



STATE OF MICHIGAN
DEPARTMENT OF TRANSPORTATION
LANSING

GRETCHEN WHITMER
GOVERNOR

PAUL C. AJEGBA
DIRECTOR

April 2, 2020

Ms. Denise Donohue, Director
County Road Association of Michigan
417 Seymour Avenue, Suite 1
Lansing, Michigan 48933-1143

Dear Ms. Donohue:

Call for Projects: Fiscal Year 2022 Federal Local Safety Program
Highway Safety Improvement, Highway Safety Improvement Systemic,
and High-Risk Rural Road Program

The Michigan Department of Transportation (MDOT) is pleased to announce the solicitation of applications for the Fiscal Year (FY) 2022 Local Safety Program encompassing the Highway Safety Improvement (HSIP), Highway Safety Improvement (HSIP) Systemic, and High-Risk Rural Road (HRRR) programs. The FY 2022 federal budget apportioned for this program is estimated to be \$15,000,000:

- \$7,500,000 for general HSIP,
- \$1,500,000 for streamlined systemic HSIP
- \$6,000,000 for HRRR

These amounts may be subject to revisions. We are asking the County Road Association of Michigan to distribute this notice to their member agencies.

Local agencies may submit up to three streamlined systemic applications for consideration. There is no limit to the number of HSIP and/or HRRR that an agency may submit. An agency wishing to submit a systemic horizontal curve delineation, rumble strips, edgeline pavement markings, signal backplates, countdown pedestrian signals, or stop controlled intersection sign upgrade project is encouraged to use the HSIP Streamlined Systemic Application Form.

Federal safety funds shall not exceed a maximum amount of \$1,500,000 per Local Agency for the fiscal year. Any non-selected HRRR projects will be automatically considered for general FY 2022 HSIP safety funds. Selected projects are to be obligated in FY 2022.

All applications must be submitted electronically by midnight on July 1, 2020.

Refer to the enclosed Exhibits for information regarding eligibility and submitting candidate Safety Project Applications.

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A list of all submitted projects will be posted on the [MDOT LAP Safety](#) website by July 22, 2020. Local Agencies are responsible to verify that their projects have been received and are on the list.

Our goal is to maintain a fiscally constrained program while maximizing the use of available federal funds. If you have any questions, please contact Pamela Blazo, Local Agency Programs Safety Engineer, at 517-335-2224 or at BlazoP@Michigan.gov.

Sincerely,

Larry T. Doyle, P.E.
Division Administrator
Development Services Division

Attachments

cc: Mark Lewis, FHWA
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Brad Wieferich, MDOT
Eric Mullen, MDOT
Tracie Leix, MDOT
Ryan Doyle, MDOT
Matt Bach, MML
Region Engineers, MDOT
Transportation Service Managers, MDOT
Local Agency Program Listserv Members, MDOT
Metropolitan Planning Organizations
Rural Task Forces

Exhibit 1 –Project Eligibility Requirements

General:

- The applicant must be an Act 51 agency (County, City, Village). Townships and tribes will need to work with their County for submittal.
- All locally owned roadways open to the public are eligible for safety funding regardless whether or not they are on the Fed-Aid network.
- The Safety Program allows for the submittal of systemic projects. Systemic safety projects involve the use of countermeasures that are widely implemented (corridor or area wide) based on similar roadway or intersection features that correlate with particular K/A crash types.

HRRR Specific Requirements:

- The roadway must be functionally classified as **rural** per the area urban census boundary (AUCB).
- The roadway must have a National Functional Classification of major collector, minor collector or local road.
- Within the most recent five-year time period of available crash data, **at least one crash, resulting in fatalities (K) or incapacitating (A) injuries, has occurred within the proposed project limits. For projects longer than 11 miles in length, multiple such serious crashes have occurred such that there is at least one such crash for every 11 miles of roadway segment.** Proposed projects with higher crash concentrations of 'K' and/or 'A' crashes may receive a higher priority than other projects.
- The proposed project must demonstrate a direct correlation to correct an area related to the fatal or incapacitating injury crashes. The proposed project limits must be relevant to the roadway features attributable to the crashes and are subject to approval by MDOT.
- There is no limit on the number of applications that may be submitted. Federal funds for selected projects will be limited to a maximum of \$600,000 per project.

