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.

Section 1. Applicant Information					
Agency Name	Van Buren County Road Commission				
Contact Name	Barry Anttila		Title	Highway Engineer	
Phone Number	269-674-8011		Email	barryanttila@vbcrc.org	
Engineer/Consultant (If applicable)					
Phone Number			Email		
				•	

Section 2. Project Information				
Project Name/Road Name	Red Arrow Highway			
Project Limits (e.g. Napier Ave. to Britain Ave.)	59.5 St to CR 681			
Project Length (nearest hundredth of a mile)	0.80	Proposed Year of Funding	2023	
Primary Work Type	☐ Reconstruct ☐ Restore & Rehabilitate ☐ Roadside Facility ☐ Resurface ☐ Traffic Operations/Safety ☐ Transit ☐ Other			
Project Description (Please provide major work items including sidewalks, utility work, ADA upgrades etc.)	Cold Milling 2 inches, HMA paving, and pavement markings.			
Was this project applied for during the 2020-2023 Call for Proejcts but not selected	☐Yes ⊠No			
Was this project awarded funding for the 2020-2023 TIP, but was either canceled or failed to be obligated	Yes No If yes, please explain:			
If you are submitting multiple applications, please rank your applications by priority.		Project Rank: 1 of 9		

Section 3. Project Funding		
Estimated Participating Cost of the Project	\$202,500	
Federal STBG Requested	\$162,000	80%
State D Requested	\$	%
CTF (Transit Only)	\$	%
Local Funds	\$40,500	20%
Total	\$202,500	100%
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)?	<ul><li>✓ Yes ☐ No</li><li>Maximum Dollar Amount you can AC?</li><li>\$ 101,200</li></ul>	
Can your agency supply additional match beyond the minimum required 18.15%. If so how much?	☐ Yes ☐ No  Amount \$81,000	
Are there elements of the project that could be eligible for other federal fund sources such as CMAQ, TAP, Bridge etc.	Source: Amou Explanation:	nt: \$
Will the project have nonparticipating work, such as water, or sewer work?	Amount: \$ Explain:	

Section 4. Regional Connectivity	
What is the most current daily traffic count for the limits of this project?	AADT: 7,197 Year of count: 2019 Source: VBCRC
National Functional Classification (NFC) for this roadway	Minor Arterial
Is the project on an All Season Road	Yes No Proposed All Season

Section 5. System Preservation	
2021 PASER rating (Available 8-10-21)	3
Current state of drainage	Adequate  Minor and tolerable drainage problems  Occasional drainage problems with some maintenance required  Inadequate, frequent flooding, excessive maintenance required
Expected increase in Remaining Service life (RSL)	7-9 yrs Use MDOT's <u>Guidelines for Geometrics on Local Projects</u>
What MDOT guidelines does the project conform to?	<ul><li>□ Reconstruction (4R)</li><li>⋈ Resurfacing, restoration, and Rehabilitation (3R)</li><li>□ Preventative Maintenance (PM)</li></ul>

Section 6. Safety						
Please list the number and severity of crashes within the proposed project limits over the last 5 yrs. (2016-2020) (see Michigan Crash Facts for crash data)						
Total Crashes	14		Pedestrian & Bicycle Crashes	1		
Fatalities	1		Serious Injuries	2		
Using the attached Crash Fincluded in the project	Reduction	n Factors sheet, ple	ase check each safety coun	ter measure that will be		
Describe any other safety improvements this project will provide  This project does not include any safety improvements.				ovements.		

Section 7. Pedestrian and Bicycle Improvements			
Please explain what pedestrian and/or bicycle facilities if any currently exist	No pedestrain or bicycle facilities exist.		
Please explain any additional pedestrian and/or bicycle improvements included in the project.	N/A		
Does this project connect to an existing pedestrian/bicycle facility or one that is planned to be completed before 2027	☐Yes ☑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	☐Yes ☑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	☐Yes ☑No If yes, please cite the plan and page number:
Is there an approved asset management plan covering the utilities along the project's limits	Yes No List utilities covered by the asset management plan:
Will this project coordinate with other infrastructure projects (i.e. utility, water, sewer, etc.)?	Yes No If yes, please indicate the project type and construction year:
How many water main breaks have you had at this location in the past five years?	0
Is there a completed utilities assessment that includes televising the sewers in the project area?	☐ Yes ⊠ No
	Yes 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>	⊠Yes □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>	☐Yes ⊠No
Does the project cross jurisdictional boundaries?	☐ Yes ☐ No
If yes, will it be bid as a single project?	Yes No NA
Will this project require environmental mitigation, purchase of Right of Way (ROW), or railroad permits?	☐ Yes ☐ No ☐ Not Sure If yes, which items are required:
If any of the above items are required please explain how they will be addressed	
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	Yes No List the adjacent segments that qualify:

						Section 9. Existing and Proposed Roadway Design						
Existing			Proposed									
ough	Center		On Street	Through	Center	On Street						
ffic Lanes	Turn Lai	ne	Parking	Traffic Lanes	Turn Lane	Parking						
	0		☐ Yes ⊠ No	2	0	☐ Yes ⊠ No						
Paved		Wid	dth (ft.)	Naved		Width (ft.)						
Unpaved		5				5						
cement		Wid	dth (ft.)	Placement		Width (ft.)						
One Side				One Side								
<b>Both Sides</b>				Both Sides	i							
Intermitte	nt			Intermitte	nt							
None				None								
Bike Lane O			r (specify)	Bike Lane Other (specify)								
Sharrows		<del>_</del>		Sharrows								
☐ Wide Shoulders ☐ None		one	Wide Shou	ulders 🔀 No	one							
Utilities Up	grades N	eede	ed	Replace U	Itilities							
Sewer and	water wo	ork neededRelocate Utilities										
				Sewer and	Water Line V	Vork						
provement	ts being	N/A	4									
oject to												
signals, or												
streetscape elements not discussed in												
project description												
Does this project enhance connectivity			Yes 🔀 No									
of pedestrian or bicyclists to fixed route			If yes, how?									
or Dial-A-Ride transit?												
	Paved Unpaved Cement One Side Both Sides Intermitted None Bike Lane Sharrows Wide Shou Utilities Up Sewer and provement oject to signals, or not discuss	Paved Unpaved Cement One Side Both Sides Intermittent None Bike Lane Sharrows Wide Shoulders Utilities Upgrades Nower and water worker and water worker and signals, or not discussed in	Ough  Fic Lanes  Turn Lane  O  Paved Unpaved  Cement One Side Both Sides Intermittent None  Bike Lane Sharrows Wide Shoulders  Utilities Upgrades Neede Sewer and water work not discussed in  Ince connectivity  Center  Turn Lane  O  Wide  Turn Lane  O  Wide  None  None	Ough  Fic Lanes  Turn Lane  On Street  Parking  O  Yes No  Paved  Unpaved  Sement  One Side  Both Sides Intermittent  None  Bike Lane  Sharrows  Wide Shoulders  Wide Shoulder	Ough  Ffic Lanes  On Street  Turn Lane  Parking  Traffic Lanes  Ough  Traffic Lanes  Ough  Traffic Lanes  Turn Lane  Ough  Traffic Lanes  Tarfic Lanes  Ough  Traffic Lanes  Paved  Ves ⋈ No  Unpaved  Unpaved  Unpaved  Unpaved  Unpaved  Unpaved  Ough  Traffic Lanes  Paved  Unpaved  Unpaved  Ough  Traffic Lanes  Paved  Unpaved  Unpaved  Inpaved  Ough  Traffic Lanes  Paved  Unpaved  Ves Woon  Ough  Parking  Paved  Ves Unpaved  None Side  Both Sides  Intermitte  None  None  Sharrows  Wide Shoulders  Wide Shoulders  Wide Shoulders  Wide Shoulders  Ves Woon  None  Paved  None Side  Both Sides  Intermitte  None  Sharrows  Wide Shoulders  Wide Shoulders  Wide Shoulders  Wide Shoulders  None  Ough  Traffic Lanes  Paved  None  Paved  None Side  Both Sides  Intermitte  None  Sharrows  Wide Shoulders  Wide Shoulders  Wide Shoulders  None  N	Ough  Fire Lanes  Center Turn Lane  O  O  Paved Unpaved Unpave						

Section 10. Estimated Project Schedule	
Activity	Estimated Date
Resolution of Support for⊠ Local Match Submitted to SWMPC	9/1/21
Project Application Submitted to MOT	January 2022
Grade Inspection Package Submitted to MDOT	March 2022
Grade Inspection Meeting Scheduled	May 2022
Final Plan and Estimate to MDOT	June 2022
Right of Way (ROW) certified*	N/A
Rail Road Permits*	N/A
Environmental Mitigation*	N/A
Project Obligated	July 2022
Project Letting	Nov 2022
Construction Start	May 2023
Project Completion	June 2023

<sup>\*</sup>Enter NA if these items will not be required.

	Proposed Improvement	% Reduction	Associated Crash Types				
	SEGMENT CRASH REDUCTION FACTORS						
	Geometric Safety Enhancements						
		80%	Rear-End Left-Turn				
		50%	Head-On Left-Turn				
Ш	Center Left-Turn Lane - Construct	20%	Head-On, Angle, Sideswipe*				
		15%	Non Left-Turn Rear-End, Other*				
		65%	Rear-End Right-Turn				
	<b>8.1.7 1 6 4 4</b>	30%	Angle				
	Right-Turn Lane - Construct	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 +++				
	General S	egment Enhance	ements				
	Access Management - Improve	15%	Drive-way Related Applicable Crashes				
		44%	K and A injury Applicable Crashes				
	Centerline Rumble Strips - Install	46%	Single Vehicle Run off Road Left Crashes				
	Centerinie Kumbie Strips - instan	43%	Sideswipe Same Crashes				
		55%	Sideswipe Opposite Crashes				
	High Friction Surface Treatment - Install	35%	Wet Crashes				
	High Friction Surface Treatment - Mistali	20%	All Other Applicable Crashes				
	Recessed Durable Pavement Markings	5%	All Applicable Crashes				
	Pedestrian Refuge - Install	50%	Pedestrian Crashes (Review NCHRP Report 841)				
	Road Diet (4-3 Lane Conversion) - Install	50%	Suburban - 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***				
	Safety Edge Improvement	13%	All non-intersection crashes (CMF Clearing House ID 8658)				

Roadside Enhancements					
Bicycle Lanes - Install per standards	50%	Bicycle Crashes			
Shared Use Path - Install	33%	Bicycle and Pedestrian Related Crashes			
Fixed Objects From Clearzone (Trees, Culverts, Etc.) - Removal	75%	Fixed-Object Applicable Crashes			
Guardrail - Install	55%	Lane Departure ***Fatalities and "A" Injury Applicable Crashes			
Sidewalk for Pedestrians - Construct	85%	Pedestrian 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			
INTERSECTI	ON CRASH REDU	CTION FACTORS			
 Pedestri	an / Bicycle Enha	ancements			
Bump Out / Curb Extension - Remove Parking / Install	30%	All Crashes			
Bicycle Lanes - Install per standards	25%	Bicycle Crashes			
Sidewalk for Pedestrians - Construct	85%	Pedestrian Crashes			
	75%	Pedestrian Fatal - Dark Unlighted Crashes			
Intersection Lighting - install	40%	Pedestrian A-Injury - Dark Unlighted Crashes			
	30%	All Applicable Dark Unlighted Crashes			
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			
Signal Timing / Hardware Enhancements					
	3%	Rear-End			
Multiple Low-Cost Improvements	12%	Right-Angle			
	3%	Nighttime			
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			
	65%	Angle			
Box Span Signal - Upgrade from Stop Control	-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						
	80%	Rear-End Left-Turn				
Contact of Town Lone Construct	50%	Head-On Left-Turn				
Center Left-Turn Lane - Construct	20%	Head-On, Angle, Other				
	15%	Non Left-Turn Rear-End				
	30%	Angle				
Intersection Improvements (Realignment, Sight-Distance Improvements, Radii Improvements, Etc.)	15%	Rear-End				
Radii improvements, etc.)	10%	Head-On, Sideswipe, Pedestrian, Bicycle, Left-Turn Related				
Offset Left-Turn Lane - Construct	65%	Angle-Turn, Head-On Left-Turn				
Offset Left-Turn Lane - Construct	20%	Rear-End Left-Turn				
	65%	Angle-Turn				
Offset Right-Turn Lane - Construct	50%	Other Applicable Crashes				
Onset Right-Turn Lane - Construct	20%	Rear-End Right Turn				
	65%	Rear-End Right-Turn				
Right-Turn Lane - Construct	20%	Applicable Rear-End Crashes, Sideswipe Same Direction				
Down debout	78%	Fatal and A-Injury Reduction				
Roundabout	57%	Minor Crash Reduction				
Lighting	_	See MDOT Interchange Warranted Lighting Guidance and overall				
		MDOT Lighting Guidance				
General Intersection Enhan	•	-				
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 (Iollipops)	15%	All Applicable Crashes				

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.

