HSIP Highway Safety Improvement Program

For State Fiscal Years 2030 and 2031

Metro District Program Criteria

Minnesota Department of Transportation Metro District Traffic Engineering September 2025

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Introduction

This document explains the requirements and gives guidance for the Highway Safety Improvement Program (HSIP) to applicants desiring to obtain federal funds under the Federal Infrastructure Investment and Jobs Act (IIJA) legislation. In IIJA, the purpose of HSIP is to achieve a significant <u>reduction in traffic fatalities and serious injuries</u> on all public roads. Projects submitted should have the greatest potential of achieving this objective. See Appendix B for a timeline flowchart of the HSIP solicitation, application, and evaluation process.

General Policies:

- 1. HSIP funds are available to MnDOT; the counties of Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott, and Washington; and the State Aid eligible cities and towns within those counties. Applicants that are not State Aid cities in the eight-county metro area, those with populations undever 5,000, must contact the MnDOT Metro State Aid Office prior to submitting their application to determine if a public agency sponsor is required.
- 2. The maximum HSIP federal award is \$2,000,000 per project. A minimum local match of 10% of the total project cost is required. The match must be in "hard dollars." Soft matches (i.e., volunteer labor, donated materials, professional services) cannot be included in the match.
- 3. HSIP funding cannot be used as a "payback" source of funding, whereby local agencies construct a project and anticipate future reimbursement—monies from HSIP funds.
- 4. This solicitation is for both Proactive and Reactive safety projects. Distribution of funds between these two project types will depend on a number of factors including the dollar amount and number of projects submitted in each category, types of projects submitted and geographic balance of projects throughout the Metro District.
- 5. Funding is for roadway construction and reconstruction projects designed to decrease the frequency and/or severity of crashes. These crashes can involve pedestrians, bicycles, and other non-motorized vehicles. The project must be a permanent improvement. Right-of-way, design, and construction engineering costs are not fundable and shall not be included in the project cost. Please refer to https://safety.fhwa.dot.gov/hsip/
- 6. The amount of federal funds awarded is based upon the original submission. Any increase in scope or costs will be the responsibility of the applicant.
- 7. Projects awarded funding through the regional HSIP solicitation are subject to the Region's Program Year Policy and Scope Change Policy available at https://metrocouncil.org/Council-Meetings/Committees/Transportation-Advisory-Board-TAB/Policies.aspx

- 8. Applicants may apply for both the Regional Solicitation and the Highway Safety Improvement Program (HSIP), but projects can only be awarded funds from one of the two federally funded programs.
- 9. The amount of funding available for this 2026 Metro District solicitation for State Fiscal Years 2030 and 2031 is approximately \$XX million for the two-year period. Additional funding may be available in State Fiscal Year 2028, or 2029.
- 10. Based on policy guidance in the 2050 Transportation Policy Plan, there is a soft target to split the competitive Metro District HSIP funding based on the percentage of the total fatal and serious injuries in the region that involve bicyclists and pedestrians. This would suggest that approximately 31% of the funding should be awarded to either standalone bike and pedestrian safety projects or to other roadway projects that include bike and pedestrian safety elements.
- 11. Two training sessions will be offered by MnDOT staff to help applicants with the HSIP process. The sessions will cover topics such as: Reactive vs Proactive safety categories, Crash Data, CMF selection, Benefit/Cost, Part of a Plan, Cost per User Exposure, Bike and Pedestrian Safety, etc. There will be an opportunity for applicants to ask questions. Dates to be determined.

Qualifying Criteria

The objective of the Highway Safety Improvement Program (HSIP) is to identify, evaluate, and implement cost effective construction safety projects with a primary goal of **reducing and preventing fatal and serious injury crashes on all public roads.**

Priority will be given to smaller stand-alone, low-cost/high-benefit projects. Applicants should submit focused safety projects and not asset replacement projects unless the replacement project by itself increases safety. See Appendix C for additional traffic signal requirements. Safety features, such as guardrails, that are routinely provided as part of a broader project should be funded from the same source as the broader project. In some instances, narrow shoulder paving in conjunction with resurfacing projects may be allowed. See Appendix D for this exception.

FOR PROACTIVE SAFETY PROJECTS:

For MnDOT Metro District and the Metro counties, their road safety plans should be the starting point for selecting projects for this solicitation. For state and county roads, projects that originate from a road safety plan will be given priority. For local streets, a city may propose strategies similar to their <u>regional/county/local's</u> safety <u>action plans</u>, if applicable.

The following crash data is provided to assist cities in focusing on the types of projects to submit. On city roads in the Metro District over the latest 5-year period available (2020-2024, preliminary) there have been 1,559 fatal and serious injury crashes:

- 1,067 (68%) involved an intersection
- 345 (22%) involved a pedestrian
- 136 (9%) involved a bicyclist
- 421 (27%) involved lane departure

The majority of fatal and serious injury crashes fall into the four categories listed above, so the focus should be on low-cost solutions that are geared toward impacting these types of crashes.

Projects should propose safety improvements that directly address the types of crashes experienced within the project area.

Priority will be given to applications that are making cost effective impacts throughout a network (at multiple locations) or via a corridor-based approach.

