



Charles Zelle, commissioner of the Minnesota Department of Transportation

State faces \$12B roads and bridges shortfall over next 20 years

A Civic Caucus Focus on Competitiveness Interview

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Present

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Summary

According to Charles Zelle, commissioner of the Minnesota Department of Transportation (MnDOT), Minnesota is underinvested in transportation. He says the system of state highways and bridges faces a \$12 billion shortfall in necessary capital spending over the next 20 years: \$5 billion to maintain the state road and bridge system we have and \$7 billion to expand the system to help meet the needs of the state, its businesses and its communities. He observes that there is a \$50 billion capital-spending shortfall over the next 20 years in all modes of transportation statewide.

Zelle admits that depreciation of the state roads and bridges is unfunded, i.e., not taken into account in budgeting. Yet, he says, those roads and bridges represent 80 percent of the state's assets. He maintains that the state's gas tax is inadequate, inefficient and diminishing and says a one-cent increase in the tax would generate \$30 million. He notes the need for more tools to price traffic.

Zelle says there is not a choice between building transit and building roads, because we need both to accommodate a projected increase of one million people in the metro area.

Background

Charles Zelle became commissioner of the Minnesota Department of Transportation (MnDOT) in January 2013. He came to MnDOT from Jefferson Lines, an intercity bus company with routes in 13 heartland states from Minnesota to Texas. He worked there for more than 20 years and served as

president and CEO. Currently, he is chair of the Jefferson Lines Board of Directors, although he is no longer an employee with any management authority.

In 2012, Zelle served on the Governor's Transportation Finance Advisory Committee, which made recommendations on state transportation funding. His past community and civic activities include being chair or president of the following organizations: Minneapolis Club, Guthrie Theater, Meet Minneapolis, Minneapolis Regional Chamber of Commerce, American Bus Association, Itasca Project Transportation Initiative and St. Paul Academy.

Born and raised in St. Paul, Zelle has a B.A. degree from Bates College in Maine and an MBA degree from the Yale School of Management.

Note. Zelle is the grandson of Edgar Zelle, who, in 1925, purchased the Jefferson Highway Transportation Company, a Minnesota intercity and, eventually, interstate bus line business and forerunner of today's Jefferson Lines. In 1928, Edgar Zelle expanded into the fledgling airline business by founding Jefferson Airways, which ran four flights a day between Rochester and St. Paul. But demand for the service was low and Jefferson Airways closed within a year.

Issues to address. In advance of the interview, the Civic Caucus asked Zelle to be ready to address the following major issues: (1) the impact of no change in state law on specific transportation needs and the state's economy; (2) the future of the gas tax and other transportation financing options; (3) the relative urgency of improving the movement of goods versus improving the movement of people; (4) whether spending on light rail and commuter rail is consistent with investments needed to build the state's economy; and (5) why the state has not kept pace in building and maintaining its transportation network, so that Minnesota now needs a \$30 billion investment over the next 20 years to keep roads and bridges from continuing to deteriorate and traffic jams from worsening.

Discussion

Minnesota is underinvested in transportation. Since becoming commissioner of the Minnesota Department of Transportation (MnDOT) a year ago, Charles Zelle has traveled around the state giving people that message and talking about the condition of our transportation system and MnDOT's vision. He noted that MnDOT deals with more than just roads and bridges. It oversees the state's 135 airports, five ports, freight rail, passenger rail, multimodal transportation and transit in Greater Minnesota.

The state's system of highways and bridges faces a \$12 billion shortfall in necessary capital spending over the next 20 years. In late December 2013, MnDOT released its newly updated 20-year Minnesota State Highway Investment Plan (MnSHIP). Current plans call for \$18 billion in spending on transportation projects over the next 20 years. But the state will actually require \$30 billion in spending during that time to meet the needs identified in the updated plan for the state's system of highways and bridges, leaving a \$12 billion shortfall.

Zelle said that \$5 billion of the \$12 billion is needed to maintain the state road and bridge system we have, while another \$7 billion is required to expand the system to help meet the needs of Minnesota and Minnesota businesses and communities. "This is what is really required to maintain our competitiveness," he said.

MnDOT's newly tweaked vision is to maintain a multimodal transportation system that maximizes the health of people, the environment and our economy. Zelle said the vision helps guide the agency to make smart investments.

