MDOT
Michigan Department of Transportation

Public Hearing

Environmental Assessment
Proposed US-23 Improvements

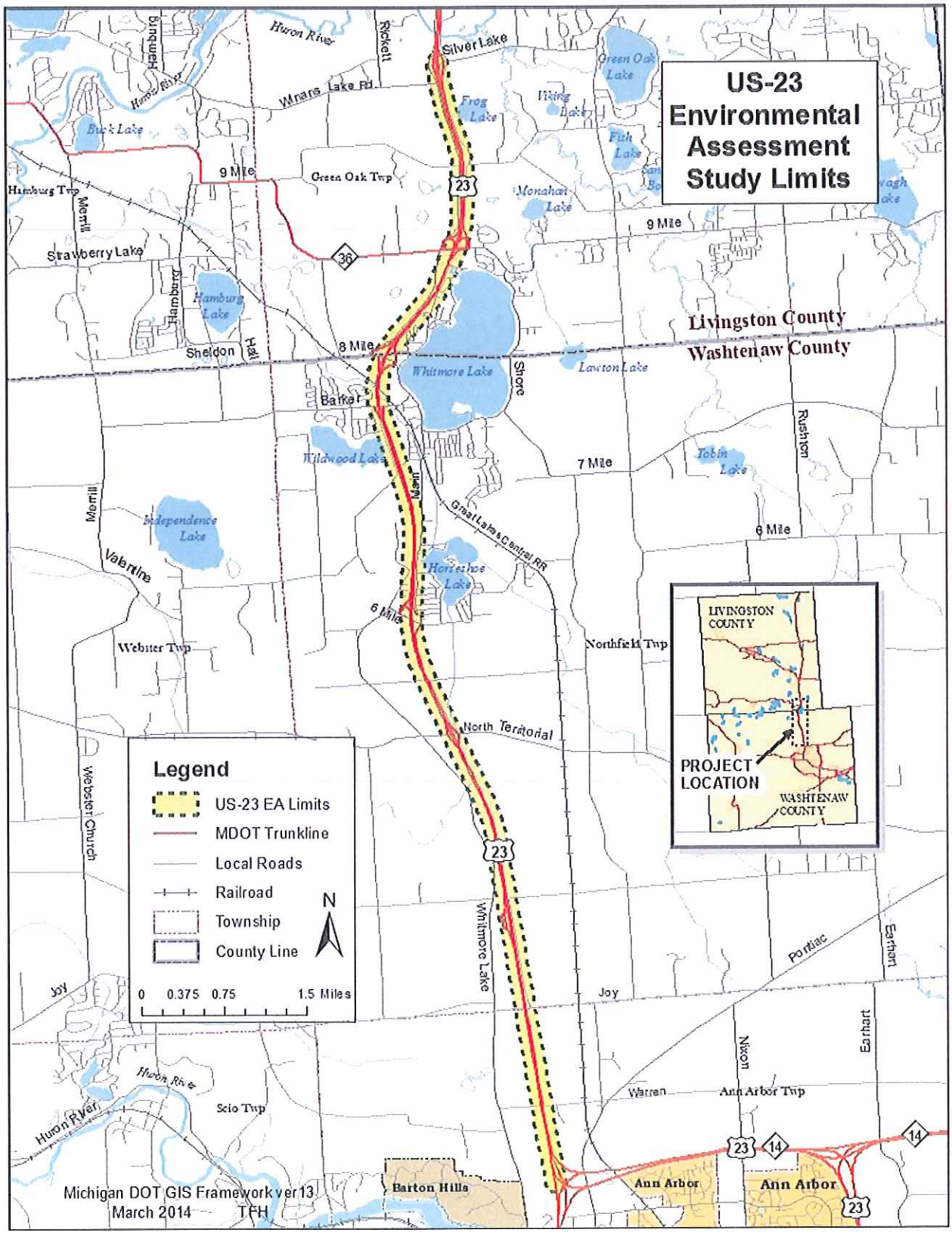
M-14/US-23 West Interchange to Silver Lake Road
Washtenaw and Livingston Counties

Thursday, February 26, 2015
4:00 p.m. – 7:00 p.m.

