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Asset Management Outcomes and Needs for STIP Years and Beyond

Prepared by Minnesota Department of Transportation

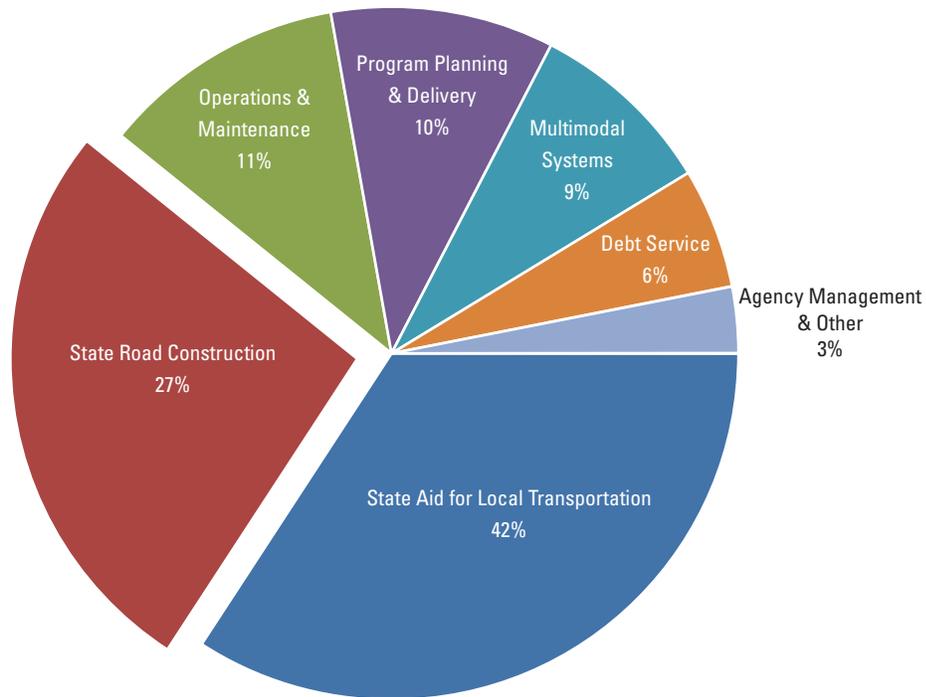
Office of Transportation System Management

Contents

| | |
|--|----|
| MnDOT Planned Appropriation..... | 1 |
| Investments in 2014-2017 STIP | 1 |
| Bridge Investment Outcomes..... | 7 |
| Pavement Investment Outcomes | 8 |
| Mandates Guiding Investment Decisions..... | 14 |
| Bridge and Pavement Needs..... | 15 |
| Risk Mitigation During MnSHIP Years..... | 16 |

NOTE: This document is based on data from the draft 2014-2017 STIP (released April 2013), as reported in the Minnesota 20-year State Highway Investment Plan (MnSHIP, released December 2013).

MnDOT Appropriation Allocation Plan, All Appropriations, 2012 to 2013 Biennium (\$6 billion)

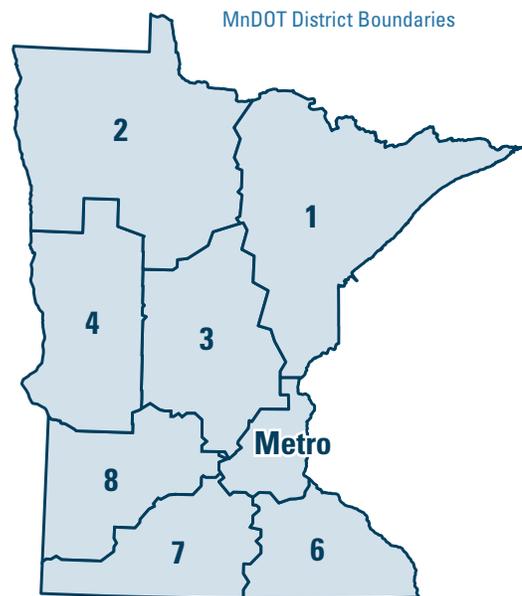


Source: MnDOT Office of Financial Management, Financial Snapshot, State Fiscal Year 2012, February Forecast

State Transportation Investment Program (STIP) investments constitute the portion of MnDOT’s budget allocated to State Road Construction, as shown in the figure above.

Investments in 2014-2017 STIP

Investment totals for the 2014-2017 STIP are presented on the following pages at the statewide level and for each district. The figure to the right maps the boundaries of MnDOT’s eight districts. District boundaries generally follow county lines but in some instances split counties based on geographical features or other factors.



