

Proceedings

# Symposium on Transportation Long-Range Funding Solutions

Continuing Education Center  
Saint Paul Campus  
University of Minnesota

Sponsor:  
Minnesota Department of  
Transportation

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Hosted by:  
Center for Transportation Studies,  
University of Minnesota

# Welcome and Symposium Purpose



Tim Henkel

## **Tim Henkel, Director of Modal Planning and Program Management, Mn/DOT**

During the 2008 legislative session, the Minnesota legislature directed Mn/DOT to evaluate the long-range needs of state highways, bridges, and transit and investigate potential strategies to meet these needs. This symposium is one part of this effort, said Tim Henkel.

The legislation, authored by Representative Frank Hornstein, specifically directed the commissioner to conduct this study in consultation with other state agencies and key stakeholders, Henkel explained. The bill mandated evaluating a complex set of needs and outlined a process for Mn/DOT to follow.

The study builds on a number of planning activities that were already under way, Henkel said, including the Statewide Transportation Plan for Minnesota (see page #) and research completed at the University of Minnesota.

The symposium focused on three sections of the legislation:

1. Identification of options for maintenance and improvement of the state's transportation system, with specific reference to the effects of the potential

increases to vehicle fuel economy, the availability of alternative modes of transportation, and extreme fuel price volatility on future transportation revenues.

2. The analysis of alternative pricing options used in other states and countries and their potential for use, public acceptance, alleviation of congestion, and revenue generation in this state.

3. Identification of road use pricing and other alternative pricing mechanisms, with particular consideration of key environmental impacts such as air quality, water quality, and greenhouse gas emissions, and estimates of implementation costs, user costs, and revenue.

Henkel set forth the symposium's goals:

- Understand the potential for and the potential consequences of the various options.
- Get partners and various stakeholders together.
- Begin the analysis of future transportation options.
- Learn what approaches are being considered in other states, and at the federal level and other countries.

The proceedings from this discussion will be part of the legislative report due November 1, 2009, he said.

## **Setting the Context**

### **Frank Hornstein, Minnesota House of Representatives**

Frank Hornstein, author of the bill that called for the study, credited Commissioner Sorel for "opening the doors of government into this process" and asking stakeholders for input. "I think we'll get a better study because of it...this is just the beginning of the discussion," he said.

Hornstein set the context for the discussion by noting some recent developments:

- An unprecedented rise in transit ridership in response to rising gas prices, congestion, and environment concern
- The I-35W bridge collapse, which

brought attention to infrastructure nationally and internationally

- Opportunities with the authorization of the federal transportation bill
- The Obama administration's investment in the national infrastructure as part of the economic stimulus funding
- Growing interest in a multimodal transportation system that could include high-speed rail and the electricification of the transportation system

He also noted several challenges for the future, such as meeting the needs of the aging population and finding alternatives to the gas tax.

**Thomas Sorel, Commissioner, Mn/DOT**

“The Mn/DOT strategic vision document states that we want to be a global leader in transportation and have a world-class transportation system,” said Tom Sorel. “To have a world-class transportation system, we need to have a sustainable source of [long-term] funding.”

There is no one silver bullet for the answers anymore, he said. Funding options such as mileage-based user fees or leveraging private sector dollars are receiving attention.

“Another part of Mn/DOT’s mission is to be collaborative,” continued Sorel. “We recognized that to have a world-class transportation system, we need all of your help to make it work. We can’t do it alone. No one agency or organization can do it alone.”

Much has changed since this study was first discussed in 2006: improved fuel economy, higher gas prices, higher transit ridership, and reduced vehicle-miles. The transportation world has changed, he noted, and gives us a glimpse of the future.

“Despite all these challenges, we have one of the largest state road construction programs we’ve ever had,” Sorel said. Mn/DOT received federal stimulus money for many road construction projects, and the agency is applying for other economic stimulus and transit grants. As a result, Mn/DOT has a large construction program at a time when it is trying to address future funding challenges.

Mn/DOT has concerns about the Obama administration’s proposal to delay federal highway authorization legislation. “Any delay would be quite disastrous, not only in Minnesota but across the country,” said Sorel.

