

## Michigan 2010 Transparency Report

### Locations Exhibiting the Most Severe Safety Needs

Location	Jurisdiction	Potential Remedies	Estimated Costs	Implementation Impediments	Comments	Crash and Injury Data				Human Factors Involvement		
						SHSP Focus Area	Total Severe Crashes	A Injuries	Fatalities	Alcohol and/or Drug*	NO Seatbelt and/or Helmet Use**	Speed***
US-12 & Conrad Rd	MDOT - Coloma TSC	Intersection warning signs, dual 48" stop signs, overhead flashing beacons or ground mounted flashing beacons, rumble strips	\$38,000 to \$53,000	Flashing beacons may not meet warrants.	Intersection warning signs were installed in 2008 - Since install , FTY crashes do not cause K or A. Will continue to monitor for further crashes.	Intersection	4	3	2	1	0	0
I-69BL & Lake Lansing Rd	MDOT - Lansing TSC	1) Prohibit through traffic movement at the intersection by eliminating the ability to cross the median. Use existing turnarounds for indirect throughs. 2) Reconstruct I-69 BL without a median for a single point intersection.	1) \$100,000 2) \$2,500,000	1) Would like concurrence from the local government and local road agency to eliminate the through movement. Added delay to Lake Lansing Road traffic may not be favorable to local residents. Public meetings would need to be held. 2) Eliminating the median would add numerous left turn movements at driveways and would increase overall conflict points. Traffic crashes would likely be shifted, not minimized.	In 2005, the left turn movement from Lk Lansing at this intersection was prohibited, and the median crossover changed to a single lane in each direction. The TSC continually monitors crashes at this intersection. No fatal or A injury crashes have occurred since March of 2007. No angle crashes occurred in 2009, and only one angle crash has occurred in 2010 (through April) and this was described as distracted driver running red light.	Intersection	3	4	2	0	0	0
M-59 (University) & Paddock	MDOT - Oakland TSC	None			Intersection was recently redesigned with resurfacing job in area to "tee up" University Dr into WB M-59 and avoid merge problem from previous alignment.	Intersection	3	4	2	1	0	0
M-97 (Grosbeck) & 10 Mile Rd	MDOT - Macomb TSC	Lansing Signal Unit is reviewing the need for a left-turn phasing for M-97.	\$150,000		The existing traffic signal will have to be modernized to box span when adding the left-turn phasing.	Intersection	5	8	1	1	0	0
M-8 (Davison) & Dexter	MDOT - Detroit TSC	Left turn phasing.	\$100,000	May not meet warrants.	2010 CPM project underway which includes addition of ped refuge islands on M-8	Intersection	5	4	1	0	1	0
M-40 & M-60	MDOT - Coloma TSC	Upgrade to signal; Offset left turn lane stop bars; Larger/dual stop signs; Rumble strips; All way stop control; Sign post enhancement	\$10,000 - \$135,000	Signal may not meet warrants; Left turn movements may be safe without stop bar replacement; Optional signing may not be visible; Rumble strips may be too noisy, not effective enough and wear quickly; Motorist acknowledgement of new intersection control.	This is a Repeat location. Existing dual overhead flasher (M-40 stops for M-60). Many intersection type crashes still caused by motorists due to improper stop/poor gap selection by M-40 vehicle.	Intersection	3	2	2	0	0	0
M-102 (8 Mile Rd) & Marie	MDOT - Detroit TSC	No recommendation			2008 CPM and ADA ramps done	Intersection	3	1	2	1	0	0
M-59 (Highland) & Hospital Rd	MDOT - Oakland TSC	Signalize; TSC will continue to monitor intersection for potential improvements.	n/a at this time	Intersection does not meet signal warrants.	Intersection was studied for potential signalization in 2009 (as a result of 2 fatalities in the area). After MDOT review, intersection was found not to meet signal warrants and signal request was denied. Alternate means of prohibiting Hospital lefts to WB M-59 were discussed with the locals and were also denied.	Intersection	3	1	2	1	0	0

