



WASHINGTON COUNTY HIGHWAY DEPARTMENT

2013 ANNUAL REPORT

Transportation Committee

Daniel Goetz, Chairman

Kenneth Brandt, Vice-Chairman

Joseph Gonnering, Secretary

Melvin Ewert

Brian Krebs

Thomas A. Wondra

Highway Commissioner

Submitted: December 5, 2013

MISSION STATEMENT

The citizens of Washington County are provided a safe and efficient highway system throughout the county as well as a safe, clean, reliable, accessible, and cost effective public transit system as an alternate to the use of privately owned vehicles.

INTRODUCTION

The Washington County Highway Department maintains a proud tradition of providing exceptional winter service to the citizens of Washington County while also providing preventative road maintenance to protect our infrastructure investments.

While striving to balance the multimodal transportation needs of the public with a fiscally prudent Highway Department, Washington County has been able to maintain a high level of service for all citizens.

I am proud of the work performed by the Highway Department in 2013.

HIGHWAY DEPARTMENT OVERVIEW

Washington County's Highway Department is responsible for two distinct branches of Transportation. First, the Highway Department's primary responsibility is to ensure the quality of County Highways through construction and maintenance activities. Secondly, Transit Services, as a division of the Highway Department, is responsible for management of alternative transportation options including the Washington County Commuter Express (WCCE) and Shared Ride Taxi.

The Highway Department is comprised of forty-nine personnel, and headed by the Highway Commissioner. Directly serving under the Highway Commissioner are the following:

- Assistant Highway Commissioner
- Transit Manager
- Project Technician
- Accounting Technician
- West Bend Patrol Superintendent
- Slinger Patrol Superintendent
- Shop Superintendant

The remainder of our personnel are employed as follows:

- West Bend Foremen
- Slinger Foreman
- Mechanic Foreman
- (35) Highway Patrolmen
- (3) Mechanics

County Supervisor oversight is provided by the Transportation Committee, consisting of:

- Dan Goetz, Chairman
- Ken Brandt, Vice Chairman
- Joe Gonnering, Secretary
- Mel Ewert
- Brian Krebs

The Transportation Committee meets bi-weekly (Typically 1st and 3rd Tuesdays) throughout the year to guide the Highway Department, provide fiscal oversight, and approve various permitting and construction-related projects or purchases.

STANDARD OPERATIONS

The Washington County Highway Department is responsible for the maintenance and construction of approximately 450 lane miles of County Trunk Highway (CTH) and the maintenance of approximately 650 lane miles of State Trunk Highway (STH). Maintenance activities are performed throughout the year, but are seasonally based.

Winter operations mostly entail snow and ice management, such as snow plowing during a snow event, salting during melting/freezing periods, snow clearing to re-establish full-width shoulders, maintaining safe vision corners, and snow removal from bridges, intersections and park and ride lots. The Highway Patrolmen also perform safety appurtenances (mostly guardrail) repairs throughout the winter season. The Highway Department works with local law enforcement agencies to ensure this work is paid for by the individuals who damage the appurtenances. Additionally, the Highway Patrolmen perform tree cutting along the right-of-way (ROW) for the upcoming construction season and to improve vision and remove potential roadside obstacles for safety.

Spring operations focus on roadway maintenance to repair damage sustained during the winter season and the preparation of roadways scheduled for construction in the summer. Another focus is right-of-way management including mowing operations, trash pick-up, and brush cutting.

Summer operations continue roadway repairs, but the focus turns toward larger projects. These projects include select construction operations on County, State or Local roadways. The Highway Department also begins the regular maintenance tasks required to preserve the infrastructure. Typically, this involves crack-filling and sealcoating select highways, ditch cleaning, culvert replacement, pavement marking, traffic sign maintenance, shoulder repair, bridge maintenance, pavement repairs, tree removal, and installing or repairing guard rail.

Fall operations consist mostly of roadway and ROW maintenance work including grading shoulders, but also include installation of snow fence and preparation of plows and salt sheds. Dependent on the weather, the Highway Department will also start preparing for the next construction season with additional culvert replacements, ditch cleaning and any other required tasks.