Northfield Township Hall, 8350 Main St., Suite A, Whitmore Lake

The location of this public hearing is accessible to individuals with mobility impairments. The hearing will take place in the second floor council chambers, accessible by elevator from the lobby. With seven days advance notice, the EA document may be available in alternate formats, including large print, audio file and other languages. Call 517-373-9534 to request accommodation.

Study Area


US-23 Environmental Assessment Study Limits
Livingston County
Washtenaw County
Legend
US-23 EA Limits
MDOT Trunkline
Local Roads
Railroad
Township
County Line
0 0.375 0.75 1.5 Miles
N
PROJECT LOCATION
LIVINGSTON COUNTY
WASHTENAW COUNTY
Huron River
Silver Lake
Wrans Lake Rd
Frog Lake
Viking Lake
Green Oak Lake
Fish Lake
Buck Lake
9 Mile
Green Oak Twp
Hamburg Twp
Strawberry Lake
Hamburg Lake
Sheldon
8 Mile
Whitmore Lake
Lawton Lake
Baker
Wildwood Lake
7 Mile
Tobin Lake
Independence Lake
Great Lakes Central RR
6 Mile
Horseshoe Lake
Webster Twp
Northfield Twp
North Territorial
Joy
Pontiac
Earhart
Nixon
Warren
Ann Arbor Twp
Scio Twp
Barton Hills
Ann Arbor
Michigan DOT GIS Framework ver13
March 2014 TFH

Introduction

This brochure summarizes the findings of the Environmental Assessment (EA) for proposed improvements to ten miles of US-23 from the west US-23/M-14 interchange north to the Silver Lake Road interchange in Northfield and Ann Arbor Townships, Washtenaw County, and Green Oak Township, Livingston County, Michigan.

The EA was prepared in accordance with the provisions of the National Environmental Policy Act (NEPA) of 1969, which requires that the social, economic, and natural environmental impacts of any proposed action of the federal government be analyzed for decision-making and public information purposes. This document describes and analyzes the build and no-build alternatives, potential impacts, and the measures taken to minimize harm to the project area.

Public involvement is essential to the Michigan Department of Transportation's (MDOT) decision-making process. Throughout the 13-month study, MDOT has engaged in dialogue with the public, local officials, and state and federal agencies on the details of the proposed improvements. MDOT is sharing the published results of the EA with the public.

To continue the public involvement process, MDOT has scheduled a hearing to present its findings and solicit comments on the EA. The public hearing will take place on Thursday, February 26, 2015, at the Northfield Township Hall, 8353 Main St., Ste. A, Whitmore Lake. For the convenience of local residents, MDOT will conduct the hearing from 4 to 7 p.m. using a combination of open forum and presentation formats. Attendees will be given an opportunity to speak publically or provide their comments in private to a court reporter or in writing using a comment form. The formal presentations are scheduled for 4:30 and 6:00 p.m., each followed by an opportunity to speak publically. Members of the study team also will be present to help explain the proposed project.

The deadline for submitting comments is March 17, 2015. All comments received or postmarked by the deadline, along with the environmental document, will help MDOT and the Federal Highway Administration (FHWA) decide which improvements best meet the purpose and need. If comments by the public and interested agencies support the determination of "no significant impact," the EA will be forwarded to the FHWA with a recommendation that a Finding of No Significant Impact (FONSI) be issued. If it is determined that the preferred alternative will have significant impacts that cannot be mitigated, the preparation of an Environmental Impact Statement will be required.

MDOT prepared the document in cooperation with FHWA. The study team includes representatives from the following areas within MDOT: Design, Project Planning, Real Estate, Construction and Technology, Traffic and Safety, Transportation Service Centers, and Region offices. Information contained in the EA also came from other federal and state agencies, local units of government, public interest groups, and individual citizens.

Project Description

The project corridor is a 10-mile four-lane section of US-23 within Livingston and Washtenaw counties from the west US-23/M-14 (tri-level) interchange (Exit 45) north to the Silver Lake Road interchange (Exit 55). The corridor experiences directional heavy traffic volumes during the weekday peak commuting hours on southbound lanes in the morning and northbound lanes in the late afternoon. The Level of Service (LOS), which measures traffic congestion, is

presently below acceptable levels during these periods and is expected to worsen by 2040. Off-peak hour traffic congestion is within the acceptable range.