Signalized intersections in urban areas tend to involve more risk than other types of intersections. A focus on signalized intersections, such as countdown timers, enforcement lights, curb extensions, etc. would have an impact on these target crashes. Other types of upgrades such as Flashing Yellow Arrow (FYA), etc. that are mainly capacity focused are much less likely to address target crashes, so typically are not eligible for HSIP funds.

The following is a list of example projects that would be considered for Proactive safety funding with this program:

J-Turns/Median U-Turns

Rumble strips/stripes

Rumble stripEs

Wider striping (6")

Embedded wet reflective striping

Delineation for sharp curves (chevrons)

Cable median barrier

Crosswalk enhancements (ex. RRFBs or Pedestrian Hybrid Beacons)

Intersection lighting

Corridor lighting

Curb extensions (bump-outs)

Sight distance improvements

Remove hazards in clear zones

Pedestrian countdown timers

Construct ped refuge islands and raised medians

Enforcement lights on signals

Turn lanes

New guardrail (not replacement)

Frontage roads (with access removals)

Sidewalks or trails

Narrow shoulder paving (see Appendix D)

Signal interconnect (fiber)

Pavement messages

Roundabouts

Stop bars

Safety edge

Friction treatments

Road diets

Signing upgrades for conspicuity/increased retroreflectivity

FOR REACTIVE SAFETY PROJECTS:

For this solicitation, proposed projects qualify for the HSIP program by having a benefit/cost (B/C) ratio of 1.0 or greater*. {Note: The B/C ratio shall exclude right-of-way costs. The cost used should be the total project cost, not the amount of requested HSIP dollars.}

Note: a B/C ratio of 1.0 is required to submit a Reactive safety project. Depending on funding available and the number/type of projects submitted, and scores for other categories, a B/C significantly above 1.0 may be needed to compete in the Reactive safety category.

*Only crashes contained within the Minnesota Department of Public Safety's database can be used to determine the B/C for project submittals. If the agency applying has access to MnCMAT, crash data from that system can be used as part of submittal. MnCMAT data will be reviewed by the HSIP committee to ensure accuracy. Crash data can also be obtained from MnDOT if an agency does not have access to MnCMAT. MnDOT Metro District Traffic Office will provide a crash listing, upon request.

If an individual crash is not in the DPS crash database, it cannot be included in the analysis or the submittal, unless the agency provides acceptable proof of the existence of the crash. Acceptable proof is a copy of the police or citizen accident report. If a crash report was not written, the crash may not be included. If the crash had no injuries and the minimum dollar amount was not met ("N" in the "\$min" box on a police report), the crash cannot be included.

See Appendix A for MnDOT crash data contacts.

Prioritization Criteria

The HSIP project evaluation committee will determine if the submitted projects have met the intent of the qualifying criteria and HSIP. This will consider information regarding how a project was prioritized, including details on how the potential project will improve safety.

Pedestrian and bicycle crashes are a focus area in the Minnesota Strategic Highway Safety Plan. Additional consideration will be given to projects which address pedestrian and bicycle safety. To account for the greater proportion of severe injuries of bike and pedestrian crashes, each bike and pedestrian crash should be entered as two crashes on the B/C worksheet.

FOR PROACTIVE SAFETY PROJECTS:

For Proactive safety projects, priority will be given to projects identified in road safety plans and projects that have the highest possibility of reducing the chances of fatal and serious injury crashes. The following criteria will be used in ranking proactive safety projects:

- Cost per user exposure
- Connection to the 2025-2029 Minnesota Strategic Highway Safety Plan (SHSP) other plans can be used to support the project, but they should reflect the project types outlined in the SHSP. This Plan can be found at the following link: Minnesota Strategic Highway Safety Plan MnDOT (state.mn.us)
- Correctable fatal and serious injury crash history (10 years, 2015 2024)
- Expected <u>system</u> risk reduction in fatal or serious injury crashes crash <u>modificat</u>reduction factor for the specific strategy
- Part of a plan (safety plan or road safety audit recommendations) include a link to or an excerpt from the existing plan
- Improvements for people outside of vehicles

FOR REACTIVE SAFETY PROJECTS:

The reactive safety projects will be prioritized by:

- Expected reduction in fatal and serious injury crashes. Highest B/C ratio, based on crash data from 2020-2024.
- The scoring committee will review the projects to determine how well they meet the
 qualifying criteria and intent of the HSIP program, to achieve a significant reduction in
 traffic fatalities and serious injuries on all public roads. In addition to crash history, the

existence of risk factors and experience with crash types that are risk factors for more severe crashes are relevant here.

- Correctable fatal and serious injury crash history (10 years, 2015 2024)
- Improvements for people outside of vehicles

EVALUATION PROCESS:

Project proposals will be reviewed by MnDOT's Metro District Traffic Engineering unit initially to determine if they meet the qualifying criteria. The HSIP committee will finalize a prioritized list of projects to be funded.

