Wisconsin Department of Transportation

July 2016

MAPSS
Performance Improvement Report

Mobility
Accountability
Preservation
Safety
Service

Mission

Provide leadership in the development and operation of a safe and efficient transportation system

Welcome to the

MAPSS Performance Improvement Report

The Wisconsin Department of Transportation's (WisDOT) Performance Improvement program focuses on the core goal areas of Mobility, Accountability, Preservation, Safety and Service (MAPSS). The Scorecard measures in this report have been deemed of highest importance to our customers to show the current state of Wisconsin's transportation system. The progress of these measures is reported on the two-page Scorecard and in the body of this report. The department also has interactive webpages within each core goal area for customers who are interested in "drilling down" into the data.

Some measures are important in demonstrating transparency and accountability, but do not rise to the level of the Scorecard. The progress of these measures is reported in the appendix of this report and on interactive webpages under the category of "additional measures."

In addition to the measures we report externally, we also track measures that are important for the smooth internal operations of the department or support other important performance outcomes; these are reported internally to department managers and staff. For example, we track several internal highway construction project measures that support our Scorecard measures and ensure we continue to deliver our programs and services efficiently to serve the needs of the public.

The maturation and progress within this program is a continual process. I am pleased to share that many of the critical Scorecard measures have seen significant improvements and we continue to steadily approach our performance goals.

The latest MAPSS Quarterly Report and the interactive WisDOT webpages provide details of each performance metric. This information is located at: **www.mapss.wi.gov**

Mark Gottlieb, P.E.
Secretary
Wisconsin Department of Transportation

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July 2016

Wisconsin Department of Transportation
MAPSS Performance Scorecard

✓ Goal has been met | ↑ Performance is trending in a favorable direction | ↔ Trend is holding | ↓ Performance is trending in an unfavorable direction

Performance measure	How we measure it	Current report period	Goal	Goal met	Trend	Comments
Mobility: Delivering transportation choices that result in efficient trips and no unexpected delays.						
Delay (hours of vehicle delay) Seasonal quarter Spring 2016	Number of hours spent in Interstate traffic below posted speed	**4,324,630 hrs**	1,464,331 hrs		↓	Vehicle delay increased compared to spring 2015. The change in speed limit from 65 to 70 mph and the inclusion of 132 miles of I-41 appear to be the major contributing factors (a lower number is better).
Reliability (planning time index) Seasonal quarter Spring 2016	Index based on extreme travel time in a period	**1.18**	1.10		↓	The planning time index increased this spring quarter with all corridors seeing an increase in their planning time index (a lower number is better).
Transit availability Calendar year 2015	Percent of population served by transit	**53.0**	55.0		↓	There was a one percent decrease from 2014 to 2015. This decrease is largely the result of one county-wide rural transportation system transitioning from public transit to specialized transit service in 2015.
Bicycling conditions on rural highways Calendar year 2015	Percent of rural highway miles with favorable bicycling conditions	**State hwys: 68.4; County roads: 90.8**	100 percent on roads where bicycles are permitted		↑	Overall, an additional 193 miles of rural state and county highways are now rated as favorable for bicycling.
Incident response Calendar year 2015	Percent of incidents cleared within a specific timeframe	**Inter-mediate incidents: 91.2; Major incidents 85.3**	Intermediate incidents: 90.0; Major incidents: 80.0	✓	↑	The department's coordination in this area continues to improve and both the intermediate and major incident clearance goals were met. In 2015, the department achieved the lowest incident clearance time in the last five years with an average clearance of 77 minutes.
Winter response State fiscal year 2016	Percent to bare-wet within a specific time period after a storm	**78 for 24-hr roads**	70.0 within specified time	✓	↑	The winter severity index was lower than in the previous year. Milder temperatures enabled salt to be more effective. Work continues on developing best practices for winter response.
Accountability: The continuous effort to use public dollars in the most efficient and cost-effective way.						
Transportation Economic Assistance grants Calendar year 2016	Capital investment dollars achieved per grant dollar awarded	**$190.96**	$50.00	✓	↑	During the first half of 2016, the department issued three grants for a total of $2,134,000, allowing for a capital investment of $407,500,000 and resulting in the creation of 486 new jobs. As a result, every grant dollar leveraged $190.96 in capital investments.
Timely scheduling of contracts State fiscal year 2015	Percent of highway program funding scheduled during the first six months of each fiscal year	**54.3**	54.0	✓	↔	DOT has made improvements to ensure our processes allow sufficient time for effective resource planning and competitive bidding. A new goal of 54 percent was established in SFY 2015.
On-time performance Calendar year 2014	Percent of highway projects completed on-time	**93.2**	100.0		↓	WisDOT will be expanding the deployment of mobile devices to improve communications in the field and resolve issues in a timely manner.
On-budget performance State fiscal year 2015	Final highway project cost as percent of original contract amount	**103.8**	103.0		↑	WisDOT implemented a new methodology that better demonstrates the final average cost of all construction projects. The 2015 figure is the lowest in the last six years (a lower number is better).
Surplus property management State fiscal year 2016	Dollar value of surplus land sold	**$7.01 mil**	$2.75 mil	✓	↔	The surplus land sales exceeded the SFY2016 sales goal with one hundred and twenty-seven parcels sold, selling twenty more parcels than SFY2015.

The Wisconsin Department of Transportation MAPSS Performance Scorecard reviews five key goals and over-arching performance measures that guide us in achieving our mission "to provide leadership in the development and operation of a safe and efficient transportation system." Establishing goals and measuring results is essential to running a successful organization and meeting public expectations.

For more information on MAPSS, visit www.mapss.wi.gov

✓ Goal has been met | ↑ Performance is trending in a favorable direction | ↔ Trend is holding | ↓ Performance is trending in an unfavorable direction

Performance measure	How we measure it	Current report period	Goal	Goal met	Trend	Comments
Preservation: Protecting, maintaining and operating Wisconsin's transportation system efficiently by making sound investments that preserve and extend the life of our infrastructure, while protecting our natural environment.						
Program effectiveness Calendar year 2015	Scheduled improvement projects compared to modeled roadway needs (as a percent)	**Location: 86; Scope: 65; Time: 85**	Location: 80; Scope: 65; Time: 65	✓	↑	Location, scope and time will likely continue to improve as refinements to a statewide scoping theme and prioritization mechanism are completed and implemented.
State highway pavement condition (backbone) Calendar year 2015	Percent of state highway pavement rated fair or above	**97.6**	90.0 rated fair or above	✓	↑	Backbone pavement needs are prioritized because while they represent only 13.5 percent of state trunk highway miles, they carry 49 percent of traffic and approximately 70 percent of the freight tonnage and value.
State highway pavement condition (non-backbone) Calendar year 2015	Percent of state highway pavement rated fair or above	**78.8**	80.0 rated fair or above		↓	While pavement conditions are affected by numerous factors, much of the decrease is attributable to the improvement budget being insufficient to maintain current system conditions.
State bridge condition Calendar year 2015	Percent of state bridges rated fair or above	**96.8**	95.0	✓	↔	State bridge conditions are holding steady and exceeding the goal.
State-owned rail line condition Calendar year 2015	Percent of state-owned rail line meeting FRA Class 2 Standard (10–25 MPH)	**63.0**	95.0		↑	In 2015, there was a net increase of 43.28 miles meeting FRA Class 2 standards through WisDOT funded projects. A total of 452.76 of the 718.22 miles of track meet the department goal.
Airport pavement condition Calendar year 2015	Percent of airport pavement rated fair or above	**87.0**	90.0		↑	The one percentage point increase from 2014 primarily results from an improved PCI value for runway pavements. Taxiway pavements held steady while aircraft parking aprons dropped.
State highway roadside maintenance Calendar year 2015	Grade point average for the maintenance condition of state highways	**2.61**	3.0		↑	Conditions increased slightly in 2015, with routine maintenance agreements and improvement projects funding highway maintenance needs.
Material recycling State fiscal year 2015	Percent of virgin materials replaced with recycled materials	**14.76**	10.0	✓	↑	The department is committed to the recycling effort. Almost all projects incorporate recycled materials.
Safety: Moving toward minimizing the number of deaths, injuries and crashes on our roadways.						
Traffic fatalities Calendar year-to-date 2016 (Preliminary)	Number of traffic fatalities	**276**	Annual target is 522. Second Quarter target is 224.		↓	As of June 30th, there have been 276 fatalities in 2016. Our long-term goal is zero preventable deaths (a lower number is better).
Traffic injuries Calendar year-to-date 2016 (Preliminary)	Number of traffic injuries	**19,464**	Annual target is 38,140. Second Quarter target is 17,764.		↓	As of June 30th, there have been 19,464 persons injured in 2016. Our long-term goal is zero preventable deaths (a lower number is better).
Traffic crashes Calendar year-to-date 2016 (Preliminary)	Number of traffic crashes	**58,177**	Annual target is 110,486. Second Quarter target is 52,816.		↓	As of June 30th, there have been 58,177 traffic crashes in 2016, which is up from 58,008 last year. Our long-term goal is zero preventable deaths (a lower number is better).
Safety belt use Calendar year 2016 (Preliminary)	Percent of vehicle occupants wearing a seat belt	**87.8**	86.0 by 2016	✓	↑	While Wisconsin's safety seat belt usage reached an all-time high in 2016, we lag behind neighboring states like Illinois and Michigan, with use rates of more than 90 percent.
Service: High quality and accurate products and services delivered in a timely fashion by a professional and proactive workforce.						
DMV wait times Calendar year-to-date 2016	Percent of DMV service center customers served within 20 minutes	**88.60**	80.0	✓	↔	DMV has continued to maintain service levels beyond the 80 percent target.
DMV electronic services Calendar year 2015	Number of DMV electronic service transactions	**4.26 mil**	Annual target is 4.73 mil		↔	Usage in 2015 has held steady in comparison to the 2014 number of transactions. The 2015 number is lower due to transaction counts not being available pursuant to a mid-year change to Google Analytics.
DMV driver license road test scheduling Calendar year-to-date 2016	Available tests as a percent of estimated demand	**98**	90.0	✓	↔	DMV is on track to continue the annual trend of achieving 90 percent or higher service levels that began in 2014.
DMV phone service Calendar year-to-date 2016	Percent of DMV phone calls answered within two minutes	**56.5**	80.0		↑	Service levels are improving slowly from the first quarter of 2016.

Wisconsin Department of Transportation
MAPSS Performance Improvement

Mobility: Delay (hours of vehicle delay)

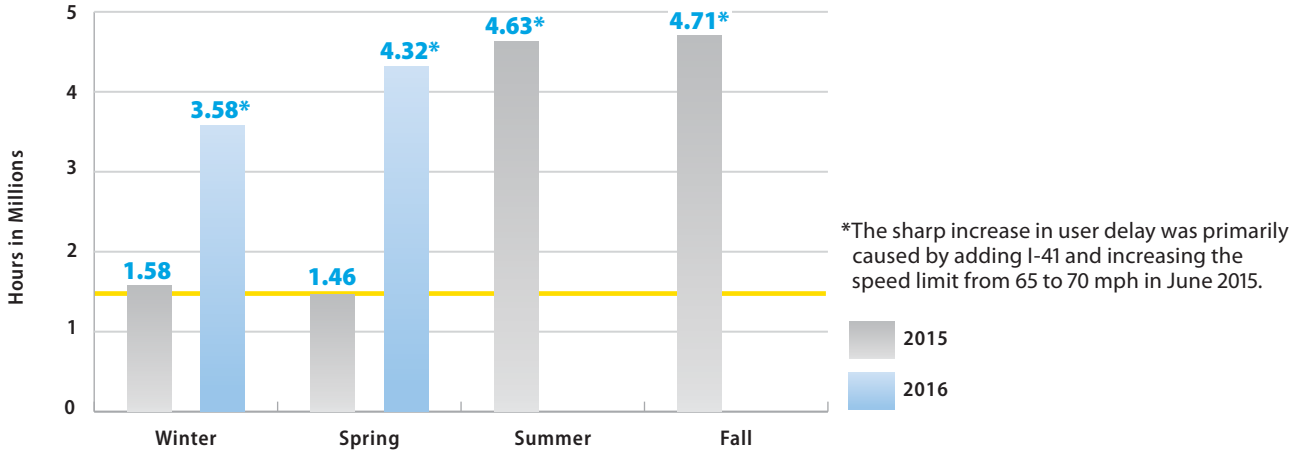
Report Date: July 2016 | **Data Frequency:** Quarterly (Seasonal Quarters) | **Division:** Transportation System Development

Why is it important? Reducing the annual total hours of vehicle delay and its resulting user delay cost on a corridor supports regional economic productivity and development.

Highway congestion occurs when traffic demand exceeds the available capacity of the highway system, this can be measured as vehicle delay. Congestion results in slower speeds, longer trip times, higher levels of harmful emissions and increased costs for auto, bus and freight movements. Congestion is broken into two categories: recurring (regular high volumes, traffic jams) and unexpected (crashes, bad weather).

Performance measure target: The Wisconsin Department of Transportation (WisDOT) began reporting this Mobility measure in Winter 2014. The department's quarterly seasonal goal is to reduce vehicle delay and user delay cost from the same quarter of the previous year.

Figure: Hours of vehicle delay statewide



Total Hours of Delay (June 2015 – May 2016) = 17,248,866
Statewide User Delay Cost (June 2015 – May 2016) = $540,792,964
(See visualization for corridor detail)

How do we measure it? Delay is defined as the extra time spent driving in congested road conditions, as compared to free flowing travel conditions. Delay is reported on the state's 10 Interstate corridors. Hours of delay are calculated by measuring the number of vehicles on a corridor and then comparing actual travel times for segments of a route to the amount of time it would take to travel that same corridor at the posted speed limit. User delay cost is determined by multiplying user cost, vehicle delay and vehicle occupancy rates. User delay cost data is split into two categories: passenger cars and freight vehicles.

How are we doing? Statewide hours of vehicle delay increased by 2,860,298 during the 2016 spring quarter compared to the 2015 spring quarter. Statewide user delay costs increased by $90,621,946 during the 2016 spring quarter compared to the 2015 spring quarter. The I-94 corridor between Madison and Milwaukee had significant increase in delay compared to the other corridors. Bridge reconstruction and rehabilitation in Waukesha County paired with the Zoo Interchange lane restrictions have lowered speeds on this corridor. The speed limit increase to 70 mph as well as newly adjusted user delay costs compound the I-41 delay, more than doubling the hours of delay for this same period from last year.

What factors affect results? Vehicle delay is comprised of recurrent and non-recurrent delay. Recurrent delay is caused by normal fluctuations in traffic demand such as morning and evening commuter traffic. Non-recurrent delay differs by seasons and areas of the state. Factors include: traffic surges from weekend holidays and special events; weather related delays and incidents; and work zone impacts such as road closures, lane restrictions and traffic detours. This report cycle was also affected by the June 2015 speed limit increase and the addition of I-41 miles.

What are we doing to improve? The department has begun investigating specific causes and their impact on delay. A rollover crash on I-94 showed that a three and a half hour full freeway closure resulted in approximately 9,000 hours of vehicle delay and $280,000 of user delay cost. WisDOT is currently examining the impact of lowered speed limits in work zones. The department uses information such as the delay causality and impact assessment project results to improve decision making and demonstrate accountability through performance-based planning and programming. WisDOT continues to provide drivers with different information sources for travel planning like, 511Wisconsin alerts, Twitter and dynamic message signs.

