

Superior Region MDOT State Long-Range Plan Implementation

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Superior Region Planner



MDOT State Long Range Plan Goals

Stewardship: *Preserve transportation system investments, protect the environment, and utilize public resources in a responsible manner.*

Safety and Security: *Continue to improve transportation safety and ensure the security of the transportation system.*

System Improvement: *Modernize and enhance the transportation system to improve mobility and accessibility.*

Efficient and Effective Operations: *Improve the efficiency and effectiveness of the transportation system and transportation services, and expand MDOT's coordination and collaboration with partners.*

Downtown Reconstruction Projects

Village of Chassell



- New Sidewalks
- New ADA Ramps
- Transit Pull-offs
- Brick-paver roads
- Period Lighting
- Utility Coordination
- Bike Pathways
- Landscaping
- Pocket Parks
- Historic Preservation



Houghton

Gwinn



Crystal Falls



Downtown Reconstruction Projects

Partnering with Communities to Revitalize
Upper Peninsula's Historic Downtowns

Sault Ste. Marie (before)



Sault Ste. Marie (after)



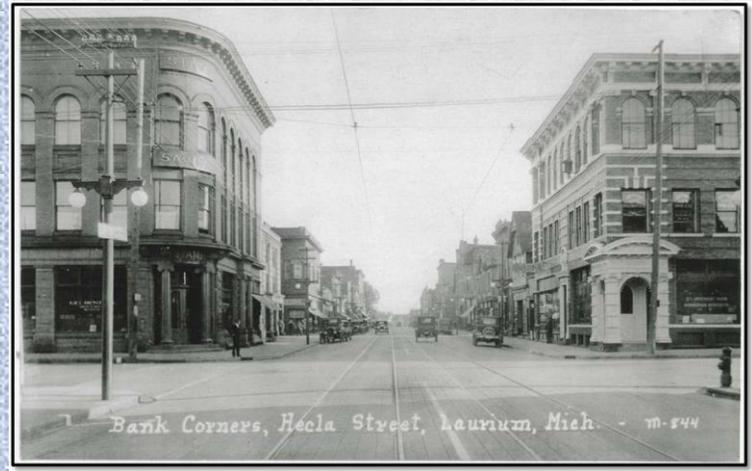
Ironwood (before)



Ironwood (after)



Laurium (100 years ago)

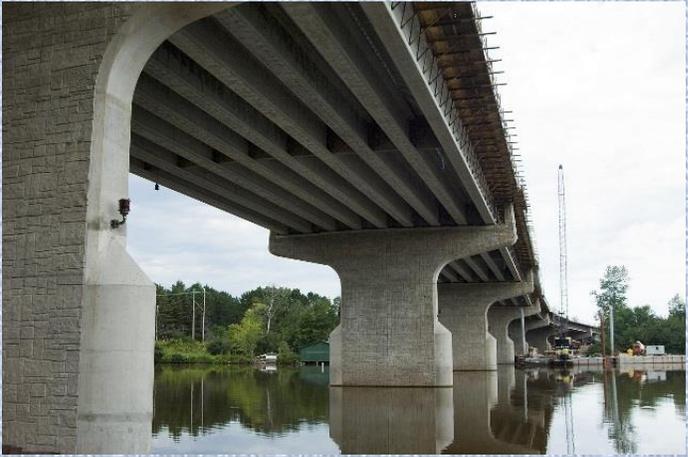


Laurium (after)



Context Sensitive Designs: Bridge Replacement Projects

Ontonagon River Bridge



I-75 SSM Bridge (Before)



I-75 SSM Bridge (After)



Menominee River Bridge (Before)



Menominee River Bridge (After)



Implementing Non-motorized Transportation in the U.P.

M-35 Wells State Park to Cedar River Harbor



US-41 Champion to Van Riper State Park



CR 424: Gaastra to Pentoga Park



M-26 Tunnel, Houghton



M-28 Marquette/Harvey



M-35 City of Gladstone



Implementing Nonmotorized Transportation in the U.P.