Statewide - 14,330 Roadway Miles

| Investment Category | | 2014 | 2015 | 2016 | 2017 | STIP Total | % Total |
|--|--------------------------------------|------------------|------------------|------------------|------------------|--------------------|------------|
| Asset Management | Pavement Condition | \$352.2 M | \$292.9 M | \$251.8 M | \$266.2 M | \$1,163.1 M | 37% |
| | Bridge Condition | \$193.7 M | \$177.1 M | \$148.7 M | \$238.2 M | \$757.7 M | 24% |
| | Roadside Infrastructure Condition | \$77.6 M | \$84.6 M | \$81.9 M | \$48.9 M | \$292.9 M | 9% |
| Traveler Safety | | \$30.6 M | \$24.9 M | \$22.3 M | \$38.5 M | \$116.2 M | 4% |
| Critical Connections | Interregional Corridor Mobility | \$0 | \$0 | \$0 | \$0 | \$0 | 0% |
| | Twin Cities Mobility | \$38.3 M | \$34.8 M | \$45.1 M | \$48.1 M | \$166.3 M | 5% |
| | Bicycle Infrastructure | \$7.5 M | \$11.0 M | \$7.3 M | \$6.4 M | \$32.1 M | 1% |
| | Accessible Pedestrian Infrastructure | \$12.0 M | \$9.9 M | \$15.4 M | \$10.2 M | \$47.5 M | 2% |
| Regional + Community Improvement Priorities | | \$71.3 M | \$55.4 M | \$14.4 M | \$17.1 M | \$158.3 M | 5% |
| Project Support | | \$144.9 M | \$103.4 M | \$97.7 M | \$67.7 M | \$413.8 M | 13% |
| Total | | \$928.1 M | \$793.9 M | \$684.5 M | \$741.3 M | \$3,147.8 M | |

District 1 - 2,195 miles

| Investment Category | | 2014 | 2015 | 2016 | 2017 | STIP Total | % Total |
|---|--------------------------------------|-----------------|------------------|-----------------|-----------------|------------------|---------|
| Asset Management | Pavement Condition | \$21.0 M | \$48.8 M | \$31.6 M | \$49.3 M | \$150.6 M | 44% |
| | Bridge Condition | \$12.7 M | \$46.8 M | \$13.6 M | \$11.0 M | \$84.2 M | 25% |
| | Roadside Infrastructure Condition | \$6.4 M | \$14.7 M | \$12.8 M | \$7.6 M | \$41.5 M | 12% |
| Traveler Safety | | \$1.2 M | \$3.8 M | \$1.4 M | \$5,408 | \$6.3 M | 2% |
| Critical Connections | Interregional Corridor Mobility | \$0 | \$0 | \$0 | \$0 | \$0 | 0% |
| | Bicycle Infrastructure | \$56,387 | \$56,387 | \$3,887 | \$16,137 | \$0.1 M | 0% |
| | Accessible Pedestrian Infrastructure | \$318,021 | \$318,021 | \$2.4 M | \$924,121 | \$4.0 M | 1% |
| Regional + Community Improvement Priorities | | \$1.5 M | \$18.0 M | \$200,000 | \$200,000 | \$19.9 M | 6% |
| Project Support | | \$9.2 M | \$7.9 M | \$8.7 M | \$8.6 M | \$34.4 M | 10% |
| Total | | \$52.3 M | \$140.3 M | \$70.8 M | \$77.6 M | \$341.1 M | |

District 2 - 1,639 miles

| Investment Category | | 2014 | 2015 | 2016 | 2017 | STIP Total | % Total |
|---|--------------------------------------|-----------------|-----------------|-----------------|-----------------|------------------|---------|
| Asset Management | Pavement Condition | \$13.2 M | \$20.2 M | \$11.8 M | \$8.7 M | \$53.9 M | 37% |
| | Bridge Condition | \$10.2 M | \$5.3 M | \$17.9 M | \$6.4 M | \$39.8 M | 27% |
| | Roadside Infrastructure Condition | \$4.2 M | \$5.4 M | \$1.7 M | \$1.4 M | \$12.8 M | 9% |
| Traveler Safety | | \$745,697 | \$1.0 M | \$5.6 M | \$1.0 M | \$8.4 M | 6% |
| Critical Connections | Interregional Corridor Mobility | \$0 | \$0 | \$0 | \$0 | \$0 | 0% |
| | Bicycle Infrastructure | \$422,079 | \$638,369 | \$854,500 | \$387,320 | \$2.3 M | 2% |
| | Accessible Pedestrian Infrastructure | \$249,084 | \$639,237 | \$3.1 M | \$305,460 | \$4.3 M | 3% |
| Regional + Community Improvement Priorities | | \$7.5 M | \$500,000 | \$2.2 M | \$3.7 M | \$13.8 M | 9% |
| Project Support | | \$3.1 M | \$3.1 M | \$3.1 M | \$2.9 M | \$12.2 M | 8% |
| Total | | \$39.6 M | \$36.8 M | \$46.3 M | \$24.8 M | \$147.5 M | |

