

Michigan 2008 5% Report												
Locations Exhibiting the Most Severe Safety Needs												
Location	Jurisdiction	Potential Remedies	Estimated Costs	Implementation Impediments	Comments	Crash and Injury Data				Human Factors Involvement		
						K/A Crash Pattern	Total Severe Crashes	A Injuries	Fatalities	Alcohol and/ or Drugs	NO Seatbelt and/ or Helmet Use*	Speed**
Conrad Rd & US-12	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.		Angle	5	4	2	1	0	0
Gratiot Ave (M-3) & Mount Elliott St	MDOT - Detroit TSC	Enforcement; Headed-up lefts on Mt. Elliot and left-turn phasing; No Turn On Red; Close drives; Box span	\$100,000	Funding/personnel issues with enforcement; Signal may not meet warrants; utility issues with box span; political issues with closing existing drives for existing businesses		Ped/Bike	5	4	2	2	1	0
Springwells St & Chamberlain St	City of Detroit	Install crash attenuators on both ends of the bridge piers. Install single level flashers (yellow for Springwells and red for Chamberlain). Construct concrete median island along Springwells between the bridge piers and extend the median island on North side to prevent vehicles making illegal left turn into Chamberlain.	\$250,000	Limited right of way and no additional right of way is available. All improvements should be done within existing ROW.	Rail road bridge requires maintenance.	FXOBJ/Ped	5	3	4	1	2	3
S Beech Daly Rd & Michigan Ave (US-12)	MDOT - Taylor TSC	Signal Upgrade to Box Span with Pedestrian countdowns, Enforcement	\$100,000	None	Currently in design, letting date of Sept. 2008, JN 88073	None	4	3	2	2	1	0
Hill Rd & Elms Rd	Genesee County	Remove trees in NE quadrant. Redesign pavement markings on Elms Road for better alignment.	\$10,000	None	The overhead beacon flasher has not had the desired effect to improve safety at this intersection.	Angle	4	4	2	1	0	0
Gotfredson Rd & Plymouth Rd	Washtenaw County	Increase the size of stop and stop ahead signs. Install reflective sheeting on sign posts. Install additional cross street does not stop on the far side of the intersection. Install ground mounted flashing beacons with stop sign. Install multi-way stop. Install traffic signal.	\$600,000	Multi-way stop and signalization may not meet warrants.	Additional Stop signs, stop ahead signs, overhead flashing beacon, and cross street does not stop signs were installed in 2006. We are continually monitoring this intersection with respect to these improvements. Total injury and frequency of crashes has been reduced. If crashes continue additional remedies will be implemented as described in potential remedies.	Angle	4	3	2	2	0	0
Deerfoot Rd (M-123) & M-28	MDOT - Newberry TSC	1) Replace overhead beacon with lights on stationary signs. 2) Upgrade cross traffic does not stop signs. 3) Construct an offset intersection. 4) Create a signalized intersection. 5) Construct new roadway with horizontal and vertical curve corrections. 6) Construct a roundabout.	1) \$40,000 2) \$1,000 3) \$2,500,000 4) \$150,000 5) \$5,000,000 6) \$1,500,000	1) None. 2) None. 3) Purchase property. 4) Location may not meet warrants. 5) Purchase of property. 6) Purchase of property. Public acceptance of round-about on rural 55 mph.	Vehicles appear to stop at the intersection and then continue into the path of cross-traffic. Remedies in the past have included: transverse rumble strips, double stop ahead signs, double stop signs, cross traffic does not stop signs, radius improvement, and relocated utility pole. Crash experience has been low since the last work has been performed. TSC will continue to monitor the location for any changes.	Angle	6	11	1	0	1	0