Additionally, maintenance of traffic control signage and enforcement of the Washington County Access Control Policy are on-going activities that continue throughout the year. We are continuing our efforts to make sure all of our traffic control devices are in compliance with requirements of the Manual on Uniform Traffic Control Devices (MUTCD). Enforcement of the Washington County Access Control Policy maintains the level of safety and traffic carrying capacity of the highway system while still adequately serving the property access needs of landowners.

While providing management for the above referenced services, the Highway Commissioner is also responsible for communications with County Supervisors, residents, local business leaders, local engineering, public works and political contacts. The focus is given to maintaining timely correspondence and ensuring an open line of communication.

Other on-going responsibilities are long range planning and providing proper training for field and office personnel. Planning involves internal operations such as updating our Pavement Surface and Evaluation Rating (PASER) Pavement Rating System, Six-Year Highway Improvement Program, and Highway Equipment Replacement Program.

We also review the Washington County Jurisdictional Plan adopted by the County Board in 2008 to continue our efforts toward a cooperative relationship with the Wisconsin Department of Transportation (WisDOT) and local municipalities on proper roadway planning.

Training is an important tool for office and field staff to continue seeking increased efficiencies and effectiveness in our office-related and maintenance operations.

Finally, the Highway Department also acts as the local manager of the WisDOT's Local Road Improvement Program (LRIP) within Washington County. Bi-annually LRIP distributes state and federal funding to the County, Cities & Villages, and Towns.

Our Highway operations for County roadways are funded by the County in the form of County Levy, County Sales Tax, and through the State with General Transportation Aids (GTA). These funds are utilized for the reconstruction of our highways through competitive bidding and maintenance of the County highways by our Department. The Wisconsin Department of Transportation also utilizes the Highway Department to perform maintenance on state roads through a Routine Maintenance Agreement (RMA). Based upon the RMA and with direction from WisDOT staff, the County performs general maintenance and snow plowing along all State Highways, and invoices the State for any work performed.

Washington County Highway Department also offers some maintenance services to local municipalities when it is cost effective to do so. This cooperation among jurisdictions allows Washington County to maintain our services while providing local municipalities with cost saving opportunities for work performed throughout Washington County. While this accounts for less than five-percent of the Highway Department revenue, the services and emergency response times can be invaluable to the local municipalities.

Another key in our operations is the dependability of our equipment, especially our snow plows which operate the majority of the winter coated in salt. Therefore, maintenance and responsible turnover of our equipment is a top priority. All equipment costs (fuel, lubes, repairs parts, labor, depreciation, etc) are assigned to each individual piece of equipment to provide the Shop Superintendent with the true cost of ownership for every piece of equipment in our fleet. The Highway Department closely monitors the life cycle costs for all equipment to ensure that each piece of equipment is retired before significant additional costs are incurred.

Our second division of responsibility is Transit Services. Transit Services include two forms of alternative transportation options in Washington County: Shared Ride Taxi and Commuter Express. Both services are contracted with oversight provided by the Transit Manager.

The Shared Ride Taxi is operated by Specialized Transportation Services (STS), and provides taxi service throughout Washington County, except if the trips are wholly within the City of Hartford or City of West Bend limits. These trips would be serviced by their respective municipal taxi service. The Washington County Commuter Express (WCCE) is operated by Go Riteway, and provides bus routes from Washington County to downtown Milwaukee (ten stops along Wisconsin Avenue), the Veteran's Affairs (VA) Medical Center, Froedtert Medical Center, Innovation and Research Drive Business Park, and Marquette University High School.

Park and Ride lots continue to be used by large numbers of motorists for the WCCE and other commuter purposes on Paradise Drive, Lannon Road, Pioneer Road, STH 33, and CTH P in Jackson.