The HSIP committee will consist of:

- MnDOT Metro District Traffic Engineer Program Support
- MnDOT Metro Traffic Safety Specialist
- MnDOT State Traffic Safety Engineer
- Two County/City Engineers
- Metropolitan Council Regional Highway Planner

Required Materials and Special Instructions

Following is a list of materials <u>required</u> to be submitted per project. Failure to provide this information may exclude the submission from consideration:

- HSIP Application (Form 1) (See Appendix for Form 1)
- Project Information Sheet (Form 2) (See Appendix for Form 2)
- Location map
- A paragraph explaining the methods the applicant used to choose the project and how it
 was selected over other potential projects within the applicant's city or county. The
 description should focus on any safety analysis or ranking involved in the selection
 process and explain the methodology used.
- A photograph showing the existing conditions within the project area. If awarded funds, this photograph will be utilized in the Metropolitan Council's online mapping tool to show a before-and-after comparison of the improvement. By submitting the application, the applicant is agreeing to allow the Metropolitan Council to use this photograph.
- Project plan or preliminary layout/scope of work proposed.
- Provide the AADT or the average AADT for the project area. If an intersection project, <u>also</u> provide the AADT for the minor road—too. Applicants may use AADT volume from the MnDOT Traffic Mapping Application (instructions under the Help Document).
- For intersection projects, provide collision diagrams. MnDOT will not provide collision diagrams.
- Include crash listings (2015-2024) obtained from MnDOT or MnCMAT.
- A list of commonly used Crash Modification Factors (CMFs) has been created. Applicants should use these CMFs (included in Appendix G), when applicable.
- For applications where a CMF is not chosen from the list, the applicant will provide a
 reasonable Crash-Modification-Factor (CRF) from the FHWA's CMF Clearinghouse
 (MUST include a printout of the CRF-CMF reference page)
 http://www.cmfclearinghouse.org/
 - The applicant is required to write a brief logical explanation on why they chose a particular CRFCMF.
- If an appropriate CMF cannot be found, the applicant should provide research support for the crash modification used to calculate the crash reduction. In the unlikely event

that no research exists, the application may contain an estimate of crash reductions based upon logical assumptions.

- The applicant must include a letter of support from the agency that owns/operates the
 facility (if different from the applicant) indicating that it is aware of and understands the
 project being submitted, and that it commits to operate and maintain the facility for its
 design life.
- The project applicant must send written notification regarding the proposed project to all affected state and local units of government prior to submitting the application.
- Projects on MSAS and CSAH roadways must meet State Aid standards.
- The project must comply with the Americans with Disabilities Act (ADA).
- In order for a selected project to be included in the Transportation Improvement
 Program (TIP) and approved by USDOT, the public agency sponsor must either have a
 current Americans with Disabilities Act (ADA) self-evaluation or transition plan that
 covers the public right of way/transportation, as required under Title II of the ADA. The
 transition plan must be completed by the local agency before the Regional
 Solicitation HSIP application deadline.

\square The applicant is a public agency that employs 50 or more people and has a completed
ADA transition plan that covers the public right of way/transportation. Date plan
completed by governing body and link to plan:
☐ The applicant is a public agency that employs fewer than 50 people and has a
completed ADA self-evaluation that covers the public rights of way/transportation. Date
self-evaluation completed and link to plan:

FOR PROACTIVE SAFETY PROJECTS:

- Provide total miles of strategy deployment.
- Number of fatal and serious injuries in the past 10 years (2015-2024) that have occurred where the applicant proposes to implement an HSIP project. If the agency submitting the application has access to MnCMAT, crash data from that system can be used as part of submittal. MnCMAT data will be reviewed by the HSIP committee to ensure accuracy. Crash data can also be obtained from MnDOT if an agency does not have access to MnCMAT. MnDOT Metro District Traffic Office will provide a crash listing, upon request (see Appendix A for contact information). Crash data should include all crash types and severities, including pedestrian and bicycle crashes. Projects may be eligible for HSIP even if no fatal or severe injuries have occurred in your implementation area.

- Collision diagrams may be submitted but are not required.
- If project is on a trunk highway, provide an approved Intersection Control Evaluation (ICE) report for proposed intersection traffic control changes.
- MnDOT and counties, please attach copy of the appropriate page(s) from your highway safety <u>action</u> plan for projects submitted that are referenced in your plan. <u>These</u> <u>strategies can also be identified in related safety plans and studies, but they need to</u> align with those identified in the SHSP and be HSIP eligible.
- Discuss how the project will improve safety for people outside of vehicles. Safety
 countermeasures for pedestrians and bicyclists can include those identified as part of
 the Safe Systems Approach, or by the FHWA as part of its Safe Transportation for Every
 Pedestrian program or others in its Proven Safety Countermeasures (e.g., pedestrian
 refuge islands, raised crosswalks, pedestrian hybrid beacons, leading pedestrian
 intervals). More information about pedestrian and bicycle safety is also available in
 MnDOT's Best Practices for Pedestrian/Bicycle Safety.

FOR REACTIVE SAFETY PROJECTS:

- The crash data shall include crashes from calendar years 2020-2024. Only crashes contained within the Minnesota Department of Public Safety's database can be included. This is to ensure that all project proposals can be compared equally. If the agency submitting application has access to MnCMAT, crash data from that system can be used as part of submittal. MnCMAT data will be reviewed by the HSIP committee to ensure accuracy. Crash data can also be obtained from MnDOT if an agency does not have access to MnCMAT. MnDOT Metro District Traffic Office will provide a crash listing, upon request (see Appendix A for contact information). Crash data should include all crash types and severities, including pedestrian and bicycle crashes.
- If an individual crash is not in the DPS crash database, it cannot be included in the analysis or the submittal, unless the agency provides acceptable proof of the existence of the crash. Acceptable proof is a copy of the police or citizen accident report. If a crash report was not written, the crash may not be included. If the crash had no injuries and the minimum dollar amount was not met ("N" in the "\$min" box on a police report), the crash cannot be included.