Inkster Rd & Michigan Ave (US-12) (Blvd)	MDOT - Taylor TSC	Signal Upgrade to Box Span with Pedestrian countdowns, Enforcement	\$100,000	None	Currently in design, letting date of Sept. 2008, JN 88073	None	5	5	1	2	1	0
Chippewa Hwy (US-31) & 8 Mile Rd	MDOT - Cadillac TSC	Upgrade and replace all intersection signing, provide reflective sheeting on sign posts, provide an intersection flashing beacon, provide transverse rumble strips on stop controlled approaches and clear brush from clear vision corners.	\$45,000-\$71,000	May not meet warrants for a flashing beacon.	Right turn deceleration lanes and a center left turn lane are to be constructed at this intersection in 2011.	Angle	3	4	4	1	2	0
S US 31 (Blvd) & Riley St	MDOT - Grand Rapids TSC			None	2007 Corridor Retiming (JN 88087) completed.	Angle	5	9	3	1	2	0
Dequindre Rd & E 11 Mile Rd & 11 Mile Rd	Macomb County					Driveway	5	4	1	0	0	0

Consolidated Rail Corporation & Livernois Ave	City of Detroit	1) Construct concrete median along Livernois between the bridge piers to prevent vehicles hitting bridge piers. 2) Construct curb on both sides of Livernois curb lanes and improve drainage for preventing accumulation of water and ice under the bridge. 3) Construct full width sidewalks on both sides to provide pedestrian friendly environment and to prevent growth of weeds. 3) Improve lighting under the bridge for safety enhancement and provide pedestrian friendly environment.	\$250,000			None	3	3	3	2	1	1
E Davison St & Van Dyke St (M-53)	MDOT - Detroit TSC	Target arrow facing EB traffic; Newer/bigger STOP sign; STOP AHEAD sign on EB Davison	\$2,500	This section of Davison is under the jurisdiction of the City of Detroit, and they need to be responsible for all potential remedies except the target arrow.		None	4	8	1	1	0	0
Haslett Rd & Perry Rd (M-52)	MDOT - Lansing TSC	Reflectors on signs posts, rumble strips and dual stop signs	\$5,000- \$10,000	Need County permission to install rumbles.		RE-LT/Angle	4	7	1	0	0	0
Swan Creek Rd & S Fordney Rd	Saginaw County	1) Add "Cross Traffic Does Not Stop" on the back of the signs on opposite side of intersection. 2) Control access points to the commercial establishment at S.E. quadrant. 3) Install overhead flashing beacons 4) Double up the "Stop Ahead" signs 5) Add Street Name Placard to warning signs 6) Utilize higher reflectivity sheeting for warning signs. 7) Provide larger sight triangle for higher visibility on approaching roadways.	\$30,000	Overuse of signs could create false sense of security at other similar yet unwarranted intersections throughout county. Commercial business may oppose access being reduced to business establishment. Limited right of way at corner prevents the use of large sight triangle clearing options.	Overhead flashing beacons along with supplemental warning signs were recently installed (Fall 2007) at this intersection as a result of an HRRR project. It is expected that this potential remedy will improve intersection safety.	Angle	4	7	1	0	1	0
Phoenix Rd & County Road 687	Van Buren County	Cut vertical curve to west of the intersection. Provide headed up left turns, improve through and right turn lanes at the intersection with installation of a overhead flashing beacon. Improved traffic signage, misc. drainage improvements, new HMA overlay and new pavement markings.	\$415,000	The proximity of the cemetery on the south side of the roadway will inhibit the overall cut on the vertical curve.		Angle	3	8	2	0	0	0
