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To: REGION FIVE SUSTAINABILITY PROJECT  
Transportation Work Group  
Jean Coleman

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This memorandum describes the planning and corresponding funding options for transportation projects in Region 5, the steps to acquire approval and funds under these options, the possibilities for paperwork reduction and streamlining during the application process, and how more local control could be exerted at the planning level.

“Transportation projects” include roadways, bridges, railways, aviation, bikeways, public transportation and ports on waterways. This memo focuses on roadways and bridges which are the main areas of interest of the Transportation Work Group, particularly how to get input into the planning for the trunk highway system. Except where noted, this memo does not discuss funding and planning for streets and other transportation projects at the county, township or city level.

The Minnesota Constitution and Statutes categorize roadways as county state-aid highways, municipal state-aid streets, trunk highways, county highways and town roads. The difference among these categories is responsibility and funding. The county state-aid highway system is a network of highways under the responsibility of the counties -- that is, they are constructed, improved and maintained by the counties.<sup>1</sup> The system comprises just over two-thirds of all county highway miles.<sup>2</sup> County highways are roads established, constructed, or

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<sup>1</sup> Minn. Stat. § 162.02, subd 1 (2010).

<sup>2</sup> Matt Burress, House Research Dept., House Research, Short Subjects, County State-Aid Highway System1 (2010) available at <http://www.house.leg.state.mn.us/hrd/pubs/ss/sscsah.pdf> (last visited July 12, 2011). Copy attached. See also Minn. Stat. § 162.06 (2010).

improved under authority of county boards, including all roads lying within the county or on the line between counties established by judicial proceedings, except those roads established, constructed, or improved by the counties that have been maintained by the towns for a period of at least one year prior to July 1, 1957.<sup>3</sup> The municipal state-aid street system is a collection of streets located within 144 Minnesota cities.<sup>4</sup>

The roadways designated as U.S. Highways in Region 5 follow trunk highway routes, are treated as trunk highways,<sup>5</sup> and are linked with adjoining state roadways to create a continuous U.S. Highway system.<sup>6</sup>

The “Great River Road” is a designation of a highway that runs the length of the Mississippi River from Itasca State Park to the Mississippi Delta. The commissioner of the Minnesota Department of Transportation (MnDOT) is charged with establishing and locating the route, and is responsible for the construction, reconstruction, improvements and maintenance of it.<sup>7</sup>

Planning for roadways, bridges, bikeways, and public transportation is governed by the statewide multi-modal transportation plan developed by the MnDOT Commissioner.<sup>8</sup> This plan governs how MnDOT constructs, improves and maintains the roadways for which it has responsibility.<sup>9</sup> Cities, counties and some townships also create transportation plans for their local roadways. Where those plans conflict with the statewide multi-modal transportation plan,

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<sup>3</sup> Minn. Stat. § 160.02 (2010).

<sup>4</sup> See Matt Burress, House Research Dept., House Research, Short Subjects, Municipal State-Aid Street System 1 (2010) available at <http://www.house.leg.state.mn.us/hrd/pubs/ss/ssmsas.pdf> (last visited July 12, 2011), copy attached; Minn. Const. art. XIV § 4; and Minn. Stat. § 162.09 (2010)

<sup>5</sup> Minn. Stat. §§ 161.114 – 117 (2010)

<sup>6</sup> See AASHTO <http://cms.transportation.org/?siteid=68>

<sup>7</sup> Minn. Stat. § 161.142 (2010)

<sup>8</sup> Minn. Stat. § 174.03 (2010)

<sup>9</sup> *Id.*

the state plan supersedes the local plans.<sup>10</sup>

A copy of the statewide multi-modal transportation plan is available online through the MnDOT website.<sup>11</sup> The Transportation Work Group should also obtain copies of any city, county and township plans for Region 5.

## **RESPONSIBILITY**

MnDOT has primary responsibility over the roadways and bridges in Region 5. Cities, counties, and townships can plan, construct, improve and maintain municipal streets and bridges, county roads and bridges, and town roads and bridges as prescribed by statute.<sup>12</sup> However, the MnDOT Commissioner may supersede the local planning authority when he or she deems the work of statewide concern.<sup>13</sup>

Planning for Interstate 94 is done by MnDOT, in accordance with federal regulations for receiving federal aid made available by the United States for highway purposes.<sup>14</sup> MnDOT also performs the construction, maintenance, and improvements on Interstate 94, either by employed labor or by contract with private companies.<sup>15</sup>

The roadways designated as U.S. Highways are planned, constructed, improved and maintained by the MnDOT, with no federal oversight.<sup>16</sup> The roadways are designated with U.S. Highway routes are numbered by the American Association of State Highway and Transportation Officials Special Committee on U.S. Route Numbering, which has little

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<sup>10</sup> *Id.* at Subd. 3

<sup>11</sup> See Minnesota Transportation Statewide Policy Plan: 2009 – 2028 available at [http://www.dot.state.mn.us/planning/stateplan/Final%20Plan%20Documents/Policy%20Plan/Entire/Minnesota%20Statewide%20Transportation%20Policy%20Plan\\_2009-2028.pdf](http://www.dot.state.mn.us/planning/stateplan/Final%20Plan%20Documents/Policy%20Plan/Entire/Minnesota%20Statewide%20Transportation%20Policy%20Plan_2009-2028.pdf) (last visited July 12, 2011)

<sup>12</sup> See Minn. Stat. §§ 162.01 – 164.36

<sup>13</sup> Minn. Stat. § 174.03 Subd. 3

<sup>14</sup> See Minn. Stat. § 161.12

<sup>15</sup> *Id.*

<sup>16</sup> See Minn. Stat §§ 161.114 – 161.117

relationship to the U.S. Department of Transportation or any other federal agency.<sup>17</sup>

The Federal Lands Highway Program of the Federal Highway Administration (U.S. DOT) provides financial resources and technical assistance to and within national forests, national parks, Indian reservations and other public lands by preparing plans and contracts, supervising construction facilities, and conducting bridge inspections and surveys.<sup>18</sup>

Attached in Appendix A is a list of the trunk highways in Region 5 with the statutory description of the routes. This information identifies the trunk highway routes that are the responsibility of MnDOT. Roadways that are not the responsibility of MnDOT and are not federal or tribal lands are either the responsibility of a county, city, or township, or are private roadways.

### **THE STATEWIDE MULTI-MODAL TRANSPORTATION PLAN**

The MnDOT Commissioner must develop, adopt, revise and monitor a statewide multimodal transportation *plan* taking into account the information submitted via public hearings.<sup>19</sup> After each revision of the statewide multimodal transportation plan, the Commissioner can take no action inconsistent with the revised plan.<sup>20</sup>

The Commissioner then has the duty to develop statewide transportation *priorities* and schedule capital improvements and expenditures pursuant to the priorities.<sup>21</sup>

The Commissioner also prepares a statewide 20-year *capital investment* plan pursuant to

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<sup>17</sup> See American Association of State Highway and Transportation Officials Special Committee on U.S. Route Numbering, <http://cms.transportation.org/?siteid=68> (last visited July 13, 2011).

<sup>18</sup> See Federal Lands Highway, <http://flh.fhwa.dot.gov/> (last visited July 13, 2011).

<sup>19</sup> Minn. Stat. § 174.03 Subd. 1(2); See also Minnesota Transportation Statewide Policy Plan: 2009 – 2028 available at [http://www.dot.state.mn.us/planning/stateplan/Final%20Plan%20Documents/Policy%20Plan/Entire/Minnesota%20Statewide%20Transportation%20Policy%20Plan\\_2009-2028.pdf](http://www.dot.state.mn.us/planning/stateplan/Final%20Plan%20Documents/Policy%20Plan/Entire/Minnesota%20Statewide%20Transportation%20Policy%20Plan_2009-2028.pdf) (last visited July 12, 2011).

<sup>20</sup> *Id.* at Subd. 2.

<sup>21</sup> Minn. Stat. § 174.03 Subd. 1 (2) (2010).

the statewide multi-modal transportation plan and the statewide transportation priorities.<sup>22</sup>

Region Five is part of a larger MnDOT district -- District 3 -- and is included in the District 3 statewide 20-year capital investment plan.<sup>23</sup>

The statewide multimodal transportation plan must include matters of local or regional concern if the inclusion is needed to insure a comprehensive, statewide perspective on transportation policies and priorities.<sup>24</sup> The Commissioner is required to recognize and attempt to accommodate the local or regional transportation plans.<sup>25</sup> The statewide plans supersede a local or regional plan to the extent inconsistent on a matter which the Commissioner demonstrates is of statewide concern.<sup>26</sup> Specific projects are planned and executed pursuant to the statewide multi-modal transportation plan and the priorities determined by the Commissioner.<sup>27</sup> For any one city, county or township project, the project must be included in the statewide plan and placed high on the schedule of priorities before it can be funded and contracts let.

## FUNDING

### Funding Sources

Minnesota's **trunk highway fund** includes monies from highway taxes, trunk highway bonds, federal aid and a variety of other sources. Funding for construction, maintenance and improvements for Interstate 94 comes from the **Highway Trust Fund** managed by the Federal

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<sup>22</sup> *Id.* at Subd. 1(3).

<sup>23</sup> Mn/DOT District 3 20-year Highway Investment Plan 2009-2028 available at <http://www.dot.state.mn.us/planning/stateplan/Final%20Plan%20Documents/Highway%20Investment%20Plans/District/PDF/District%203%20Highway%20Investment%20Plan.pdf> (last visited July 12, 2011). The District 3 website is at <http://www.dot.state.mn.us/d3/>.

<sup>24</sup> Minn. Stat. § 174.03 Subd. 3 (2010).

<sup>25</sup> *Id.*

<sup>26</sup> *Id.*

<sup>27</sup> *See* Minn. Stat. § 174.03 (2010).

Highway Administration<sup>28</sup> and is received into the trunk highway fund,<sup>29</sup> Funding for the **Great River Road** also flows through the trunk highway fund, with contributions from federal, state, local and private sources.<sup>30</sup>

The **Transportation Revolving Loan Fund** (TRLF) is a state infrastructure bank established to provide loans to eligible borrowers for public transportation projects eligible for financing or aid under any federal act or program or state law.<sup>31</sup> The fund was established with federal incentive money and non-federal contributions.

Under Minnesota Statutes, Chapter 162, there are a separate **county state-aid highway fund** and **municipal state-aid street fund**. Revenue for the state-aid funds comes mainly from taxes on motor fuels, motor vehicle registration, and motor vehicle sales. In addition, counties, towns and cities have funds for roads and bridges from both state and local sources.

### **Funding Distribution**

The federal aid received for construction, maintenance and improvements to Interstate 94 is used by MnDOT for construction, maintenance and improvements, either by labor employed to do the work or by contract with private entities.<sup>32</sup>

The distribution of funds from the trunk highway fund, the county state-aid highway fund and the municipal state-aid street fund must be approved by the MnDOT Commissioner and distributed pursuant to the 20-year capital investment plan developed by MnDOT pursuant to the statewide multi-modal transportation plan.<sup>33</sup> The approval of the Commissioner is based on the

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<sup>28</sup> See Federal Highway Administration, Office of Policy Development, Highway Trust Fund Primer (1998) available at <http://www.fhwa.dot.gov/app/primer98.pdf> (last viewed July 12, 2011)

<sup>29</sup> See Matt Burress, House Research Dept., House Research, Short Subjects, Trunk Highway System 1 (2010) available at <http://www.house.leg.state.mn.us/hrd/pubs/ss/ssthf.pdf> (last visited July 12, 2011).

<sup>30</sup> Minn. Stat. § 161.142 (2010).

<sup>31</sup> Minn. Stat. § 446A.085, Subd. 2 (2010).

<sup>32</sup> See Matt Burress, House Research Dept., House Research, Short Subjects, Trunk Highway System 1 (2010) available at <http://www.house.leg.state.mn.us/hrd/pubs/ss/ssthf.pdf> (last visited July 12, 2011).

<sup>33</sup> Minn. Stat. § 174.03 (2010)

criteria set forth by statutes and regulations governing the specific funding streams for a given project.

**Trunk highway projects**, including U.S. Highway projects, are funded pursuant to the statewide 20-year capital investment plan and with money from the trunk highway fund.<sup>34</sup> Planning, construction, improvement and maintenance are performed by the MnDOT, again, by labor employed to do the work or by contract.<sup>35</sup>

The MnDOT Commissioner releases funds for **county state-aid highways** and **municipal state-aid streets** upon receipt of an abstract of bids, a certification as to the execution of a contract that includes a requirement for bond, and a payment request for a given project.<sup>36</sup> Counties receive money from the state's county state-aid highway (CSAH) fund for the construction, improvement, and maintenance of highways included in the state-aid system.<sup>37</sup> Cities receive money from the state's municipal state-aid street fund for the construction, improvement, and maintenance of qualifying municipal streets included in the system.<sup>38</sup> Based on a statutory formula, the aid is distributed through a state-aid program administered by the MnDOT.<sup>39</sup> The aid can only be expended on streets that constitute part of the municipal state-aid street system.

The state, counties, cities, and other governmental entities may borrow money from the **Transportation Revolving Loan Fund (TRLF)**. Projects that are eligible for TRLF financing are those that are eligible under Title 23 or Title 49 of the United States Code and Minn. Stat. §

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<sup>34</sup> Minn. Const. art. XIV § 6.

<sup>35</sup> Minn. Stat. § 161.32 (2010).

<sup>36</sup> Minnesota Administrative Rules 8820.1500 Construction Funds

<sup>37</sup> Minn. Const. art. XIV, § 7; *See also* Matt Burress, House Research Dept., House Research, Short Subjects, County State-Aid Highway System1 (2010) available at <http://www.house.leg.state.mn.us/hrd/pubs/ss/sscsah.pdf> (last visited July 12, 2011). *and* Minn. Stat. § 162.06 (2010).

<sup>38</sup> Minn. Const. art. XIV, § 4; Minn. Stat. § 162.09 (2010); *See also* Matt Burress, House Research Dept., House Research, Short Subjects, Municipal State-Aid Street System 1 (2010) available at <http://www.house.leg.state.mn.us/hrd/pubs/ss/ssmsas.pdf> (last visited July 12, 2011).

<sup>39</sup> *See* Minn. Stat. § 162.13 (2010); *see also* Minn. Stat. §§ 162.09 – 162.14 (2010).

446A.085, subd. 2 (2010). Eligible projects include (but are not limited to) pre-design studies, acquisition of right-of-way, and road and bridge maintenance, repair, improvement, or construction. All proposals are evaluated pursuant to the statewide transportation priorities, and subject to the approval of the MnDOT Commissioner.<sup>40</sup> The MnDOT Commissioner has discretion to approve applications for loans under the TRLF for municipal roadway projects pursuant to the criteria set forth in Minnesota Regulations 8805.0400 and 8805.0500.<sup>41</sup>

### **LOCAL INPUT FOR STATEWIDE PLANNING**

The statewide multi-modal transportation plan must be revised once every four years.<sup>42</sup> The MnDOT Commissioner is required to consider local transportation plans when revising the statewide multi-modal transportation plan<sup>43</sup> and must hold public hearings to receive public input prior to each revision.<sup>44</sup> This process affords governing bodies of Region 5 an opportunity to submit their local or regional transportation plans for the consideration of the Commissioner of transportation. The Commissioner is required to recognize or attempt to accommodate local and regional plans to the extent that these plans are not inconsistent on matters deemed to be of statewide concern.<sup>45</sup> If a local or regional plan is superseded by the Commissioner, the political subdivision may challenge the Commissioner's decision.<sup>46</sup>

The MnDOT Commissioner is required to submit to a final layout and project report that includes the purpose, route location, and proposed design of the highway to the governing body of any municipality in which trunk highway construction, reconstruction, or improvement is

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<sup>40</sup> See MnDOT TRLF How it works, at [http://www.dot.state.mn.us/planning/program/trlf\\_how.html](http://www.dot.state.mn.us/planning/program/trlf_how.html)

<sup>41</sup> Minn. Stat. § 446A.085 (2010); Minn. R. 8805.0050 – 8805.0500 (2010).

<sup>42</sup> *Id.*

<sup>43</sup> Minn. Stat. § 174.03 (2010).

<sup>44</sup> *Id.*

<sup>45</sup> *Id.*

<sup>46</sup> *Id.*

taking place.<sup>47</sup> The governing body is required to schedule and conduct a public hearing at which MnDOT is required to present the final layout for the project.<sup>48</sup> The governing body has 90 days from the date of the hearing to approve or disapprove of the final layout.<sup>49</sup> A governmental body's failure to disapprove of a final layout within this timeframe is deemed approval.

The hearing and approval process is an opportunity for municipalities to demand revisions be made to proposed projects.<sup>50</sup> Municipalities that have taken a proactive approach to their own transportation planning by creating local transportation plans will be better prepared to seek specific revisions to proposed project submissions.

### **STREAMLINING**

Local boards should develop their own transportation plans in preparation for their inclusion in the statewide multi-modal revision process. MnDOT is required to cooperate with regional development commissions in the regional transportation planning process, in accordance with mutually acceptable terms and conditions, and may provide technical and financial assistance.<sup>51</sup> Early and frequent collaboration with MnDOT may be the easiest approach to ensure that Region Five's interests are included in the statewide multi-modal transportation plan.

Streamlining of individual projects should be considered based upon the type of project and its specific requirements.

### **PAPERWORK REDUCTION**

Input on revisions to the statewide multi-modal transportation plan can be submitted

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<sup>47</sup> Minn. Stat. §§ 161.162 – 161.165 (2010).

<sup>48</sup> Minn. Stat. §§ 161.164 (2010).

<sup>49</sup> *Id.*

<sup>50</sup> *Id.*

<sup>51</sup> Minn. Stat. § 174.03 subd. 4(2) (2010).

online via the MnDOT website during comment periods.<sup>52</sup> Online comment submissions eliminate the need to mail or personally deliver comments to the office of the MnDOT Commissioner.

Early collaboration with MnDOT regarding local transportation planning and input into the statewide multi-modal transportation plan are likely the best ways to avoid issues, and paperwork, arising from the state superseding local transportation plans. Conflicts between statewide and local transportation plans are likely to result in expense and delay which may be avoidable if local governing bodies collaborate with MnDOT.

Paperwork at the project planning level is likely dependent on the specifications of a given project. One area for potential paperwork reduction is bid letting. All five counties in Region Five use an online interface, eGram,<sup>53</sup> to manage the bid letting process. Municipalities should utilize similar interfaces to solicit, receive and process contract bidding.

### **NEXT STEPS**

- The Transportation Work Group should obtain and analyze any handbooks or policies that govern the specifications for the application process. These specifications include the type of information required and outline the application process. Then the work group can develop specific ideas for reduction of paperwork on the project level, based on the specifications or the particular project.
- The Transportation Work Group should also obtain copies of any city, county and township transportation plans for Region 5, the Statewide Multi-Modal Transportation Plan and the District 3 statewide 20-year capital investment plan.
- If the Transportation Work Group is interested in information about aviation and ports on

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<sup>52</sup> See Minnesota Department of Transportation, <http://www.dot.state.mn.us> (last visited July 13, 2010).