Crash data requests to MnDOT should be made as soon as possible. Requests made after <u>June</u> 15th may be significantly delayed due to limited resources. MnDOT will not provide collision diagrams.

Number of fatal and serious injuries in the past 10 years (2015-2024) that have occurred
where the applicant proposes to implement a HSIP project. See explanation above for
acceptable methods and sources of crash data. Projects may be eligible for HSIP even if
no fatal or serious injuries have occurred in your implementation area.

- HSIP B/C Worksheet A sample HSIP B/C worksheet is included in Appendix E. Refer to Appendix F for recommended service life criteria. You can find an Excel version of a <u>HSIP</u> <u>Benefit Cost Worksheet</u> on this web page under Reference Material. Note: The Discount Rate has changed significantly from previous versions of the B/C worksheet, ensure you are using the most up to date version from the website.
- If project is on a trunk highway, provide signed Intersection Control Evaluation (ICE) report for proposed intersection traffic control changes.
- Description of how the project meets the intent of the HSIP program (i.e., reduce fatal and serious injury crashes within the proposed project area).
- Proposed roundabouts must address mini-roundabouts as an option.
- Discuss how the project will improve safety for people outside of vehicles. Safety countermeasures for pedestrians and bicyclists can include those identified by the Safe Systems Approach, or the FHWA as part of its Safe Transportation for Every Pedestrian program or others in its Proven Safety Countermeasures (e.g., pedestrian refuge islands, raised crosswalks, pedestrian hybrid beacons, leading pedestrian intervals). More information about pedestrian and bicycle safety is also available in MnDOT's Best Practices for Pedestrian/Bicycle Safety.

SUBMISSION OF APPLICATION:

Applicants will send applications electronically. There will be no paper copies needed. Within two business days, applicants should receive notice that their application was received. If no response is received, the applicant should reach out to contacts in Appendix A to verify the application was received.

Documents should have "recognize text" enabled when converting to PDF. This helps the review process by enabling the use of the search function.

Electronic submittal to: Ashley.Hansen@state.mn.us

Crash ModificaReduction Factors

A Crash <u>ModificaReduction</u> Factor (CMRF) is the <u>inverse of the percentage of crash reduction</u> that may be expected after implementing a given countermeasure. A <u>CRF-CMF</u> should be regarded as a generic estimate of the effectiveness of a countermeasure. The estimate is a useful guide, but it remains necessary to apply engineering judgment and to consider site-specific environmental, traffic volume, traffic mix, geometric, and operational conditions, which will affect the safety impact of a countermeasure.

If possible, an application should reference the FHWA Crash Modification Factors (CMF) identified in the list of commonly used crash modification factors (included in Appendix G). If an appropriate CMF is not included for the proposed countermeasure, applicants may use a one from FHWA's CMF Clearinghouse. The Clearinghouse can be found at the following website http://www.cmfclearinghouse.org/.

For all applications, the applicant is required to write a brief, logical explanation on why they chose a particular <u>CRFCMF</u>.

When an appropriate CMF cannot be found in the recommended list, other CMFs from the clearinghouse should be used. If neither of those are available, crash reduction percentages from studies not found in the Crash Modification Clearinghouse may be used. Lastly, if no studies can be found to provide a crash reduction, proposals may contain an estimate of crash reductions based upon logical assumptions. The proposal will have to thoroughly demonstrate in a logical fashion how each improvement will impact each type of crash. The HSIP Committee will review the documentation for accuracy and concurrence with logic.

Some examples of acceptable estimates are listed below:

<u>Example 1</u>: A project is proposing closure of a median at an intersection. Logically, all left turning and cross street right angle crashes will be eliminated. (100% reduction in these type of crashes).

<u>Example 2</u>: A project is proposing a traffic signal revision including creating a protected left turning phase for the minor leg of the intersection. This project should reduce the amount of minor leg left turn crashes significantly (90% reduction). Additionally, any significant improvement in capacity would reduce rear end collisions slightly (10% reduction for minor capacity improvements, 20% for significant improvements).

<u>Example 3</u>: A project is proposing a traffic signal revision including adding left and right turn lanes. Adding turn lanes should reduce rear end collisions and some turning collisions depending on proposed versus existing phasing. (20% reduction in impacted rear end collisions is reasonable).

The applicant may contact a member of the MnDOT review team (see Appendix A) to discuss crash <u>modificareduction</u> assumptions for each improvement project prior to submittal.

If only one improvement is included in the proposed project, the eCMFsrash reduction factors from the FHWA CMF Clearinghouse, or a modificapercentage reduction based on an estimated procedure described above can be entered directly into the benefit/cost (B/C) worksheet. If two improvements are included in the proposed project, the overall crash modificareduction factor should be determined using the "multiple safety improvement crash modificareduction formula" described below. No more than two CMFs can be used in the Multiple Safety Improvements Crash Reduction Formula.

Multiple Safety Improvement Crash Reduction Modification Formula:

Multiple CRF_CMF = 1 - [(1 - CMRF #1) x (1 - CRMF #2)]

CMRF is the overall crash reduction factor expressed as a decimal (to two significant digits) to be used on the B/C worksheet.

