Niles-Buchanan-Cass Area Transportation Study
2026-2029 Transportation Improvement Program (TIP)
Federal Surface Transportation Block Grant Project Application

If you need assistance, please contact Brandon Kovnat, SWMPC Transportation Planner
Email kovnatb@swmpc.org or call (269) 925-1137 x 1524

Applicant Information

Agency Name: _____

Contact Name: _____ Title: _____

Email Address: _____ Phone Number: _____

Engineer/Consultant: _____ Company: _____

Email Address: _____ Phone Number: _____

Project Description

Project Name/Road Name: _____

Project Limits (From/To): _____

Project Length (to the nearest hundredth of a mile): ____ miles

City, Village, or Township: _____

Additional location description if needed

Major Work Type: Select Item

Preferred Year of Funding: _____

Detailed Work Description (*Include all work items as part of this project e.g. drain cleaning, curb and gutter replacement, guardrail, tree clearing, grading, culvert replacement, all types of ROW, ADA upgrades, etc.*).

Describe any non-participating work if applicable

What is the need and purpose for this project (what issues are being addressed by the proposed work)

If you are submitting multiple applications, please rank your applications by priority. Rank: ____ of ____

Proposed Budget

	Amount	Percent of Total
Total Participating Construction Estimate	$	100 %
STBG Requested	$	%
Local Match	$	%
Enter additional fund source	$	%
Enter additional fund source	$	%

Are the other funding sources secured? Yes ☐ No ☐ *If no, provide details on when these funds will be secured*

Non-Participating Cost Estimate: $_____

Total Project Estimate with Non-Participating: $_____

Are you willing to contribute additional local match above the minimum 18.15% required: Yes ☐ No ☐

Are you willing to use an Advance Construct (AC): Yes ☒ No ☐

If so, what is the maximum Amount: $_____

Estimated Project Schedule

Activity	Date (Month/Year)
NEPA/SHPPO Submitted	
Right-of-Way Certification Submitted	
Grade Inspection (GI) Completed	
Full Biddable Package Submitted to MDOT	
Project Letting	
Construction Start	
Project Completion	

System Preservation

What is the most recent PASER rating (https://www.mcgi.state.mi.us/tamcMap/): ____

Do the project limits begin or end at a road with a PASER of 7 or higher: Yes ☐ No ☐

Which MDOT guidelines will the project use: Select Item

What is the expected increase in Remaining Service Life (RSL): ____ Years

What is the current state of drainage on the road: Select Item

Regional Significance

What is the average annual daily traffic (AADT) volume for the limits of this project? _____ Vehicles/day

What is the National Functional Classification (NFC) of the road: Select Item

Safety

For the questions below use the five-year totals from 2019-2023 (https://www.michigantrafficcrashfacts.org/)

All Crashes

Total number of crashes: _____

Number of fatalities: _____

Number of Serious Injuries: _____

Pedestrian and Bicycle Crashes

Total number of crashes: _____

Number of fatalities: _____

Number of Serious Injuries: _____

List the safety countermeasures included in the project
Use the attached list of countermeasures and associated crash types

Counter Measure	Crash Type Addressed	Does this address a fatal or serious injury crash
Improved pavement markings	*Angle, Rear-End Crashes*	Yes ☐ No ☒
		Yes ☐ No ☐
		Yes ☐ No ☐
		Yes ☐ No ☐
		Yes ☐ No ☐
		Yes ☐ No ☐
		Yes ☐ No ☐

Complete Streets

Are there existing pedestrian and/or bicycle facilities within the limits of the project? If so, please explain

Describe any improvements to pedestrian and/or bicycle facilities included with the project

Will the new/improved pedestrian and/or bicycle facilities connect to existing pedestrian/bicycle facility or one that is planned to be completed before 2029: Y/N Yes ☐ No ☐

Does your agency have a policy for maintaining non-motorized transportation infrastructure, such as bike lanes and pedestrian pathways/sidewalks? Yes ☐ No ☐

Accessibility and Equity

Is the project located in a Disadvantaged Community (DAC), as identified by the Climate and Environmental Justice Screening Tool (https://screeningtool.geoplatform.gov/): Yes ☐ No ☐