Pigeon Rd (M-142) & Pinnebog Rd	MDOT - Cass City TSC	Add additional "Cross Traffic Does Not Stop" signs. Remove the overhead flashing beacon and replace it with ground mounted flashers.	\$500 for the signs and pavement markings. \$24,000 for the possible signal work.	The signal work will require MDOT signal unit approval.	"Cross Traffic Does Not Stop" signs are to be installed. A request to remove the overhead flashing beacon and replace it with ground mounted flashers has been made.	Angle	3	5	2	0	2	0
Silver Lake Rd & Zimmerman Rd	Grand Traverse County	Left turn phasing for all legs.	\$300,000		Applied for grant in 2008.	HD-LT	3	4	2	1	0	0
E Lake Lansing Rd & I 69 BL	MDOT - Lansing TSC	Run traffic operation model to see if MDOT can close median.	\$10,000-\$25,000	Possible operational issues.		Angle	3	4	2	0	0	0
Swan Creek Rd & S Hemlock Rd	Saginaw County	1) Add "Cross Traffic Does Not Stop" on the back of the signs on opposite side of intersection. 2) Install overhead flashing beacons 3) Double up the "Stop Ahead" signs 4) Add Street Name Placard to warning signs 5) Utilize higher reflectivity sheeting for warning signs. 6) Install vertical reflectivity sheets to stop sign posts.	\$15,000	Overuse of signs could create false sense of security at other similar yet unwarranted intersections throughout county.	Overhead flashing beacons along with supplemental warning signs were recently installed (Spring 2008) at this intersection as a result of an HRRR project. It is expected that this potential remedy will improve intersection safety.	Angle	3	4	2	0	0	0
Elmhurst St & Dexter Ave (Offset)	City of Detroit				Traffic signal at this location was modernized in 2007 along with new pavement markings and ADA curb ramps. City is expecting reduction in crashes at this location. No safety enhancement is proposed for this location at this time.	None	3	4	2	1	0	1
Grand Blanc Rd & Duffield Rd	Genesee County	Vertical mounted flashing beacons for stop signs and warning signs. Monitor vegetation and remove. Reflective strips on stop sign posts and warning sign posts.	\$30,000		Interested in the vertical stop beacon and warning beacon installation for this intersection. Reflective strips for sign posts can be installed now by GCRC staff.	Angle	4	4	1	0	2	0

S Lapeer Rd (M-24) & Pratt Rd	MDOT - Davison TSC	Protected Left Turn Signal	\$80,000	HD-LT crash frequency does not meet warrants		None	3	3	1	0	0	0
Harper Ave & Elizabeth St	Macomb County/City of St Clair Shores					Angle	4	4	1	0	0	1
Van Born Rd & Beech Daly Rd	City of Dearborn Heights/Taylor/Wayne County	Lengthen the all red interval for both N-S and E-W phases.	Less than \$200, could be absorbed by maintenance activities.	None	Left turn ped crash in fog,wet pavement at night. One angle crash with dark signals (power outage). Continue to monitor crash frequencies.	Angle	4	4	1	1	0	0
Monroe Rd & Ecorse Rd	City of Taylor/Wayne County	Left turn phasing for EB-WB and NB-SB directions.	\$100,000	None	City of Taylor used CMAC funds to install 4-way left turn phasing in 2008.	None	4	4	1	0	0	0
W 5th St (M-21) & Ann Arbor St	MDOT - Davison TSC	Signal Ahead Signing-Possible "Prepare to Stop When Flashing" device.	\$25,000	Approval from Lansing Signals required.	Advanced curve warning sign, divided hwy sign, keep right and chevron signs installed 3/21/07. A work order is being written to install a signal ahead sign. Will monitor and pursue beacon and 'be prepared to stop' signing if crashes do not improve.	FXOBJ	3	2	2	1	0	0
W 9 Mile Rd & Lahser Rd	Oakland County	Modernization of Traffic Signal to include 4-Way Flashing Yellow Arrow Left Turn and Box Span design.		N/A - Previously Installed with a Signal Modernization Project with RCOC funds. Installation completed on 4/24/2006.	Fatalities(2) that occurred on 01/23/06 was the result of a vehicle fleeing the Police. RCOC will continue to monitor this location.	None	3	2	2	0	2	0
