

Mark Filipi, Manager of Technical Planning Support, Metropolitan Council

An Interview with The Civic Caucus
8301 Creekside Circle #920, Bloomington, MN 55437

May 18, 2012

Notes of the Discussion

Present : Verne Johnson (chair), Audrey Clay, Janis Clay, Clarence Shallbetter, Tim McDonald, Dan Olson, Jim Olson

A. Introduction of interviewee - As Manager of Technical Planning Support for the Metropolitan Council, Mark Filipi's work focuses on travel demand forecasting and air quality modeling.

Filipi Joined the Council in 1990 as a Transportation Planner. Among the Metropolitan Council projects he has worked on over the years have been the Dual-Track Airport Planning Process; the 1990, 2000 and 2010 Travel Behavior Inventories; multiple Transportation System Performance Evaluations; highway and transit studies; the Northstar Commuter Rail studies; the Central Corridor studies; the SW Corridor Studies. Recently, he was a member of the team preparing the Council's risk assessment of the Vikings stadium proposal for the Arden Hills Twin Cities Army Ammunition Plant site.

Prior to joining the Council, he worked as a planner for the City of St. Paul, the City of Springfield, MO, and Greene County, MO. He has also been an insurance salesman and an oilfield geologic technician.

He holds a master's degree in City and Regional Planning from Southern Illinois University-Edwardsville; and a BA in Geology from Carleton College, Northfield, MN.

B. Discussion -

THE PROBLEM: Congestion will grow as the region's population, households and employment expands.

The biggest "problem" in transportation is that people are continually deciding they want to travel more, Filipi said. The growth rates both in the number of trips people make and in the number of trips a household makes continue to increase. Since roadways are limited in capacity this means congestion will worsen.

THE GOAL: Find alternative ways to manage congestion.

Funding more road building, as a solution to this problem, is not enough. Certainly we can build more, but studies of what we would need to build to eliminate congestion during the peak hours conclude that that approach is simply not feasible. There is no way people could conceivably accept the consequences of building enough roads to result in no congestion. So the region needs to look for alternatives to increased highway construction. And with tightening budgets as background, the Met Council is looking for lower-cost, high-benefit solutions.

THE STRATEGY: ethink the planning process.

The way to deal with the critical aspects of congestion with limited resources, Filipi said, begins with understanding, as best we can, why we have congestion and, even more basically, where people are trying to go.

Every ten years the Metropolitan Council performs a Travel Behavior Inventory (TBI), capturing the driving habits of one percent of households, which, it turns out, is a statistically significant sample.

To accomplish this, the household residents are asked to keep a diary of all trips they make on a given weekday. Where they start and stop, when they were made, why they were made, and how they were made. Unfortunately, people don't always accurately record all their trips. In the 2010 TBI, a subset of the surveyed households were asked to carry GPS units to learn exactly when people started a trip, where they went and at what speed.

The details of driving behaviors on trips are important, he explained. People stop to get coffee, for example, which sounds like an insignificant thing; but from a transportation-planning viewpoint, you can't often serve a coffee stop with mass transit. So these small details can have considerable influence on the analysis of transportation needs.

Travel characteristics analyzed.

State highways handle a majority of vehicle miles. In 2007, total Vehicle Miles Traveled (VMT) in the state was 57.4 billion based on approximately 141,000 miles of roadway. The state highway system carries 58 percent of total VMT, while representing 8 percent of all roadway miles.

Daily trip rates by households have been steadily rising over the past 50 years, from an average of 7.5 daily trips in 1958, to 8.9 in 1970, 9.1 in 1982, 10.1 in 1990, and 10.3 in 2000. In recent years the trend has decreased slightly, likely due to the economic contraction, Filipi said.

Single occupant vehicles account for a large percentage of all trips. 71.5 percent of all vehicle trips in the Metropolitan region are made in single-occupant vehicles. The vast majority of work commute trips, 83.5 percent, are made by solitary drivers as well. In 5 percent of trips, there were other car passengers, and in 5 percent of trips travelers used public transit. In 2007 6.7 percent of Minnesota households had no vehicle available to them down from 7.7 percent with no vehicle available in 2000.

Trips are taken throughout the metro, he added, not concentrated in any particular region (though the two downtowns do focus much traffic), and traffic between the downtowns is a small percentage of total trips.

Congestion is limited in duration and is a function of the economy.

Serious congestion in the metropolitan area occurs only for a couple of hours each day. The straight commuting trips are almost all in the morning; the trips in the second half of the day appear to include many more trips for errands.

The statistic Vehicle Miles Traveled (VMT) as reported by TBI survey respondents has increased steadily from 41 million in 1991 to a high of 56 million in 2008. The observed VMT as reported by the Minnesota Department of Transportation for the same period shows a similar pattern, growing from 51 million daily VMT in 1991 to a high of 74 million daily VMT in 2008, tapering off a few million in years since. The difference in the two sets of number is that the TBI reported data includes only VMT produced by residents of the region, while the MnDOT data also includes VMT from commercial vehicles and trips made in the region by people who live outside the 7-county region.

If all things were equal and VMT were decreasing, it would be great, Filipi said, but it appears that the cause of the decline in VMT is that people are making fewer trips. This decline in miles traveled is a likely a result of the economic slowdown, he believes, and will probably reverse as the economy picks up.

The planning process for transit is not coherent. In 2011 the Legislative Auditor released an evaluation report stating that transit-planning processes in the state - including planning for rail, bus, and cars - is "less than ideal." (http://tinyurl.com/cs37q6s)The report found that more than 25 organizations are involved with transit planning or operations in the Twin Cities. And, "the lack of an agreed-upon vision and priorities for transit in the region has contributed to the transit governance challenges."

A participant asked whether the process for establishing transit considers a cost-benefit analysis, and who performs it.

Filipi said that throughout the process of creating a large project like rail transit, various organizations and agencies perform cost benefit calculations. However, there is no single office or organization accountable for the quality and outcome of the planning, including its long-term impact.

And sometimes the planning is not necessarily realized as originally intended. The Hiawatha light rail line was originally proposed as a bus rapid transit line, Filipi said. Studies had called for a six lane divided highway; so the government bought a huge swath of land but ended up building only four lanes.

The initial steps for the development of rail projects are often in the hands of the counties by virtue of their status as Regional Railroad Authorities and their powers in that role to acquire railroad right-ofway if and when it is abandoned by a railroad.

After several studies (such as feasibility analysis, alternatives analysis, draft environmental impact statement), the process likely moves to a funding proposal to the federal government, while coordinating among pertinent local and state government agencies and community organizations.

Congestion may be a natural product of a good system. Part of the challenge might be that there is no solution to congestion, a participant observed. Drivers will always go first to the route that offers the fastest way to their destination. As long as the freeways offer that benefit, they will always be full at peak demand hours.

One effect of improvements to the freeways is the unloading of the parallel surface streets. As a result, some people may drive those surface streets as a preferable alternative to the freeways.

C. Conclusion - The Met Council is identifying those corridors most in need of improvement, Filipi said. The council has stated for years that we can't build ourselves out of congestion, Filipi said. Presently 80 percent of money for roads goes toward maintenance. Only 20 percent goes toward improvements in capacity and the related additional maintenance. In the planning process it must always be noted that every time a lane is added, funding must also be earmarked to maintain that lane in the future. The process will continue to be complicated by the involvement of so many interested stakeholders, changing demographics and the vagaries of the economy.

The chair thanked Mr. Filipi for the interview.