Escanaba M-35 Nonmotorized Pathway

Before



After (Making Connections)



Before



After (Alternate Transportation Mode)



Before



After (ADA Compliance)



Implementing Nonmotorized Transportation in the U.P.

- Local Government Collaboration
- Superior Region Nonmotorized Investment Strategy
- Regional Nonmotorized Planning Teams

Long-term Strategies (M-35, Menominee)

Regional Investment Strategies

2009

MDOT Superior Region Non-Motorized Transportation Plan & Investment Strategy

Developed by:
 Central U.P. Planning & Development Region
 Eastern U.P. Regional Planning & Development
 Western U.P. Planning & Development Region

Prepared for:

MAP A-1
Recent & Proposed Future Non-motorized MDOT Investments

Proposed 2014 & 2015 ENH Projects (See map A-2)
 Route: M-35 from 48th Ave. to Birch Creek Rd. (Approx. 16 miles)
 Project #'s (110682 & 110684)
 Scope: R&R with 8 ft. wide shoulders
 See Map A-2 for further detail

Year: 2013
 Route: M-35, from US-41 to 48th Ave.
 Project # (103311)
 Scope: R&R with the installation of new, wider, Non-motorized facilities

Year: 2010
 Route: US-41 (20th Ave. to 48th Ave./ 2 miles)
 Scope: R&R with the installation of new non-motorized facilities on both sides of US-41 and upgraded ADA ramps

Year: 2007
 Route: US41 (B01 to 20th Ave.)
 Project # (ENH200500004)
 Scope: R&R, Installation of historic lighting, brick-paver-stamped non-motorized facilities, and tree plantings,

Year: 2005,
 Project # (ENH200300207)
 Route: 10th Avenue (US41 to 6th St.)
 Scope: This project included the installation of brick pavers/sidewalks, tree plantings, historic lighting, and curb/gutter.

Year: 2004
 Project # (58381)
 Route: Menominee/Marinette Interstate Bridge
 Scope: Complete bridge replacement including: an 8 ft. wide non-motorized facility, historic lighting, and concrete etchings

Access Management

Completed studies:

- US-41/M-28 corridor, Marquette County
- US-2 corridor, Dickinson County
- US-45/M-64/M-38 corridor, Ontonagon County
- US-2 Ironwood, Gogebic County
- US-41/M-26 corridor, Houghton County
- I-75 BS in Sault Ste. Marie, Chippewa County
- US-2/US-41/M-35 in Escanaba, Delta County

Working with access management corridor teams to improve safety and the quality of life along and around MDOT highways



Access Management

- The program continues to be very successful
- MDOT has integrated access management into the designing process

Right-in, Right-out



Nonmotorized



Redefined Crossovers



(Before)

Access Removal

(after)



Access Management: US-2, Ironwood

Safety Improvements Realized

- Primary objective: separate and minimize both vehicular and pedestrian conflict points
- Challenge: to preserve internal circulation schemes along a corridor that has developed over 125 years

(Before)



(after)



- More than 100 non-conforming access points were analyzed by the team, including drives and street approaches
- Proposed access improvements were presented to the general public
- Team members met with individual property owners to gain concurrence

Three-Lane Conversions: US-2, Crystal Falls

- Other Upper Peninsula
Three-Lane Conversions:
- City of Menominee
 - Village of Powers
 - City of Munising
 - City of Escanaba
 - City of Iron River
 - Bark River
 - Christmas
 - Calumet
 - St. Ignace
 - Crystal Falls Township

Pedestrian Issues



US-2, Crystal Falls (After)



Left-turn Lock-up



New Pathway



US-2, Crystal Falls (Before)



Drainage Issues



Roundabout Implementation

Marquette: US-41/M-28/Front Street

Future Projects

- City of Ishpeming (2016):
US-41/M-28/2nd Street
- City of Sault Ste. Marie (2018):
I-75 Business Spur/3 Mile Road/
Mackinac Trail

Utilizing innovative design solutions to improve safety and the quality of life on and around MDOT highways