<sup>53</sup> See RtVision, Inc., <http://www.rtvision.com/products.php?id=2> (last viewed July 14, 2011).

waterways or wishes more research on railways, the Work Group should contact the William Mitchell Community Development Clinic for further research.

- If the Transportation Work Group is interested in the funding and planning for streets and other transportation projects at the county, township or city level, it should contact the William Mitchell Community Development Clinic for further research.

## APPENDIX A

### Trunk Highways

Trunk highways are the various numbered routes described in Minnesota Statute sections 161.114 – 161.117. The highways extend as nearly as possible along the routes numbered 1 through 70 described in the constitutional amendment adopted November 2, 1920,<sup>54</sup> and the routes described in any act of the legislature which has made or hereafter makes a route a part of the trunk highway system.<sup>55</sup> The descriptions of the trunk highways include starting and ending points and municipalities through which the highways are to travel. The Commissioner cannot deviate from the starting points or terminals as set forth in the route description; nor shall there be any deviation from the various cities named in the routes through which such routes shall pass.<sup>56</sup>

There are several constitutional trunk highways, those numbered 1 through 70, in Region Five.<sup>57</sup> These trunk highways are referred to by their original route numbers in statutes, but their designated numbers on road signs may differ. The routes that are entirely or partially within Region Five are as follows:

Route No. 2. Beginning at a point on Route No. 1 on the westerly limits of the city of Duluth and thence extending in a southwesterly direction along said Route No. 1 to a point on said route at Carlton and thence extending in a westerly direction to a point on the east bank of the Red River of the North at Moorhead, affording Duluth, Carlton, McGregor, Aitkin, Brainerd, Motley, Staples, Wadena, Detroit, Moorhead and intervening and adjacent communities a reasonable means of communication, each with the other and other places within the state.

Route No. 3. Beginning at a point on the boundary line between the states of Minnesota and Wisconsin, westerly of La Crosse, Wisconsin, and thence extending in a northwesterly direction to a point on the easterly limits of the city of St. Paul and then beginning at a point on the westerly limits of the city of Minneapolis and thence extending in a northwesterly direction to a point on the east bank of the Red River of the North at Breckenridge, affording La Crescent, Winona, Kellogg, Wabasha, Lake City,

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<sup>54</sup> See Minn. Stat. § 161.114 (2010).

<sup>55</sup> Minn. Const. art. XIV, § 2, *See also* Minn. Stat. § 161.115 – 12 (2010).

<sup>56</sup> Minn. Stat. § 161.15 (2010).

<sup>57</sup> Minn. Stat. § 161.114 (2010).

Red Wing, Hastings, St. Paul, Minneapolis, Osseo, Champlin, Anoka, Elk River, Big Lake, St. Cloud, Albany, Sauk Centre, Alexandria, Elbow Lake, Fergus Falls, Breckenridge and intervening and adjacent communities a reasonable means of communication, each with the other and other places within the state.

Route No. 4. Beginning at a point on the boundary line between the states of Minnesota and Iowa, southwesterly of Jackson and thence extending in a northerly direction to a point on Route No. 3, southeasterly of Sauk Centre and thence extending in a northwesterly direction along said Route No. 3 to a point on said route at Sauk Centre and thence extending in a northerly direction to a point at International Falls, affording Jackson, Windom, Sanborn, Redwood Falls, Morton, Olivia, Willmar, Paynesville, Sauk Centre, Long Prairie, Wadena, Park Rapids, Itasca State Park, Bemidji, International Falls and intervening and adjacent communities a reasonable means of communication, each with the other and other places within the state.

Route No. 8. Beginning at a point on the westerly limits of the city of Duluth and thence extending in a northwesterly direction to a point on Route No. 6 near Crookston and thence extending in a westerly and northerly direction along said Route No. 6 to a point on said route northerly of Crookston and thence extending in a northwesterly direction to a point on the east bank of the Red River of the North at East Grand Forks, affording Duluth, Floodwood, Swan River, Grand Rapids, Cass Lake, Bemidji, Bagley, Erskine, Crookston, East Grand Forks and intervening and adjacent communities a reasonable means of communication, each with the other and other places within the state.

Route No. 18. Beginning at a point on Route No. 3 at Elk River and thence extending in a northerly direction to a point on Route No. 2 easterly of Brainerd, affording Elk River, Princeton, Milaca, Onamia and intervening and adjacent communities a reasonable means of communication, each with the other and other places within the state.

Route No. 19. Beginning at a point on Route No. 2 at Brainerd and thence extending in a northwesterly direction to a point on Route No. 8 at Cass Lake, affording Brainerd, Pine River, Walker, Cass Lake and intervening and adjacent communities a reasonable means of communication, each with the other and other places within the state.

Route No. 27. Beginning at a point on Route No. 3 at St. Cloud and thence extending in a northerly direction to a point on Route No. 2 at Brainerd, affording St. Cloud, Sauk Rapids, Royalton, Little Falls, Brainerd and intervening and adjacent communities a reasonable means of communication, each with the other and other places within the state.

Route No. 28. Beginning at a point on Route No. 27 at Little Falls and thence extending in a southwesterly direction to a point on the boundary line between the states of Minnesota and South Dakota at Browns Valley, affording Little Falls, Sauk Centre, Glenwood, Starbuck, Morris, Graceville, Browns Valley and intervening and adjacent communities a reasonable means of communication, each with the other and other places within the state.

Route No. 34. Beginning at a point on Route No. 2 at Detroit and thence extending in a

northeasterly direction to a point on Route No. 8 westerly of Grand Rapids, affording Detroit, Park Rapids, Walker, Remer, Grand Rapids and intervening and adjacent communities a reasonable means of communication, each with the other and other places within the state.

Route No. 37. Beginning at a point on Route No. 27 at Little Falls and thence extending in a northwesterly direction to a point on Route No. 2 at Motley, affording Little Falls, Motley and intervening and adjacent communities a reasonable means of communication, each with the other and other places within the state.

Over time, the Minnesota Legislature has created additional trunk highway routes and eliminated some routes. Several of these routes are entirely or partially within Region Five. The legislature may continue to add additional trunk highways or eliminate unneeded routes. They are described as follows:

Route No. 71. Beginning at a point on Route No. 27 in Little Falls, thence extending in a northeasterly direction to a point on Route No. 1, at or near Moose Lake; affording Little Falls, Onamia, Isle, McGrath, and Moose Lake a reasonable means of communication each with the other and other places within the state.<sup>58</sup>

Route No. 131. Beginning at a point on Route No. 37 at or near Randall, thence extending in an easterly direction to a point on Route No. 27.<sup>59</sup>

Route No. 137. Beginning at a point on Route No. 18 northwesterly of Garrison, thence extending in a northerly direction to a point on Route No. 34 at or near Remer; affording Garrison, Deerwood, Crosby, and Remer a reasonable means of communication each with the other and other places within the state.<sup>60</sup>

Route No. 138. Beginning at a point on Route No. 19 northerly of Walker, thence extending in a northwesterly direction to a point on Route No. 4.<sup>61</sup>

Route No. 139. Beginning at a point on Route No. 19 at or near Pine River, thence extending in a northeasterly direction to a point on Route No. 34.<sup>62</sup>

Route No. 162. Beginning at a point on Route No. 34 at or near Remer, thence extending in an easterly direction to a point on Route No. 8.<sup>63</sup>

Route No. 183. Beginning at a point on Route No. 36 east of Henning, thence extending

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<sup>58</sup> Minn. Stat. § 161.115 subd. 2 (2010).

<sup>59</sup> *Id.* at subd. 62.

<sup>60</sup> *Id.* at subd. 68.

<sup>61</sup> *Id.* at subd. 69.

<sup>62</sup> *Id.* at subd. 70.

<sup>63</sup> *Id.* at subd. 93.

in an easterly direction to a point on Route No. 2 at or near Staples.<sup>64</sup>

Route No. 193. Beginning at a point on Route No. 2 at or near Motley, thence extending in a northerly direction to a point on Route No. 34 westerly of Walker.<sup>65</sup>

Route No. 197. Beginning at a point on Route No. 4 southerly of Park Rapids, thence extending in an easterly direction to a point on Route No. 139 as herein established easterly of Backus.<sup>66</sup>

Route No. 207. Beginning at a point on Route No. 2, at or near Frazee, thence extending in an easterly direction to a point on Route No. 4 at or near Menahga.<sup>67</sup>

Route No. 209. Beginning at a point on Route No. 3 at or near Becker, thence extending in a northerly direction to a point on Route No. 18, at or near Brainerd; affording Becker, Foley, Gilman, Pierz and Brainerd, a reasonable means of communication each with the other and other places within the state.<sup>68</sup>

Route No. 227. Beginning at a point in or adjacent to Nimrod; thence extending in a westerly direction to a point on Route No. 4.<sup>69</sup>

Route No. 238. Beginning at a point on Route No. 3 westerly of Albany; thence extending in a general northerly direction to a point at or near Upsala; thence continuing in a northerly direction to a point on Route No. 28 westerly of Little Falls.<sup>70</sup>

Route No. 309. Beginning at a point on Route No. 18 at or near Brainerd, thence extending in a general northwesterly direction to a point at or in the grounds of the Brainerd State School and Hospital, thence extending in a general southerly direction to a point on Route No. 18 at or near Brainerd.<sup>71</sup>

Route No. 392. Beginning at a point on the boundary between the states of Minnesota and North Dakota in or near Moorhead; thence extending in a general southeasterly direction through the city of Minneapolis; thence in a general easterly direction through the city of St. Paul to a point on the boundary between the states of Minnesota and Wisconsin in or near Lakeland.<sup>72</sup>

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<sup>64</sup> *Id.* at subd. 114.

<sup>65</sup> *Id.* at subd. 124.

<sup>66</sup> *Id.* at subd. 128.

<sup>67</sup> *Id.* at subd. 138.

<sup>68</sup> *Id.* at subd. 140.

<sup>69</sup> *Id.* at subd. 158.

<sup>70</sup> *Id.* at subd. 169.

<sup>71</sup> *Id.* at subd. 240.

<sup>72</sup> Minn. Stat. § 161.12 subd. 4 (2010). *See also* Minn. Stat. § 161.12 (2010) (describing legislative intent to gain federal interstate highway funding).



# Your Destination...Our Priority

Executive Summary  
Minnesota Statewide Transportation Policy Plan: 2009-2028







## Minnesota Department of Transportation

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### Transportation Building

395 John Ireland Boulevard  
Saint Paul, MN 55155-1899

August 2009

Dear Citizens of Minnesota,

I am pleased to share with you Minnesota's Statewide Transportation Policy Plan 2009-2028: Your Destination...Our Priority. This plan is the result of extensive collaboration during the past two years between the Minnesota Department of Transportation and citizens, stakeholders and partners throughout Minnesota. I want to thank everyone who took the time to participate in our outreach meetings and provide comments and suggestions on the draft plan.

The Statewide Transportation Policy Plan establishes a multimodal transportation vision for the State of Minnesota and identifies policies and strategies that support this vision. Although investment directions will continue to evolve over time, there is no doubt that a safe, efficient and sustainable transportation system will remain essential to Minnesota's economic vitality and quality of life. As the state's transportation leader, Mn/DOT embraces its responsibility to uphold the vision and policies presented in this plan.

The success of Minnesota's transportation system depends on the coordinated efforts of many public and private providers, and the policies and strategies outlined in this plan provide the framework for our joint efforts. Mn/DOT will continue to look for opportunities to involve citizens, stakeholders and partners in the implementation of this plan and in future investment and policy decisions. Together, we can realize the shared vision of a safe, efficient and sustainable transportation system.

Sincerely,

A handwritten signature in black ink that reads 'Thomas K. Sorel'.

Thomas K. Sorel  
Commissioner



## Executive Summary

### Minnesota Statewide Transportation Policy Plan: 2009-2028

Transportation is critical in supporting economic vitality and quality of life in Minnesota. For families and individuals, transportation puts goods on store shelves; transports us to work, health care, school and recreational activities; and takes us across the nation and around the world for business and leisure. In addition, transportation is essential for the thousands of manufacturing, retail, wholesale and agricultural businesses in Minnesota. It acts as a lifeline for moving raw materials to manufacturing facilities, farm produce to processing facilities and markets, and finished products to distributors or customers.

The Minnesota Department of Transportation has been developed this plan in cooperation and consultation with its partner transportation providers, both public and private, stakeholders and the general public. It results from work and discussions during a period marked by significant shifts in the focus of the public's transportation concerns, coupled with dramatic changes in the state and national economic outlook.

The process began in the spring 2007 with a series of outreach meetings held throughout the state. Travel trends and system conditions were discussed and stakeholders identified key issues that needed to be addressed. A Steering Committee composed of state and local government representatives

began working through potential approaches to the issues. Work on the plan was postponed in late summer to address the pressing issues related to the Interstate 35W bridge collapse in Minneapolis. Reconvening in January 2008, the committee soon had to factor into the plan a major state funding increase for transportation and legislative directive on bridge rehabilitation.

A second round of outreach meetings was held in July 2008 to share the Steering Committee's work and to discuss the implications of the Chapter 152 transportation funding bill enacted during the 2008 legislative session. Based on this additional stakeholder input, the policies and investment priorities were further developed and refined into the proposed draft plan.

In January 2009, the draft plan was posted for public review on Mn/DOT's Web site and discussed with stakeholders at a series of open houses held statewide. Formal public hearings were held in St. Paul at the end of March, with videoconference links to each of Mn/DOT's eight district offices to provide greater accessibility for public comment. In June 2009, the Steering Committee reviewed a summary of all the comments received along with recommended responses and final revisions leading to this Statewide Transportation Policy Plan and accompanying Statewide Highway Investment Plan.



## Vision: A Safe, Efficient and Sustainable Transportation System

A long-range vision for transportation in Minnesota began to emerge as trends and issues were discussed with stakeholders around the state. **Stakeholders identified a range of desired system improvements, additions and enhancements to transportation necessary to create a safe, efficient and sustainable transportation system for the future.** Key components of this vision include:

- Superior highway connections to adjacent states and Canada
- Active ports in Duluth and along the Mississippi River
- Strong connections to a national high-speed passenger rail network
- Cost-competitive national freight rail connections supported by a network of regional freight rail corridors and intermodal terminals
- Vibrant Twin Cities International Airport “Hub” and secondary supporting airports throughout the state
- Upgraded highways and expanded transit service connecting the regional trade centers throughout the state
- Reliable mobility in the Twin Cities through innovative highway capacity improvements and expanded transitways
- Reliable mobility in Greater Minnesota metropolitan areas through expansion of both the highway network and transit systems
- Additional transit options throughout the state with

improved connectivity between services and modes

- Safe travel throughout the state, with a goal toward zero deaths
- Expanded networks for safe biking and walking
- Infrastructure maintained in safe and structurally sound condition

The vision is broad and far-reaching, and may take the next 50 years to fully realize. But the vision speaks to transportation as a critical ingredient for the continued economic vitality of the entire state and the livability of its communities.

Mn/DOT plays a unique leadership role in upholding the vision and policies presented in this draft plan. As the state's transportation leader, Mn/DOT will:

- Promote a safe, reliable and modern transportation system
- Improve access and enhance the movement of people and freight
- Promote a culture of innovation in the organization
- Become the state transportation leader and employer of choice for Minnesota's diverse population
- Build public trust in the department

Your destination is our priority and Mn/DOT will follow these directions to create a safe, efficient and sustainable transportation system for Minnesota.



## Moving Toward the Vision: Challenges and Opportunities

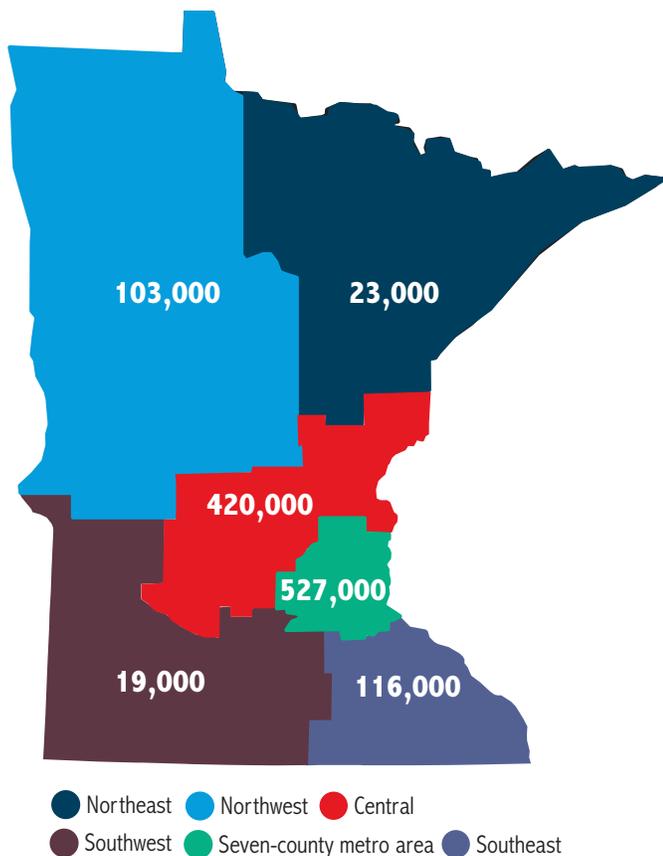
To move Minnesota toward its long-range vision for transportation, there are many challenges to address as well as opportunities to seize. Following are some of the key challenges and opportunities that the Steering Committee considered in developing the policies and strategies put forth in this plan.

### Challenges

#### Growing, Aging and More Diversified Population:

Minnesota's population is expected to grow by 1.3 million during the next 25 years. Much of the growth will be concentrated in Rochester-Twin Cities-St. Cloud metropolitan areas. The population is also aging. By 2030, about 20 percent will be over age 65 and 6 percent will be over age 80. Providing a safe driving environment and transit options will be critical in meeting the mobility needs of these citizens.

**Increasing Global Competition:** Major changes in the global economy during the past decade have greatly affected goods movements and connections to global markets. These trade



**Figure 1.1 Distribution of projected 1.3 million new residents expected by 2035 (2005 base year)**

connections continue to shift in response to global economic demands and changing markets.

**Aging Infrastructure and Declining Physical Conditions:**

Much of Minnesota's transportation infrastructure will require significant rehabilitation or reconstruction during the next 20 years. This is particularly true for much of the state highway "baby boom" bridges constructed in the 1950s and 1960s as part of the federal interstate program. State highway pavement conditions have also declined during the past decade. Other elements of the transportation system - from rail lines and port facilities to highway rest areas and drainage facilities - are also in need of major reinvestment to maintain existing service levels.