District 3 - 1,983 miles

| Investment Category | | 2014 | 2015 | 2016 | 2017 | STIP Total | % Total |
|---|--------------------------------------|-----------------|-----------------|-----------------|-----------------|------------------|---------|
| Asset Management | Pavement Condition | \$36.5 M | \$35.6 M | \$46.2 M | \$27.1 M | \$145.4 M | 50% |
| | Bridge Condition | \$6.7 M | \$7.5 M | \$13.9 M | \$18.1 M | \$46.2 M | 16% |
| | Roadside Infrastructure Condition | \$4.9 M | \$6.0 M | \$6.8 M | \$4.3 M | \$22.0 M | 8% |
| Traveler Safety | | \$2.3 M | \$2.5 M | \$2.4 M | \$3.1 M | \$10.3 M | 4% |
| Critical Connections | Interregional Corridor Mobility | \$0 | \$0 | \$0 | \$0 | \$0 | 0% |
| | Bicycle Infrastructure | \$762,861 | \$662,820 | \$671,280 | \$1.0 M | \$3.1 M | 1% |
| | Accessible Pedestrian Infrastructure | \$892,391 | \$577,244 | \$847,240 | \$729,450 | \$3.0 M | 1% |
| Regional + Community Improvement Priorities | | \$15.4 M | \$3.6 M | \$1.0 M | \$1.0 M | \$21.0 M | 7% |
| Project Support | | \$8.5 M | \$16.0 M | \$10.0 M | \$5.6 M | \$40.1 M | 14% |
| Total | | \$75.9 M | \$72.3 M | \$81.8 M | \$61.0 M | \$291.1 M | |

District 4 - 1,811 miles

| Investment Category | | 2014 | 2015 | 2016 | 2017 | STIP Total | % Total |
|---|--------------------------------------|-----------------|-----------------|-----------------|-----------------|------------------|---------|
| Asset Management | Pavement Condition | \$55.0 M | \$29.1 M | \$18.2 M | \$24.2 M | \$126.5 M | 54% |
| | Bridge Condition | \$412,752 | \$3.5 M | \$15.6 M | \$2.6 M | \$22.1 M | 9% |
| | Roadside Infrastructure Condition | \$8.4 M | \$5.8 M | \$8.4 M | \$2.2 M | \$24.7 M | 11% |
| Traveler Safety | | \$3.8 M | \$2.4 M | \$1.8 M | \$3.8 M | \$11.8 M | 5% |
| Critical Connections | Interregional Corridor Mobility | \$0 | \$0 | \$0 | \$0 | \$0 | 0% |
| | Bicycle Infrastructure | \$210,000 | \$5.5 M | \$2.0 M | \$30,972 | \$7.8 M | 3% |
| | Accessible Pedestrian Infrastructure | \$2.6 M | \$605,026 | \$240,571 | \$826,968 | \$4.2 M | 2% |
| Regional + Community Improvement Priorities | | \$1.8 M | \$9.5 M | \$6.1 M | \$1.6 M | \$19.0 M | 8% |
| Project Support | | \$4.4 M | \$4.3 M | \$4.6 M | \$3.6 M | \$16.9 M | 7% |
| Total | | \$76.6 M | \$60.9 M | \$56.8 M | \$38.8 M | \$233.1 M | |