Before



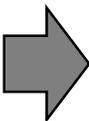
After

Commercial Vehicle Enforcement (CVE)

- Partnering with MSP Commercial Vehicle Enforcement Division
- Traffic data recording, including weight in motion (WIM)
- Motor Carrier officer with laptop connection in patrol vehicle
- Virtual weigh stations

Virtual Weigh Stations

Computer wirelessly connected WIM sensor in pavement



Utilize PITWS and scales to officially weigh commercial vehicles



Powers Weigh Station

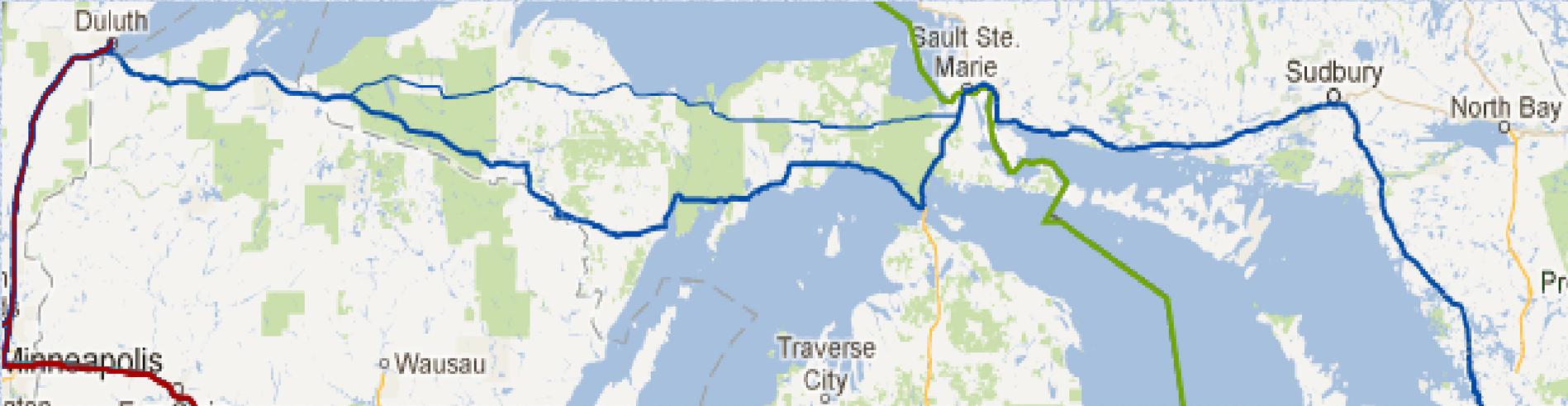


Powers Weigh Station with Advanced Warning



Investing In Superior Region Great Lakes Regional Transportation Operations Coalition (GLRTOC)

