areas increased in 2003, it's still below the national average." The Bush administration, Frankel explained, is committed to reducing highway fatalities and believes that nothing would make a greater difference in these numbers than to increase the use of safety belts everywhere in America. The administration's SAFETEA bill offers proposals to increase safety-belt use. "Part of this goal is to include more flexibility in how states can use funds," Frankel revealed. "The Bush administration wants local government to use common sense to solve transportation needs, and rural programs will receive their fair share when included in the formula program."

Enactment of this bill, he added, would be an important step in reducing highway fatalities and injuries, and providing greater flexibility to state and local governments to use these funds consistent with a comprehensive strategic highway safety plan. The president's proposal would provide more than \$201 billion in funding for highway and safety programs and nearly \$46 billion in funding for public transportation programs from fiscal year 2004 through fiscal year 2009.

Frankel also addressed a few other elements of SAFETEA not necessarily directed toward rural transportation, including proposals for environmental streamlining, expanding the resources available for investment, and improving connectivity. "One of our great challenges is fulfilling the dream of the 'I' (intermodalism) in ISTEA," he said. "We've not made as much progress as we need to. We need a seamless system that cuts across modes. Again, we've made some progress, but it's not as seamless as it needs to be; connections need to be improved. The way we are structured institutionally and financially creates a stovepipe, and we believe some of the new SAFETEA legislation will help correct this."

PUBLIC FORUM

Discussion PANEL OUTLINES IMPORTANCE OF RURAL AMERICA

In a gathering of top transportation executives representing a variety of public- and private-sector entities, panelists explored the implications of rural transportation for Minnesota and the nation during the portion of the forum open to the public. The panel, moderated by CTS director Robert Johns, included Congressman Oberstar; Paul Foley, CEO of MAIR Holdings, Inc.; Larry Naake, executive director of the National Association of Counties (NACO); Chris Zeilinger, assistant director of the Community Transportation Association of America; and James M. Foote, executive vice president of sales and marketing for Canadian National Railroad (CN).

Foote opened the discussion describing CN's commitment to rural America, especially to the hundreds of small upper Midwest communities along their routes. "We want to provide the highest quality of rail service to our customers, and we're not about downsizing, abandonment, and layoffs. We're a growing business providing a good, quality product, and this region will reap great benefits because of this," Foote explained. "Canadian National Railroad has purchased various U.S. rail companies to help fill some service holes, and we plan to continue our expansion with a complete focus on customer service."

Foote noted local and national impacts resulting from bottlenecks in Chicago's rail yards. "This has to be fixed," he said, "perhaps through investments in the Chicago Regional Environmental and Transportation Efficiency (CREATE) program. It would focus on improving Chicago's rail system and would benefit freight traffic, commuter traffic, and intercity rail passengers.

"We want to commit more than a billion dollars in federal funds to unlock this mess in Chicago," Foote explained, adding that moving freight in a more cost-efficient and time-efficient fashion creates a more dynamic economy, more affordable consumer goods, and ultimately, a better quality of life for all Americans.

In his remarks, Foley stated that low cost air carriers, like JetBlue Airways, are threatening major carriers, such as Northwest Airlines, and this, in turn, jeopardizes the viability of rural airlines. "The future scheduled air travel in rural America," he cautioned, "is directly linked to the success of major air carriers." Foley explained that rural airlines are most threatened today by cost, function of price, and function of demand. "Since 9/11, 29 percent of the passengers who flew legs of 300 miles or less have stopped flying for a variety of reasons," Foley said. "Our challenge now is to get cost as low as we can in order to keep services operating."



(From left) James Oberstar, Paul Foley, Larry Naake, Chris Zeilinger, and James M. Foote

He contends that one main problem is the security fees that have become an exorbitant expense to both airlines and their passengers. "Right now, taxes and fees make up 24 percent of a \$200 roundtrip ticket. Security costs should be funded from the federal government's general funds." And, he concluded, "Airlines cannot install every new system or procedure because it improves safety. We need the systems with the biggest bang for the buck."

According to Naake, the two major concerns facing rural transportation involve economic development and safety. In many rural areas, railroads have disappeared, there's more dependence on automobiles and trucks, and the trucks are getting larger and heavier. "It's harder for the rural road system to handle this kind of load. Good roads contribute to economic vitality and are essential to safety," he said. "Rural areas have more fatalities but receive less funding, and this is a huge problem. We need to invest more money on rural roads."

Naake added that NACO has made proposals to Congress to help rural communities address their transportation issues. Some of these include supporting an increase in the federal gas tax or an indexing of the gas tax; supporting improvements to the most dangerous rural two-lane roads; and supporting additional funding for rural transit programs.

Zeilinger called for a national commitment to people even in the most isolated rural areas in a fashion similar to the social policy in which the Rural Electrification Act of 1938 was grounded. "Transportation everywhere is about people, and transportation decisions affect the lives and vitality of people," he added. "Although there are many different types of rural areas, there are also many commonalities: health care is being centralized and doctors are now farther away than ever; rural education is becoming more regionalized, with some communities now left without schools and students having to be transported long distances; we've had welfare reform and need to get people to work, but both child care and transportation are often barriers to getting to work. We hope there will be a new reauthorization in which the needs of rural transportation are included."

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After questions from the audience, moderator Robert Johns asked each panelist to comment on a specific challenge or theme faced by his particular industry or agency. Naake stated that technology is one major challenge, adding, "Many rural systems are not yet plugged into our Web system." Foote, however, noted that technology has allowed CN to spread out its rail network like a highway network. "The days of centralization are no longer in vogue, and this is facilitated by technology." Foley said that as the survival of large network airlines is threatened, the industry will have to think in more revolutionary, urgent terms. "[Major] carriers now are too bureaucratic. They need creative ideas to accommodate business travelers and tourists who want to stop over or fly into one city and out another."