Wisconsin Department of Transportation
MAPSS Performance Improvement

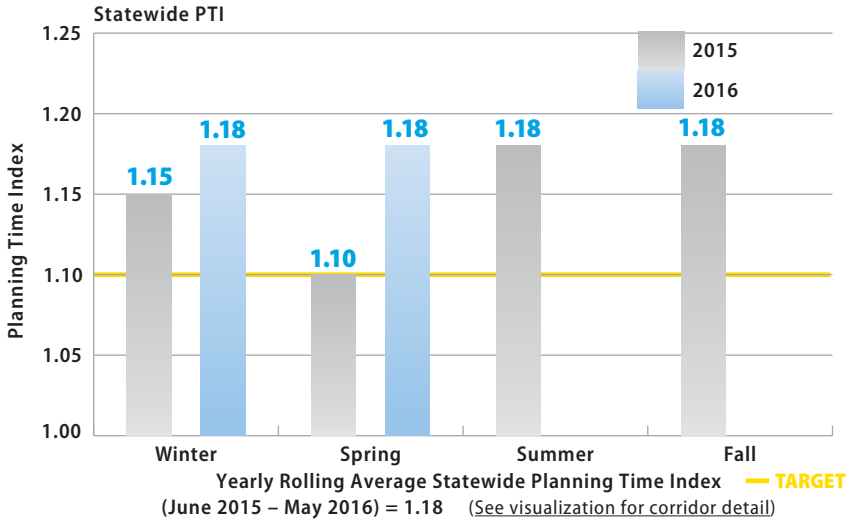
Mobility: Reliability (planning time index)

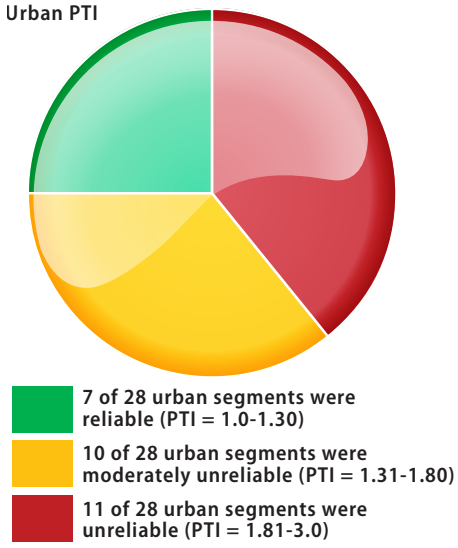
Report Date: July 2016 | **Data Frequency:** Quarterly (Seasonal Quarters) | **Division:** Transportation System Development

Why is it important? Travelers expect to arrive safely and on time at their destination. Their confidence level and certainty of on-time arrival are intuitive measures of transportation system reliability. Planning Time Index (PTI) expresses that same value in a mathematical term that helps travelers more precisely budget travel time and transportation planners better measure system performance.

Performance measure target: The Wisconsin Department of Transportation (WisDOT) began reporting this Mobility measure in Winter 2014. The department's goal is to report the reliability for each Interstate corridor and 28 urban freeway and highway segments. WisDOT's initial seasonal quarterly goal is to reduce the PTI value from the same period of the prior year.

Figures: Statewide reliability index for Wisconsin Interstate corridors





What it means: PTI of **1.5** means that for a **20 minute** trip, you will complete your trip in 30 minutes (20 x 1.5 = 30) the majority of the time.

How do we measure it? Reliability is reported on 10 Interstate corridors and 28 urban freeway and highway segments. The planning time index is calculated from two basic measures: travel time at the posted speed limits and the 95th percentile travel time, marking the most extreme travel delay in a period (the worst of 20 trips). The ratio of these two measures constitutes the index. This measure is represented by direction and by weekday, non-holiday peak periods. Travel time information for this measure was acquired from an FHWA-sponsored national data set.

How are we doing? The statewide PTI increased slightly in the spring quarter of 2016 as compared to spring 2015. All corridors saw an increase in planning time index. The 70 mph speed limit increase led to slight performance reductions; however, larger changes from the previous quarters are attributed to factors like construction and weather. Work zones that either began or ended during this period have influenced the results. Peak hour urban reliability has decreased in new work zones and improved for recently completed improvement projects. Three fewer urban segments were reliable than the 2015 spring quarter. The number of unreliable segments decreased, while the number of moderately unreliable segments increased. Drivers in the Milwaukee urban corridor continue to experience the least reliable travel times.

What factors affect results? Travel reliability measures variability of congestion. A wide variation in the recorded travel time indicates low reliability and a high planning time index. Traffic incidents, weather conditions, special events, holiday travel, sporadic demands and work zones are all dynamic components of traffic congestion that may adversely affect travel time reliability. Reducing or mitigating the impact of these factors serves to improve travel time reliability.

What are we doing to improve? 511 Wisconsin has expanded messaging through Twitter to include photos, graphics and videos. Followers are able to receive instant updates on excessive delays, incidents, work zones and detour information to help alter their routes and avoid congestion. Travel times for alternate routes are displayed during incidents resulting in severe freeway delays. The Madison area work zones also have alternate route travel times displayed to provide drivers opportunities to avoid congestion during peak hours and holiday traffic surges.

Wisconsin Department of Transportation

MAPSS Performance Improvement

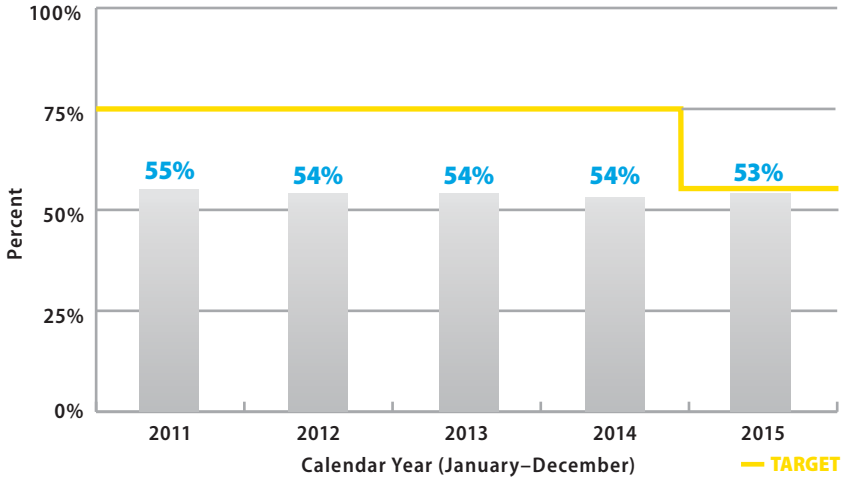
Mobility: Transit availability

Report Date: July 2016 | **Data Frequency:** Annual (Calendar Year) | **Division:** Transportation Investment Management

Why is it important? Transit provides a lifeline to those who depend on it to obtain medical care, make shopping trips, travel to school or work and to meet other basic needs. Approximately 48 percent of Wisconsin transit riders travel to work, 23 percent to school, 18 percent to retail, tourism or recreational destinations, and 10 percent to health care services. Greater transit availability means greater mobility for Wisconsin citizens. Transit service is a key component of a comprehensive, multimodal transportation system and contributes to an enhanced quality of life in Wisconsin communities.

Performance measure target: The department's goal is to increase the percent of the population with access to transit service to 55 percent.

Figure: Percent of the population served by transit



Note: The target for 2015 has been revised from 75 percent to 55 percent to better align with the national data.

How do we measure it? The total population with access to transit is calculated by adding together the population that resides within one-quarter mile walking distance from a fixed bus route for Wisconsin's bus systems and the population within the service area for shared-ride taxi and other public transit systems (i.e., not fixed route). The total population with access is then divided by Wisconsin's total population to determine the percent of the population with access to public transit each calendar year. Only transit services that are supported with public resources are considered in this calculation. The department's methodology is consistent with industry standards for measuring access to transit.

How are we doing? Approximately 53 percent of the state's population has access to public transit. This represents a decrease of one percentage point from 2014 to 2015. This decrease is largely the result of one county-wide rural transportation system transitioning from public transit to specialized transit service in 2015 to more efficiently and effectively meet the needs of county residents. Nationally, it is estimated that 55 percent of the population has access to public transit.

What factors affect results? Transit service availability is determined by local government decisions with planning assistance offered by WisDOT to help identify appropriate options. The degree of investment in transit from federal, state and local sources is a major factor affecting this performance measure. For example, transit routes and service areas may differ year-to-year in response to budget levels. Efforts by communities to encourage commercial and residential land use decisions that increase population density in areas having transit access also have an effect. Transit service operated on a regional, as opposed to a community-by-community basis, also tends to increase the percent of the regional population with access to transit.

What are we doing to improve? The department actively provides technical assistance to local transit providers in the areas of planning and budgeting, and frequently sponsors transit development plans and feasibility studies to ensure that transit investments are well informed, sustainable and promote effective service. Department staff review transit system budgets and service profiles annually to ensure transit operations are consistent with state and federal regulations, as well as department goals and best practices. Management performance reviews of urban bus systems every five years, along with annual cost efficiency report analyses for all systems, helps ensure that Wisconsin transit systems function efficiently and effectively in meeting mobility needs.

Wisconsin Department of Transportation

MAPSS Performance Improvement

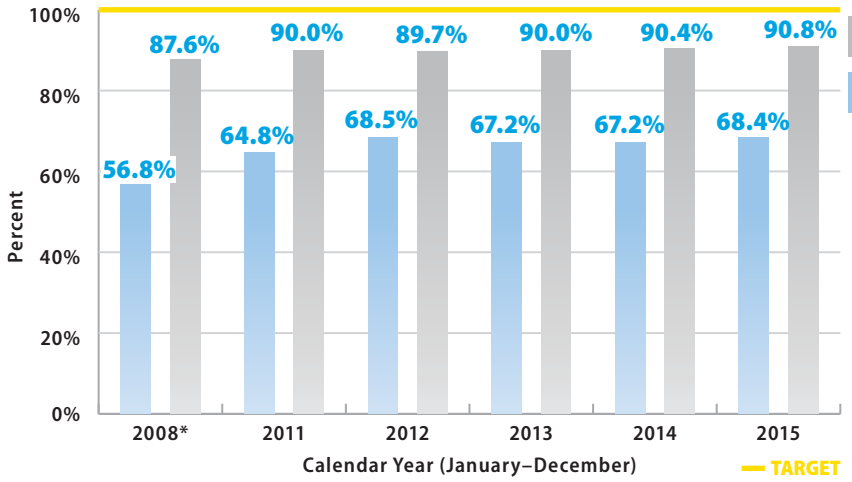
Mobility: Bicycling conditions on rural highways

Report Date: July 2016 | **Data Frequency:** Annual (Calendar Year) | **Division:** Transportation Investment Management

Why is it important? Bicycle travel is an essential component of a multimodal transportation system. The option to travel by bicycle is important for people too young to drive, people who cannot drive or people who choose not to drive. Monitoring rural highway conditions for bicycling helps planners and designers identify potential facility improvements for all modes of travel. This is especially important in areas that are currently less suitable for bicycle travel and are experiencing growth or increased auto congestion. Generally, projects that create safety and operational improvements for all roadway users also result in improved conditions for bicyclists.

Performance measure target: The department's goal is to have favorable conditions for bicycling on all rural county and state highways on which bicycles are permitted to travel. Favorable is defined as having conditions rated as 'best' or 'moderate' for bicycling.

Figure: Percent of rural county/state highways rated best/moderate condition for bicycling



Target: 100% for highways with traffic volumes at or below levels considered undesirable (independent of pavement width). See the "Wisconsin Rural Bicycle Planning Guide" for volume threshold details.

***2008 data was analyzed for the 2010 State bicycle map. Analysis was not completed in 2009 and 2010.**

How do we measure it? Annually, the total number of rural miles of state and county highways with bicycling conditions rated as 'best' or 'moderate' is divided by the total number of non-freeway miles of state and county highways to arrive at the percentage. The department's ratings for bicycling conditions on rural highways is defined in the "Wisconsin Rural Bicycle Planning Guide," which describes the calculations for determining conditions as 'best,' 'moderate,' or 'undesirable'. The calculation includes two primary factors: traffic volume and pavement width. It also accounts for the percent of trucks and percent of solid yellow pavement markings along the roadway (which is an indicator of hills and curves).

How are we doing? Wisconsin continues to improve bicycling conditions on county and state highways. In 2015, the percentage of rural state highways rated as having 'best' or 'moderate' conditions for bicycling increased slightly, with about 101 miles of improved conditions on state highways. The percent of rural county highways rated as 'best' or 'moderate' for bicycling also increased to 90.8 percent. This was primarily due to the addition of paved shoulders. Overall, an additional 193 miles of rural state and county highways are now rated as favorable for bicycling.

What factors affect results? Vehicles per day, travel lane width, and the presence or absence of paved shoulders are the primary determinants of rural bicycling conditions. As traffic on roadways increases, the favorable conditions for bicycling can decrease. Inclusion of a wider travel lane or paved shoulder on a roadway can improve conditions for bicycling.

What are we doing to improve? WisDOT's paved shoulder policy for pavement replacement, reconstruction, and new construction projects on rural state highways is a standard shoulder width of five feet on asphalt roadways on the state highway system. In addition, department staff continue to work with the Wisconsin County Highway Association on a paved shoulder policy for county highways.

Wisconsin Department of Transportation

MAPSS Performance Improvement

Mobility: Incident response

Report Date: July 2016 | **Data Frequency:** Annual (Calendar Year) | **Division:** Transportation System Development

Why is it important? Incidents happen on the Interstate and state highway system every day, from minor property damage incidents to serious traffic crashes. This measure focuses on the amount of time it takes to clear intermediate and major traffic incidents on the Interstate and state highways. Intermediate traffic incidents typically affect travel lanes and usually require traffic control on the scene to divert road users past the blockage. Major traffic incidents usually involve hazardous material (HAZMAT) spills, overturned tractor-trailers, fatalities, multiple vehicles, and/or other natural or man-made disasters. Major incidents can result in closing all or part of a roadway. Restoring the roadway to full operation as quickly as possible helps reduce secondary incidents, minimize delay for people and freight, and decreases the associated economic impact of traffic delays.

Performance measure target: The department's goal is to reduce the length of time traffic flow is disrupted by long-term incidents on the Interstate and state highway system. The goal is to clear 90 percent of all intermediate incidents in less than two hours and to clear 80 percent of all major incidents in less than four hours.

Figure 1: Percent of the time that target clearance time is met

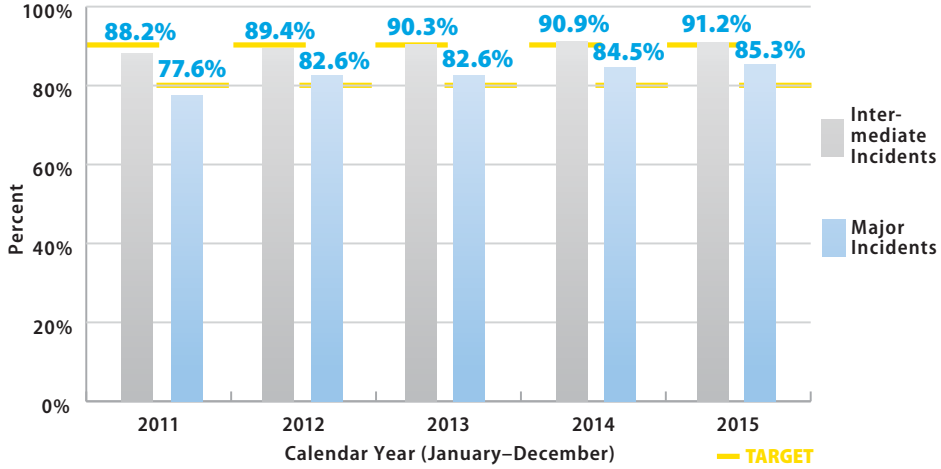
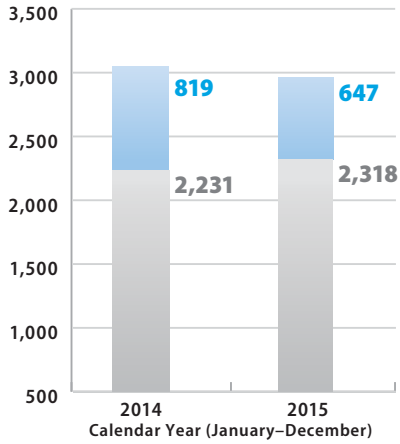


Figure 2: Number of traffic incidents



How do we measure it? The incident clearance time is defined as the time from when an agency with responsibility to respond first becomes aware of the incident and the time when the last responder leaves the scene. This measure previously tracked the average total clearance time (hours) of the state's most severe extended duration incidents. The department has expanded this measure to now report the percent of intermediate and major incidents cleared in less than two and four hours, respectively.