Does this project remove a priority ADA barrier, as identified in an adopted ADA Transition Plan or similar plan? Yes ☐ No ☐

Strategic Planning & Investment

The project crosses jurisdictional boundaries. Yes ☐ No ☐

The project will coordinate with other infrastructure projects (i.e. utility, water, sewer, etc.) Yes ☐ No ☐

The Project is identified in a pavement asset management plan Yes ☐ No ☐

There is an asset management plan covering utilities along the length of the project Yes ☐ No ☐

The city/village/Township has adopted an asset management policy Yes ☐ No ☐

The project supports goals or objectives from another planning document (ex. master plan or rec plan) Yes ☐ No ☐

If the project supports goals or objectives in another planning document please identify the plan, specify the relevant goals or objectives, and describe how this project will help achieve them

Risk Assessment

Does right of way need to be acquired? Yes ☐ No ☐ Unknown ☐

Does the project intersect with a railroad crossing? Yes ☐ No ☐ Unknown ☐

Does the project require utility relocation? Yes ☐ No ☐ Unknown ☐

Are the project limits within a defined FEMA floodplain? Yes ☐ No ☐ Unknown ☐

Will there be trees removed within the project limits? Yes ☐ No ☐ Unknown ☐

Is the project within 100 feet of a cemetery? Yes ☐ No ☐ Unknown ☐

Are there historic elements withing 100 feet of the proposed work* Yes ☐ No ☐ Unknown ☐

Describe approximately how many individual mature trees or acres of trees will be removed if applicable

* Historic elements include any of the following if they are 50 years old or older: **objects** (ex. Statues or monuments), **structures** (ex. bridges, stone curbs, or brick streets), intentional/designed landscapes, **buildings**, **Historic districts, intentional/designed landscapes**

Existing and Proposed Roadway Design

	Existing			Proposed		
Number of lanes	Through Lanes: ___	Center Turn Lane (Y/N): ___	On Street Parking (Y/N): ___	Through Lanes: ___	Center Turn Lane (Y/N): ___	On Street Parking (Y/N): ___
Shoulder	☐ Paved ☒ Unpaved	Width: _____ Ft.		☐ Paved ☐ Unpaved	Width: _____ Ft.	
Sidewalk/ path	Placement Inntermittent	Width: _____ Ft.		Placement Inntermittent	Width: _____ Ft.	
On road bicycle facilities	☐ Bike Lanes ☐ Sharrows ☐ Wide Shoulders	☐ Other (Specify) _____ ☐ None		☐ Bike Lanes ☐ Sharrows ☐ Wide Shoulders	☐ Other (Specify) _____ ☐ None	
Utilities	☐ Utility Work is needed ☐ Water/Sewer Work is needed			☐ Replacement of utilities ☐ Relocation of utilities ☐ Sewer and/or water line work		

Applicant Acknowledgements

By signing below, the project sponsor ensures that they have read and understood the appropriate federal guidance and agree to follow all applicable federal regulations and requirements from the acceptance of federal funds, should this project receive an award. In addition, the project sponsor acknowledges the potential loss of federal funds if the project is not obligated within the programmed fiscal year or if Michigan Department of Transportation statewide obligation limitations have been met.

Certification of Matching Funds

By signing below, the Project Sponsor assures that sufficient funds are available to pay any costs above the awarded federal fund amount and that completion of this project is not contingent upon additional grants (the sources of matching funds may be changed after STBG funding has been awarded, in accordance with all established TIP amendment guidelines).