“We’re in a perfect storm situation, where there’s a lot of uncertainty,” Sorel observed. “In the end, I think we’ll have a better approach for long-term funding both in Minnesota and nationally. But we need to go through this perfect storm to

sort these things out.”

There is a stronger emphasis on multimodal solutions. “Whether it be rail, transit, our port system, aviation, highways, biking, walking, you name it—all these modes of transportation need to be in our future, and they are part of this discussion,” Sorel said. Freight has come to the forefront in the federal highway authorization bill, he added, and there is serious discussion about freight movement as well as people movement.

Innovations in technology, contracting mechanisms, and financing need to be part of the solution. “We’ve got to support our ideas with innovation,” he said. Technologies in pavement materials will mean longer pavement life. Innovative contracting, as was used on the I-35W bridge project, can reduce project time. “All these things have a tremendous impact on our economy, congestion and mobility,” he said.

**Peter Bell, Chair, Metropolitan Council**

“As a result of the past legislative session, transit operations in the metropolitan area are fairly stable,” Bell began. “I think that is a major accomplishment.” The transportation bill was passed, and the bonding bill provided \$21 million for transit capital, he said.

Ridership is at record levels nationally. At Metro Transit, there were 82 million rides in 2008—a 27-year high. Yet both here in the metropolitan area and nation-wide, Bell said, we face service reductions and fare increases. Huge cost pressures are affecting the system. Transit is predicated on a business model in which growing volume doesn’t make up deficits—the opposite happens. The more people you serve, the more it costs, he explained.

A major breakthrough was the passage of the motor vehicle sales tax (MVST) referendum that allocates 100 percent of proceeds to transportation on a 60/40 split (it will be fully phased in by 2012).



Frank Hornstein



Thomas Sorel



Peter Bell

However, Bell said, a major problem is that revenue has fallen short. As of March, \$63 million less was collected than what was projected a short time ago. Had MVST performed as projected, Metro Transit would have been able to aggressively build out the transit system. There is an imbalance between funding transit capital versus funding transit operations—transit capital funding is much less solid than transit operations, he said.

Bell then gave four principles he believes should be considered for transit long-term funding solutions. First, funding sources should be tied more closely to transit. “I think the public wants to see a direct line between the funding source and that activity,” he posited. MVST is an “inverted incentive—buy a car/support transit—that doesn’t make a lot of sense to people.” Sales tax is a way that many regions have supported transit, but there is not a direct connection to it. Other ideas include capturing revenue from transit-induced development (value capture) and expanding demand pricing. “We must continue to work on building a world-class system,” he declared.

The second principle concerns subsidies. About a third of the cost of transit operations comes from the fare box and two-thirds comes from the taxpayer. “I would argue that it is better to subsidize consumers,” said Bell. “We are, in effect, subsidizing people on transit rides that don’t need the subsidy... We should think about that because this is a huge political challenge.” Restructuring transit for cost savings is also a huge challenge.

The third principle involves the cost and composition of the system. “There is an age-old argument about which is better—bus rapid transit (BRT) or light-rail transit (LRT),” said Bell. If something provides 70 to 80 percent of the benefit at 20 to 30 percent of the cost—and you’re already broke—you should choose it. “We need to embrace BRT because

frankly, the aggressive build-out of our system in this region is going to be BRT, not LRT, because you do get that 70 to 80 percent of the benefit at 20 to 30 percent of the cost,” he said.

Bell’s final principle is to look at using resources created from a potential national cap and trade program. “There is broad agreement that transit is an important piece of the puzzle in addressing climate change,” he said. “We are looking into adding a community’s carbon footprint, and the impact of development on that, into our planning process. If we go ahead on a national level with cap and trade, we need to look at using some of the resources from cap and trade to help fund transit.”

## Needs – Revenues – Challenges

### State Roads – Peggy Reichert, Mn/DOT

Peggy Reichert explained how Mn/DOT has gone through a process over the last two years to develop a state highway investment plan, with significant public input. The analysis includes a summary of eight district plans, identifies capital investments to meet performance targets, identifies priorities for projected funding and volatile economic conditions, and provides a snapshot in time and sense of scale.