How are we doing? The department's coordination in this area continues to improve and both the intermediate and major incident clearance goals were met. In 2015, the department achieved the lowest incident clearance time in the last five years with an average clearance of 77 minutes. There were eight major incidents on the Interstate that involved either a HAZMAT spill, significant infrastructure damage, multiple tractor-trailer crashes or fire, each taking over eight hours to clear.

What factors affect results? The specific location, time of day, weather condition, incident complexity, and the number of simultaneous incidents all affect the amount of time required to clear the highway.

What are we doing to improve? The department will continue to conduct After Action Reviews on significant incidents across the state in order to help identify strengths, weaknesses and opportunities for improvement associated with clearance activities. In 2015, 1,300 first responders took Traffic Incident Management (TIM) training on responder safety, safe and quick clearance, and improved communication—all to aid in quick restoration of traffic flow. Through a partnership with the Department of Justice, TIM training will be mandatory for all new law enforcement officers in 2016. The department is also working with the state's technical colleges to incorporate formal TIM training into their fire service and tow operator programs. WisDOT will continue to host Traffic Incident Management Enhancement (TIME) meetings and promote TIM trainings across the state for responders from local law enforcement, fire departments, public works and highway departments, towing companies and other responder disciplines. The meetings are dedicated to improving communication between responder disciplines, identifying and executing best practices at incident scenes and improving the overall safety of an incident scene for all responders.

Wisconsin Department of Transportation

MAPSS Performance Improvement

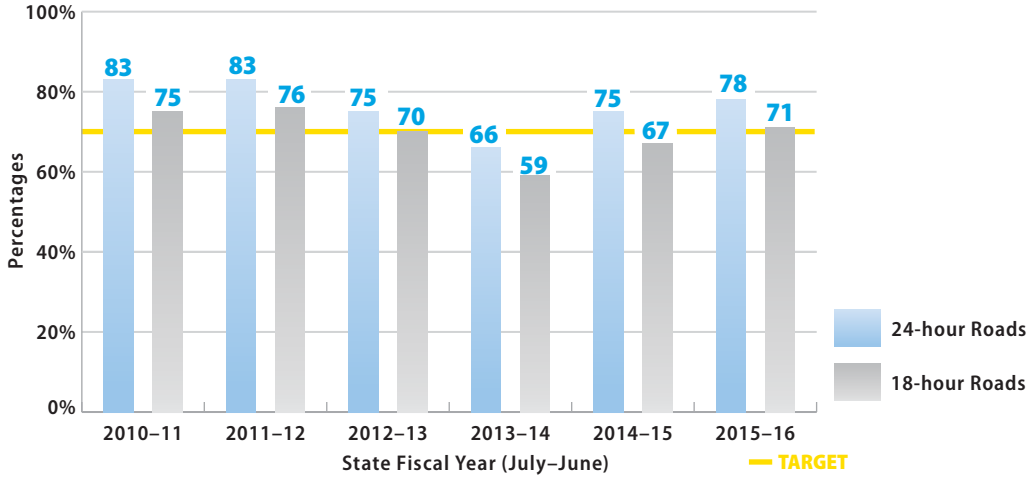
Mobility: Winter response

Report Date: July 2016	**Data Frequency:** Annual (State Fiscal Year)	**Division:** Transportation System Development

Why is it important? Returning roads to the condition they were in before a winter storm restores the capacity of the system to move traffic. This allows safe travel to work, school and other destinations. Clear roads also meet the needs for emergency travel and restore travel time reliability, which is important to the movement of freight.

Performance measure target: Roads maintained 24 hours a day are to be cleared within four hours and roads that are maintained 18 hours a day are to be cleared in six hours of the end of the storm. Eighteen-hour roads have lower traffic counts, concentrated in peak travel time periods, and are not serviced between 10 p.m. and 4 a.m. The department's goal is achieve these targets 70 percent of the time.

Figure: Percent that bare-wet conditions are met after winter storm events



How do we measure it? Each county provides weekly reports covering each storm event. They record the time at two points: when each storm event ends and when roads were restored to bare/wet pavement. For each storm event, the time to bare/wet pavement is calculated as the elapsed time between these two points. The performance measure is the average percent for all storm events that bare/wet pavement conditions are met for 18-hour roads (within six hours) and on 24-hour roads (within four hours). Data is compiled for each state fiscal year (July–June). state fiscal year (July–June). Winter severity is calculated each year based on a set of weather factors including the number of snow and freezing rain events, total duration of all storms, total snow accumulation and number of incidents (blowing snow, drifting, ice and frost). The index is the gauge by which the department measures the impact of winter on our roads with a typical winter rating of 100.

How are we doing? Both the 24-hour and 18-hour roads measures improved over last year, with both roads exceeding the 70 percent goal. The winter severity index was lower than in the previous year. This winter was rated a little below a typical winter or 90 on the severity scale compared to the 2014–2015 rating of 100. Milder temperatures enabled salt to be more effective. Spring 2016 was also milder.

What factors affect results? Performance is largely impacted by severity of winter conditions, although winter storm timing does appear to impact the amount of time it takes to clear 18-hour roads. Simultaneous storms that happen less than 8 hours apart increase the time needed to clear the road. Controllable factors include the timing of the response, availability of resources, and the effectiveness of the response. The department and counties are constrained by financial resources from fully deploying best practices for winter response.

What are we doing to improve? We are working to ensure the right materials and resources are available and used for the conditions before, during and after each storm event. The department continues to identify best practices based on data from studies conducted in other states, especially in regard to the practice of anti-icing. We are beginning to implement route optimization, which strategically routes trucks based on locations of shops, salt and fuel supplies to minimize downtime for snowplow operators. Dane, Green, Brown, Eau Claire, La Crosse, Marquette and Waukesha counties will begin utilizing their new optimized routes by next winter.

Wisconsin Department of Transportation

MAPSS Performance Improvement

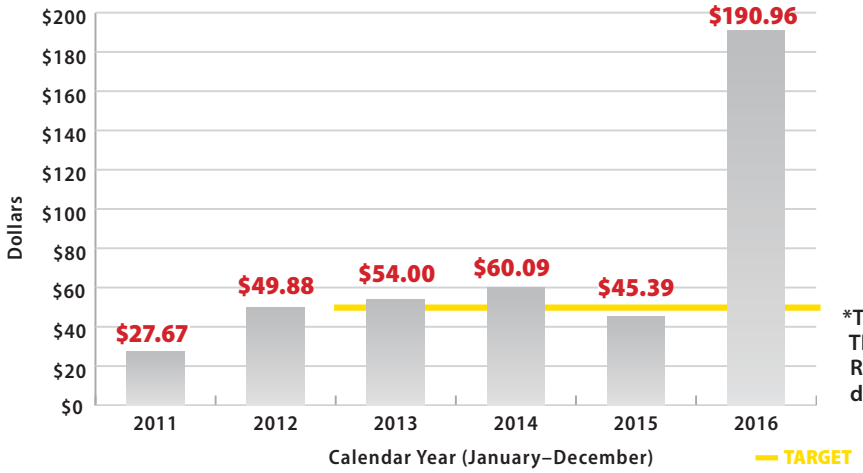
Accountability: Transportation Economic Assistance grants

Report Date: July 2016 | **Data Frequency:** Semi-annually (Calendar Year) | **Division:** Transportation Investment Management

Why is this important? The Transportation Economic Assistance (TEA) program provides state matching grants of up to 50 percent, or $5,000 maximum per job, to aid governing bodies supporting local private businesses, and consortiums for road, rail, harbor and airport projects that help attract employers to Wisconsin, or encourage business and industry to remain and expand within Wisconsin. The program strives to increase the number of jobs statewide by responding to the transportation needs of an economic development project contingent on a transportation facility improvement. The goal is to attract and retain business in Wisconsin, which increases the number of local job opportunities, improves the local tax base, and boosts spending in the local economy.

Performance measure target: Achieve $50 of capital investment for every $1 of grant funds awarded.

Figure: Capital investment dollars per grant dollar awarded



*The department first began measuring TEA grants by Capital Investment Ratio in 2013. Years 2011 and 2012 are depicted for historical reference only.

How do we measure it? The ratio is calculated by dividing the total capital investment by the total grant dollars awarded. A higher number is desired. The amount of the TEA grant is determined by evaluating and approving the cost estimates for the transportation improvement project.

How are we doing? During the first five months of 2016, WisDOT exceeded the goal. The department coordinated with several local partners on application submittals and project scoping. As of May 2016, the department issued three grants totaling $2,134,000—allowing for a capital investment of $407,500,000 and resulting in the creation of 486 new jobs. As a result, each grant dollar leveraged $190.96 in capital investments.

What factors affect results? The condition of the local and/or state economy has a large impact on how much businesses are willing or able to invest. TEA grants awarded to local governments are based on the total number of jobs that are guaranteed to be created as a result of the business development. Grant dollar awards relative to the capital investment vary based on the quantity of each component, even as other benefits are likely to be realized. For example, rail improvement projects tend to cost more per foot than roadway improvements, creating additional grant dollar expenditures with equal capital investments. The net result is a lower capital investment to grant dollar ratio.

What are we doing to improve? The department conducts extensive outreach at business/industry functions, the Governor's Small Business Summit, region-sponsored local program symposiums, and teams with partner state agencies like the Wisconsin Economic Development Corporation and Department of Administration to promote the TEA Program. WisDOT has streamlined the environmental clearance process and published resources to help guide sponsors and consultants on how to complete the programmatic environmental review. WisDOT is also working to streamline the delivery process to speed-up and ease the burden of moving a project from application to construction.

Wisconsin Department of Transportation

MAPSS Performance Improvement

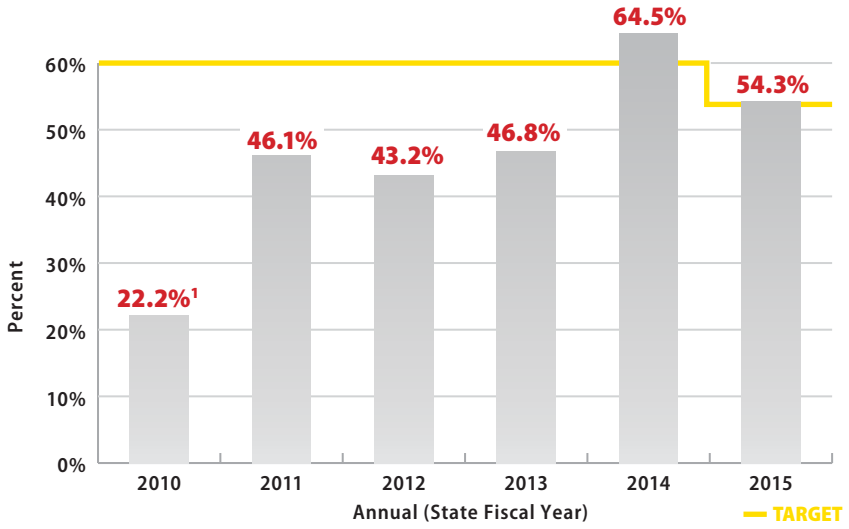
Accountability: Timely scheduling of contracts

Report Date: July 2016	**Data Frequency:** Annual (State Fiscal Year)	**Division:** Transportation System Development

Why is this important? The process for timely scheduling of contracts is critical because it distributes improvement projects into monthly bid lettings over the course of the state fiscal year. This enhances program delivery by balancing the workload for the department and the road building industry. The department's ultimate objective is to maximize competitive bids, provide the department flexibility in adjusting lettings in the last half of the fiscal year for let contract savings or overages, and allow the department to spend additional federal funds if they are received late in the year.

Performance measure target: Contract for 54 percent of the improvement program funding in the first half of the state fiscal year between the months of July and December.

Figure: Percent of annual road construction contract funds scheduled for bid letting during first six months of fiscal year



[1] In 2010, the department received significant ARRA funding late in the year. Timing of the ARRA funded projects and the increased total value had a negative effect on the department's ability to meet this performance measure target.

How do we measure it? Monthly snapshots allow the department to compare the actual funding amounts programmed with predefined monthly targets.

How are we doing? The department initially believed that having a predefined plan with a greater percentage of work being let prior to January 1st each year would allow the road building industry to efficiently plan and schedule work forces and equipment for the upcoming construction season. The goal was initially (2008) set at 50 percent and increased to 60 percent in 2009. With input from the road building industry, the department has set a new goal of 54 percent in state fiscal year 2015 to more evenly distribute the lets, which will result in better resource planning and more competitive bids.

What factors affect results? Several large projects in one year present scheduling challenges. These projects create large spikes in the let distribution flow.

What are we doing to improve? The department's planning, project development, contract proposal management and Bureau of State Highway Programs meet regularly to discuss and look for opportunities to better manage this process. This measure is monitored monthly and reported out at the Planning Chief Meetings. Wisconsin DOT is meeting with industry representatives annually, to get feedback and to ensure our work processes are synced to get the best results. The Local Program recently expanded to a full six-year cycle. This mirrors the process used by the state program and allows for improved scheduling.

Wisconsin Department of Transportation

MAPSS Performance Improvement

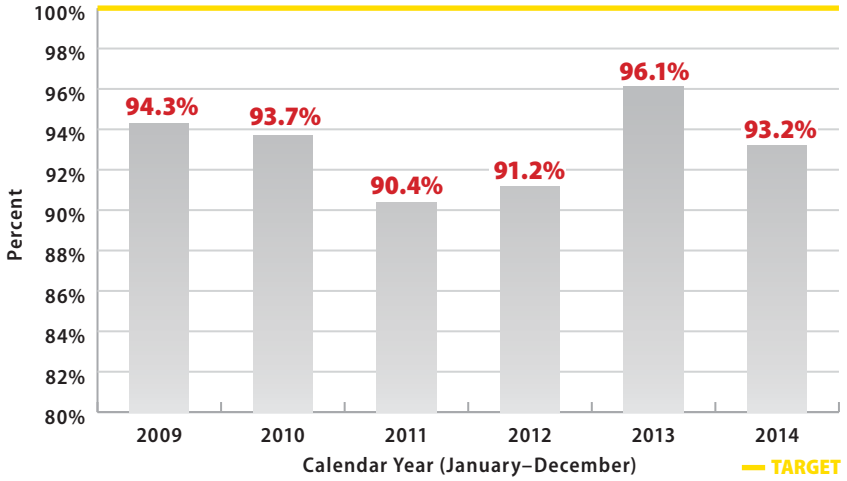
Accountability: On-time performance

Report Date: July 2016 | **Data Frequency:** Annual (Calendar Year) | **Division:** Transportation System Development

Why is this important? This measure indicates the department's ability to estimate and manage the amount of time it will take to complete a highway construction project. The better the department is at determining project time, the better able we are to schedule future projects to effectively utilize contractor resources. The general public and businesses are affected by construction projects. When the department adheres to a schedule, the better everyone can plan for the impact.