Superior Region GLRTOC Corridors



GLRTOC Corridor Profile

2013 Improvement Strategy

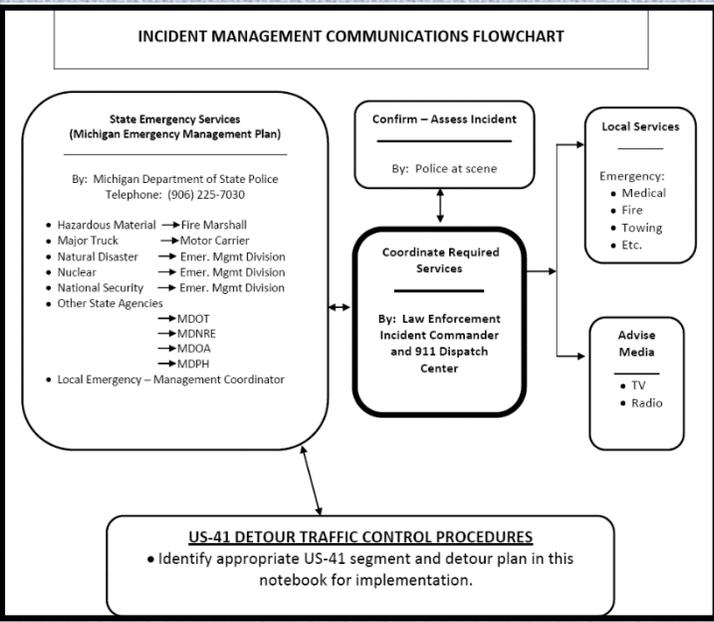
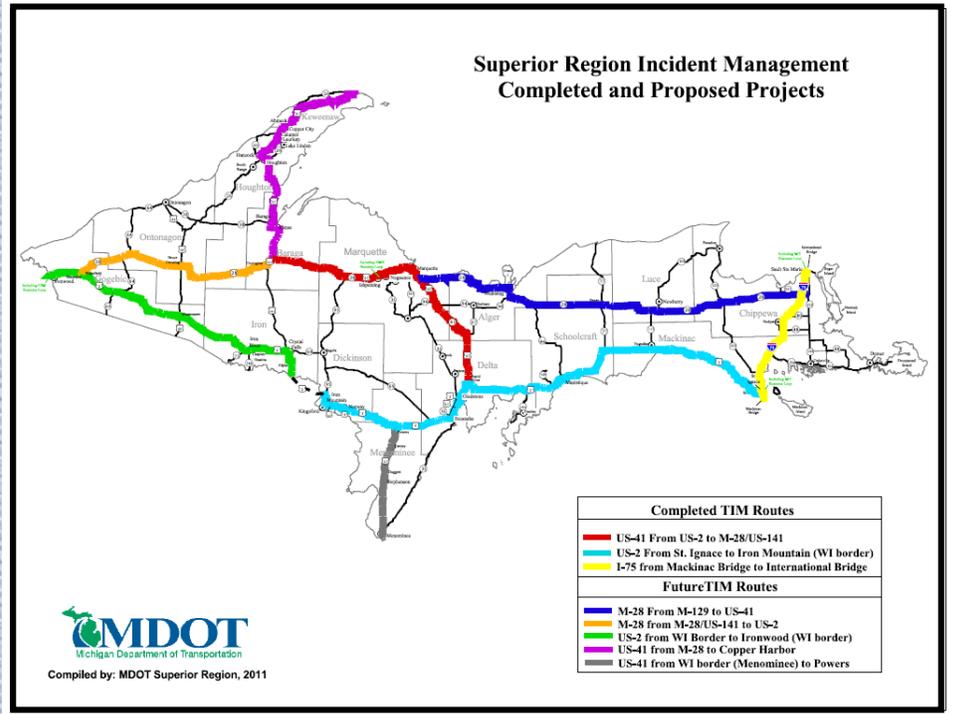
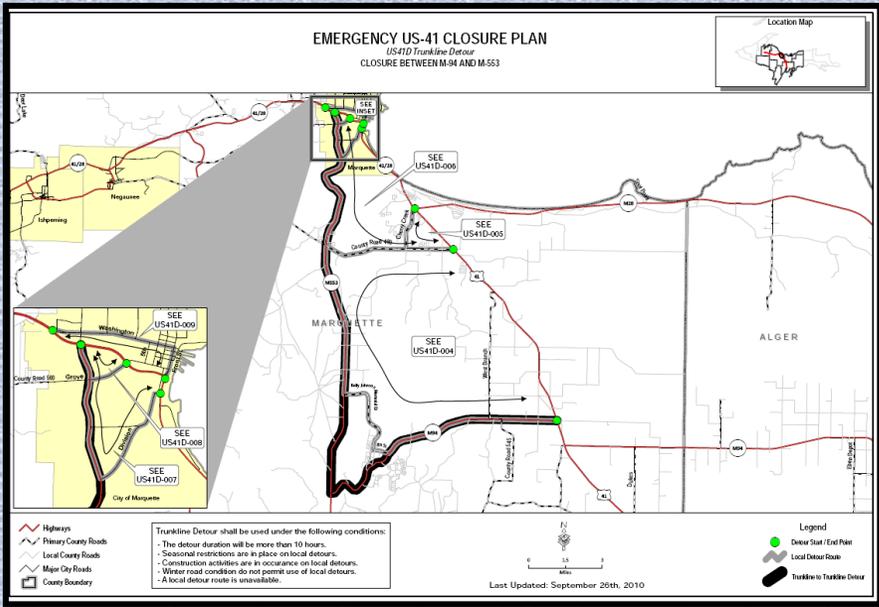
GLRTOC Route	Total Route Mileage	Total AADT	% Commercial AADT	Total Programmed Funds (2013)	Total Lane Miles Improved (2013)	Total Corridor Work Zone Delay
I-75	52	2,800 - 8,400	5% - 15%	\$10.2 million	57 miles	< 10 minutes
US-2	320	750 - 23,500	3% - 21%	\$6.5 million	92 miles	30 minutes
M-28	305	1,400 - 31,500	4% - 16%	\$9.7 million	45 miles	30 minutes