Section 1. Applicant Information					
Agency Name	Van Buren County Road Commission				
Contact Name	Barry Anttila		Title	Highway Engineer	
Phone Number	269-674-801	1	Email	barryanttila@vbcrc.org	
Engineer/Consultant (If applicable)					
Phone Number			Email		

Section 2. Project Information					
Project Name/Road Name	Red Arrow Hwy				
Project Limits (e.g. Napier Ave. to Britain Ave.)	26 <sup>th</sup> St to CR 652s (24 <sup>th</sup> St)				
Project Length (nearest hundredth of a mile)	1.03	Proposed Year of Funding	2024		
Primary Work Type	☐ Reconstruct ☐ Restore & Rehabilitate ☐ Roadside Facility ☐ Resurface ☐ Traffic Operations/Safety ☐ Transit ☐ Other				
Project Description (Please provide major work items including sidewalks, utility work, ADA upgrades etc.)	Milling HMA surface, HMA paving, and pavement markings.				
Was this project applied for during the 2020-2023 Call for Proejcts but not selected	☐Yes ⊠No				
Was this project awarded funding for the 2020-2023 TIP, but was either canceled or failed to be obligated	☐Yes ⊠No If yes,	please explain:			
If you are submitting multiple applications, please rank your applications by priority.		Project Rank: 7 of 9			

Section 3. Project Funding					
Estimated Participating Cost of the Project	\$340,200				
Federal STBG Requested	\$272,160	80%			
State D Requested	\$	%			
CTF (Transit Only)	\$	%			
Local Funds	\$68,040	20%			
Total	\$340,200	100%			
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)?	<ul><li>✓ Yes ☐ No</li><li>Maximum Dollar Amo</li><li>\$ 170,100</li></ul>	ount you can AC?			
Can your agency supply additional match beyond the minimum required 18.15%. If so how much?	☐ Yes ☐ No  Amount \$136,080				
Are there elements of the project that could be eligible for other federal fund sources such as CMAQ, TAP, Bridge etc.	Source: Amou Explanation:	nt: \$			
Will the project have nonparticipating work, such as water, or sewer work?	Amount: \$ Explain:				

Section 4. Regional Connectivity	
What is the most current daily traffic count for the limits of this project?	AADT: 9542 Year of count: 2018 Source: VBCRC
National Functional Classification (NFC) for this roadway	Minor Arterial
Is the project on an All Season Road	Yes No Proposed All Season

Section 5. System Preservation					
2021 PASER rating (Available 8-10-21)	6				
Current state of drainage	Adequate  Minor and tolerable drainage problems  Occasional drainage problems with some maintenance required  Inadequate, frequent flooding, excessive maintenance required				
Expected increase in Remaining Service life (RSL)	7-9 yrs Use MDOT's <u>Guidelines for Geometrics on Local Projects</u>				
What MDOT guidelines does the project conform to?	<ul> <li>□ Reconstruction (4R)</li> <li>⋈ Resurfacing, restoration, and Rehabilitation (3R)</li> <li>□ Preventative Maintenance (PM)</li> </ul>				

Section 6. Safety						
Please list the number and severity of crashes within the proposed project limits over the last 5 yrs. (2016-2020) (see Michigan Crash Facts for crash data)						
Total Crashes	44		Pedestrian & Bicycle Crashes	0		
Fatalities	1		Serious Injuries	1		
Using the attached Crash Fincluded in the project	Reduction	n Factors sheet, ple	ase check each safety coun	ter measure that will be		
Describe any other safety improvements this project will provide		not include safety improven	nents.			

Section 7. Pedestrian and Bicycle Improvements			
Please explain what pedestrian and/or bicycle facilities if any currently exist	Existing 5 foot paved shoulder.		
Please explain any additional pedestrian and/or bicycle improvements included in the project.			
Does this project connect to an existing pedestrian/bicycle facility or one that is planned to be completed before 2027	☐Yes ☑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	☐Yes ☑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	Yes No If yes, please cite the plan and page number:
Is there an approved asset management plan covering the utilities along the project's limits	☐Yes ☒No List utilities covered by the asset management plan:
Will this project coordinate with other infrastructure projects (i.e. utility, water, sewer, etc.)?	Yes No If yes, please indicate the project type and construction year:
How many water main breaks have you had at this location in the past five years?	0
Is there a completed utilities assessment that includes televising the sewers in the project area?	☐ Yes ⊠ No
	Yes 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>	⊠Yes □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>	□Yes ⊠No
Does the project cross jurisdictional boundaries?	☐ Yes ☐ No
If yes, will it be bid as a single project?	Yes No NA
Will this project require environmental mitigation, purchase of Right of Way (ROW), or railroad permits?	☐ Yes ☐ No ☐ Not Sure If yes, which items are required:
If any of the above items are required please explain how they will be addressed	
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	Yes No List the adjacent segments that qualify:

Section 9. Existi	ing and Propo	sea Roa	iaw	ay Design				
		Existi	ng		Proposed			
Include the	Through	Center		On Street	Through	Center	On Street	
number of	Traffic Lanes	Turn Lar	ne	Parking	Traffic Lanes	Turn Lane	Parking	
vehicle lanes	2	1		☐ Yes ⊠ No	2	1	$\square$ Yes $\boxtimes$ No	
Shoulder			Wi	dth (ft.)	Naved Paved		Width (ft.)	
Surface			7				7	
Sidewalk/ path	Placement		Wi	dth (ft.)	Placement		Width (ft.)	
information	One Side				One Side			
	Both Sides				Both Sides			
	Intermitte	nt			Intermitte	ent		
	None				None			
On road bicycle	Bike Lane	∐ C	)the	r (specify)	Bike Lane	U Othe	er (specify)	
facilities	Sharrows	—	₹		Sharrows	—.		
Hailiai - Carran	Wide Shou			one	+=	Wide Shoulders None		
	lities, Sewer Utilities Upgrades Needed				Replace Utilities Relocate Utilities			
and Water Sewer and water work needed			eeded			Mork		
Please describe any improvements being N/A								
	made as part of this project to							
crosswalks, signag	• •							
streetscape eleme		ed in						
project description								
Does this project of		ctivity		Yes No				
of pedestrian or b		-	_	es, how?				
or Dial-A-Ride trar	nsit?			•				
Section 10. Esti	mated Projec	t Schedı	ıle					
Activity					E	stimated Date	2	
Resolution of Support for ☐ Local Match Submitted to SWMPC 9/1/2021								
Project Application Submitted to MOT January 2023								
Grade Inspection Package Submitted to MDOT March 2023								
Grade Inspection Meeting Scheduled June 2023								
Final Plan and Esti	Final Plan and Estimate to MDOT July 2023							
Right of Way (ROV	•				n	/a		
Rail Road Permits	Rail Road Permits* n/a							
Environmental Mitigation*								

Project Obligated

**Construction Start** 

Project Completion

Project Letting

October 2023

February 2024

May 2024

July 2024

<sup>\*</sup>Enter NA if these items will not be required.

Proposed Improvement	% Reduction	Associated Crash Types					
SEGMENT (	CRASH REDUCTION	CRASH REDUCTION FACTORS					
Geometric Safety Enhancements							
	80%	Rear-End Left-Turn					
	50%	Head-On Left-Turn					
Center Left-Turn Lane - Construct	20%	Head-On, Angle, Sideswipe*					
	15%	Non Left-Turn Rear-End, Other*					
	65%	Rear-End Right-Turn					
	30%	Angle					
Right-Turn Lane - Construct	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 +++					
General S	Segment Enhand	cements					
Access Management - Improve	15%	Drive-way Related Applicable Crashes					
	44%	K and A injury Applicable Crashes					
Centerline Rumble Strips - Install	46%	Single Vehicle Run off Road Left Crashes					
Centerline Rumble Strips - Mistali	43%	Sideswipe Same Crashes					
	55%	Sideswipe Opposite Crashes					
High Friction Surface Treatment - Install	35%	Wet Crashes					
nigh Friction Surface Treatment - mstun	20%	All Other Applicable Crashes					
Recessed Durable Pavement Markings	5%	All Applicable Crashes					
Pedestrian Refuge - Install	50%	Pedestrian Crashes (Review NCHRP Report 841)					
Road Diet (4-3 Lane Conversion) - Install	50%	Suburban - 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***					
Safety Edge Improvement	13%	All non-intersection crashes (CMF Clearing House ID 8658)					

Roadside Enhancements						
Bicycle Lanes - Install per standards	50%	Bicycle Crashes				
Shared Use Path - Install	33%	Bicycle and Pedestrian Related Crashes				
Fixed Objects From Clearzone (Trees, Culverts, Etc.) - Removal	75%	Fixed-Object Applicable Crashes				
Guardrail - Install	55%	Lane Departure ***Fatalities and "A" Injury Applicable Crashes				
Sidewalk for Pedestrians - Construct	85%	Pedestrian 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				
INTERSECTI	ON CRASH REDU	CTION FACTORS				
 Pedestri	an / Bicycle Enha	ancements				
Bump Out / Curb Extension - Remove Parking / Install	30%	All Crashes				
Bicycle Lanes - Install per standards	25%	Bicycle Crashes				
Sidewalk for Pedestrians - Construct	85%	Pedestrian Crashes				
	75%	Pedestrian Fatal - Dark Unlighted Crashes				
Intersection Lighting - install	40%	Pedestrian A-Injury - Dark Unlighted Crashes				
	30%	All Applicable Dark Unlighted Crashes				
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				
Signal Timir	ng / Hardware E	nhancements				
	3%	Rear-End				
Multiple Low-Cost Improvements	12%	Right-Angle				
	3%	Nighttime				
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				
	65%	Angle				
Box Span Signal - Upgrade from Stop Control	-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						
	80%	Rear-End Left-Turn				
Contact of Town Long Construct	50%	Head-On Left-Turn				
Center Left-Turn Lane - Construct	20%	Head-On, Angle, Other				
	15%	Non Left-Turn Rear-End				
	30%	Angle				
Intersection Improvements (Realignment, Sight-Distance Improvements, Radii Improvements, Etc.)	15%	Rear-End				
Radii illiprovellients, Etc.)	10%	Head-On, Sideswipe, Pedestrian, Bicycle, Left-Turn Related				
Offset Left-Turn Lane - Construct	65%	Angle-Turn, Head-On Left-Turn				
Offset Left-Turn Lane - Construct	20%	Rear-End Left-Turn				
	65%	Angle-Turn				
Offset Right-Turn Lane - Construct	50%	Other Applicable Crashes				
Offset Right-Turn Lane - Construct	20%	Rear-End Right Turn				
Bi-la Toma Long Constant	65%	Rear-End Right-Turn				
Right-Turn Lane - Construct	20%	Applicable Rear-End Crashes, Sideswipe Same Direction				
Davindahasit	78%	Fatal and A-Injury Reduction				
Roundabout	57%	Minor Crash Reduction				
Lighting	_	See MDOT Interchange Warranted Lighting Guidance and overall				
		MDOT Lighting Guidance				
General Intersection Enhan	•	-				
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 (Iollipops)	15%	All Applicable Crashes				

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.