Performance measure target: The department's goal is to meet the project time frame specified in the construction contract 100 percent of the time.

Figure: Percent of highway projects completed on time



How do we measure it? This measure reports the percent of construction projects that were completed within the original project time frame specified. The numbers are calculated by identifying construction projects that had work completed during the calendar year and then comparing the actual date/days the project took to complete with the date/days that were specified in the contract.

How are we doing? The number of construction projects completed on time decreased by three percent. Construction administration staff continue to focus on project communication to minimize contract problems and keep the contract on time.

What factors affect results? Factors affecting this measure include adverse weather, plan changes during construction, material delays or shortages, utility work delays and contractor scheduling. The on-time performance is also affected by the quality and completeness of project designs.

What are we doing to improve? The department is focusing on three areas to improve this measure:

- Work with contractors to improve communications and resolve issues that may impact the schedule in a timely manner. The department will also be expanding the deployment of mobile devices to foster timely decision making in the field.
- Let larger and more complex construction contracts out for bid in the fall or early winter to ensure that contractors have adequate time to schedule the resources and staffing needed to complete the project on time.
- Continue to use historic project data to develop more accurate project schedules.

Wisconsin Department of Transportation

MAPSS Performance Improvement

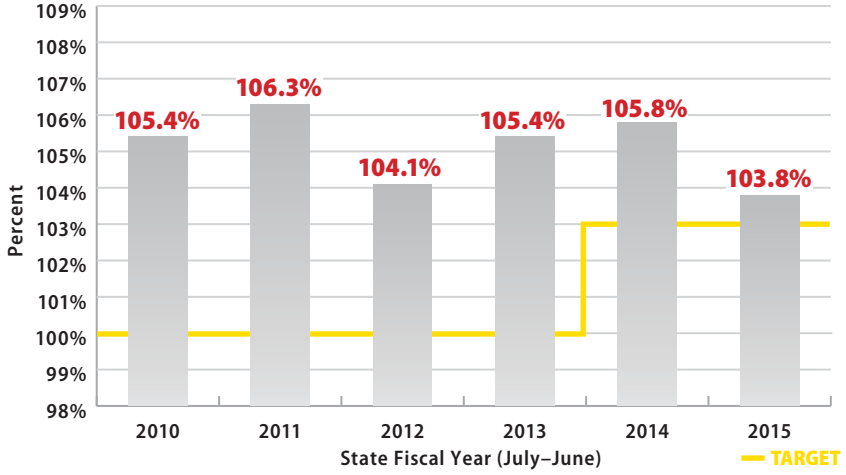
Accountability: On-budget performance

Report Date: July 2016 | **Data Frequency:** Annual (State Fiscal Year) | **Division:** Transportation System Development

Why is it important? The department aims to have the final project cost as close as possible to the amount that was originally contracted when the project was let out for bid. While managing to our budget is important, WisDOT's top priority is delivering a quality project. Therefore, projects costs may increase due to an issue recognized in the field.

Performance measure target: The department's goal is to have the actual project costs not exceed the original contract amount by more than three percent.

Figure: Final highway project cost as a percent of the original contract amount



How do we measure it? This measure was recently updated to compare the final construction cost (excluding engineering and project oversight) with the original contract amount of all State Highway Rehabilitation and Major Highway program projects that were completed during the year. Previously, this measure compared projects that were let during the fiscal year and had already achieved 95 percent of their contract budget before the end of the state fiscal year. This new methodology aligns the On-budget and Engineering Construction Cost Index datasets and better demonstrates the final average cost of all construction projects regardless of when they are awarded.

How are we doing? The previous reporting method consistently showed the department met the goal, but complex multi-year projects were excluded. Revising the data set to include all projects completed during the year, regardless of when they were awarded, now captures those large complex project costs. The department's final construction costs have exceeded 105 percent in four out of the last six years. Project managers deployed additional change management strategies in fiscal year 2015 and final costs were held to 103.8 percent.

What factors affect results? Actual costs are affected by the quality and completeness of project designs, changes in field conditions, weather and contract oversight. Active change management procedures, changes in customer expectations, and changes in how projects are scoped and managed can also influence results. In the fall of 2014, the cement shortage/delay forced some projects to install temporary asphalt or install concrete in winter conditions. Poor soil conditions, even when borings are taken, can also affect budget performance.

What are we doing to improve? The department analyzes projects that exceed 108 percent to ensure that best practices are being followed. Program monitoring staff in the regions have recently been tasked with reviewing and compiling best practice management strategies, lessons learned and construction feedback. The department continues to monitor individual projects and deploy techniques in order to improve overall project management, including enhanced risk/issues management, project oversight for large contracts and contract change management processes.

Wisconsin Department of Transportation

MAPSS Performance Improvement

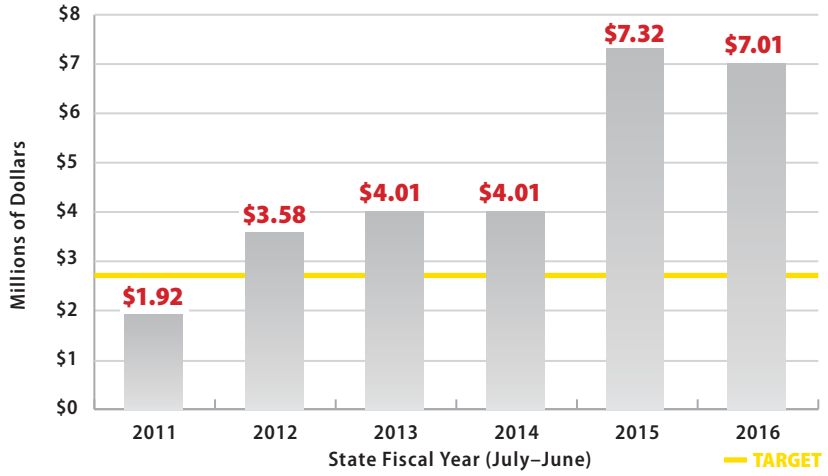
Accountability: Surplus property management

Report Date: July 2016 | **Data Frequency:** Quarterly (State Fiscal Year) | **Division:** Transportation System Development

Why is it important? The department purchases property for transportation improvement projects. Once the project design and construction is complete, land that is no longer needed by the state can be made available for private development. The revenue generated by surplus land sales is deposited into the Transportation Fund to be available for other transportation improvements. Surplus land that is sold spurs local economic development since the parcels often have good access and visibility. When land is returned to the tax rolls, local governments benefit because they can generate new property tax revenue from the property.

Performance measure target: The department's goal is to generate $2.75 million in revenue each state fiscal year through the sale or lease of surplus property in accordance with Wisconsin State Statute 85.15(2) and to return as much land as possible to the local tax rolls.

Figure: Value of surplus land sold



How do we measure it? The department's regional offices enter sale and lease data into a central system. This data is then broken down into four categories—sale of land, sale of buildings and personal property, rental income, and lease income. The total revenue from surplus land sales is compiled for each region; all regions are combined for the total state revenue in the 2016 fiscal year.

How are we doing? Sales dollar values have exceeded the FY 2016 goal. One hundred and twenty-seven of the 168 parcels in the marketing plan have been sold. The remaining parcels will be considered in the FY 2017 marketing plan.

What factors affect results? The make-up of the surplus land inventory and locating an interested buyer are the most significant factors. Only about seven percent of the current inventory is identified as having marketable access. Twenty-two percent of the property is being held for future projects, four percent is for wetland mitigation and 66 percent has no access. Property parcels with no access to the highway are dependent upon the willingness of abutting property owners to acquire surplus remnants and return the parcels to the local tax rolls.

What are we doing to improve? The department continues to improve marketing efforts by:

- Providing photos and mapping of each available parcel.
- Focusing on the sale of surplus land parcels with high maintenance costs.
- Reviewing market rental rates for each region to maximize lease revenue and rental income.
- Using real estate brokers to maximize advertisement and exposure of large value properties to the public.

The department is reviewing the preparation process to create a more effective and timely sales cycle. Work activities are also being streamlined to reduce travel time and department expenses related to appraisals.

In addition, the use of the real estate inventory management system program has allowed the department to separate land not intended for immediate sale into a hold category. The hold category is intended for future use parcels and single abutter parcels not wanted by the abutting property owner at this time.

Wisconsin Department of Transportation

MAPSS Performance Improvement

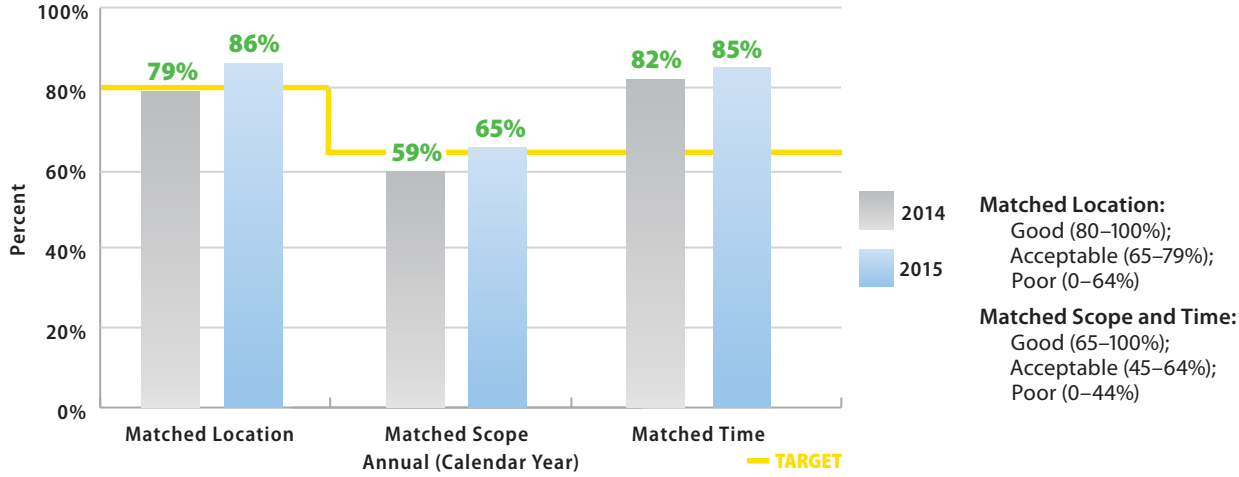
Preservation: Program effectiveness

Report Date: July 2016	**Data Frequency:** Annual (Calendar Year)	**Division:** Transportation Investment Management

Why is it important? Over the past decade, highway infrastructure funding has not kept pace with inflation. Therefore, while the needs of an aging transportation system have increased, purchasing power has decreased. This trend has amplified the importance of making prudent, data-driven highway improvement decisions. Wisconsin DOT implemented this corporate performance measure to assess how individual region improvement programs align with improvements suggested by the department's asset management model. The goal is to improve consistency in the use of asset management data and techniques. This measure will guide project programming and also help to illustrate system needs and investments to legislators, citizens and industry stakeholders.

Performance measure target: To have 3R network (resurfacing, restoration and rehabilitation) scheduled projects align with the 3R asset management model at a level of "good" or above at both the statewide and regional levels (matched location 80 percent, matched scope 65 percent and matched time 65 percent).

Figure: 3R scheduled projects vs. 3R modeled projects



How do we measure it? Roadway segments for the first four years of a region's scheduled projects documented in the 3R improvement program are compared to a set of "need-based modeled" projects. "Need" is based on safety (rate and severity) and pavement condition (when and how the Pavement Management Decision Support System recommends a treatment). "Modeled" project locations coincide with the termini of improvement program projects where possible. This coincidence allows for a one-to-one comparison of "programmed" versus "modeled" project location, scope (level of improvement) and timing (priority).

How are we doing? All regions remain in the "good" or "acceptable" category for all measures and will likely improve as refinements to a statewide scoping theme and prioritization mechanism are completed and implemented, thereby enabling increased compliance with the performance measures.

What factors affect results? Perfect conformity with the asset management model is not the desired outcome of this measure. Due to data limitations at the "planning level," targets have been set at 80 percent for Location and 65 percent for Scope and Timing. Accepting less than 100 percent conformity recognizes that existing data and models cannot capture all the variables that are essential for determining project location, scope and timing. This measure facilitates improved investment decisions through effective use of data-driven asset management tools and techniques. The model provides "planning level" information that serves as a starting point for program planning. The department's planners and engineers then use this data to streamline the process of formulating "project level" decisions. The measure is a guide to ensure general conformity with the asset management principals embodied in the scoping and prioritization themes. Variation in performance across regions is expected.

What are we doing to improve? The department is revisiting the current prioritization and scoping themes developed by staff technical experts in the early 2000s. The asset management investment methodology will be updated to address current realities and challenges related to limited funding, aging pavements, traffic volumes, and other issues that have emerged since the theme was originally developed. A more robust prioritization and scoping theme will enable the department to more consistently program projects in a way that facilitates system service at the lowest lifecycle cost and will also enable exacting performance measures. Leaders across the department are providing input into the formulation of this updated prioritization and scoping theme.

Wisconsin Department of Transportation

MAPSS Performance Improvement

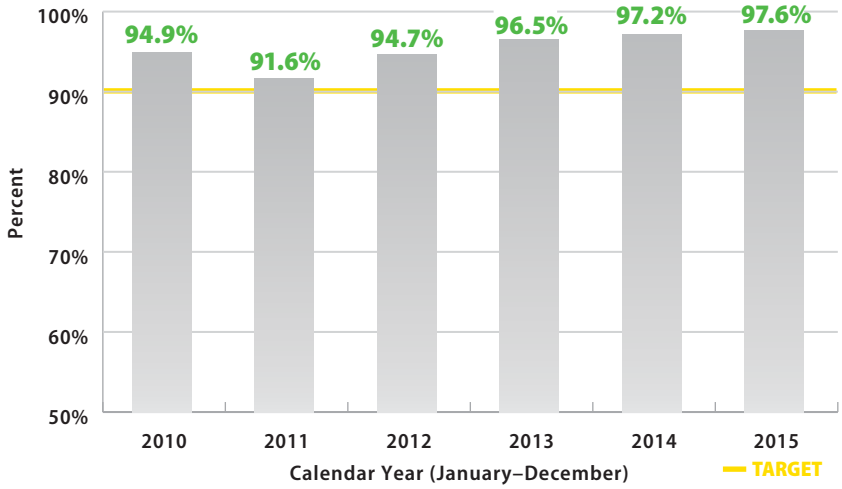
Preservation: State highway pavement condition (backbone)

Report Date: July 2016 | **Data Frequency:** Annual (Calendar Year) | **Division:** Transportation Investment Management

Why is it important? Backbone highways are multi-lane highways connecting all major population and economic regions of the state. This 1,588-mile network provides economic links to national and international markets (e.g., Interstates 39, 41, 43, 90 and 94; US Highways 10, 41, 51, 53 and 151; and State Highway 29). Good condition pavement promotes the safe, efficient movement of people and products throughout Wisconsin. Comprehensive pavement condition data is necessary to determine cost-effective maintenance and improvement strategies that extend the life and serviceability of the state trunk highway system.

Performance measure target: The goal is to have 90 percent of backbone highway pavement rated fair or above using the most cost-effective pavement improvement methods available.

Figure: Percent of state backbone highway pavement rated fair or above



How do we measure it? The Pavement Condition Index (PCI) method is used for rating pavement condition based on visual signs of pavement distress, such as cracks, ruts and potholes. PCI is a numerical rating that ranges from 0 to 100—where 100 represents pavement in excellent condition and 55 represents a minimum rating for pavement in fair condition. Specialized pavement data collection vehicles gather data on the state trunk highway system on a two-year statewide collection cycle.

