2024-2026 Congestion Mitigation and Air Quality Project Application

Click "Enable Editing" to begin filling out this form. You may save this form at any time.
If you need assistance, please contact Brandon Kovnat, SWMPC Associate Planner.
Email kovnatb@swmpc.org or call (269) 925-1137 x 1524

Section 1. Applicant Information

Applicant Name	Berrien County Road Department		
Contact Name	Kevin Stack	Title	Engineering Supervisor
Phone Number	269-925-1196 ex 4421	Email	kstack@bcroad.org
Sponsor (If applicable)			
Engineer/Consultant (If applicable)			
Phone Number		Email	

Section 2. Project Information & Costs

Project Name: Red Arrow Highway Non-Motorized path				
City/Village/ Township: Chikaming			County: Berrien	
Project Location *(short description of where the project is located)*	This project will extend the Red Arrow Linear Path from Lakeside to Harbert along the side of Red Arrow Highway			
Which Emissions form is being used? (list the form name not the MDOT form number*)*	Non-motorized Pathway			
Work Description (Short description of work being performed. Please provide enough information for eligibility to be determined)	This project will be in conjunction with a roadway project along Red Arrow Highway to extend the Non-motorized facility north to Harbert.			
Describe how the project will reduce congestion and/or emissions	This will allow homeoweners and residence along Red Arrow Highway to use non motorized means of travel to access small business districts along the corridor and reduce car emissions.			
Project Cost *Only include CMAQ eligible expenses*	$ 400000	Proposed Year of Funding	2024	
Minimum Local Match – 20% of eligible costs	$80000			
Can you supply additional match beyond the minimum required 20% If so how much?	☐ Yes ☒ No Amount $0			
Emissions Benefit (from Emissions form)	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Nitrogen Oxide (NO_x)	Particulate Matter (PM 2.5)

Section 3. Performance measures

Besides emissions reductions what other performance measures will the project contribute to? *(select all that apply)* ☒ Safety ☐ Pavement Condition ☐ System Reliability ☒ Pedestrian/Bicycle Connectivity ☐ Transit State of Good Repair	If you checked any of the Performance Measures please indicate how the project will improve them: Saefty factor will be achieved by getting pedestrain traffic on to a separate non motorized trail rather than riding along the road edge of Red Arrow Highway. This will connect pedestrain traffic with business districts and creating a multip township non motorized facility.

Section 4. Additional Questions

Question	Y/N	If Yes, Provide Brief Explanation of How the project will meet these Criteria
Will the project be ready for obligation by July 1 of the year in which it's programmed?	☒Yes ☐No	Project packet will be created in 2023
Will this project use multiple funding sources/be combined with another Non-CMAQ project?	☒Yes ☐No	Rural Task Force
Is the project being carried out by a sponsored agency, or is a private entity providing funding, materials, or services in support of this project?	☐Yes ☒No	
Does the project require Right of Way (ROW) acquisition or an easement?	☐Yes ☒No	**If yes, attach a signed letter from that agency granting permission to implement all or part of this project in their right-of-way.**

Section 5. Estimated Project Schedule

Activity	Estimated Date
Resolution of Support for Local Match Submitted to SWMPC	02/01/2022
Project Application Submitted to MOT	01/01/2024
Grade Inspection Package Submitted to MDOT	02/01/2024
Grade Inspection Meeting Scheduled	02/01/2024
Final Plan and Estimate to MDOT	03/01/2024
Right of Way (ROW) certified	01/01/2024
Rail Road Permits	NA
Environmental Mitigation	NA
Project Obligated	04/01/2024
Project Letting	05/01/2024
Construction Start	06/01/2024
Project Completion	11/01/2024

Enter NA for any activity that doesn’t apply to the project.

Bicycle and Pedestrian Improvements

This calculator will estimate the reduction in emissions resulting from improvements to bicycle and pedestrian infrastructure and associated mode shift from passenger vehicles to bicycling or walking, including but not limited to sidewalks, dedicated bicycle infrastructure, improved wayfinding, mid-block crossing installations, bike share systems, and bike parking improvements.

INPUT

(1) What is your project evaluation year? 2024

(2) Estimate the shift in daily motorized passenger vehicle trips to non-motorized travel due to the bicycle and pedestrian project.