Metro District - 1,758 miles

| Investment Category | | 2014 | 2015 | 2016 | 2017 | STIP Total | % Total |
|---|--------------------------------------|------------------|------------------|------------------|------------------|--------------------|---------|
| Asset Management | Pavement Condition | \$100.9 M | \$50.1 M | \$66.4 M | \$67.9 M | \$285.2 M | 23% |
| | Bridge Condition | \$144.1 M | \$56.2 M | \$70.2 M | \$117.6 M | \$388.2 M | 31% |
| | Roadside Infrastructure Condition | \$32.5 M | \$36.3 M | \$37.3 M | \$18.2 M | \$124.3 M | 10% |
| Traveler Safety | | \$7.3 M | \$6.4 M | \$2.0 M | \$21.5 M | \$37.3 M | 3% |
| Critical Connections | Twin Cities Mobility | \$38.3 M | \$34.8 M | \$45.1 M | \$48.1 M | \$166.3 M | 13% |
| | Bicycle Infrastructure | \$3.6 M | \$430,903 | \$1.9 M | \$520,950 | \$6.4 M | 1% |
| | Accessible Pedestrian Infrastructure | \$5.6 M | \$3.9 M | \$6.6 M | \$3.1 M | \$19.2 M | 2% |
| Regional + Community Improvement Priorities | | \$23.9 M | \$7.5 M | \$4.6 M | \$4.2 M | \$40.1 M | 3% |
| Project Support | | \$85.2 M | \$43.8 M | \$38.8 M | \$26.9 M | \$194.8 M | 15% |
| Total | | \$441.4 M | \$239.5 M | \$272.9 M | \$308.0 M | \$1,261.8 M | |

District 6 - 1,825 miles

| Investment Category | | 2014 | 2015 | 2016 | 2017 | STIP Total | % Total |
|---|--------------------------------------|------------------|------------------|-----------------|-----------------|------------------|---------|
| Asset Management | Pavement Condition | \$53.4 M | \$57.0 M | \$19.6 M | \$17.7 M | \$147.7 M | 36% |
| | Bridge Condition | \$5.2 M | \$52.8 M | \$10.2 M | \$65.8 M | \$133.9 M | 33% |
| | Roadside Infrastructure Condition | \$6.3 M | \$7.7 M | \$4.0 M | \$3.1 M | \$21.1 M | 5% |
| Traveler Safety | | \$9.6 M | \$5.1 M | \$4.0 M | \$2.1 M | \$20.7 M | 5% |
| Critical Connections | Interregional Corridor Mobility | \$0 | \$0 | \$0 | \$0 | \$0 | 0% |
| | Bicycle Infrastructure | \$891,036 | \$2.7 M | \$617,608 | \$2.4 M | \$6.6 M | 2% |
| | Accessible Pedestrian Infrastructure | \$738,744 | \$2.5 M | \$633,271 | \$2.7 M | \$6.6 M | 2% |
| Regional + Community Improvement Priorities | | \$10.6 M | \$2.4 M | \$0 | \$0 | \$13.1 M | 3% |
| Project Support | | \$24.3 M | \$15.3 M | \$15.4 M | \$5.5 M | \$60.5 M | 15% |
| Total | | \$111.1 M | \$145.5 M | \$54.4 M | \$99.2 M | \$410.2 M | |