How are we doing? The 2015 data shows 97.6 percent of the backbone system in fair or above condition. Backbone highways typically rate higher than non-backbone highways. This is expected since backbone pavement needs are prioritized due to their importance to overall system function. While backbone highways represent only 13.5 percent of state trunk highway miles, they carry 49 percent of state trunk highway traffic and approximately 70 percent of the freight tonnage and value traversing Wisconsin's state trunk highways.

What factors affect results? In 2015, the percentage of backbone pavement in fair or above condition improved slightly. Generally, backbone pavement needs are prioritized above non-backbone pavement needs due to their importance to overall system function. Pavement condition is also affected by material quality, adequacy of pavement design, traffic loading, improvement and maintenance history, age, and environmental factors such as temperature and moisture. The department considers all of these factors when using asset management tools and strategies to determine investment levels and steward highway improvement funding provided through the state budget.

What are we doing to improve? The department continues to research, develop, and implement pavement rehabilitation and maintenance processes that maximize the long-term health of the highway system. This includes researching and testing new materials, as well as enhancing asset management strategies with improved data, analysis tools, and prioritization to make sound investment decisions. The improved collection methodology enhances the effectiveness of the Pavement Management Decision Support System (PMDSS). PMDSS uses pavement data to assist engineers, planners, and analysts in determining which segments of roadway to include in the six-year improvement program.

Wisconsin Department of Transportation

MAPSS Performance Improvement

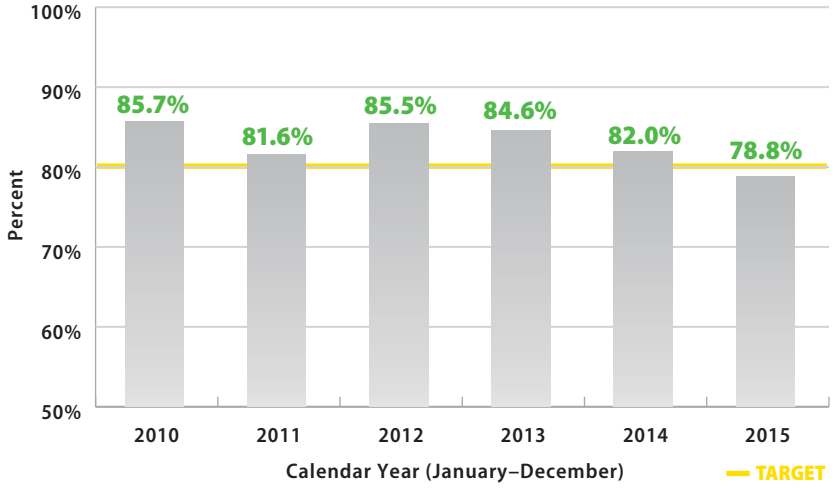
Preservation: State highway pavement condition (non-backbone)

Report Date: July 2016 | **Data Frequency:** Annual (Calendar Year) | **Division:** Transportation Investment Management

Why is it important? The majority of the state's trunk highway system is on non-backbone highways. Known internally to WisDOT as the 3R (resurfacing, restoration and rehabilitation) system, these highways comprise 10,167 of the nearly 12,000 total centerline miles in the entire system. Keeping these highways in good condition helps to promote the safe, efficient movement of people and products throughout Wisconsin. Comprehensive pavement condition data is used to determine cost-effective maintenance and improvement strategies that extend the life of the state highway system.

Performance measure target: The goal is to have 80 percent of non-backbone highway pavements rated fair or above using the most cost-effective pavement improvement methods available.

Figure: Percent of state non-backbone highway pavement rated fair or above



How do we measure it? The Pavement Condition Index (PCI) method is used for rating pavement condition based on visual signs of pavement distress, such as cracks, ruts and potholes. PCI is a numerical rating that ranges from 0 to 100—where 100 represents pavement in excellent condition and 55 represents a minimum rating for pavement in fair condition. Specialized pavement data collection vehicles gather data on the state trunk highway on a two-year statewide collection cycle.

How are we doing? The 2015 data shows 78.8 percent of the non-backbone system in fair or above condition. Non-backbone highways carry about 51 percent of all state trunk highway traffic and approximately 30 percent of the freight tonnage and value traversing Wisconsin's state trunk highways. Without increased investments, Wisconsin's pavement will continue to deteriorate as more costly improvements associated with an aging system consume financial resources and delay other needed rehabilitation projects.

What factors affect results? The decrease in 2015 pavement condition is attributable to funding constraints. Insufficient funding from federal and state sources negatively affects pavement condition. Pavement condition is also affected by material quality, adequacy of pavement design, traffic loading, improvement and maintenance history, age, and environmental factors such as temperature and moisture. The department considers all of these factors when using asset management tools and strategies to determine investment levels and steward highway improvement funding provided through the state budget.

What are we doing to improve? The department continues to research, develop, and implement pavement rehabilitation and maintenance processes that maximize the long-term health of the highway system. This includes researching and testing new materials, as well as enhancing asset management strategies with improved data, analysis tools, and prioritization to make sound investment decisions. The improved collection methodology enhances the effectiveness of the Pavement Management Decision Support System (PMDSS). PMDSS uses pavement data to assist engineers, planners, and analysts in determining which segments of roadway to include in the six-year improvement program.

Wisconsin Department of Transportation

MAPSS Performance Improvement

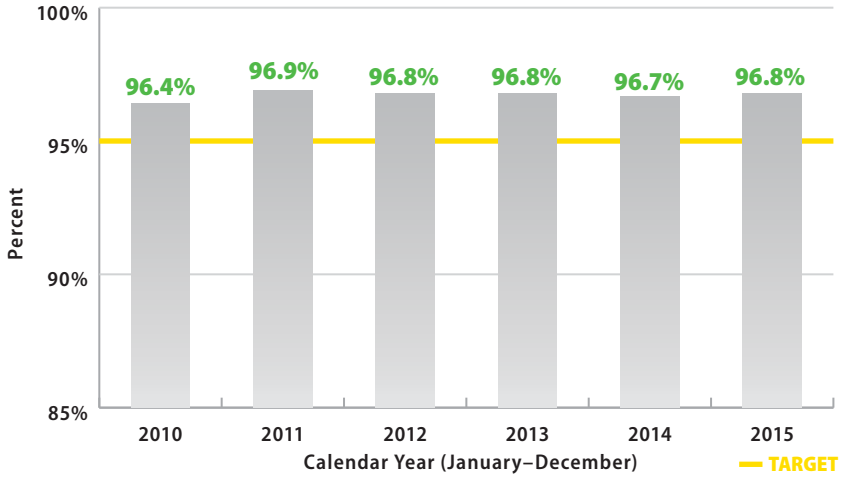
Preservation: State bridge condition

Report Date: July 2016	**Data Frequency:** Annual (Calendar Year)	**Division:** Transportation System Development

Why is it important? Wisconsin bridges are critical infrastructure assets of the highway transportation network. Ensuring safety for the traveling public is a top priority for the department. Inspecting and evaluating bridges is a key component of meeting this objective. Bridges with a condition rating of poor are considered deficient and may need corrective action to ensure current and future operation of the transportation system. An accurate understanding of the condition of the inventory of bridges allows for planning and prioritizing limited resources to address operational needs.

Performance measure target: The department's goal is to have 95 percent of Wisconsin's state-owned or maintained bridges rated fair or above.

Figure: Percent of bridges rated fair or above



How do we measure it? The department performs bi-yearly safety inspections and condition assessments of bridges. This is the designated frequency in National Bridge Inspection Standards (NBIS). Through these inspections, condition rating data is collected for the deck, superstructure and substructure with an overall rating of good, fair or poor condition assigned each calendar year. Bridges with a poor condition rating and open to traffic are safe; however, these structures may need corrective action to ensure continued operation.

How are we doing? The department works to allocate available resources to meet the safety and mobility needs of the state. Currently, 96.8 percent of Wisconsin's 5,267 state-owned or maintained bridges have a good rating or fair rating, while 3.2 percent of state bridges have a poor condition rating. There are 47 state-owned bridges with weight restrictions, an improvement from 49 state-owned weight restricted bridges in 2014. The above yearly data shows that Wisconsin has been exceeding the goal of 95 percent in good/fair condition over the past five years. When including Wisconsin's 8,849 local bridges, the good/fair bridge condition rating drops to 91.8 percent, which is better than the national average of approximately 89.5 percent. The state highway system network accounts for 10 percent of the total mileage in Wisconsin, yet handles 60 percent of the total vehicle miles traveled.

What factors affect results? The increasing average age of the state bridge inventory is a significant factor. The average age of state system bridges is more than 34 years. Wisconsin puts a high emphasis on maintaining and improving its bridges through its rehabilitation and replacement improvement programming. Bridges receive the highest priority in the project selection process. Wisconsin spends additional state money above the federal dollars it receives from the bridge program to maintain its bridges.

What are we doing to improve? The department continues to improve the bridge inspection and bridge management programs by utilizing new technology and innovative management practices. In 2015, the department deployed mobile device technology for structure inspections and incorporated Highway Structure Information System (HSIS) asset management upgrades to improve the timeliness and accuracy of our structural data. Additionally, the department introduced a bridge preservation policy that programs lower level treatments and action to extend the long-term performance of the bridges on our state highways.

Wisconsin Department of Transportation

MAPSS Performance Improvement

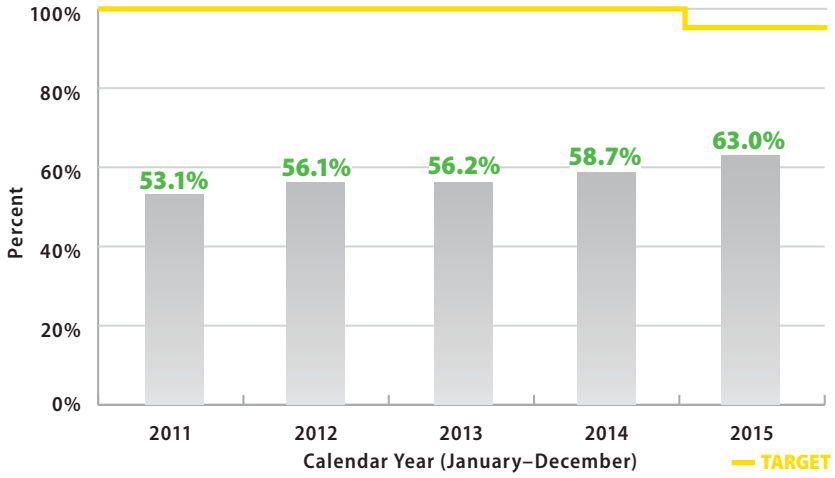
Preservation: State-owned rail line condition

Report Date: July 2016	**Data Frequency:** Annual (Calendar Year)	**Division:** Transportation Investment Management

Why is it important? The efficient movement of freight throughout the state enhances Wisconsin's economic productivity and competitiveness. It is critical to maintain train operating speeds as high as possible to optimize the daily movement of freight in the state.

Performance measure target: The department's goal is to have 95 percent of state-owned rail line miles functioning at Federal Rail Administration (FRA) Class 2 operating speed standards. The FRA Class 2 standards include tracks capable of operating loaded 286,000 pound rail cars above 10 miles per hour and not exceeding 25 miles per hour.

Figure: Percent of miles of state-owned rail line meeting FRA Class 2 standard (10–25 mph)



How do we measure it? The track is evaluated based on the percent of track miles operating at speeds allowed by the FRA's Class 2 Track Safety Standards. The percent of miles of rail line meeting the standard is calculated by dividing the amount of track meeting or exceeding FRA Class 2 standards by the total amount of state-owned rail lines.

How are we doing? There are approximately 718.22 miles of rail line owned by WisDOT. This includes approximately 12 miles of track from Plymouth to Sheboygan Falls and approximately eight miles of track from Fitchburg to Oregon, which were reactivated in 2015. In 2015, 55.33 miles were improved to meet FRA Class 2 standards through WisDOT funded projects and 12.05 miles of rail line deteriorated to below FRA Class 2 standards due to poor tie conditions. A total of 452.76 of the 718.22 miles of track (63.0 percent) met the department goal. This is a 43.28 mile increase from 2014 to 2015 in the number of miles that meet the standard.

What factors affect results? Variability in railroad infrastructure program funding levels affects the amount of track improvement projects that can be initiated in a particular program cycle. In addition, rail projects sometimes require more than one year to complete, creating the appearance of little progress in one year and substantial progress in the next. Another factor is that railroad project funds can be spent on rail bridge projects that do not affect this measure, but do improve overall rail system safety, speed, efficiency, and reliability. Funds may also be used for the acquisition of new rail lines to the system. Acquisition of new rail lines is focused on the continued preservation of short-line rail service needs statewide. While this supports economic development, it increases the total miles system-wide and reduces the proportion of available rail improvement project funding. Last, the overall state of the economy impacts the volume of goods transported by the railroads, the revenue it produces, and the reinvestment in railroad structures by the railroad companies.

What are we doing to improve? The department reviews the annual maintenance plans of companies operating on state-owned railroad track and discusses opportunities to upgrade rail track and structure conditions. The department's rail grant and loan program funds railroad infrastructure rehabilitation projects to improve track structure and increase operating speeds each year. Annual compliance inspections are done to ensure that railroads are properly maintaining state-owned rail lines. Due to ongoing investment in rail lines and enforcement of maintenance standards, the department expects this upward trend in the percent of miles meeting FRA's Class 2 operating standards to continue.

Wisconsin Department of Transportation

MAPSS Performance Improvement

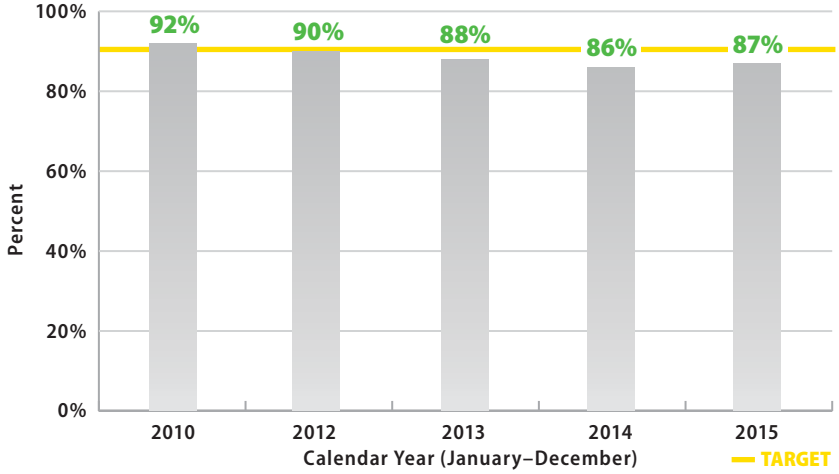
Preservation: Airport pavement condition

Report Date: July 2016 | **Data Frequency:** Annual (Calendar Year) | **Division:** Transportation Investment Management

Why is it important? Pavement condition ratings are a primary indicator of the long-term structural health of the state's airport system. The department evaluates pavement conditions at 98 publicly-owned airports in the State's Airport System Plan (SASP). This encompasses airports of all sizes including the state's largest, General Mitchell International Airport.

Performance measure target: The department's goal is to have 90 percent of airport pavement with a rating of fair or above as determined by airport classification and pavement function.

Figure: Percent of airport pavement rated fair or above



How do we measure it? The Pavement Condition Index (PCI) method is used for rating pavement condition based on visual signs of pavement distress, such as cracks, ruts and potholes. The PCI is a numerical rating that ranges from 0 to 100, with 100 being a pavement in excellent condition. Approximately one-third of the 98 SASP airports are inspected each year. The average is calculated and compiled for each calendar year and includes an assessment of all runways, taxiways and aprons at the 98 SASP airports. The measure includes an analysis of both runway and taxiway pavements, as well as aircraft parking aprons.