HSIP Specific Requirements:

- Projects may be located in a rural or urban designated area.
- All locally controlled public roadways, regardless of National Functional Classification, are eligible.
- There is no limit on the number of applications that may be submitted. Federal funds for selected projects will be limited to a maximum of \$600,000 per project.

HSIP Streamlined Systemic Specific Requirements:

- Only the following project types may use the Streamlined Systemic Application (see Exhibit 4 for more guidance):
 - Horizontal curve delineation
 - Rumble strips
 - Edgeline pavement markings
 - Signal backplates
 - Countdown pedestrian signals
 - Stop controlled intersection sign upgrades

- Agencies may submit no more than three streamlined systemic applications totals including no more than two project applications for the same work type. Federal funds for selected projects will be limited to a maximum of \$200,000 per project.

Exhibit 2 – Financial Goals

Project Type¹	Total Program
Projects with scopes that directly address areas with a concentration of Types "A" and "K" crashes	\$11,000,000
Safety Edge	\$500,000
Non-motorized facility/Pedestrian improvements	\$500,000
High Friction Surface Treatment	\$500,000
Road Safety Audits (RSA)	\$60,000
Guardrail Upgrades and Clear Zone Improvements ³	\$750,000
Safety Funds per MDOT Region	\$500,000

1. A selected project may count towards multiple financial goals.
2. Copies of the Regional (Local) Traffic Safety Plan for your area may be obtained by contacting your Regional Planning Agency or by contacting MDOT at BlazoP@Michigan.gov or at 517-335-2224.
3. The intent of the Guardrail financial goal is for projects installing guardrail when none currently exists, upgrading terminal endings, or removing existing guardrail by flattening slopes. It is not intended to be used for replacing existing damaged guardrail as this is considered a maintenance item.

Exhibit 3 – Funding Participation

General:

- Portion eligible for federal aid:
 - Project’s Construction Phase (‘A’ Phase.)
 - Preliminary Engineering, **ONLY** if criteria of Preliminary Engineering Section outlined below is met.

- Portion not eligible for federal aid:
 - Right-of-way costs.
 - Preliminary engineering, unless criteria of Preliminary Engineering Section outlined below is met.
 - Construction engineering.
 - Decorative items, not safety related in nature.

- Selected projects will be ‘Lump Summed’ at the lesser of the original estimate plus \$20,000, or the original estimate plus 20 percent. Projects may, at MDOT’s discretion, be funded by a “Pro-Rata” method.

- Projects will be let by MDOT or performed by Local Force Account, as approved by MDOT’s Local Agency Program (LAP) office: information found at www.michigan.gov/mdot ~ Doing Business ~ Local Agency Program ~ Force Account and Local Agency Reimbursement System (LARS) Information.

- All social, economic and environmental impacts within the project limits impacts must be mitigated before federal funds can be obligated. Project applications which are expected to have significant public controversy and/or require an environmental assessment will not be considered until these outstanding issues have been resolved.

- Local Agencies within Metropolitan Planning Organization (MPO) areas must coordinate with their MPO to ensure inclusion of their project in the area’s Transportation Improvement Program for the fiscal year for which the project was selected. LAP will supply a list of selected projects to the MDOT Planning group, but it is the local agency’s responsibility to ensure these projects are included in the State Transportation Improvement Program.

HRRR specific:

- Construction will be funded at 90 percent federal funds and 10 percent local funds. See the section below regarding funding percentages for Preliminary Engineering (if eligible).

- Road Safety Audits (RSAs) are not eligible for HRRR funds.