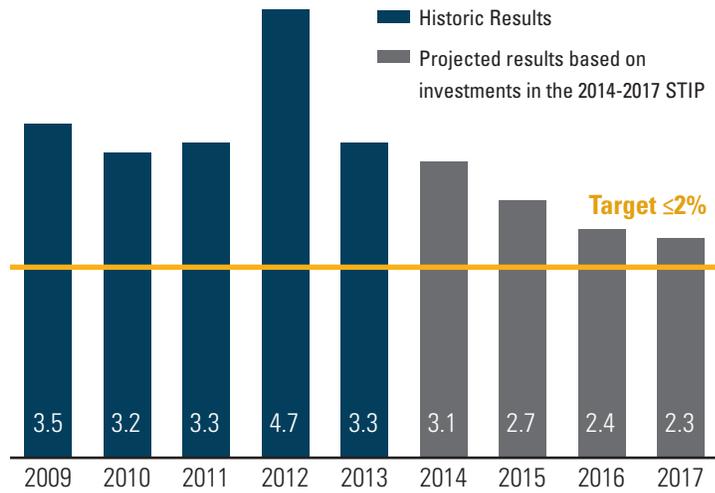
District 7 - 1,633 miles

| Investment Category | | 2014 | 2015 | 2016 | 2017 | STIP Total | % Total |
|---|--------------------------------------|-----------------|-----------------|-----------------|-----------------|------------------|---------|
| Asset Management | Pavement Condition | \$39.7 M | \$25.3 M | \$35.2 M | \$50.2 M | \$150.4 M | 51% |
| | Bridge Condition | \$8.6 M | \$4.0 M | \$7.2 M | \$14.0 M | \$33.9 M | 12% |
| | Roadside Infrastructure Condition | \$6.8 M | \$3.9 M | \$6.1 M | \$8.4 M | \$25.2 M | 9% |
| Traveler Safety | | \$3.0 M | \$2.1 M | \$1.9 M | \$3.1 M | \$10.1 M | 3% |
| Critical Connections | Interregional Corridor Mobility | \$0 | \$0 | \$0 | \$0 | \$0 | 0% |
| | Bicycle Infrastructure | \$1.4 M | \$918,987 | \$1.3 M | \$1.9 M | \$5.6 M | 2% |
| | Accessible Pedestrian Infrastructure | \$770,357 | \$601,941 | \$665,856 | \$1.3 M | \$3.4 M | 1% |
| Regional + Community Improvement Priorities | | \$9.8 M | \$9.4 M | \$0 | \$6.0 M | \$25.2 M | 9% |
| Project Support | | \$7.0 M | \$8.8 M | \$13.5 M | \$11.5 M | \$40.8 M | 14% |
| Total | | \$77.2 M | \$55.0 M | \$65.9 M | \$96.4 M | \$294.5 M | |

District 8 - 1,486 miles

| Investment Category | | 2014 | 2015 | 2016 | 2017 | STIP Total | % Total |
|---|--------------------------------------|-----------------|-----------------|-----------------|-----------------|------------------|---------|
| Asset Management | Pavement Condition | \$32.5 M | \$26.9 M | \$22.8 M | \$21.2 M | \$103.4 M | 61% |
| | Bridge Condition | \$5.8 M | \$867,158 | \$0 | \$2.7 M | \$9.3 M | 6% |
| | Roadside Infrastructure Condition | \$8.0 M | \$4.8 M | \$4.7 M | \$3.8 M | \$21.3 M | 13% |
| Traveler Safety | | \$2.7 M | \$1.6 M | \$3.1 M | \$3.9 M | \$11.3 M | 7% |
| Critical Connections | Interregional Corridor Mobility | \$0 | \$0 | \$0 | \$0 | \$0 | 0% |
| | Bicycle Infrastructure | \$83,720 | \$54,982 | \$0 | \$55,200 | \$0.2 M | 0% |
| | Accessible Pedestrian Infrastructure | \$854,260 | \$750,984 | \$919,656 | \$217,600 | \$2.7 M | 2% |
| Regional + Community Improvement Priorities | | \$862,900 | \$4.4 M | \$440,000 | \$484,000 | \$6.2 M | 4% |
| Project Support | | \$3.2 M | \$4.2 M | \$3.6 M | \$3.2 M | \$14.2 M | 8% |
| Total | | \$54.0 M | \$43.5 M | \$35.6 M | \$35.5 M | \$168.6 M | |

Bridge Investment Outcomes



Source: MnDOT Bridge Office

NHS Bridges in "Poor" Condition as a Percentage of Total NHS Bridge Deck Area

Bridge condition improved in 2013 after a 2012 uptick in the percent of NHS bridge deck area in Poor condition. This spike occurred because the very large Blatnik Bridge connecting Duluth and Superior was assigned a Poor condition rating following a 2011 inspection. MnDOT has since carried out a major rehabilitation on this bridge that improved its condition and extended its useful life.

Statewide

| Year | Target | Current/Projected* | Target-Miles "Poor" | Actual/Projected* Miles "Poor" |
|--|------------|--------------------|---------------------|--------------------------------|
| State System (14,330 miles) - "Poor" Ride Quality Index of 2.0 or less | | | | |
| 2009 | 5.0 - 9.0% | 6.9% | 717 - 1,290 | 989 |
| 2010 | | 5.2% | | 739 |
| 2011 | | 6.6% | | 945 |
| 2012 | | 5.6% | | 797 |
| 2013 | | 4.7% | | 669 |
| 2014 | 5.0 - 9.0% | 4.4%* | 717 - 1,290 | 635* |
| 2015 | | 4.5%* | | 650* |
| 2016 | | 5.7%* | | 824* |
| 2017 | | 6.7%* | | 960* |
| Interstate (1,822 miles) - "Poor" Ride Quality Index of 2.0 or less | | | | |
| 2009 | 2.0% | 7.0% | 36 | 128 |
| 2010 | | 3.4% | | 62 |
| 2011 | | 3.9% | | 71 |
| 2012 | | 2.4% | | 44 |
| 2013 | | 2.4% | | 44 |
| 2014 | 2.0% | 1.5%* | 36 | 27* |
| 2015 | | 1.7%* | | 31* |
| 2016 | | 1.6%* | | 29* |
| 2017 | | 2.0%* | | 36* |
| Non-Interstate NHS (5,774 miles) - "Poor" Ride Quality Index of 2.0 or less | | | | |
| 2009 | 4.0% | 5.0% | 231 | 289 |
| 2010 | | 3.8% | | 219 |
| 2011 | | 5.1% | | 294 |
| 2012 | | 4.3% | | 248 |
| 2013 | | 2.9% | | 167 |
| 2014 | 4.0% | 3.3%* | 231 | 191* |
| 2015 | | 3.6%* | | 208* |
| 2016 | | 4.2%* | | 243* |
| 2017 | | 4.7%* | | 271* |