CRF1_CMF #1 is the crash reduction factor for the first improvement expressed as a decimal. CRF2_CMF #2 is the crash reduction factor for the second improvement expressed as a decimal.

- Each crash may only be used on one B/C worksheet.
- Use the total cost of the project in the denominator on the B/C worksheet(s).
- All individual B/C worksheets must be submitted, and the application must include an overall B/C calculation.
- If using multiple CMRFs providing your calculation is required.
- No more than two CMRFs per crash (using the formula) will type and location will can be applied be allowed. For example: a crash that occurs where multiple countermeasures are proposed median construction, lighting, stop sign improvements an applicant will need to choose which two CMFs will be used for the Multiple Safety Improvement Crash ModificaReduction Formula calculation to be used in the B/C worksheet. The crash cannot then be used in in another B/C worksheet, effectively double applying more than two modifications factors to a single crash counting the crash. The CMFs chosen for the formula must directly apply to any crashes included on the B/C worksheet.

Use of Fatal Crashes

Type of Crash	Crash Severity	Cost per Crash
Fatal (F)	1 Fatal Crash (K)	\$15,900,000
Personal Injury (PI)	2 Serious Injury (A)	\$1,700,000
Personal Injury (PI)	3 Minor Injury (B)	\$380,000
Personal Injury (PI)	4 Possible Injury (C)	\$180,000
Property Damage (PD)	5 Property Damage Only (N)	\$18,000

Since fatal crashes are often randomly located, there is considerable debate as to whether they should be treated as personal injury crashes or as fatalities. Furthermore, the value assigned is subject to many considerations. With the above in mind, the following criteria shall be used when computing expected crash reduction benefits:

 The cost assigned to a fatal crash may be used if there are two or more correctable fatal crashes being addressed by the same proposed improvement, within the <u>fivethree</u>-year period.

or

 The cost for a fatal crash may be used when there is at least one correctable fatal crash and two or more correctable serious injury crashes being addressed by the same proposed improvement, within the <u>five</u>three-year period.

If the above criteria are not satisfied, a correctable fatal crash shall be treated as two serious injury type crashes when computing the benefit-cost ratio. To do this, enter the correctable fatal crash as two serious injury crashes on the HSIP B/C worksheet.

For example, if there is a project with two fatal crashes within the project limits, both being at an intersection that is being modified by a roundabout project that would address both crashes, it would be acceptable to count two fatal crashes at the fatal crash cost.

Alternatively, if one of two fatal crashes within the project limits was a right-angle crash that occurred at an intersection being modified by a roundabout project, and the other fatal crash was a run-off-road hitting a tree within the rumble strip installation portion of the same project, the use of a fatal crash cost in the B/C worksheet would not be allowed – in this case each fatal would be entered as two serious injury crashes.

If there are questions about using the full fatal value or the 2x serious injury crash value, please contact Kaare Festvog or Ashley Hansen to discuss the issue.

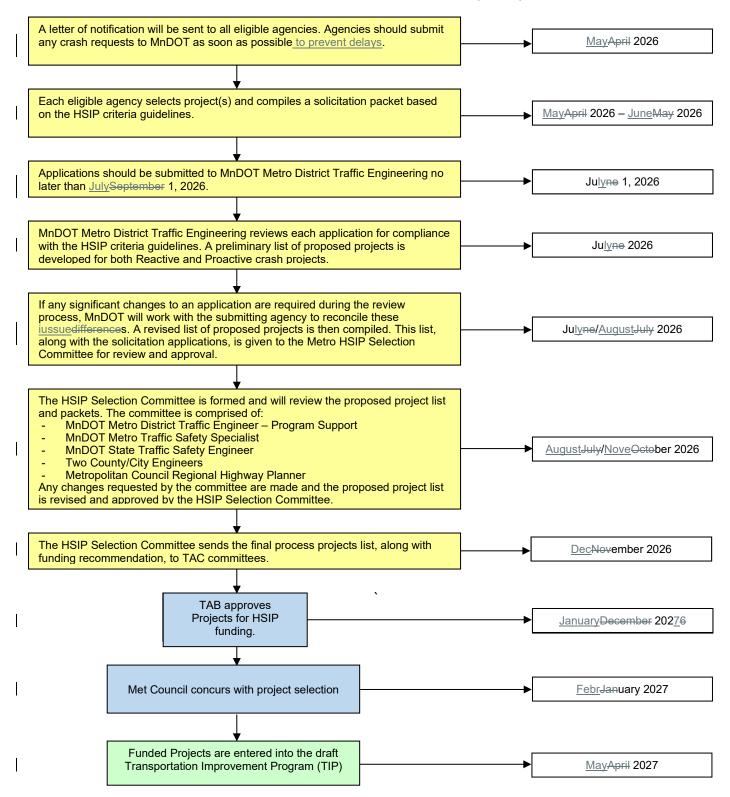
Appendix A

MnDOT Metro District Traffic Engineering Program Support Contacts

Information	Contact	E-Mail	Phone Number
Proposal Content	Kaare Festvog	kaare.festvog@state.mn.us	(651) 440-2855
Proposal Content	Ashley Hansen	ashley.hansen@state.mn.us	(651) 775-9497
Crash Information	Cherzon Riley	cherzon.riley@state.mn.us	(612) 322-1080

<u>Appendix B</u>

Highway Safety Improvement Program (HSIP) Metro District Process Timeline (2026)



Appendix C

Traffic Signals:

In most cases, traffic signals are not safety control devices. They assign right of way for vehicles and are necessary for operational purposes. However, in some cases they can improve safety. The objective for the Highway Safety Improvement Program is "to significantly reduce fatalities and serious injuries resulting from crashes on all public roads" (23 CRF 924.5). Signal projects will be considered for funding provided they meet the following criteria.