Traffic incidents are another cause for traffic congestion. The corridor experienced 25 traffic incidents from January 2014 through mid-September 2014, with an average lane closure duration of one hour and 17 minutes. Mechanical failure is the typical incident with the occasional minor collision due to the bumper-to-bumper traffic experienced during the periods of congestion. These incidents and a lack of redundancy in the local road network adjacent to this segment create traffic flow delays. The lack of places for those involved in an incident to safely pull off the roadway also worsens traffic delays.

Constructed between 1957 and 1962, the US-23 bridges have exceeded their 40-year design life. The bridges over US-23 at 8 Mile, 6 Mile and N. Territorial Roads are rated "structurally deficient" by the National Bridge Inventory (NBI) system. This means their decks, superstructures or substructures are in "poor condition." Moreover, the N. Territorial Road bridge has been posted for weight restrictions, forcing heavy-duty trucks to use alternate routes to access nearby facilities. Other issues include substandard under clearance at the bridge over the railroad south of 8 Mile Road and entrance ramps at M-36, 6 Mile, 8 Mile, N. Territorial, and Barker roads constructed in the 1960s when the speed limit was 60 miles per hour.

Need for the Improvements

The purpose is to address the immediate insufficiencies of the corridor as described in the previous section by focusing on traffic safety, operational and infrastructure concerns, and the directional peak hour congestion in the US-23 corridor. The goal is to develop safe, efficient, and sustainable transportation improvements to assure that the corridor will meet the current and future highway operations with the use of state of the art traffic control measures along with improved infrastructure.

The specific needs that the project will address are:

- economically feasibility with regard to restricted funding and rapidly deteriorating infrastructure conditions;
- directional weekday (Monday – Friday) rush hour congestion (southbound morning, 6:30 – 9AM, and northbound late afternoon, 3:30 – 7PM);
- structurally deficient bridges over US-23 at 8 Mile, 6 Mile, North Territorial Roads, and US-23 bridges over state-owned railroad tracks (leased by the Great Lakes Central Railroad);
- improved on-ramps that allow for adequate acceleration to safely merge into US-23 traffic at the 6 Mile Road, 8 Mile Road, Barker Road, and N. Territorial interchanges;
- inefficient traffic operations at the corridor interchanges;
- no incident management areas to safely clear and investigate accidents;
- required roadway maintenance on US-23 from the west US-23/M-14 interchange to north of the Silver Lake Road interchange; and,
- required roadway maintenance on the bridges over US-23 at Joy and Warren Roads.

The resulting action will utilize cost effective innovative technologies and methods, expedite the construction schedule, and limit travel disruption during construction.

Alternatives Considered

MDOT has considered five alternatives to address the transportation infrastructure and operational needs of the US-23 Improvements project corridor. All the Alternatives are within MDOT right-of-way (ROW) except around the N. Territorial Road bridge replacement and 5 Mile Road realignment where some ROW will be required in all quadrants. Each alternative satisfies elements of the purpose and needs of the corridor. The MDOT is implementing Intelligent Transportation Systems (ITS) statewide throughout the highway system and is part of all the alternatives listed here. The ITS will include installation of additional traffic camera locations and electronic message boards to better inform the public of travel conditions by identifying travel times to interchanges, construction dates and times and traffic incident notification.

No-Build Alternative
The No-Build Alternative is included as a baseline to compare impacts. It is not considered a reasonable alternative, because it does not address the functional obsolescence and operational inefficiencies or structural deficiencies of the bridges or ramps. Furthermore, it does not address the operational inefficiencies of the interchanges or relieve the directional weekday peak-hour traffic congestion. The modeling of this alternative illustrates the continuation of the directional peak period congestion and deterioration of the traffic flow in this corridor through 2040.