Incident Management Planning

Managing Planned and Unplanned Road Closures:

- Planning ahead to minimize delay
- Identifying local detours
- Enhancing communication and partnerships

.....to ensure traffic is moving safely and efficiently on the trunkline as soon as possible



Traffic Control Options

The MDOT Superior Region procedure for detouring traffic on state highways during short-term and long-term closures consists of the following:

- 1- If the incident type permits a partial closure of the highway and sufficient room exists for movement of traffic through the incident location, then flagging of traffic should be considered.
- 2- For full closure of the highway with duration of less than 30 minutes, the option of holding traffic in place may be considered.
- 3- For full closure of the highway with duration of less than 10 hours, the options of either an approved local municipal/county detour route, or a state highway-to-highway detour route should be considered for detouring of traffic. The use of municipal/county approved detour routes shall be in accordance with the US-2 incident management plan.
- 4- For full closure of the highway with duration of greater than 10 hours, the only option to use is a state highway-to-highway route for detouring of traffic. Traffic must be monitored, and if back-ups reach the nearest identified detour route, traffic must be detoured.

If the estimated closure time exceeds the approximate travel time of the detour route, the option of detouring traffic may be considered by the incident commander.

Note: All overweight and over-width permitted vehicles shall be held in place during the closure time period, unless otherwise permitted by MDOT to change routes.

Call and be sure... before you detour.

At times, accidents, emergencies or severe weather require closure of US-2 between St. Ignace and Iron Mountain. These conditions, determined jointly by the Michigan Department of Transportation (MDOT) and the Michigan State Police (MSP), may require traffic to be detoured on local county roads or city streets. Before you decide to detour traffic, be sure that the appropriate local road agencies have been properly notified.

- MDOT Escanaba TSC.....1-906-786-1800
- MDOT Newberry TSC.....1-906-293-5168
- MDOT Crystal Falls TSC.....1-906-875-6844
- Dickinson County Road Commission.....1-906-774-1588
- Delta County Road Commission.....1-906-796-3200
- Menominee County Road Commission.....1-906-753-6914 or... 1-906-863-5100
- Schoolcraft County Road Commission.....1-906-341-5634
- Mackinac County Road Commission.....1-906-643-7333
- Mackinac Bridge Authority.....1-906-643-7600
- St. Ignace Dept. of Public Works.....1-906-643-9277
- Manistique Dept. of Public Works.....1-906-341-5346
- Gladstone Dept. of Public Works.....1-906-428-9577
- Escanaba Dept. of Public Works.....1-906-786-1842
- Norway Dept. of Public Works.....1-906-563-9651
- Iron Mountain Dept. of Public Works.....1-906-774-0722

Superior Region Innovations

Road Weather Information Systems (RWIS)



- Provide safer highways
- Improve road maintenance decision-making
- Improve traveler information

I-75/US-2 LED lighting



I-75, Innovative Construction Techniques (Fibermat, Tru-pave)
Prevent Reflective Cracking



US-2, Gladstone "Smart Signal" (Increased Safety)