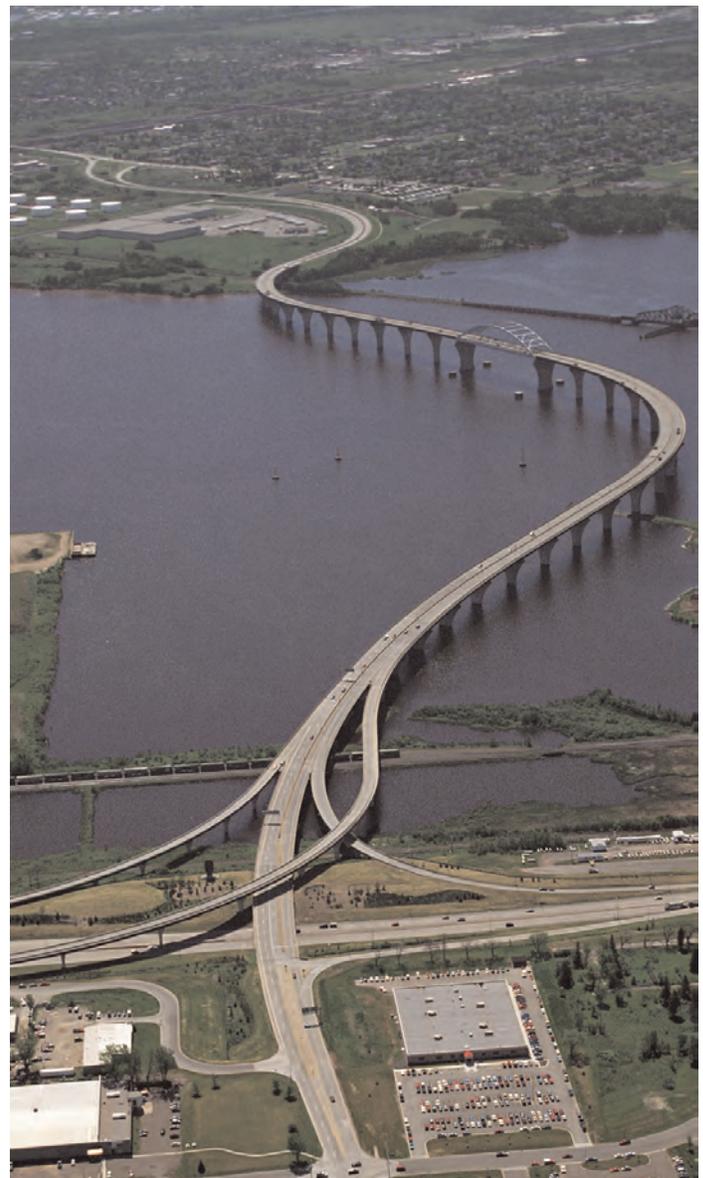
**Concern with Energy and the Environment:**

While cleaner fuels and emission standards have significantly reduced air pollutants such as particulates and carbon monoxide, energy consumption and greenhouse gas emissions associated with transportation have emerged as leading concerns. In 2007, the Minnesota Legislature established goals calling for a carbon dioxide emission reduction of 15 percent by 2015, 30 percent by 2025 and 80 percent by 2050. Transportation contributes 34 percent of all carbon dioxide emissions in the state and is one of the primary sources to be addressed to meet these goals.

**Volatile Revenues and Costs:**

The steady increase in statewide vehicle miles traveled since the 1970s began to level

off in 2004 and actually declined in 2008. The travel reduction coupled with increased vehicle fuel efficiency has led to reductions in federal and state motor fuel tax revenues. General economic conditions since 2001 have also spurred a decline in automobile sales, resulting in lower than expected revenues from the motor vehicle sales tax and license fees. Meanwhile, construction costs have increased dramatically between 2004 and 2008 due to increased worldwide demand for oil, concrete and steel. The current economic recession could lead to lower construction costs but also declining revenues. The volatility in revenues and costs creates a challenging framework for planning improvements to the system during both the short- and long-term, and requires careful attention to risk management.





## Opportunities

**New Approaches to Safety and Congestion:** Mn/DOT is pursuing systematic, data-driven solutions to safety and congestion problems. The approach gives greater priority to low-cost, high-benefit projects that incorporate innovative solutions. Problems are evaluated on a systemwide basis, and solutions implemented in a shorter timeframe than more traditional projects. Examples of these include rumble stripes, cable-median barriers, High Occupancy Toll lanes, capacity additions through shoulder conversions and lane re-markings within existing rights of way.

**Increased Interest in Multimodal Solutions:** In 2004, Minnesota's first Light Rail Transit line - the Hiawatha LRT - opened connecting the Mall of America in Bloomington and downtown Minneapolis. The Northstar Commuter Rail line between downtown Minneapolis and the city of Big Lake is on schedule to open in 2009. There is a growing interest in having alternatives to the highway system to move both people and freight. Several studies are underway to examine the

potential for expanding transit, passenger and freight rail, bicycling and pedestrian systems, as well as designing complete streets to accommodate multiple modes.

### **Increased State Funding and Legislative Direction:**

The Minnesota Legislature approved a significant increase in transportation funding in 2008. This funding included bonding for state highway improvements supported by the first increase in the motor vehicle fuel tax since 1988 and an optional quarter-cent county sales tax to develop and operate transitways in the Twin Cities Metropolitan Area and in Greater Minnesota. The legislation also directed Mn/DOT to develop and carry out, by 2018, a major repair and replacement program for fracture critical and structurally deficient state highway bridges throughout the state.

**Potential New Directions in Federal Transportation Funding:** The future focus and structure of federal transportation funding is currently under debate as policymakers and stakeholders across the country look to the next authorization bill slated for 2010. In the near term, Congress enacted the

American Recovery and Reinvestment Act of 2009 providing more than \$500 million to address transportation needs in Minnesota during the next two years.

**New Expectations for Mn/DOT Leadership and**

**Accountability:** The tragic collapse of the Interstate 35W Bridge in Minneapolis on Aug. 1, 2007, focused the public's attention on transportation and prompted a closer look into the condition and needs of the system. The ensuing months of inquiry and discussion led to a growing recognition among

policy leaders, legislators and the general public that a vital, multimodal transportation system is essential to Minnesota's economy and quality of life. Through legislative hearings, partner consultations and public outreach, Mn/DOT has been asked to play a stronger role as a leader and advocate for Minnesota's transportation system. Policymakers and stakeholders alike want Mn/DOT to provide a clear picture of system needs and priorities for future investments. In addition, they want to better understand how spending decisions are made and the system conditions that will result.





## Moving Toward the Vision: Plan Approach and Guiding Principles

This plan is intended to move Minnesota toward the long-range transportation vision, recognizing the challenges and opportunities involved. The following key principles frame the plan approach and are reflected throughout the policies and strategies.

**1. Continue performance-based planning and investment management:** This plan continues the commitment to performance-based planning established in the 2003 Statewide Transportation Plan. This plan further suggests that performance measures be developed and applied to all modes and jurisdictions as a way to measure progress and the effectiveness of policies and strategies.

**2. Articulate a more multimodal and multi-jurisdictional approach to transportation:**

The 2003 plan was primarily a plan for Mn/DOT and focused on the highway system as the backbone of the transportation system. While this plan continues to acknowledge the importance of the highway system, it also recognizes that a more multimodal and multi-jurisdictional approach to transportation is needed to achieve major goals, including maintaining Minnesota's economic competitiveness, reducing greenhouse gas emissions and providing modal choices for consumers.

**3. Build on existing plans:** Since 2003, several major modal and specialty plans and studies have been completed related to aeronautics, freight, bicycles and safety. Metropolitan Plans have been updated around the state. The policies and strategies in this Statewide Transportation Policy Plan build upon these plans and

studies and, in many instances, identify issues and strategies that need to be examined further in the future.

**4. Concurrently update the 20-year Statewide Highway Investment Plan:**

Mn/DOT develops its long-range statewide highway investment plan in a decentralized manner through the preparation of plans by each of its eight districts. The last update occurred in 2004 after the Statewide Transportation Plan was adopted. To provide stakeholders with a clearer picture of the link between the policy and the investment program, the 20-year Statewide Highway Investment Plan has been updated in tandem with the policy plan process.

**5. Emphasize importance of partnerships:**

Minnesota's transportation system is a complex network of inter-connected modes, owned and managed by a variety of government jurisdictions and private companies. To operate effectively, coordination across modes and jurisdictions is essential. Toward this end, the plan identifies key issues and strategies for consideration by Mn/DOT's partners, who provide key components of the statewide system. The plan begins to set a framework for enhanced coordination and stronger collaboration among Minnesota's transportation partners.

**6. Commit to innovation:** With all the challenges facing Minnesota's transportation system in both the near- and longer-term, innovation is imperative. Creativity and innovation need to permeate every aspect of transporta-

tion service delivery, from how revenues are generated, services are contracted and projects are constructed, to how existing capacity and rights of way are managed.

**7. Seek cost-effective and context-appropriate solutions:**

Given limited financial resources, it is essential that cost-effective and context-appropriate solutions are implemented so that resources can be stretched to provide benefits to the greatest number of users.

**8. Maintain a flexible and opportunistic approach:**

This plan has been developed during a time of significant change, bringing both challenges and opportunities for the future of transportation in Minnesota. The Minnesota Legislature approved increased funding for transportation and directed investments toward a major bridge rehabilitation program. When gas prices peaked in July 2008 at more than \$4 per gallon, Minnesotans drove fewer miles, transit ridership increased, and transportation revenues declined. As of this writing, gas prices have plummeted, the national economy is in serious recession and Congress has approved an economic stimulus bill, a component of which was a major infrastructure investment program. Clearly, the policies and strategies set forth in this policy plan and the highway investment plan may need to be revisited to respond to the evolving challenges and opportunities.





## Moving Toward the Vision: Policies, Strategies and Performance Measures

The policies, strategies, performance measures and targets presented in this plan provide guidance to Mn/DOT for the state highway system and, where appropriate, to other transportation providers responsible for local roads and other modes. As such, this plan seeks to provide a more comprehensive framework to coordinate and integrate the multimodal, multi-jurisdictional networks that compose Minnesota's transportation system.



### Policy 1—Traveler Safety

**Reduce the number of fatalities and serious injuries for all travel modes.**

Mn/DOT will continue to support the Toward Zero Deaths initiative and, in cooperation with its partners, pursue a comprehensive “four E” approach to highway safety: Education, Enforcement, Engineering and Emergency medical services. Engineering improvements will focus on systemwide, cost-effective safety investments on both the state and local roads. Mn/DOT will also continue to monitor air travel safety and will work with the Federal Railroad Administration to monitor and report rail safety.

### Policy 2—Infrastructure Preservation

**Ensure the structural integrity of the transportation systems serving people and freight.**

Consistent with the directives of the 2008 Minnesota Legislature, Mn/DOT will carry out an investment program to repair and replace fracture critical and structurally deficient state trunk highway bridges

while continuing to work toward achieving condition targets for all state bridges, pavements and other infrastructure. However, given the outlook for future revenues and other competing needs, it is unlikely that all infrastructure condition targets will be achieved for the entire state trunk highway system.

Mn/DOT will apply cost-effective strategies, such as preventive maintenance, pavement reclamation and innovative contracting methods, to maximize available resources and reduce or stem increases in costs. Mn/DOT will also work with other public and private transportation systems of statewide importance to monitor the condition of their physical assets and provide technical assistance where appropriate.

### **Policy 3—Maintenance and Security**

#### **Maintain and operate the statewide transportation system in an efficient, cost-effective and secure manner.**

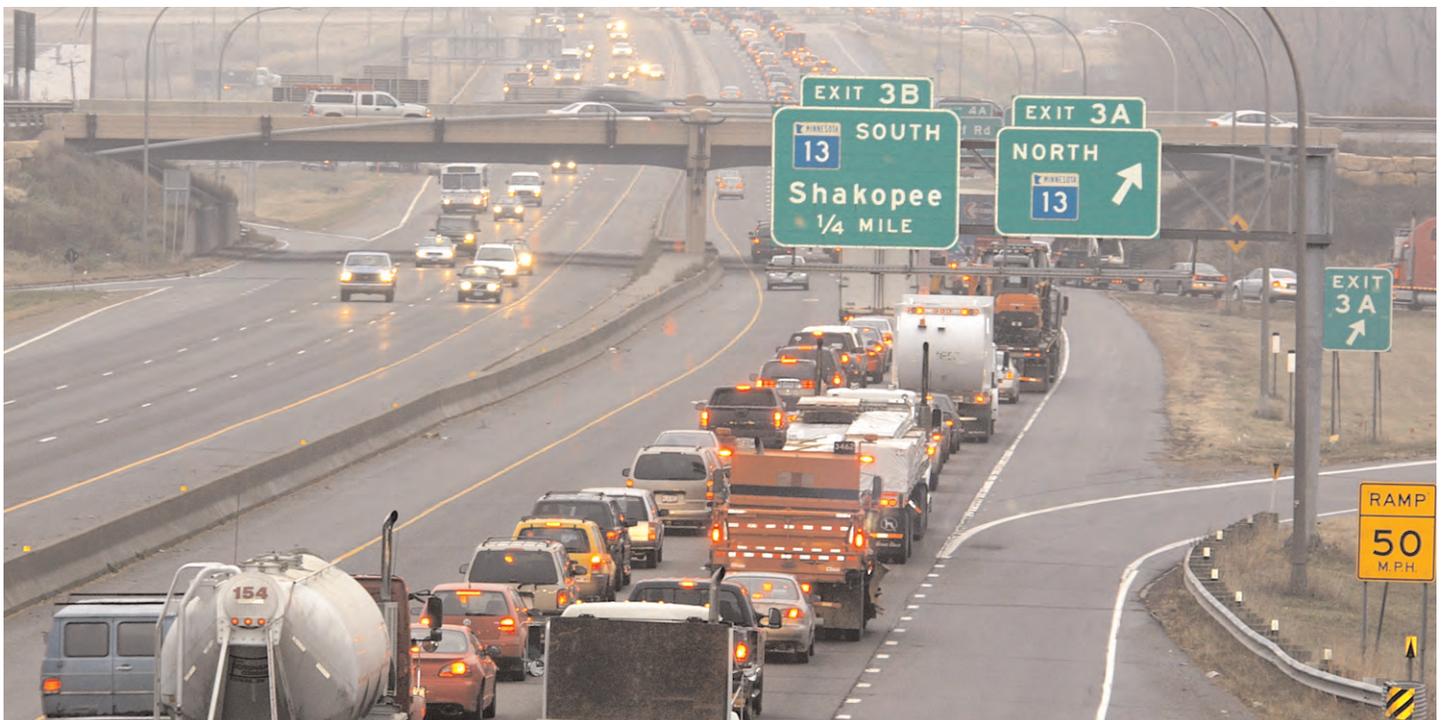
Mn/DOT will use the increase in operating funds provided through the 2008 Legislature to address high priority maintenance needs, including snow and ice removal; bridge, pavement and drainage maintenance; and safety and traffic operations. Mn/DOT will revamp its bridge inspection process to meet new federal requirements, document follow-up procedures to improve the effectiveness of the bridge inspection program,

and emphasize preventive maintenance to ensure public safety and extend bridge life. Mn/DOT will continue to pursue a wide range of opportunities to share costs, resources and best practices with its transportation partners and thereby achieve efficiencies across systems.

### **Policy 4—National and Global Connections**

#### **Maintain and strengthen Minnesota's strategic multimodal connections to the Upper Midwest, the nation and the world.**

During the past 15 years, Minnesota's economy has become more global. Maintaining viable multimodal transportation connections to and from adjacent states, as well as gateways to the rest of the world, has become critical to the state's economic future. Because these connections rely on infrastructure beyond Minnesota's borders, Mn/DOT will continue to work with neighboring states and federal agencies to maintain and improve national and international transportation linkages that are important to Minnesota. Mn/DOT will also continue to work with private industry providers, such as air, rail and waterway transport, to identify approaches that will support maintaining strong national and international transportation connections to Minnesota for people and freight.



## **Policy 5—Statewide Connections**

### **Enhance the movement of people and freight between regional trade centers within Minnesota by providing efficient, multimodal transportation connections.**

Travel between regional trade centers is important for citizens and businesses throughout the state. Strong transportation connections link workers with jobs, raw materials with manufacturers, and recreational users with parks and natural resource areas. In 2000, Mn/DOT created the Interregional Corridor system with the goal of enhancing the economic vitality of the state by providing safe, timely and efficient highway connections between key economic centers throughout the state. Mn/DOT will continue to work with its partners to maintain safety and mobility on these interregional corridors and will identify strategic, cost-effective modal options for statewide travel, such as intercity bus service, high-speed passenger rail, regional freight rail and air service for both passengers and freight.

## **Policy 6—Twin Cities Mobility**

**Provide mobility and address congestion in the Twin Cities by optimizing use of the existing system and making strategic capacity investments in both highways and transit.** This plan moves the region away from its long-held and historical approach of attempting to build its way out of congestion by adding more highway lanes — one major project at a time — to a more innovative, balanced and financially realistic approach to address regional mobility needs. This new approach reflects an understanding that congestion



may be mitigated but not eliminated. It also emphasizes lower cost, systemwide improvements that optimize use of existing highway capacity and rights of way and provide advantages for transit. Examples include improvements in lane continuity, use of shoulders during peak hours, incident clearance and signal timing. Managing demand through metering, traveler information, telework initiatives and potential expansion of pricing is also envisioned. Improvements to expand capacity and/or access will be part of the approach, but these investments will be focused on strategic improvement to both the highway and transit systems. This vision for mobility in the Twin Cities will be more fully articulated through a joint study led by Mn/DOT and the Metropolitan Council beginning in 2009. The findings will be incorporated into the Metropolitan Transportation Policy Plan in 2010 through a formal amendment.

## **Policy 7—Greater Minnesota Metropolitan and Regional Mobility**

**Provide for the changing transportation needs of people and freight within Greater Minnesota regions and metropolitan areas by planning regionally for critical investments and improving coordination across modes and jurisdictions.** A growing and aging population combined with shifts in the economy will put new demands on the transportation system in Greater Minnesota. To address these changes, Mn/DOT will continue to work with the Metropolitan Planning Organizations, Regional Development Commissions and other partners at the local and regional level to identify issues and opportunities for coordinated roadway, transit, bicycle-pedestrian and freight system improvements. Of particular importance will be the joint efforts to examine the changing needs for both transit and freight.

## **Policy 8—Community Development and Transportation**

**Support local efforts to increase jobs, expand housing, and improve community livability through more coordinated planning, complementary design, and timely communication among land use and transportation authorities.** Transportation is a key



ingredient to community livability and local economic development. Local governments must carefully consider and address the transportation needs and implications of their land use and community development decisions. Mn/DOT will work with regional and local partners as well as state agencies to promote the planning and development of local transportation systems that are sensitive to the community context, support local development goals and conform to regional system plans.

**Policy 9—Energy and the Environment**

**Improve the energy efficiency and environmental sustainability of Minnesota's transportation system.**

Mn/DOT and other transportation agencies will continue to protect and enhance the environment by integrating environmental stewardship in the planning, development and construction phases of transportation projects as well as in system operations. Working in close coordination with other transportation system providers, Mn/DOT will also strive to reduce emissions and improve energy efficiency through the

promotion of travel modes with high occupancy and/or low emission vehicles, increased use of alternative fuels and adoption of property and right of way management practices that offset greenhouse gas emissions.