M-5 (Grand River Ave) & Lahser Rd	MDOT - Detroit TSC				Safety project completed in 2008 or 2009. TSC will continue to monitor.	Intersection	3	1	2	0	0	0
EB I-96 - 1/4 M west of Glendale to 1/4 M east of Davison	MDOT - Detroit TSC	Delineation	\$10,000		current bridge project on I-96 from Davison to Underwood	Lane Departure	7	4	3	2	1	4
WB I-94 - 200' east of Scotten St to 1/4 M west of 30th St	MDOT - Detroit TSC	Cushion wall, drainage improvements, enforcement	Unknown	Utility issues with new drainage; Funding/personnel issues with enforcement;	Unknown cost since correcting the drainage issues will impact other utilities as well as impacts to traffic and mobility; Cushion wall would need to be specifically designed for this site, installed and maintained.	Lane Departure	6	7	2	3	1	4
SB I-75 - 1/4 M north of Big Beaver Rd to Livernois Ave	MDOT - Oakland TSC	Speed warning system, investigate geometric improvements with widening project.	\$1,000,000.00	None	I-75 has a mainline curve in this area, advisory speed of 55 mph. Signs were upgraded in 2009 as part of a freeway signing project. Improved signing and/or speed warning system likely the best remedies before I-75 is reconstructed and widened in this area. Concrete barriers on either side of SB I-75 in this area as well.	Lane Departure	10	10	2	2	1	3
M-11 (28th St) - Kalamazoo St to Breton Rd	MDOT - Grand Rapids TSC	Add street lighting along this segment; Enforcement due to alcohol related crashes	\$700,000	ROW / slopes/other utility impacts; Coordinating with State & Local Police Departments		Lane Departure	8	9	5	4	2	0
WB I-94 - E 8 Mile Rd to 1/10 M south of M-102	MDOT - Detroit TSC	Enforcement	unknown	funding/personnel issues with enforcement		Lane Departure	9	7	2	1	2	3
SB I-75 - Off ramp to 4 Mile Rd	MDOT - Grayling TSC	Relocate freeway signing for I-75/US-127 split further south (done in 2007)			No crash pattern since sign was relocated	Lane Departure	4	2	3	2	3	1
SB I-75 - 500' north of 9 Mile Rd to 1/4 M South of 9 Mile Rd	MDOT - Oakland TSC	TSC will continue to monitor intersection for potential improvements.			I-75 has a mainline curve in this area which had an advisory speed of 50 mph. Speed warning system and new signing added in 2009. Area was reconstructed after 9 Mile bridge was demolished by a tanker explosion. Reconstruction improved superelevation on curve and allowed advisory speed to be increased to 55 mph.	Lane Departure	5	3	2	2	2	4
WB I-94 - Wayne Rd to I-275	MDOT - Taylor TSC	Placement of median cable barrier	\$500,000	None	Any potential project should include cable barrier on the EB side of I-94 as well.	Lane Departure	5	6	2	1	0	0
US-41 - Main St to Lake St	MDOT - Ishpeming TSC	Reconstruction of roadway with grade lift, removal of adjacent barrier curb, addition of 8' paved shoulders, addition of roadside ditches	3.516 Million - programmed for 2012 construction	None. This project is programmed for 2012 Construction.	MDOT Project limits - Bayou Street to Carp River Bridge	Lane Departure	4	4	2	2	1	3
US-12 - 1/10 M to 1/2 M east of Lima Center Rd	MDOT - Brighton TSC	Tree trimming and/or possible removal to improve visibility on curved section. Continue to monitor crashes to see if further improvements are warranted.	Approximately \$1000.00 per tree removal.	Public acceptance for removal of trees.	Centerline and shoulder rumble strips were installed in 2008 in this segment of US-12. No severe lane departure crashes have occurred since the installation of the rumble strips.	Lane Departure	4	3	2	3	2	0
US-31 - 2/10 M south to 2/10 M north of Bates Rd	MDOT - Traverse City TSC	Rumble Strips		None	Rumble Strips were installed in 2009.	Lane Departure	3	4	4	2	1	2
M-54 (Dort Hwy) - 2/10 M south of Maple Ave to Judd St	MDOT - Davison TSC	Centerline rumble strips; Revise clearance intervals	\$25,000	Rumble strips may have to be installed in a future project if no specific rumble contract is available.	All lane departure type crashes occurred in 2006-none since 2006	Lane Departure	5	3	2	2	3	0
US-31 - Gonder Rd to 2/10 M east of Gonder Rd	MDOT - Traverse City TSC	Rumble Strips		None	Rumble Strips were installed in 2010.	Lane Departure	5	4	4	1	0	4
Lyndon & Meyers	City of Detroit	Lane assignment changes, signal, pavement marking, and sign improvements	\$250,000	Right of way restrictions, utility coordination		Intersection	5	4	1	0	1	0