US-2, Cut River Bridge (Innovative Contracting)
Fixed-Cost Variable Scope



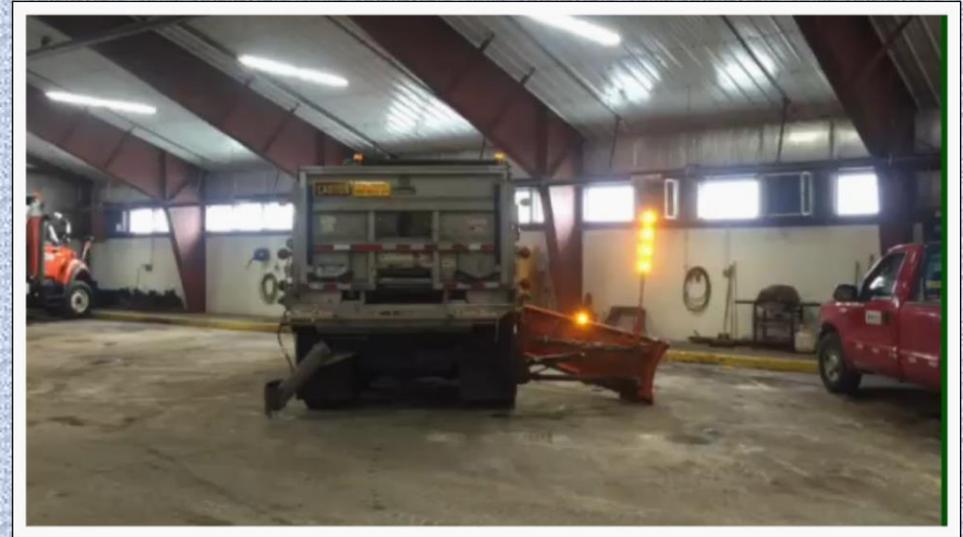
Innovations In Maintenance

Study of oil service life (St. Ignace Garage)

- Study showed discarded oil still had partial remaining service life
- Push back regular oil change interval
- Save money on expense of oil
- Save on labor
- Save on downtime for truck maintenance