HSIP specific:

- Construction will be funded at 80 percent federal funds and 20 percent local funds unless it meets one of the categories below. See the section below regarding funding percentages for Preliminary Engineering (if eligible).
 1. If the project scope addresses a roadway feature related to a fatality (K) and/or an incapacitating (A) injury within the limits of proposed work, it will be funded at 90 percent federal funds and 10 percent local funds.
 2. If it is an approved systemic project (that supports the State Strategic Highway Safety Plan), it will be funded at 90 percent federal funds and 10 percent local funds.

HSIP streamlined systemic specific:

- Construction will be funded at 90 percent federal funds and 10 percent local funds

- Projects are not eligible for Preliminary Engineering funding.

Preliminary Engineering (up to 10% of the estimated eligible construction costs)

Preliminary engineering for selected safety projects may be programmed for one or more of the following:

- MDOT Local Safety Initiative (LSI) identified location (funded at 50 percent federal funds/50 percent local funds)
 - Proposed scope of work must address the noted location deficiencies reviewed and identified by the LSI Program.
 - A copy of the MDOT LSI written suggestion list must be included with application.

- Traffic Signal Optimization (funded at 80 percent federal funds/20 percent local funds)
 - Must complete a traffic signal optimization study to analyze the timing of signal controllers and implement the revised timings.
 - Signals should be studied to allow for a minimum of one second all red phase and the yellow change interval phase must be evaluated to meet current guidelines.
 - A maximum of \$5,000 total cost will be allowed per signal location for the analysis and adjustment of signal controllers.
 - Signal component upgrades are not permitted under this category.
 - The analysis/study portion of the project will be programmed under a 'PE' Phase with the physical adjustments of timing being programmed under an 'CON' Phase.

- Road Safety Audits (RSAs) (funded at 80 percent federal funds/20 percent local funds)
 - An RSA proposal is submitted without an associated construction phase. It is hoped that the construction phase would be submitted in the next call for projects, however a previously funded RSA does not guarantee funding of the construction phase in a future year.
 - A maximum of \$20,000 in total project costs will be set up for each RSA.
 - The RSA Final Report/findings must be submitted to the Safety Program Administrator for reimbursement.
 - It is anticipated that this work will be completed by a consultant or another agency other than the road owner.

Exhibit 4 – Design Requirements

General:

- Proposed projects must meet current standards and warrants, current Americans with Disabilities Act and Buy America requirements.
- Designed in accordance with MDOT's Guidelines for Geometrics on Local Agency Projects, or in accordance with the current MDOT accepted version of AASHTO *A Policy on Geometric Design of Highways and Streets*. Other commonly used guidelines may be acceptable with prior MDOT approval.
- Traffic signal upgrade projects must install a box span configuration (unless justification is provided) and shall include the installation of signal back plates with reflectorized borders. These projects shall also include overhead mounted street name signs. Note that all work at a MDOT signal should include local TSC concurrence. If the selected project contains a MDOT signal, all signal design work must be completed by a MDOT prequalified consultant.
- High friction surface projects shall use or follow the intent/material requirements of the most current MDOT Special Provision.
- Corridor (or local agency-wide) permanent signing or pavement marking projects must be of a higher standard than the minimums required by the Michigan Manual of Uniform Traffic Control Devices (MMUTCD) and/or standards. These type projects shall include additional signing improvements beyond upgrading sign reflectivity requirements (i.e.: adding reflective sheeting to sign posts, larger signs, etc.). Permanent pavement markings shall include improvements such as edgelines where not required by MMUTCD, being recessed or high quality 'durable' markings.
- Any new guardrail or guardrail endings installed must be compliant with the Manual for Assessing Safety Hardware 2016 (MASH-16).
- Culvert end treatments for any newly installed culverts must meet Table 5-1 of the MDOT Drainage Manual. Any new longitudinal culverts installed must have a minimum 1:6 slope from the top of the pipe to the roadway/driveway surface.