Name: _____ Title: _____

SEGMENT CRASH REDUCTION FACTORS

Proposed Improvement	% Reduction	Associated Crash Types
Geometric Safety Enhancements		
Center Left-Turn Lane - *Construct*	80%	Rear-End Left-Turn
	50%	Head-On Left-Turn
	20%	Head-On, Angle, Sideswipe*
	15%	Non Left-Turn Rear-End, Other*
Right-Turn Lane - *Construct*	65%	Rear-End Right-Turn
	30%	Angle
	15%	Rear-End
	10%	Other*
Horizontal Curve Flattening	30%	Lane Departure***
Shoulders - *Widen to Standard Width (add **1'** each side)*	5%	Lane Departure***
Shoulders - *Widen to Standard Width (add **2'** each side)*	10%	Lane Departure***
Shoulders - *Widen to Standard Width (add **3'** each side)*	15%	Lane Departure***
Shoulders - *Widen to Standard Width (add **4'** each side)*	20%	Lane Departure***
Shoulders - *Widen to Standard Width (add **5'** each side)*	25%	Lane Departure***
Shoulders - *Widen to Standard Width (add **6'** each side)*	30%	Lane Departure***
Shoulders - *Widen to Standard Width (add **7'** each side)*	35%	Lane Departure***
Vertical Curve Modification	20%	All Applicable Crash Types +++
Superelevation Correction	20%	Lane Departure***
General Segment Enhancements		
Access Management - *Improve*	15%	Drive-way Related Applicable Crashes
Centerline Rumble Strips - *Install*	44%	K and A injury Applicable Crashes
	46%	Single Vehicle Run off Road Left Crashes
	43%	Sideswipe Same Crashes
	55%	Sideswipe Opposite Crashes
High Friction Surface Treatment - *Install*	35%	Wet Crashes
	20%	All Other Applicable Crashes
Recessed Durable Pavement Markings	5%	All Applicable Crashes
Road Diet (4-3 Lane Conversion) - *Install*	50%	Suburban - All Applicable Crashes
	30%	Urban - All Applicable Crashes
Shoulder Rumble Strips	20%	Run-Off the Road Right Crashes
Signing/Delineation on Horizontal Curves (Including Recessed Durable Pavement Markings) - *Install*	20%	Lane Departure***
Install Edgelines - *Where none currently exist*	15%	Lane Departure*** (CMF Clearing House ID 10243)
HMA Safety Edge Improvement	13%	All non-intersection crashes
Roadside Enhancements		
Fixed Objects From Clearzone (Trees, Culverts, Etc.) - *Removal*	75%	Fixed-Object Applicable Crashes
Guardrail - *Install*	55%	Lane Departure *** Fatalities and "A" Injury Crashes
	7%	Lane Departure *** B/C/O Applicable Crashes
Slope Flattening	15%	Fixed-Object, Overturn Applicable Crashes
Living Snow Fence	20%	Crashes due to wintry surface conditions
Lighting - *install on segment*	20%	Dark Unlighted Crashes

INTERSECTION CRASH REDUCTION FACTORS

Proposed Improvement	% Reduction	Associated Crash Types
Signal Timing / Hardware Enhancements		
Install Reflectorized Backplates	15%	All Applicable Crashes
Add All-Red Clearance Interval - *Add per ITE*	20%	Head-On Left-Turn, Angle
Yellow-Change Interval - *Increase*	10%	All Crash Types
Box Span Signal - *Upgrade from Stop Control*	65%	Angle
	-25%	Rear-End (Increases Crashes)
	20%	All Other Non Rear-End Crashes
Box Span Signal - *Upgrade from Diagonal Span*	10%	All Applicable Crashes+
Protected Left-Turn Signal Phase - *Add*	30%	Left-Turn
Signal Head Size - *Increase to 12 "*	10%	All Applicable Crashes +
Signal Optimization & Timing Updates	10%	All Applicable Crashes +
Removing Night Flash from Signal Timing	50%	Nighttime Flash mode Related Crashes
Intersection Geometric Enhancements		
Center Left-Turn Lane - *Construct*	80%	Rear-End Left-Turn
	50%	Head-On Left-Turn
	20%	Head-On, Angle, Other
	15%	Non Left-Turn Rear-End
Intersection Improvements (Realignment, Sight-Distance Improvements, Radii Improvements, Etc.)	30%	Angle
	15%	Rear-End
	10%	Head-On, Sideswipe, Pedestrian, Bicycle, Left-Turn Related
Offset Left-Turn Lane - *Construct*	65%	Angle-Turn, Head-On Left-Turn
	20%	Rear-End Left-Turn
Offset Right-Turn Lane - *Construct*	65%	Angle-Turn
	50%	Other Applicable Crashes
	20%	Rear-End Right Turn
Right-Turn Lane - Construct	65%	Rear-End Right-Turn
	20%	Applicable Rear-End Crashes, Sideswipe Same Direction
Roundabout	78%	Fatal and A-Injury Reduction
	57%	Minor Crash Reduction
General Intersection Enhancements (Non-Signalized Intersections)		
All-Way Stop Control - *New Installation*	60%	All Applicable Crashes
Ground Mounted Flashing Beacons (Red)- *Install ***	30%	All Crashes On Install Approach
Ground Mounted Flashing Beacons(Amber) - *Install ***	20%	All Crashes On Install Approach
Signing - *Improve/Upgrade*	30%	Angle, Rear-End Crashes
Pavement Markings - *Improve/Upgrade*	30%	Angle, Rear-End Crashes
Reflective Sheeting on Sign Posts *(lollipops)*	15%	All Applicable Crashes