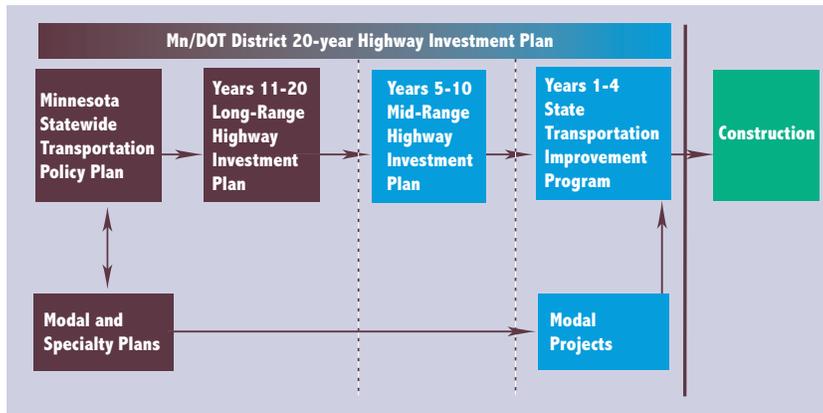
**Policy 10—Accountability and Transparency**

**Strengthen accountability and transparency in the delivery of Minnesota's transportation system.**

To strengthen accountability and transparency in its decision-making, Mn/DOT will set clear and measurable objectives, track progress toward meeting objectives and report results on a regular basis to policymakers and the traveling public. Mn/DOT will develop new approaches and venues to proactively and regularly engage partners and stakeholders in the decision-making process at both the project and broader system levels. A new project scoping, cost estimating and cost management process will improve Mn/DOT's ability to deliver projects on time and within budget.

# Moving Toward the Vision: Mn/DOT Statewide 20-year Highway Investment Plan 2009-2028

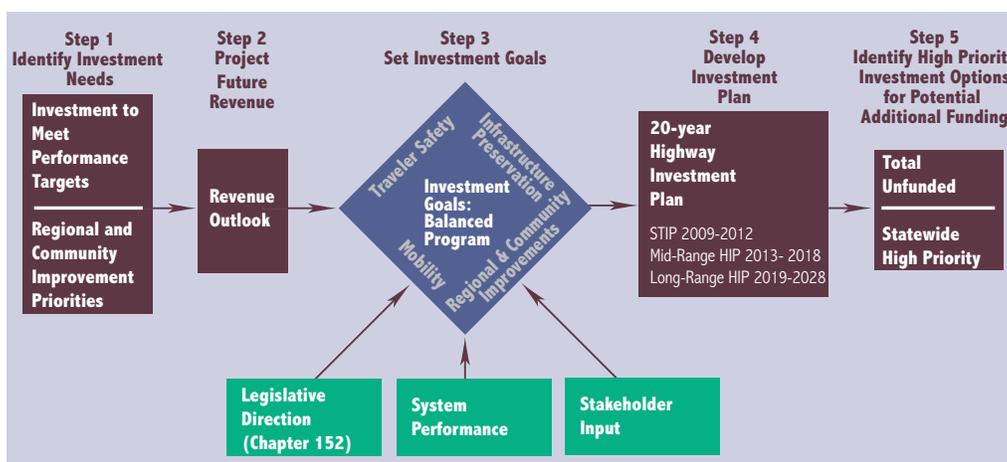
## Mn/DOT's Planning and Programming Process



Concurrent with the Statewide Transportation Policy Plan update, Mn/DOT updated its Statewide Highway Investment Plan. This 20-year plan, last updated in 2004, provides the link between the policies and strategies established in the Statewide Transportation Policy Plan and the capital improvements that are made to the state highway system. The Statewide Highway Investment Plan 2009-2028 is a compilation of eight individual district highway investment plans.

Mn/DOT established a five-step process and guidelines to ensure that the individual district plans would be developed in a consistent, objective manner and that planned improvements would address statewide goals and investment priorities.

## Mn/DOT Highway Investment Plan Development Process



## Step 1—Identify Investment Needs

Investment needs fall into two categories: improvements to address system performance and improvements to address regional and community priorities. Performance-based needs include investments to meet established system

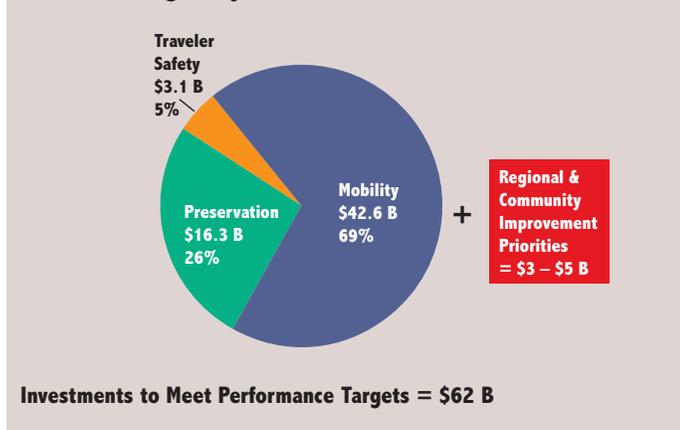
performance targets related to traveler safety, infrastructure preservation, interregional corridor mobility, Twin Cities mobility and Greater Minnesota Regional and Metro mobility. The analytical models and methodologies used to calculate the investments to meet these system performance targets are described more fully in the 20-year Statewide Highway Investment Plan. Regional and community priorities include a wide range of highway improvements to support local business or community development goals, from major highway expansions and new interchanges to intersection modifications, trails and sidewalks.

Statewide, investments to meet system performance targets during the 20-year period are estimated at approximately \$62 billion. Mobility needs related to interregional corridors and congestion mitigation in the Twin Cities and Greater Minnesota urban areas represent the largest proportion, about \$43 billion, or 69 percent, of the total. For now, congestion mitigation needs in the Twin Cities have been estimated based on previously identified needs from the 2004 Metro District Plan. The approach to mobility and congestion mitigation will be further examined in 2009 and will likely result in a revised estimate of need. Infrastructure preservation accounts for

about \$16 billion, or 26 percent, and roadway improvements targeted toward safety total about \$3 billion, or 5 percent of the total needs.

An additional \$3 billion to \$5 billion is needed to address regional and community improvement priorities. This estimate reflects the sum of each district's understanding of local concerns expressed during the past

## Statewide Highway Investment Needs 2009-2028



several years and, as such, does not represent a comprehensive assessment of every potential local request. It does illustrate, however, that there are many demands on available transportation funding beyond the investments needed to meet established statewide performance targets.

### Step 2—Project Future Revenue

Next, revenues were projected based on the trends in state and federal revenue sources for state highway construction. No new sources of revenue were assumed but the increased bond funding for trunk highways enacted by the 2008 Legislature was factored into the projection. Construction cost trends were also analyzed and projected so that investment needs and expenditures could be estimated in year-of-construction dollars. A more complete description of revenue and cost trends and projections is provided in Chapter 5 of the Statewide Transportation Policy Plan. Given the volatility in both costs and revenues and the current discussion of increased funding in the next Federal Transportation Act, the projections assumed in this plan represent a snapshot in time. They will need to be updated annually as long-range investments become programmed in the four-year State Transportation Improvement Program.

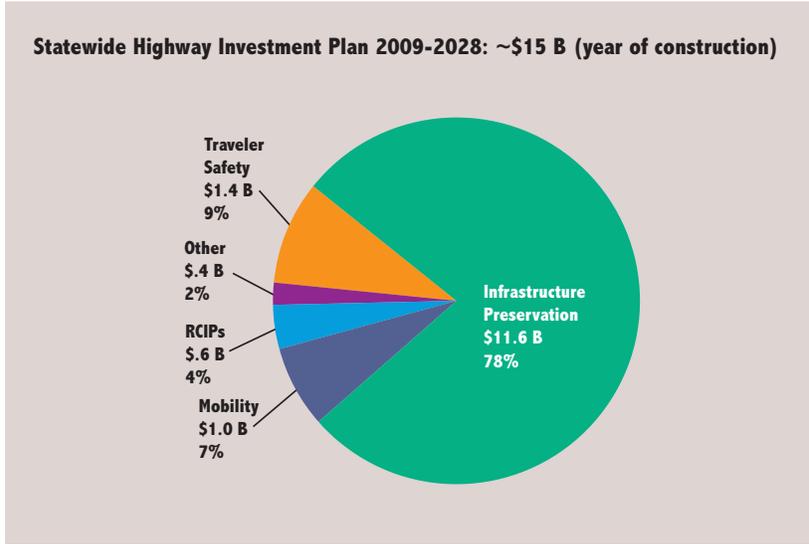
### Step 3—Set Investment Goals

The investment priorities reflected in this update of the Statewide Highway Investment Plan differ significantly from the 2004 plan. At that time, Mn/DOT identified infrastructure preservation as its top priority and districts were directed to fully fund preservation needs before other priorities, including safety, mobility and local community priorities. The revenue and costs outlook in 2004 projected sufficient long-term funding to meet not only preservation needs, but other areas of need as well.

Since 2004, revenues have not grown as anticipated and construction costs have increased dramatically. Even with the increased transportation revenues provided through Minnesota Law 2008, Chapter 152, the costs to fully preserve bridges, pavements and other roadway infrastructure during the next 20 years will exceed projected funding.

The investment goals for this update of the Statewide Highway Investment Plan reflect Chapter 152 legislative direction, consideration of system performance trends and stakeholder input. While infrastructure preservation continues to be an important priority for Mn/DOT, it cannot be the exclusive priority. The goal for the 2009 plan is to lay out a balanced program of investments that:

- Supports the continued development of the statewide economy and livability of Minnesota communities;
- Optimizes the allocation of projected revenues towards four strategic investment priorities of traveler safety, mobility, infrastructure preservation and regional and community improvements; and
- Results in a consistent level of investment effort across districts toward statewide system performance targets, including the investment directions established in Chapter 152 for the rehabilitation or replacement of fracture critical and structurally deficient bridges and other highway improvements.



**Step 4—Develop Investment Plan**

About \$15 billion is projected to be invested statewide over the next 20 years, from 2009-2028. Costs are expressed in projected year-of-construction dollars. Investments to preserve pavements, bridges and other infrastructure average 78 percent of the total for the 20 years. Roadway enhancements and capacity improvements for safety account for 9 percent of the total, with 7 percent planned to improve mobility and 4 percent to address regional and community improvement needs.

As a result of planned investments, Mn/DOT anticipates the repair or replacement of 120 fracture critical or structurally deficient bridges by 2018, consistent with the Chapter 152

legislative direction. In addition, the other 4,000 state highway bridges will receive needed repairs or reconstruction. The number of state highway miles with pavement in good condition will be maintained; however, the number of miles with poor pavement condition will nearly triple, from about 600 miles today to 1,600 miles by 2018.

To improve traveler safety, the planned investments in the first 10 years focus on both systemwide safety enhancements, such as median cable barriers and edge treatments, as well as a few safety/capacity improvements. Other investments for mobility and regional and community priorities are summarized in the 20-year Statewide Highway Investment Plan.

## Step 5—Identify High Priority Investment Options for Potential Additional Funding

With a total estimated investment need exceeding \$65 billion during the next 20 years, and projected revenues of about \$15 billion, this analysis indicates that almost \$50 billion remains in “unmet needs.” To place this level of funding in perspective, every 5 cents on the motor vehicle fuel tax in Minnesota provides just under \$100 million per year to the State Road Construction fund. To meet five percent of the \$50 billion gap, or \$2.5 billion, over the next 10 years would require the equivalent of a 12.5-cent increase in the motor vehicle fuel tax.

It is unlikely that future transportation funding will increase sufficiently to meet almost \$50 billion in “unmet need.” This plan's policies and strategies, therefore, emphasize a new approach to meeting system improvement needs through stronger partnerships and innovation. This is especially evident in the plan's vision for mobility in the Twin Cities, calling for a more comprehensive and fiscally realistic approach to congestion mitigation.

This plan also stresses the need to set priorities. Toward this end, Mn/DOT has identified 5 percent of the “unmet needs” as high priority investment options should additional revenue be available during the next 10 years. Additional funding, such as the American Recovery and Reinvestment Act, would likely carry specific eligibility criteria or investment direction. For this

reason, the identified high priority unfunded investments are distributed across all four strategic investment categories.

### High Priority Unfunded Investment Options

Strategies	\$	%
Enhance Traveler Safety	\$385 M	15%
Improve Mobility on IRCs and Twin Cities Freeways	\$1,030 M	41%
Preserve Infrastructure	\$970 M	39%
Regional Community Priorities	\$115 M	5%
<b>Total</b>	<b>\$2,500 M</b>	<b>100%</b>

These priorities were identified because they would provide the opportunity to enhance traveler safety on rural roads across the state as well as Twin Cities metro freeways, upgrade under performing Interregional Corridors, fund a low-cost/high-benefit congestion management program as well as some key capacity expansion projects in the Twin Cities, preserve pavement and bridges, and support partnership projects for local economic development efforts throughout Minnesota.



## **Moving Toward the Vision: Future Plans and Studies**

Many issues and proposed strategies outlined in this plan will require further in-depth analysis and consultation among the partners, stakeholders and policymakers. Several key studies and investment plans are currently underway or will be initiated soon to evaluate and expand upon the policies and strategies of this plan. The major policies and investment priorities identified in these plans and studies will be incorporated into the Statewide Transportation Policy Plan through an amendment, anticipated in 2010.

### **Greater Minnesota Transit Plan**

The update of the 2001 Greater Minnesota Transit Plan is scheduled for completion in 2009. The plan will define the future vision for public transportation across Greater Minnesota and focus on the needs of four target market groups. It will identify strategies to guide investments to both maintain and expand current transit services across the state.

### **Greater Minnesota Transit Implementation/Investment Plan**

In 2008, the Minnesota Legislature directed Mn/DOT to develop a transit implementation plan that included an analysis of ridership and transit service needs throughout greater Minnesota; a calculation of unmet needs; an assessment of the level and type of service required to meet unmet needs; an analysis of costs and revenue options; and a plan to reduce unmet transit service needs. The plan, to be completed in 2009, will specifically address special transportation service ridership and needs.

### **Intercity Bus Study**

In 2009, Mn/DOT will update the Intercity Bus Study, last updated in 1997. The study's primary objectives include: enhanced coordination and connectivity between public and private sector services; identification of service gaps; formulation of strategies to meet service needs; and improved interface between transportation modes. The results of this study, scheduled for completion in mid-2009, will be incorporated into the Statewide Transportation Policy Plan through an amendment, anticipated in 2010.

## Statewide Freight and Passenger Rail Plan

The Minnesota Statewide Comprehensive Freight and Passenger Rail Plan was mandated by the 2008 Minnesota Legislature and is scheduled for completion in late 2009. The plan will create a vision for both passenger and freight rail services in Minnesota; establish investment needs; identify a potential passenger system network; determine the role of private and public sector entities; set parameters for corridor priorities; and identify potential funding sources. The plan will comply with expected federal state rail plan guidelines and requirements in order to expedite development and funding for proposed and future projects.

## Metro Highway System Investment Study

During the next 12 months, Mn/DOT and the Metropolitan Council will work with other transportation partners to evaluate the metropolitan highway system. The study's goal is to define the long-term (40- to 50-year) vision for the Twin Cities metropolitan area's transportation system. The Metro Highway System Investment Study will guide overall mobility decisions by giving direction to fully use all highway and modal investments in a coordinated manner.

## Regional Freight Studies

The Northern Minnesota/Northwest Wisconsin Freight Study and the Western Minnesota Freight Study will be multimodal and include highway (commercial vehicle operations), rail, waterway, air cargo and intermodal transportation. The studies will examine regional and local issues not captured in previous freight transportation studies and plans; document the existing freight transportation systems; identify industry and region-specific issues and trends as they relate to freight transportation; and identify potential system improvements for freight movement in these regions.

## Long-Range Transportation Funding Options

The 2008 Minnesota Legislature directed that Mn/DOT evaluate the 20-year needs to maintain and improve the state's highways, bridges and transit as well as various funding options to meet those needs. The analysis will be conducted in consultation with other state agencies and stakeholders and will consider the implications of increased fuel economy, availability of alternative modes, and fuel price volatility on various revenue options. The study, due in November 2009, will also look into the potential of road pricing and other alternative funding mechanisms with particular consideration of their environmental impacts and implementation feasibility.





### **Innovative Finance Initiative**

Mn/DOT is working with its transportation partners and stakeholders to explore innovative finance concepts and options for maximizing limited transportation dollars. Through this initiative, Mn/DOT will seek to align user benefits with costs and deliver a greater number of transportation projects more quickly.

### **Americans with Disabilities Act Transition Plan**

The Americans with Disabilities Act Transition Plan will identify physical obstacles in Mn/DOT facilities, describe the methods that will be used to make the facilities accessible, specify the schedule for the taking action, and identify the responsible official. Upon completion, the plan will assist Mn/DOT in meeting ADA requirements.

### **Complete Streets Feasibility Study**

Complete streets are defined as roadways designed and operated to enable safe, attractive and comfortable access and travel for all users: pedestrians, bicyclists, motorists and public transport users of all ages and abilities. Mn/DOT and its partners are assessing the benefits, cost and feasibility of establishing a complete streets policy in Minnesota.





## County State-Aid Highway System

### *Overview*

The county state-aid highway system is a network of key highways under the jurisdiction of Minnesota's counties. It covers roughly 30,500 miles, comprises just over two-thirds of all county highway miles, and includes roadways within all 87 counties. Counties receive money from the state's county state-aid highway (CSAH) fund for the construction, improvement, and maintenance of their highways included in the state-aid system. Under a 2008 change, two formulas determine how much aid is allocated to each county.

### *Sources of revenue*

State aid is provided through the CSAH fund, which is established by the Minnesota Constitution. Revenue mainly comes from taxes on motor fuels, motor vehicle registration, and motor vehicle sales. Available revenue consisted of \$423.1 million in calendar year 2010. (This briefing does not discuss a CSAH fund "set-aside" that goes into town road, town bridge, and flexible highway accounts, some of which may also be provided to counties.)

### *Limitations on aid*

Among the requirements accompanying the aid, counties must typically expend 60 percent of their allocation on construction projects and 40 percent on maintenance efforts. [Minn. Rules part 8820.1400](#). Counties are also required to expend a share of their aid on stretches of county state-aid highways located within small cities having a population under 5,000. [Minn. Stat. § 162.08](#), subd. 1. In general, the amount expended must at least be proportional, based on the construction needs for county state-aid highway segments located in a county's small cities compared to the total construction needs in that county's state-aid highway system.

### *Distribution of funds*

Money in the CSAH fund is allocated on a calendar-year basis (using actual tax receipts as well as estimates). A portion is set aside as deductions for county highway-related purposes, including: (1) MnDOT administrative costs, (2) a disaster account, (3) a research account, and (4) a state park roads account. The calendar year 2010 deductions amounted to \$16.1 million, or about 5 percent of the total in the fund.

Direct aid, at about \$407 million in calendar year 2010, is divided into two categories. The first is the **apportionment sum** and the second is the **excess sum**. Each category reflects a distinct revenue stream and each contains a statutory formula to calculate the aid distribution among the counties. [Minn. Stat. § 162.07](#).

### *Apportionment sum revenue and distribution formula*

The apportionment sum revenue consists of available CSAH fund dollars that are not identified as part of the excess sum (described below). The funds are distributed to counties following a statutory formula, so that:

- 10 percent of the apportionment sum is divided equally among all counties;
- 10 percent is proportional, based on motor vehicle registration in each county (compared to the total for all counties);

- 30 percent is proportional, based on county state-aid highway lane-miles (compared to the total for all counties); and
- 50 percent is proportional, based on county construction needs to bring the system up to county engineering standards. [Minn. Stat. § 162.07](#), subd. 1b.