Daily Passenger Vehicle Trips		
Before	After	Change
4456	3750	706

(3a) Select the data type used for entering the typical one-way trip distance of passenger vehicles below:

Trip Distance Source
Average

(3b) If you selected "Average" above, enter the typical one-way trip distance. If you selected "Distribution" above, enter the typical distribution of one-way trip distances.

Typical Trip Distance (miles one way)
2

Distribution of Trip Distances (daily fraction per mileage bin)					
x < 1	1 ≤ x < 2	2 ≤ x < 3	3 ≤ x < 4	4 ≤ x ≤ 5	Sum

OUTPUT

EMISSION REDUCTIONS

Pollutant	Total
Carbon Monoxide (CO)	6.020
Particulate Matter <2.5 µm ($PM_{2.5}$)	0.016
Particulate Matter <10 µm (PM_{10})	0.055
Nitrogen Oxide (NOx)	0.429
Volatile Organic Compounds (VOC)	0.402

*Units in kg/day unless otherwise noted

Carbon Dioxide Equivalent (CO_2e)	490.363
Total Energy Consumption (MMBTU/day)	6.364

2024-2026 Congestion Mitigation and Air Quality Project Application

Click "Enable Editing" to begin filling out this form. You may save this form at any time.
If you need assistance, please contact Brandon Kovnat, SWMPC Associate Planner.
Email kovnatb@swmpc.org or call (269) 925-1137 x 1524

Section 1. Applicant Information

Applicant Name	Berrien County Road Department		
Contact Name	Kevin Stack	Title	Engineering Supervisor
Phone Number	269-925-1196	Email	kstack@bcroad.org
Sponsor (If applicable)			
Engineer/Consultant (If applicable)	Williams & Works		
Phone Number	616-224-1500	Email	austin@williams-works.com

Section 2. Project Information & Costs

Project Name: W. John Beers Walks - Roosevelt to Demorrow			
City/Village/ Township: Lincoln Charter Township		County: Berrien	
Project Location *(short description of where the project is located)*	North and south sides of W. John Beers Rd. from S. Roosevelt Rd. to Demorrow Rd. in Lincoln Township, Berrien County, MI.		
Which Emissions form is being used? (list the form name not the MDOT form number)	Bicycle and Pedestrian Improvements		
Work Description (Short description of work being performed. Please provide enough information for eligibility to be determined)	Extension of existing walkways that were placed on both the north and south sides of W. John Beers Rd. in 2012 using CMAQ grant. Work includes installation of 6 ft. wide concrete paths, A.D.A. ramps, retaining walls, drainage improvements. New walkways to connect to existing sidewalks at Demorrow Rd. at the border with the Village of Stevensville. Total length of the project is approximately 2,560 feet (5,120 feet of walkway)		
Describe how the project will reduce congestion and/or emissions	The addition of sidewalks will encourage pedestrians to make non-motorized trips between the Village of Stevensville and the Lincoln Township public facilites (Park, Library), Lakeshore Public Schools, and the commercial area of John Beers Rd. and Cleveland Ave. This will improve air quality and reduce congestion by reducing motorized vehicles, and their accompanying emissions, from the roadway.		
Project Cost	$ 990,000	Proposed Year of Funding	2026

Only include CMAQ eligible expenses				
Minimum Local Match – 20% of eligible costs		$198,000		
Can you supply additional match beyond the minimum required 20% If so how much?		☒ Yes ☐ No Amount $392,000		
Emissions Benefit (from Emissions form)	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Nitrogen Oxide (NO_x)	Particulate Matter (PM 2.5)

Section 3. Performance measures

Besides emissions reductions what other performance measures will the project contribute to? *(select all that apply)* ☒ Safety ☐ Pavement Condition ☐ System Reliability ☒ Pedestrian/Bicycle Connectivity ☐ Transit State of Good Repair	If you checked any of the Performance Measures please indicate how the project will improve them: The proposed project closes a critical 2,500 ft. gap between the existing sidewalks in the Village of Stevensville west of S. Roosevelt Rd. and the existing federally funded non-motorized facilities on John Beers Rd. and S. Roosevelt Rd. Currently, pedestrians and cyclist must share the 4 ft. widened shoulders which are not wide enough for safe travel by both types of users onthis route, posted at 40 mph. This is particularly of concern in the winter months, when the full width of the shoulders may not be available due to snowfall.