1. New Signals:

- Warrant 7, Crash Experience from the Minnesota Manual on Uniform Traffic Control Devices (MN MUTCD) must be met. Signal Warrant 7 – Crash Experience (Section 4C.08) should be followed. Exceptions to meeting this warrant may be made if an adequate case is made on how the new signal will "reduce the number of, or potential for, fatalities and serious injuries" as required by the IIJA.
- All new signals on a trunk highway shall meet current MnDOT design standards. If
 exceptions to incorporating these standards are necessary due to site-specific
 conditions, explanation should be included with the application.
- Installation of red light running (enforcement) lights is strongly encouraged. Installation
 costs are low when installed with new signals and they provide the benefit of red light
 running enforcement to be accomplished by one law enforcement officer, instead of
 two.
- Documentation should be provided confirming that other intersection types were considered but are not feasible. Those considered should include intersection types that reduce the probability of severe right-angle crashes. Roundabouts, J-Turns, Median U-Turns, and some alternative intersection types fall into this category.

2. Existing Signals:

- Rebuilding an existing signal system may be eligible for HSIP funding if it is necessary
 for implementation of a geometric improvement where the signal system cost is
 incidental to the primary geometric safety improvement on the project.
- Rebuilding an existing signal system without geometric improvements may be eligible
 for HSIP funding if additional safety devices are included, such as: adding mast arms,
 adding signal heads, interconnect with other signals, etc.

3. Retiming of Signal Systems:

 The development and implementation of new signal timing plans for a series of signals, a corridor, or the entire system are not eligible for HSIP funds if the work is done with internal personnel. If an agency wishes to submit a timing project, the application must show how the timing will specifically improve roadway safety. Capacity specific improvements are not HSIP eligible. However, it may be eligible if retiming is required after construction of a project including signals.

Appendix D

Guidelines for HSIP-funded narrow shoulder paving in conjunction with resurfacing projects:

If narrow shoulder paving projects are funded through HSIP, it makes sense under certain circumstances to do the work in conjunction with a resurfacing project, rather than as a separate, stand-alone project. Work involving the paving of existing aggregate or turf shoulders with 1 to 2 feet of pavement may be allowed within the following guidelines:

- Narrow shoulder paving can be done in conjunction with resurfacing if the project is along
 one of the segments specifically identified in the County Road Safety Plan for this type of
 work.
- The project can be at a different location than those identified in the CRSP if it is along a higher-risk segment, as identified in the CRSP. The CRSP assigns a risk rating to highway segments based on the following criteria: traffic volume, rate and density of road departure crashes, curve density and edge assessment. The risk rating ranges from 0 (lower risk) to 5 (higher risk). If the proposed project is along a highway segment with a rating of 4 or 5, then it can be done in conjunction with a resurfacing project. This process ensures that narrow shoulder paving is being done at locations of higher risk rather than being driven by the schedule of pavement rehabilitation projects.
- The shoulder paving must include a safety edge and either shoulder or edgeline rumble or mumble strips.
- If a project is required to construct more than 2-foot shoulders per State Aid standards, or if the applicant plans for more than 2-foot shoulders, HSIP funding cannot be used for any additional width beyond 2 feet (local funds may be used for the additional width).
- The applicant should use regular construction dollars to upgrade guardrail and other safety hardware as part of the resurfacing project.

Appendix E

Updated 8772572825

Traffic Safety Benefit-Cost Calculation Highway Safety Improvement Program (HSIP) Reactive Project



Highway Safety Improveme	ent Program (HSIP) Re	active Project
A. Roadway Description	on	
Route	Distric	County
Begin I	End RP	Miles
Locatic		
B. Project Description	n	
Proposed Work		
Project Cost"		Installation Year
Project Service		Traffic Growth I
exclude Right of heap from	Project Cost	
C. Crash Modification	Factor	
Fatal (K) Crash	es Referen	
Serious Injury (A) Crashes	
Moderate Injur	y (B) Crash Crash Ty	
Possible Injury	(C) Crashe	
Property Dama	ge Only Cra	www.CMFclearinghouse.org
D. Crash Modification	Factor (optional :	second CMF)
Fatal (K) Crash		·
Serious Injury ((A) Crashes	
Moderate Injur	y (B) Crash Crash Ty	
Possible Injury	(C) Crashe	
Property Dama	ge Only Cra	www.CMFclearinghouse.org
E. Crash Data		
Begin Date	End Da	te Oyears
Data Source		
Crash Severi	ity « enter target cra	shes > < optional 2nd CMF >
K crashes		
A crashes		
B crashes		
C crashes		
PDO crashes		
F. Benefit-Cost Calcu	ılation	
\$ 0	Benefit (present	B/C Patio = N/A

D/C NAUV - IN/A

Proposed project expected to reduce 0 crashes annually, 0 of which involving fatality or serious injury.