How are we doing? The previous four years have indicated a consistent decrease in the rating level falling from 92 in 2010 to 86 in 2014. This drop is primarily due to a change in the federal inspection procedure. Due to the department's inspection cycle spanning three years, with one-third of the airports inspected annually, the new methodology was not completely integrated until the end of 2014.

Results from 2015 indicate the declining trend may have reversed, showing an increase from 86 in 2014 to 87 in 2015. The one point increase is primarily the result of a significant increase in the PCI value for runway pavements, which increased from 86 in 2014 to 92 in 2015 and exceeded the target value. Taxiway pavements held steady at 86 while aircraft parking aprons slipped from 84 to 80.

What factors affect results? Airports are locally-owned and decisions regarding improvements are handled at the local level. Challenges are presented when a pavement is in need of rehabilitation but the airport owner has prioritized other projects. As high priority safety projects are completed, airports are again shifting their focus to pavement rehabilitation priorities. In addition, as runway pavement needs are met, WisDOT anticipates that taxiway and apron pavement rehabilitation will become a higher priority that will result in a rebound in the overall rating at or near the target level in the coming years.

What are we doing to improve? The department established minimum PCI levels that provide a threshold value for pavements according to use and airport classification. These thresholds provide the department and local authorities with the ability to prioritize projects and the capability to budget and program future pavement rehabilitation projects. The goal is to keep these pavements at or slightly above their minimum values when construction work actually occurs.

In order to encourage the local authorities to preserve proper pavement conditions, the airport must have pavements above the minimum PCI value before airports can receive federal or state aid for any other airport improvement project.

Wisconsin Department of Transportation

MAPSS Performance Improvement

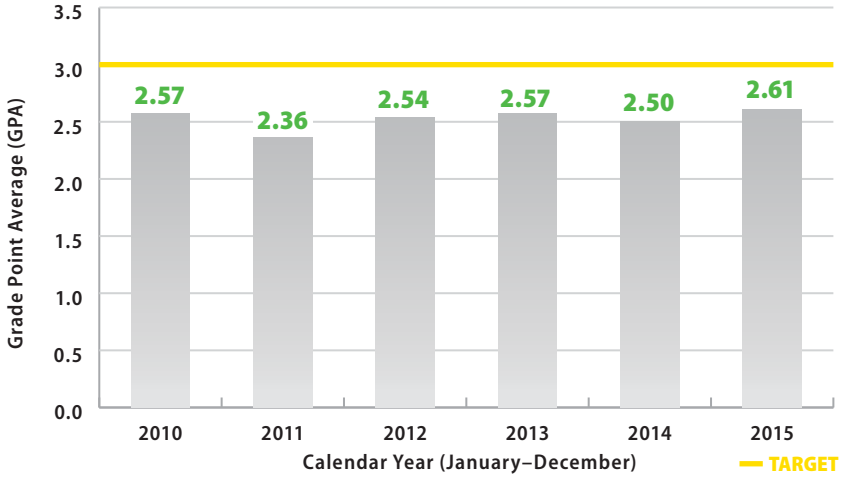
Preservation: State highway roadside maintenance

Report Date: July 2016 | **Data Frequency:** Annual (Calendar Year) | **Division:** Transportation System Development

Why is this important? Many factors affect the safety, efficient operation and longevity of our highway system. Effective and consistent maintenance efforts preserve our investment in the highway system, enhance economic productivity and minimize the impact to the natural environment.

Performance measure target: The department's goal is to maintain a 3.0 out of 4.0 grade point average (GPA) of 28 features evaluated including roadway shoulders, drainage features, roadside elements, and traffic control and safety devices.

Figure: Grade point average for the maintenance condition of state highway roadsides



How do we measure it? Condition data is collected each fall as part of a field review process. Rating teams composed of region maintenance coordinators and county patrol superintendents rate a random sample of 1,200 one-tenth mile segments around the state. The condition of elements such as warning signs, markings, shoulder and roadside litter are assessed and documented. Grading curves are established to help identify areas for improvement, such as reducing gravel shoulder drop-off, removing hazardous debris from shoulders, maintaining visible center line and edge line markings, and providing more visible, longer-lasting traffic signs.

How are we doing? Overall conditions improved slightly between 2014 and 2015. The statewide grade point average increased 0.11 in 2015, to its highest level in the last six years. Four features improved their condition one grade level (drop-off/build-up on paved shoulders, delineators, flumes, and potholes/raveling). Three of the four improved grades were the result of minor backlog changes, while one feature (flumes) had a significant improvement. However, one feature (routine replacement of regulatory/warning signs) fell a grade level as a result of a one percentage point change.

What factors affect results? The annual GPA is impacted by baseline conditions, maintenance budget levels and policies, winter maintenance costs and improvement program investments. The highway maintenance condition largely depends on funding from routine maintenance agreements and improvement projects. The department's first priority is snow and ice removal while the balance is spent on non-winter activities. Historically, about three-quarter of maintenance dollars are programmed to winter, pavement and structure maintenance activities, with the balance used on system needs associated with the 28 Compass features.

What are we doing to improve? The department is employing innovative strategies to address the backlog of maintenance needs created by the previous shortfall in funding. These approaches include leveraging the improvement program, focusing on cost efficient delivery of winter maintenance services, improved reporting of Compass results to the regions, and linking targets to county routine maintenance agreement activities. A $50 million appropriation increase went into effect in fiscal year 2015 and increased the routine maintenance base program to $170 million annually. At this higher level, the department can effectively respond to annual variability in winter maintenance cost demands while sustaining a viable annual level of financial commitment to non-winter routine maintenance demands. In addition, alternate contracting methods and broader-based delivery options are being piloted to test enhancements to the long standing county-based routine maintenance delivery model. Efficiency gains from these pilot efforts along with additional funding over time will be necessary to meet the 3.0 target GPA. It is estimated it will take three to five years of investment at current levels to see a sustained impact on the Compass GPA results. The 2015 condition data represents only the second year of increased maintenance funding at the $170 million level.

Wisconsin Department of Transportation

MAPSS Performance Improvement

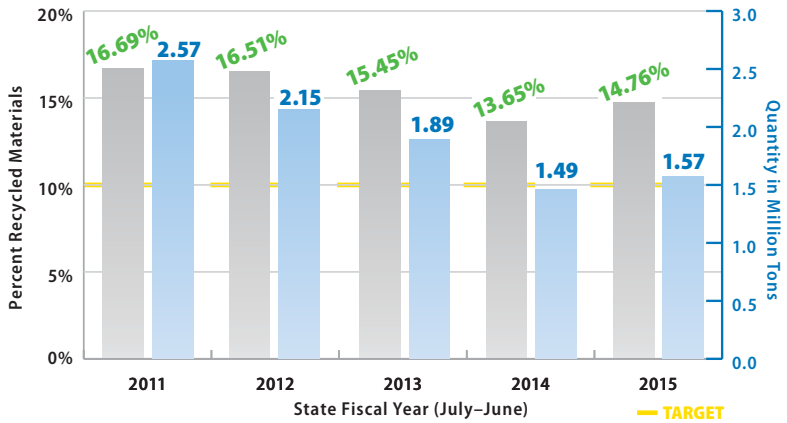
Preservation: Material recycling

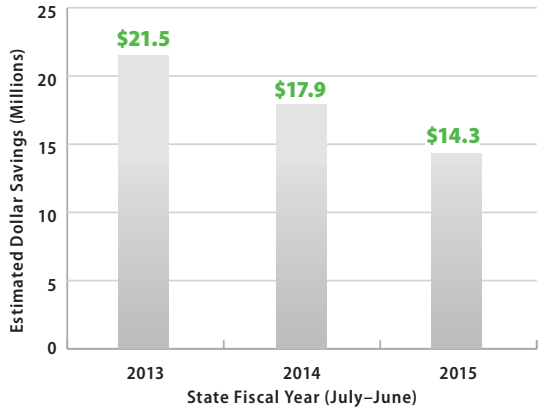
Report Date: July 2016 | **Data Frequency:** Annual (State Fiscal Year) | **Division:** Transportation System Development

Why is it important? The department strives to incorporate environmental sustainability or green initiatives in its vision for providing a safe and efficient transportation system. This includes incorporating the use of recycled materials in improvement projects to lessen the impact on Wisconsin's environment and to preserve resources for future generations.

Performance measure target: The department's goal is to make sure recycled materials are incorporated into projects. The goal based on the new measuring methodology is to have 10 percent of virgin materials replaced with recycled materials in construction projects.

Figures: Recycled materials used in pavement and bridge construction





How do we measure it? Recycled material quantities are calculated based on the total tonnage of construction bid items where recycled materials are commonly used. Steel that is extracted and recycled by the construction contractor is also included in the total tonnage. The use of recycled materials is measured by the percentage of virgin material replacement in some key construction materials.

How are we doing? The department remains committed to conserving resources, minimizing waste, keeping materials out of landfills and avoiding Greenhouse Gas emissions. Each year the size and types of projects in the Improvement Program dictate the amount of recycled materials eligible to be used in projects. In 2011, the department achieved an unusually high level of recycled materials use due to the number and type of projects that year. Almost all projects incorporate recycled materials, the largest type being recycled concrete followed by reclaimed asphaltic pavement in hot mix asphalt and base course. For every ton of fly ash that has been used to replace a ton of Portland cement, the department saves one ton of CO_2 and one million British thermal units (BTUs) of energy. The department leverages opportunities, when possible, to utilize recycled materials. An example was the use of bottom ash, from a nearby previously landfilled ash waste, in the I-94 project.

What factors affect results? The department wants to encourage the use of recycled materials and has written project specifications to allow recycled materials. Ultimately, the contractor makes the decision on the materials to use based on market conditions. The economy, fuel costs and landfill tipping fees affect the cost effectiveness and attractiveness of recycling.

What are we doing to improve? The department continues to work with other states at a national level and with universities to develop new technologies and methods to incorporate not only greater amounts of recycled material but also new recycled materials. These efforts have yielded significant results in the past in the form of new materials being recycled and greater amounts of the material currently being used. We are also working with UW-Madison and the Recycled Materials Resource Center (RMRC) to improve how we track the use of recycled materials on a project level. RMRC is also working on a web-based tool to identify waste material supplies that are available for use by contractors. By reporting the use of recycled materials by percentage of the product being placed, we will be able to better track usage based on design and material policies.

Wisconsin Department of Transportation
MAPSS Performance Improvement

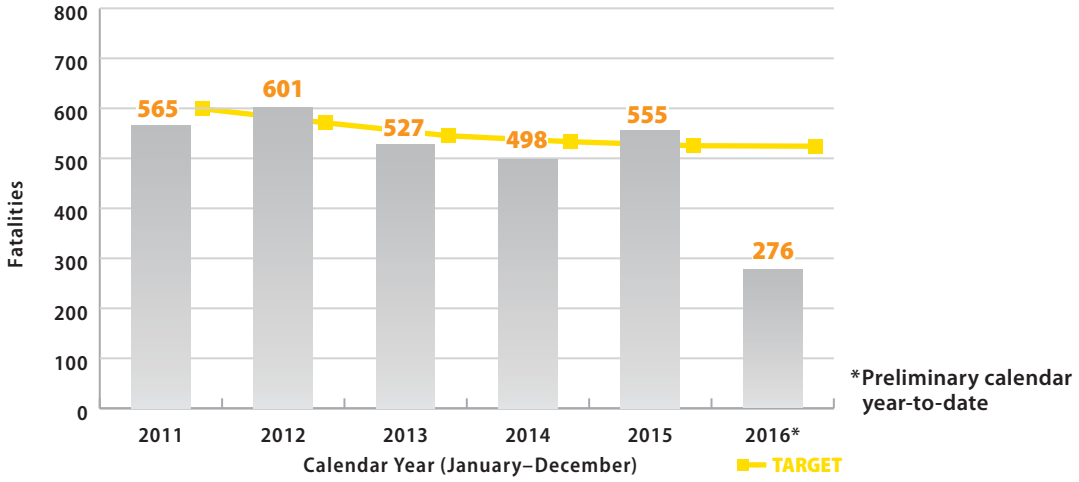
Safety: Traffic fatalities

Report Date: July 2016 | **Data Frequency:** Quarterly (Calendar Year) | **Division:** State Patrol

Why is this important? Any preventable traffic death on Wisconsin's roadways is one too many. Each fatality is a tragedy—a person who will not be returning home.

Performance measure target: For each calendar year, the department seeks to reduce traffic fatalities by five percent from the prior five-year rolling average. This supports the department's over-arching safety goal of zero deaths on Wisconsin roads (Zero in Wisconsin).

Figure: Number of traffic fatalities



How do we measure it? The measure uses traffic fatality data collected through the national Fatality Analysis Reporting System (FARS). The information is not considered final until approximately June of the following year as data is reported late or needs verification.

How are we doing? Wisconsin has experienced a dramatic reduction in traffic fatalities on its roads in recent years but a rise has occurred in 2015 and 2016. In 2015, there were 555 traffic fatalities in Wisconsin, which is 11.4 percent more than in 2014. As of June 30, 2016, Wisconsin has had 276 fatalities, which is 9.9 percent more than last year for the second quarter. Even though Wisconsin has had 52 fatality-free days in 2016 (the five-year second quarter average is 59), there are still far too many needless and preventable deaths on our roadways. In many instances, drivers and passengers have been ejected from the vehicle because they were not wearing safety belts. Wearing a safety belt is the single most effective way to prevent ejection or being violently thrown around inside the vehicle during a crash. Wisconsin's fatality rate for 2014 was 0.83 per 100 million vehicle miles traveled (VMT), which is the lowest recorded.

What factors affect results? Traffic crashes are avoidable events caused by such factors as human behavior, vehicle condition and environmental surroundings. Weather can also have a seasonal impact, especially on motorcycle or bicycle-related fatalities. The largest factor and most difficult to change is the risk-taking behavior of drivers and tolerance of the public toward risky behavior.

What are we doing to improve? The department uses a combined strategy of engineering, education, enforcement and emergency response to prevent traffic fatalities, including designing safer roads and maintaining the highway infrastructure. The department has expanded the use of multi-jurisdictional High Visibility Enforcement task forces around the state to address impaired driving, speed, pedestrian safety and safety belt use. Speed and aggressive driving are targeted through increased use of aerial enforcement in partnership with agencies across the state. The department provides ongoing educational outreach to high school students to promote safe driving, use of safety belts and eliminating driving distractions. Centerline and shoulder rumble strips have been installed along with other roadway improvements in corridors with safety concerns.

Wisconsin Department of Transportation

MAPSS Performance Improvement

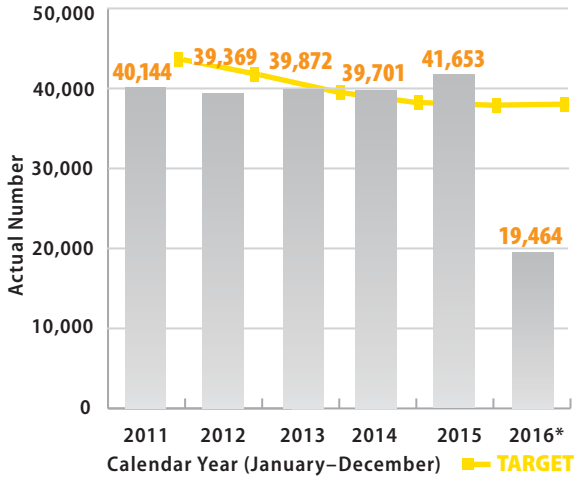
Safety: Traffic injuries

Report Date: July 2016 | **Data Frequency:** Annual (Calendar Year) | **Division:** State Patrol

Why is this important? Each traffic crash potentially creates loss of life, debilitating injuries or lost income and productivity for crash victims. Any preventable traffic death or incapacitating injury is one too many.