Section 4. Additional Questions

Question	Y/N	If Yes, Provide Brief Explanation of How the project will meet these Criteria
Will the project be ready for obligation by July 1 of the year in which it's programmed?	☒Yes ☐No	Project wil be designed well in advance of the grant fiscal year.
Will this project use multiple funding sources/be combined with another Non-CMAQ project?	☒Yes ☐No	Local Township matching funds
Is the project being carried out by a sponsored agency, or is a private entity providing funding, materials, or services in support of this project?	☒Yes ☐No	Lincoln Charter Township will provide the engineering and matching funds for this project.
Does the project require Right of Way (ROW) acquisition or an easement?	☐Yes ☒No	**If yes, attach a signed letter from that agency granting permission to implement all or part of this project in their right-of-way.**

Section 5. Estimated Project Schedule

Activity	Estimated Date
Resolution of Support for Local Match Submitted to SWMPC	Feb 2025
Project Application Submitted to MOT	March 2025
Grade Inspection Package Submitted to MDOT	April 2025
Grade Inspection Meeting Scheduled	May 2025

Final Plan and Estimate to MDOT	July 2025
Right of Way (ROW) certified	August 2025
Rail Road Permits	N/A
Environmental Mitigation	N/A
Project Obligated	October 2025
Project Letting	December 2025
Construction Start	May 2026
Project Completion	July 2026

Enter NA for any activity that doesn't apply to the project.

FY 2026 – CMAQ Application
W. John Beers Rd. – Nonmotorized pathways – S. Roosevelt Rd. to Demorrow Rd.
Lincoln Charter Township

Additional information which may contribute to assessment:

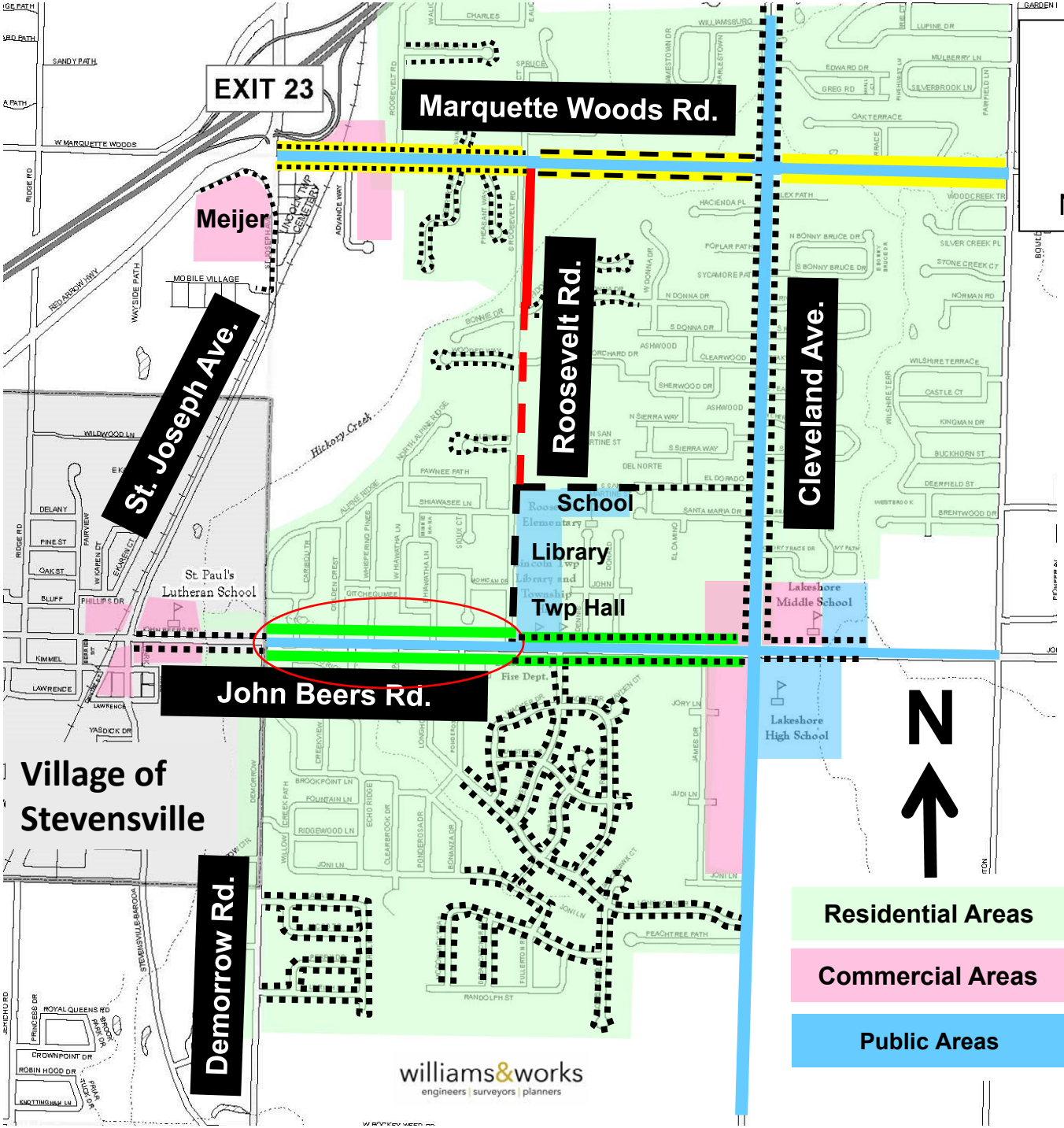
SERVICE AREAS - Approximately 700 existing residential properties are adjacent to or connect with the proposed walkways on John Beers Rd. between S. Roosevelt Rd. and Demorrow Rd. As this is will connect to existing walkways to the east and west, many more residences have the potential to use this facility as well. (see attached map)