Mn/DOT identified investment needs by analyzing traveler safety, infrastructure preservation, and mobility in addition to considering the needs of regional and community investment priorities, said Reichert. That analysis produced \$65 billion of investment needs between the years 2009-2028.

Mn/DOT analysts then looked at potential revenues during the same time period, which included a set of assumptions such as no new state revenues or increases; state Trunk Highway Fund share going to construction remains constant; federal government honors SAF-

ETEA-LU funding levels; higher world oil prices; slower growth in GDP; slower state population growth; increased fuel efficiency; slight increase in new vehicle sales; and 0.6 percent annual growth. The result of this analysis found that Mn/DOT can expect \$15 billion in revenue during 2009-2028—leaving a revenue gap of \$50 billion during the next 20 years, she said.

In addition, Reichert said, revenue sources are not aligned with other goals. For example:

- Increased fuel efficiency = lower gas tax revenues
- Use of alternative fuels = no gas tax revenues
- Smaller, lighter cars may cost less = lower sales tax revenues
- Increased transit ridership reduces gas consumption and perhaps auto ownership = reduced gas tax and sales tax revenues
- Reduced VMT reduces gas consumption = reduced fuel tax revenues



Peggy Reichert

## Metropolitan Area Transit



Arlene McCarthy

### Arlene McCarthy, Metropolitan Council

Arlene McCarthy outlined several areas related to transit: Metro Transit revenues and expenses, revenue issues and outlook, policy plan funding, and funding challenges. The Metro Transit system includes: bus, rail, suburban transit providers, Metro Mobility, contracted transit, and transportation planning. In 2008, the Metro Transit system had 95 million rides, 200+ bus routes, almost 1600 buses, one light-rail line (Hiawatha) with 10 million rides and 24 light-rail transit vehicles, the Northstar commuter rail to open late fall 2009, and 25 percent of system privately contracted.

For operations, revenues for calendar year 2009 are estimated to be \$377.1 million and expenses are estimated to be \$384.3 million. The adopted budget includes using \$7.2 million in reserves to balance the budget, she said.

The sources for funding Metro Transit operations include: MVST, state general fund, fares, federal funds (allowable only for preventive maintenance), other sources, including one-time County Transit Improvement Board (CTIB) sales tax, and advertising and interest income.

Capital spending for Metro Transit, excluding major transitways, is about \$160 million annually and includes spending primarily for fleet replacement, expansion, park and rides, garages and other facilities, and technology improvements. Major transitway construction can more than double annual capital spending; for example, the Central Corridor will average \$200 million per year. Sources for capital spending are federal funds, regional transit capital bonds, state bonds, and CTIB sales tax.

McCarthy described several issues related to continued funding of Metro Transit operations and capital. The largest source of operating funds, the motor vehicle sales tax (MVST), has seen recent sharp decreases and is volatile and dif-

ficult to forecast. Transit growth/service expansion is dependent on MVST recovery, and MVST recovery is dependent on car sales.

Recent appropriations from the state general fund have been flat year-to-year and are susceptible to cuts in times of state deficits. This source of revenue cannot be relied upon to grow and is the assumed source of 50 percent of net operating funds for new rail projects, McCarthy said.

Metro Transit has one of the highest fare-box recovery ratios in the nation. Fare increases have negative impacts on ridership and transit-dependent populations. It also raises a relatively small amount of revenue; for example, a \$.25 increase raises \$6 million, she said.

The federal formula funds have been stable with little growth. The federal highway reauthorization may or may not change traditional funding levels. Federal funds are primarily used for capital purposes, not operating expenses. New projects and other discretionary projects are awarded competitively and are limited, she said.

McCarthy explained that the CTIB sales tax is designated for transitway capital and operating expenses and is not available to fund base bus system maintenance or expansion. When expanding transitways, operating costs for Metro Transit increase.

