

# **Chapter 1: Overview**

The region's mobility – so fundamental to its economic vitality and quality of life – is challenged by mounting congestion, rising costs, and tight fiscal constraints.

Traffic on the region's freeways and expressways is heavy and expected to worsen. By 2030, the Twin Cities area will be home to nearly a million more people than in 2000, who will make more trips and travel more miles. The result: commuters and others will endure more hours of delay on more miles of congested highway.

In the past, the answer to meeting travel demand was to build additional highway lanes to meet projected 20-year needs. This was the vision that built the Interstate freeway system and guided subsequent highway development. But experience has shown that there are never enough highway lanes to meet the growing demand for peak-hour urban travel. Instead of preserving future capacity for decades, new highway lanes can fill up in a matter of months.

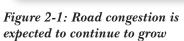
Compounding the situation is the issue of funding. Even if current and future funding levels were commensurate with those of decades past, there would still not be enough money to "fix" congestion throughout the region's highway system. Adding enough highway capacity to meet forecasted 2030 demand over the next 20 years would cost some \$40 billion dollars, an amount that, if funded by the state gas tax alone, would add more than two dollars per gallon to the cost of fuel.

The lack of adequate funding to support highway and transit programs has been a problem in past years and remains so, despite recent changes in state transportation financing. By FY 2012, 100 percent of revenues from the state motor vehicle sales tax (MVST) will be dedicated to transportation. But total MVST revenues have been declining since 2002, and although an upturn is forecasted beginning in FY 2010, predictions of a turnaround have been off the mark since 2003.

A 2008 state law will channel significant levels of new revenue to highways and transitways in coming years. However, growing preservation costs and legislatively mandated bridge repair/replacement investments will absorb a very large portion of those new revenues destined to the state highway fund.

The law permits funding of transitway development by revenues from a quarter-cent sales tax allocated by a joint-powers board led by metropolitan area counties that enacted the tax. Each of the seven counties has authority to enact the sales tax; five counties enacted the tax in 2008. This revenue will provide a significant infusion of money into transitway development, but the funds, by law, may not be spent on general bus operations.

Considering the projected state financial situation, securing significant additional transportation funds from the state in the near term will be a challenge. At the federal level, the six-year transportation funding bill was scheduled for reauthorization in 2009, offering some potential for higher levels of federal highway and transit funds but as of the adoption of this plan no new bill has been enacted by Congress.



However, infrastructure investments were part of the federal funding package (ARRA) passed in 2009 to stimulate the nation's economy.

In recent years the cost of fuel and construction materials – concrete, asphalt, steel – has soared, and the declining value of the U.S. dollar further eroded purchasing power. Although these trends have moderated, they signal the uncertain future and the challenges this region faces as it grapples with the task of preserving its aging transportation infrastructure.

A number of recent and long-term trends, whose impacts on transportation needs are as yet unclear, add uncertainty to the future of transportation:

- Having climbed to record levels in 2008, fuel prices have fallen, but continue to fluctuate, making the future direction uncertain.
- In a reversal of past trends, the number of vehicles miles traveled (VMT) per capita in the region edged downward from 2005–2008 but rebounded slightly as fuel costs dropped; however, total VMT continued to grow.
- The region will see continued job growth, a prime generator of peak-period highway travel, but more slowly than in previous years.
- Retired baby-boomers will likely keep driving into their later years but may not contribute to rush-hour travel.
- In previous decades, women surged into the workforce and onto commuting routes, but the effect of this increase on commuter travel has now leveled off.
- Growing concerns about the impact of fuel-burning on climate change could lead to some cut back in travel and to higher carbon taxes not dedicated to transportation, but to what extent these outcomes might happen remains uncertain.

# **The Regional Transportation Strategy**

The region faces hard choices in addressing mobility, safety and preservation needs. To respond effectively, the region needs a transportation strategy that is realistic, innovative and focused on leveraging available dollars for the most benefit while coordinating those investments with land use decisions. The transportation system must optimize all available transportation modes – highways, transit and others – and be coordinated with land use decisions for maximum effect.

#### **The Highway Vision**

Adequate resources must be committed to the preservation and maintenance of the extensive highway system built over the last 50 years, including the bridge repair/replacement program mandated by the 2008 Legislature. It is also important, however, to improve the performance of the highway system in order to preserve essential regional mobility levels for the region's economic vitality and quality of life.



Figure 2-2: The increased cost of construction materials is just one challenge in maintaining transportation infrastructure.