MnDOT's annual spending on pavement preservation; FY 2009 - 2017 (\$ millions)

■ Better Roads ■ ARRA ■ Regular Program

** Future year spending projections based on planned investments in the 2013-2016 STIP

Source: MnDOT Materials Office

District 1

| Year | Target | Current/Projected* | Target-Miles "Poor" | Actual/Projected* Miles "Poor" |
|--|--------|--------------------|---------------------|--------------------------------|
| Interstate (192 miles) - "Poor" Ride Quality Index of 2.0 or less | | | | |
| 2011 | 2.0% | 3.9% | 4 | 7 |
| 2012 | | 6.5% | | 12 |
| 2013 | | 3.2% | | 6 |
| 2014 | 2.0% | 2.7%* | 4 | 5* |
| 2015 | | 4.7%* | | 9* |
| 2016 | | 4.4%* | | 8* |
| 2017 | | 3.8%* | | 7* |
| Non-Interstate NHS (915 miles) - "Poor" Ride Quality Index of 2.0 or less | | | | |
| 2011 | 4.0% | 7.0% | 37 | 64 |
| 2012 | | 4.9% | | 45 |
| 2013 | | 2.9% | | 27 |
| 2014 | 4.0% | 3.9%* | 37 | 36* |
| 2015 | | 5.6%* | | 51* |
| 2016 | | 7.1%* | | 65* |
| 2017 | | 5.9%* | | 54* |

District 2

| Year | Target | Current/Projected* | Target-Miles "Poor" | Actual/Projected* Miles "Poor" |
|--|--------|--------------------|---------------------|--------------------------------|
| Non-Interstate NHS (616 miles) - "Poor" Ride Quality Index of 2.0 or less | | | | |
| 2011 | 4.0% | 0.6% | 25 | 4 |
| 2012 | | 0.7% | | 4 |
| 2013 | | 0.6% | | 4 |
| 2014 | 4.0% | 0.6%* | 25 | 4* |
| 2015 | | 1.2%* | | 7* |
| 2016 | | 1.3%* | | 8* |
| 2017 | | 1.9%* | | 12* |

District 3

| Year | Target | Current/Projected* | Target-Miles "Poor" | Actual/Projected* Miles "Poor" |
|--|--------|--------------------|---------------------|--------------------------------|
| Interstate (182 miles) - "Poor" Ride Quality Index of 2.0 or less | | | | |
| 2011 | 2.0% | 1.8% | 4 | 3 |
| 2012 | | 1.8% | | 3 |
| 2013 | | 0.0% | | 0 |
| 2014 | 2.0% | 0.0%* | 4 | 0* |
| 2015 | | 0.3%* | | 1* |
| 2016 | | 0.0%* | | 0* |
| 2017 | | 0.0%* | | 0* |
| Non-Interstate NHS (1,045 miles) - "Poor" Ride Quality Index of 2.0 or less | | | | |
| 2011 | 4.0% | 4.9% | 42 | 51 |
| 2012 | | 2.9% | | 30 |
| 2013 | | 1.9% | | 20 |
| 2014 | 4.0% | 2.2%* | 42 | 23* |
| 2015 | | 2.1%* | | 22* |
| 2016 | | 1.4%* | | 15* |
| 2017 | | 2.2%* | | 23* |

District 4

| Year | Target | Current/Projected* | Target-Miles "Poor" | Actual/Projected* Miles "Poor" |
|--|--------|--------------------|---------------------|--------------------------------|
| Interstate (230 miles) - "Poor" Ride Quality Index of 2.0 or less | | | | |
| 2011 | 2.0% | 0.0% | 5 | 0 |
| 2012 | | 0.0% | | 0 |
| 2013 | | 0.0% | | 0 |
| 2014 | 2.0% | 0.0%* | 5 | 0* |
| 2015 | | 0.1%* | | 0* |
| 2016 | | 0.1%* | | 0* |
| 2017 | | 0.1%* | | 0* |
| Non-Interstate NHS (587 miles) - "Poor" Ride Quality Index of 2.0 or less | | | | |
| 2011 | 4.0% | 2.5% | 23 | 15 |
| 2012 | | 2.3% | | 14 |
| 2013 | | 2.6% | | 15 |
| 2014 | 4.0% | 1.9%* | 23 | 11* |
| 2015 | | 2.5%* | | 15* |
| 2016 | | 3.7%* | | 22* |
| 2017 | | 4.9%* | | 29* |