Section 1. Applicant Information					
Agency Name	Van Buren Co	Van Buren County Road Commission			
Contact Name	Barry Anttila		Title	Highway Engineer	
Phone Number	269-674-801	L	Email	barryanttila@vbcrc.org	
Engineer/Consultant (If applicable)					
Phone Number			Email		

Section 2. Project Information					
Project Name/Road Name	CR 681				
Project Limits (e.g. Napier Ave. to Britain Ave.)	M-51 to CR 352				
Project Length (nearest hundredth of a mile)	2.16	Proposed Year of Funding	2024		
Primary Work Type	<ul> <li>☑ Reconstruct ☐ Restore &amp; Rehabilitate ☐ Roadside Facility</li> <li>☐ Resurface ☐ Traffic Operations/Safety ☐ Transit ☐ Other</li> </ul>				
Project Description (Please provide major work items including sidewalks, utility work, ADA upgrades etc.)	Trench, widen, crush and shape, HMA paving, drainage improvements, curb and gutter and slope restoration.				
Was this project applied for during the 2020-2023 Call for Proejcts but not selected	⊠Yes □No				
Was this project awarded funding for the 2020-2023 TIP, but was either canceled or failed to be obligated	☐Yes ☐No If yes, please explain:				
If you are submitting multiple applications, please rank your applications by priority.		Project Rank: 3 of 9			

Estimated Participating Cost of the Project	\$1,080,000	
Federal STBG Requested	\$864,000	80%
State D Requested	\$	%
CTF (Transit Only)	\$	%
Local Funds	\$216,000	20%
Total	\$1,080,000	100%
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)?	⊠ Yes □ No Maximum Dollar An \$ 540,000	nount you can AC?
Can your agency supply additional match beyond the minimum required 18.15%. If so how much?	⊠ Yes □ No Amount \$432,000	
Are there elements of the project that could be eligible for other federal fund sources such as CMAQ, TAP, Bridge etc.	Source: Amo Explanation:	unt: \$
Will the project have nonparticipating work, such as water, or sewer work?	Amount: \$ Explain:	

Section 4. Regional Connectivity	
What is the most current daily traffic count for the limits of this project?	AADT: 1,119 Year of count: 2021 Source: VBCRC
National Functional Classification (NFC) for this roadway	Major Collector
Is the project on an All Season Road	Yes No Proposed All Season

Section 5. System Preservation					
2021 PASER rating (Available 8-10-21)	3				
Current state of drainage	<ul> <li>☐ Adequate</li> <li>☑ Minor and tolerable drainage problems</li> <li>☐ Occasional drainage problems with some maintenance required</li> <li>☐ Inadequate, frequent flooding, excessive maintenance required</li> </ul>				
Expected increase in Remaining Service life (RSL)	10-14 yrs Use MDOT's <i>Guidelines for Geometrics on Local Projects</i>				
What MDOT guidelines does the project conform to?	<ul><li>☑ Reconstruction (4R)</li><li>☐ Resurfacing, restoration, and Rehabilitation (3R)</li><li>☐ Preventative Maintenance (PM)</li></ul>				

Section 6. Safety						
Please list the number and severity of crashes within the proposed project limits over the last 5 yrs. (2016-2020) (see Michigan Crash Facts for crash data)						
Total Crashes	18		Pedestrian & Bicycle Crashes	0		
Fatalities	0		Serious Injuries	1		
Using the attached Crash Fincluded in the project	Reduction	n Factors sheet, ple	ase check each safety coun	ter measure that will be		
Describe any other safety improvements this project will provide		No other safety in	nprovements are included in	n this project.		

Section 7. Pedestrian and Bicycle Improvements				
Please explain what pedestrian and/or bicycle facilities if any currently exist	No pedestrian or bicycle facilities exist.			
Please explain any additional pedestrian and/or bicycle improvements included in the project.	N/A			
Does this project connect to an existing pedestrian/bicycle facility or one that is planned to be completed before 2027	☐Yes ☑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	☐Yes ☑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	☐Yes ☑No If yes, please cite the plan and page number:
Is there an approved asset management plan covering the utilities along the project's limits	Yes No List utilities covered by the asset management plan:
Will this project coordinate with other infrastructure projects (i.e. utility, water, sewer, etc.)?	Yes No If yes, please indicate the project type and construction year:
How many water main breaks have you had at this location in the past five years?	
Is there a completed utilities assessment that includes televising the sewers in the project area?	☐ Yes ⊠ No
	☐ Yes ☑ 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>	⊠Yes □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>	□Yes ⊠No
Does the project cross jurisdictional boundaries?	☐ Yes ☐ No
If yes, will it be bid as a single project?	☐ Yes ☐ NA
Will this project require environmental mitigation, purchase of Right of Way (ROW), or railroad permits?	☐ Yes ☐ No ☐ Not Sure If yes, which items are required:
If any of the above items are required please explain how they will be addressed	
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	Yes No List the adjacent segments that qualify:

Section 9. Existing and Proposed Roadway Design								
	Existing			Proposed				
Include the	Through	Center		On Street	Through	Center	On Street	
number of	Traffic Lanes	Turn La	ne	Parking	Traffic Lanes	Turn Lane	Parking	
vehicle lanes	2	0		☐ Yes ⊠ No	2	0	☐ Yes ⊠ No	
			1					
Shoulder	Paved		Wi	dth (ft.)	Naved Paved		Width (ft.)	
Surface			4				6	
Sidewalk/ path	Placement		Wi	dth (ft.)	Placement		Width (ft.)	
information	One Side				One Side			
	Both Sides				Both Sides			
	Intermitte	nt			Intermitte	nt		
	None				None		/	
On road bicycle	Bike Lane		Othe	r (specify)	Bike Lane	Othe	er (specify)	
facilities	Sharrows		<del>_</del> ,		Sharrows	.lala sa 🔽 N		
Litilities Course	Wide Shou			one	Wide Shou		one	
Utilities, Sewer	Utilities Up	_			Replace Utilities Relocate Utilities			
and Water Sewer and water work needed			eeded	Sewer and Water Line Work				
Please describe any improvements being N/A								
made as part of this project to								
crosswalks, signage or signals, or								
streetscape elements not discussed in								
project description								
Does this project	enhance connec	tivity		Yes No				
of pedestrian or bicyclists to fixed route								
or Dial-A-Ride trai	or Dial-A-Ride transit?							
·								
Section 10. Esti	mated Projec	t Sched	ule					
Activity						stimated Date	9	
Resolution of Sup			ubm	itted to SWMPC		/1/2021		
	Project Application Submitted to MOT March 2023							
Grade Inspection Package Submitted to MDOT June 2023								
Grade Inspection Meeting Scheduled August 2023								
Final Plan and Estimate to MDOT September 2023								
	Right of Way (ROW) certified*  n/a							
	Rail Road Permits* n/a							
Environmental Mi	ugation*					/a 	2	
	Project Obligated November 2023							
Project Letting					ı Ja	nuary 2024		

**Construction Start** 

Project Completion

April 2024

July 2024

<sup>\*</sup>Enter NA if these items will not be required.

Proposed Improvement	% Reduction	Associated Crash Types					
SEGMENT (	CRASH REDUCTION FACTORS						
Geometric Safety Enhancements							
	80%	Rear-End Left-Turn					
	50%	Head-On Left-Turn					
Center Left-Turn Lane - Construct	20%	Head-On, Angle, Sideswipe*					
	15%	Non Left-Turn Rear-End, Other*					
	65%	Rear-End Right-Turn					
	30%	Angle					
Right-Turn Lane - Construct	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 +++					
General S	Segment Enhand	cements					
Access Management - Improve	15%	Drive-way Related Applicable Crashes					
	44%	K and A injury Applicable Crashes					
Centerline Rumble Strips - Install	46%	Single Vehicle Run off Road Left Crashes					
Centerline Rumble Strips - Mistali	43%	Sideswipe Same Crashes					
	55%	Sideswipe Opposite Crashes					
High Friction Surface Treatment - Install	35%	Wet Crashes					
nigh Friction Surface Treatment - mstun	20%	All Other Applicable Crashes					
Recessed Durable Pavement Markings	5%	All Applicable Crashes					
Pedestrian Refuge - Install	50%	Pedestrian Crashes (Review NCHRP Report 841)					
Road Diet (4-3 Lane Conversion) - Install	50%	Suburban - 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***					
Safety Edge Improvement	13%	All non-intersection crashes (CMF Clearing House ID 8658)					

Roadside Enhancements						
Bicycle Lanes - Install per standards	50%	Bicycle Crashes				
Shared Use Path - Install	33%	Bicycle and Pedestrian Related Crashes				
Fixed Objects From Clearzone (Trees, Culverts, Etc.) - Removal	75%	Fixed-Object Applicable Crashes				
Guardrail - Install	55%	Lane Departure ***Fatalities and "A" Injury Applicable Crashes				
Sidewalk for Pedestrians - Construct	85%	Pedestrian 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				
INTERSECTI	ON CRASH REDU	CTION FACTORS				
 Pedestri	an / Bicycle Enha	ancements				
Bump Out / Curb Extension - Remove Parking / Install	30%	All Crashes				
Bicycle Lanes - Install per standards	25%	Bicycle Crashes				
Sidewalk for Pedestrians - Construct	85%	Pedestrian Crashes				
	75%	Pedestrian Fatal - Dark Unlighted Crashes				
Intersection Lighting - install	40%	Pedestrian A-Injury - Dark Unlighted Crashes				
	30%	All Applicable Dark Unlighted Crashes				
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				
Signal Timing / Hardware Enhancements						
	3%	Rear-End				
Multiple Low-Cost Improvements	12%	Right-Angle				
	3%	Nighttime				
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				
	65%	Angle				
Box Span Signal - Upgrade from Stop Control	-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						
	80%	Rear-End Left-Turn				
Contact of Town Long Construct	50%	Head-On Left-Turn				
Center Left-Turn Lane - Construct	20%	Head-On, Angle, Other				
	15%	Non Left-Turn Rear-End				
	30%	Angle				
Intersection Improvements (Realignment, Sight-Distance Improvements,	15%	Rear-End				
Radii Improvements, Etc.)	10%	Head-On, Sideswipe, Pedestrian, Bicycle, Left-Turn Related				
Offset Left-Turn Lane - Construct	65%	Angle-Turn, Head-On Left-Turn				
Offset Left-Turn Lane - Construct	20%	Rear-End Left-Turn				
	65%	Angle-Turn				
Offset Right-Turn Lane - Construct	50%	Other Applicable Crashes				
Offset Right-Turn Lane - Construct	20%	Rear-End Right Turn				
Bi-la Toma Long Constant	65%	Rear-End Right-Turn				
Right-Turn Lane - Construct	20%	Applicable Rear-End Crashes, Sideswipe Same Direction				
Davindahasit	78%	Fatal and A-Injury Reduction				
Roundabout	57%	Minor Crash Reduction				
Lighting	_	See MDOT Interchange Warranted Lighting Guidance and overall				
		MDOT Lighting Guidance				
General Intersection Enhan	•	-				
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 (Iollipops)	15%	All Applicable Crashes				

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.

Section 1. Applicant Information					
Agency Name	Van Buern County Road Commission				
Contact Name	Barry Anttila		Title	Highway Engineer	
Phone Number	269-674-801	L	Email	barryanttila@vbcrc.org	
Engineer/Consultant (If applicable)					
Phone Number			Email		

Section 2. Project Information					
Project Name/Road Name	CR 687				
Project Limits (e.g. Napier Ave. to Britain Ave.)	CR 372 to CR 376				
Project Length (nearest hundredth of a mile)	2.49	Proposed Year of Funding	2026		
Primary Work Type	<ul> <li>☑ Reconstruct □ Restore &amp; Rehabilitate □ Roadside Facility</li> <li>□ Resurface □ Traffic Operations/Safety □ Transit □ Other</li> </ul>				
Project Description (Please provide major work items including sidewalks, utility work, ADA upgrades etc.)	Trench, widen, HMA crush and shape, HMA paving, drainage improvements, pavement markings, slope restoration.				
Was this project applied for during the 2020-2023 Call for Proejcts but not selected	☐Yes ⊠No				
Was this project awarded funding for the 2020-2023 TIP, but was either canceled or failed to be obligated	Yes No If yes, please explain:				
If you are submitting multiple app rank your applications by priority.	· •	Project Rank: 4 of 9			

Estimated Participating Cost of the Project	\$1,478,000	
Federal STBG Requested	\$1,182,400	80%
State D Requested	\$	%
CTF (Transit Only)	\$	%
Local Funds	\$295,600	20%
Total	\$1,478,000	100%
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)?	Xes □ No     Maximum Dollar Al     \$ 739,000	mount you can AC?
Can your agency supply additional match beyond the minimum required 18.15%. If so how much?		
Are there elements of the project that could be eligible for other federal fund sources such as CMAQ, TAP, Bridge etc.	Source: Ame Explanation:	ount: \$
Will the project have nonparticipating work, such as water, or sewer work?	Amount: \$ Explain:	

Section 4. Regional Connectivity	
What is the most current daily traffic count for the limits of this project?	AADT: 1,202 Year of count: 2021 Source: VBCRC
National Functional Classification (NFC) for this roadway	Major Collector
Is the project on an All Season Road	Yes No Proposed All Season