F. Analysis Assumptions

Crash Severity	Crash Cost
K crashes	\$1,600,000
A crashes	\$800,000
B crashes	\$250,000
C crashes	\$130,000
PDO crashes	\$15,000

Link: mndot.gov/planning/program/appendix a.ht

 Real Discount
 0.8%
 Defeat

 Traffic Growth
 0.0%
 Defeat

 Project Service
 10 years
 Defeat

Crash Severity	Grash Deduction	ABB931 Dadection	Annual Benefit
K crashes	0.00	0.00	\$0
A crashes	0.00	0.00	\$0
B crashes	0.00	0.00	\$0
C crashes	0.00	0.00	\$0
PDO crashes	0.00	0.00	10

H. Amort	tized Benefit		
Year	<u>Crash Prorfile</u>	Present Value	
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Appendix F

Recommended Service Life Criteria (in years)

Intersection & Traffic Control		Roadway & Roadside	
Construct/Lengthen Turn Lanes	20	Change Pavement Width	20
Provide Traffic Channelization	20	Add Lane(s) to Traveled Way	20
Improve Sight Distance (non-vegetation)	20	Construct Two Way Left Turn Lane	20
Install Traffic Signs	15	Implement Road Diet	20
Install Oversized Stop Sign, Gated Stop Signs	15	Construct Median for Traffic Separation	20
Upgrade to Solar Powered LED Sign	5	Widen or Improve Shoulder	20
Update to Wired LED Sign	10	Realign Roadway (except at railroads)	20
Increase Sign Retroreflectivity	15	Groove Pavement for Skid Treatment	10
Install Pavement Markings (paint)	1	Apply High Friction Surface Treatment	10
Install Pavement Markings (wet-reflective,		Install Breakaway Sign Supports	15
tape, thermoplastic)	5	Install Breakaway Utility Poles	15
Install Delineators	5	Relocate Utility Poles	20
Install Illumination	15	Install Guardrail End Treatment	10
Install/Upgrade Traffic Signals	10	Change Barrier Type	25
Retime Coordinated System	5	Upgrade or Install Concrete Median Barrier	25
Improve Signal Head Visibility	10	Upgrade or Install Cable Median Barrier	25
Implement Flashing Yellow Arrow	10	Install Impact Attenuators	10
Construct Roundabout	20	Install Outside Guardrail/Barrier	25
Construct J-Turn/Median U-Turn	20	Install Chevron Signs	15
		Flatten or Re-Grade Side Slopes	20
Pedestrian & Bicycle Safety		Relocate/Remove Fixed Object	20
Construct Sidewalk	20	Install Edge Treatments	10
Construct Pedestrian & Bicycle		Provide Milled Center Line/Edge Line	
Overpass/Underpass	30	Rumble Strips/Stripes	10
Install Fencing & Pedestrian Barrier	10		
Construct Dedicated Bike Facility at		<u>Structures</u>	
Intersection	20	Upgrade Bridge Rail	25
Install Bike Lane	20	Widen or Modify Bridge for Safety	30
Install Curb Extensions and Medians	20	Replace Bridge for Safety	30
Install Pedestrian Refuge Island	20	Construct New Bridge for Safety	30
Install RRFB/Pedestrian Hybrid Beacon	10		
Install Pedestrian Countdown Timer	10		
Install Leading Pedestrian Interval	10		

Source: Federal Highway Administration (FHWA) Countermeasure Service Life Guide

Appendix G

Metropolitan Council CMF List

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Federal HSIP Funding Application (Form 1)

INSTRUCTIONS: Complete and return completed form and application packet to Ashley Hansen ashley.hansen@state.mn.us. Applications must be received by 4:30 pm on JulySeptember 1, 2026. *Be sure to complete and attach the Project Information form. (Form 2) I. GENERAL INFORMATION 1. APPLICANT: 2. JURISDICTIONAL AGENCY (IF DIFFERENT): 3. MAILING ADDRESS: CITY: STATE: ZIP CODE: 4. COUNTY: 5. CONTACT PERSON: TITLE: PHONE NO. **CONTACT E-MAIL ADDRESS: II. PROJECT INFORMATION** 6. PROJECT NAME: 7. BRIEF PROJECT DESCRIPTION - Include location, road name, type of improvement, etc. (A complete description can be submitted separately): 8. HSIP PROJECT CATEGORY – Check which project grouping in which you wish your project to be scored. Proactive Reactive III. PROJECT FUNDING 9. Are you applying, or have you applied for funds from other source(s) to fund this project? Yes No If yes, please identify the source(s): 10. FEDERAL AMOUNT*: \$ 13. MATCH % OF PROJECT TOTAL: 11. MATCH AMOUNT: \$ 14. SOURCE OF MATCH FUNDS: 12. PROJECT TOTAL: \$ 15. REQUESTED PROGRAM YEAR(S): SEE NOTE BELOW** 2030 2031 Either year 16. SIGNATURE: 17. TITLE: *Would you accept a federal award that covers 80% of the total project cost if non-HSIP federal funds were awarded? Yes No **NOTE: If funding becomes available in 2028, or 2029 could this project be advanced to

meet this schedule? Yes No Which years would work? 2028 2029

PROJECT INFORMATION (Form 2)

(To be used to assign State Project Number <u>after</u> project is selected.)