"Small urban centers are experiencing sprawl and congestion," Zeilinger said. "There are some land use policies that might be opportunities for smaller rural communities to think about. Our cities are learning things from rural communities. New housing developments or new shopping centers, for example, mimic the ideal small town. There's an opportunity to teach urban counterparts because they are trying to be like rural America."

PUBLIC FORUM

OBERSTAR: 'MORE THAN JUST ROADS' NEEDED IN RURAL AMERICA

At the conclusion of the panel discussion during the portion of the forum open to the public, Congressman James Oberstar shared his observations of the two-day event and briefly summarized what had transpired. "This is a place where ideas can clash in a thoughtful and constructive way, and where people can come at the problems from different perspectives and challenge one another," he said. "What we need to continue to think through is how transportation supports and inhibits growth in small towns throughout America."

Oberstar offered several thoughts on how rural transportation issues, such as distance and isolation, may be overcome with advances in technology. One suggestion, gleaned from forum discussions, is the use of satellite communications to aid such applications as remote/rural hospital surgical procedures.

"We should also consider using the median strip of highways to move fiber-optic cable and help eliminate the isolation that has characterized rural areas in the past and open up the means of communications," Oberstar suggested. "Using the roadways to deliver fiber-optic cable would give states a way to capture revenue and would allow us to transform rural communities so that people can stay there—where they want to be. This also helps avoid having to further crowd people into urban areas."

Oberstar also talked about some of Minnesota's small-town success stories, in which industries have opted to open facilities in rural areas, thereby creating ample job opportunities for local residents and, overall, helping these rural communities to thrive.

"When industry moves into rural towns, it keeps people there," he explained. "Northwest Airlines has a reservations center on the Iron Range [in northern Minnesota] which attracts a skilled work force from 30 cities around the area. People don't have to move to the Twin Cities to have a life. They have a life in their small town and they love it there. But it takes a lot of heavy lifting to keep companies in rural areas."

Finally, Oberstar reminded the audience that, besides working to keep industry and people in rural towns, there is also a need to retain the quality of life that's been a traditional part of rural America. "The small town is the birthplace of values in America; it's a connection to the past and a bridge to the future," he said. "We're all in this together, but we need creative thinking—it's more than just roads—we need to bring resources together to resolve these problems. This forum has made a great start at doing that."



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Rep. James L. Oberstar

JAMES L. OBERSTAR FORUM ON TRANSPORTATION POLICY AND TECHNOLOGY

Attendees of Invitation-Only Discussion

National and Minnesota Leaders

Thomas Adler, New England Transportation Institute and Museum Herb Bergson, City of Duluth

Jason Boehlert, National Association of Development Organizations Samuel G. Bonasso, Research and Special Programs Administration John Chell, Arrowhead Regional Development Commission Douglas Differt, Minnesota Department of Transportation Paul Foley, MAIR Holdings, Inc. James Foote, Canadian National Railroad Emil H. Frankel, U.S. Department of Transportation Henry Hanka, American Scenic Byways Resource Center Richard Harnish, Midwest High Speed Rail Coalition Michael Jaros, Minnesota House of Representatives Dennis Jensen, Duluth Transit Authority David Johnson, National Association of Railroad Passengers Rick Krueger, Minnesota Transportation Alliance Colleen Landkamer, Blue Earth County Rose McMurray, Federal Motor Carrier Safety Administration Larry Naake, National Association of Counties James Oberstar, U.S. House of Representatives Adolph Ojard, Duluth Seaway Port Authority A. George Ostensen, Federal Highway Administration Mike Robinson, Minnesota Department of Transportation Brian Ryks, Duluth Airport Authority Alan Steger, Federal Highway Administration Richard Stewart, University of Wisconsin-Superior Richard Thomas, Government Relations, Ames Construction Elwyn Tinklenberg, The Tinklenberg Group Tim Worke, Associated General Contractors of Minnesota Chris Zeilinger, Community Transportation Association of America

University of Minnesota Participants

Stanley Burns, Electrical and Computer Engineering, UMD Donald Crouch, Computer Science, UMD Max Donath, ITS Institute Greg Fox, Finance and Operations, UMD Duluth Jerry Fruin, Applied Economics William Gartner, Applied Economics
Thomas Horan, Humphrey Institute of Public Affairs
Robert Johns, Center for Transportation Studies
Taek Kwon, Electrical and Computer Engineering, UMD
Vince Magnuson, Academic Administration, UMD
Lee Munnich, Humphrey Institute of Public Affairs
James Riehl, College of Science and Engineering, UMD
David Wyrick, Mechanical and Industrial Engineering, UMD

Forum Staff and Observers

Gina Baas, Center for Transportation Studies

Tricia Bunten, College of Science and Engineering, UMD

Jeanne Hartwick, Northland Advanced Transportation Systems Research Laboratories, UMD

Steve Lockwood, Parsons Brinckerhoff

Cheri Marti, Center for Transportation Studies

Michael McCarthy, Center for Transportation Studies

Jackie Morris, Office of James L. Oberstar

Kathy Stein, Howard/Stein-Hudson Associates

Teri Williams, College of Science and Engineering, UMD

Carol Wolosz, Northland Advanced Transportation Systems Research Laboratories, UMD

UNIVERSITY OF MINNESOTA



CENTER FOR TRANSPORTATION STUDIES

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

Editor: Michael McCarthy Writer: Nancy Strege Photographer: Brett Groehler, UMD Designers: Pat Hayes Kaufman/The Design Company Pat Rouse

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