Similar to the Highway fleet, an important factor in Transit operations is the dependability of the vehicles. Whereas the Commuter Express is operated with vehicles owned by Go Riteway, the County owns the shared ride taxi vehicles and leases them to STS. Based on the assumption that most shared ride taxi vehicles will put on over 50,000-miles each year, the maintenance and responsible turnover of these vehicles is a top priority. In 2013, the Shared Ride Taxi fleet included twenty-seven (27) vehicles. Four of these vehicles are schedule to be replaced in 2014 with an average mileage of almost 300,000 miles.

ACHIEVEMENTS FROM 2013

Winter Maintenance

Washington County suffered through a long, cold, snowy winter during the 2012-2013 season. On December 20, 2012, Washington County was hit with over 15 inches of snow in some locations. This storm cost almost \$250,000 over a three day period on the State and County Highways. This was just the start of a long winter.

The Washington County Highway Department performed some level of plowing or salting for 22 of the 28 days during February. With numerous snow events and seemingly continuous blowing snow during the winter months, Washington County Highway Department resources were being stretched thin by spring. The Highway Department performed our last salt run of the season on April 10, 2013.

The 2012-2013 winter season stressed our salt reserves as the Highway Department used 24,414 tons of salt on State and County Highways. This was the most salt ever used in Washington County.

Salt Totals Through the Years			
<u>Winter Season</u>	<u>County</u>	<u>State</u>	<u>Total</u>
2007-2008	9,264	15,073	24,337
2008-2009	6,039	11,619	17,658
2009-2010	4,146	9,371	13,517
2010-2011	6,787	11,656	18,443
2011-2012	4,452	7,122	11,574
2012-2013	10,057	14,357	24,414

The Washington County Highway Department, along with state purchased salt, begins the 2013-2014 winter season with 19,472 tons of salt in our inventory. At \$57.59 per ton, this is over one million dollars worth of salt to begin the winter season. Through the annual bid process, Washington County reserves the option to purchase an additional 6,625 tons of salt during the current winter season. This would provide adequate salt to exceed the most severe winter season in recent history.

Reconstruction & Paving Operations

Through the annual budget process, the Washington County Highway Department Six-Year Highway Improvement Plan is reviewed and updated. Highway and bridge improvement projects are planned and programmed based on pavement conditions, vehicles accident/safety concerns, traffic patterns and necessary street expansion to accommodate increased traffic from new residential or business development.

To help facilitate the Six-Year Highway Improvement Plan, all of the county highways are field-inspected annually and given a pavement condition rating on an annual basis using the Pavement Surface Evaluation and Rating system (PASER).

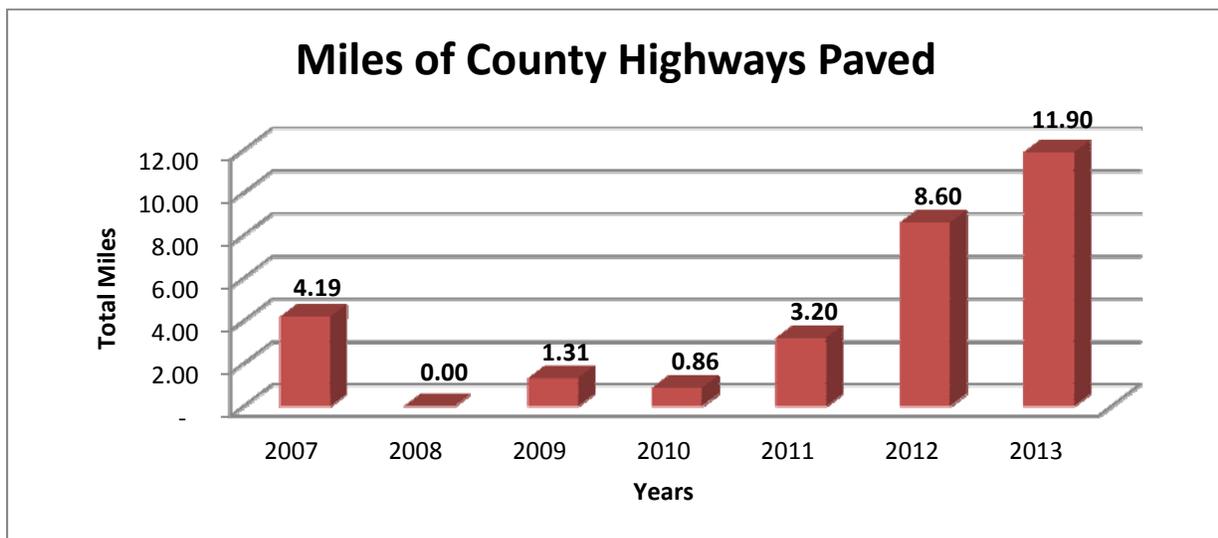
The pavement rating system assigns a number from 1 to 10, with 10 being a new roadway and 1 being a pavement in extremely poor condition. After the 2012-2013 paving season, the average pavement rating for a county highway was 6.75.

