

# NATS 2024 – 2026 CALL FOR TRANSPORTATION PROJECTS GUIDANCE PACKET

A federal transportation program administered by the Southwest Michigan Planning Commission in partnership with the Niles Buchanan Cass Area Transportation Study member communities and the Michigan Department of Transportation



June 28, 2021

## **Introduction**

The Southwest Michigan Planning Commission (SWMPC), the designated metropolitan planning organization (MPO) for the Niles Area Transportation Study (NATS) planning area is announcing the availability of funding for transportation projects through the federal Surface Transportation Block Grant program (STBG), funded through the Federal Highway Administration (FHWA).

The Surface Transportation Block Grant (STBG) program provides flexible funding that localities may use for projects that preserve and improve conditions and performance on any Federal-aid Eligible Road, on pedestrian and bicycle infrastructure, or for transit capital projects. STBG promotes flexibility in local transportation decisions and provides flexible funding to best address regional and local transportation needs.

## **Eligible Applicants**

Eligible applicants are cities, villages, the Cass County Road Commission and the Berrien County Road Department. If a township wishes to retain a consultant to handle the application and engineering for a project, the Berrien County Road Department or the Cass County Road Commission must be listed under agency name on the application.

## **Location of Projects**

NATS STBG funded road projects must be located on a federal aid eligible road that is within the NATS planning area. The NATS planning area includes the cities of Buchanan and Niles, the townships of Bertrand Township, Buchanan Township, Howard Township, Mason Township, Milton Township, Niles Charter Township, Ontwa Township, and the Village of Edwardsburg.

**A map of road ownership and type can be found here:** <https://southwest-michigan-planning-commission-swmipc.hub.arcgis.com/maps/SWMPC::road-ownership-berrien-cass-van-buren-county/explore?location=42.384386%2C-85.947776%2C15.54>

## **Eligible Project Costs**

Only construction costs are eligible for STBG funding. Preliminary and construction engineering is the responsibility of the project sponsor to complete without STBG funding.

## **Local Match**

The project sponsor must have already committed matching funds when the project is submitted. Applicants that contribute more than the minimum local match will be given extra consideration through the scoring system. Local match is a minimum of 18.15 percent of the total eligible construction costs. The local match does not necessarily have to be provided directly by the sponsor but it must be a non-federal source to qualify as match. A resolution of support for the project from the agency who is financially responsible for the project is required at the time of project application submission. (See page 5 template example)

## Project Prioritization & Selection

The process for project prioritization has many steps and SWMPC conducts a the process that is fair. To learn more about the 2023-2026 TIP Development Timeline, please see Appendix C. SWMPC encourages public input in accordance with the adopted SWMPC Public Participation Plan.

1. Eligible applicant submit projects using the 2023-2026 TIP Application along with supporting documentation.
2. SWMPC staff will review project submissions using an approved Prioritization Process and score each project.
3. SWMPC staff and the NATS Prioritization Subcommittee will develop a preliminary list of all projects based on the score of the Prioritization Process Factors.
4. The prioritized list will be adjusted to remain fiscally constrained.
5. The recommended project list will be reviewed at the Technical Committee level.
6. The NATS Technical Committee will then make a recommendation to the NATS Policy Committee for approval.

## Key Dates

Date	Activity	Public Involvement
June 28, 2021	Call for STBG funded projects issued	X
September 24, 2021	Applications due to SWMPC staff	X
October, 11, 2021	Submitted projects available for public review and comment	X
November 2021	Project Review Subcommittee selects fiscally constrained draft list of projects.	X
January 2022	NATS TAC & Policy Committee discussion and vote on STBG and transit projects	X

*For further information on eligible projects, submittal of applications or other questions related to the STBG program, please contact Brandon Kovnat at (269) 925-1137 ext. 1524 or email [kovnatb@swmpc.org](mailto:kovnatb@swmpc.org).*

## Illustrative List of Projects

NATS MPO will adopt a list of projects that is financially constrained with the amount of STBG funding available for programming. Applications, not included in the fiscally constrained list will be placed on an illustrative list of projects, ranked in priority order based on the project's evaluation score. Should additional funding become available NATS intends to fund projects on the approved illustrative list. This illustrative list will be in effect only until the adoption of the next programming cycle.