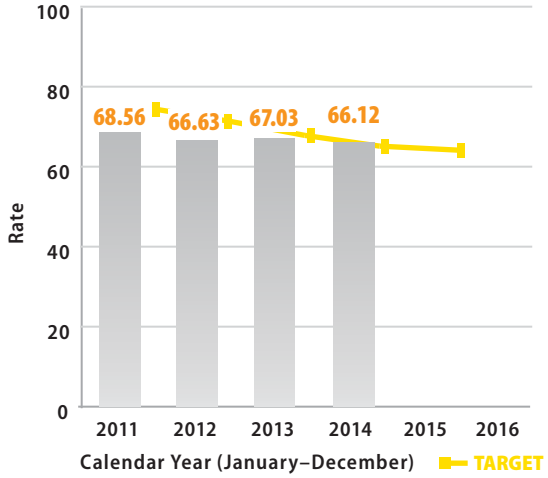
Performance measure target: The goal of this measure is to reduce the number of personal injuries from traffic crashes by five percent from the prior five-year rolling average.

Figure 1: Total number of injuries



*Preliminary calendar year-to-date. The final rate for 2015 will be available in October 2016.

Figure 2: Injury rate per 100 million vehicle miles traveled



How do we measure it? The measure uses traffic injury data compiled from all traffic crash reports submitted by Wisconsin law enforcement agencies. Injuries related to vehicle crashes are calculated against vehicle miles traveled each calendar year to generate an injury rate per 100 million vehicle miles traveled. Prior year volume data used to calculate this rate is available by September of the subsequent year.

How are we doing? The number of traffic injuries in 2016 is 19,464, 1.5 percent above last year at this time and 4.1 percent above the five-year average for the second quarter. When calculated against vehicle miles traveled, the personal injury rate in Wisconsin in 2014 was 66.12 personal injuries per 100 million vehicle miles traveled. This is 3.5 percent below the prior five-year rolling average of 68.51. Serious injury crashes (those that result in incapacitating injuries) have declined from 3,990 in 2007 to 2,499 in 2015. There have been 1,059 serious injury crashes on Wisconsin roads in 2016 as of June 30, 2016 (preliminary), which is down from 1,126 (6.0 percent) in 2015.

What factors affect results? Traffic crashes are avoidable events caused by such factors as human behavior, vehicle condition and environmental surroundings. Weather can also have a seasonal impact, especially on motorcycle or bicycle-related crashes. For motorcyclists and bicyclists, the use of proper safety gear can reduce severity of personal injuries. Wearing a seat belt while in a car or truck is the single most effective way to reduce or eliminate injury in a crash. Safety and road design improvements and tougher laws can have a positive impact on crash frequency. In addition, the severity of injuries in crashes can be lessened through rapid and high-quality emergency medical response.

What are we doing to improve? The department uses a combined strategy of engineering, education, enforcement and emergency response to prevent traffic crashes and injuries, including designing safer roads and maintaining the highway infrastructure. In addition, the department has expanded the number of multi-jurisdictional High Visibility Enforcement task forces to address impaired driving, speed, pedestrian safety and safety belt use. The department is targeting speed and aggressive driving through increased use of aerial enforcement and in partnership with agencies across the state. The department provides ongoing educational outreach to high school students to promote safe driving, use of safety belts and eliminating driving distractions, such as texting. The department has installed center line and shoulder rumble strips and other roadway improvements in corridors with safety concerns.

Wisconsin Department of Transportation

MAPSS Performance Improvement

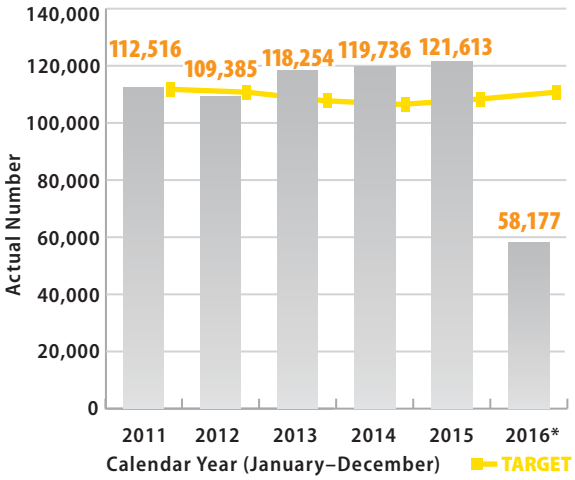
Safety: Traffic crashes

Report Date: July 2016 | **Data Frequency:** Annual (Calendar Year) | **Division:** State Patrol

Why is this important? Each crash potentially creates loss of life, debilitating injuries or lost income and productivity for crash victims. Crashes on the road system also impact traffic flow and the timely movement of goods and people to their destinations.

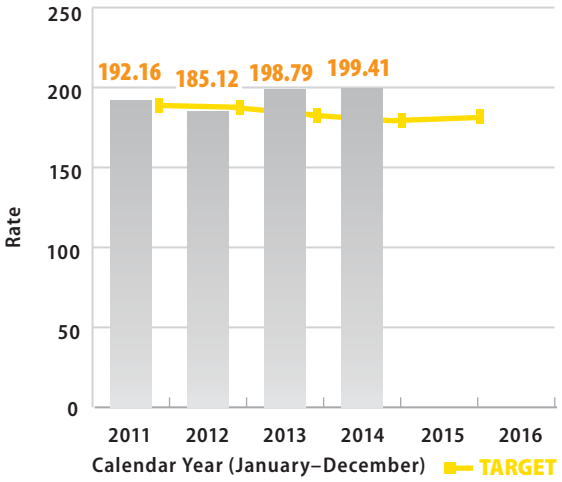
Performance measure target: The goal of this measure is to reduce traffic crashes on Wisconsin roads by five percent from the prior five-year rolling average.

Figure 1: Total number of crashes



*Preliminary calendar year-to-date. The final rate for 2015 will be available in October 2016.

Figure 2: Crash rate per 100 million vehicle miles traveled



How do we measure it? The measure uses traffic crash data compiled from all traffic crash reports submitted by Wisconsin law enforcement agencies. In order to calculate the annual crash rate, the total number of crashes is divided by the number of vehicle miles traveled (in hundreds of millions). Prior year volume data used to calculate this rate is available by September of the subsequent year.

How are we doing? As of June 30, 2016, the number of second quarter traffic crashes on Wisconsin roads was 58,177. This is 0.3 percent above last year and 4.6 percent above the five-year average for the second quarter. The crash rate in 2014 increased from the rate in 2013. The crash rate of 183.12 in 2010 was the lowest rate recorded since 1944. In calendar year 2014, there were 119,736 total crashes (fatal crashes, injury crashes and property damage crashes) on Wisconsin roads. When calculated against vehicle miles traveled in 2014, the crash rate was 199.41 crashes per 100 million vehicle miles traveled. This is 5.1 percent above the prior five-year rolling average of 189.66.

What factors affect results? Traffic crashes are avoidable events caused by such factors as human behavior, vehicle condition and environmental surroundings. Weather can also have a seasonal impact, especially on motorcycle or bicycle-related crashes.

What are we doing to improve? The department uses a combined strategy of engineering, education, enforcement and emergency response to prevent traffic crashes and injuries. This includes designing safer roads, maintaining the highway infrastructure, educational efforts targeted on prevention, and expanding enforcement campaigns in partnership with law enforcement agencies across the state. The department works to encourage drivers to stay within the speed limit, drive sober, buckle their safety belts and eliminate driving distractions.

Wisconsin Department of Transportation

MAPSS Performance Improvement

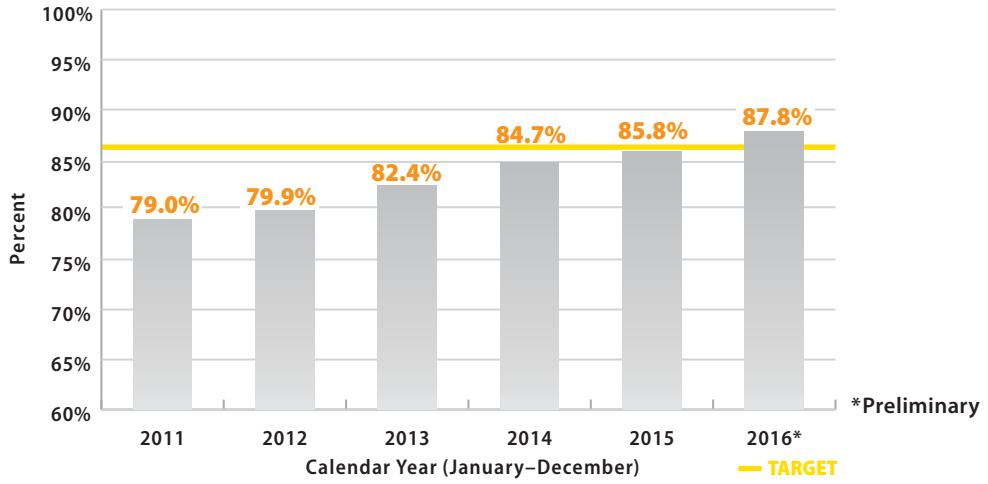
Safety: Safety belt use

Report Date: July 2016	**Data Frequency:** Annual (Calendar Year)	**Division:** State Patrol

Why is this important? Wearing safety belts saves lives. Buckling a safety belt every time, on every trip, decreases the risk of being ejected or thrown about the vehicle in the event of a crash. In Wisconsin, a 10 percent increase in safety belt use would save about 44 lives and prevent 650 injuries each year. More than 50 percent of all passenger vehicle occupant fatalities in Wisconsin are unbelted. Motorists who do not use safety equipment are 12.3 times more likely to be killed than someone wearing a shoulder and lap belt at the time of a crash. The likelihood of surviving a crash, and possibly avoiding debilitating injuries, can be increased by the simple task of buckling a safety belt.

Performance measure target: The goal of this measure is to increase safety belt use to 86 percent for all passenger vehicle occupants by 2016.

Figure: Percent of vehicle occupants wearing a safety belt



How do we measure it? Using guidelines developed by the National Highway Traffic Safety Administration (NHTSA), the department conducts an annual seat belt use survey in conjunction with the annual Click It or Ticket seat belt enforcement mobilization conducted each spring. The survey data presents a statistically representative sample of the percentage of safety belt use in Wisconsin.

How are we doing? Safety belt use reached 87.8 (preliminary) percent in 2016, an all-time high for safety belt usage in Wisconsin. That means that approximately one in seven motorists is still not buckling up—putting themselves and others at risk of serious injury or death in the event of a crash. Wisconsin is approaching the 88.5 percent national average for safety belt use but still lags behind the safety belt use of neighboring states like Illinois and Michigan, which estimate safety belt use rates of more than 90 percent.

What factors affect results? Human behavior is the most important factor that affects safety belt use results. Consistent safety belt use saves lives and motorists need to be proactive in buckling their safety belts every time, on every trip, to promote their safety and the safety of others. Safety belt use is a law in the state of Wisconsin. Since 2009, it is a primary enforcement law, which means law enforcement officers can pull over and cite a motorist for not wearing a safety belt.

What are we doing to improve? Increased safety belt use is a major component of Wisconsin's Zero in Wisconsin message. The department promotes safety belt use through education and enforcement. The nationwide Click It or Ticket effort, in conjunction with NHTSA, utilizes paid advertising and enforcement to promote public awareness. Much of the educational efforts are targeted at younger drivers whose safety belt use is much lower than other age groups. The department also supports car seat fitting stations to ensure that parents and providers are instructed on how to properly install child car seats and booster seats to keep small children safe in vehicles and training instructors on safety seat installment. By buckling their safety belt every time they get in a vehicle, motorists ensure their own personal safety, as well as the safety of passengers.

Wisconsin Department of Transportation

MAPSS Performance Improvement

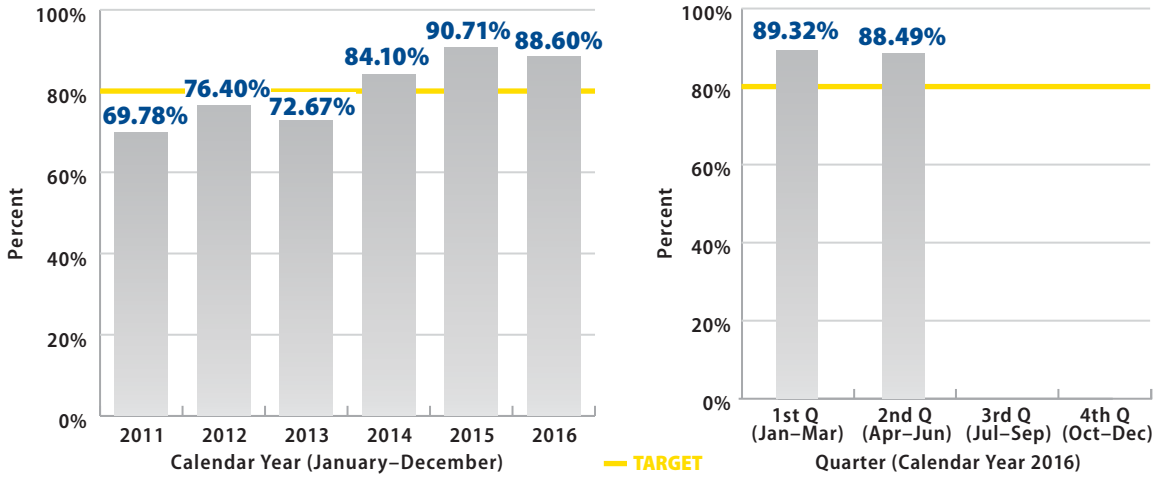
Service: DMV wait times

Report Date: July 2016 | **Data Frequency:** Quarterly (Calendar Year) | **Division:** Motor Vehicles

Why is it important? For many customers, their primary contact with the department is through the Division of Motor Vehicles (DMV). While most DMV services do not require an in-person visit to a customer service center, the DMV service centers still experience large volumes of customers (more than two million transactions occur at offices each year). The DMV's goal is that customers receive quality service within a reasonable amount of time.

Performance measure target: The goal of this measure is to serve 80 percent of customers within 20 minutes of their arrival at a DMV customer service center.

Figure: Percent of DMV service center customers served within 20 minutes



How do we measure it? The measure counts all recorded wait times at the 92 Customer Service Centers and calculates the percent of customers who waited 20 minutes or less. This includes all customers who visit the 30 five-day stations and any customer seeking a product that requires a photo at the remaining 62 locations. The DMV's 30 five-day offices serve approximately 90 percent of customers.

How are we doing? The DMV has maintained the 2015 monthly trend of service levels near 90 percent, well over the 80 percent target. We continue to use projection models to balance customer service with work share completed in customer service centers. This allows us to improve internal processing metrics in conjunction with maintaining these high levels of service.

What factors affect results? Factors affecting this measure are staff vacancies and absences, computer system reliability and the day of the week/month (demand for services varies). The availability of self-service options, by phone and on-line, also affect the demand for counter service.

What are we doing to improve? DMV expanded vehicle services to 20-hour locations and has begun offering additional Saturday hours around the state. Expanding our service hours for our customers should improve this measure by spreading customer demand and reducing peak demand. Additionally, DMV has begun work that would give customers the ability to make appointments as well as complete and submit applications electronically prior to arriving at a service center. This will allow DMV to better allocate resources to meet demand and decrease transaction time.