Year	PASER
2006	7.03
2007	6.80
2008	6.59
2009	6.25
2010	6.40
2011	6.23
2012	6.21
2013	6.75

*2012 and 2013 paving operations are reflected in the 2013 PASER rating

The Highway Department’s goal is to improve and/or repave a minimum of 9.3 miles of highway per year, based on an average 20-year pavement service life on the 186 miles of county highways. After falling behind from 2008 to 2011, Washington County was able to overlay or pulverize and relay 11.90 miles of county highway in 2013.

- CTH K Peaceful Hills to STH 144 0.78 Miles Pulverize & Repave
- CTH M CTH MY to CTH H 4.09 Miles Pulverize & Repave
- CTH W CTH H to CTH 28 1.00 Miles Pulverize & Repave
- CTH W CTH 33 to CTH D 3.35 Miles Pulverize & Repave
- CTH P STH 145 to Jackson 2.38 Miles Overlay



Preventative Maintenance

Unfortunately, the harsh winter season in Wisconsin is not only difficult on motorists; it is also hard on the road surface and subgrade. After the spring thaw the Assistant Commissioner and Project Technician inspect our roads for damage that requires maintenance. This inspection will create the work orders to guide our preventative maintenance actions during the summer and fall months.

Left alone, pavements will typically deteriorate over time at an ever-increasing rate. Preventative maintenance and rehabilitation can slow or reverse this deterioration. The degree to which this occurs is dependent on the type of maintenance as well as the timing of such actions. In general, an early and systematic maintenance plan is the most cost effective and results in the greatest extension of useful pavement life.

Whether our crews are patching potholes, milling bumps, crack-filling, or sealcoating a highway, preventative maintenance is the best way to extend the life of a road.

These tasks attempt to keep water out of our roadway's base due to the destructive actions that will occur when water is allowed to penetrate the surface. The water in a roadway's base will freeze and thaw during Wisconsin's long winter expanding and contracting the road subgrade. The work we do annually in preventative maintenance is a small cost compared to the potential full scale reconstructions that would be required if preventative maintenance wasn't regularly done.

In 2011, Washington County reconstructed CTH H from STH 144 to CTH XX. This project improved a highway with 11 foot lanes and 3 foot gravel shoulders into a modern design with 12 foot lanes, 3 feet paved shoulder and 3 feet of gravel shoulder. The project also included a wetland mitigation site to offset wetland impacts within the reconstruction. In total, this 3.20 mile stretch of road cost \$4,862,994 to perform a reconstruction.

In 2013, Washington County was able to repave CTH M from CTH MY to CTH H. This road had previously been reconstructed to meet current design standards with a 12 foot driving lane, 3 foot paved shoulder and 5 foot gravel shoulders. In total, this 4.09 mile stretch of road cost \$972,621 to pulverize and repave.

- CTH H Reconstruction \$1,519,685 per Mile
- CTH M Repaving \$237,804 per Mile

As performing a reconstruction to improve drainage, subgrade, aggregate base, asphaltic surface and incorporating modern design/safety features into a roadway is a very costly endeavor; a properly designed and maintained highway is able to be repaved at a fraction of the cost required for a full reconstruction.