There is a \$50 billion capital-spending shortfall over the next 20 years in all modes of transportation statewide. Those modes include Metro Transit, passenger rail, Greater Minnesota transit, airport upgrades, port upgrades, and every road in the state. While there is a \$12 billion shortfall for the state system of highways and bridges, the \$50 billion shortfall includes \$28.5 billion for the county and municipal road systems.

Zelle observed that traditionally transportation has been "pretty nonpartisan, pure arithmetic and not grounded in ideology."

An interviewer pointed out that state and local governments tend to ignore depreciation and do not take it into account in their budgeting. The interviewer said that is a special problem in transportation, which has a huge capital investment in place. One issue in state and local governments, he continued, is that they budget by "money in and money out" and don't have balance sheets. He asked Zelle how the state could deal with depreciation as a real cost and take it into account in transportation budgeting.

Zelle responded, "We do talk about this. Our one overriding goal is enhancing our financial effectiveness." He noted that 80 percent of the state's assets are roads and bridges. "The challenge is getting people to understand the cost of our products and our services," he said. "We're a heavy-asset business and we must have return on those investments." He agreed that depreciation is unfunded.

We're \$5 billion short of maintaining the market value of our assets in the next 20 years. "In looking at the life-cycle costs of our assets," Zelle said, "we are less effective financially in doing mill-and-overlays of pavement that only last five years. That's not a good investment. The right strategy should be, with our eyes open, looking at hard numbers, over a period of asset life, to say how would we run this to be financially effective?"

(Mill-and-overlay involves removing the top two inches of asphalt to provide a new wearing surface on asphalt pavement.)

A recent study by an outside group showed that the necessary investments that could be made to the state road and bridge system if the \$12 billion shortfall were funded would have an average return on investment of 2.5 to one. He pointed out that this is capital investment to refurbish the state system of roads and bridges and does not include operating costs, such as snowplowing. "Roads and bridges don't last forever," he said. MnDOT refurbished the Blatnik Bridge in Duluth for \$15 million. "That will extend the life of that asset for 10 to 20 years, which is better than building a new bridge."

Enhancement of the road and bridge system should be an acceptable alternative to new construction projects. An interviewer asked how we can change the political conversation, so that

legislators who want to make their mark can understand that maintenance and enhancement of roads and bridges is good and that they don't have to come up with a new building project in their legislative districts.

"We must tell the story," Zelle said, "that to maintain our quality of life, we want to enhance our system, whether it's an additional lane or passing lanes or an interchange. Enhancement is exciting."

In the past, when we had earmarks from the Federal government, there was enough in the system. "It's getting a lot more transparent, he said. "Everybody in the state is going to have to hold hands on this. There isn't funding in the system for any of it. No projects can be funded if we can't even maintain what we have." He said we must do more to help people understand that our pavements rank 38th in the country in terms of quality and they're going to get worse.

One penny on the state's gas tax generates about \$30 million. Zelle said 40 percent of that money goes to counties and cities, leaving \$18 million for the state system out of each penny of gas tax. He said of the tax, "it's inadequate, it's diminishing, it's not indexed and it's inefficient, because cars are getting more fuel-efficient and vehicle miles are not going up." He said it would have helped if we'd indexed the gas tax 20 years ago. And he noted that assuming federal transportation funding will be stable "would be optimistic."

Rail transit will not reduce the \$12 billion shortfall over the next 20 years. An interviewer asked how much the \$12 billion shortfall would be reduced if we are able to build light-rail transit lines and passenger rail to Duluth. Zelle responded that those things would not reduce the shortfall. "In the metro area, we're not planning to add any additional general-purpose highway lanes if the \$7 billion shortfall portion for expanding the state highway system is funded. It'll be MnPASS lanes and interchanges that accommodate some of the transit system. There is not enough concrete or land available for the roads to handle the million more people who will be coming here."

(MnPASS Express Lanes on metro-area freeways are designed for solo drivers to use by paying an electronic fee. Small, two-axle trucks weighing less than 26,000 pounds can also open an account and use the express lanes. Transit buses, carpools with two or more people and motorcycles can use the express lanes for free.)

MnDOT's road investments and the Metropolitan Council's transit investments are completely integrated. Zelle said it is not a choice between building transit and building roads. He gave the example of the transit station being developed at Lake St. and I-35W in Minneapolis, which is a partnership of MnDOT, the Metropolitan Council, the City of Minneapolis and Hennepin County. "It can't happen without those four," he said.