Better visibility to increase motorist safety



Salt to wheel application

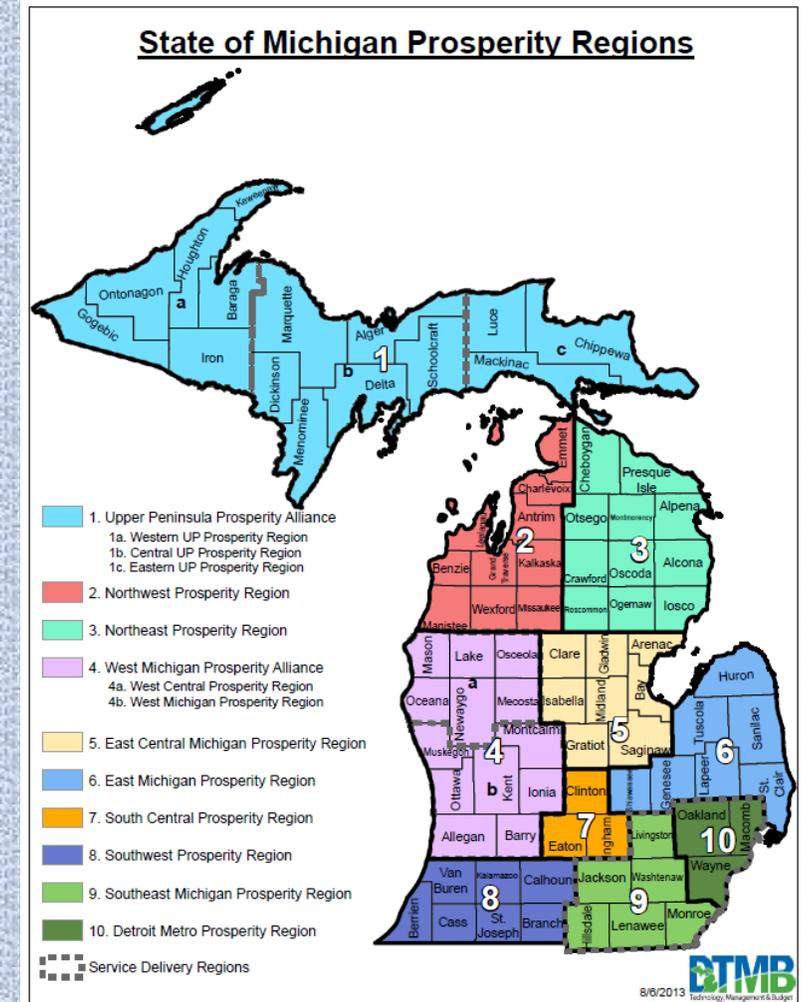


Region Prosperity Initiative (RPI)

- An effort by the State of Michigan to align around a common set of service delivery boundaries
- A local, voluntary grant initiative
- Managed by regional planning commissions

Superior Region RPI Implementation

- Participation in local, regional, and statewide RPI Teams
- Developed an MDOT RPI implementation plan
- Realigned organizational boundaries
- Participate in RPI implementation studies



TEDF Category (A) Grants

US-2 Island Resort and Casino
Passing Lane Extension



US-41 Passing Lane, L'anse (CertainTeed)



M-95/CR601 Intersection
Improvements (Eagle Mine)



Mead Road/US-2 (Verso Mill)



Intermodal Transportation

- Studying the cost effectiveness of Transload facilities in the U.P.
- Development of interactive rail map
- Rural freight U.P. freight studies
- Partnering with the Northwoods Rail Transit Commission to better understand northern Wisconsin and U.P. rail needs
- Meetings with mining companies to understand rail needs



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EVALUATION OF POTENTIAL TRANSLOAD FACILITY LOCATIONS IN THE UPPER PENINSULA (UP) OF MICHIGAN

Irfan Rasul
Michigan Technological University

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Rural Freight Rail and Multimodal Transportation Improvements – the Upper Peninsula of Michigan
Final Report
Project Number: 2010-0295

Gregory Graman, Ph.D., Frank Pentz, David Nelson
Student Researchers: Irfan Rasul, Al...
Pasi Lautala, Ph.D., P.E.
Suman...
esse, Sean Pengelly,

Figure 1: Upper Peninsula freight rail interactive map

Off-Road Vehicle (ORV) Connector Routes

(MCL 324.81101 to 81150 PA117, PA118, PA119 of 2013)

As of September 2013:

- MDOT may authorize the operation of ORVs on a highway, other than an interstate highway
- All state highways remain closed to ORV use except specific connector locations approved by MDOT
- MDOT can approve or deny a requested connector route at its discretion