According to the 2030 Transportation Policy Plan, goals for transit are to double ridership by 2030 (50 percent ridership growth by 2020), grow and improve the base bus system, and build and operate a system of regional transitways.

In closing, McCarthy said that significant funding challenges exist for Metro Transit. There is structural imbalance between existing and forecasted operating revenues and expenses and limited revenue for planned operating growth/service expansion. Capital revenue will allow for system growth, she said.

# Greater Minnesota Transit and Passenger Rail

## Mike Schadauer, Mn/DOT

Mike Schadauer described how Greater Minnesota transit encompasses 61 transit systems throughout the state operated by different local governments including 12 multi-county systems, 25 county-only, and 23 municipal and by-reservation systems. In 2009, Mn/DOT has contracts for \$49.2 million to fund and operate these transit services. The funding comes from various sources including federal formula grants, state general fund, MVST, and local government contributions. Capital assistance for calendar year 2008-09 is \$18.3 million, which comes from federal, state, and local sources, he said.

In 2009, Schadauer said, 68 counties have county-wide service, seven have municipal service only, and five counties have no public transit service. The transportation plan calls for meeting 80 percent of transportation needs, costs will increase to meet those needs and revenues are projected to be flat during the same time period.

Schadauer then discussed the freight and passenger rail plan. The purpose of the plan is to develop a vision for rail in Minnesota, establish investment needs and priorities, and define roles for the public and private sectors. Mn/DOT has received input from a policy advisory committee, technical advisory committees, and from the public across Minnesota. A draft report will be complete by the end of 2009, as the Federal Rail Administration requires rail plans for funding.

Schadauer related that Mn/DOT is participating in the Passenger Rail Transportation Forum, which provides advice to the commissioner of transportation about funding opportunities and establishes a funding strategy, primarily for a line between Chicago and the Twin Cities and between Duluth and the Twin Cities. Mn/DOT is competing for funds provided by the American Recovery and Reinvestment Act and Passenger Rail Investment and Improvement Act.



Mike Schadauer

# National Perspective on Revenue Options for Transportation

Jeffrey Buxbaum, Cambridge Systematics



Jeffrey Buxbaum

Jeffrey Buxbaum made several observations and offered a national perspective on Minnesota's funding challenges. The state's \$50 billion highway funding gap can't be solved by raising the gas tax by even a reasonable amount, he said. "We're struggling in the transportation industry to come up with sustainable sources of funding that track inflation and keep up with increasing costs. Those are significant problems."

On the transit side, it is easier to find capital to build systems but hard to fund ongoing operations, said Buxbaum. Additionally, bonds are not a sustainable revenue source. Minnesota funds a very low portion of its transportation budget with bonds, at less than 10 percent, relative to other states.

The funding gap to maintain the federal highway system at current congestion levels is \$58 billion, said Buxbaum. To improve the system, the funding gap grows to \$119 billion between 2007 and 2017. Congressman Oberstar's proposed authorization bill addresses some of these issues, but there is still a fairly significant funding gap at the national and state level.

In the midst of all of this, revenues are declining. Since 1975, U.S. vehicle miles per gallon (MPG) have held steady at about 21, and revenue from fuel taxes has been steady. With increases in MPG, the vehicle motor tax has become a less stable revenue source.

National studies are predicting that the Highway Trust Fund will be in deficit before the end of this federal authorization period, Buxbaum related. Those studies offer a number of solutions:

- Maintain the importance of the motor fuel tax for the fund.
- Supplement basic funds with other sources of funding such as customs duties, container fees, and tax credits.
- At the state and local level, continue

using fuel and vehicle fees.

- Continue to use sales taxes, local option taxes, beneficiary charges, and transit fees.

- Consider increasing tolling and pricing, which currently represent about 5 percent of revenue around the country.

- Use innovative financing and public-private partnerships.

These are all part of the solution, but not the only ones. Over time, and assuming gas usage declines, there will have to be some transition away from gas taxes as a source of revenue, Buxbaum asserted.