**Excess sum revenue** Excess sum revenue consists of the total from three sources:

- revenue from motor fuels tax above the amount collected at a rate of 20 cents per gallon (which is composed of new revenue from a motor fuels tax increase established in 2008 transportation finance legislation);
- revenue from the registration tax above the inflation-adjusted amount collected in fiscal year 2008 (which is designed to identify increased revenue resulting from registration tax changes also made 2008); and
- revenue from the motor vehicle sales tax above the percentage allocated to the CSAH fund in fiscal year 2007 (which is designed to reflect additional motor vehicle sales tax revenue currently being phased in for transportation purposes). [Minn. Stat. § 162.07](#), subd. 1a.

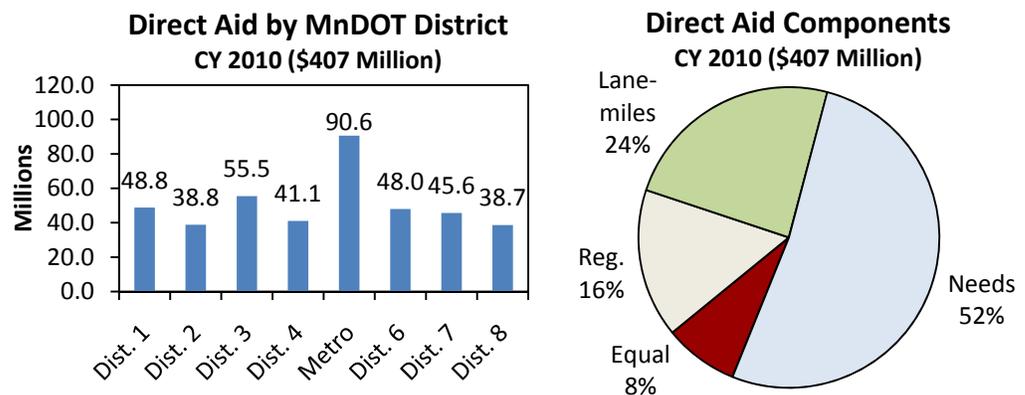
**Excess sum distribution formula**

The formula for distributing the excess sum is 40 percent proportional, based on motor vehicle registration in each county, and 60 percent proportional, based on each county’s construction needs. [Minn. Stat. § 162.07](#), subd. 1c.

**Analysis of formulas**

The apportionment and excess sum categories were introduced in 2008 as part of legislation that increased funding for transportation purposes. [Laws 2008, ch. 152](#). The creation of two aid formulas was designed to address equity concerns in the statewide distribution of the aid.

For 2010, the excess sum consisted of \$81.5 million or 20 percent of the formula-based direct aid allocated to counties (that is, excluding deductions). However, the share of aid distributed under the excess sum formula—as opposed to the apportionment sum formula—is expected to increase. This is because in the next few years additional revenue is projected for transportation purposes due to recent legislation, and the increased revenue will mainly be distributed under the excess sum formula. The effect of the predicted revenue growth will likely be to de-emphasize the county lane-miles formula component and more heavily weight vehicle registration as well as construction needs.



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## Municipal State-Aid Street System

The municipal state-aid street system is a collection of about 3,500 miles of key streets located in 144 Minnesota cities. The system constitutes less than 16 percent of all miles of city streets. Cities receive financial assistance from the state for the construction and maintenance of those streets included in the system. Assistance comes from a portion of constitutionally dedicated, transportation-related taxes. Based on a statutory formula, the aid is distributed through a state-aid program administered by the Minnesota Department of Transportation (MnDOT). [Minn. Stat. § 162.13](#). The aid can only be expended on streets that constitute part of the municipal state-aid street system. Total available funds for calendar year 2010 amounted to \$130.7 million.

### *Constitutional and statutory framework for state aid*

The Minnesota Constitution establishes a basic framework for state highway finance. It (1) dedicates funding to be “used solely for highway purposes” through taxes on motor fuels, motor vehicle registration, and motor vehicle sales; (2) establishes various accounting funds, including a municipal state-aid street (MSAS) fund for financial assistance to cities; (3) allocates tax revenues among state, county, and municipal roads, so that the MSAS fund receives 9 percent of 95 percent of those tax revenues constitutionally dedicated to streets and highways (after some special allocations and transfers); and (4) establishes certain requirements related to use of the funds and characteristics each highway system. [Minn. Const. art. XIV](#). State statutes further specify finance and policy elements such as aid allocation formulas and requirements for cities to receive aid.

### *Eligibility and requirements*

Within each city, the municipal state-aid street system is restricted to up to 20 percent of the total miles of (1) the city’s streets, plus (2) county highways located within the jurisdiction of that city. City streets that were previously part of a state trunk highway or a county highway system and were “turned back” to a city are also included in the municipal state-aid street system and do not count against the 20 percent limit. [Minn. Stat. § 162.09](#).

Among the qualifications under the Minnesota Constitution for inclusion in the system, a city must have a population over 5,000. [Minn. Const. art. XIV](#). (Chisholm fell below the population cutoff but is grandfathered in.) Smaller cities having a population under 5,000 do not receive aid from the MSAS fund. However, such cities are indirectly assisted through a separate program that funds certain county highways: a portion of state funds for the county state-aid highway system provided to each county must be allocated to a municipal account for county state-aid highways located in smaller cities. [Minn. Stat. § 162.08](#).

### *Distribution of funds*

State-aid funding is distributed on a calendar-year basis. MnDOT determines the amount annually based on both tax receipts to date and estimates of receipts for the remainder of that fiscal year. Apportionment amounts are released each January. For calendar year 2010, total available MSAS funding was \$130.7 million.

Funds were distributed as follows based on formulas and caps set in state law:

- \$127.3 million apportioned by formula as direct aid to cities;
- \$2.6 million to an administrative account for MnDOT expenses in administering the state-aid program;
- \$167,000 to a disaster account for unforeseen events resulting in undue financial hardship; and
- \$609,000 to a research account. [Minn. Stat. §§ 162.12, 162.13.](#)

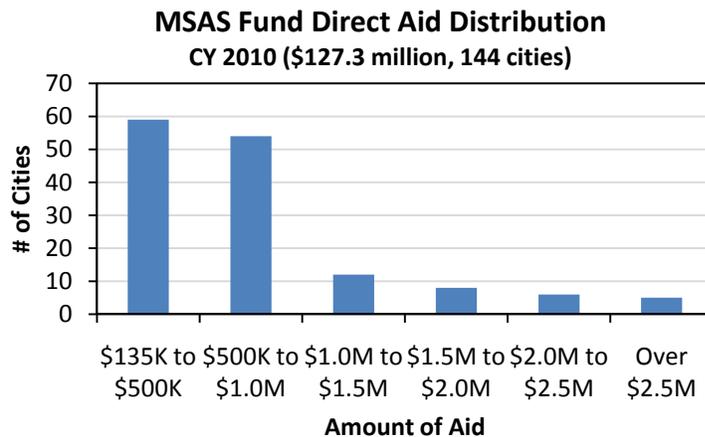
***Direct aid allocation formula***

Money in the MSAS fund apportioned to cities via direct aid follows a formula provided in statute, so that:

- **50 percent** is divided proportionally based on the population of each city (compared to the total for all cities); and
- **50 percent** is divided proportionally based on the construction needs of each city, which is the amount the city needs to bring all its municipal state-aid streets up to state standards. [Minn. Stat. § 162.13.](#)

***Analysis of aid apportionment***

Owing to the variety of cities having streets in the state-aid system, MSAS fund distributions vary. Calendar year 2010 direct aid apportionments to cities ranged from about \$137,000 to over \$11 million. The average allocation was \$880,000, with 31 cities receiving over \$1 million a piece and 11 cities receiving over \$2 million. Obviously, because population is a key element of aid allocation, larger cities tend to receive relatively greater amounts of funding. The following chart groups cities based on amount of aid distributed.



Comparing 2009 to 2010 direct aid apportionments, all cities had an increase in apportionment based on the population component of the funding allocation formula, while 42 cities saw a decrease under the construction-needs component. The net result was an aid decrease for ten cities and an increase for the remaining 134 cities. The largest net decrease was relatively modest, at about \$28,000.

**For more information:** Contact legislative analyst Matt Burress at 651-296-5045. Also see the House Research publication [Highway Finance Overview](#), November 2009.

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## Introduction

As part of the 2009 Minnesota Statewide Transportation Policy Plan update, Mn/DOT District 3 updated its 20-year investment plan. The Mn/DOT District 3 20-Year Highway Investment Plan, last updated in 2004, provides the link between the policies and strategies established in the Statewide Transportation Policy Plan and the capital improvements that are made to the state highway system. This 20-year plan is a guide for future capital investments in the state trunk highway system for north central Minnesota. It does not address spending for highway operations or other modes of transportation. The Mn/DOT Statewide 20-year Highway Investment Plan discusses in greater detail the relationship of the highway investment plans to the Statewide Transportation Policy Plan and the methodology and calculation of performance-based investment needs.

This document has three primary sections. The first sets the context, highlighting issues and trends in District 3 that influence its 20-year highway investment plan. The second details the five steps in the development of the plan: (1) identify investment needs, (2) project future revenue, (3) set investment goals, (4) develop investment plan, and (5) prioritize unfunded investment needs. The final section outlines expected system performance and anticipated outcomes resulting from planned investments over the 20-year planning period.

## Setting the Context

District 3's planning area encompasses a 12-county region in central Minnesota. The twelve counties are Benton, Cass, Crow Wing, Isanti, Kanabec, Mille Lacs, Morrison, Sherburne, Stearns, Todd, Wadena, and Wright Counties. While District 3 uses slightly different boundaries to manage its construction and maintenance activities, this 20-year Highway Investment Plan will focus on this 12-county area.

District 3 is the most populated, fastest-growing district in Greater Minnesota. Five of the top 10 fastest growing counties in the state are located here. The District's economy is also quite diverse. An abundance of natural resources (e.g., rich soils, forests, iron ore and granite deposits, and lakes) helped define the original economic fabric of the District. Over time, however, the District's economy has diversified into one of the most productive, economically viable regions in the state outside the Twin Cities Metropolitan Area.

In the southern portion of the district in and around the St. Cloud and Twin Cities Metropolitan Areas, an expanding retail and service base has prompted incredible growth and development. Many areas that were once considered rather rural and agricultural in character are undergoing significant transformation and becoming thriving bedroom communities and full-service trade centers.

The northern economy in the District, once deeply rooted in mining and forestry-related activity, is also experiencing dramatic changes. This region's many lakes and forests and its general close driving proximity to the Twin Cities have made it one of Minnesota's most popular tourism destinations. The wealth of recreational and outdoor opportunities in this area has spurred the economy and contributed to the region's growth.

## Transportation System Profile

- Eight major Interregional Corridors (IRCs) providing critical connections to important regional trade centers around the state, including Interstate 94; U.S. Highways 10 and 169; and MN Highways 23, 24 (Clearwater to Clear Lake), 34 (Hubbard-Cass Co. Line to Walker), 210 (Motley to Highway 169 Aitkin), and 371 (Little Falls to Cass Lake).
- 3,995 total lane miles (the greatest number of lane miles for all districts, including the Metro District).
- 1,961 total lane miles on the IRC system.
- 23 airports (regional airports located in Brainerd and St. Cloud).
- Eight urban and rural public transit systems providing service to 10 of the 12 counties in the District.
- Five major rail lines and one short line constituting 367 rail line miles.
- Seven Class I Safety Rest Areas, including:
  - I-94 – Enfield, Fuller, Big Spunk, and Middle Spunk
  - TH 10 – St. Cloud Travel Information Center
  - TH 169 – Rum River
  - TH 371 – Brainerd Lakes Area Welcome Center
- Home to Minnesota’s first commuter rail corridor, the Northstar Commuter Rail, which will become operational in late 2009 and provide services to commuters traveling between Minneapolis and Big Lake (District 3 stations located in Elk River and Big Lake).

## Transportation Issues and Trends

- 288 highway-related fatalities during the 2004 to 2007 timeframe, which is the highest number of fatal and incapacitating crashes among the seven Greater Minnesota Mn/DOT districts.
- Nearly 178 miles of rural two-lane highways warrant conversion to four-lane expressways by 2028; today, several corridors carry 15,000 to 20,000 vehicles per day.
- An estimated 249 miles of IRCs will perform below target performance by 2028 without planned investments; District 3 is the only Greater Minnesota district predicted to have underperforming IRCs in the 20-year planning timeframe.
- Traffic on virtually every highway passing through the 12 Regional Trade Centers (RTCs) will be congested.
- High seasonal and recreational travel peaks are experienced; virtually all major roads heading north and west out of the Twin Cities Metropolitan Area, except Interstate 35, pass through District 3.
- Transportation road and bridge infrastructure is aging.
- There will be moderate pavement preservation needs during the mid-range planning period, 2013-2018, with considerably higher pavement needs in the long-range planning period, 2019-2028.

- Major rehabilitation and replacement work will be required on Interstate 94 and major four-lane expressways like U.S. Highways 10 and 169.
- Fifteen bridges will require replacement by 2018; five of them exceed \$8 million each for their replacement.

### **Social and Economic Issues and Trends**

- Twelve regional trade centers and one metropolitan planning organization, including:
  - Level 1 – St. Cloud metropolitan area (St Cloud Area Planning Organization)
  - Level 2 – Brainerd-Baxter, Buffalo, Cambridge, Elk River, and Monticello-Big Lake
  - Level 3 – Little Falls, Mora, Princeton, Sauk Centre, St. Michael, and Wadena
- Eighteen cities with a population of more than 5,000: Albertville, Baxter, Big Lake, Brainerd, Buffalo, Cambridge, Delano, Elk River, Isanti, Little Falls, Monticello, Otsego, St. Cloud, St. Joseph, St. Michael, Sartell, Sauk Rapids, and Waite Park.
- Increasing and high levels of population and employment growth.
- Expanding retail and services base in the south and strong tourism sector in the north.
- Greater share of population in younger age cohort groups compared to other parts of Greater Minnesota.
- Large commuter field commuting to the Twin Cities Metropolitan Area and to a lesser extent to the St. Cloud Metropolitan Area.

### **The Bottom Line**

District 3's rapid growth means more use and greater wear and tear on its roads and bridges. Over the next 20 years, the District estimates its population growth will generate an additional 1.25 million new vehicle trips per day. The additional use on the system will place further stress on an already aging transportation infrastructure and result in greater congestion and travel delays for motorists.

## Development of the Highway Investment Plan

The District 3 20-year Highway Investment Plan 2009-2028 has been developed within the context of Mn/DOT's decentralized planning and programming process. This process begins with policies, strategies, performance measures, and performance targets set in Chapter 7 of the Statewide Transportation Policy Plan. Five of the ten policies list performance measures and targets that can be directly affected by capital investments in the highway system.

This plan identifies capital investment needs within the framework of four strategic investment priorities: Traveler Safety, Infrastructure Preservation, Mobility, and Regional and Community Improvements. The process culminates in highway system construction projects (Figure 1). Issues and trends discussed previously enter the planning process at all levels, influencing policy, plans, programs, and project design. Statewide guidelines have been established to ensure the District 3 plan has been created in a consistent, objective manner similar to the other seven Mn/DOT district plans.

The District 3 20-year Highway Investment Plan 2009-2028 covers three planning periods:

- **2009 to 2012 State Transportation Improvement Program (STIP):** Updated annually, planned spending in these four years includes specific projects identified in the current four-year STIP plus additional improvements that will be funded by Chapter 152 bonds in years 2011 and 2012 but have not yet been included in the STIP. Projects are generally considered commitments with well-developed scopes, cost estimates, and planned year of construction; however, if projected revenues are not realized, the timing of planned investments may change.
- **2013 to 2018 Mid-Range Highway Investment Plan (Mid-Range HIP):** Investments identified in these six years remain in the planning stage and represent a general spending plan but not a commitment. Major projects under development are given an estimated cost range and construction year but both are subject to change as project development proceeds. Much of the spending plan is comprised of funding allocations within the four strategic investment priority areas, such as roadway safety enhancements and pavement preservation. Specific projects for these funding allocations are generally not identified or fully scoped until the annual development of the STIP. The Mid-Range HIP is also updated annually
- **2019 to 2028 Long-Range Highway Investment Plan (Long-Range HIP):** Planned spending in this 10-year planning period represents a very rough, long-term outlook on revenues and investment priorities. The Long-Range HIP intends to provide a general comparison of projected revenues, given current trends and conditions, with long-term needs. Planned investments are associated with broad investment categories within the four strategic priorities. The final 10 years of the plan include only a very general outlook of investment estimates due to the high level of uncertainty associated with both revenue and costs in this period.



Figure 1 – Role of District 20-year Highway Investment Plan in Mn/DOT’s Planning and Implementation Process

The development of the District 3 20-year Highway Investment Plan occurred through a five step process (Figure 2):

1. *Identify investment needs* that address system performance or support regional and community improvements.
2. *Project revenues* for each of the three planning periods.
3. *Set investment goals* based on legislative direction, system performance, and stakeholder input as investment needs exceed projected revenue.
4. *Develop investment plan* for each of the three planning periods.
5. *Identify high priority investment options for potential additional funding* over the next ten years.

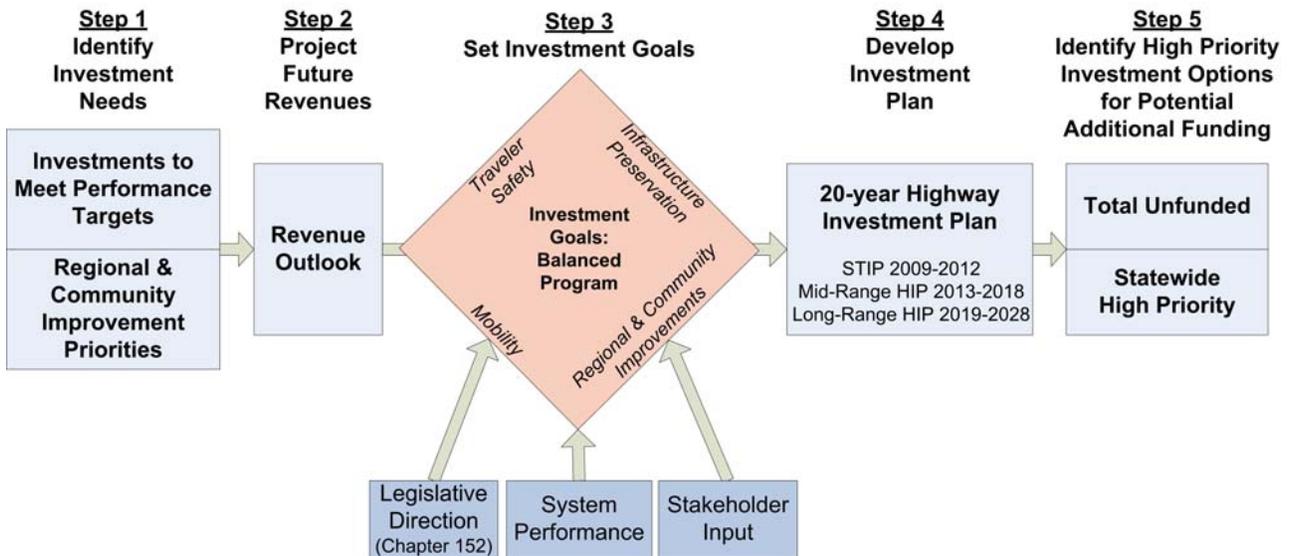


Figure 2 – Mn/DOT 20-year Highway Investment Plan Development Process

## Step 1: Identify Investment Needs

District 3's investment needs for the four strategic priority areas fall into two categories: investments to meet performance targets and improvements to support Regional and Community Improvement Priorities (RCIPs).