Build Alternatives

Transportation Systems Management (TSM):
This alternative includes the bridge replacements at N. Territorial, 8 Mile, and 6 Mile Roads, the replacement of the US-23 bridges over the Great Lakes Central Railroad, and the widening of the US-23 bridge over Barker Road. It also includes Capital Preventive Maintenance (CPM) for the Warren and Joy Road bridges, and the US-23 mainline from the west US-23/M-14 interchange north to the Silver Lake Road interchange. The N. Territorial, 8 Mile, and 6 Mile Roads bridge replacements will be constructed to accommodate pedestrian and non-motorized travel.

The N. Territorial Road bridge replacement includes the realignment of 5 Mile Road to intersect N. Territorial Road approximately 500 feet east of the existing northbound on-ramp. Additional work includes constructing roundabouts on N. Territorial Road at the ramp termini. The park and ride lot will be removed and will be reviewed for replacement at a later date. The TSM elements include ramp extensions and minor operational improvements at intersection terminals such as timing changes or storage lanes that do not require right-of-way. This alternative does address infrastructure and some of the operational inefficiencies, but does not present opportunities to relieve the US-23 mainline traffic congestion due to traffic incidents and directional weekday peak hour traffic congestion.

Ramp Metering:
Ramp metering is the use of traffic signals, typically a signal yellow light, to control the flow of traffic entering a freeway facility. This control aims to maximize the capacity of the highway and prevent traffic flow breakdown and the onset of congestion. This alternative analysis included all the elements listed in the TSM Alternative as well as metering of the following on-ramps:

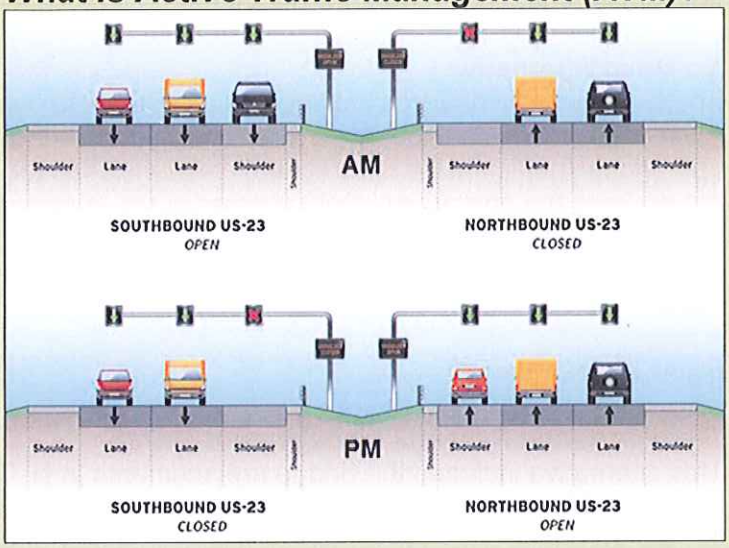
- 6 Mile Rd. On-Ramp to SB US-23 (300 feet from cross street)
- 8 Mile Rd. On-ramp To SB US-23 (381 feet from cross street)

- M-36 On-Ramp to SB US-23 (34' feet from cross street)
- M-36 On-Ramp to NB US-23 (300 feet from cross street)

Although the addition of ramp metering at these select locations did not result in significant freeway operational improvements, it is anticipated that ramp metering will have an impact on safety by reducing the number of crashes at the merge areas for these metered ramps. This alternative does address infrastructure and some of the operational inefficiencies, but does not present opportunities to relieve the US-23 mainline traffic congestion due to traffic incidents and directional weekday peak-hour traffic congestion.

Active Traffic Management (ATM), Preferred Alternative: This Alternative includes all the elements listed in the TSM Alternative, six crash investigation sites (CIS) and an active traffic management (ATM) system. The ATM includes dynamic shoulder use from the west US-23/M-14 interchange to south of the M-36 interchange, to relieve the directional peak period traffic congestion. The southbound (SB) shoulders will only be open to traffic during the typical AM peak period of 6:30 – 9AM. The northbound (NB) shoulders will only be open to traffic during the typical PM peak period of 3:30 – 7PM. The shoulders will be restricted to passenger vehicles and light-duty trucks. The shoulders will also be available for traffic diversion in the event of mainline incidents; such as, collisions, mechanical breakdowns, or when traffic meets congestion thresholds during off-peak hours due to special event traffic or seasonal fluctuations. This Alternative requires the reconfiguration of the 8 Mile Road interchange along with its bridge replacement due to the widening of the US-23 bridges over the railroad to accommodate the dynamic shoulder use configuration. It also requires the widening of the US-23 bridges over Barker Road to accommodate the dynamic shoulder use configuration.