Buxbaum next outlined long-term funding questions:

- What is the transition to a new revenue model for funding transportation?
- How do we manage congestion on the road system?
- Is the way we pay for it part of that solution?
- How do we meet the energy and climate goals?

Buxbaum sees climate change—more so than congestion—as a publicly accepted incentive to change the transportation system. People don't like congestion, but they deal with it. "As we look forward, I see climate change being the driver to this and transportation system issues following behind," he said. Transportation professionals need to coordinate with environmental policymakers.

U.S. policy undervalues roads, Buxbaum said. In a comparison of gasoline prices of 155 countries around the world, the United States has the 111th lowest price because of our lower fuel taxes. Europeans pay higher fuel taxes, and those funds are used to pay for costs of the system and other impacts from transportation such as environmental effects and social costs, he said.

There is some criticism of congestion pricing and tolling because of their regressivity, but Buxbaum countered

that the current system is regressive—it's based on use, not income, and fixed costs like the motor vehicle tax are often regressive. The discussion needs to compare revenue options to the present situation, not the ideal, he said. The ideal way to pay for the system would have these features:

- A base fee that pays for the cost of maintaining and building the highway system we need. Potentially that fee replaces the gas tax over time.
- A congestion fee charged at certain times during the day. The value of the road in certain places at certain times of the day is higher than the value of the road during the rest of the day. It could include a transit subsidy to give people alternatives.
- An environmental fee, which might be carbon pricing, to mitigate the negative impacts of transportation.

It may be difficult, however, to get these ideas, through the legislative process.

Next, Buxbaum outlined funding ideas based on existing revenue streams:

- Direct user fees: Collected from transportation users; price directly associated with a trip. Examples: Time-of-day tolling, flat tolling, and transit/ferry fares.
- Indirect user fees: Collected from transportation users, but price not associated with an actual trip. Examples: MVT, registration fees, excise taxes, and value capture technologies.
- Specialized taxes: Collected from non-transportation activities, but revenues are dedicated to transportation. Examples: state and local taxes.
- General taxes: Collected from non-transportation activities, revenues are budgeted for transportation based on legislative discretion. Examples: Income, property, and sales tax, and other ad valorem taxes.

These funding options can be evaluated along four criteria: revenue yield and reli-

ability; economic efficiency (promotion of economically wise behavior); regressivity (does strategy put an unfair burden on low-income households); administrative effectiveness (ease and cost of collection and enforcement); and public acceptance (possible or probable, and in what timeframe).

Who pays, who benefits, how much, who wins, and who loses—we need to address those questions, he said. “The current system may be unfair, but it's the system we have. Moving to something else, such as a mileage-based fee, means that some will see it as a win and others won't. That's where these things are going to succeed or fail,” he said.

Buxbaum then reviewed the current prospects for these four options.

Direct user fees. The economy is driving down support for tolling, he said. People are driving less. Financing has become tighter, so it is harder to get bonds issued. These projects used to depend on bond insurance, which is hard to get now. As a result, projects are being delayed and rethought in places like North Carolina and Virginia, but a Maryland project is moving forward.

In the Indiana tollway example, there has been a public backlash to private sector deals because of an apparent loss of control and the surrender of decision making for toll rates. There was an attempt to do this type of project in Florida, but there were no bids from the private sector. Additionally, he said, existing toll operators are looking to increase tolls.

“The more innovative direct user fees are congestion pricing,” Buxbaum said. In New York last year, there was a desire to implement congestion pricing to manage congestion and raise revenues. The project didn't make it through the public acceptance process because of the issue of who wins and who loses, he said. Washington State is the first place in the country to put a toll on an existing free

road. Buxbaum also discussed other innovative direct user fee projects in Oregon and San Francisco.

Buxbaum reviewed studies of mileage-based user fees, such as one from the University of Iowa, and demonstration projects in Oregon and Minnesota. Many other states are also investigating mileage-based fee options. For transit, all agencies are under pressure to raise fares, he said.

Indirect user fees. The fairest way to collect indirect user fees is to raise the gas tax because there is a connection to use, he said. "It may be regressive, but so are all the other revenue measures that compete with it. We know how to do it," he said. On a per household basis, it costs about \$60 per year.