HSIP Streamlined Systemic Specific Requirements:

- Horizontal curve delineation projects
 - All horizontal curves signed shall meet the requirements shown in the table below **that has been modified** from Table 2C-5 of the Michigan Manual of Uniform Traffic Control Devices (MMUTCD) specifically for the selection of local agency safety projects submitted through this streamlined application.

Type of Horizontal Alignment Sign	Difference Between Speed Limit and Advisory Speed				
	5 mph	10 mph	15 mph	20 mph	25 mph or more
Turn (W1-1), Curve (W1-2), Reverse Turn (W1-3), Reverse Curve (W1-4), Winding Road (W1-5), and Combination Horizontal Alignment/Intersection (W1-10 series) (See MMUTCD Section 2C.07 to determine which sign to use)	Required	Required	Required	Required	Required
Advisory Speed Plaque (W13-1P)	Required	Required	Required	Required	Required
Chevrons (W1-8)	Recommended	Required	Required	Required	Required

Note: Required means that the sign and/or plaque shall be used, recommended means that the sign and/or plaque should be used. Yellow retroreflective sheeting must be added to the sign posts for all new installations.

- All horizontal curve signs must include reflective sheeting on the signposts.
- The advisory speed shall be determined utilizing one of the methods listed in Section 2C.08 of the MMUTCD.

Table 2C-6. Typical Spacing of Chevron Alignment Signs on Horizontal Curves

Advisory Speed	Curve Radius	Sign Spacing
15 mph or less	Less than 200 feet	40 feet
20 to 30 mph	200 to 400 feet	80 feet
35 to 45 mph	401 to 700 feet	120 feet
50 to 60 mph	701 to 1,250 feet	160 feet
More than 60 mph	More than 1,250 feet	200 feet

Note: The relationship between the curve radius and the advisory speed shown in this table should not be used to determine the advisory speed.

- Edgeline pavement marking projects
 - Eligible roadways are those that have never had striped edgelines.
 - Local agencies may elect to use 4 inch or 6-inch edgelines.

- Rumble strip (corrugations) projects
 - Local agencies may install only centerline rumble strips, only shoulder rumble strips, or both centerline and shoulder rumble strips.
 - Centerline rumble strips are typically confined to rural areas with a posted speed limit of 55 mph however they may be installed on lower speed roadways with a history of lane departure crashes.
 - When installing shoulder rumble strips, it is recommended to maintain at least 4 feet of paved shoulder beyond the rumble strip for non-motorized users. Agencies should take into account all modes of users when installing shoulder rumble strips.
 - Shoulder rumble stripes (rumble strips placed within the paint line) are allowable in place of offset shoulder rumble strips.
 - Consideration should be given to the available lane width when installing both centerline and shoulder rumble strips.
 - Sinusoidal rumble strips are allowable.

- Signal Backplate projects
 - Backplates must contain a reflective border.
 - Backplates will be added to each direction of existing signal heads.
 - Signal upgrades other than the addition of backplates are not allowed through this streamlined application and need to be submitted through the general Call for Projects process.

- Countdown Pedestrian Signal projects
 - Signal upgrades other than the addition of countdown pedestrian signals or the upgrade from standard pedestrian signals to countdown are not allowed through this streamlined application and need to be submitted through the general Call for Projects process.
 - All countdown pedestrian signals must be LED.
 - Upgrades to sidewalk ramps, push buttons, controllers, or cabinets are not allowed through this streamline application and need to be submitted through the general Call for Projects process.

- Stop Controlled Intersection Sign Upgrade projects
 - Projects must include dual Stop signs and dual Stop Ahead signs.
 - Stop Signs and Stop Ahead signs should be 36 inches in size.
 - Dual Stop signs must include red reflective post sheeting.
 - Dual Stop Ahead signs must include yellow reflective post sheeting.