NON-MOTORIZED CRASH REDUCTION FACTORS

Proposed Improvement	% Reduction	Associated Crash Types
Pedestrian / Bicycle Enhancements		
Pedestrian Refuge Island - *Install*	50%	Pedestrian Crashes (Review NCHRP Report 841)
Bump Out / Curb Extension - *Remove Parking / Install*	30%	All Crashes
Bicycle Lanes - *Intersections, Install per standards*	25%	Bicycle Crashes
Bicycle Lanes - *Segments, Install per standards*	50%	Bicycle Crashes
Shared Use Path - *Install*	33%	Bicycle and Pedestrian Related Crashes
Sidewalk for Pedestrians - *Construct*	85%	Pedestrian Crashes
Intersection Lighting - *install*	75%	Pedestrian Fatal - Dark Unlighted Crashes
	40%	Pedestrian A-Injury - Dark Unlighted Crashes
	30%	All Applicable Dark Unlighted Crashes
Pedestrian Hybrid Beacons (HAWK Signals) - ***Install***	55%	Pedestrian Crashes (CMF ID 9020)
Rectangular Rapid Flashing Beacons	47%	Pedestrian Crashes
Ped. Countdown Signals - *Install new Pedestrian signal*	30%	Pedestrian Crashes
Ped. Countdown Signals - *Upgrade from existing Pedestrian signal*	25%	Pedestrian Crashes

Notes:
* "Other" includes other crash which might be mitigated by the addition of a right-turn lane in the judgment of the crash analyst
** applies to new installation or with removal of existing overhead flashing beacon
*** "Lane departure" crashes include the following types: Fixed Object, Overturn, Sideswipe Opposite, Sideswipe Same and Head-On (Run off Road Right/Left Crashes)
+ All Applicable Crash - Rear End, Angle Crashes, Sideswipe Same. The Crashes should occur at The signal that is being upgraded. Does not include driveway and anima
+++ All Applicable Crash Types - Lane Departure, Fixed Object, Angle Crashes, Sideswipe Oppisite, Sideswipe Same. The crashes should occur on or near a vertical curve

REFERENCES:

The references listed below are the sources recognized by MDOT for obtaining crash reduction factors.

1) MDOT Safety Programs Unit - Crash Reduction Factors (As recommended by K. Kunde. P.E.); October, 1986
2) *Selection Process for Local High Safety Projects,* - Transportation Research Record 847: 1982
3) UKTRP - 85-6, University of Kentucky; March, 1985
4) *Desktop Reference for Crash Reduction Factor* , Federal Highway Administration. 2007
5) NCHRP Report 617: *Accident Modification Factors for Traffic Engineering and ITS Improvements* , TRB 2008
6) Crash Modification Factor Clearinghouse, ***http://www.cmfclearinghouse.org/index.cfm*** , 2009
7) Safety Edge - https://www.fhwa.dot.gov/publications/research/safety/hsis/11025/11025.pdf
8) Removing Night Flash - https://www.fhwa.dot.gov/publications/research/safety/hsis/13069/index.cfm
9) RRFBs - CMF Clearinghouse ID 9024