Sibley Rd & Middlebelt Rd	Wayne County	Lengthen the all red interval for both N-S and E-W phases.	Less than \$200, could be absorbed by maintenance activities	None	Fatal crash occurred on wet pavement in rain.	Angle	3	2	2	1	0	0
Hammond Rd W & N Garfield Rd	Grand Traverse County				Left turn phasing installed 7/1/2008.	Angle	4	3	1	0	1	0
E Borland Ave & VanDyke Rd & S Cedar St (M-102)	MDOT - Davison TSC	Access Management to consolidate driveways and create service drive.	\$750,000	Business Owners may not be receptive.		Angle	5	4	1	0	0	0
Dequindre Rd & 8 Mile Rd (M-102)	MDOT - Detroit TSC	Enforcement		Funding/personnel issues with enforcement.		None	4	3	1	1	1	0
Eureka Rd & Wayne Rd/Wahrman Rd	Wayne County	No discernible remedy.	N/A	N/A	Proposed road project will relocate intersection 1/4 mile east.	None	4	3	1	0	0	0
WB I-96 Local - 1700' W Schaefer Hwy to 1300'	MDOT - Detroit TSC	Slope flattening	\$100,000	None		FXOBJ	7	4	3	3	2	5
WB I-94 - 120' E M-10 to 540' W Linwood off Ra	MDOT - Detroit TSC	Rumble strips in shoulder; Education; Enforcement	\$250,000 for rumble strips		A major reconstruction project is in the study phase for I-94 (I-96 to Conner) which is to provide and 8-lane freeway with full shoulders and continuous service drives.	FXOBJ/Ped	7	5	4	2	2	2
WB I-96 - WB I-95/NB I-275 Merge to 6 Mile Rd	MDOT - Taylor TSC	Place guardrail to protect abutments for both NB (left and right) and SB piers (to include existing truss).	\$50,000	None	Will be added to the current Median Cable Barrier safety project for this section, to be constructed in 2009. JN 87946.	FXOBJ/SS-SM	7	4	3	0	3	1
28th St - 1030' W Kalamazoo Ave SE to 1130' V	DOT - Grand Rapids TS	2008 Corridor Retiming (JN 101124). Separate traffic and peds via shared use path. Access Management. Add additional thru lanes.	Unknown	Available ROW, property access, Utility concerns	Access management study has been completed, and is being utilized as construction/permit projects allow.	Bike/HD-ON/RE-ST	9	8	5	3	2	0
WB I-94 - 240' W of W Grand Blvd to Livernois /	MDOT - Detroit TSC	Rumble strips in shoulder; Education; Enforcement	\$250,000 for rumble strips.	Funding/personnel issues with education and enforcement.		FXOBJ	7	7	4	2	1	4
Dort Hwy - 430' N Hemphill Rd to Elms Dr	MDOT - Davison TSC	Non-motorized path.	\$1,200,000	Possible ROW constraints.		Ped	9	8	4	4	0	2
NB I-75 - 2030' N Bristol Rd to 250' N Miller Rd	MDOT - Davison TSC				Two chain reaction crashes. A resurfacing project took place in 2007 in the area of concern.	FXOBJ	8	5	3	2	3	4
M-40 - 2260' N 143rd Ave to 130' S 64th St	MDOT - Kalamazoo TSC	1) Construct service road from truck stop to Interchange Drive along with installing new traffic signal at M-40 and Interchange Drive. 2) Move CAT scales to better facilitate keeping semis in truck stop (Coordinate new semi movements with new signing and pavement marking). 3) Apply a bridge treatment to increase friction on overpass. 4) Install hatching in southbound center left turn lane at southbound I-196 entrance and exit ramps. 5) Install rumble strips along shoulders. 6) Install hatching in the shoulder areas in curb and gutter section.	1) \$500,000 for the intersection (City of Holland to pay for service road) 2) \$100,000 3) \$55,000 4) \$2,500 5) \$2,500 6) \$8,000	Local businesses are concerned if the shoulders are "blocked off" that people will not use them as "turn lanes" which will impede traffic flow and increase the perceived traffic problems	1) Working with the City of Holland on this potential remedy. 4) This remedy is still being evaluated for its benefits. (Biggest concern: How many left turners are there onto 64th Avenue?) 5/6) This remedy is still being evaluated for its benefits. (Biggest concern: Number of businesses in the area so would the traffic choosing not to use the shoulder as a "turn lane" impede traffic flow.).	HD-ON	7	15	3	0	1	2