Mn/DOT's 2009 Statewide Transportation Plan estimates that statewide trunk highway investment needs exceed \$65 billion over the next 20 years, while projected revenues total only about \$15 billion – resulting in a gap of about \$50 billion statewide. About \$40 billion of this funding gap is for mobility needs in the metro area and on interregional corridors in Greater Minnesota. As the Mn/DOT plan acknowledges, it is unrealistic to expect that future transportation funding will increase to meet the \$50 billion "unmet need." In fact, that plan estimates that meeting just 5 percent of this \$50 billion gap – or \$2.5 billion – over the next 10 years would require the equivalent of a 12.5-cent per gallon increase in the motor vehicle fuel tax.

The statewide transportation plan's policies and strategies, therefore, emphasize a new approach to meeting system improvement needs. This is especially evident in the plan's vision for mobility in the metro area, which calls for "a more comprehensive and fiscally realistic approach to congestion mitigation."

While traffic congestion impacts can and should be mitigated, physical, social and environmental constraints as well as the limited funds available for capacity expansion must be recognized.

Five major objectives to mitigate congestion on the region's roadway system and enhance its performance should be pursued:

- · Increase the people-moving throughput
- · Manage and optimize the existing system, to the greatest extent possible
- Manage future demand
- Increase trip reliability, and
- Minimize travel time

In order to achieve the above objectives, this plan recommends emphasizing a system-wide management approach with the following strategies:

- Implement an Active Traffic Management (ATM) program on a system-wide basis.
- Construct lower-cost/high-benefit highway improvements on a system-wide basis to improve traffic flow by removing bottlenecks, improving geometric design and minimizing safety hazards on the Regional Highway System.
- Develop a system of managed lanes to move more people, more reliably and provide more capacity within existing right-of-way, while providing greater speed and reliability for transit which also benefits freight and people movement in the adjacent general purpose lanes.
- Implement strategic capacity expansion in the form of general purpose lanes.
- Implement non-freeway trunk highway improvements consistent with the investments above.
- Support other strategies including Travel Demand Management (TDM), transit investments and land use changes, to reduce future demand on the Metropolitan Highway System.

Fully funding these investment strategies is beyond the fiscal constraint of this plan. As additional funds are sought and become available, they should be used to more fully implement the highway investment vision articulated in this plan.

The system-wide management approach and associated strategies, together with the transit investment approach described in Chapter 7: Transit, constitute the policy basis for the federally required Congested Management Process (CMP). A more detailed discussion of the CMP is included in Chapter 5: Regional Mobility.

In 2009 and early 2010, Mn/DOT and the Metropolitan Council conducted a Metropolitan Highway System Investment Study (MHSIS), a MnPASS Part 2 Study, and other studies to refine in greater detail the managed lane highway vision, identify lower-cost/high-benefit projects along congested highway corridors, reassess major expansion projects and identify key investments on the Metropolitan Highway System by 2030 and beyond. The results of these studies are incorporated into this Transportation Policy Plan.

Additional needs in the developing portions of the region, including for new principal and "A" minor arterials, are also acknowledged in spite of current financial constraints.

This new highway vision is discussed in greater detail in Chapter 6: Highways.

### The Transit Contribution

Transit is already a major contributor to regional mobility. Ridership has grown steadily since 2003 to 91 million rides in 2008. The numbers are on track for reaching the goal of doubling 2003 ridership (73 million rides) by 2030 (147 million rides). Key factors driving this growth include opening of the region's first modern rail transit line in 2004, increased park-and-rides and express service, higher fuel and parking prices, strong employment concentrations in the core cities and increasing congestion.

Transit is currently moving people through the most heavily traveled, typically congested highway segments during the morning peak hour. On some stretches, express buses carry as many as 30 to 40 percent of the people moving inbound during that peak 60-minute period.

In the future, transit will take on an even bigger role in moving people in the region. A network of transitways will allow travel that avoids congested lanes, connects regional employment centers, improves the reliability of riders' trips and boosts the potential for transit-oriented development.

**Transitways** can be commuter rail, light rail transit, express buses using corridors with transit advantages, and bus rapid transit (which can use dedicated busways, managed or priced lanes, bus-only shoulders and arterial street bus lanes).