## General Considerations for Federal Funding

Projects carried out using USDOT funds must comply with applicable provisions in Title 23 of the United States Code dealing with Federal-aid highways, such as project agreements, authorization to proceed prior to incurring costs, prevailing wage rates (DavisBacon), Buy America, competitive bidding, and other contracting requirements, regardless of whether the projects are located within the right-of-way of a Federal-aid highway.

Applicants are urged to familiarize themselves with title 23 requirements. Federal aid, including STBG, is generally most efficiently used for major road rehabilitation or reconstruction. The administrative burden of a federal-aid project can be substantial. Thus, a small project is often best accomplished with local funds to avoid this burden.

## Application Instructions

The application form is attached in the email sent out for the Call for Project. The application can also be found here: [https://www.swmpc.org/downloads/20242026\\_nats\\_stbg\\_application.docx](https://www.swmpc.org/downloads/20242026_nats_stbg_application.docx). A sample application can be found on page 6.

The applicant must fill out a separate application for each project for which they are applying for, with each road segment being considered a separate project. Although this is a call for the 2023 – 2024 Transportation Improvement Plan (TIP), projects that are currently approved and programmed for 2023 do not need to reapply. If the agency had an approved project on the approved 2020-2023 Illustrative list and would like to be considered for the 2024-2026 funding, they need to reapply with updated information.

The application form is a fillable Microsoft Word Document with a series of checkboxes and areas to fill in text. You may be prompted to enable editing, but note that this is not a macro-enabled form. To fill in a text area, please click in the area where you want to enter text until you see a blue highlighted area, as shown below. When you see the blue highlighted area, you can start typing. If you end up expanding some of the boxes to complete your response, do not worry about formatting as long as your application is still legible.

**Please save your final file in the following format: AgencyName\_ProjectName.docx.**

All applications are due on **Friday, September 24, 2021**

Please email the completed application to both Brandon Kovnat at [kovnatb@swmpc.org](mailto:kovnatb@swmpc.org) and Kim Gallagher at [gallagherk@swmpc.org](mailto:gallagherk@swmpc.org). Please include “NATS STBG Application” in the subject line

**You may also mail your application to:** Brandon Kovnat  
Southwest Michigan Planning Commission  
376 W. Main Street  
Benton Harbor, MI 49022

**NOTE:** SWMPC staff will contact you with an email confirmation of your submitted application. If you do not receive an email confirmation, please contact an SWMPC staff member.

**Attachment 1 –**

**Sample Resolution**

Resolution# \_\_\_\_\_

The following is Resolution \_\_\_\_\_ enacted by the \_\_\_\_\_ of \_\_\_\_\_, \_\_\_\_\_ County, Michigan, hereinafter referred to as the Local Public Agency (LPA), in the matter of the stated described project.

WHEREAS, the United States Congress has set aside monies for Surface Transportation Block Grant (STBG) projects through the State of Michigan, Department of Transportation (MDOT) and administered by the Southwest Michigan Planning Commission (SWMPC); and

WHEREAS; the (Add project description here) is a transportation activity eligible to receive federal STBG funding; and

WHEREAS, if requested funds are granted, the (County/City/Village, etc.) shall be responsible for at least 18.5% percent of the eligible costs.

NOW, THEREFORE BE IT ORDAINED by (Board of County Commissioners/Township/City/Village Council, etc.), that:

**SECTION ONE:** (Consultant/Engineer of Record) of said LPA is hereby empowered on behalf of the LPA to prepare and execute an application for STBG funds for the stated described project and to submit to the SWMPC for consideration of funding.

**SECTION TWO:** The total cost of the project is estimated to be \$\_\_\_\_\_, of which the LPA, if awarded the funds, commits to pay at least 18.5% (hereinafter known as the local match) of the actual cost, estimated to be \$\_\_\_\_\_. The local match shall be funded by the LPA using \_\_\_\_\_ (Source) \_\_\_\_\_ funds. The LPA further agrees to pay 100 % of the cost over and above the awarded amount of STBG funding and for all non-participating costs associated project development activities.

