Minnesota is shifting gears in its approach to Twin Cities traffic congestion. With the region already home to more highway miles per capita than most comparable metro areas, the recent statewide transportation policy plan from the Minnesota Department of Transportation moves the Twin Cities further away from “attempting to build its way out of congestion by adding more highway lanes.” And the Metropolitan Council’s recent transportation plan states flat out that, because of constraints, highway system expansion will not eliminate congestion in the Twin Cities area or even significantly reduce it.

These leading transportation agencies have called for less emphasis on major expansion of new roadway capacity and, instead, more emphasis on innovative approaches aimed at increasing access rather than creating free-flowing traffic conditions at all times on busy highways.

The shift on congestion both recognizes fiscal realities and makes for smart public policy. A 2007 study from Mn/DOT and the Met Council estimated that more than $40 billion in government funds would be needed to solve metro-area congestion by 2030 through major roadway expansions and related improvements – an amount that would require a $2-a-gallon increase if the revenues were to come solely from the gas tax. Public-sector efficiency requires that government get all it can out of its infrastructure investments. So quite correctly, the transportation strategy going forward, when it comes to roads for the Twin Cities, banks more on creative approaches to managing the system and carefully targeting any construction projects.

Access is what matters. Too often in the past, transportation policy has focused on the means – that is, the trip – and not the goal of easy access to where people want to be. Recent University of Minnesota research finds that while congestion has worsened in the Twin Cities in the last decade, the ease of reaching destinations has improved throughout the region – by car, walking, biking and transit. Access can be easier even as roadways clog up if target destinations are nearby or reachable via quick commutes on transit. With destinations closer, a long, cross-town drive on the crowded expressway is not the only way, or even the best way, to travel.

And worth considering, too, that while congestion is annoying, it comes with the territory in large and bustling metro areas – a sign of a successful region with large numbers of people going places.

Although congestion has worsened, it turns out that Twin Cities travel time on average is not so bad. Even with recent increases in work-trip times, the 13-county Minneapolis-St. Paul region ranks second among the nation’s 25 largest metropolitan areas for its short average travel time to work, according to Census data. That ranking for the Twin Cities metro would stand at 10th shortest – not second – if it matched the area’s ranking for population size.
Still, congestion in the Twin Cities remains a costly and important transportation problem, one made all the more frustrating for so many of the region’s residents by their limited access to convenient transit. Clogged roads and stalled traffic undermine the public’s return on investment from highways.

Experiences here and nationwide demonstrate that added lane miles won’t end congestion. Why? Because of what the transportation planners call the “iron law of congestion”: New lanes, when constructed, are quickly plagued by the very congestion they were expected to cure. An expanded highway attracts new travelers and becomes congested to the point where those same travelers, just as before, find other routes, avoid the congested route during peak traffic times, or use transit or other transportation alternatives. Consequently the expanded route can handle more travelers but usually with the same level of congestion and the same slow speeds.

As a top transportation priority, state, regional and local governments must preserve and maintain the Twin Cities area’s existing transportation system. Beyond that, government must find smart and innovative ways to slow the growth in congestion by increasing the efficiency of existing roadways; targeting improvements that hold the greatest potential for positive, long-term and system-wide impacts; boosting transit use; spurring more travel on bike and foot; changing land-use patterns; and otherwise lowering the demand for limited space on our highways.

Of course, as the Metropolitan Council’s transportation policy plan notes, implementation of smart, effective strategies to manage congestion cost money. So funding for transportation remains a major challenge, and one that must be met because smart investments in transportation help spur economic growth for the state and expanded prosperity for Minnesotans.

This Growth & Justice issue brief looks at approaches to the issue of congestion in the Twin Cities area and presents five smart policies and strategies for managing it: highway system management, travel demand management, transit and transit advantages, travel by bike and by walking, and land use.

More information and detail on all the topics in this issue brief, as well as citations for the research, are available in the full Growth & Justice research report, at www.growthandjustice.org/congestion.
Managing the Highway System

The emphasis – and presumably the action – for highways is shifting away from the idea of building more and more lane miles to instead determining how best to improve and manage existing lane miles for better system-wide performance. Here in Minnesota and nationwide, governments and transportation experts are identifying innovative and strategic ways to increase the people-moving capacity of existing highways. Highway system management can alleviate congestion problems, give travelers more options, make trips more predictable, and increase safety. And smart approaches to highway system management can yield these benefits at a much lower cost than would be incurred with construction for big highway expansions. Stand-out approaches include active traffic management (e.g., metered ramps at expressway entrances and rapid response to traffic accidents), intelligent transportation systems (e.g., real-time traveler information on electronic signs over expressway lanes), managed and priced highway lanes (e.g., MnPASS lanes on I-394 and I-35W), and low-cost but high-impact highway construction projects.

Potential Policies and Approaches

- Build on the Twin Cities’ expertise and infrastructure for active traffic management and intelligent transportation systems to better manage peak-hour traffic and avoid as much as possible the bottle-necks and stop-and-go shock waves that undermine travel flow.
- Increase the network of managed lanes – or high-occupancy toll and transit lanes – as called for in the Met Council’s plans for the Twin Cities area highway system.
- For any strategic highway expansion in the future, focus on low-cost but high-benefit projects that will improve traffic flow not only where the capacity is increased but also for other congested segments of the broader highway system.
- Incorporate a “complete streets” approach into road improvements and any new construction, using design principles that strive to integrate transit, pedestrians and bicyclists into the highway system in ways that promote safety and access.
- Change state law to relieve law enforcement officials and public agencies from liability when removing disabled vehicles or spilled cargo from highways without the owner’s knowledge or consent.