Metro District

| Year | Target | Current/Projected* | Target-Miles "Poor" | Actual/Projected* Miles "Poor" |
|--|--------|--------------------|---------------------|--------------------------------|
| Interstate (517 miles) - "Poor" Ride Quality Index of 2.0 or less | | | | |
| 2011 | 2.0% | 5.4% | 10 | 28 |
| 2012 | | 3.6% | | 19 |
| 2013 | | 3.0% | | 16 |
| 2014 | 2.0% | 2.2%* | 10 | 11* |
| 2015 | | 2.3%* | | 12* |
| 2016 | | 3.0%* | | 16* |
| 2017 | | 3.3%* | | 17* |
| Non-Interstate NHS (739 miles) - "Poor" Ride Quality Index of 2.0 or less | | | | |
| 2011 | 4.0% | 3.7% | 30 | 27 |
| 2012 | | 4.0% | | 30 |
| 2013 | | 2.5% | | 18 |
| 2014 | 4.0% | 2.8%* | 30 | 21* |
| 2015 | | 3.3%* | | 24* |
| 2016 | | 3.7%* | | 27* |
| 2017 | | 4.3%* | | 32* |

District 6

| Year | Target | Current/Projected* | Target-Miles "Poor" | Actual/Projected* Miles "Poor" |
|--|--------|--------------------|---------------------|--------------------------------|
| Interstate (416 miles) - "Poor" Ride Quality Index of 2.0 or less | | | | |
| 2011 | 2.0% | 2.6% | 8 | 11 |
| 2012 | | 1.4% | | 6 |
| 2013 | | 3.0% | | 12 |
| 2014 | 2.0% | 1.2%* | 8 | 5* |
| 2015 | | 0.4%* | | 2* |
| 2016 | | 0.2%* | | 1* |
| 2017 | | 0.2%* | | 1* |
| Non-Interstate NHS (513 miles) - "Poor" Ride Quality Index of 2.0 or less | | | | |
| 2011 | 4.0% | 8.5% | 21 | 44 |
| 2012 | | 8.5% | | 44 |
| 2013 | | 7.0% | | 36 |
| 2014 | 4.0% | 6.4%* | 21 | 33* |
| 2015 | | 5.6%* | | 29* |
| 2016 | | 4.8%* | | 25* |
| 2017 | | 4.1%* | | 21* |

District 7

| Year | Target | Current/Projected* | Target-Miles "Poor" | Actual/Projected* Miles "Poor" |
|--|--------|--------------------|---------------------|--------------------------------|
| Interstate (285 miles) - "Poor" Ride Quality Index of 2.0 or less | | | | |
| 2011 | 2.0% | 0.0% | 6 | 0 |
| 2012 | | 1.0% | | 3 |
| 2013 | | 3.3% | | 9 |
| 2014 | 2.0% | 2.3%* | 6 | 7* |
| 2015 | | 2.6%* | | 7* |
| 2016 | | 1.6%* | | 5* |
| 2017 | | 3.7%* | | 11* |
| Non-Interstate NHS (623 miles) - "Poor" Ride Quality Index of 2.0 or less | | | | |
| 2011 | 4.0% | 6.1% | 25 | 38 |
| 2012 | | 7.0% | | 44 |
| 2013 | | 3.3% | | 21 |
| 2014 | 4.0% | 4.4%* | 25 | 27* |
| 2015 | | 3.9%* | | 24* |
| 2016 | | 6.4%* | | 40* |
| 2017 | | 8.6%* | | 54* |

District 8

| Year | Target | Current/Projected* | Target-Miles "Poor" | Actual/Projected* Miles "Poor" |
|--|--------|--------------------|---------------------|--------------------------------|
| Non-Interstate NHS (736 miles) - "Poor" Ride Quality Index of 2.0 or less | | | | |
| 2011 | 4.0% | 6.8% | 29 | 50 |
| 2012 | | 5.0% | | 37 |
| 2013 | | 3.9% | | 29 |
| 2014 | 4.0% | 4.5%* | 29 | 33* |
| 2015 | | 4.8%* | | 35* |
| 2016 | | 5.3%* | | 39* |
| 2017 | | 3.3%* | | 24* |

Mandates Guiding Investment Decisions

- MAP-21

The surface transportation bill, Moving Ahead for Progress in the 21st Century (MAP-21), established new requirements for federal highway programs. MAP-21 expanded the number of highways classified as the National Highway System (NHS) to include Interstates, most U.S. Highways, and other principal arterials in Minnesota, which slightly increases the amount of NHS to 45 percent of the state highway system. The bill establishes national goals and requires USDOT to establish performance measures for the NHS in several categories. The legislation sets the target for NHS bridges in Poor condition and USDOT will set targets for interstate pavement condition. States will set performance targets for most measures in coordination with metropolitan planning organizations (MPOs) and providers of public transportation.