The Highway Department provides an extensive focus on the life cycle costs for all County Highways. This focus drives the decision to reconstruction, pulverize and repave, or overlay roads as they reach the end of their useful life. Depending on the design standards and the geotechnical reports from soil boring, the total life cycle cost of the road is analyzed to ensure the most value to the taxpayers of Washington County.

To ensure we maintain our infrastructure, Highway Department employees perform road repairs and preventative maintenance throughout the year. Some of our more significant projects from the past year are detailed below:

- 1) **Sealcoated CTH E, CTH H, CTH O and CTH S:** In 2013 Washington County sealcoated 12.66 miles of County Highway with boiler slag. The sealcoating process takes place in June and depending on the location and weather usually takes 2 to 3 days. An emulsion oil is applied onto the road and a chip spreader with a fleet of trucks hauling boiler slag spread the material evenly into the emulsion oil.

The boiler slag is rolled and compacted into the emulsion where it “sets-up”. Any excess material is swept off to the side of the road. This is all done as the road remains open to traffic.

The 2013 sealcoating project was a phenomenal success with a total cost of \$244,950 or \$1.13 per square yard. Contractors have performed this work in Washington County for local municipalities for up to \$1.83 per square yard. Highway Department employees were able to sealcoat these 12.66 miles for \$151,735 less than a contractor.

- 2) **Concrete Repair along CTH Q:** The Highway Department has a number of very skilled masons who perform concrete work. This experience paid off handsomely as we were able to perform a sizable improvement to failing concrete along CTH Q at Riverscrest Drive.

The road surface along CTH Q in this section was failing badly at the joints creating sizable cracking, debris in the roadway and heaving of the adjacent asphalt. Highway Department employees were performing regular maintenance to patch the potholes as the temporary repairs were becoming less effective as the road deteriorated.

Over the course of two and a half weeks, in conjunction with the Village of Germantown, Highway Department employees were able to form, re-pour, and finish the entire intersection while keeping this vital corridor open to traffic with minimal interruption to the traveling public.

- 3) **Culvert Replacement:** As a roadway will only last as long as the subgrade remains in good condition, drainage along a roadway plays an integral role in the life span of any roadway. Culverts play a key role in the drainage along county highways. During field inspections in spring of 2013, a sizable number of culverts were marked for replacement as they had reached the end of their useful life. Highway Department employees took a proactive approach to repair the failing culverts instead of waiting for a future road failure.

With an ambitious paving schedule in 2013 and 2014, twenty-three culverts required replacement during the summer months.

Year	Culverts	Year	Culverts
2006	4	2010	0
2007	7	2011	6
2008	2	2012	6
2009	2	2013	23

Transit Operations

Transit Services continued to provide quality public transit options to the citizens of Washington County in 2013.

In early 2013, through an American Recovery and Reinvestment Act (ARRA) grant, the Shared Ride Taxi was able to implement AVL/MDCs into all of the Shared Ride Taxi vehicles. This program installed a tablet loaded with Routematch software into every shared ride taxi. The AVL/MDC program has increased the response time of the Shared Ride Taxi service through an automated dispatching system with real time data on all Shared Ride Taxi vehicles.

The savings from this grant program were re-purposed towards the Shared Ride Taxi capital outlay budget. Because of these savings, Transit anticipates returning \$173,400 from their capital outlay account to the general fund at the end of 2013.

Transit also implemented an agency fare to the Family Care providers in Washington County. This created a flat fare of \$8.00 for all rides to the Family Care providers. The agency fare implementation is to ensure that Washington County levy is not used to subsidize the Family Care program. Family Care rides are charged at actual cost for Washington County to provide the ride.

The implementation of the agency fare has increased revenue for Transit by almost \$40,000.

The Shared Ride Taxi projects to finish the year with around 95,000 rides to the citizens of Washington County. This is down slightly from our record high of 99,587 rides in 2011, but up slightly from the 92,941 rides provided in 2012

While the citizens of Washington County were enjoying reduced fuel prices in 2013, ridership on the Washington County Commuter Express (WCCE) suffered as a result.