A problem with the gas tax, however, is that inflation erodes its value. "It may be best to tie the gas tax to an inflation index, but that is difficult to do," he said. Another idea is to peg the tax to the value of gas, which works well when the price of gas is \$4.50 per gallon but not so well when

it is \$2.00 per gallon. It's hard to predict revenue when the tax is based on price. Additionally, raising the gas tax is hard to get through legislatures. Some places have been successful, but others have not.

Registration fees and special excise taxes are another example of indirect user fee revenue. The flat fees tend to be regressive and tend to give low yields, he said.

Sales taxes. Sales taxes have been popular California because the control of the money stays local, which makes them more popular. Money that is collected and used locally is more acceptable, said Buxbaum.

General taxes. General taxes are a fair funding mechanism, Buxbaum said, because users are not the only beneficiaries of the system. Businesses and others—particularly the more affluent—also benefit from the system through general benefits to the economy and society. Thus, an income-tax-based system is a fair way to fund the system.

## Matrix of Potential Revenue Options for Minnesota



Ed Idzorek

### Ed Idzorek, Mn/DOT

Mn/DOT investigated a wide range of revenue strategies to create a matrix of potential revenue options for Minnesota. The investigation also looked at some local and regional considerations as well as factors influencing transit revenue under the current tax structure, said Ed Idzorek. The matrix includes existing revenue sources, modifications to existing revenue sources, and other potential revenue sources.

The analysis included the impact of higher numbers of more fuel-efficient vehicles, electric vehicles, and less expensive vehicles, Idzorek said. The matrix also reflects a number of other factors: the effect of increased availability of alternative modes, the effect of extreme volatility in fuel prices, public acceptance

of tax method, tax equity, geographic applicability, ability to alleviate congestion, ability to reduce greenhouse gas (GHG) emissions, implementation complexity, stability of revenue generation method, and revenue generation potential. Mn/DOT analysts also referenced several completed national studies by the Transportation Research Board and the National Cooperative Highway Research Program.

A broad and growing range of revenue options are available, Idzorek concluded, some better suited to achieving specific goals. It may take multiple options to cover all goals. The next steps are for policymakers to establish goals and for technical staff to develop approaches to meeting those goals.

## Resource Panel

**David Levinson, RP Braun/CTS  
Chair in Transportation Engineering,  
University of Minnesota, Department  
of Civil Engineering**

“Mn/DOT has identified \$50 billion of unfunded needs for additional resources of which 86 percent are for the purpose of mobility over the next 20 years,” David Levinson began. “I am not clear as to how these needs were identified, but several points should be kept in mind.”

First, he said, this is a slow-growing region, with about five million people now and growing at 1 percent per year. Second, per-capita vehicle-miles traveled (VMT) has been flat for almost a decade, and overall VMT growth has been flat for about half a decade.

There are several reasons for this, most recently the recession and high gas prices, but the most important is market saturation, Levinson asserted. “If speeds are not growing and people have finite time, they choose not to devote additional time to travel (and thus distance),” he said.

“We cannot know what the need for mobility is if we have an unpriced (or underpriced) transportation system,” said Levinson. People overconsume if they are subsidized, and people do not currently pay for the congestion externality they impose on others. “Once there is something like marginal cost pricing, we can determine which links generate more revenue than they cost to operate and maintain, and that will signal where capacity should be added, where the benefits of added capacity outweigh the costs,” he said.

Another way to think about what \$50 billion means is that in Minnesota, that amounts to \$10,000 of new construction for each resident (because this is above and beyond preservation funds). Over 20 years, \$10,000 per capita is \$500 per year, or about \$0.50 per trip.

“But that \$0.50 per trip is not to pay for existing infrastructure,” Levinson said. “If we were to charge users, we would be

looking at 10 to 100 times as much per trip, as the new capacity built for \$50 billion will serve only 10 percent to 1 percent of trips, because most trips will continue to use pre-existing infrastructure,” he explained.