### Investments to Meet Performance Targets

For District 3, four of the ten policies discussed in Chapter 7 of the Statewide Transportation Policy Plan address system performance that can be directly affected by capital investment in the highway system. These policies are Policy 1: Traveler Safety, Policy 2: Infrastructure Preservation, Policy 5: Statewide Connections, and Policy 7: Greater Minnesota Metropolitan and Regional Mobility. The Statewide 20-year Highway Investment Plan sets investment direction, performance measures, and performance targets as well as details methodology for determining investment needs.

In migrating from policies to investment needs a broad range of improvements were identified. While any specific improvement would likely address issues and trends associated within several policies, the improvements were categorized into specific policies for the purpose of defining needs. Table 1 identifies investment needs to meet these performance targets by 2018 and maintain them thereafter. An investment need identified in the planning period '2009-2018' or '2019-2028' signifies a need to meet performance targets within that period.

#### *Policy 1: Traveler Safety*

Policy 1 guides investments that reduce the number of traffic-related deaths and serious injuries and has two broad categories:

- *Roadway Enhancements* are proactive, lower-cost strategies applied system-wide to highways generally in conjunction with other types of highway projects.
- *Capacity Improvements* are higher-cost strategies most often initiated as stand alone projects.

#### **Performance-based Investment Needs**

*Roadway Enhancements* associated with Traveler Safety represent lower-cost, high-benefit systematic strategies to reduce fatal and serious injury crashes. These strategies were developed as part of the Minnesota Strategic Highway Safety Plan (SHSP) and represent safety improvements that can be included in preservation projects or constructed as stand alone projects. Within this plan, the investment needs are quantified using the forecasted traffic volumes in 2018 and 2028 for the following strategies:

- Edge Treatments
- Centerline Rumble Strips
- Rural Intersection Enhancements
- Right-turn Lanes/Bypass Lanes
- Left-turn Lanes
- Passing Lanes
- Full Standard Shoulders
- Geometric Intersection Changes/Access Management

- Intersection Control Revisions
- Cable Median Barrier

*Capacity Improvements* associated with Traveler Safety represent strategies to reduce fatal and serious injury crashes through proactive and systematic capacity-related investments. Within this plan, these investment needs are quantified for highway corridors and intersections where forecasted traffic volumes are high enough to warrant consideration for improvements beyond the strategies shown under Traveler Safety – Roadway Enhancements. Capacity Improvements are considered based on the criteria below:

- Rural corridors warranted consideration when the average annual daily traffic (AADT) exceeds 11,200 in 2018 or 2028; and
- Intersections warranted consideration when the mainline AADT exceeds 35,000 and the cross street AADT exceeds 10,000 in 2018 or 2028.

If a corridor or intersection meets the above criteria, an average cost is assigned based on a broad range of potential strategies and improvements. The specific improvement and cost will not be clearly defined until the project has gone through the scoping process to identify the appropriate and context sensitive solution and it is programmed in a future STIP. Potential strategies and improvements may include, but are not limited to, the following:

- For corridors: adding right, left, or center turn lanes, improving sight distances, adding passing lanes, constructing a median, or adding lanes; and
- For intersections: changing intersection geometrics or control, constructing grade separation, or constructing an interchange.

Based on the criteria above, the following corridors and intersections warrant consideration under Traveler Safety – Capacity Improvements (corridor length):

2009 to 2018 (Total Needs \$265 M)

- TH 12 Meeker-Wright County Line to Cokato (2.7 miles) \*
- TH 12 Howard Lake to Waverly to Montrose to Delano (14.4 miles) \*
- TH 169 TH 27 north of Onamia to Wigwam Bay (9.9 miles)
- TH 23 Junction TH 15 in St Cloud (Intersection)
- TH 25 Buffalo to Big Lake (10.2 miles)
- TH 55 Annandale to Maple Lake to Buffalo to Rockford (20.9 miles)
- TH 65 Cambridge to TH 107 (6.4 miles)
- TH 95 Cambridge to North Branch (9.2 miles) \*
- TH 210 Brainerd to Crow Wing CSAH 12 (Deerwood shortcut) (7.8 miles)
- TH 371 Nisswa to Jenkins (10.5 miles)

2019 to 2028 (Total Needs \$253 M)

- TH 12 Cokato to Howard Lake (3.9 miles)
- TH 169 Wigwam Bay to Garrison (4.5 miles)
- TH 15 Kimball to I-94 (St Cloud) (12.7 miles)
- TH 18 Brainerd to Garrison (14.5 miles)

- TH 23 Paynesville to Richmond (10.7 miles)
- TH 24 Wright CSAH 6 to I-94 (Clearwater) (9.9 miles)
- TH 47 St Francis to Isanti CSAH 8 (2.0 miles)
- TH 55 Wright CSAH 3 to Annandale (2.7 miles)
- TH 65 TH 70 to Mora (4.5 miles)
- TH 95 Mille Lacs CSAH 5 to Mille Lacs-Isanti County Line (Princeton Area) (5.7 miles)
- TH 210 Pillager to Baxter (8.7 miles)
- TH 371 Jenkins to Pine River (3.0 miles)
- TH 371 Hackensack to Cass CSAH 6 (3.1 miles)

\* Indicates that the corridor extends into an adjacent district

### *Policy 2: Infrastructure Preservation*

Policy 2 guides investments that ensure the structural integrity of the highway transportation system.

#### **Performance-based Investment Needs**

The investment needs for Infrastructure Preservation were developed in four categories:

- *Chapter 152 Bridge* includes rehabilitation and replacement of 120 structurally deficient and fracture critical bridges statewide as outlined in Minnesota Laws 2008, Chapter 152. Structurally deficient bridges meet a specific condition rating for the bridge deck, superstructure, and substructure or culvert. Fracture critical bridges are those with a steel superstructure whose members are arranged in a manner in which if one fails, the bridge would collapse. Note, the classification of structurally deficient or fracture critical does not imply the bridge is inherently unsafe. Each of the 120 bridges was reviewed and a cost estimate for either rehabilitation or replacement was developed.
- *Other Bridge* includes rehabilitation and replacement of bridges not included in Minnesota Laws 2008, Chapter 152. Investment needs include bridge and large culvert replacement, redecking, deck overlay, and preventative maintenance activities (e.g., painting).
- *Pavement* reflects a model that optimizes cost-effective improvements for the entire highway system. Investment needs include crack sealing, pavement mill and overlay, and full reconstruction.
- *Other Infrastructure* includes cost-effective replacement of signs, lighting, traffic signals, intelligent transportation systems, safety rest areas, and drainage infrastructure. Investment needs for signs, lighting, and traffic signals are based on the life-cycle replacements. Investment needs for intelligent transportation systems, safety rest areas, and drainage are based on a review of existing conditions and replacement costs.

### *Policy 5: Statewide Connections*

Policy 5 addresses investments that enhance mobility on key highways, *Interregional Corridors* (IRCs), linking Greater Minnesota regional trade centers that are performing below travel speed targets.

#### **Performance-based Investment Needs**

Each Interregional Corridor was examined using forecasted 2008, 2018 and 2028 traffic volumes. Consistent with the performance criteria, high priority IRC performance was compared against a 60 mile per hour (mph) performance target and medium priority IRCs were compared against a performance target of 55 mph. The IRC speed formula used to estimate corridor performance considers the following factors: traffic volume, number of lanes, number of traffic signal, facility type, posted speed limit, and rural or urban location.

If a corridor fell below its designated target performance, a range of alternatives to meet the designated target performance was considered and a cost estimate was developed. Potential improvements may include signal retiming, signal elimination, lane extensions, alignment changes, access management, and expansion. Based on this process, the following corridors warrant consideration under Statewide Connections:

#### 2009 to 2018 (Total Needs \$1,738 M)

I-94/TH 25 – Twin Cities to St Cloud, Potential improvements:

- TH 25 2- to 4- lane expansion from Buffalo to I-94
- I-94 4- to 6- lane expansion from Rogers to Clearwater

TH 24/TH 10 – I-94 (Clearwater) to Little Falls, Potential improvements:

- I-94/TH-10 new river crossing Clearwater to Clear Lake
- TH 10 conversion to freeway type facility from Clear Lake to Rice

TH 210 – Staples to Aitkin, Potential improvements:

- No specific improvement identified

#### 2019 to 2028 (Total Needs \$1,835 M)

TH 10 – Twin Cities to Clear Lake, Potential improvements:

- TH 10 conversion to freeway type facility from west of TH 169 interchange to Lake Orono
- TH 10 bypass around Big Lake
- TH 10 interchange construction in Rice and Royalton

TH 169/TH 18 – Twin Cities to Garrison, Potential improvements:

- TH 169 freeway conversion from Elk River through Zimmerman

### *Policy 7: Greater Minnesota Metropolitan and Regional Mobility*

Policy 7 guides investments for preserving mobility within *Greater Minnesota Trade Centers* that are linked to Interregional Corridors.

#### **Performance-based Investment Needs**

The investment needs for Greater Minnesota Metropolitan and Regional Mobility address high-volume highway corridors in *Greater Minnesota Trade Centers*. These investment needs are quantified for urban highway corridors where the future Level of Service falls below D by 2018 or 2028. Within this plan, the threshold for Level of Service D/E corresponds to the following criteria:

- An existing 2-lane arterial with a forecasted AADT > 15,000;
- An existing 4-lane arterial with a forecasted AADT > 30,000; or
- An existing 4-lane freeway with a forecasted AADT > 75,000.

If a corridor meets the above criteria, an average cost is assigned based on a broad range of potential strategies and improvements. The specific improvement and cost will not be clearly defined until the project has gone through the scoping process to identify the appropriate and context sensitive solution and it is programmed in a future STIP. Potential strategies and improvements may include, but are not limited to signal retiming, intersection modification, lane extensions, access management, interchange conversion or expansion.

Based on the criteria above, the following corridors warrant consideration under Greater Minnesota Metropolitan and Regional Mobility (corridor length):

#### 2009 to 2018 (Total Needs \$51 M)

TH 10 in Big Lake (0.7 miles)	TH 10 in Elk River (0.9 miles)
TH 12 in Waverly/Montrose (3.4 miles)	TH 12 in Delano (1.9 miles)
TH 15 in St Cloud/Sauk Rapids (5.3 miles)	TH 23 in Waite Park/St Cloud (7.2 miles)
TH 25 in Buffalo (1.9 miles)	TH 25 in Monticello (2.1 miles)
TH 25 in Big Lake (0.8 miles)	TH 27 in Little Falls (1.6 miles)
TH 55 in Buffalo (3.2 miles)	TH 65 in Isanti (1.5 miles)
TH 95 in Cambridge (1.2 miles)	TH 371 in Baxter (1.2 miles)

#### 2019 to 2028 (Total Needs \$30 M)

TH 10 in Wadena(0.9 miles)	TH 12 in Howard Lake (1.2 miles)
TH 101 in Otsego (4.6 miles)	TH 210 in Brainerd (2.9 miles)

### **Investments to Meet Performance Targets Summary**

District 3's 20-year investments to meet performance targets are approximated at \$5.9 billion (Table 1). This is nearly one-third of the total performance-based needs in Greater Minnesota. Mobility, both IRCs and Greater Minnesota Metropolitan and Regional Mobility, accounts for the single largest performance-based need, about \$3.7 billion, over the 20-year planning period. This area alone accounts for over 62 percent of the District's total performance-based needs and an astonishing 95 percent of the total mobility needs in Greater Minnesota. Infrastructure preservation,

on the other hand, accounts for the second highest portion, about 24 percent, of the District’s total needs. Over \$1.4 billion will be required for improvements relating to preserving the condition of the District’s roads, bridges, and other infrastructure such as safety rest areas, lighting, striping, signals, and drainage facilities. Traveler safety rounds out the District’s overall performance-based needs with an estimated \$804 million required for the 20-year planning period. This represents roughly 14 percent of the District’s total needs and accounts for nearly 40 percent of the total performance-based safety needs in Greater Minnesota.

**Table 1 – District 3 Total Investments to Meet Performance Targets for 2009-2028 (\$ in millions, year of construction)**

STRATEGIC INVESTMENT PRIORITY	PLANNING PERIOD					
	2009 to 2018		2019 to 2028		2009 to 2028	
	Need (\$)	% of Need	Need (\$)	% of Need	TOTAL (\$)	% of Total
<b>Traveler Safety</b>	<b>404</b>	<b>15%</b>	<b>400</b>	<b>12%</b>	<b>804</b>	<b>14%</b>
Roadway Enhancements	139		147		286	
Capacity Improvements	265		253		518	
<b>Infrastructure Preservation</b>	<b>476</b>	<b>18%</b>	<b>937</b>	<b>29%</b>	<b>1,413</b>	<b>24%</b>
Chapter 152 Bridge Program	48		-		48	
Other Bridge	81		94		175	
Pavement	304		769		1,073	
Other Infrastructure	43		74		118	
<b>Mobility</b>	<b>1,788</b>	<b>67%</b>	<b>1,865</b>	<b>58%</b>	<b>3,653</b>	<b>62%</b>
Interregional Corridors	1,738		1,835		3,573	
Greater MN Trade Centers	51		30		81	
<b>Total Investment</b>	<b>\$2,670 M</b>		<b>\$3,200 M</b>		<b>\$5,870 M</b>	

**Regional and Community Improvement Priorities Summary**

Regional and Community Improvement Priorities (RCIPs) represent system improvements identified by the District and regional or local communities and business groups as desirable and supportive of business or community development. The District compiled a list that reflects their understanding of regional and community priorities heard from stakeholders over the last five to ten years.

District 3 identified 17 RCIPs with an estimated cost of \$259 million (2009 dollars) in its 20-year Highway Investment Plan (Table 2). The list includes 12 interchange conversion projects and five reconstruction projects. Five of the interchanges listed in Table 2 qualified as performance-based safety or IRC mobility investment needs using past performance measure criteria. The remaining seven interchanges are on the list primarily to support local economic and community development goals or a longer term vision (e.g., freeway) planned for the corridor.

The five reconstruction projects shown in Table 2 include four urban and one rural reconstruction project. Aging sidewalks, curb, gutter and utilities have triggered the need for reconstruction on three of the projects as a practical way of addressing local community development needs. The remaining two reconstruction projects are needed to bring the roadway to a satisfactory standard so the District may begin negotiations to transfer ownership and jurisdictional control and responsibility of these roadways to affected local governments.

**Table 2 – District 3 Regional and Community Improvement Priorities**

<b>TH</b>	<b>Project</b>	<b>Notes</b>
10	TH 10 Interchange at Benton CSAH 13	<i>Previously identified as an IRC Mobility need in the 2004 Plan *</i>
10	TH 10 Interchange at Benton CSAH 4	<i>Previously identified as an IRC Mobility need in the 2004 Plan *</i>
10	TH 10 Interchange at Sherburne CSAH 11/SE of Becker	<i>Previously identified as a Safety need in the 2004 Plan *</i>
10	TH 10 Interchange at Morrison CSAH 14 in Randall	<i>RCIP</i>
15	TH 15 Interchange at 18 <sup>th</sup> St. in Sauk Rapids	<i>RCIP</i>
15	TH 15 Interchange at Benton CSAH 29 in Sauk Rapids	<i>Previously identified as a Safety need in the 2004 Plan *</i>
15	TH 15 Interchange at Stearns CR 120	<i>RCIP</i>
65	TH 65 Interchange at Isanti CSAH 5 in Isanti	<i>Previously identified as a Safety need in the 2004 Plan *</i>
65	TH 65 Interchange at Isanti CSAH 30 south of Cambridge	<i>RCIP</i>
65	TH 65 Interchange at TH 107 south of Braham	<i>RCIP</i>
71	TH 71 Reconstruction in Sauk Centre	<i>Reconstruction to address Preservation need</i>
95	TH 95 Reconstruction in Cambridge	<i>Part of the Corridor Vision</i>
169	TH 169 Interchange at Mille Lacs CSAH 11 north of Milaca	<i>Previously identified as a Safety need in the 2004 Plan *</i>
227	TH 227 Reconstruction and shoulder widening from TH 71 to Wadena CSAH 14 in Nimrod	<i>Future Turnback</i>
293	TH 293 Reconstruction from TH 95 to Main Street in Cambridge	<i>Future Turnback</i>
371	TH 371 Interchange at Crow Wing CSAH 48 in Baxter, Including bicycle/pedestrian crossing	<i>Part of the Corridor Vision</i>
371B	TH 371B Reconstruction from Crow Wing CR 117/Buffalo Hills Lane to TH 210 in Brainerd	<i>Reconstruction to address Preservation</i>

\* Criteria for performance-based needs changed since the 2004 Plan.

## **Step 2: Project Future Revenue**

Future revenues were projected assuming no new sources of revenue or rate increases in existing state or federal revenue sources. Revenue forecasts were prepared in winter 2007 and are intended for long-range planning purposes. The bond funding authorized by Minnesota Laws 2008, Chapter 152 has been included in the forecasts. Statewide revenues were allocated to the Districts according to Mn/DOT's adopted target formula and bonds were allocated to bridges and other projects as outlined in Chapter 152.

Given the volatility in both construction costs and state and federal revenue sources, the revenue forecast represents a snapshot in time and is to be updated annually for purposes of the 4-year STIP. Chapter 5 of the Statewide Transportation Policy Plan provides a more complete description of revenue and cost trends and projections. District 3's projected revenue totals approximately \$1.4 billion over the 20-year planning period.

## **Step 3: Set Investment Goals**

### **Statewide Goals: A Balanced Program**

#### *Need for Investment Goals*

For District 3, as well as for the state as a whole, the investment needs identified in Step 1 greatly exceed the projected future revenues identified in Step 2. Since all of the identified needs cannot be funded, it is necessary to set investment goals to guide how capital funds are spent. Based on input from stakeholders, investment goals should represent a balanced program of investments across the four strategic investment priorities of Traveler Safety, Mobility, Infrastructure Preservation, and Regional and Community Improvement Priorities; and result in a consistent, flexible and transparent approach across districts toward statewide system performance targets.

#### *Changes from the 2004 Investment Goals*

These statewide investment goals reflected in this update of the District 3 Highway Investment Plan differ significantly from the 2004 plan. At that time, Mn/DOT identified infrastructure preservation as its top priority. District 3 was directed to fully fund preservation needs before other priorities, including traveler safety, mobility, and local community priorities. The revenue and construction cost outlook in 2004 projected sufficient long term funding to meet not only preservation needs, but other areas of need as well.

Since 2004, revenues have not grown as anticipated and construction costs have increased dramatically. Even with the increased transportation revenues provided through Minnesota Laws 2008, Chapter 152, the cost to fully preserve bridges, pavements, and other road infrastructure over the next 20 years will exceed projected funding.