As the demand for WCCE is elastic, ridership has increased or decreased depending on the cost of fuel as riders consider alternate transportation.

The WCCE projects to finish the year with around 118,000 rides. This is down from our record highs of 127,500 in 2011 and 2012.

GOALS FOR 2014

Looking forward into 2014 for the Highway Department and Transit Services, we anticipate several key projects will be undertaken:

Reconstruct CTH P from CTH PV to CTH NN (Rusco Road): CTH P south of West Bend is the remnants of old US 45. The original roadway was constructed in 1922 as an 18' wide concrete roadway constructed directly on the subgrade. In 1959, the concrete pavement was widened to 22' by adding 2' of concrete on each side of the original road surface. Since that time, the concrete surface has been overlaid with asphalt multiple times while never performing an upgrade to the subgrade.

The reconstruction in 2014 will improve the subgrade, base aggregate, and provide a new asphaltic surface. The reconstructed road will include 12' driving lanes with 5' paved shoulders and 3' gravel shoulders.

As CTH P has around 8,000 vehicles per day between CTH PV and CTH NN (Rusco Road), this project will be staged in three phases to minimize impact to property owners, businesses and the Washington County Fair.

Continue the design, right-of-way acquisition, and utility work for scheduled reconstructions:

The reconstruction of a County Highway is a 3 to 4 year process. The first year includes surveying work and roadway design. The second year includes completing any right-of-way acquisition. The third year often includes the relocation of utilities located within the right-of-way. And the fourth year is the reconstruction of the County Highway. Highway Department staff anticipates continuing work on the planned reconstruction of the following highways:

- CTH NN and CTH G (North) Intersection: Complete the final design of a roundabout with right-of-way acquisition and utility coordination scheduled for 2014. Reconstruction scheduled for 2015.
- CTH C Reconstruction from American Eagle Drive to CTH Z: Finalize design and begin right-of-way acquisition in 2014. Reconstruction scheduled for 2016.
- CTH N from 800' into Dodge County to Airport Drive: A federally funded joint project between Dodge County, Washington County and the City of Hartford, the reconstruction of CTH N will include right-of-way acquisitions and utility relocation in 2014. Reconstruction is tentatively scheduled for 2015.

Effectively bid and oversee proposed 2014 paving contract: In addition to the reconstruction of CTH P, the Highway Department will be performing substantial repaving in 2014. We anticipate bidding the projects early in 2014 to induce competitive bids with a spring start date. The following are our proposed projects:

- CTH W	STH 28 to Fond du Lac Co	0.30 Miles	Pulverize & Repave
- CTH BB	STH 28 to Fond du Lac Co	1.00 Miles	Pulverize & Repave
- CTH D	Nickel Lane to CTH WW	2.80 Miles	Pulverize & Repave
- CTH Z	Hillside Road to STH 33	3.50 Miles	Pulverize & Repave
- CTH D	Nenno Road to Railroad Tracks	0.70 Miles	Overlay

Performance Based Contracts: The Wisconsin Department of Transportation (WisDOT) and the Wisconsin Counties Highway Association (WCHA) are working together to implement changes in the Routine Maintenance Agreement that will ultimately replace the actual cost reimbursement requirement of the RMA with language and procedures that support the a performance based or unit price reimbursement when appropriate.

WisDOT Performance Based Contracts are going to be slowly rolled out in 2014 with a significant expansion planned for 2015. A driving factor behind the Performance Based Contracts is ensuring that WisDOT is paying for the results instead of an annual allocation. The Performance Based Contracts will also blur the lines between counties as Washington County might perform some work in Ozaukee County of vice versa.

While there is certainly some apprehension on the implementation, this provides an exciting opportunity for Highway Department employees to share their expertise outside of the county when feasible.

Washington County has expressed interest to WisDOT in participating in the Performance Based Contracts to ensure the greatest value to all taxpayers.