“Attention is a scarce resource; spending time on non-starters like \$50 billion in mobility needs detracts from real problems with existing infrastructure,” he asserted. “In short, the \$50 billion suggested compromises—wants not needs.”

Levinson also said the institutional structure of transportation funding and administration should re-examined. He contended that Minnesota should consider a public utility model in which a transportation authority or utility, with independence from the legislative and executive branches of government, determines how much is required to maintain (and as necessary expand) the transportation system, with oversight from a public utility commission or something similar.

A transportation authority would resemble how natural gas, electricity, water and sewer in many places are currently delivered, he explained. Like those services, transportation is a utility that has costs that users should bear as directly as possible. The user fee notion would be embedded into the governance structure of such a transportation authority.

Value capture has not been accurately characterized in the presentations, said Levinson. If there are no road user fees, transportation creates value for landowners. “Several of the methods proposed by the University’s value capture study ([www.cts.umn.edu/Research/ValueCapture](http://www.cts.umn.edu/Research/ValueCapture)) hold promise for financing transportation systematically, not just at the project level,” he said.

In the short term, gas taxes, indexed and adjusted appropriately, should be used to fund transportation, as they are administratively much more efficient than road user charges, he said. They



David Levinson



Tom Stinson

have several advantages—foremost they are cheaper to collect than most of the proposed VMT charges.

“Ultimately as the fleet becomes electrified, the gas tax becomes a better...incentive,” he said. Levinson offered this example: If today 100 percent of the drivers use gas and pay for 100 percent of roads, and next year only 50 percent of drivers use gasoline, the remaining 50 percent would pay for all of the roads by doubling the gas tax. That provides a somewhat stronger incentive to switch to electricity. If the following year another 25 percent switch to electricity, then 75 percent use electric and 25 percent use fuel and pay the motor fuel tax, which is now four times as high.

“Eventually this becomes unsustainable as the last driver of a gasoline-powered car could not possibly afford 100 percent of the road system’s costs, but in the meantime the incentive works in the right direction for the environment,” he concluded. “And since government is always a lagging indicator, retaining the gas tax for as long as tenable should be considered the near-term solution, with continuing research into road pricing, additional demonstration, and deployment of select strategies like high-occupancy toll lanes.”

**Tom Stinson, Professor, University of Minnesota and Minnesota State Economist**

Tax policy is a challenging problem for the public sector. “It’s a way to pay for services that are not provided for by the market,” said Tom Stinson. Public sector funding is a particular challenge for economists because there is not one simple single objective: rather, there’s a trade-off of objectives. While economists’ stock-and-trade is devising mechanisms that interfere as little as possible with the market results, that may not be the most important part of selecting revenue sources, he said.

Stinson gave reactions to the morning’s presentations. First, it is apparent that we may not want to look for a single solution for the funding problems. Given the mix of objectives, a portfolio approach may be a better option as opposed to one single approach to solve these problems.

Second, concern about a particular tax system’s regressivity is not a strong argument. “What we’re really concerned about from a social point of view is not regressivity of a particular tax but of the entire tax system,” Stinson said. “If you think about the goal of reducing congestion or of climate change, it doesn’t matter if greenhouse gas emissions are being caused by a low-income person or a high-income person.”

Third, there is the issue of geographic rural equity. This issue offers another reason to consider a portfolio of taxes approach. Congestion is not the same kind of a problem in some areas of the state as it is in others, he said.

Revenue adequacy was also discussed. “You can index to a less volatile base than the price of fuels,” said Stinson. Local sales taxes and statewide sales taxes, while they might be an attractive source of base revenue, fail the efficiency test because there is little connection to environment and congestion. “There’s no connection to whether you bought a wide-screen TV and how much you contributed to congestion,” he said.

Congestion has been discussed as a problem for a long time, but it is not resonating with the public. The environment is resonating much more. “Maybe that’s the issue you use to address congestion problems,” he said.

“Tom Gillespie, Minnesota State Demographer, has talked about the aging of the population. There’s going to be a huge change in the demographics. You need to think about how that is going to affect the tax system,” Stinson concluded.











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