Samaria & Douglas	Monroe County	Cross Traffic Does Not Stop Signs, Intersection Flashers	\$10,000	Funding	Keeping track of crash information to see if appearance on list legitimate or a fluke.	Intersection	3	6	1	0	1	0
Schoenherr & 13 Mile Rd	Macomb County/ City of Warren	Consolidate driveways, Dilemma zone detection system	\$300,000	Agreements with local businesses and the City of Warren	Dilemma zone detection does not have any impediments (cost 30k)	Intersection	3	4	1	0	0	0
Elizabeth & Harper	Macomb County/ City of St Clair Shores	Install traffic signal, enforcement, driver education	\$50,000	Traffic signal not warranted		Intersection	3	3	1	1	0	0
Palmer & Venoy	Wayne County/ City of Westland					Intersection	4	4	1	1	0	0
Monroe & Ecorse	Wayne County					Intersection	3	3	1	0	0	0
Capac Rd - 1/2 M north of Pratt Rd to 1/4 M south of Hough Rd	St Clair County/ Macomb County	Widen shoulders; Edge line and center line rumble strips	\$100,000	Ditches and culverts would have to be moved back to accommodate widening	In the country, plenty of space to widen	Lane Departure	5	3	3	2	2	4
Fruit Ridge Ave NW - 1/2 M south of 7 Mile Rd to 1/4 M north of 7 Mile Rd	Kent County	Providing a clear zone within the Right-of-Way; Improving the friction factor of the road surface.	\$95,000	Property owner objection to tree removal; Lack of funds to complete	A Federal Local Safety project grant was applied for (FY2012)	Lane Departure	4	4	2	1	1	1
Commerce Rd - 75' west of Indian Trail to Orchard Lake Rd	Oakland County	Upgrade Advance Curve Warning Signs and Chevrons Signs in the curve to Fluorescent Yellow (Type IX Sheeting). Clear brush blocking the westbound Side Road Intersection Sign (W2-2L) and upgrade to Fluorescent Yellow (Type IX Sheeting). Add an Advance Road Name w/Left Arrow (D3-2a) Sign to this installation. Reconstruct highway to include a center turn lane. Tree removal to provide a larger clear zone.	\$5,000 for upgrading, installation, and relocation of signs. Costs for widening project and clear zone improvements unknown at this time due to unknown project limits and possible right-of-way costs.	RCOC will implement the potential signing remedies immediately with our own work forces. This will be done with RCOC funds because of the relatively low cost. Going through MDOT for funds would not be cost effective due to the heavy draw on resources to administer the project. Widening project requires additional right-of-way. Removal of large trees in this area is a sensitive community concern. However, most trees are back near the ROW line allowing room for recovery.	We'll continue to monitor this location. It will remain on our list as a potential location for safety improvements including construction of a center lane and tree removal when funding becomes available.	Lane Departure	6	5	2	2	0	1
W Jefferson Ave - City limits to Dearborn St	City of Detroit	Discretionary greenery maintenance, discretionary fixed object removal, road diet, pavement marking, signal and sign related improvements	\$500,000	Right of way restrictions, utility coordination		Lane Departure	5	3	2	2	2	2
Alden Hwy - 520' E Grass River Natural Area Rd to 2770' E Comfort Rd	Antrim County	Improve the alignment of the roadway or improve signage and pavement markings.	N/A	Environmental constraints prevent changes in alignment.	Additional signs have been provided. Safety project is to be completed installing improved signage and pavement markings ---- 2010 update - Safety project completed in 2009 added chevrons with reflective post strips all of high intensity material and placed wet weather reflective pavement markings.	Lane Departure	3	2	3	3	0	2
Andersonville Rd - 1/2 M south of Big Lake Rd to 2/10 M south of Farley Rd	Oakland County				This section of highway was on the 2008 report and potential remedies have been implemented. They included upgrading Advance Curve Warning Signs to Fluorescent Yellow (Type IX Sheeting). Installing Target Arrows and Chevrons (Type IX Sheeting) in the curve. Installing Raised Pavement Markers on the Centerline, and relocating a "Do Not Pass" so it doesn't block sight to the curve sign.	Lane Departure	3	5	2	2	2	0
Carpenter Rd - Bemis Rd to Merritt Rd	Washtenaw County	Construct paved shoulders, install centerline and shoulder rumble strips, improve ditch slopes and remove any roadside obstructions within the road right-of-way	\$500,000 +	Lack of local funding	The Washtenaw County Road Commission will search for state or federal funds to assist with improving this segment of roadway.	Lane Departure	6	6	3	3	3	3