**SECTION THREE:** Upon completion of the described Project, and unless otherwise agreed, the LPA shall: (1) provide adequate maintenance for the described Project in accordance with all applicable state and federal laws, including, but not limited to, [23 USC 116](#); (2) provide ample financial provisions, as necessary, for the maintenance of the described Project; (3) if necessary, maintain the right-of-way, keeping it free of obstructions; and (4) if necessary, hold said right-of way inviolate for public highway purposes.

Passed: \_\_\_\_\_, 2021. (Date)

Attested: \_\_\_\_\_  
(Clerk) (Officer of LPA - title)

Attested: \_\_\_\_\_  
(Title) (President of Council)

# 2024-2026 Transportation Improvement Program (TIP)

## Federal Surface Transportation Block Grant Funds Project Application

Click "Enable Editing" to begin filling out this form. You may save this form at any time.

If you need assistance, please contact Brandon Kovnat, SWMPC Associate Planner.

Email [kovnatb@swmpc.org](mailto:kovnatb@swmpc.org) or call (269) 925-1137 x 1524

Section 1. Applicant Information			
Agency Name	Anytown		
Contact Name	Mary Fakename	Title	Village President
Phone Number	(555)-555-5555	Email	Fakename@anytown.org
Engineer/Consultant (If applicable)	Robert Fakename		
Phone Number	(555)-555-5555	Email	fakename@consultant.com

  

Section 2. Project Information			
Project Name/Road Name	Main Street		
Project Limits (e.g. Napier Ave. to Britain Ave.)	First Street to Fifth Street		
Project Length (nearest hundredth of a mile)	0.5	Proposed Year of Funding	2024
Primary Work Type	<input checked="" type="checkbox"/> Reconstruct <input type="checkbox"/> Restore & Rehabilitate <input type="checkbox"/> Roadside Facility <input type="checkbox"/> Resurface <input type="checkbox"/> Traffic Operations/Safety <input type="checkbox"/> Other		
Project Description (Please provide major work items including sidewalks, utility work, ADA upgrades etc.)	Full depth reconstruction with sidewalk repairs		
Was this project applied for during the 2020-2023 Call for Projects but not selected	<input type="checkbox"/> Yes, <input checked="" type="checkbox"/> No has the agency known and taken action to find funding for the project before.		
Was this project awarded funding for the 2020-2023 TIP, but was either canceled or failed to be obligated	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, please explain: this is for a project that was selected but never constructed using federal funds		
If you are submitting multiple applications, please rank your applications by priority. <i>The project selection committee will use this information as one of the factors in determining priority projects for the region.</i>	<b>Project Rank: 1 of 6</b>		

### Section 3. Project Funding

Estimated STBG Participating Cost of the Project	\$ 800,000
Minimum local match required - 18.15% of the Participating cost. $800,000 \times .1815 =$	\$ 145,200
Can your agency supply additional match beyond the minimum required 18.15%. If so how much? <i>This locally approved pre-determined amount provides agency representatives the ability to agree to providing additional local match if required during the project selection committee process</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Amount \$600,000
Are there elements of the project that could be eligible for other federal fund sources such as CMAQ, TAP, Bridge etc.	Source: CMAQ Amount: \$208,407 Explanation: 10 ft. non-motorized path along the length of the project
Will the project have nonparticipating work, such as water, or sewer work? <i>These are costs must be included in the application in this section. Note: These costs cannot be funded with STBG funding.</i>	Amount: \$ 1,200,000 Explain: Replacement for underground utilities: water main, sanitary sewer, and storm sewer
Does your agency have the financial capacity to Advance Construct (AC) all or part of this project if necessary? If yes, what is the maximum dollar amount your agency is willing to Advance Construct (AC)? <i>Example: Local agency funds and constructs project in 2023 and is reimbursed by MDOT in 2024.</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Maximum Dollar Amount you can AC? \$ 200,000