- Chapter 152 Bridge Program

The Chapter 152 Bridge Program authorized MnDOT to issue \$1.2 billion in bonds to be used for bridge improvements on the state highway system through 2018. To repay its Chapter 152 bonds, Minnesota currently has a 3.5 cent per gallon surcharge on top of its 25 cent per gallon gas tax rate. An additional \$600 million were authorized through this program for non-bridge needs.

- GASB 34

Minnesota adopted the Government Accounting Standards Board Statement 34 (GASB 34) financial reporting requirements for the value and condition of its major infrastructure assets in 2001. MnDOT set performance thresholds for highway infrastructure, such as the condition of pavements and bridges. This infrastructure must be at or above GASB 34 thresholds or resulting financial actions could negatively affect Minnesota's future bond rating, which could negatively impact state and local units of government by increasing the cost of borrowing money.

Bridge and Pavement Needs

BRIDGE NEEDS

By the year 2023, 54% of MnDOT's bridges will be over 50 years old. The chart below details anticipated investment types needed to address these assets.

| By the year 2023... | | | |
|---------------------|------------|--------------------------------|--------------------------|
| Number of bridges | % of Total | Age in 2023 | Presumed Investment Need |
| 562 | 12% | Will be over 70 years old | Replacement |
| 970 | 21% | Will be over 60 years old | Replacement |
| 1,736 | 38% | ~1/3 will be over 50 years old | Replacement/major rehab |
| 2,485 | 54% | >1/2 will be over 40 years old | Major rehabilitation |
| 641 | 14% | Will reach 20 years old | Preservation investment |

The following bridges have emerged as having uncertain funding requirements not previously identified in established MnSHIP bridge priorities. They provide an example of unanticipated need due to changing asset condition:

- I-35 bridge in Duluth
- TH 169 bridge over Nine Mile Creek
- I-35W bridge over Minnesota River

PAVEMENT NEEDS

At current rates of investment, MnDOT paves 520 centerline miles per year.

MnDOT's target for pavements on the entire state highway system is 5-9% in Poor Condition. Currently, MnDOT is within that range and is projected to remain within targets through 2016. It is projected that, in 2016, 984 miles of state highway pavements will be in Poor condition, which is 8.3% of the statewide system. To reach 5% Poor condition, MnDOT would need to pave an additional 267 miles per year.

Risk Mitigation During MnSHIP Years (2014-2023)

| Key Capital Investment Risks | Mitigated Risk Through Year 10 (of 3 ✓) | Mitigated Risk Through Year 20 (Of 3 ✓) |
|---|--|--|
| GASB 34: pavement and bridge conditions deteriorate jeopardizing state bond rating | ✓✓ | ✓ |
| Federal policy: failure to achieve MAP-21 performance targets on NHS reduces funding flexibility | ✓✓✓ | ✓ |
| MnDOT policy: misalignment with Vision and Statewide Multimodal Transportation Plan results in loss of public trust | ✓✓ | ✓ |
| Bridges: deferring bridge investments viewed as an unwise/unsafe strategy | ✓✓✓ | ✓✓ |
| Responsiveness: rigid investment priorities limits ability to support local economic development and quality of life opportunities | ✓✓ | — |
| Operations budget: untimely or reduced capital investment leads to unsustainable maintenance costs | ✓✓ | ✓ |
| Public outreach: investment inconsistent with MnSHIP public outreach results in loss of public trust | ✓✓ | — |

| | |
|--------|--|
| ✓✓✓ | <i>Adequately mitigated</i> MnDOT mitigates most or all of the risk through its investment priorities |
| ✓✓ | <i>Partially mitigated</i> MnDOT mitigates most of the risk through its investment priorities, but must accept some risk |
| ✓ or — | <i>Unmanaged or inadequately mitigated</i> MnDOT is unable to mitigate the risk well, and must accept much of the risk or transfer it to another agency |