US-2 (Gogebic) signs installed



Trout Lake staked and ready for sign installation



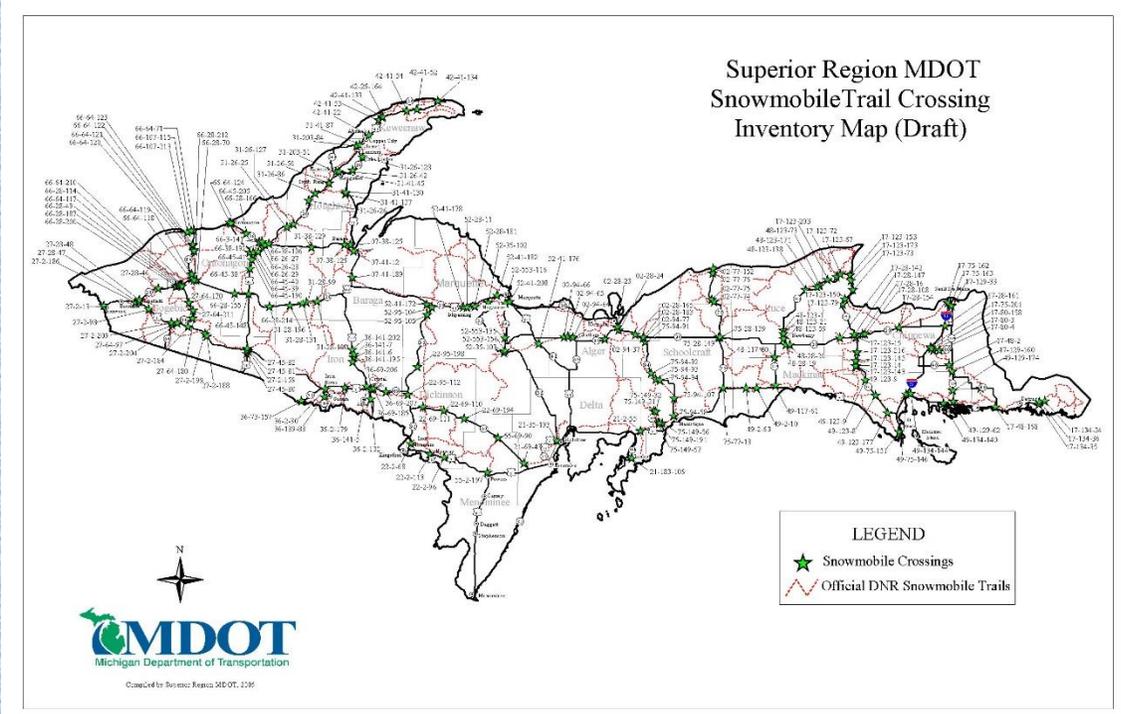
Bergland volunteers installing signs

Accomplishments

- Updated MDOT procedures, guidelines, and manuals
- New webpage
- Developed process for requesting an ORV connector
- Developed new permit special conditions
- Finalized the MDOT ORV sign handbook
- Generated templates for: ORV connector route maps and a complete issued MDOT permit, and local government resolution
- Established an MOU between MDOT and MDNR
- Developed stronger partnerships with ORV user groups, MDNR, tribal, federal, state and local governments
- Promoted tourism industry through improved ORV access to essential services
- Improved customer service

U.P. Snowmobile Crossing Repair (MDOT Highways Only)

- Annual maintenance = approximately \$125,000 per year
- \$3,000-\$12,000 per crossing
- Crossings need replacement every two to five years (depending on snowmobile volumes)
- Since 2002 - constructed or maintained 107 official DNR crossings



Newly Re-paved Snowmobile Crossing



MDOT Pure Michigan Byways: Improving Local Economies Through Tourism

Pure Michigan Byways

- M-123 "Tahquamenon Scenic Heritage Route"
- M-35 "Hidden Coast Heritage Route"
- US-2 "Iron County Heritage Route"
- US-41 "Copper Country Trail" (also federally designated National Byway)
- M-134 "North Huron Scenic Byway"

Scenic M-134 Designated as the State's First Pure Michigan Byway

By Paul Gingras



Clark Township Supervisor Gary Reid and Township Clerk Susie Rutledge pose next to the design to be used to highlight the state's 17 Pure Michigan Byways. M-134 is the first to be named under this branding campaign. State marketing will accompany the new designation. Signs along highways formerly

"We're going to get a lot of mileage out of this," said Jeff Hagan about the new designation of M-134 as the North Huron Byway. Mr. Hagan, of the Eastern Upper Peninsula Regional Planning and Development Commission, was part of a panel in Cedarville convened to promote the designation of the road Friday, October 16. The designation is designed to attract both travelers and project funding to the area. This is the first road to be rechristened a byway, and a distinctive sign will be used on it and other routes in the state that are deemed the most recreationally rich, historical significant, and picturesque.



The 59-mile M-134 stretch hugs the north shore of Lake Huron, passes through Mackinac and Chippewa counties, honors the

Public Private Partnerships

City of Ishpeming, Community Center



US-41/US-2 Rapid River Minimart



US-45/US-2 Watersmeet



M-553/CR480 Crossroads Restaurant



US-41/US-41 Jack's IGA



Questions?