## 2009 Statewide Investment Goals

The investment goals in this plan update reflect Chapter 152 legislative direction, consideration of system performance trends, and stakeholder input. While infrastructure preservation continues to be an important investment priority for Mn/DOT, it cannot be the exclusive priority. The statewide investment goals for a balanced program are as follows:

1. Fully fund all Chapter 152 bridges by 2018;
2. Fund at least 85 percent of all other bridge preservation needs;
3. Fund at least three times the district's Highway Safety Improvement Program (HSIP) goal;
4. Use at least 70 percent of the remaining available revenues to fund pavement preservation (*District 3 and Metro District: Fully fund pavement preservation needs*);
5. Identify some level of investment in other infrastructure preservation; and
6. Remaining funds may be invested at the district's discretion.

## District Goals

District 3 remains committed to Mn/DOT's "preservation first" investment strategy that was emphasized in past plan update cycles. For that reason, the present pavement conditions in District 3 are in better overall shape compared to several other Districts around the state. Similarly, the physical condition of the District's inventory of bridges is also relatively sound with only a few structurally deficient structures requiring immediate attention. With a large share of the state's high-volumes highways and a historically high number of severe crashes, the District has also been a leader in the implementation of low-cost safety improvements, such as edge and centerline rumble strips and median cable guardrail projects that are designed to reduce the number of run-off-the-road and cross-over-the-median crashes.

The District's past investment priorities have made a positive difference toward ensuring the development of a safe and sound transportation. However, limited funding and inflationary increases to existing projects in the STIP and Mid-Range HIP have forced the delay of important two- to four-lane safety expansion projects and several longer-range IRC mobility projects by five or more years. A number of these projects with significant planning and environmental review work already completed were removed entirely from the plan simply because the prospect of funding them was so unlikely given the revenues anticipated over the next 20 years and beyond.

Maintaining the existing system is a key objective for Mn/DOT. At the same time, the Statewide Transportation Policy Plan recognizes the need for a more balanced investment approach that incorporates investments across all areas of need (e.g., infrastructure preservation, traveler safety, and mobility) and carefully weighs the impacts/tradeoffs made between various investments options. To that end, District 3, in developing its 20-year Highway Investment Plan, challenged itself to continue investing in needed preservation and low-cost safety improvements while at the same time making a firm commitment to implement the major safety expansion projects identified in its present 10-year highway investment program to the extent

possible. Other strategies considered in the investment recommendations of this plan include:

- Continuing to invest responsibly in system preservation to ensure a safe and sound transportation infrastructure.
- Reducing head-on, run-off-the-road, and intersection crashes on high volume, rural two-lane highways.
- Reducing across-median and intersection crashes on rural expressways.
- Implementing low-cost, proactive safety improvements:
  - Installing turn lanes, rumble strips/stripes, and median cable barriers to prevent run-off-the-road and head-on crashes.
  - Managing access to reduce the number of conflict points at intersections and driveways.
- Implementing higher-cost, reactive improvements:
  - Installing signals, roundabouts, lighting, and left/right turn lanes at intersections.
  - Adding lanes on high-volume, two-lane roadways.
  - Converting busy, unsafe intersections to interchanges.

#### **Step 4: Develop Investment Plan**

District 3's 20-year Highway Investment Plan is a subset of projects and improvements identified as either investments to meet performance targets or Regional and Community Improvement Priorities.

#### **District 20-year Highway Investment Plan**

District 3 investments over the 20-year planning period total more than \$1.4 billion (Table 3) and include anticipated Chapter 152 bonds in years 2009 and 2010. The District's overall performance-based transportation needs for the 20-year planning period is estimated to be nearly \$5.9 billion. The difference in revenues to needs represents a \$4.5 billion financial gap necessary toward fully meeting all of the District's performance-based needs: \$2.1 billion in the Mid-Range HIP and \$2.4 in the Long-Range HIP.

**Table 3 – District 3 Highway Investment Plan 2009-2028**  
(\$ in millions, year of construction)

STRATEGIC INVESTMENT PRIORITY	PLANNING PERIOD							
	2009 to 2012		2013 to 2018		2019 to 2028		2009 to 2028	
	STIP (\$)	% of STIP	HIP (\$)	% of HIP	LRP (\$)	% of LRP	TOTAL (\$)	% of Total
<b>Traveler Safety</b>	<b>40</b>	<b>12%</b>	<b>121</b>	<b>33%</b>	<b>135</b>	<b>18%</b>	<b>296</b>	<b>21%</b>
Roadway Enhancements	15		21		41		78	
Capacity Improvements	25		100		94		218	
<b>Infrastructure Preservation</b>	<b>231</b>	<b>72%</b>	<b>248</b>	<b>67%</b>	<b>594</b>	<b>81%</b>	<b>1,072</b>	<b>75%</b>
Chapter 152 Bridge Program	48		-		-		48	
Other Bridge	23		69		108		199	
Pavement	154		152		470		776	
Other Infrastructure	7		27		15		49	
<b>Mobility</b>	<b>12</b>	<b>4%</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>12</b>	<b>1%</b>
Interregional Corridors	12		-		-		12	
Greater MN Trade Centers	-		-		-		-	
<b>Regional and Community Improvement Priorities</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<i>Right of Way, Consultants, Supplemental Agreements</i>	<b>36</b>	<b>11%</b>	<b>NA</b>		<b>NA</b>		<b>36</b>	<b>3%</b>
<b>Total Investment</b>	<b>\$320 M</b>		<b>\$370 M</b>		<b>\$730 M</b>		<b>\$1,420 M</b>	

Infrastructure preservation comprises the single largest proportion of District 3's total investments over the 20-year life of this Plan. Table 3 reports the District will commit an estimated \$1.1 billion (75 percent) of its total revenues toward projects that improve the condition of its roads, bridges, and other infrastructure. Traveler Safety represents the second highest investment priority for District 3. Here, the District plans to invest more than \$296 million (21 percent) of its forecasted budget toward projects to improve Traveler Safety necessary for supporting the State's Toward Zero Death (TZD) goals.

The final investment category is reserved for projects designed to enhance regional and statewide mobility. District 3 has more than \$3.7 billion in documented mobility needs within its regional trade centers and on its designated IRC system as depicted previously in Table 1 of this Plan. Despite this enormous level of need, the District only is able to commit \$12 million in the current STIP for this purpose. This relatively small amount of funding is being used for the payback of bonds received for the construction of four new interchanges on TH 101 in Otsego. This project was completed fall 2008. Beyond the STIP, no other funds have been committed in either the Mid- or Long-Range HIP toward meeting the IRC or RTC performance targets recommended in the State Plan.

### Anticipated Projects 2009-2018

The following is a list of anticipated major projects in the strategic investment priority areas of Traveler Safety, Mobility, Infrastructure Preservation, and Regional and Community Improvement Priorities. Anticipated projects address only the first planning period, 2009 to 2018, comprised of the STIP and Mid-Range HIP. The timing of investments is better known in 2009 to 2018 relative to 2019 to 2028; the latter period having a high level of uncertainty associated with both revenue and costs. Mn/DOT examines the STIP and Mid-Range HIP together as both update annually in succession, STIP then Mid-Range HIP, as the new construction cycle begins.

The anticipated projects listed are typically greater than \$5 million in construction cost. If projected revenues are not realized, the timing of planned investments may change. This is particularly true in the Mid-Range HIP where projects remain in the planning stage and represent a general spending plan, but not a commitment. Figures 3 and 4 identify the location of anticipated projects in the STIP and Mid-Range HIP, respectively.

Maintaining a balanced program that addresses District 3's many safety needs and preserves the condition of the highway and bridge infrastructure will require significant resources. District 3's investments represent only a portion of its identified performance-based needs and RCIPs. During the 2009 to 2018 planning period, District 3 expects to address many of its most critical transportation needs.

### *Traveler Safety*

#### **Capacity Improvement – Anticipated Projects**

- TH 23, TH 95 to Foley, 2 to 4 Lane (2012)
- TH 25, Buffalo to Monticello, 2 to 4 Lane (2015)
- TH 371, Nisswa to Jenkins, 2 to 4 Lane (2018)

### *Mobility*

#### **Interregional Corridor – Anticipated Projects**

- I-94, at TH 101 Add half-mile westbound auxiliary lane and improvement interchange. Funded by Metro District (2013-2018)

### *Infrastructure Preservation*

#### **Pavement Preservation – Anticipated Major Projects**

- TH 10, Wadena to Staples, Mill and Overlay (2009)
- TH 10 westbound only, St Cloud to Clear Lake, Unbonded Concrete Overlay (2010)
- TH 10, westbound only, Clear Lake to Big Lake, Unbonded Concrete Overlay (2011)
- TH 10 westbound only, Big Lake to Elk River, Mill and Overlay (2011)
- TH 371, Baxter to Nisswa, Mill and Overlay (2011)
- TH 371, Nisswa to Pine River, Mill and Overlay (2012)

#### **Bridge Preservation – Anticipated Major Projects**

- TH 10, Replace Bridge #5955 over Lake Orono in Elk River (2014)
- TH 24, Replace Bridge #6557 over Mississippi River in Clearwater (2016)
- I-94, Replace Bridges #86813 and #86814 Wright CSAH 75 at Monticello (2010)
- TH 95, Replace Bridge #9173 over Rum River in Cambridge (2013/2014)

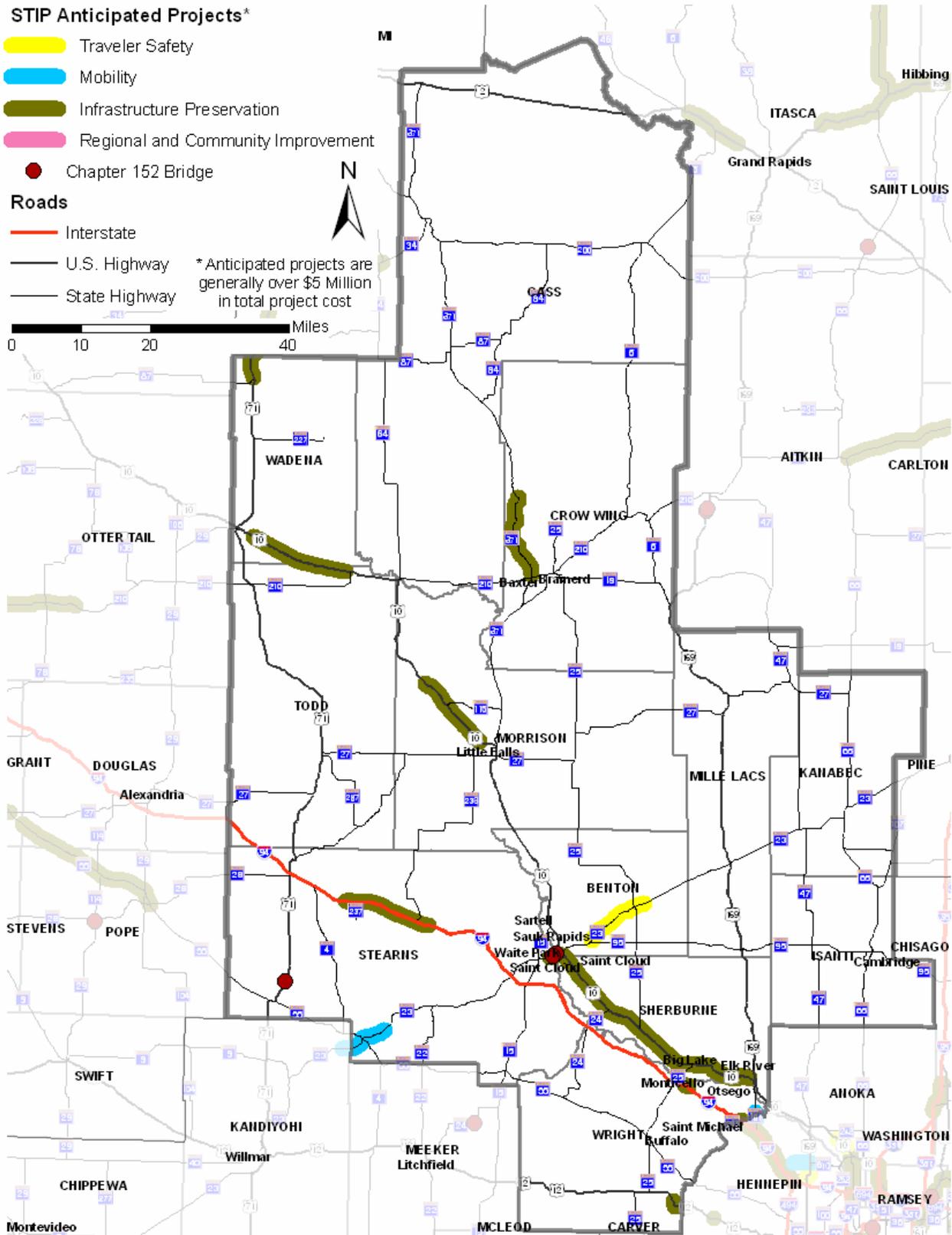


Figure 3 – District 3 Anticipated Projects for the STIP 2009 to 2012

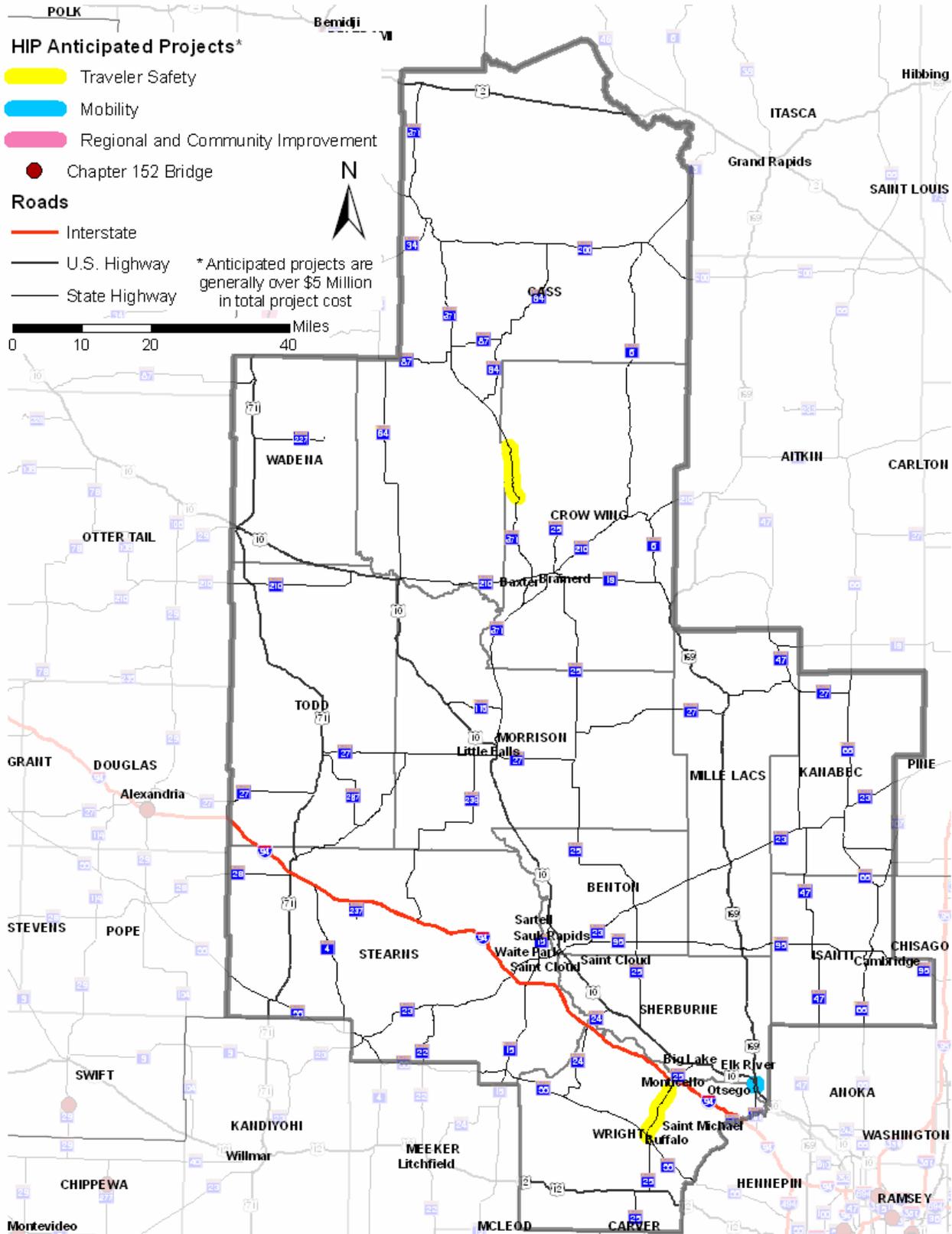


Figure 4 – District 3 Anticipated Projects for the Mid-Range HIP 2013 to 2018

## **Step 5: Identify High Priority Investment Options for Potential Additional Funding**

With a total estimated statewide investment need exceeding \$65 billion over the next 20 years, and projected investments of about \$15 billion, almost \$50 billion remains in unfunded needs. It is unlikely that future transportation funding will ever be increased to meet this degree of unmet need. Mn/DOT's policies and strategies, therefore, emphasize a new approach to meeting system improvement needs through stronger partnerships and innovation.

To place this level of funding in perspective, every 5 cents on the motor vehicle fuel tax in Minnesota increases total revenues by \$150 million per year and provides just under \$100 million per year to the State Road Construction fund. To generate an additional \$2.5 billion in revenue over 10 years would require the equivalent of a 12.5-cent increase in the motor vehicle fuel tax.

### **District Unfunded Investment Needs**

District 3's unfunded investment needs total \$4.9 billion and are distributed across the four strategic priorities as follows:

- 10 Percent – Improve Traveler Safety
- 74 Percent – Improve Mobility
- Seven Percent – Preserve Infrastructure in Safe and Sound Condition
- Nine Percent – Support Regional and Community Improvement Priorities

### **Statewide High Priority Investment Options for Potential Additional Funding**

Given the magnitude of unfunded investment needs each district prepared an approach to high priority investment options should additional funding become available. District 3 emphasized investments in Traveler Safety – Capacity Improvements and Statewide Connections. Mn/DOT's Transportation Program Committee used the information provided by the districts to develop a statewide approach.

The statewide approach identified five percent (or \$2.5 billion) of the total unfunded investment needs as high priority should additional revenue be available during the next 10 years. Since additional funding, such as the American Recovery and Reinvestment Act, would likely carry specific eligibility criteria or investment direction, the statewide approach is distributed across all four strategic investment categories.

The statewide approach provides the opportunity to enhance traveler safety on rural roads across the state as well as Twin Cities Metropolitan Area highways, upgrade underperforming IRCs, fund a lower-cost/high-benefit congestion management program as well as some key capacity expansion projects in the Twin Cities, preserve pavement and bridge infrastructure, and support partnership projects for local economic development efforts throughout Minnesota.