Section 5. System Preservation					
2021 PASER rating (Available 8-10-21)	2				
Current state of drainage	☐ Adequate ☐ Minor and tolerable drainage problems ☐ Occasional drainage problems with some maintenance required ☐ Inadequate, frequent flooding, excessive maintenance required				
Expected increase in Remaining Service life (RSL)	10-14 yr Use MDOT's <i>Guidelines for Geometrics on Local Projects</i>				
What MDOT guidelines does the project conform to?	<ul><li>☑ Reconstruction (4R)</li><li>☐ Resurfacing, restoration, and Rehabilitation (3R)</li><li>☐ Preventative Maintenance (PM)</li></ul>				

Section 6. Safety						
Please list the number and severity of crashes within the proposed project limits over the last 5 yrs. (2016-2020) (see Michigan Crash Facts for crash data)						
Total Crashes	24		Pedestrian & Bicycle Crashes	2		
Fatalities	0		Serious Injuries	1		
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		Widen shoulders				

Section 7. Pedestrian and Bicycle Improvements				
Please explain what pedestrian and/or bicycle facilities if any currently exist	No pedestrian or bicycle facilities exist			
Please explain any additional pedestrian and/or bicycle improvements included in the project.	Widen shoulders			
Does this project connect to an existing pedestrian/bicycle facility or one that is planned to be completed before 2027	☐Yes ☑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	☐Yes ☑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	Yes No If yes, please cite the plan and page number:
Is there an approved asset management plan covering the utilities along the project's limits	☐Yes ☒No List utilities covered by the asset management plan:
Will this project coordinate with other infrastructure projects (i.e. utility, water, sewer, etc.)?	Yes No If yes, please indicate the project type and construction year:
How many water main breaks have you had at this location in the past five years?	0
Is there a completed utilities assessment that includes televising the sewers in the project area?	☐ Yes ⊠ No
	Yes 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>	⊠Yes □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>	□Yes ⊠No
Does the project cross jurisdictional boundaries?	☐ Yes ☐ No
If yes, will it be bid as a single project?	Yes No NA
Will this project require environmental mitigation, purchase of Right of Way (ROW), or railroad permits?	☐ Yes ☐ No ☐ Not Sure If yes, which items are required:
If any of the above items are required please explain how they will be addressed	
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	Yes No List the adjacent segments that qualify:

Section 9. Existing and Proposed Roadway Design							
	Existing			Proposed			
Include the	Through Center			On Street	Through	Center	On Street
number of	Traffic Lanes	Turn La	ne	Parking	Traffic Lanes	Turn Lane	Parking
vehicle lanes	2	0		☐ Yes ⊠ No	2	0	☐ Yes ⊠ No
			•				
Shoulder	Paved		Wi	dth (ft.)	Naved Paved		Width (ft.)
Surface			2				6
Sidewalk/ path	Placement		Wie	dth (ft.)	Placement		Width (ft.)
information	One Side				One Side		
	Both Sides				Both Sides		
	Intermitte	nt			Intermitte	nt	
	None			()	None		
On road bicycle	Bike Lane		Othe	r (specify)	Bike Lane	Othe	er (specify)
facilities	Sharrows	L-1	<del>_</del>		Sharrows		
Littilities Course	Wide Shou			one	Wide Shou		one
Utilities, Sewer	Utilities Up	_					
and Water Sewer and water wo		ork n	Sewer and Water Line Work		Mork		
Please describe any improvements being			N/A	١	Sewer and	i water Line v	VOIK
made as part of this project to			IN/	٦			
	•						
crosswalks, signage or signals, or streetscape elements not discussed in							
project descriptio							
Does this project enhance connectivity Yes No							
of pedestrian or b		-		es, how?			
or Dial-A-Ride transit?				·			
Section 10. Esti	mated Projec	t Sched	ule				
Activity					Es	stimated Date	9
Resolution of Sup	port for□ Local	Match S	ubm	itted to SWMPC	9,	/1/2021	
Project Applicatio	n Submitted to	MOT			Α	ugust 2025	
Grade Inspection Package Submitted to MDOT September 2025						<u>2</u> 5	
Grade Inspection Meeting Scheduled November 2025						.5	
Final Plan and Estimate to MDOT December 202						ecember 202	5
Right of Way (RO\	N) certified*				N	/A	
Rail Road Permits	*				N	/A	
Environmental Mi	tigation*				N	/A	
Project Obligated March 2026							

**Project Letting** 

**Construction Start** 

Project Completion

May 2026

July 2026

November 2026

<sup>\*</sup>Enter NA if these items will not be required.

	Proposed Improvement	% Reduction	Associated Crash Types					
	SEGMENT O	RASH REDUCTION	SH REDUCTION FACTORS					
	Geometric Safety Enhancements							
		80%	Rear-End Left-Turn					
	Control of Town Laws Construct	50%	Head-On Left-Turn					
	Center Left-Turn Lane - Construct	20%	Head-On, Angle, Sideswipe*					
		15%	Non Left-Turn Rear-End, Other*					
		65%	Rear-End Right-Turn					
	Picks Town Love Construct	30%	Angle					
	Right-Turn Lane - Construct	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***					
$\boxtimes$	Shoulders - Widen to Standard Width (add 4' each side)	20%	Lane Departure***					
	<b>Shoulders</b> - Widen to Standard Width (add <b>5'</b> each side)	25%	Lane Departure***					
	<b>Shoulders</b> - Widen to Standard Width (add <b>6'</b> each side)	30%	Lane Departure***					
	<b>Shoulders</b> - Widen to Standard Width (add <b>7'</b> each side)	35%	Lane Departure***					
	Vertical Curve Modification	20%	All Applicable Crash Types +++					
	General S	egment Enhanc						
	Access Management - Improve	15%	Drive-way Related Applicable Crashes					
		44%	K and A injury Applicable Crashes					
	Centerline Rumble Strips - Install	46%	Single Vehicle Run off Road Left Crashes					
	Centerinie Kumbie Strips - mstun	43%	Sideswipe Same Crashes					
		55%	Sideswipe Opposite Crashes					
	High Friction Surface Treatment - Install	35%	Wet Crashes					
	Tilgit Tiction Surface Treatment - Mistali	20%	All Other Applicable Crashes					
	Recessed Durable Pavement Markings	5%	All Applicable Crashes					
	Pedestrian Refuge - Install	50%	Pedestrian Crashes (Review NCHRP Report 841)					
	Road Diet (4-3 Lane Conversion) - Install	50%	Suburban - 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***					
	Safety Edge Improvement	13%	All non-intersection crashes (CMF Clearing House ID 8658)					

Roadside Enhancements						
Bicycle Lanes - Install per standards	50%	Bicycle Crashes				
Shared Use Path - Install	33%	Bicycle and Pedestrian Related Crashes				
Fixed Objects From Clearzone (Trees, Culverts, Etc.) - Removal	75%	Fixed-Object Applicable Crashes				
Guardrail - Install	55%	Lane Departure ***Fatalities and "A" Injury Applicable Crashes				
Sidewalk for Pedestrians - Construct	85%	Pedestrian 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				
INTERSECT	ION CRASH REDU	CTION FACTORS				
 Pedestr	ian / Bicycle Enha	ancements				
Bump Out / Curb Extension - Remove Parking / Install	30%	All Crashes				
Bicycle Lanes - Install per standards	25%	Bicycle Crashes				
Sidewalk for Pedestrians - Construct	85%	Pedestrian Crashes				
	75%	Pedestrian Fatal - Dark Unlighted Crashes				
Intersection Lighting - install	40%	Pedestrian A-Injury - Dark Unlighted Crashes				
	30%	All Applicable Dark Unlighted Crashes				
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				
Signal Timi	ng / Hardware E	nhancements				
	3%	Rear-End				
Multiple Low-Cost Improvements	12%	Right-Angle				
	3%	Nighttime				
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				
	65%	Angle				
Box Span Signal - Upgrade from Stop Control	-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		
		65%	Angle-Turn, Head-On Left-Turn		
	Offset Left-Turn Lane - Construct		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		
		78%	Fatal and A-Injury Reduction		
	Roundabout	57%	Minor Crash Reduction		
	Lighting	_	See MDOT Interchange Warranted Lighting Guidance and overall		
	<u> </u>		MDOT Lighting Guidance		
	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 (Iollipops)	15%	All Applicable Crashes		

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.

Section 1. Applicant Information				
Agency Name	Van Buren County Road Commission			
Contact Name	Barry Anttila		Title	Highway Engineer
Phone Number	269-674-8011		Email	barryanttila@vbcrc.org
Engineer/Consultant (If applicable)				
Phone Number			Email	

Section 2. Project Information				
Project Name/Road Name	CR 352			
Project Limits (e.g. Napier Ave. to Britain Ave.)	CR 215s to CR 358			
Project Length (nearest hundredth of a mile)	2.00	Proposed Year of Funding	2024	
Primary Work Type	<ul> <li>         ⊠ Reconstruct □ Restore &amp; Rehabilitate □ Roadside Facility         □ Resurface □ Traffic Operations/Safety □ Transit □ Other     </li> </ul>			
Project Description (Please provide major work items including sidewalks, utility work, ADA upgrades etc.)	Trench and widen, HMA crush and shape, HMA paving, drainage improvements, guardrail, curb and gutter, pavement markings and restortation.			
Was this project applied for during the 2020-2023 Call for Proejcts but not selected	⊠Yes □No			
Was this project awarded funding for the 2020-2023 TIP, but was either canceled or failed to be obligated	☐Yes  ☐No If yes, please explain:			
If you are submitting multiple applications, please rank your applications by priority.		Project Rank: 5 of 9		

Estimated Participating Cost of the Project	\$1,464,000	
Federal STBG Requested	\$1,171,200	80%
State D Requested	\$	%
CTF (Transit Only)	\$	%
Local Funds	\$292,800	20%
Total	\$1,464,000	100%
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)?	⊠ Yes □ No Maximum Dollar A \$ 732,000	amount you can AC?
Can your agency supply additional match beyond the minimum required 18.15%. If so how much?	⊠ Yes □ No Amount \$585,600	
Are there elements of the project that could be eligible for other federal fund sources such as CMAQ, TAP, Bridge etc.	Source: Am Explanation:	nount: \$
Will the project have nonparticipating work, such as water, or sewer work?	Amount: \$ Explain:	

Section 4. Regional Connectivity	
What is the most current daily traffic count for the limits of this project?	AADT: 1,160 Year of count: 2021 Source: VBCRC
National Functional Classification (NFC) for this roadway	Major Collector
Is the project on an All Season Road	Yes No Proposed All Season

Section 5. System Preservation			
2021 PASER rating (Available 8-10-21)	5		
Current state of drainage	<ul> <li>☐ Adequate</li> <li>☐ Minor and tolerable drainage problems</li> <li>☐ Occasional drainage problems with some maintenance required</li> <li>☐ Inadequate, frequent flooding, excessive maintenance required</li> </ul>		
Expected increase in Remaining Service life (RSL)	10-14 yrs Use MDOT's <i>Guidelines for Geometrics on Local Projects</i>		
What MDOT guidelines does the project conform to?	<ul><li>☑ Reconstruction (4R)</li><li>☐ Resurfacing, restoration, and Rehabilitation (3R)</li><li>☐ Preventative Maintenance (PM)</li></ul>		

Section 6. Safety				
Please list the number and severity of crashes within the proposed project limits over the last 5 yrs. (2016-2020) (see Michigan Crash Facts for crash data)				
Total Crashes	9		Pedestrian & Bicycle Crashes	0
Fatalities	0		Serious Injuries	1
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 provide	will	This project does not include safety improvements.		