Exhibit 5 - Submitting Candidate Safety Project Applications **(Electronic submittal is required)**

General:

- Applications and supporting information must be submitted electronically no later than midnight on **July 1, 2020** using the FY 2022 Electronic Application Submittal form.
 - The FY 2022 Electronic Submittal Form can be found online at [MDOT LAP - Safety Program](#) in the Application Process section of the page.
 - **Electronic submittals are limited to 15MB.**
- Applicants will receive an auto-generated email from MDOT-DesignLAP@Michigan.gov acknowledging receipt of the application. Please retain this receipt.
- Applications are reviewed and selected by a committee.
- Additional information for application development can be found at:
 - www.michigan.gov/highwaysafety or link to it from the MDOT Local Agency Safety Program Website.
 - Traffic Crash Data maps per Region (Traffic Crash Data)
 - HSM Calibration Factors/Distribution Values (Safety Links, Traffic Standards and Typicals, Safety Programs, Highway Safety Manual)
 - Safety Guides (Safety Links, Traffic Standards and Typicals, Safety Programs, Safety Guides)
 - Local (Regional) Road Safety Plan. Current plans can be obtained from your area Planning Organization.

HSIP and HRRR Specific Requirements:

- The six required submittal documents are listed below. All MDOT forms and spreadsheets mentioned can be found online at [MDOT LAP - Safety Program](#) in the Application Process section of the page.
 1. Cover Letter
 - Provide a brief overview discussion as to the proposed project, crash pattern that has been experienced, and how the proposed scope of work will remedy the past crash history.
 2. MDOT Form 1627
 3. Map showing project location(s).
 4. Detailed cost estimate or Michigan Engineers Resource Library (MERL) estimate.
 5. Economic Benefit Cost Analysis

- Must be completed using the MDOT Time of Return (TOR) spreadsheet or the Highway Safety Manual (HSM) spreadsheet. Agencies may choose to submit both and will be scored based on the version showing the best result.
- Attach the excel version of the spreadsheet to your application.
- Guardrail oriented projects and independent RSA submittals do not require an economic benefit cost analysis.
- Common Crash Reduction Factors (CRF) are listed in the TOR spreadsheet and common Crash Modification Factors (CMF) are listed in the HSM spreadsheet.
 - Additional CRFs and/or CMFs may be used. If submitting a spreadsheet utilizing a CRF or CMF not listed in the spreadsheet, state the source utilized to obtain the factor and include a copy of the report.
- Local Agencies are encouraged to utilize the HSM for locations where little to no crash history exists, proposed systemic improvements, and locations where additional support of the TOR is desired.

6. UD-10s (crash reports)

- Include UD-10s for all crashes that are used to compile the TOR. Include only those UD-10 crash reports that relate to the proposed scope of work.
 - The HSM requires all crashes to be input, including animal crashes. UD-10s for animal crashes are NOT to be included with the application.
 - If submitting both a TOR and a HSM analysis, clearly identify the UD-10 reports used in the TOR analysis.
 - Use the most current 3 to 5-year period of available data (**only crashes occurring in 2014 to present can be counted**).
- To provide additional support, the following is recommended (but not required):
 - A copy of the Local (Regional) Road Safety Plan priority emphasis areas or priority projects list. Current plans may be obtained from your area Planning Organization. Please highlight the relevant information.
 - Crash analysis used to determine the proposed project's scope.
 - Crash concentration maps in the proposed project's limits.
 - MDOT LSI written suggestion list (**required if requesting participation for Preliminary Engineering**)
 - Photos of existing project site conditions.
 - Preliminary proposed plan view, cross-sections, and/or profiles.
 - Ability to deliver a construction package for obligation within this fiscal year.
 - Project coordination with other construction projects.
 - Highway Safety Manual Analysis

HSIP Streamlined Systemic Specific Requirements:

- Fill out the Streamlined Systemic Safety Application found online at [MDOT LAP – Safety Program](#).
 - Macros must be enabled.
 - When filled out completely, the user will see 5 Steps with a ‘Save as PDF’ button.
 - Use the ‘Save As PDF’ button at the bottom of the spreadsheet to save a copy.

- Email the PDF copy, along with any supplemental location maps, to MDOT-DesignLAP@michigan.gov.