- 15 Percent – Improve Traveler Safety \$385 Million
- 41 Percent – Improve Mobility on Interregional Corridors and Congested Metro Freeways \$1 Billion
- 39 Percent – Preserve Infrastructure in Safe and Sound Condition \$970 Million
- Five Percent – Support Regional and Community Improvement Priorities \$115 Million

### **District High Priority Investment Options for Potential Additional Funding**

In District 3, the four strategic priority areas additional funding would address includes the following:

- 53 Percent – Improve Traveler Safety
  - *Includes 2 to 4 lane capacity improvements to TH 371 (Complete Nisswa to Pine River) and TH 55 (Buffalo to Rockford)*
- 37 Percent – Improve Mobility on Interregional Corridors
  - *Includes Interregional Corridor projects on I-94 (Twin Cities to St. Cloud)*
- Five Percent – Preserve Infrastructure in Safe and Sound Condition
- Four Percent – Support Regional and Community Improvement Priorities

## System Performance and Anticipated Outcomes

The District 3 20-year Highway Investment Plan 2009-2028 was developed as a planning document that links the policies and strategies established in the Statewide Transportation Policy Plan and the capital improvements that are made to the state highway system. District 3 has approximately \$5.9 billion in investment needs and \$1.4 billion in total investments over the 20-year planning period, resulting in \$4.5 billion of unfunded investment needs.

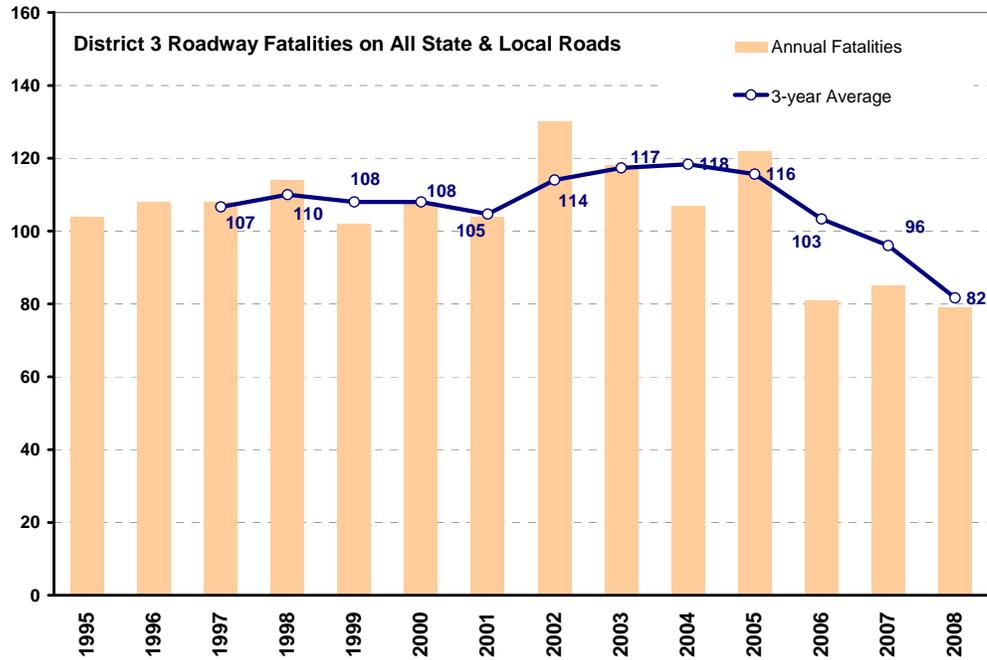
The plan, however, is a snapshot in time. Anticipated project timing and expected highway system performance will change as revenues are realized and construction costs change. Highway system needs change continuously as District 3 completes its annual STIP/Mid-Range HIP update. As part of this process, District 3 tracks investments using system performance targets and responds with appropriate changes to its investment plan on an annual basis. This section focuses on the first planning period, 2009 to 2018, comprised of the STIP and Mid-Range HIP. The timing of investments, and therefore the accuracy of outcomes and system performance, is better known in 2009 to 2018 relative to 2019 to 2028.

### 2009-2018 STIP/Mid-Range HIP Outlook

#### Traveler Safety

District 3 will provide modest levels of funding for lower-cost safety improvements including edge treatments, centerline rumble strips, cable median barrier, turn lanes, etc. Under the higher cost spectrum of safety improvements, the District plans to acquire the necessary right-of-way for and construct three projects warranting conversion from two-lane to four-lane. As a result of these investments, District 3 anticipates:

- A decrease in the number of fatalities and serious injury crashes on state highways. Following a trend of generally increasing fatalities through 2005, District 3 has since realized a reduction in fatalities (Figure 5). Lower-cost safety investments have been shown to address run-off-the-road, head-on, cross-median, and intersection related crashes. These crashes are typical of those on rural highways where 70 percent of Minnesota's fatal crashes occur.
- A reduction in the number highway miles warranting 2- to 4- lane expansion. With the completion of the three capacity improvement projects, the District will fund approximately 28 miles (about 30 percent) of the 92 miles of rural highways warranting four-lane expansion in 2018. These projects may further help to reduce the number of fatal and serious injury crashes on state highways.



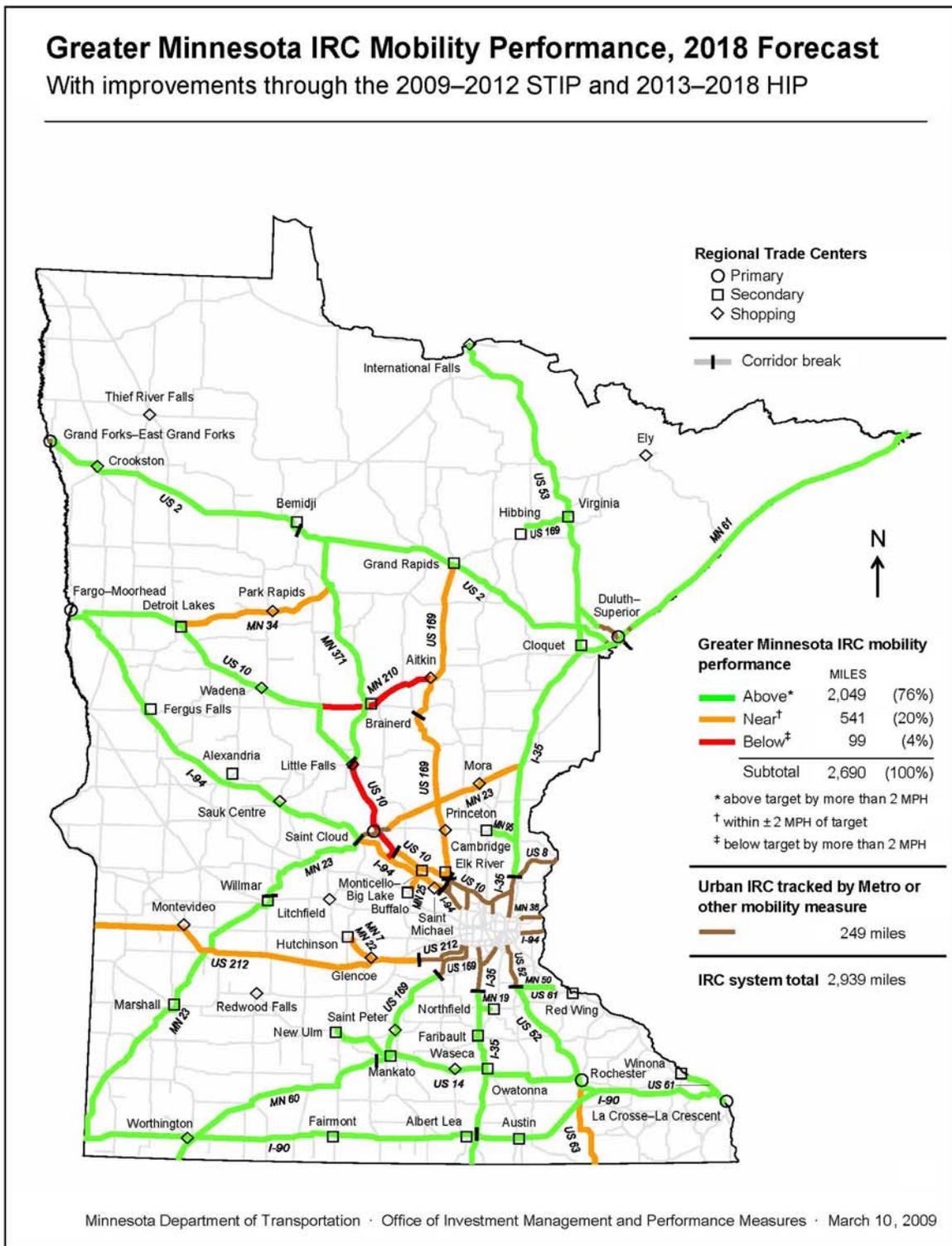
**Figure 5 – District 3 Annual Fatalities on All Roads (& 3-year Average)**

Source: Mn/DOT Office of Traffic, Safety and Technology

### Mobility

District 3 is not directly funding mobility improvements that address Interregional Corridors (IRCSs) or Regional Trade Centers (RTCs) falling below performance targets. However, other anticipated projects have mobility-related benefits. TH 25 from Buffalo to Monticello currently qualifies as both a traveler safety need under Policy 1 and has been forecasted to be an IRC need under Policy 5 by 2018 without the planned 2- to 4-lane expansion. Anticipated system performance in 2018 related to mobility is as follows:

- While the performance goal of 95% of total IRC miles meeting performance targets will be met, the number of IRC miles falling below speed targets will increase. That number will increase from 52 miles in 2008 to 99 miles in 2018. Without the TH 25 traveler safety improvement from Buffalo to Monticello, the total in 2018 would be forecasted to increase to 148 miles (Figure 6).
- The TH 25 traveler safety 2- to 4-lane expansion project from Buffalo to Monticello benefits IRC mobility. Completion of this project will ensure the I-94 Saint Michael to Saint Cloud IRC segment including the Buffalo connector operates “near” its performance target rather than “below” (Figure 6).
- No investments to preserve mobility in RTCs are planned.



**Figure 6 – Interregional Corridor Performance in 2018 Based on Planned Improvements through the STIP and Mid-Range HIP 2009 to 2018**

Source: Mn/DOT Office of Investment Management

## Infrastructure Preservation

District 3 remains committed to preserving the condition of its pavement and bridge infrastructure on both principal and non-principal arterials. Principal arterials are state highways that have the highest level of traffic and connect major trade centers. Non-principal arterials include all other state highways.

### Bridge Preservation

Fund 100 percent of bridge preservation needs. As a result, District 3 has been forecasted to meet its performance targets in 2018 for the number of bridges with a condition rating of “good”, “fair and poor”, and “poor” on both principal and non-principal arterials.

### Pavement Preservation

Fund 100 percent of pavement preservation needs. District 3 has been forecasted to meet “good” pavement targets on both principal and non-principal arterials through 2017 (Figure 7) and maintain “poor” pavement targets through 2016 (Figure 8).

## Predicted "Good" Ride Quality Index (miles with RQI > 3.0) ATP-3 Only

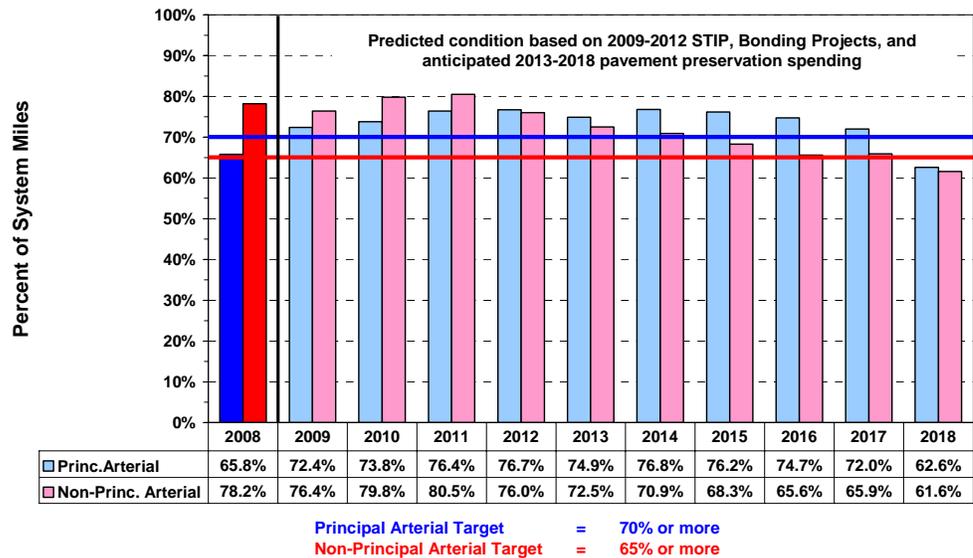
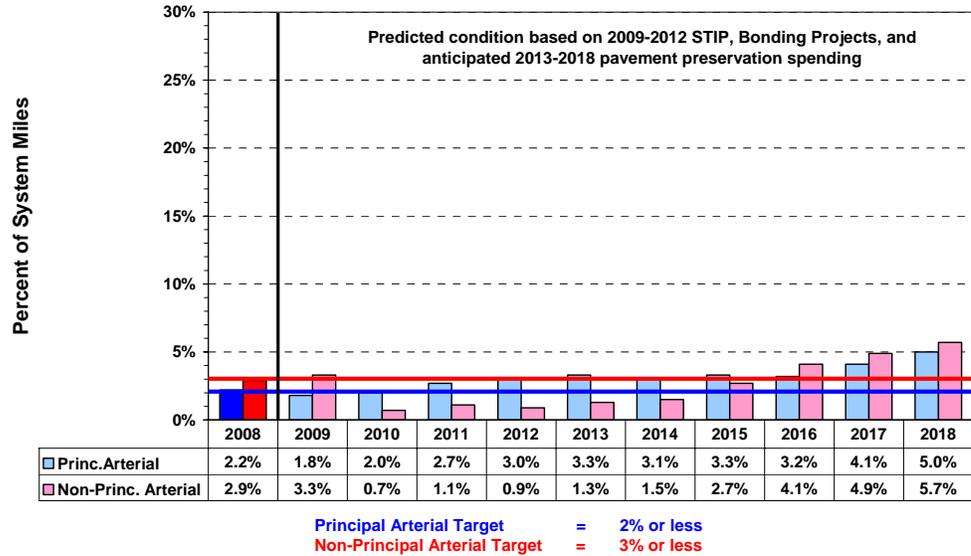


Figure 7 – Predicted “Good” Ride Quality Index for District 1

Source: Mn/DOT Office of Materials Services

### Predicted "Poor" Ride Quality Index (miles with RQI <= 2.0) ATP-3 Only



**Figure 8 – Predicted “Poor” Quality Ride Index for District 1**

Source: Mn/DOT Office of Materials Services

#### Other Infrastructure Preservation

Begin to systematically fund other infrastructure. Additional outcomes and system performance will be known in the future as measures and targets in this area develop.

### Long-Range HIP 2019-2028 Outlook

#### Infrastructure Preservation

In the long-range years of this plan, District 3’s pavement preservation needs will be considerably higher, approximately equal to the total revenues for the District. It is anticipated that the District will only be able fund half of its pavement needs in the last 10 years of this plan.

#### Mobility and Traveler Safety

District 3 will be the only Greater Minnesota district that is predicted to have underperforming IRCs in the 20-year planning time frame. It is estimated that without planned investments, there will be over 249 miles of “at-risk” IRCs by 2028. District 3 will have an additional 86 miles of rural highway segments warranting consideration for 2-to-4 lane expansion by 2028. Unfortunately, due to the substantial increase in infrastructure preservation needs, it is anticipated that the District will not be able to fund any IRC or regional mobility project and will only have sufficient revenues to fund one major safety capacity improvement project (e.g., TH 55 - Buffalo and Rockford) within the last 10 years of the plan.

## **Further Information**

Please contact Mn/DOT District 3 for additional information.

Website: <http://www.dot.state.mn.us/d3.html>



## *Prairie to pine*

The district has the largest population base outside the Minneapolis/St. Paul metro area. The district's southern boundary is located adjacent to the metro area and is rapidly becoming part of the greater urbanized area with a strong commuter demand. That demand is currently served by highways, buses and park and ride lots. The central portion of the district wraps around the St. Cloud metropolitan area, which is one of Minnesota's fastest growing communities. To the north there are hundreds of lakes and resorts surrounded by pine and birch forests.



## *District supports*

- 1,653 centerline miles (3,984 lane miles) of state, U.S., and interstate highways
- 429 bridges
- 422 miles of rail line
- 110 miles of paved trails
- 23 airports
- Nine transit systems
- Nine rest areas for traveler safety
- Two Travel Information Centers



## *Thirteen counties*

District 3 is located in the central portion of Minnesota and includes the following counties:

- Aitkin
- Benton
- Cass
- Crow Wing
- Isanti
- Kanabec
- Mille Lacs
- Morrison
- Sherburne
- Stearns
- Todd
- Wadena
- Wright

## *Major projects*

### **A few of our future projects:**

- I-94 Albertville; construct a WB ramp connecting the interchanges of Wright CR 19 and Wright CR 37, 2011/2012
- Highway 15 Sartell/St. Cloud at Stearns CR 120; construct a diverging diamond interchange, 2012/2013
- Highway 23 Foley to Highway 95; expand to four lane, 2011/2012
- Highway 10 Elk River; replace the Mississippi River Bridge, 2015
- Highway 24 Clearwater, replace the Mississippi River bridge, 2016/2017
- Highway 27 Little Falls, replace the Mississippi River bridge, 2020
- Highway 210 Brainerd; replace the Mississippi River Bridge, 2020
- Highway 371 Nisswa to Jenkins; expand to four lane, 2018/2019

*Project dates subject to change*





## District profile

District 3, which encompasses much of central Minnesota, has two full service offices - headquarters is located in Baxter, with the second office in St. Cloud. Twenty truck stations, staffed with experienced transportation specialists, are strategically located throughout the district. This presence helps to provide efficient highway construction and maintenance, which benefits all customers, internal and external.



There are approximately 360 dedicated employees who are skilled in engineering, snow & ice control, traffic, land acquisition, business planning and much more. District 3 is staffed to be a competitive organization. Each person plays an important role in the safety and efficiency of Minnesota's transportation system.

## Other districts

Six other Districts serve greater Minnesota. Services provided by the Mn/DOT Districts include the planning, design, construction and maintenance of the state and federal highway system and aid/assistance to the county and city systems qualified for state and federal dollars. Transit, trail and rail coordination is also provided by the Districts.

## Main contacts

BOB BUSCH  
Transportation District Engineer

CALVIN PUTTBRESE  
Construction Engineer

TERRY HUMBERT  
Acting Program Delivery Engineer

KELVIN HOWIESON  
State Aid and Traffic District Engineer

GARY DIRLAM  
Area Maintenance Engineer - Baxter

DAN ANDERSON  
Area Maintenance Engineer - St. Cloud

BETTY JO WINTEROWD  
Acting Administrative Manager

JUDY JACOBS  
Communications Specialist

MAIN NUMBERS  
Baxter - 218-828-5700  
St. Cloud - 320-223-6500

WEB  
[mndot.gov/d3/](http://mndot.gov/d3/)



### **MnDOT District 3**

7694 Industrial Park Road  
Baxter, MN 56425

St. Cloud Office  
3725 12th Street North  
St. Cloud, MN 56303

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## Minnesota Department of Transportation



Welcome to  
*District 3*