Perform minor alterations to WCCE schedule on Medical Routes: The reconstruction of the Zoo Interchange in Milwaukee County will require the Wisconsin Department of Transportation to shut down Watertown Plank Road in 2014. To help mitigate congestion to Froedtert Medical Center Transit Services are finalizing an updated WCCE schedule to better accommodate the needs of the commuters into the region.

The improved schedule will provide additional options to the riders of the WCCE and hopefully increase revenue without adding additional hours of service.

The Wisconsin Department of Transportation will also be providing additional marketing efforts to help increase ridership to reduce the congestion during the Zoo Interchange reconstruction.

Evaluate Washington County Transit Development Plan: With the help of the Southeast Wisconsin Regional Planning Commission (SEWRPC), stakeholders from Washington County created an updated Transit Development Plan during 2013. In 2014, the Transportation Committee and Transit Services will begin to perform an in-depth assessment of the recommendations and transit service alternatives to evaluate the future public transportation needs of Washington County.

CONCLUSION

I would like to thank the Transportation Committee and County Board for their support of Transportation in Washington County. Through ongoing efforts and funding, the infrastructure in Washington County has been maintained to provide the greatest long-term value to the citizens of Washington County.

I would also like to thank the employees of the Highway Department. It is through their hard work, experience and dedication that the above referenced projects were completed safely, on-time and in a cost effective manner.

The citizens of Washington County are blessed with one of the finest Highway Departments and Transit systems in the State of Wisconsin.

Respectfully submitted,



Thomas A. Wondra
Washington County
Highway Commissioner

Performance Management Highlights Report – Highway Department 2013

Targeted services to be measured

- S1. Snow & Ice Control – Winter operations
- S2. Traffic Control – Signs, signals, pavement markings
- S3. Driving Surface Management – Pavement and shoulders
- S4. Roadside Maintenance – mowing, weed control, litter pickup, tree and brush control
- S5. Structures and Drainage – Bridges, culverts and roadside ditches

Outcomes of services to be measured

- O1. County highways are open to travel 365 days a year.
- O2. County highway signs are easy to read, command respect and direct traffic safely.
- O3. County highway pavements are safe and provide a high ride quality.
- O4. County highway rights-of-way contribute to motorist safety and are aesthetically pleasing.
- O5. County highway bridges and culverts are structurally sound and functional.

Targeted Service	Measure	Target for 2013	Actual for 2013	Target for 2014
S1 Snow & Ice Control	County trunk highways blocked for more than six hours	0	0	0
S2 Traffic Control Devices	Pavement markings are done annually	100%	100%	100%
S3 Driving Surface Maintained	Potholes 2" or deeper not filled within one day of the reported condition	0	0	0
S4 Roadside Maintenance	All rights-of-way are mowed once a year	100%	100%	100%
S5 Bridges, Culverts, and Drainage	Culverts blocked by debris	0	0	0

Outcomes of Services	Measure	Target for 2013	Actual for 2013	Target for 2014
O1 County highways are traversable year round	Highways blocked by snow or ice for more than six hours	0	0	0
O2 County highway traffic control devices are easy to read, command respect, and direct traffic safely.	Downed stop signs are replaced within 24 hours	100%	100%	100%
	Other downed or damaged signs replaced within three working days	100%	100%	100%
O3 County highway pavements are safe and provide a high ride quality.	Pavement ratings increase each year	6.40+	6.75	6.40+
	2" deep potholes filled within one working day	0	0	0
	Shoulders not more than 2" of pavement elevation	0	3	0
O4 County highway rights-of-way contribute to motorist safety and are aesthetically pleasing.	Five or less complaints about site distance due to vegetation	0-5	3	0-5
	Ten or less complaints about noxious weeds on county rights-of-way	0-10	4	0-10
	Highways blocked due to fallen dead trees	0	1	0
O5 County highway bridges and culverts are structurally sound and functional	Highways closed due to catastrophic failure of bridge or culverts	0	0	0
	Highways closed by flooding caused by plugged culverts	0	0	0