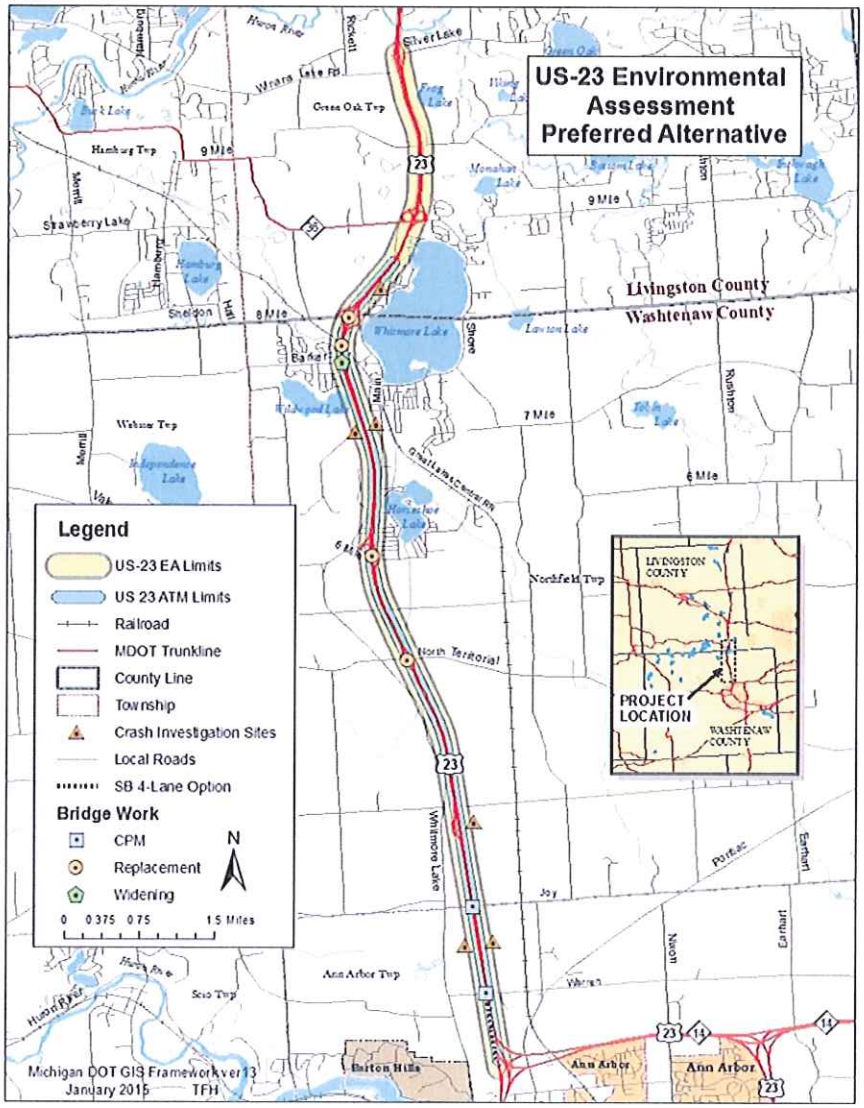
What is Active Traffic Management (ATM)?



ATM includes Intelligent Transportation System (ITS) with traffic cameras and electronic message boards, and dynamic shoulder use only during the periods of directional peak period congestion. The traffic cameras will be monitored through the Southeast Michigan Traffic Operations Center (SEMTOC). Street lighting will be installed along the ATM to enhance the cameras' effectiveness during low visibility periods. They will monitor the corridor for incidents that may cause traffic congestion and notify the MDOT Courtesy Patrol for public assistance for minor incidents or Michigan State Police for collisions or possible suspicious behavior. The ATM will use the inside median shoulders for the dynamic shoulder use during the directional peak hour congestion with lane availability indicated by electronic signage on gantries over the roadway. The gantries will be spaced ½ to 1 mile apart. The accompanying graphic illustrates the operation of the ATM dynamic shoulder use.