DESTINATION AREAS - The proposed extension will allow access to jobs, services and retail businesses. The extension will connect the existing non-motorized pathways on S. Roosevelt Rd. and John Beers Rd. to the commercial and public facilities within the Village of Stevensville. Likewise, this link will provide residents from the Village and east of Demorrow Rd. with direct pedestrian access to the public facilities (library, Township Hall, park), restaurants, a large shopping center, post office, and several smaller commercial businesses located on John Beers Rd. and Cleveland Avenue intersection. Some of the businesses in this area include Martins grocery, Walgreens, Ace Hardware, two banks, an exercise facility, post office, restaurants, office buildings and a convenience store/gas station. In addition, Lakeshore Public High School is located at this intersection.

LAND USES - The land uses surrounding the path are primarily residential, connecting to commercial area on both the NW and SE side. (See attached map).

CONNECTIONS TO OTHER NON-MOTORIZED PATHS - As shown on the attached map, this link will connect to the existing 2012 CMAQ funded non-motorized pathways on John Beers Rd. In addition, it will connect with the existing non-motorized pathways on S. Roosevelt Road that include a 2015 CMAQ funded pathway and the planned extension that will connect to Marquette Woods Rd. Roosevelt Rd. connects to John Beers Rd. to the south and Marquette Woods Rd. to the north, both Federal Aid roads.

ESTIMATED COST - The estimated cost for this project is $980,000 including engineering. This includes a 6 ft. wide concrete pathway, approximately 2,800 sq. ft. of retaining wall, 16 A.D.A. ramps, two large culvert extensions, numerous tree removals, relocation of existing hydrants, phone junction boxes, driveway aprons, placement of leech basins, and allowances for restoration.



Lincoln Charter Township

FY 2026 CMAQ Application

John Beers Road

Non-Motorized Improvements

- Federal Aid Road
- Existing Sidewalk
- Existing Non - Motorized Trail (Safe Routes to School 2008)
- Existing Non-motorized 6 ft. walk (CMAQ 2012)
- Existing Non - Motorized Trail (CMAQ 2014)
- Existing Widened Shoulders + 6ft. Sidewalks
- Existing Widened Shoulders
- Planned Non - Motorized Trail
- Planned Widened Shoulders
- Planned Improvements
- 6 ft pathways both sides (2026 – CMAQ)

Bicycle and Pedestrian Improvements

This calculator will estimate the reduction in emissions resulting from improvements to bicycle and pedestrian infrastructure and associated mode shift from passenger vehicles to bicycling or walking, including but not limited to sidewalks, dedicated bicycle infrastructure, improved wayfinding, mid-block crossing installations, bike share systems, and bike parking improvements.

INPUT

(1) What is your project evaluation year? 2026

(2) Estimate the shift in daily motorized passenger vehicle trips to non-motorized travel due to the bicycle and pedestrian project.