SB US-131 - 240' S Grandville Ave to 650' S Fr	DOT - Grand Rapids TS	2008 Corridor Retiming (JN 101124). Add additional thru lanes.	Unknown	Available ROW, Utility concerns	Access management study has been completed, and is being utilized as construction/permit projects allow.	FXOBJ	12	13	2	4	1	4
M-150 - 125' N Hickory Lawn to 130' N Montmol	MDOT - Oakland TSC	Implementation of access management strategies.	Unknown	None	Potential for further growth in this area the with current configuration being 5-lanes in a heavily commercialized area. Recent new installation of a signal for 2 large developments.	Driveway	12	12	3	0	2	0

SB I-75 - 1030' S Big Beaver Rd exit to 80' E Liv	MDOT - Oakland TSC	Placement of a speed advisory warning system.	\$825,000	None	90 degree curve with speed advisory signing with concrete barrier and guardrail. Geometry limited due to existing development.	FXOBJ	10	11	2	2	2	5
WB I-94 - 140' S 10 Mile exit ramp to 460' N 9 M	MDOT - Macomb TSC				The concentration of fixed-object type crashes in this section of I-94 are the results of standing water in the roadway. Drivers are losing control of their vehicles and striking the median barrier wall due to hydroplaning. We have corrected the standing water through this and other sections of I-94 by reconstructing the outside lane and the inside & outside shoulders to provide positive drainage into the new valley gutter. We will continue to monitor this location to ensure these type of crashes have been reduced by the reconstruction.	FXOBJ	10	11	2	3	1	5
EB I-696 - Bermuda/Mohawk Rd to I-75 mainline	MDOT - Oakland TSC	Congestion mitigation.	Unknown	None	4-5 lane section for EB I-696 highest ADT in state with 205,000 vehicles; weaving movements with I-75 interchange; this is a depressed freeway section	RE-ST	10	10	2	1	2	1
NB US-131 - 1 Mile E Pine Island Dr to 500' S P	DOT - Grand Rapids TSC	Add 3rd NB lane from W. River Dr. to 10 Mile	Unknown	Existing structure widths (over/under).	2007 Full Reconstruct (JN 50758).	OVTN/RE-ST	6	7	3	2	3	3
SB US-131 - 750' N of Park St to 1990' S I-96 (E	DOT - Grand Rapids TSC				2005 Reconstruct, added additional lane.	SS-SM	9	8	2	2	3	1
Grosbeck Hwy - 820' N 10 Mile Rd to 11 Mile Rd	MDOT - Macomb TSC	Reduce M-97 to two lanes of traffic in each direction and construct a boulevard section with crossovers, Retime the signals on M-97 corridor to provide better progression to avoid the frequency of stop-and-go conditions. Relocate utilities from overhead to underground.	\$26,000,000	Right of way		RE-ST/HD-ON	6	5	3	1	1	0
SB US-31 - 850' N Shettler Rd to 350' S I-96 on	MDOT - Muskegon TSC	Short Term: Remove two trees and the relocation of two signs. Long Term: Possible freeway tower lighting and the reconstruction and reconfiguration of the existing interchange.	Long Term: \$50,000,000	Long Term: ROW, Property Access and Utilities	Trees have been removed and the signs have been scheduled for relocation.	Lane Departure	6	3	3	1	1	5
S 11th St - 470' S Fulkerson Rd to 600' S Bell R	MDOT - Coloma TSC	Enforcement, Access Management Study, Construct a Boulevard	\$3,000 for Access Management Study	Availability of enforcement personnel, Planning constraints for access management, Public acceptance of boulevard		Driveway	9	11	2	1	0	0