Section 7. Pedestrian and Bicycle Improvements				
Please explain what pedestrian and/or bicycle facilities if any currently exist	No pedestrian or bicycle facilities exist.			
Please explain any additional pedestrian and/or bicycle improvements included in the project.	N/A			
Does this project connect to an existing pedestrian/bicycle facility or one that is planned to be completed before 2027	☐Yes ☑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	☐Yes ☑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	☐Yes ☑No If yes, please cite the plan and page number:
Is there an approved asset management plan covering the utilities along the project's limits	Yes No List utilities covered by the asset management plan:
Will this project coordinate with other infrastructure projects (i.e. utility, water, sewer, etc.)?	Yes No If yes, please indicate the project type and construction year:
How many water main breaks have you had at this location in the past five years?	
Is there a completed utilities assessment that includes televising the sewers in the project area?	☐ Yes ⊠ No
	Yes 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>	⊠Yes □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>	□Yes ⊠No
Does the project cross jurisdictional boundaries?	☐ Yes ☐ No
If yes, will it be bid as a single project?	Yes No NA
Will this project require environmental mitigation, purchase of Right of Way (ROW), or railroad permits?	☐ Yes ☐ No ☐ Not Sure If yes, which items are required:
If any of the above items are required please explain how they will be addressed	
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	Yes No List the adjacent segments that qualify:

Section 9. Existing and Proposed Roadway Design							
	Existing			Proposed			
Include the	Through	Center		On Street	Through	Center	On Street
number of	Traffic Lanes	Turn Lar	ne	Parking	Traffic Lanes	Turn Lane	Parking
vehicle lanes	2	0		☐ Yes ⊠ No	2	0	☐ Yes ⊠ No
Shoulder	Paved			dth (ft.)	Paved		Width (ft.)
Surface	Unpaved		2				6
Sidewalk/ path	Placement		Wid	dth (ft.)	Placement		Width (ft.)
information	One Side				One Side		
	Both Sides				Both Sides		
	Intermitte	nt			Intermitte	nt	
	None				None		(
On road bicycle	Bike Lane		the	r (specify)	Bike Lane	Othe	er (specify)
facilities	Sharrows	Idoro D	_ 7 Na	<b></b> .	Sharrows	ıldara N	000
Utilities, Sewer	☐ Wide Shoulders ☐ None ☐ Utilities Upgrades Needed				Wide Shoulders None		
and Water	· = ·	_			Replace Utilities Relocate Utilities		
and water	Sewer and water work needed		Sewer and Water Line Work				
Please describe any improvements being N/A			Sewer and	vater Enie v	VOIR		
made as part of this project to			•				
crosswalks, signage or signals, or							
streetscape eleme		ed in					
project description	n						
Does this project of	enhance connec	tivity		Yes 🛛 No			
of pedestrian or b	icyclists to fixed	l route	If y	es, how?			
or Dial-A-Ride tran	nsit?						
Section 10. Esti	mated Projec	t Schedı	ıle				
Activity					E:	stimated Date	5
Resolution of Support for $\square$ Local Match Submitted to SWMPC					/1/2021		
Project Application Submitted to MOT					pril 2023		
Grade Inspection Package Submitted to MDOT					ıly 2023		
Grade Inspection Meeting Scheduled					eptember 202	23	
Final Plan and Estimate to MDOT				0	ctober 2023		
Right of Way (ROW) certified*					/a		
Rail Road Permits* n/a							
Environmental Mitigation* n/a							
Project Obligated				Ja	nuary 2024		

**Project Letting** 

**Construction Start** 

Project Completion

April 2024

July 2024

October 2024

<sup>\*</sup>Enter NA if these items will not be required.

	Proposed Improvement	% Reduction	Associated Crash Types			
	SEGMENT CRASH REDUCTION FACTORS					
	Geometric Safety Enhancements					
		80%	Rear-End Left-Turn			
	Control of Town Laws Construct	50%	Head-On Left-Turn			
	Center Left-Turn Lane - Construct	20%	Head-On, Angle, Sideswipe*			
		15%	Non Left-Turn Rear-End, Other*			
		65%	Rear-End Right-Turn			
	Picks Town Love Construct	30%	Angle			
	Right-Turn Lane - Construct	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***			
$\boxtimes$	Shoulders - Widen to Standard Width (add 4' each side)	20%	Lane Departure***			
	<b>Shoulders</b> - Widen to Standard Width (add <b>5'</b> each side)	25%	Lane Departure***			
	<b>Shoulders</b> - Widen to Standard Width (add <b>6'</b> each side)	30%	Lane Departure***			
	<b>Shoulders</b> - Widen to Standard Width (add <b>7'</b> each side)	35%	Lane Departure***			
	Vertical Curve Modification	20%	All Applicable Crash Types +++			
	General S	egment Enhanc				
	Access Management - Improve	15%	Drive-way Related Applicable Crashes			
		44%	K and A injury Applicable Crashes			
	Centerline Rumble Strips - Install	46%	Single Vehicle Run off Road Left Crashes			
	Centerinie Kumbie Strips - mstun	43%	Sideswipe Same Crashes			
		55%	Sideswipe Opposite Crashes			
	High Friction Surface Treatment - Install	35%	Wet Crashes			
	Tilgit Tiction Surface Treatment - Mistali	20%	All Other Applicable Crashes			
	Recessed Durable Pavement Markings	5%	All Applicable Crashes			
	Pedestrian Refuge - Install	50%	Pedestrian Crashes (Review NCHRP Report 841)			
	Road Diet (4-3 Lane Conversion) - Install	50%	Suburban - 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***			
	Safety Edge Improvement	13%	All non-intersection crashes (CMF Clearing House ID 8658)			

Roadside Enhancements				
Bicycle Lanes - Install per standards	50%	Bicycle Crashes		
Shared Use Path - Install	33%	Bicycle and Pedestrian Related Crashes		
Fixed Objects From Clearzone (Trees, Culverts, Etc.) - Removal	75%	Fixed-Object Applicable Crashes		
Guardrail - Install	55%	Lane Departure ***Fatalities and "A" Injury Applicable Crashes		
Sidewalk for Pedestrians - Construct	85%	Pedestrian 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		
INTERSECT	ION CRASH REDU	CTION FACTORS		
 Pedestr	ian / Bicycle Enha	ancements		
Bump Out / Curb Extension - Remove Parking / Install	30%	All Crashes		
Bicycle Lanes - Install per standards	25%	Bicycle Crashes		
Sidewalk for Pedestrians - Construct	85%	Pedestrian Crashes		
	75%	Pedestrian Fatal - Dark Unlighted Crashes		
Intersection Lighting - install	40%	Pedestrian A-Injury - Dark Unlighted Crashes		
	30%	All Applicable Dark Unlighted Crashes		
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		
Signal Timi	ng / Hardware E	nhancements		
	3%	Rear-End		
Multiple Low-Cost Improvements	12%	Right-Angle		
	3%	Nighttime		
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		
	65%	Angle		
Box Span Signal - Upgrade from Stop Control	-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					
	80%	Rear-End Left-Turn			
	50%	Head-On Left-Turn			
Center Left-Turn Lane - Construct	20%	Head-On, Angle, Other			
	15%	Non Left-Turn Rear-End			
	30%	Angle			
Intersection Improvements (Realignment, Sight-Distance Improvements, Radii Improvements, Etc.)	15%	Rear-End			
radii iliprovements, etc.)	10%	Head-On, Sideswipe, Pedestrian, Bicycle, Left-Turn Related			
Offset Left-Turn Lane - Construct	65%	Angle-Turn, Head-On Left-Turn			
Offset Left-Turn Lane - Construct	20%	Rear-End Left-Turn			
	65%	Angle-Turn			
Offset Right-Turn Lane - Construct	50%	Other Applicable Crashes			
Onset Right-Turn Lane - Construct	20%	Rear-End Right Turn			
	65%	Rear-End Right-Turn			
Right-Turn Lane - Construct	20%	Applicable Rear-End Crashes, Sideswipe Same Direction			
Davindahasit	78%	Fatal and A-Injury Reduction			
Roundabout	57%	Minor Crash Reduction			
Lighting	_	See MDOT Interchange Warranted Lighting Guidance and overall			
		MDOT Lighting Guidance			
General Intersection Enhan	•	-			
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 (Iollipops)	15%	All Applicable Crashes			

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.

Section 1. Applicant Information				
Agency Name	Van Buren Co	Van Buren County Road Commission		
Contact Name	Barry Anttila		Title	Highway Engineer
Phone Number	269-674-801	L	Email	barryanttila@vbcrc.org
Engineer/Consultant (If applicable)				
Phone Number			Email	

Section 2. Project Information			
Project Name/Road Name	CR 388		
Project Limits (e.g. Napier Ave. to Britain Ave.)	Bloomingdale Village limits (41st St) to CR 380		
Project Length (nearest hundredth of a mile)	2.55	Proposed Year of Funding	2025
Primary Work Type	☐ Reconstruct ☐ Restore & Rehabilitate ☐ Roadside Facility ☐ Resurface ☐ Traffic Operations/Safety ☐ Transit ☐ Other		
Project Description (Please provide major work items including sidewalks, utility work, ADA upgrades etc.)	Milling HMA surface	e, HMA paving, pavement marki	ngs
Was this project applied for during the 2020-2023 Call for Proejcts but not selected	☐Yes ⊠No		
Was this project awarded funding for the 2020-2023 TIP, but was either canceled or failed to be obligated	☐Yes ☐No If yes, please explain:		
If you are submitting multiple applications, please rank your applications by priority.		Project Rank: 6 of 9	

Section 3. Project Funding		
Estimated Participating Cost of the Project	\$541,000	
Federal STBG Requested	\$432,800	80%
State D Requested	\$	%
CTF (Transit Only)	\$	%
Local Funds	\$108,200	20%
Total	\$541,000	100%
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)?	☐ Yes ☐ No  Maximum Dollar Amo  \$ 270,500	ount you can AC?
Can your agency supply additional match beyond the minimum required 18.15%. If so how much?	⊠ Yes □ No Amount \$216,400	
Are there elements of the project that could be eligible for other federal fund sources such as CMAQ, TAP, Bridge etc.	Source: Amou Explanation:	nt: \$
Will the project have nonparticipating work, such as water, or sewer work?	Amount: \$ Explain:	

Section 4. Regional Connectivity	
What is the most current daily traffic count for the limits of this project?	AADT: 1833 Year of count: 2019 Source: VBCRC
National Functional Classification (NFC) for this roadway	Major Collector
Is the project on an All Season Road	Yes No Proposed All Season

Section 5. System Preservation	
2021 PASER rating (Available 8-10-21)	2
Current state of drainage	Adequate  Minor and tolerable drainage problems  Occasional drainage problems with some maintenance required  Inadequate, frequent flooding, excessive maintenance required
Expected increase in Remaining Service life (RSL)	7-9 yrs Use MDOT's <u>Guidelines for Geometrics on Local Projects</u>
What MDOT guidelines does the project conform to?	☐ Reconstruction (4R)  ☐ Resurfacing, restoration, and Rehabilitation (3R)  ☐ 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 Michigan Crash Facts for crash data)				
Total Crashes	15		Pedestrian & Bicycle Crashes	0
Fatalities	1		Serious Injuries	3
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 provide	will	This project does not include safetly improvements.		

Section 7. Pedestrian and Bicycle Improvements			
Please explain what pedestrian and/or bicycle facilities if any currently exist	Milling HMA surface, HMA paving, shoulders and pavement markings.		
Please explain any additional pedestrian and/or bicycle improvements included in the project.	N/A		
Does this project connect to an existing pedestrian/bicycle facility or one that is planned to be completed before 2027	☐Yes ☐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	☐Yes ☑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	☐Yes ☑No If yes, please cite the plan and page number:
Is there an approved asset management plan covering the utilities along the project's limits	Yes No List utilities covered by the asset management plan:
Will this project coordinate with other infrastructure projects (i.e. utility, water, sewer, etc.)?	Yes No If yes, please indicate the project type and construction year:
How many water main breaks have you had at this location in the past five years?	
Is there a completed utilities assessment that includes televising the sewers in the project area?	☐ Yes ⊠ No
	Yes 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>	⊠Yes □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>	□Yes ⊠No
Does the project cross jurisdictional boundaries?	☐ Yes ☐ No
If yes, will it be bid as a single project?	Yes No NA
Will this project require environmental mitigation, purchase of Right of Way (ROW), or railroad permits?	☐ Yes ☐ No ☐ Not Sure If yes, which items are required:
If any of the above items are required please explain how they will be addressed	
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	Yes No List the adjacent segments that qualify:

Section 9. Existing and Proposed Roadway Design							
	Existing			Proposed			
Include the	Through	Center		On Street	Through	Center	On Street
number of	Traffic Lanes	Turn Lar	ne	Parking	Traffic Lanes	Turn Lane	Parking
vehicle lanes	2	0		☐ Yes ⊠ No	2	0	☐ Yes ⊠ No
Shoulder			Wid	dth (ft.)			Width (ft.)
Surface			4		□ Unpaved 4		
Sidewalk/ path	Placement		Wid	dth (ft.)			Width (ft.)
information	One Side				One Side		
	<u> </u> Both Sides				Both Sides		
	Intermitte	nt			Intermitte	nt	
	None				None		
On road bicycle	Bike Lane	∐ C	the	r (specify)	Bike Lane	Othe	er (specify)
facilities	Sharrows		_		Sharrows		
	Wide Shou			one	Wide Shou		one
Utilities, Sewer	Utilities Upgrades Needed			Replace Utilities			
and Water	Sewer and water work needed			Relocate Utilities Sewer and Water Line Work			
				Sewer and	l Water Line V	Vork	
Please describe any improvements being							
made as part of this project to							
crosswalks, signage or signals, or							
streetscape elements not discussed in							
project description				<u></u>			
Does this project		-		Yes No			
of pedestrian or bicyclists to fixed route    If yes, how?				es, now?			
or Dial-A-Ride transit?							
Section 10. Esti	mated Projec	t Schedi	ıle				
Activity	matearrojee	e Serreac	лс		E	stimated Date	2
Resolution of Supp	oort for□ Local	Match Su	ubm	itted to SWMPC		/1/2021	
Project Application Submitted to MOT				A	ugust 2024		
Grade Inspection Package Submitted to MDOT				October 2024			
Grade Inspection Meeting Scheduled				D	ecember 202	4	
Final Plan and Estimate to MDOT				Ja	nuary 2025		
Right of Way (ROW) certified*				n	/a		
Rail Road Permits*				n	/a		
Environmental Mi	tigation*				n	/a	
Project Obligated	Project Obligated April 2025						
Project Letting June 2025							

**Construction Start** 

Project Completion

Aug 2025

Oct 2025

<sup>\*</sup>Enter NA if these items will not be required.