Whitehall Rd - Tyler Rd to Bard Rd	Muskegon County	Curve Delineation	\$3,500	Upon completion of presently planned safety projects.		Lane Departure	3	2	2	1	1	2
Rogers Hwy - Kopke Rd to Sutton Rd	Lenawee County	Centerline rumble strips; Place gravel along pavement edge to eliminate edge drop; Edge striping	\$15,000	Noise created with close proximity to existing houses; None associated with gravel placement; 1/2 mile segment in 9 mile roadway that has similar features throughout - would require edge line for entire 9 miles of roadway.	Gravel work to be completed during summer 2010. Will monitor situation and review in the future for other countermeasures.	Lane Departure	4	2	2	1	0	2
Sheridan Dr - Evanston Ave to Vine Ave	Muskegon County				This road segment contains two high volume four-way stop intersections. The crashes in this segment are predominantly intersection related. The intersections will be reviewed separately. This segment should be removed from consideration.	Lane Departure	4	8	1	1	0	1
Ormes Rd - Lewis Rd to 8/10 M east of Lewis Rd	Tuscola County	Short term: Repaint; sweep; enforcement; education. Long term: straighten road; double chipseal w/fog seal; sign upgrade; bit overlay w/paved shoulders; rumble strips.	\$546,800 +	Limited enforcement staff; Education by others; Location of Cass River prohibits realignment; Public acceptance of chipseal and rumble strips; material availability; limited roadway width; environmental concerns	Repainting and sweeping completed; Application for grant funds submitted for bit overlay w/paved shoulders. Additional funding required for other countermeasures.	Lane Departure	4	5	1	1	0	2
River Rd - 1/2 M south of Dice Rd to 1/4 M north of Dice Rd	Saginaw County	Paved Shoulders, rumble striping, guardrail updates, signage updates, curve modifications and obstruction removal	~\$500,000	Additional costs (above Safety grant) and resident complaints from noise of rumble striping and possibility of problems acquiring ROW.	Selected as 2010 Safety project, design substantially complete, anticipate late fall/early winter letting with 2011 construction	Lane Departure	6	7	1	1	0	5
Bellevue Hwy - Westgate Rd to Peck Rd	Eaton County					Lane Departure	4	4	1	2	0	2
Grafton Rd - Buhl Rd to Stoney Creek Rd	Monroe County	Intersection improvements/pavement markings within the curve	\$100,000	Funding	Applied for 2012 Safety Funds	Lane Departure	4	4	1	2	1	0
Rochester Rd - Perrydale to 4/10 M north of Mead Rd	Oakland County				This section of highway was part of a 2005-2006 project that reconstructed a two-way, two-lane highway to a three lane cross-section with a center lane for left turns. Reconstruction included cutting the hill for sight distance improvement, three-foot paved shoulders, upgraded guardrail, and raised pavement markers. A traffic signal was installed at the intersection with Mead Road.	Lane Departure	4	4	1	1	0	1

<b>Additional Notes:</b>	*Alcohol/Drug involvement is reported on a per crash basis when reported on the crash report. Not per driver or injured party.
	**All fatal and incapacitating injured drivers and/or passengers were reported when not wearing a seatbelt or helmet (motorcycle crashes). Use for remaining drivers and passengers could be listed as yes, unknown or not applicable.
	***Speed related crashes involve vehicles whose hazardous action was listed at "Speed too fast" or when the crash report narrative indicated a driver was speeding.