### Section 4. Regional Connectivity

What is the most current daily traffic count for the limits of this project? If you feel the traffic count has increased since the last county please contact SWMPC to request a count. <i>If you don't have a count contact SWMPC</i>	AADT: 6324 Year of count: 2015      Source: SWMPC
<u>National Functional Classification</u> (NFC) for this roadway	Minor Arterial
Does one of <u>NATS Flex Route transit routes fixed route</u> use the road? (Only indicate yes if it carries a current route, not a planned route).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

## Section 5. System Preservation

2021 PASER rating ( <a href="#">Available 8-10-21</a> )	2
Current state of drainage	<input type="checkbox"/> Adequate <input type="checkbox"/> Minor and tolerable drainage problems <input type="checkbox"/> Occasional drainage problems with some maintenance required <input checked="" type="checkbox"/> Inadequate, frequent flooding, excessive maintenance required
Expected increase in Remaining Service life (RSL)	20 Use MDOT's <a href="#">Guidelines for Geometrics on Local Projects</a>
What MDOT guidelines does the project conform to?	<input checked="" type="checkbox"/> Reconstruction (4R) <input type="checkbox"/> Resurfacing, restoration, and Rehabilitation (3R) <input type="checkbox"/> Preventative Maintenance (PM)

## Section 6. Safety

Please list the number and severity of crashes within the proposed project limits over the last 5 yrs. (2016-2020) (see <a href="#">Michigan Crash Facts</a> for crash data)			
Total Crashes	21	Pedestrian & Bicycle Crashes	1
Fatalities	0	Serious Injuries	0
Using the attached Crash Reduction Factors sheet, please check each safety counter measure that will be included in the project			
Describe any other safety improvements this project will provide		Travel lanes will be narrowed from 12 ft. to 11 ft. and shoulder will be widened from 3 ft. to 4 ft.	

## Section 7. Complete Streets

Please explain what pedestrian and/or bicycle facilities if any currently exist	Sidewalks on both sides for a portion of the road and one side of the road for a portion.
Please explain any additional pedestrian and/or bicycle improvements included in the project	The sidewalk will be replaced with a 10 ft. wide path to allow for both pedestrian and bicycle use.
Does this project connect to an existing pedestrian/bicycle facility or one that is planned to be completed before 2027	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, please provide a map of the connecting facilities

Section 8. Strategic Planning & Investment	
Is the project identified in an approved Asset Management Plan, or Capital Improvement Plan	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, please attach the plan.
Is the project identified in another approved planning document such as a master plan or parks and recreation plan	<input type="checkbox"/> Yes <input type="checkbox"/> No If yes, please cite the plan and page number: <a href="#">Master Plan: Appendix G, Map 6</a>
Is there an approved asset management plan covering the utilities along the project's limits <i>The wording means that for if the agency maintaining the roads does not own all the utilities they should use the plans of the utility owner. County road agencies should use township or water authority plans if applicable</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No List utilities covered by the asset management plan: <a href="#">Water, Sewer, Sotrm Sewer</a>
Will this project coordinate with other infrastructure projects (i.e. utility, water, sewer, etc.)? Please include these costs in the "non-participating costs in section	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, please indicate the project type and construction year: <a href="#">Water, sewer, storm sewer in 2021</a>
How many water main breaks have you had at this location in the past five years? <i>Project should be coordinated with water repairs. (Dig once)</i>	<a href="#">2</a>
Is there a completed utilities assessment that includes televising the sewers in the project area?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Has staff received Asset Management training through the Michigan Transportation Asset Management Council? <a href="https://www.michigan.gov/tamc/0,7308,7-356-82158---.00.html">https://www.michigan.gov/tamc/0,7308,7-356-82158---.00.html</a>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Has your agency completed the Asset Management Readiness Scale from the Michigan Infrastructure Council (MIC)? <a href="https://fcm.ca/en/resources/mamp/tool-asset-management-readiness-scale">https://fcm.ca/en/resources/mamp/tool-asset-management-readiness-scale</a>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Does the project cross jurisdictional boundaries?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If yes, will it be bid as a single project?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
Will this project require environmental mitigation, purchase of Right of Way (ROW), or railroad permits? <i>This information helps determine what year project should be programmed since this factors have been proven to cause project delays and additional cost.</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Sure If yes, which items are required: <a href="#">ROW</a>
If any of the above items are required please explain how they will be addressed. <i>Project selection committee will be interested in how far the applicant is in one of the above processes.</i>	What is the current status of property ownership necessary to construct/implement the improvement? <a href="#">ROW still needs to be purchased.</a>