Proposed Improvement	% Reduction	Associated Crash Types		
SEGMENT CRASH REDUCTION FACTORS				
Geometric Safety Enhancements				
	80%	Rear-End Left-Turn		
	50%	Head-On Left-Turn		
Center Left-Turn Lane - Construct	20%	Head-On, Angle, Sideswipe*		
	15%	Non Left-Turn Rear-End, Other*		
	65%	Rear-End Right-Turn		
	30%	Angle		
Right-Turn Lane - Construct	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 +++		
General S	Segment Enhand	cements		
Access Management - Improve	15%	Drive-way Related Applicable Crashes		
	44%	K and A injury Applicable Crashes		
Centerline Rumble Strips - Install	46%	Single Vehicle Run off Road Left Crashes		
Centerline Rumble Strips - Mistali	43%	Sideswipe Same Crashes		
	55%	Sideswipe Opposite Crashes		
High Friction Surface Treatment - Install	35%	Wet Crashes		
nigh Friction Surface Treatment - mstun	20%	All Other Applicable Crashes		
Recessed Durable Pavement Markings	5%	All Applicable Crashes		
Pedestrian Refuge - Install	50%	Pedestrian Crashes (Review NCHRP Report 841)		
Road Diet (4-3 Lane Conversion) - Install	50%	Suburban - 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***		
Safety Edge Improvement	13%	All non-intersection crashes (CMF Clearing House ID 8658)		

Roadside Enhancements				
Bicycle Lanes - Install per standards	50%	Bicycle Crashes		
Shared Use Path - Install	33%	Bicycle and Pedestrian Related Crashes		
Fixed Objects From Clearzone (Trees, Culverts, Etc.) - Removal	75%	Fixed-Object Applicable Crashes		
Guardrail - Install	55%	Lane Departure ***Fatalities and "A" Injury Applicable Crashes		
Sidewalk for Pedestrians - Construct	85%	Pedestrian 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		
INTERSECTI	ON CRASH REDU	CTION FACTORS		
 Pedestri	an / Bicycle Enha	ancements		
Bump Out / Curb Extension - Remove Parking / Install	30%	All Crashes		
Bicycle Lanes - Install per standards	25%	Bicycle Crashes		
Sidewalk for Pedestrians - Construct	85%	Pedestrian Crashes		
	75%	Pedestrian Fatal - Dark Unlighted Crashes		
Intersection Lighting - install	40%	Pedestrian A-Injury - Dark Unlighted Crashes		
	30%	All Applicable Dark Unlighted Crashes		
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		
Signal Timir	ng / Hardware E	nhancements		
		Rear-End		
Multiple Low-Cost Improvements	12%	Right-Angle		
	3%	Nighttime		
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		
	65%	Angle		
Box Span Signal - Upgrade from Stop Control	-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					
		80%	Rear-End Left-Turn			
	Center Left-Turn Lane - Construct	50%	Head-On Left-Turn			
		20%	Head-On, Angle, Other			
		15%	Non Left-Turn Rear-End			
		30%	Angle			
	Intersection Improvements (Realignment, Sight-Distance Improvements, Radii Improvements, Etc.)	15%	Rear-End			
	radii iliprovements, etc.)	10%	Head-On, Sideswipe, Pedestrian, Bicycle, Left-Turn Related			
	Offset Left-Turn Lane - Construct	65%	Angle-Turn, Head-On Left-Turn			
	Offset Left-Turn Lane - Construct	20%	Rear-End Left-Turn			
		65%	Angle-Turn			
	ffset Right-Turn Lane - Construct	50%	Other Applicable Crashes			
		20%	Rear-End Right Turn			
	Bi-la Toma Long Constant	65%	Rear-End Right-Turn			
	Right-Turn Lane - Construct	20%	Applicable Rear-End Crashes, Sideswipe Same Direction			
			Fatal and A-Injury Reduction			
	Roundabout	57%	Minor Crash Reduction			
	Lighting	_	See MDOT Interchange Warranted Lighting Guidance and overall			
			MDOT Lighting Guidance			
	General Intersection Enhan	•	-			
	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 (Iollipops)	15%	All Applicable Crashes			

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.

Section 1. Applicant Information			
Agency Name	Van Buren County Road Commission		
Contact Name	Barry Anttila	Title	Highway Engineer
Phone Number	269-674-8011	Email	barryanttila@vbcrc.org
Engineer/Consultant (If applicable)			
Phone Number		Email	

Section 2. Project Information			
Project Name/Road Name	Red Arrow Hwy		
Project Limits (e.g. Napier Ave. to Britain Ave.)	CR 681 to Lawrence Village limits		
Project Length (nearest hundredth of a mile)	2.19	Proposed Year of Funding	2026
Primary Work Type	☐ Reconstruct ☐ Restore & Rehabilitate ☐ Roadside Facility ☐ Resurface ☐ Traffic Operations/Safety ☐ Transit ☐ Other		
Project Description (Please provide major work items including sidewalks, utility work, ADA upgrades etc.)	Trench and widen, milling HMA surface, HMA paving, drainage improvements, shoulders, guardrail, pavement markings and slope restoration.		
Was this project applied for during the 2020-2023 Call for Proejcts but not selected	⊠Yes □No		
Was this project awarded funding for the 2020-2023 TIP, but was either canceled or failed to be obligated	Yes No If yes, please explain:		
If you are submitting multiple applications, please rank your applications by priority.		Project Rank: 2 of 9	

Section 3. Project Funding		
Estimated Participating Cost of the Project	\$1,689,000	
Federal STBG Requested	\$1,351,200	80%
State D Requested	\$	%
CTF (Transit Only)	\$	%
Local Funds	\$337,800	20%
Total	\$1,689,000	100%
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)?	☐ Yes ☐ No  Maximum Dollar Amo  \$ 844,500	ount you can AC?
Can your agency supply additional match beyond the minimum required 18.15%. If so how much?	⊠ Yes □ No Amount \$675,600	
Are there elements of the project that could be eligible for other federal fund sources such as CMAQ, TAP, Bridge etc.	Source: Amou Explanation:	nt: \$
Will the project have nonparticipating work, such as water, or sewer work?	Amount: \$ Explain:	

Section 4. Regional Connectivity	
What is the most current daily traffic count for the limits of this project?	AADT: 3,642 Year of count: 2021 Source: VBCRC
National Functional Classification (NFC) for this roadway	Minor Arterial
Is the project on an All Season Road	Yes No Proposed All Season

Section 5. System Preservation		
2021 PASER rating (Available 8-10-21)	2	
Current state of drainage	<ul> <li>☐ Adequate</li> <li>☐ Minor and tolerable drainage problems</li> <li>☐ Occasional drainage problems with some maintenance required</li> <li>☐ Inadequate, frequent flooding, excessive maintenance required</li> </ul>	
Expected increase in Remaining Service life (RSL)	10-14 yrs Use MDOT's <u>Guidelines for Geometrics on Local Projects</u>	
What MDOT guidelines does the project conform to?	<ul> <li>□ Reconstruction (4R)</li> <li>⋈ Resurfacing, restoration, and Rehabilitation (3R)</li> <li>□ Preventative Maintenance (PM)</li> </ul>	

Section 6. Safety				
Please list the number and severity of crashes within the proposed project limits over the last 5 yrs. (2016-2020) (see Michigan Crash Facts for crash data)				
Total Crashes	38		Pedestrian & Bicycle Crashes	0
Fatalities	0		Serious Injuries	2
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 provide	will	Widening the paved shoulders.		

Section 7. Pedestrian and Bicycle Improvements			
Please explain what pedestrian and/or bicycle facilities if any currently exist	No pedestrian or bicycle facilities exist.		
Please explain any additional pedestrian and/or bicycle improvements included in the project.	The shoulders will be widen for shared use purpose.		
Does this project connect to an existing pedestrian/bicycle facility or one that is planned to be completed before 2027	☐Yes ☑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	☐Yes ☑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	☐Yes ☑No If yes, please cite the plan and page number:
Is there an approved asset management plan covering the utilities along the project's limits	Yes No List utilities covered by the asset management plan:
Will this project coordinate with other infrastructure projects (i.e. utility, water, sewer, etc.)?	Yes No If yes, please indicate the project type and construction year:
How many water main breaks have you had at this location in the past five years?	
Is there a completed utilities assessment that includes televising the sewers in the project area?	☐ Yes ⊠ No
	Yes 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>	⊠Yes □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>	□Yes ⊠No
Does the project cross jurisdictional boundaries?	☐ Yes ☐ No
If yes, will it be bid as a single project?	Yes No NA
Will this project require environmental mitigation, purchase of Right of Way (ROW), or railroad permits?	☐ Yes ☐ No ☐ Not Sure If yes, which items are required:
If any of the above items are required please explain how they will be addressed	
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	Yes No List the adjacent segments that qualify:

Section 9. Existing and Proposed Roadway Design							
	Existing			Proposed			
Include the	Through	Center		On Street	Through	Center	On Street
number of	Traffic Lanes	Turn Lan	e	Parking	Traffic Lanes	Turn Lane	Parking
vehicle lanes	2	0		☐ Yes ⊠ No	2	0	☐ Yes ⊠ No
Shoulder	Naved Paved		Wid	dth (ft.)	Naved Paved		Width (ft.)
Surface			4				7
Sidewalk/ path	Placement		Wid	dth (ft.)	Placement		Width (ft.)
information	One Side				One Side		
	<u> </u> Both Sides				Both Sides		
	Intermitte	nt			Intermitte	nt	
	None				None		
On road bicycle	Bike Lane	∐ O	the	r (specify)	Bike Lane	U Othe	er (specify)
facilities	Sharrows	.ldo.ro 🔽	_ 1 N. a		Sharrows	.lala as N	
Litilities Cower	☐ Wide Shoulders ☐ None ☐ Utilities Upgrades Needed			Wide Shoulders None			
Utilities, Sewer and Water	· = ·	_			Replace Utilities Relocate Utilities		
and water	Sewer and water work needed		Sewer and Water Line Work				
Please describe any improvements being N/A			Sewer and	vvater Line v	VOIR		
made as part of this project to							
crosswalks, signage or signals, or							
streetscape eleme		ed in					
project description							
Does this project of	enhance connec	ctivity		Yes 🛛 No			
of pedestrian or b	icyclists to fixed	l route	If y	es, how?			
or Dial-A-Ride tran	nsit?						
Section 10. Esti	mated Projec	t Schedu	le				
Activity					Es	stimated Date	5
Resolution of Support for $\square$ Local Match Submitted to SWMPC				9,	/1/2021		
Project Application Submitted to MOT				Ju	ine 2026		
Grade Inspection Package Submitted to MDOT				Α	ugust 2025		
Grade Inspection Meeting Scheduled					ctober 2025	_	
Final Plan and Estimate to MDOT					ovember 202	.5	
Right of Way (ROW) certified* n/a							
	Rail Road Permits* n/a						
Environmental Mitigation* n/a							
Project Obligated				l Fe	ebruary 2026		

Project Letting

**Construction Start** 

Project Completion

April 2026

July 2026

November 2026

<sup>\*</sup>Enter NA if these items will not be required.