This alternative alleviates the stop-and-go traffic conditions that currently exist on US-23. Because of this, SB US-23 would experience some congestion near the US-23/M-14 interchange. MDOT has developed a design strategy to mitigate this congestion. MDOT is

proposing a four-lane treatment that will start south of the Warren Road bridge and provide four lanes at the US-23 and M-14 split (two lanes to each roadway). The additional lane will not require any additional right-of-way. This option could reduce the traffic congestion during the peak hours near the US-23/M-14 interchange. This is the Preferred Alternative (see map) as it fulfills all the elements of the purpose and need and is the focus of this document. The features of the Preferred Alternative are represented in the following figure and are presented in Section 5.0 of the Environmental Assessment.



ATM with High Occupancy Vehicles (ATM-HOV):
This alternative includes all the elements listed in the ATM Alternative, except the dynamic shoulder use during the periods of directional peak hour traffic would be designated as a High Occupancy Vehicle (HOV) lane and will only be available for passenger vehicles and small trucks with 2 or more occupants.

The HOV dynamic shoulder use has many issues with regard to enforcement and safety. The State of Michigan does not have a specific law to enforce HOV only lanes. Such lanes can be enforced under the Michigan Vehicle Code 257.642 mandating adherence to traffic control devices, such as, signage or electronic message boards restricting lane usage.

The frequently asked questions associated with the FHWA pooled fund study, *HOV Lane Enforcement Handbook* (2006),[1] reported difficulty in recognizing a violating vehicle (detecting that there are 2 or more people in the vehicle) during periods of heavy traffic. The designation of the median shoulder for HOV-only during the peak periods would require that police officers enforce the managed shoulder during heavy traffic volumes to ensure its success. There is no inside shoulder with this alternative where police officers can safely pull over a vehicle for an HOV violation. Either the police officers would need to block the median shoulder lane to pull over a vehicle, which would block the flow of traffic in that lane, or they would need to signal for

[1] https://hovpfs.ops.fhwa.dot.gov/hov_pfs_members/docs/projects/10/enforce_faq.pdf

the violating vehicle to pull the vehicle over in the right shoulder, which would be very difficult and dangerous. Both of these situations could result in a significant reduction to the US-23 capacity during the peak period or develop unsafe situations for police officers and other drivers. Camera enforcement could improve the enforcement of HOV. However, Michigan does not have the legislation or the infrastructure and resources to support camera enforcement at this time.

The ATM-HOV Alternative does fulfill most of the elements of the purpose and need, but due to the enforcement and safety issues it is not a preferred alternative.

North South Commuter Rail (WALLY)

The North-South Commuter Rail from Howell to Ann Arbor, popularly known as the WALLY (Washtenaw – Livingston Rail Line), is not an alternative in this study. However, public comments from the December 2013 and August 2014 public meetings included requests to add the WALLY as a "build alternative." The EA includes a section in response to the public comments by explaining the WALLY's relationship to this Environmental Assessment. The US-23 Modernization EA and the WALLY are concurrent studies and are separate but complementary projects,

WALLY development will continue with or without US-23 developments and will be required to follow the environmental clearance process as defined in the National Environmental Policy Act (NEPA) after the feasibility study is complete. The separation of the US-23 Improvement EA and the WALLY Phase II study ensures both projects proceed without delay. The North-South Commuter Rail website at http://www.nsrailstudy.com contains information on the Phase II study and provides a forum for public comment.

What's next?

After the public hearing, a copy of the complete transcript of all written and oral comments received in response to the findings of the EA will be available for public review by March 2015, at the same locations as listed for EA review. Each comment will be shared with all study team members and with MDOT and the Federal Highway Administration (FHWA) management for their consideration. After reviewing all comments MDOT will select a Recommended Alternative and request that the Federal Highway Administration issue a Finding of No Significant Impact (FONSI) to close the environmental clearance process.