Does this project perform Resurfacing, Reconstruction, or Preventative Maintenance on a segment adjacent to a segment that currently has a PASER of 7 or higher	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No List the adjacent segments that qualify
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Section 9. Existing and Proposed Roadway Design						
	Existing			Proposed		
Include the number of vehicle lanes	Through Traffic Lanes	Center Turn Lane	On Street Parking	Through Traffic Lanes	Center Turn Lane	On Street Parking
	2*	0*	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2*	0*	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Shoulder Surface	<input type="checkbox"/> Paved <input type="checkbox"/> Unpaved		Width (ft.) NA	<input type="checkbox"/> Paved <input type="checkbox"/> Unpaved		Width (ft.) NA
Sidewalk/ path information	<b>Placement</b> <input type="checkbox"/> One Side <input checked="" type="checkbox"/> Both Sides <input type="checkbox"/> Intermittent <input type="checkbox"/> None		Width (ft.) 5 ft.	<b>Placement</b> <input type="checkbox"/> One Side <input checked="" type="checkbox"/> Both Sides <input type="checkbox"/> Intermittent <input type="checkbox"/> None		Width (ft.) 10 ft (west) 5 ft (east)
On road bicycle facilities	<input type="checkbox"/> Bike Lane <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> Sharrows <input type="checkbox"/> Wide Shoulders <input checked="" type="checkbox"/> None			<input type="checkbox"/> Bike Lane <input checked="" type="checkbox"/> Other (specify) <u>non-motorized path</u> <input type="checkbox"/> Sharrows <input type="checkbox"/> Wide Shoulders <input type="checkbox"/> None		
Utilities, Sewer and Water	<input checked="" type="checkbox"/> Utilities Upgrades Needed <input checked="" type="checkbox"/> Sewer and water work needed			<input checked="" type="checkbox"/> Replace Utilities <input checked="" type="checkbox"/> Relocate Utilities <input checked="" type="checkbox"/> Sewer and Water Line Work		
Please describe any improvements being made as part of this project to crosswalks, signage or signals, or streetscape elements not discussed in project description						
Does this project enhance connectivity of pedestrians or bicyclists to fixed route or Dial-A-Ride transit?			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, how? Improves connection from existing bus stop to nearby retail by improved sidewalk conditions.			

Section 10. Estimated Project Schedule	
Activity	Estimated Date
Resolution of Support for Local Match Submitted to SWMPC	August 2023
Project Application Submitted to MOT	September 2023
Grade Inspection Package Submitted to MDOT	October 2023
Grade Inspection Meeting Scheduled	October 2023
Final Plan and Estimate to MDOT	November 2023
Right of Way (ROW) certified*	July 2022
Rail Road Permits*	NA
Environmental Mitigation*	NA
Project Obligated	January 2024

Project Letting	February 2024
Construction Start <input type="checkbox"/>	April 2024
Project Completion	October 2024

\*Enter NA if these items will not be required.