He said such partnerships are working on intermodal connections among cars, pedestrians and transit, not adding general-purpose highway lanes. "We'll accommodate the extra million people coming into our area through build-out of our transit system," Zelle said.

"It's not LRT [light-rail transit] vs. BRT [bus rapid transit] vs. arterial streets vs. buses vs. streetcars vs. bikes," he continued. "You need all of them together. In a high-density corridor, LRT is the proper investment. But it may not be the solution in another corridor, which might call more for BRT. We need road investment along with transit investment, not one or the other. We must plan for growth, because

there will be one million more people in the metro area. If we don't, businesses will move out and people won't live here. The market will take care of itself."

Freight movement is essential for an urban economy. An interviewer asked how we can get the proper balance between moving people and moving products and resources. The interviewer said we must look at the intrastate and interstate movement of goods. "We can't forget moving the product," he said.

"That's absolutely right," Zelle agreed. "Freight is a really important part of the equation," he said. "It's essential for urban economies."

"Commercial vehicles are the ones that actually do affect the roadway the most," he continued. Roads are built to a standard to accommodate commercial traffic. He said MnDOT projects a 30 percent increase in truck traffic over the next 20 years. He observed that transit is a way to reduce the number of single-occupancy cars that take up so much of the space from commercial vehicles.

He noted the increase in freight train shipping from North Dakota's oil fields. "Maintaining freight movement through the entire system is critical to our manufacturing base and to maintaining our quality of life," he said. "It's not just three trains a day coming through towns any more. It's 20 trains a day with 100 cars each going through towns, cutting off parts of communities from each other. We need to expand our investment in creating underpasses and overpasses."

Getting more tools to price traffic is the wave of the future. An interviewer said Ken Orski, editor and publisher of an influential and widely read transportation newsletter in Washington, thinks federal transportation funding is at a "dead stop." Orski questions, the interviewer said, whether federal aid is making any real contribution to the national transportation system and says it would be better if states did the taxing, spending and prioritizing without passing the money through Washington, which brings no value added. Orski believes we need to move much more heavily to trip pricing on roadways. The interviewer asked Zelle how we can begin the trip pricing discussion.

Zelle responded, "There is no question that getting more tools to price traffic is the wave of the future." He said the MnDOT's highest return on investment is from traffic management: telling people what's happening on the road ahead; ramp metering; MnPASS lanes, where we price congestion; and Highway Helper trucks. "There are astronomical benefits if we can solve breakdowns quickly," he said. "As we're able to also tie road and car traffic with transit, we might have most bus ticketing done on smart phones. We could have a sale on transit for the next hour before rush hour begins."

We can get more utilization of cars by thinking of them differently. An interviewer noted that in the 1970s, the Citizens League defined transit by vehicle occupancy, that is, getting drivers to ride. "The automobile system is by far the largest carrier of passengers," the interviewer said. "It's the largest transit system. If you load it up, there's no additional capital investment."

Zelle said he likes to count passenger miles, not vehicle miles. "Don't think of a car as a huge asset for each family," he said. "It's a burden paying for insurance, parking, a garage." He noted there are 250 Smart cars in Minneapolis that people can pick up wherever they're parked, drive them and leave them at a convenient place when they're finished. Some people using the service will be able to get by without a car or with only one car per family.

Broadening transportation financing to include the state capturing the value of property appreciation near transit stops and highway interchanges has not been tried. An interviewer noted that there is a lot of momentum in trying to build political support for broader transportation financing in general. "Transportation is built around the premise that the people who use or benefit from it should pay 100 percent of the cost through the gas tax, transit fares, motor vehicle licensing and potentially trip pricing," the interviewer said.

But the interviewer pointed out that the state's investment in improvements to Highway 610 in the northern suburbs of Minneapolis is opening up hundreds or thousands of acres of land for development. "That land appreciates in value tremendously the minute MnDOT announces it's going to build a four-lane, controlled access freeway," the interviewer said. "Shouldn't the state say to the landowners, we would like a return on that appreciation in value?"

Zelle responded, "Value capture around transit hubs and interchanges of freeways hasn't been done. I like the idea. I'm not sure the state has really thought about that being our role."

"Our funding comes from multiple sources," he continued. "Fuel taxes provide less than half the funding for the Trunk Highway Fund. That funding hasn't been keeping pace with inflation. The county and municipal road systems are largely on the back of property taxes, so we will find little value captures. But we're so capital heavy that we must take a 20-year look. We need dedicated funds to make these investments."