Vernor Hwy - Waterman St to Lansing St	City of Detroit	1) Create bump out to reduce crossing width for pedestrians and facilitate on-street parking. 2) Provide mid-block crossings at critical locations (locations generating large number of pedestrians traffic) supplemented with ped-actuated crossing signals and pedestrian crossing signs.	\$350,000	Limited right of way and no additional right of way is available. All improvements should be done within existing ROW.		Ped/Bike	8	5	3	2	0	0
Romeo Plank Rd - 1400' S Hall Rd to 300' N Mil	Macomb County					Lane Departure	6	5	2	1	1	0
Greenfield Rd - 725' S Acacia St to 200' N Keele	Wayne County	Education programs for both pedestrians and drivers.	Unknown	Determining audience; Achieving widespread participation	Diverse crash types at varied locations makes remedies vague	None	10	10	3	3	2	2
Alden Hwy - 520' E Grass River Natural Area Rd	Antrim County	Improve the alignment of the roadway	N/A	Environmental constraints prevent changes in alignment.	Additional signs have been provided.	FXOBJ	4	3	3	4	1	4
Vreeland Rd - Maywood Ave to 590' W Hoover	Wayne County	Installation of crossing gates ordered by MDOT and completed by railroad agency	\$120,000	None	MDOT DSTR held on 3-27-06 and Confirming Order issued on 5-9-06 for installation of 3/4 road gates. Wayne County and MDOT Rail Safety to monitor crashes.	TRAIN	5	3	2	1	0	0
Bristol Rd - Carmanwood Dr to 150' W Grand Tr	Wayne County/City of Bu	Improve pedestrian facilities along Bristol Road. A study would have to be conducted. Possibilities could be a midblock crossing and a pedestrian sanctuary-median.	\$40,000	GCRC does not install or maintain sidewalks. Project would need to be coordinated with City of Burton and Flint Twp.		Ped	4	2	2	1	0	0
South I-94 Service Drive - Waters Edge Ln to D	Wayne County	Installation of street lights and/or sidewalks.	Unknown	Local community issue.	Roadway has rural appearance with increasing volumes.	None	3	2	3	1	2	0
Hayes Rd - 350' N Stadler Rd to 1650' S Canal	Macomb County					None	4	2	3	1	0	2

Andersonville Rd - 1/2 Mile S Big Lake Rd to 3/4 Gratiot Rd - 23 Mile Rd to Bates Rd	Oakland County Macomb County	Upgrade advance curve warning signs to fluorescent yellow (Type IX Sheeting). Install target arrows and chevrons (Type IX Sheeting) in the curve. Install raised pavement markers on the centerline. Relocate a "Do Not Pass" so it doesn't block sight to the curve sign.	\$5,000 for upgrading, installation, and relocation of signs. \$1,750 for installation of Centerline Raised Pavement Markers.	RCOC will implement the potential signing remedies immediately with our own work forces and include the RPMs in our annual maintenance contract for work by contractor. This will be done with RCOC funds because of the relatively low cost.	Potential remedies should improve awareness and visibility of the curve and centerline of the road. Of the 5 crashes at this location resulting in 2 Fatalities and 7 Type A injuries, both Fatal and one of the Type A crashes involved drinking.	Lane Departure AN-DR	4 5	6 7	2 2	2 2	2 7	1 1
Keefer Hwy - 1/2 Mile N Clarksville Rd to 1/2 Mile Dodge Rd - 450' W Dosh Rd to 1950' W Henderson Rd - 1900' E Krull Rd to 250' W Roberson Rd - 1240' W Prentiss St to 900' W N P Metro Pkwy - 750' W Moravian Dr to 500' E Cap	Ionia County Genesee County St Joseph County Kent County Macomb County Macomb County	Upgrade existing 4' aggregate shoulders to 6' HMA; Flatten existing 1 on 3 non-recoverable front slope to recoverable 1 on 4; Remove existing fixed objects within ROW including trees, rocks and other objects. Improve clear zone area and culverts installations. Widen shoulders. Tree removal Install fluorescent yellow curve (W1-5) signs, large arrow (W1-6), and chevrons (W1-8) signs. Remove trees.	