Please fill in the following information as it pertains to your proposed project. Items that do not apply to your project, please label N/A. **Do not send this form to the State Aid Office. For project solicitation package only.**

County, City	, or Lead Agency
Functional C	lass of road
Road System	(TH, CSAH, MSAS, County Road, Township Road, City Street)
Name of roa	d (Example: 1 st Street, Main Avenue)
Zip code wh	ere the majority of work is being done
<u>Approximate</u>	e begin construction date (MO/YR)
<u>Approximate</u>	e end construction date (MO/YR)
Location:	From:
	To:
	(Do not include legal description.)
TYPE OF WO	PRK
(Examples: G	rade, Agg Base, Bit Base, Bit Surf, Sidewalk, Curb and Gutter, Storm Sewer,

Signals, Lighting, Guardrail, Bike Path, Ped Ramps, Bridge, Park and Ride, etc.)



Metro District, Local HSIP Solicitation Application for Federal Safety Funds Rumble Strip Special Program

Program Information

- 1. Up to \$6 Million in HSIP funding will be dedicated in each construction season of 2030 and 2031 to reduce lane departure crashes on locally owned roads.
- 2. These projects will be eligible for 100% federal funding (no local match needed), including full project development and construction administration costs and management. Locals will be required to provide staff for construction inspection, project review and coordination, and quality oversight (no federal reimbursement for local staff time).
- 3. Applicants will choose from three standardized packages for 6" ground-in epoxy pavement markings AND rumble strips in the following locations:
 - A. Edgeline or Shoulder
 - B. Centerline
 - C. both Edgeline OR Shoulder AND Centerline

Segments with the centerline and edgeline/shoulder rumble strip combination option are preferred but not required. An agency can have different packages across their network.

- 4. Projects will be selected based on objective prioritization using County Road Safety Plan risk rankings, project sheets, or crash data, with a goal of funding 100–200 miles per year across the state. Counties may submit multiple segments and/or applications.
- 5. If a project is selected, the funding will be drawn from the Metro District ATP funding target allocation.
- 6. Once segments are selected, MnDOT will lead the process through project development (NEPA requirements, design, project coordination, plan preparation, and letting) and through the construction project administration (pre-construction meeting, agency coordination, contractor payments, change orders, and project close-out).
- 7. This program is a pilot and could lead to rotating 100% funding approach for rumble strips and/ or potentially lighting, chevrons, and other targeted systemic improvements.
- 8. See posted example for reference.
- 9. See attached "Draft MnDOT/County Agreement" to better understand the roles and responsibilities of MnDOT and your county.
- 10. Contact Derek Leuer (derek.leuer@state.mn.us) with any questions.

1. Contact Information Details

Lead Agency	Contact Name
Walleye County	Jack Salmon

АТР	County	Metropolitan Planning Organization (MPO)	Tribal Government
9	Walleye County	None.	[Yes/no Name]

NOTE: if any portion of the project is located within MPO boundaries, a letter of support / priority from the MPO is needed.

2. Project Details

Preferred Funding Year(s)		
Both		
Total Number of Project Miles		
50		

Please complete the following project breakdown information for each type of project request. If you have more than one location, please use the "Rumble Strip Application Location listing spreadsheet.xlsx" located on the State Aid Traffic Safety Page.

Project Types

Type A: Edgeline/Shoulder Rumbles with 6" Ground-In Epoxy (White):

Type B: Centerline Rumbles with 6" Ground-In Epoxy (Yellow) Paint

Type C: Edgeline/Shoulder Rumbles with 6" Ground-In Epoxy (White) AND Centerline Rumbles with 6" Ground-In Epoxy (Yellow):

Type	Type A	Type B	Type C
Completing	☐ Shoulder/Edgeline	☐ Center Line	□ Both
Type of Rumble	☐ Standard Corrugated OR	☐ Standard Corrugated OR	If you are completing
	☐ Sinusoidal Rumble	☐ Sinusoidal Rumble	Centerline and
Location of Rumble	☐ Shoulder Rumbles OR☐ Edgeline Rumble (referred to as a SripE)	N/A	Shoulder rumbles, please complete the fields to the left for each type
Number of Miles			

Funding Notes

See Attached Sheet. Segment #6 will have maintenance in early 2030; project will need to be coordinated to ensure correct timing.

3. Selection Criteria

Describe how project was identified.

Walleye County selected projects on the following criteria:

- 1. Identified all roads with a CRSP risk ranking of 3 stars or more
- 2. Added any roads with traffic volume greater then 1,000 vehicles per day
- 3. Identified roads with no major pavement projects for the next 10+ years, or will have fresh mill and overlay in 2029 or 2030.

OPTIONAL Notes: Description of any unique characteristics, and/or additional notes for Selection Committee

Project #3 has a variable shoulder width through-out. For simplicity, edgeline rumbles can be used. Project #4 does have a few noise sensitive recievers and may need sinusoidal rumbles on about 15% of the length.

4. Submission Information

Submit this application via PDF to XXX.YYY@state.mn.us by June XX, 2026.

Please include the following as necessary:

- Map of project location(s)
- County Road Safety Plan project sheet(s)
- Letters of support
 - a. Other roadway jurisdiction if not the roadway owner (applying for someone else).