Daily Passenger Vehicle Trips		
Before	**After**	**Change**
7480	5984	1496

(3a) Select the data type used for entering the typical one-way trip distance of passenger vehicles below:

Trip Distance Source
Average

(3b) If you selected "Average" above, enter the typical one-way trip distance. If you selected "Distribution" above, enter the typical distribution of one-way trip distances.

Typical Trip Distance (miles one way)
1

Distribution of Trip Distances (daily fraction per mileage bin)					
x < 1	**1 ≤ x < 2**	**2 ≤ x < 3**	**3 ≤ x < 4**	**4 ≤ x ≤ 5**	**Sum**

OUTPUT

EMISSION REDUCTIONS

Pollutant	Total
Carbon Monoxide (CO)	8.896
Particulate Matter <2.5 µm ($PM_{2.5}$)	0.021
Particulate Matter <10 µm (PM_{10})	0.063
Nitrogen Oxide (NOx)	0.628
Volatile Organic Compounds (VOC)	0.688

*Units in kg/day unless otherwise noted

Carbon Dioxide Equivalent (CO_2e)	557.693
Total Energy Consumption (MMBTU/day)	7.162

2024-2026 Congestion Mitigation and Air Quality Project Application

Click "Enable Editing" to begin filling out this form. You may save this form at any time.
If you need assistance, please contact Brandon Kovnat, SWMPC Associate Planner.
Email kovnatb@swmpc.org or call (269) 925-1137 x 1524

Section 1. Applicant Information

Applicant Name	Village of Three Oaks		
Contact Name	Dan Faulkner	Title	Village Manager
Phone Number	269-756-9221	Email	villagemgr@threeoaksvillage.org
Sponsor (If applicable)			
Engineer/Consultant (If applicable)	Tony McGhee, Abonmarche Consultants, Inc		
Phone Number	269-252-8980	Email	tmcghee@abonmarche.com

Section 2. Project Information & Costs

Project Name: US -12 Non-Motorized Path				
City/Village/ Township: Village of Three Oaks			County: Berrien	
Project Location *(short description of where the project is located)*	The project is in the Village of Three Oaks, along the south side of US-12, beginning approximately 1,300 feet west of Elm Street.			
Which Emissions form is being used? (list the form name not the MDOT form number)	FHWA Bicycle and Pedestrian Improvements Toolkit			
Work Description (Short description of work being performed. Please provide enough information for eligibility to be determined)	Build 10' non-motorized path to connect to existing sidewalk system on the south side of US -12 from Memorial Drive west to intersection of Dunn Street at mobile home park.			
Describe how the project will reduce congestion and/or emissions	The creation of the new non-motorized path will allow residents of the mobile home park (80 residential lots) to safely walk to shops, work and school, reducing the amount of car traffic. The extension will also allow people to walk to Hardings Grocery and Family Dollar from all parts of the Village, reducing vehicle traffic. The path will also serve as a connecting point from the community's residential neighborhoods to Watkins Park, the community's largest park and home to many youth recreational programs.			
Project Cost *Only include CMAQ eligible expenses*	$ 250,100	Proposed Year of Funding	2024	
Minimum Local Match – 20% of eligible costs	$ 50,020			
Can you supply additional match beyond the minimum required 20% If so how much?	☐ Yes ■ No Amount $			

Emissions Benefit (from Emissions form)	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Nitrogen Oxide (NO_x)	Particulate Matter (PM 2.5)
	0.056	0.602	0.052	0.003

Section 3. Performance measures

Besides emissions reductions what other performance measures will the project contribute to? *(select all that apply)*	If you checked any of the Performance Measures please indicate how the project will improve them:
☒ Safety ☐ Pavement Condition ☐ System Reliability ☒ Pedestrian/Bicycle Connectivity ☐ Transit State of Good Repair	Safety - currently, there are no pedestrian pathways from the mobile home park to downtown Three Oaks. Residents risk their safety to walk along US-12 to travel back and forth from downtown. Adding the sidewalk extension will connect the mobile home park, Hardings and Dollar Tree to the downtown and existing residential neighborhoods with sidewalks. Furthermore, the path will provide the final link to create an accessible a non-motorized route from the community's residential neighborhoods to Watkins Park.