Most of the corridors labeled as Tier 1 in the Council's 2004 plan are well underway. The Northstar Commuter Rail Line started operations between downtown Minneapolis and Big Lake in November 2009. Construction has begun on Central Corridor Light Rail, to connect the St. Paul and Minneapolis downtowns and the University of Minnesota, and it is expected to open in 2014. The Hiawatha Light Rail



Figure 2-3: Hiawatha LRT



Figure 2-4: Metro Transit Bus



Figure 2-5: Northstar Commuter Rail



Figure 2-6: BRT - U of M Campus Connector on Transitway

line, already operating between downtown Minneapolis and the Mall of America, has been extended to meet the Northstar Commuter Rail line at the Target Field Station and will need to shift from two- to three-car trains to expand its capacity. Also two Bus Rapid Transit (BRT) lines are under construction on highways south of downtown Minneapolis:

- I-35W, including a combination of a high-occupancy toll lane and a priced dynamic shoulder, from Lakeville to downtown Minneapolis, and
- Cedar Avenue, from Lakeville north to the Mall of America with express bus to downtown Minneapolis.

BRT uses buses incorporating a number of the premium characteristics of light rail or commuter rail to provide fast and reliable service.

Nine other potential transitway corridors are under consideration in this plan. According to the Council's Transit Master Study, two of them show good potential for light rail or a dedicated busway- Southwest, between Eden Prairie and Minneapolis, and Bottineau, connecting the northwest suburbs with downtown Minneapolis. Light rail was selected as the locally preferred alternative (LPA) for the Southwest Corridor by Hennepin County Regional Railroad Authority in early 2010 and amended into the Transportation Policy Plan by the Council in May 2010. Hennepin County also selected light rail as the LPA for the Bottineau Transitway in June 2012 and the Council amended it into the Transportation Policy Plan in May 2013. The Rush Line corridor, the proposed link between Forest Lake and St. Paul, is currently under study. An alternatives analysis for Red Rock was completed, and bus improvements are currently being planned. An alternatives analysis began for the Gateway corridor (I-94 east) in fall 2010.

Four other promising transitway corridors - I-35W North, Highway 36/NE Corridor, Highway 65/Central Avenue/BNSF (Bethel/Cambridge), and Midtown should also be analyzed in the next few years to determine the most appropriate mode and alignment for implementation.

This plan assumes that one of these nine corridors will be implemented as a light rail line by 2020 and work begun on another LRT line to be completed shortly after 2020. It also anticipates that a third LRT line will be built by 2030. Based on current data, no corridor is projected to have enough ridership to justify investment in another commuter rail line. However, with Northstar now operational, it will be possible, after the regional Travel Behavior Inventory is completed, to reexamine current projections compared with actual ridership and determine whether or not ridership projections for other commuter rail corridors should be higher. Also the possible implementation of high speed rail lines to Chicago and Duluth may significantly reduce the capital costs of commuter rail in the Red Rock and Bethel/Cambridge corridors. Because these corridors may become viable under those changed assumptions, this plan also assumes implementation of a second commuter rail line between 2020 and 2030 in its cost estimates. The plan also calls for the implementation of four highway BRT corridors, in addition to 35W South and Cedar Avenue.

The implementation of the above transitway corridors converging in the two downtowns will require the

development of two intermodal transit passenger facilities at the St. Paul Union Depot and the Minneapolis Interchange.

The **regular-route bus system** will evolve and expand as population, congestion and travel costs increase, as the region implements rail transit and as customer needs change. *Local routes* will benefit from expanded coverage and frequency. Arterial routes, on high-traffic arterial streets, will receive the highest level of local bus service with highly visible passenger facilities at major stops. *Express routes* will be enhanced and expanded in congested highway corridors. Some arterial and express routes will develop into bus rapid transit corridors. The plan identifies nine arterial streets which are good candidates.



Figure 2-7: Bike commuting is a growing mode choice in the region

**Dial-a-ride services**, including Metro Mobility, will be expanded as both the general population and the number of people with disabilities increases. Metro Mobility will continue to meet the requirements of the Americans with Disabilities Act by providing transit service to

people with disabilities who cannot use the regular-route transit system. The Council will partner with local units of government to provide general-public dial-a-ride services in suburban and rural areas.



Figure 2-8: Pedestrian facilities are an important component of multimodal transportation

## **Other Transportation Modes**

Walking and bicycling are part of the total transportation picture and work well for shorter, non-



recreational trips. The Council provides planning guidance on land use issues related to bikeways and walkways, and with its Transportation Advisory Board, allocates federal funds to bicycle and pedestrian projects. The Council will continue to support and coordinate efforts to strengthen these modes.

The **freight movement system** and the **region's airports** connect the region to the rest the nation and the world. The Council will continue to work with Mn/DOT and monitor the issues confronting the freight industry. This plan contains the first major update of the aviation plan since 1996, and the Council will work with the Metropolitan Airports Commission to ensure adequate facilities for aviation users.

The region is able to draw on proven as well as innovative tools to achieve a transportation system that best meets current and future needs. No single solution will accomplish that goal, but taken together, coordinated and refined, they will keep the region moving and vital.