	Proposed Improvement	% Reduction	Associated Crash Types
<b>SEGMENT CRASH REDUCTION FACTORS</b>			
<b>Geometric Safety Enhancements</b>			
<input type="checkbox"/>	<b>Center Left-Turn Lane - Construct</b>	80%	Rear-End Left-Turn
		50%	Head-On Left-Turn
		20%	Head-On, Angle, Sideswipe*
		15%	Non Left-Turn Rear-End, Other*
<input type="checkbox"/>	<b>Right-Turn Lane - Construct</b>	65%	Rear-End Right-Turn
		30%	Angle
		15%	Rear-End
		10%	Other*
<input checked="" type="checkbox"/>	<b>Horizontal Curve Flattening</b>	30%	Lane Departure***
<input type="checkbox"/>	<b>Shoulders - Widen to Standard Width (add 1' each side)</b>	5%	Lane Departure***
<input type="checkbox"/>	<b>Shoulders - Widen to Standard Width (add 2' each side)</b>	10%	Lane Departure***
<input type="checkbox"/>	<b>Shoulders - Widen to Standard Width (add 3' each side)</b>	15%	Lane Departure***
<input type="checkbox"/>	<b>Shoulders - Widen to Standard Width (add 4' each side)</b>	20%	Lane Departure***
<input type="checkbox"/>	<b>Shoulders - Widen to Standard Width (add 5' each side)</b>	25%	Lane Departure***
<input type="checkbox"/>	<b>Shoulders - Widen to Standard Width (add 6' each side)</b>	30%	Lane Departure***
<input type="checkbox"/>			
<input type="checkbox"/>	<b>Shoulders - Widen to Standard Width (add 7' each side)</b>	35%	Lane Departure***
<input type="checkbox"/>	<b>Vertical Curve Modification</b>	20%	All Applicable Crash Types +++
<b>General Segment Enhancements</b>			
<input type="checkbox"/>	<b>Access Management - Improve</b>	15%	Drive-way Related Applicable Crashes
<input type="checkbox"/>	<b>Centerline Rumble Strips - Install</b>	44%	K and A injury Applicable Crashes
		46%	Single Vehicle Run off Road Left Crashes
		43%	Sideswipe Same Crashes
		55%	Sideswipe Opposite Crashes
<input type="checkbox"/>	<b>High Friction Surface Treatment - Install</b>	35%	Wet Crashes
		20%	All Other Applicable Crashes
<input checked="" type="checkbox"/>	<b>Recessed Durable Pavement Markings</b>	5%	All Applicable Crashes
<input type="checkbox"/>	<b>Pedestrian Refuge - Install</b>	50%	Pedestrian Crashes (Review NCHRP Report 841)
<input type="checkbox"/>	<b>Road Diet (4-3 Lane Conversion) - Install</b>	50%	Suburban - All Applicable Crashes

<input type="checkbox"/>	Shoulder Rumble Strips	20%	Run-Off the Road Right Crashes
<input checked="" type="checkbox"/>	Signing/Delineation on Horizontal Curves (Including Recessed Durable Pavement Markings) - <i>Install</i>	20%	Lane Departure***
<input type="checkbox"/>	Safety Edge Improvement	13%	All non-intersection crashes (CMF Clearing House ID 8658)
<b>Roadside Enhancements</b>			
<input type="checkbox"/>	Bicycle Lanes - Install per standards	50%	Bicycle Crashes
<input type="checkbox"/>	Shared Use Path - <i>Install</i>	33%	Bicycle and Pedestrian Related Crashes
<input type="checkbox"/>	Fixed Objects From Clearzone (Trees, Culverts, Etc.) - <i>Removal</i>	75%	Fixed-Object Applicable Crashes
<input type="checkbox"/>	Guardrail - <i>Install</i>	55%	Lane Departure ***Fatalities and "A" Injury Applicable Crashes
<input type="checkbox"/>	Sidewalk for Pedestrians - <i>Construct</i>	85%	Pedestrian Crashes
<input type="checkbox"/>	Slope Flattening	15%	Fixed-Object, Overturn Applicable Crashes
<input type="checkbox"/>	Living Snow Fence	20%	Crashes due to wintry surface conditions
<input type="checkbox"/>	Lighting - <i>install on segment</i>	20%	Dark Unlighted Crashes
<b>INTERSECTION CRASH REDUCTION FACTORS</b>			
<b>Pedestrian / Bicycle Enhancements</b>			
<input checked="" type="checkbox"/>	Bump Out / Curb Extension - <i>Remove Parking / Install</i>	30%	All Crashes
<input type="checkbox"/>	Bicycle Lanes - Install per standards	25%	Bicycle Crashes
<input type="checkbox"/>	Sidewalk for Pedestrians - <i>Construct</i>	85%	Pedestrian Crashes
<input type="checkbox"/>	Intersection Lighting - <i>install</i>	75%	Pedestrian Fatal - Dark Unlighted Crashes
		40%	Pedestrian A-Injury - Dark Unlighted Crashes
		30%	All Applicable Dark Unlighted Crashes
<input type="checkbox"/>	Rectangular Rapid Flashing Beacons	47%	Pedestrian Crashes
<input type="checkbox"/>	Ped. Countdown Signals - <i>Install new Pedestrian signal</i>	30%	Pedestrian Crashes
<input type="checkbox"/>	Ped. Countdown Signals - <i>Upgrade from existing Pedestrian signal</i>	25%	Pedestrian Crashes
<b>Signal Timing / Hardware Enhancements</b>			
<input type="checkbox"/>	Multiple Low-Cost Improvements	3%	Rear-End
		12%	Right-Angle
		3%	Nighttime
<input type="checkbox"/>	Install Reflectorized Backplates	15%	All Applicable Crashes
<input type="checkbox"/>	Add All-Red Clearance Interval - <i>Add per ITE</i>	20%	Head-On Left-Turn, Angle
<input type="checkbox"/>	Yellow-Change Interval - <i>Increase</i>	10%	All Crash Types
<input type="checkbox"/>	Box Span Signal - <i>Upgrade from Stop Control</i>	65%	Angle