	Proposed Improvement	% Reduction	Associated Crash Types			
	SEGMENT CRASH REDUCTION FACTORS					
	Geometric Safety Enhancements					
		80%	Rear-End Left-Turn			
		50%	Head-On Left-Turn			
	Center Left-Turn Lane - Construct	20%	Head-On, Angle, Sideswipe*			
		15%	Non Left-Turn Rear-End, Other*			
		65%	Rear-End Right-Turn			
	Pick Town Love Construct	30%	Angle			
	Right-Turn Lane - Construct	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***			
$\boxtimes$	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 +++			
	General S	egment Enhance	ements			
	Access Management - Improve	15%	Drive-way Related Applicable Crashes			
		44%	K and A injury Applicable Crashes			
	Centerline Rumble Strips - Install	46%	Single Vehicle Run off Road Left Crashes			
	Centerinie Kumbie Strips - mstan	43%	Sideswipe Same Crashes			
		55%	Sideswipe Opposite Crashes			
	High Friction Surface Treatment - Install	35%	Wet Crashes			
	riigii Friction Surface Treatment - mstan	20%	All Other Applicable Crashes			
	Recessed Durable Pavement Markings	5%	All Applicable Crashes			
	Pedestrian Refuge - Install	50%	Pedestrian Crashes (Review NCHRP Report 841)			
	Road Diet (4-3 Lane Conversion) - Install	50%	Suburban - 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***			
	Safety Edge Improvement	13%	All non-intersection crashes (CMF Clearing House ID 8658)			

Roadside Enhancements				
Bicycle Lanes - Install per standards	50%	Bicycle Crashes		
Shared Use Path - Install	33%	Bicycle and Pedestrian Related Crashes		
Fixed Objects From Clearzone (Trees, Culverts, Etc.) - Removal	75%	Fixed-Object Applicable Crashes		
Guardrail - Install	55%	Lane Departure ***Fatalities and "A" Injury Applicable Crashes		
Sidewalk for Pedestrians - Construct	85%	Pedestrian 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		
INTERSECT	ION CRASH REDU	CTION FACTORS		
 Pedestr	ian / Bicycle Enha	ancements		
Bump Out / Curb Extension - Remove Parking / Install	30%	All Crashes		
Bicycle Lanes - Install per standards	25%	Bicycle Crashes		
Sidewalk for Pedestrians - Construct	85%	Pedestrian Crashes		
	75%	Pedestrian Fatal - Dark Unlighted Crashes		
Intersection Lighting - install	40%	Pedestrian A-Injury - Dark Unlighted Crashes		
		All Applicable Dark Unlighted Crashes		
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		
Signal Timi	ng / Hardware E	nhancements		
	3%	Rear-End		
Multiple Low-Cost Improvements	12%	Right-Angle		
	3%	Nighttime		
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		
	65%	Angle		
Box Span Signal - Upgrade from Stop Control	-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				
	80%	Rear-End Left-Turn		
	50%	Head-On Left-Turn		
Center Left-Turn Lane - Construct	20%	Head-On, Angle, Other		
	15%	Non Left-Turn Rear-End		
	30%	Angle		
Intersection Improvements (Realignment, Sight-Distance Improvements, Radii Improvements, Etc.)	15%	Rear-End		
radii iliprovements, etc.)	10%	Head-On, Sideswipe, Pedestrian, Bicycle, Left-Turn Related		
Offset Left-Turn Lane - Construct	65%	Angle-Turn, Head-On Left-Turn		
Offset Left-Turn Lane - Construct	20%	Rear-End Left-Turn		
	65%	Angle-Turn		
Offset Right-Turn Lane - Construct	50%	Other Applicable Crashes		
Offset Right-Turn Lane - Construct	20%	Rear-End Right Turn		
	65%	Rear-End Right-Turn		
Right-Turn Lane - Construct	20%	Applicable Rear-End Crashes, Sideswipe Same Direction		
Davindahasit	78%	Fatal and A-Injury Reduction		
Roundabout	57%	Minor Crash Reduction		
Lighting	_	See MDOT Interchange Warranted Lighting Guidance and overall		
		MDOT Lighting Guidance		
General Intersection Enhan	•	-		
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 (Iollipops)	15%	All Applicable Crashes		

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.

Section 1. Applicant Information				
Agency Name	Van Buren Co	Van Buren County Road Commission		
Contact Name	Barry Anttila		Title	Highway Engineer
Phone Number	269-674-801	L	Email	barryanttila@vbcrc.org
Engineer/Consultant (If applicable)				
Phone Number			Email	

Section 2. Project Information			
Project Name/Road Name	CR 652		
Project Limits (e.g. Napier Ave. to Britain Ave.)	72 <sup>nd</sup> Ave to Robinson Rd (60 <sup>th</sup> Ave)		
Project Length (nearest hundredth of a mile)	3.15	Proposed Year of Funding	2026
Primary Work Type	☐ Reconstruct ☐ Restore & Rehabilitate ☐ Roadside Facility ☐ Resurface ☐ Traffic Operations/Safety ☐ Transit ☐ Other		
Project Description (Please provide major work items including sidewalks, utility work, ADA upgrades etc.)	Milling 2 inches, HMA paving, shoulders, pavement markings		
Was this project applied for during the 2020-2023 Call for Proejcts but not selected	☐Yes ⊠No		
Was this project awarded funding for the 2020-2023 TIP, but was either canceled or failed to be obligated	Yes No If yes, please explain:		
If you are submitting multiple applications, please rank your applications by priority.		Project Rank: 8 of 9	

Section 3. Project Funding		
Estimated Participating Cost of the Project	\$659,000	
Federal STBG Requested	\$527,200	80%
State D Requested	\$	%
CTF (Transit Only)	\$	%
Local Funds	\$131,800	20%
Total	\$659,000	100%
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)?	☐ Yes ☐ No  Maximum Dollar Amo  \$ 329,500	ount you can AC?
Can your agency supply additional match beyond the minimum required 18.15%. If so how much?	⊠ Yes □ No Amount \$263,600	
Are there elements of the project that could be eligible for other federal fund sources such as CMAQ, TAP, Bridge etc.	Source: KATS Amoun Explanation:	t: \$
Will the project have nonparticipating work, such as water, or sewer work?	Amount: \$ Explain:	

Section 4. Regional Connectivity	
What is the most current daily traffic count for the limits of this project?	AADT: 1,782 Year of count: 2019 Source: VBCRC
National Functional Classification (NFC) for this roadway	Major Collector
Is the project on an All Season Road	

Section 5. System Preservation	
2021 PASER rating (Available 8-10-21)	8
Current state of drainage	Adequate  Minor and tolerable drainage problems  Occasional drainage problems with some maintenance required  Inadequate, frequent flooding, excessive maintenance required
Expected increase in Remaining Service life (RSL)	7-9 yrs Use MDOT's <u>Guidelines for Geometrics on Local Projects</u>
What MDOT guidelines does the project conform to?	<ul> <li>□ Reconstruction (4R)</li> <li>⋈ Resurfacing, restoration, and Rehabilitation (3R)</li> <li>□ Preventative Maintenance (PM)</li> </ul>

Section 6. Safety				
Please list the number and severity of crashes within the proposed project limits over the last 5 yrs. (2016-2020) (see Michigan Crash Facts for crash data)				
Total Crashes	20		Pedestrian & Bicycle Crashes	1
Fatalities	0		Serious Injuries	2
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 provide	will	This project does not include any safety improvements.		

Section 7. Pedestrian and Bicycle Improvements			
Please explain what pedestrian and/or bicycle facilities if any currently exist	No pedestrian or bicycle facilities exist.		
Please explain any additional pedestrian and/or bicycle improvements included in the project.	N/A		
Does this project connect to an existing pedestrian/bicycle facility or one that is planned to be completed before 2027	☐Yes ☑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	☐Yes ☑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	Yes No If yes, please cite the plan and page number:
Is there an approved asset management plan covering the utilities along the project's limits	☐Yes ☒No List utilities covered by the asset management plan:
Will this project coordinate with other infrastructure projects (i.e. utility, water, sewer, etc.)?	Yes No If yes, please indicate the project type and construction year:
How many water main breaks have you had at this location in the past five years?	0
Is there a completed utilities assessment that includes televising the sewers in the project area?	☐ Yes ⊠ No
	Yes 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>	⊠Yes □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>	□Yes ⊠No
Does the project cross jurisdictional boundaries?	☐ Yes ☐ No
If yes, will it be bid as a single project?	Yes No NA
Will this project require environmental mitigation, purchase of Right of Way (ROW), or railroad permits?	☐ Yes ☐ No ☐ Not Sure If yes, which items are required:
If any of the above items are required please explain how they will be addressed	
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	Yes No List the adjacent segments that qualify:

Section 9. Existing and Proposed Roadway Design							
	Existing			Proposed			
Include the	Through	Center		On Street	Through	Center	On Street
number of	Traffic Lanes	Turn Lar	ne	Parking	Traffic Lanes	Turn Lane	Parking
vehicle lanes	2	0		☐ Yes ⊠ No	2	0	☐ Yes ⊠ No
Shoulder	Naved Paved		Wi	dth (ft.)			Width (ft.)
Surface			6				
Sidewalk/ path	Placement		Width (ft.)		Placement Width (ft.)		Width (ft.)
information	One Side				One Side		
	Both Sides				Both Sides		
	Intermitte	nt			Intermitte	nt	
0 11: 1	None			/	None		( ; ; ; )
On road bicycle	Bike Lane		<b>Othe</b>	r (specify)	Bike Lane	Othe	er (specify)
facilities	Sharrows		<del>_</del>		Sharrows	.lala sa 🔽 N	
Litilities Course	Wide Shou			one	Wide Shou		one
Utilities, Sewer and Water	Utilities Up	_			Replace Utilities Relocate Utilities		
and water	Sewer and water work needed			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 connec	ctivity		Yes 🔀 No			
of pedestrian or bicyclists to fixed route							
or Dial-A-Ride transit?							
Coation 10 Fati	matad Duaisa	+ Cabaalı	.i.a				
Section 10. Esti	mated Projec	t Scheal	uie			stimated Date	
Activity  Resolution of Sup	nort for □ Local	Match Si	uhm	itted to SWMDC		stimated Date /1/2021	<u> </u>
			ubiii	itted to SWIVIFC	<u> </u>	ine 2025	
Project Application Submitted to MOT Grade Inspection Package Submitted to MDOT					ugust 2025		
Grade Inspection Meeting Scheduled					ctober 2025		
Final Plan and Estimate to MDOT				N	ovember 202	:5	
Right of Way (ROW) certified*				n,	/a		
Rail Road Permits*					n,	/a	
	Environmental Mitigation* n/a						
Project Obligated						pril 2026	_
Project Letting				Ju	ine 2026		

Construction Start

Project Completion

August 2026

October 2026

<sup>\*</sup>Enter NA if these items will not be required.