Transportation Demand Management

Traffic congestion is a supply and demand problem: Too much demand for road space given the supply. A number of approaches can be used to manage the demand side of the transportation equation. One is for travelers to shift away from driving alone. Another is for travelers to shift out of peak drive time. And a third is for travelers to shift out of motor vehicles altogether. Efforts to reduce the demand for travel can ease congestion, usually at a much lower cost than supply-side action to add roadway lane miles.

Potential Policies and Approaches

- Promote carpools and vanpools as alternatives to solo driving to and from work.
- Work with the private sector to encourage flexible employment arrangements that eliminate commutes to the office or shift them out of the peak travel hours.
- Improve transit service and the transportation infrastructure for biking and walking in order to give commuters choices other than driving.

Transit and Transit Advantages

Transit increases the capacity of major metropolitan thoroughfares and in this way alleviates congestion. The basic link between transit and congestion is a simple one: Transit carries more people per vehicle in less vehicle space per passenger when compared to cars, freeing up room on the road. By way of example, buses on I-35W into downtown Minneapolis in 2006 carried what otherwise would have been two more full lanes of traffic during the peak morning hour for the expressway section at Lake St. Even if transit captures a relatively small share of the peak-time travel load, it can improve the traffic flow by keeping off the road those few cars that would otherwise push a crowded-but-flowing lane into gridlock.

Interestingly, the congestion benefits of transit are greatest in the long term, while the benefits from highway expansion are greatest in the short term. Added highway capacity provides immediate congestion relief on a route, but that relief quickly fades as more people use the improved route and it clogs with congestion again. With transit, as congestion grows in the long term, additional travelers will switch over to bus or rail and help mitigate the problem, assuming there are enough transit vehicles to accommodate them. Of course, transit service is important not only for its congestion impacts but also
for providing affordable mobility and access to low- and moderate-income travelers – a top priority.

Potential Policies and Approaches

• Make investments and pursue strategies that give transit a travel-time advantage in heavy traffic and consequently make it an attractive choice for commuters.
• Use other strategies, too, to attract new transit riders who would otherwise drive.
• Accelerate the Met Council’s plans for increased transit service, infrastructure and passenger loads in order to double ridership by 2020 instead of the current target year of 2030.
• Secure increased and stable funding for transit to allow for accelerated service expansion and other initiatives that boost ridership.
• Encourage greater concentrations of jobs in existing employment centers as a way to increase the viability of transit for work trips by a greater share of Twin Cities area commuters.
• Pursue parking options and strategies to boost transit use by commuters.

Walking and Biking

Walking and biking reduce the number of cars on the road, helping to alleviate traffic congestion. Already, a small but significant share of the workers in the Twin Cities area bike or walk to their jobs – 3.5 percent, according to Census Bureau estimates – and more than 10 percent of the workers living in Minneapolis use those modes to get to work. With local governments in the lead, the Twin Cities area has developed an extensive network of walkways and bikeways that commuters tap into. And the potential exists to increase the number of work trips made using these non-motorized means.

Potential Policies and Approaches

• Develop complete streets designed for safe and efficient use by bikers and walkers, as well as cars, trucks and transit vehicles.
• Define biking and walking as part of the transportation system and not only as recreational pursuits.
• Closely link investments and strategies for bike-walk transportation to transit because travelers use combinations of these modes for their trips.
• Make regional bikeways easier to navigate, using route markers and signs.
• Establish safe routes to schools for students who walk or bike.

Land Use, Locations and Destinations

Land use patterns matter. More compact development, and a mix of uses close by, allows people to reach destinations without driving cars for long distances and even without driving cars at all. When it comes to the efficient use of transportation infrastructure, concentrations of job sites are important. Transit-oriented development (TOD) has the potential to concentrate important destinations – for working, living or shopping – at nodes served by transit. However TOD faces challenges and obstacles that undermine the developers who seek to make it happen, including local zoning restrictions, land acquisition difficulties, the complexity of mixed-use development deals, adverse incentives from public-sector policies and programs, and the political dynamics of the public approval process.

Potential Policies and Approaches

• Continue – and even strengthen – the strong focus for highway spending on the maintenance and improvement of existing roads and emphasize travel improvements on routes serving established, compact and job-rich areas.
• Foster increased employment and population concentrations in already developed areas of the Twin Cities and along existing transportation corridors.
• For a range of state government programs and initiatives administered by the Metropolitan Council, distribute funding to reward local communities that adopt planning, zoning and investment approaches aimed at increasing compact development and reducing the need to drive.
• For the State of Minnesota and the Met Council, identify laws, fees and regulations that discourage development in built-up areas and take action to correct them.
• Advance, fund and build upon existing state programs and initiatives that promote sensible land use and curb the need to drive.
• Make transit investments that have strong potential to trigger transit-oriented, compact development.
• Consider ways to increase the flexibility that local governments both have and exercise in order to shape transit-oriented development and joint development projects near transit.