<input type="checkbox"/>		-25%	Rear-End (Increases Crashes)
		20%	All Other Non Rear-End Crashes
<input type="checkbox"/>	<b>Box Span Signal - Upgrade from Diagonal Span</b>	10%	All Applicable Crashes+
<input type="checkbox"/>	<b>Protected Left-Turn Signal Phase - Add</b>	30%	Left-Turn
<input type="checkbox"/>	<b>Signal Head Size - Increase to 12 "</b>	10%	All Applicable Crashes +
<input type="checkbox"/>	<b>Signal Optimization &amp; Timing Updates</b>	10%	All Applicable Crashes +
<input type="checkbox"/>	<b>Removing Night Flash from Signal Timing</b>	50%	Nighttime Flash mode Related Crashes
<b>Intersection Geometric Enhancements</b>			
<input type="checkbox"/>	<b>Center Left-Turn Lane - Construct</b>	80%	Rear-End Left-Turn
		50%	Head-On Left-Turn
		20%	Head-On, Angle, Other
		15%	Non Left-Turn Rear-End
<input type="checkbox"/>	<b>Intersection Improvements (Realignment, Sight-Distance Improvements, Radii Improvements, Etc.)</b>	30%	Angle
		15%	Rear-End
		10%	Head-On, Sideswipe, Pedestrian, Bicycle, Left-Turn Related
<input type="checkbox"/>	<b>Offset Left-Turn Lane - Construct</b>	65%	Angle-Turn, Head-On Left-Turn
		20%	Rear-End Left-Turn
<input type="checkbox"/>	<b>Offset Right-Turn Lane - Construct</b>	65%	Angle-Turn
		50%	Other Applicable Crashes
		20%	Rear-End Right Turn
<input type="checkbox"/>	<b>Right-Turn Lane - Construct</b>	65%	Rear-End Right-Turn
		20%	Applicable Rear-End Crashes, Sideswipe Same Direction
<input type="checkbox"/>	<b>Roundabout</b>	78%	Fatal and A-Injury Reduction
		57%	Minor Crash Reduction
<input type="checkbox"/>	<b>Lighting</b>	-	See MDOT Interchange Warranted Lighting Guidance and overall MDOT Lighting Guidance
<b>General Intersection Enhancements (Non-Signalized Intersections)</b>			
<input type="checkbox"/>	<b>All-Way Stop Control - New Installation</b>	60%	All Applicable Crashes
<input type="checkbox"/>	<b>Ground Mounted Flashing Beacons (Red)- Install **</b>	30%	All Crashes On Install Approach
<input type="checkbox"/>	<b>Ground Mounted Flashing Beacons(Amber) - Install **</b>	20%	All Crashes On Install Approach
<input type="checkbox"/>	<b>Signing - Improve/Upgrade</b>	30%	Angle, Rear-End Crashes
<input checked="" type="checkbox"/>	<b>Pavement Markings - Improve/Upgrade</b>	30%	Angle, Rear-End Crashes
<input type="checkbox"/>	<b>Reflective Sheeting on Sign Posts (lollipops)</b>	15%	All Applicable Crashes