Proposed Improvement	% Reduction	Associated Crash Types			
SEGMENT CRASH REDUCTION FACTORS					
Geometric Safety Enhancements					
	80%	Rear-End Left-Turn			
	50%	Head-On Left-Turn			
Center Left-Turn Lane - Construct	20%	Head-On, Angle, Sideswipe*			
	15%	Non Left-Turn Rear-End, Other*			
	65%	Rear-End Right-Turn			
Bisht Town Love Construct	30%	Angle			
Right-Turn Lane - Construct	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 +++			
General S	Segment Enhanc				
Access Management - Improve	15%	Drive-way Related Applicable Crashes			
	44%	K and A injury Applicable Crashes			
Centerline Rumble Strips - Install	46%	Single Vehicle Run off Road Left Crashes			
Centernine Rumbie Strips - mstun	43%	Sideswipe Same Crashes			
	55%	Sideswipe Opposite Crashes			
High Friction Surface Treatment - Install	35%	Wet Crashes			
riigh Friction Surface Treatment - mstun	20%	All Other Applicable Crashes			
Recessed Durable Pavement Markings	5%	All Applicable Crashes			
Pedestrian Refuge - Install	50%	Pedestrian Crashes (Review NCHRP Report 841)			
Road Diet (4-3 Lane Conversion) - Install	50%	Suburban - 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***			
Safety Edge Improvement	13%	All non-intersection crashes (CMF Clearing House ID 8658)			

Roadside Enhancements				
Bicycle Lanes - Install per standards	50%	Bicycle Crashes		
Shared Use Path - Install	33%	Bicycle and Pedestrian Related Crashes		
Fixed Objects From Clearzone (Trees, Culverts, Etc.) - Removal	75%	Fixed-Object Applicable Crashes		
Guardrail - Install	55%	Lane Departure ***Fatalities and "A" Injury Applicable Crashes		
Sidewalk for Pedestrians - Construct	85%	Pedestrian 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		
INTERSECT	ION CRASH REDU	CTION FACTORS		
 Pedestr	ian / Bicycle Enha	ancements		
Bump Out / Curb Extension - Remove Parking / Install	30%	All Crashes		
Bicycle Lanes - Install per standards	25%	Bicycle Crashes		
Sidewalk for Pedestrians - Construct	85%	Pedestrian Crashes		
	75%	Pedestrian Fatal - Dark Unlighted Crashes		
Intersection Lighting - install	40%	Pedestrian A-Injury - Dark Unlighted Crashes		
		All Applicable Dark Unlighted Crashes		
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		
Signal Timi	ng / Hardware E	nhancements		
	3%	Rear-End		
Multiple Low-Cost Improvements	12%	Right-Angle		
	3%	Nighttime		
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		
	65%	Angle		
Box Span Signal - Upgrade from Stop Control	-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					
	80%	Rear-End Left-Turn			
	50%	Head-On Left-Turn			
Center Left-Turn Lane - Construct	20%	Head-On, Angle, Other			
	15%	Non Left-Turn Rear-End			
	30%	Angle			
Intersection Improvements (Realignment, Sight-Distance Improvements, Radii Improvements, Etc.)	15%	Rear-End			
radii iliprovements, etc.)	10%	Head-On, Sideswipe, Pedestrian, Bicycle, Left-Turn Related			
Offset Left-Turn Lane - Construct	65%	Angle-Turn, Head-On Left-Turn			
Offset Left-Turn Lane - Construct	20%	Rear-End Left-Turn			
	65%	Angle-Turn			
Offset Right-Turn Lane - Construct	50%	Other Applicable Crashes			
	20%	Rear-End Right Turn			
	65%	Rear-End Right-Turn			
Right-Turn Lane - Construct	20%	Applicable Rear-End Crashes, Sideswipe Same Direction			
Davindahasit	78%	Fatal and A-Injury Reduction			
Roundabout	57%	Minor Crash Reduction			
Lighting	_	See MDOT Interchange Warranted Lighting Guidance and overall			
		MDOT Lighting Guidance			
General Intersection Enhan	•	-			
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 (Iollipops)	15%	All Applicable Crashes			

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.

Section 1. Applicant Information				
Agency Name	Van Buren Co	Van Buren County Road Commission		
Contact Name	Barry Anttila		Title	Highway Engineer
Phone Number	269-674-801	L	Email	barryanttila@vbcrc.org
Engineer/Consultant (If applicable)				
Phone Number			Email	

Section 2. Project Information			
Project Name/Road Name	CR 652		
Project Limits (e.g. Napier Ave. to Britain Ave.)	CR 354 to 72 <sup>nd</sup> Ave		
Project Length (nearest hundredth of a mile)	1.04	Proposed Year of Funding	2026
Primary Work Type	☐ Reconstruct ☒ Restore & Rehabilitate ☐ Roadside Facility ☐ Resurface ☐ Traffic Operations/Safety ☐ Transit ☐ Other		
Project Description (Please provide major work items including sidewalks, utility work, ADA upgrades etc.)	Trench and widen, milling HMA surface, HMA paving, shoulders, curb and gutter, pavement markings and slope restoration.		
Was this project applied for during the 2020-2023 Call for Proejcts but not selected	⊠Yes □No		
Was this project awarded funding for the 2020-2023 TIP, but was either canceled or failed to be obligated	☐Yes ☐No If yes, please explain:		
If you are submitting multiple applications, please rank your applications by priority.		Project Rank: 9 of 9	

Estimated Participating Cost of the Project	\$460,000	
Federal STBG Requested	\$368,000	80%
State D Requested	\$	%
CTF (Transit Only)	\$	%
Local Funds	\$92,000	20%
Total	\$460,000	100%
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)?	⊠ Yes □ No     Maximum Dollar Ar     \$ 230,000	mount you can AC?
Can your agency supply additional match beyond the minimum required 18.15%. If so how much?	⊠ Yes □ No Amount \$184,000	
Are there elements of the project that could be eligible for other federal fund sources such as CMAQ, TAP, Bridge etc.	Source: Amo Explanation:	ount: \$
Will the project have nonparticipating work, such as water, or sewer work?	Amount: \$ Explain:	

Section 4. Regional Connectivity	
What is the most current daily traffic count for the limits of this project?	AADT: 366 Year of count: 2021 Source: VBCRC
National Functional Classification (NFC) for this roadway	Major Collector
Is the project on an All Season Road	Yes No Proposed All Season

Section 5. System Preservation	
2021 PASER rating (Available 8-10-21)	8
Current state of drainage	Adequate  Minor and tolerable drainage problems  Occasional drainage problems with some maintenance required  Inadequate, frequent flooding, excessive maintenance required
Expected increase in Remaining Service life (RSL)	7-9 yrs Use MDOT's <u>Guidelines for Geometrics on Local Projects</u>
What MDOT guidelines does the project conform to?	<ul> <li>□ Reconstruction (4R)</li> <li>⋈ Resurfacing, restoration, and Rehabilitation (3R)</li> <li>□ Preventative Maintenance (PM)</li> </ul>

Section 6. Safety				
Please list the number and severity of crashes within the proposed project limits over the last 5 yrs. (2016-2020) (see Michigan Crash Facts for crash data)				
Total Crashes	1		Pedestrian & Bicycle Crashes	0
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 provide	will	Project includes widen shoulders.		

Section 7. Pedestrian and Bicycle Improvements			
Please explain what pedestrian and/or bicycle facilities if any currently exist	No pedestrian or bicycle facilities exist.		
Please explain any additional pedestrian and/or bicycle improvements included in the project.	A five foot paved shoulder for shared use purposes.		
Does this project connect to an existing pedestrian/bicycle facility or one that is planned to be completed before 2027	☐Yes ☑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	☐Yes ☑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	☐Yes ☑No If yes, please cite the plan and page number:
Is there an approved asset management plan covering the utilities along the project's limits	Yes No List utilities covered by the asset management plan:
Will this project coordinate with other infrastructure projects (i.e. utility, water, sewer, etc.)?	Yes No If yes, please indicate the project type and construction year:
How many water main breaks have you had at this location in the past five years?	
Is there a completed utilities assessment that includes televising the sewers in the project area?	☐ Yes ⊠ No
	Yes 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>	⊠Yes □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>	□Yes ⊠No
Does the project cross jurisdictional boundaries?	☐ Yes ☐ No
If yes, will it be bid as a single project?	Yes No NA
Will this project require environmental mitigation, purchase of Right of Way (ROW), or railroad permits?	☐ Yes ☐ No ☐ Not Sure If yes, which items are required:
If any of the above items are required please explain how they will be addressed	
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	Yes No List the adjacent segments that qualify:

Section 9. Existing and Proposed Roadway Design								
	Existing			Proposed				
Include the number of vehicle lanes	Through Traffic Lanes 2	Center Turn Lan	ie	On Street Parking  ☐ Yes ☒ No	Through Traffic L 2		Center Turn Lane 0	On Street Parking  ☐ Yes ☒ No
Shoulder Surface	□ Paved     □ Unpaved		Width (ft.)		Paved Unpaved		Width (ft.) 7	
Sidewalk/ path information	Placement One Side Both Sides Intermittent None		Width (ft.)		Placement One Side Both Sides Intermittent None		Width (ft.)	
On road bicycle facilities	Bike Lane Other (specify) Sharrows Wide Shoulders None				☐ Bike Lane ☐ Other (specify) ☐ Sharrows ☐ None			
Utilities, Sewer and Water	Utilities Upgrades Needed  Sewer and water work needed			Replace Utilities Relocate Utilities 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			The existing shoulder is made up of 2 ft of pavement and 4 ft of gravel. The propsed shoulder will be 5 ft pavement and 2 ft gravel.					
Does this project enhance connectivity of pedestrian or bicyclists to fixed route or Dial-A-Ride transit?			☐Yes ☑No If yes, how?					
Section 10. Estimated Project Schedule								
Activity					F	stimated Date	2	
Resolution of Support for ☐ Local Match Sub			 Ibmitted to SWMPC				9/1/2021	
Project Application Submitted to MOT							March 2025	
Condition and Children			207			<u> </u>		

Enter NA if these items will not be required.	these items will not be required.		
2024-2026 RTF Application	Page 6 of 5		

	Proposed Improvement	% Reduction	Associated Crash Types			
	SEGMENT CRASH REDUCTION FACTORS					
	Geometric Safety Enhancements					
		80%	Rear-End Left-Turn			
		50%	Head-On Left-Turn			
	Center Left-Turn Lane - Construct	20%	Head-On, Angle, Sideswipe*			
		15%	Non Left-Turn Rear-End, Other*			
		65%	Rear-End Right-Turn			
	Right-Turn Lane - Construct	30%	Angle			
		15%	Rear-End			
		10%	Other*			
	Horizontal Curve Flattening	30%	Lane Departure***			
$\boxtimes$	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 +++			
	General S	egment Enhance	ements			
	Access Management - Improve	15%	Drive-way Related Applicable Crashes			
		44%	K and A injury Applicable Crashes			
	Centerline Rumble Strips - Install	46%	Single Vehicle Run off Road Left Crashes			
	Centernine Rumbie Strips - Instan	43%	Sideswipe Same Crashes			
		55%	Sideswipe Opposite Crashes			
	High Friction Surface Treatment - Install	35%	Wet Crashes			
	right Friction Surface Treatment - Mistali	20%	All Other Applicable Crashes			
	Recessed Durable Pavement Markings	5%	All Applicable Crashes			
	Pedestrian Refuge - Install	50%	Pedestrian Crashes (Review NCHRP Report 841)			
	Road Diet (4-3 Lane Conversion) - Install	50%	Suburban - 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***			
	Safety Edge Improvement	13%	All non-intersection crashes (CMF Clearing House ID 8658)			

Roadside Enhancements						
Bicycle Lanes - Install per standards	50%	Bicycle Crashes				
Shared Use Path - Install	33%	Bicycle and Pedestrian Related Crashes				
Fixed Objects From Clearzone (Trees, Culverts, Etc.) - Removal	75%	Fixed-Object Applicable Crashes				
Guardrail - Install		Lane Departure ***Fatalities and "A" Injury Applicable Crashes				
Sidewalk for Pedestrians - Construct	85%	Pedestrian Crashes				
Slope Flattening	15%	Fixed-Object, Overturn Applicable Crashes				
Living Snow Fence		Crashes due to wintry surface conditions				
Lighting - install on segment		Dark Unlighted Crashes				
INTERSECTION CRASH REDUCTION FACTORS						
 Pedestrian / Bicycle Enhancements						
Bump Out / Curb Extension - Remove Parking / Install	30%	All Crashes				
Bicycle Lanes - Install per standards	25%	Bicycle Crashes				
Sidewalk for Pedestrians - Construct	85%	Pedestrian Crashes				
	75%	Pedestrian Fatal - Dark Unlighted Crashes				
Intersection Lighting - install	40%	Pedestrian A-Injury - Dark Unlighted Crashes				
	30%	All Applicable Dark Unlighted Crashes				
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				
Signal Timi	ng / Hardware E	nhancements				
	3%	Rear-End				
Multiple Low-Cost Improvements	12%	Right-Angle				
	3%	Nighttime				
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				
	65%	Angle				
Box Span Signal - Upgrade from Stop Control	-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		Left-Turn				
Signal Head Size - Increase to 12 "		All Applicable Crashes +				
Signal Optimization & Timing Updates		All Applicable Crashes +				
Removing Night Flash from Signal Timing		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			
	0" 11 " 7 1 0 0 1	65%	Angle-Turn, Head-On Left-Turn			
	Offset Left-Turn Lane - Construct	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			
	Lighting		See MDOT Interchange Warranted Lighting Guidance and overall			
			MDOT Lighting Guidance			
	General Intersection Enhancements (Non-Signalized Intersections)					
	All-Way Stop Control - New Installation		All Applicable Crashes			
	Ground Mounted Flashing Beacons (Red)- Install **		All Crashes On Install Approach			
	Ground Mounted Flashing Beacons(Amber) - Install **		All Crashes On Install Approach			
	Signing - Improve/Upgrade		Angle, Rear-End Crashes			
	Pavement Markings - Improve/Upgrade	30%	Angle, Rear-End Crashes			
	Reflective Sheeting on Sign Posts (Iollipops)		All Applicable Crashes			