\$925,000 \$20,000	Predominate land use along corridor is agricultural, and thus, most of the land has been cleared of all trees except in front of a minimal number of residential homes. One home is a Michigan Centennial Farm within with mature trees along property frontage. Land Owner Approval Trees - The public dislikes tree removal and some may be on private property.	An upgrade would cover this remaining three mile section of proposed All-Season roadway connecting state route M-43 to the south and Interstate I-96 to the north. Four miles of the corridor has been constructed in 2000 and 2005. This remaining three miles has not been identified for improvements in the RTF's four year plan and is not expected to be identified for some time. All accidents of type A or Greater were attributed to either Medical Conditions or Alcohol Involvement.	FXOBJ FXOBJ FXOBJ	3 4 3	3 4 2	2 2 2	1 3 1	0 1 0	0 1 2
Maple Island Dr - 330' S Eavanston Ave to Creeper Rd - 1240' W Prentiss St to 900' W N P Metro Pkwy - 750' W Moravian Dr to 500' E Cap	Muskegon County Macomb County Macomb County	1) Upgrade to high intensity fluorescent signs. 2) Install flashing beacons with sign upgrade and black backplates for east/westbound directions. Add a dedicated left center turn lane to the existing roadway and remove the existing super elevated curve within the project. The roadway will be widened from four, 12 foot lanes to five, twelve foot lanes with all necessary ancillary work to match existing commercial driveways and drainage. Included as part of this work will be: remove existing pavement including concrete curb & gutter and storm sewer, re-grade curve to remove super elevation, place new aggregate drainage course, new edge drain, new aggregate base course, new storm sewer, new concrete curb & gutter and new HMA pavement. Finally all commercial driveways will be re-graded to match the new roadway and paved with reinforced concrete as well as turf restoration along all frontages.	1) \$1,200 2) \$45,000	Flashing beacon may not meet warrants. Also, this is an established commercial strip. There will be a significant disruption to the businesses during construction.	2 each 36" stop ahead and stop signs placed following 2006 MCRC study, flashing beacon did not meet warrants in 2006.	None	3	2	2	1	2	0
Wadhams Rd - 300' S WB I-69 Ramps to 300' N Federal Rd - 1/2 Mile N/S Yankee Rd	St Clair County Montcalm County		\$2,439,000 (projected 2012 dollars)		The description and cost for this project is for the portion of Wadhams Road from 300' S of WB I-69 Ramps to Lapeer Road (approximately 0.51 mile) only. The portion from Lapeer Road to North River Road is to be widened to five lanes in 2009-2010 as part of the bridge replacement project of the Wadhams Road bridge over the Black River.	Driveway	4	3	2	0	0	0
Alden Nash Ave SE - 440' N Cascade Rd to 430' N Federal Rd - 1/2 Mile N/S Yankee Rd	Kent County	1. Place emphasis on snow/ice control. 2. Construct right turn lane. Install fluorescent yellow curve (W1-2) signs, large arrow (W1-6), and chevrons (W1-8) signs.	1. None (within county) 2. \$120,000.00 Signs - \$3,500	1. None 2. Possible ROW acquisition, warranting right turn lane to dirt road (Cutler Rd) None	Two Crashes were weather related (icy roads). One was a motorcycle rear-ending right turning car.	HD-ON None	3 3	2 2	2 2	0 1	0 1	0 0
<b>Additional Notes:</b>		*ALL drivers or passengers regardless of injury 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 description indicated a driver was speeding.										