Wisconsin Department of Transportation

MAPSS Performance Improvement

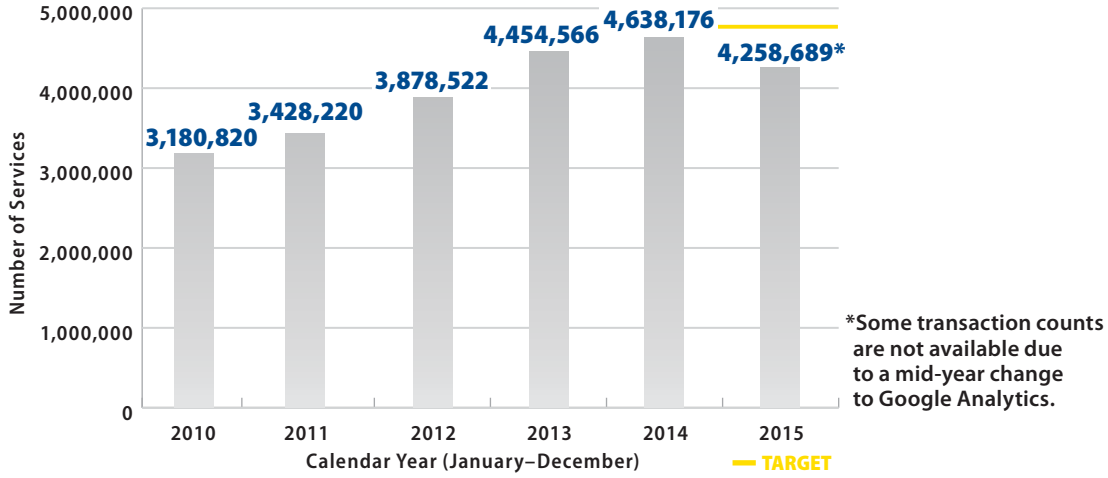
Service: DMV electronic services

Report Date: July 2016 | **Data Frequency:** Annual (Calendar Year) | **Division:** Motor Vehicles

Why is it important? The goal of this measure is to increase the number of customer performed electronic transactions by two percent each calendar year. This will further DMV's efforts of shifting from manual work by DMV staff to providing customer self-service options through automation. Using technology to improve the quality and decrease the cost of services has and will continue to be a priority for DMV.

Performance measure target: The goal of this measure is to increase the number of services that are provided electronically by two percent each calendar year (4.54 million in 2014). Our goal is also to represent a shift from manual work by DMV staff to self-serve through automation.

Figure: Total electronic services performed by customers



How do we measure it? The measure is a count of all electronic customer transactions performed annually.

How are we doing? Many new higher-volume online systems were implemented between 2012 and 2014, which had a direct impact on the increased use of DMV electronic services. With fewer new online implementations in 2015, the use of electronic services held steady with 2014 levels.

What factors affect results? The total number of DMV interactions with customers varies from year to year for a variety of reasons: changes to the economy, the length of specific products (e.g., some registrations are biennial rather than annual), and changes in laws that can alter demand for particular services. Typically, DMV responds to more than 6.5 million requests for service in-person and electronically annually.

What are we doing to improve? The department continues to create new electronic services and encourages users to complete transactions online. Public awareness campaigns and expanded use of social media have helped to publicize the availability of DMV's electronic service options.

Wisconsin Department of Transportation

MAPSS Performance Improvement

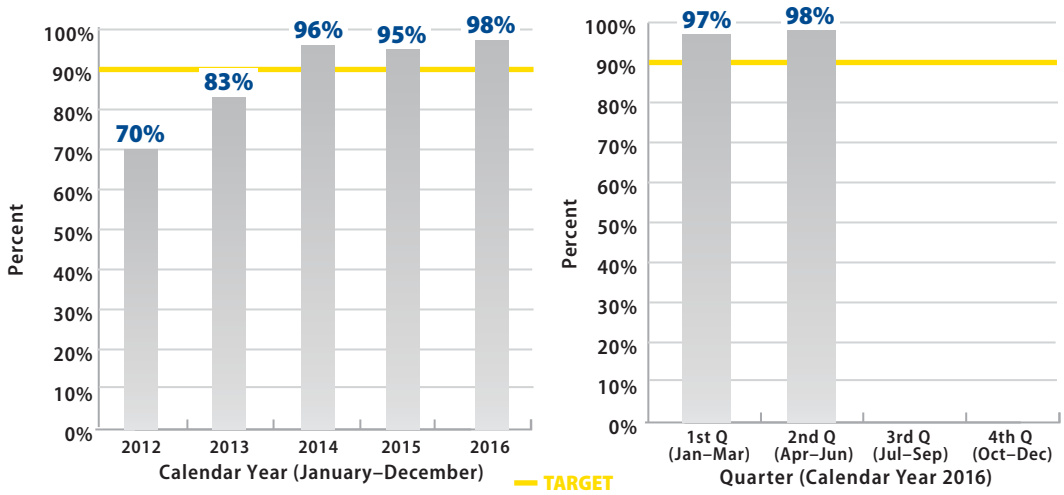
Service: DMV driver license road test scheduling

Report Date: July 2016 | **Data Frequency:** Quarterly (Calendar Year) | **Division:** Motor Vehicles

Why is it important? Customers who are eligible to schedule a Class D skills test should be able to find adequate appointment slots available at the same location the instruction permit was processed. A lack of local availability upon eligibility creates an inconvenience for customers who must travel great distances to take a road test or delay scheduling.

Performance measure target: To have enough Class D skills tests available to meet 90 percent of the estimated demand four weeks before the customer's eligibility date.

Figure: Percent of DMV road test demand met four weeks in advance



How do we measure it? Applicants under the age of 18 must hold their instruction permit for six months before they are eligible to take a road skills test. By looking at the number of Class D Instruction Permits issued to customers under the age of 18 each week at each DMV office, and applying a multiplier to account for adult permits as well as a statewide fail rate, the DMV is able to estimate the demand for road skills tests needed at each office six months into the future. Four weeks before the actual testing week, the DMV compares the number of scheduled and available tests to the estimated demand, and calculates the demand that is not served at each DMV office and the total statewide demand not being met. The weekly data is then combined for the monthly report. If a DMV office offers more tests than the estimated demand, this is not counted toward meeting another office's demand.

How are we doing? The DMV is on track to continue the annual trend of achieving 90 percent or higher service levels that began in 2014. This is largely due to using improved projection models to better estimate our customers' needs.

What factors affect results? While there are prerequisites for scheduling a Class D skills test, it is ultimately up to the customer to schedule their test at the location and date that best meet their needs. Some customers hold a permit beyond the minimum requirement, and some customers feel more comfortable taking a test in one location over another. These personal preferences cannot be accounted for in the established goals.

What are we doing to improve? Used as a leading indicator to allocate staff resources, DMV continues to explore ways to use this measure to make informed resourcing decisions. With projections available six months in advance, DMV ties this information to the availability of time off and adjusts resources as needed (temporarily or permanently) to respond to weekly fluctuations in estimated demand levels. Management follows up with offices not meeting the goals to ensure the estimated demand levels are understood and to identify circumstances that influence performance.

Wisconsin Department of Transportation

MAPSS Performance Improvement

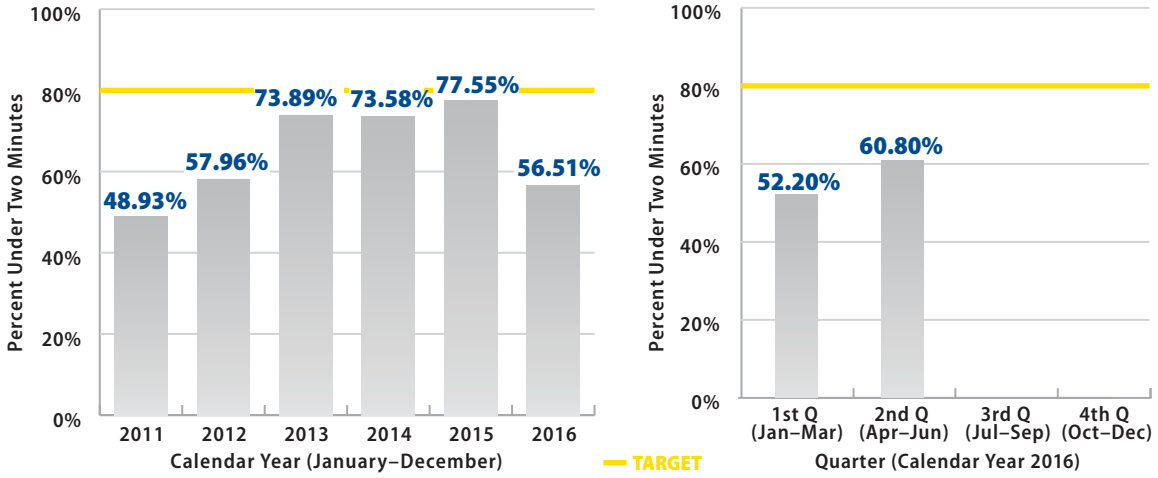
Service: DMV phone service

Report Date: July 2016 | **Data Frequency:** Quarterly (Calendar Year) | **Division:** Motor Vehicles

Why is it important? In addition to approximately two million customers served in person each year at our service centers, the department's Division of Motor Vehicles (DMV) also receives an average of 1.11 million phone calls each year from individuals, business partners and other governmental entities. These calls range in complexity from a simple request for a service center location to questions about Commercial Driver License (CDL) eligibility requirements. Although phone customers are not physically waiting in line, they deserve timely service.

Performance measure target: The DMV's performance target is to answer 80 percent of all the calls offered within two minutes wait time.

Figure: Percent of DMV phone wait times within two minutes



How do we measure it? Each week, the DMV counts the total number of calls offered to representatives and calculate the percent that waited two minutes or less before speaking with a representative. Calls abandoned or blocked due to a busy signal are considered to have waited longer than two minutes.

How are we doing? The DMV was not able to meet the service level target for the first two quarters of 2016. This follows the trend of low service levels for the fourth quarter of 2015 and is likely due to phone unit vacancies and new legislative requirements.

What factors affect results? These include the number of representatives answering phones, the number of calls, the length of time a representative is on the phone with a customer (a product of the complexity of the call), and the representative's knowledge and skills.

What are we doing to improve? By expanding online services and improving the information available on the department's website, DMV can reduce the number of calls. The DMV is also evaluating data to help identify best practices across the division's phone units and make informed decisions regarding staffing, performance management and unit structures.

Wisconsin Department of Transportation

MAPSS Performance Improvement

Appendix A:

Additional performance measures

Mobility

Accountability

Preservation

Safety

Air support unit deployments for traffic enforcement 31

Service

Wisconsin Department of Transportation

MAPSS Performance Improvement

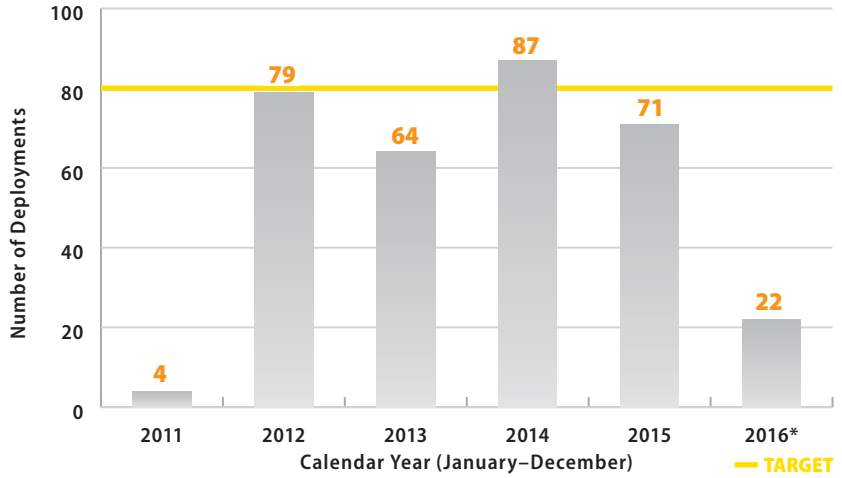
Safety: Air support unit deployments for traffic enforcement

Report Date: July 2016 | **Data Frequency:** Quarterly (Calendar Year) | **Division:** State Patrol

Why is this important? Speed continues to be a contributing factor in approximately 30 percent of traffic fatalities in Wisconsin. Speed is also believed to be under reported in crash reports. Using a consistent air enforcement presence through the Division of State Patrol's (DSP) Air Support Unit (ASU), along with dedicated law enforcement vehicles, is an effective method of enforcing speed and aggressive driving. Ensuring ASU is used periodically on traffic corridors helps law enforcement agencies conduct high visibility enforcement efforts and provides a deterrent effect even when air support is not present. In 2016, WisDOT will evaluate and report out on results of research into the impact of aerial speed enforcement on selected corridors.

Performance measure target: The goal of this measure is to increase the number of ASU traffic enforcement deployments to 80 in 2016. DSP anticipates the number of ASU deployments to eventually level off into maintenance of effort mode. Depending upon the number of law enforcement cars participating in deployments, DSP considers six to eight traffic stops per hour as optimal performance. Each traffic stop does not necessarily lead to a citation.

Figure: Air support unit deployments for traffic enforcement



*Preliminary calendar year-to-date.

How do we measure it? The ASU will document the number of deployments to assist law enforcement agencies with enforcing speed and aggressive driving laws. As part of each deployment, law enforcement agencies will also report the number of contacts they have with motorists.

How are we doing? There are multiple uses for state planes that impact how often the planes are available for traffic enforcement, including: surveillance for criminal investigations, photo flights to document a scene for evidentiary purposes, search missions, construction work zone enforcement, and use by other agencies such as the Department of Natural Resources (DNR). With the previous limited use of the ASU, the state had lacked an important tool to enforce speed and aggressive driving laws while seeking to change driver behavior through consistent presence offered by the ASU with ground support. There were 22 ASU deployments in 2016, which resulted in an average of 6.46 stops per hour.

What factors affect results? There are multiple mission options in WisDOT and DNR that may limit the number of flights made for traffic enforcement. Funding constraints may also limit the number of aerial enforcement deployments. Weather is an unpredictable factor that can scuttle deployments. Finally, the availability of a trained flight crew can be a limiting factor.

What are we doing to improve? Considering how effective aerial enforcement can be as a law enforcement tool, WisDOT has recommitted to planning and funding additional ASU deployments. DSP has dedicated additional federal funds to deployments in cooperation with local law enforcement agencies on high-volume corridors and is looking for ways to attract trained pilots. Consistent deployment of the ASU, along with a highly visible law enforcement presence on the ground, will encourage drivers to stay within speed limits, curb aggressive driving, provide safer work zones and prevent crashes.

Mission

Provide leadership in the development and operation of a safe and efficient transportation system.

Vision

Dedicated people creating transportation solutions through innovation and exceptional service.

Wisconsin Department of Transportation

Values

Accountability
Being individually and collectively responsible for the impact of our actions on resources, the people we serve, and each other.

Attitude
Being positive, supportive and proactive in our words and actions.

Communication
Creating a culture in which people listen and information is shared openly, clearly, and timely—both internally and externally.

Excellence
Providing quality products and services that exceed our customers' expectations by being professional and the best in all we do.

Improvement
Finding innovative and visionary ways to provide better products and services and measure our success.

Integrity
Building trust and confidence in all our relationships through honesty, commitment and the courage to do what is right.

Respect
Creating a culture where we recognize and value the uniqueness of all our customers and each member of our diverse organization through tolerance, compassion, care and courtesy to all.

Teamwork
Creating lasting partnerships and working together to achieve mutual goals.

MAPSS
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Accountability
Preservation
Safety
Service

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