The public hearing legal notice follows. Please use the form on the back of this brochure to provide any comments concerning the EA.

PUBLIC HEARING NOTICE
MICHIGAN DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL ASSESSMENT FOR PROPOSED US-23 IMPROVEMENTS
US-23/M-14 WEST INTERCHANGE TO SILVER LAKE ROAD
WASHTENAW AND LIVINGSTON COUNTIES, MICHIGAN

The Michigan Department of Transportation (MDOT) has completed an Environmental Assessment (EA) on proposed improvements to ten miles of US-23 from the US-23/M-14 west interchange to Silver Lake Road in Northfield and Ann Arbor townships, Washtenaw County, and Green Oaks Township, Livingston County.

MDOT will conduct a public hearing at the Northfield Township Hall, 8350 Main St., Suite A, Whitmore Lake, on Thurs., Feb. 26, 2015 to receive comments on the EA document. To allow easier participation for those in the study area, the public hearing will take place continuously from 4 p.m. to 7 p.m., with formal presentations at 4:30 and 6 p.m.

The EA describes and analyzes the proposed work and the measures taken to minimize harm to the project area. The proposed project involves replacing and upgrading pavement, median shoulders, bridges, and entrance and exit ramps. It also analyzes the effects of using upgraded shoulders, permanent message boards, cameras and other active traffic management system technology to reduce congestion, improve safety, manage incidents and better accommodate through traffic during peak hours.

MDOT has encouraged public involvement during the study process by conducting public meetings on Dec. 12, 2013 and Aug. 14, 2014, and by providing study information and opportunities to comment at www.michigan.gov/mdotstudies. The EA is available for review and comment through February 9, 2015, on-line and at the following locations: Northfield Township Hall, 8350 Main St., Ste. A, Whitmore Lake; Northfield Township Library,125 Barker Rd., Whitmore Lake; Green Oaks Township Hall, 10001 Silver Lake Rd., Brighton; Ann Arbor Township Hall, 3792 Pontiac Tr., Ann Arbor; Livingston County Clerk Office, 200 E. grand River Ave., Howell; Washtenaw County Clerk Office, 200 N. Main, Ann Arbor; Ann Arbor District Library, 343 S. Fifth Ave.; Brighton Public Library, 100 Library Dr.; MDOT Brighton Transportation Service Center, 10321 E. Grand River, Ste. 500, Brighton; MDOT University Region Office, 4701 W. Michigan Ave., Jackson; and the MDOT Bureau of Development, 425 W. Ottawa St., Lansing.

A court reporter will record the hearing's formal presentation and public comment session, and will be available to take comments in private for inclusion in the public hearing transcript. Citizens also may complete a written comment form at the hearing or mail, fax or e-mail their comments to: Robert H. Parsons, Public Involvement and Hearings Officer, Bureau of Development, Michigan Department of Transportation, P.O. Box 30050, Lansing, MI 48909; Fax: 517-335-5696; or e-mail: parsonsb@michigan.gov. Comments must be e-mailed, faxed or postmarked on or before Mar. 17, 2015. A copy of the complete transcript, including all of the written and recorded oral comments received, will be available for public review in March 2015 at the above listed locations.

With seven days advance notice, the document may be available in alternate formats, including large print, audio file and other languages. For more information on this public hearing, or to request accommodations, please write to the above address or call (517) 373-9534.

US-23 IMPROVEMENTS – US-23/M-14 TO SILVER LAKE ROAD
WASHTENAW AND LIVINGSTON COUNTIES
ENVIRONMENTAL ASSESSMENT
COMMENT FORM

GET INVOLVED! Your comments are important.

*** * * PLEASE PRINT CLEARLY * * ***

Name _____ E-mail _____

Address _____

City _____ State _____ Zip Code _____

TELL US WHAT YOU THINK.

Please use the space below and additional pages if necessary. Turn your comment form in at the public meeting. If you wish, you may mail, fax or e-mail them (see below).

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Please return this form to:
Bob Parsons
MDOT Public Involvement
P.O. Box 30050
Lansing, MI 48909
Fax: 517.335.5696
parsonsb@michigan.gov