Section 4. Additional Questions

Question	Y/N	If Yes, Provide Brief Explanation of How the project will meet these Criteria
Will the project be ready for obligation by July 1 of the year in which it's programmed?	☒ Yes ☐ No	Upon notification of funding, Abonmarche can design and prepare bid docs to meet MDOT requirements for bidding a 2024 project
Will this project use multiple funding sources/be combined with another Non-CMAQ project?	☐ Yes ☒ No	
Is the project being carried out by a sponsored agency, or is a private entity providing funding, materials, or services in support of this project?	☐ Yes ☒ No	
Does the project require Right of Way (ROW) acquisition or an easement?	☐ Yes ☒ No	**If yes, attach a signed letter from that agency granting permission to implement all or part of this project in their right-of-way.**

Section 5. Estimated Project Schedule

Activity	Estimated Date
Resolution of Support for Local Match Submitted to SWMPC	10/13/2021
Project Application Submitted to MOT	11/1/2021
Grade Inspection Package Submitted to MDOT	11/6/2023
Grade Inspection Meeting Scheduled	12/4/2023
Final Plan and Estimate to MDOT	1/15/2024
Right of Way (ROW) certified	1/2/2024
Rail Road Permits	NA
Environmental Mitigation	NA
Project Obligated	3/4/2024
Project Letting	4/1/2024
Construction Start	5/1/2024
Project Completion	7/1/2024

Enter NA for any activity that doesn't apply to the project.

CMAQ Emissions Calculator Toolkit

Bicycle and Pedestrian Improvements

This calculator will estimate the reduction in emissions resulting from improvements to bicycle and pedestrian infrastructure and associated mode shift from passenger vehicles to bicycling or walking, including but not limited to sidewalks, dedicated bicycle infrastructure, improved wayfinding, mid-block crossing installations, bike share systems, and bike parking improvements.

Navigator

Bicycle and Pedestrian Improvements

INPUT

(1) What is your project evaluation year? 2021

(2) Estimate the shift in daily motorized passenger vehicle trips to non-motorized travel due to the bicycle and pedestrian project.

Daily Passenger Vehicle Trips		
Before	After	Change
158	80	78

(3a) Select the data type used for entering the typical one-way trip distance of passenger vehicles below:

Trip Distance Source
Distribution

(3b) If you selected "Average" above, enter the typical one-way trip distance. If you selected "Distribution" above, enter the typical distribution of one-way trip distances.

Typical Trip Distance (miles one way)
0.64

Distribution of Trip Distances (daily fraction per mileage bin)					
x < 1	1 ≤ x < 2	2 ≤ x < 3	3 ≤ x < 4	4 ≤ x ≤ 5	Sum
19.90%	20.40%	21.30%	17.20%	21.20%	100.0%

OUTPUT

EMISSION REDUCTIONS

Pollutant	Total
Carbon Monoxide (CO)	0.602
Particulate Matter <2.5 µm ($PM_{2.5}$)	0.001
Particulate Matter <10 µm (PM_{10})	0.003
Nitrogen Oxide (NOx)	0.052
Volatile Organic Compounds (VOC)	0.056
Carbon Dioxide Equivalent (CO_2e)	24.702
Total Energy Consumption (MMBTU/day)	0.313

*Units in kg/day unless otherwise noted

Village of Three Oaks

Proposed Non-Motorized Trail Connector

ABONMARCHE

95 West Main Street
P.O. Box 1088
Benton Harbor, MI 49023
T: (269) 927-2295
F: (269) 927-1017
www.abonmarche.com

Engineer's Opinion of Construction Costs

Project: **US-12 Sidewalk Extension**
Project No: **P21-0121**
Description: **Sidewalk Extension to Dunn St on South Side of US-12**
Stage: **30% Preliminary**
Date: **8/12/2021**
Prepared By: **Brandon Vasher, EIT**

Miscellaneous

Line	Item	Quantity	Unit	Unit Cost	Item Cost
1	Mobilization, Max $20,000	1.00	LSUM	$ 20,000.00	$ 20,000.00
2	Temporary Traffic Control	1.00	LSUM	$ 5,000.00	$ 5,000.00
Subtotal: Miscellaneous					**$ 25,000.00**

Proposed Improvements - Sidewalk Extension

Line	Item	Quantity	Unit	Unit Cost	Item Cost
3	Sidewalk, Rem	25.00	Syd	$ 10.00	$ 250.00
4	Pavt, Rem	165.00	Syd	$ 10.00	$ 1,650.00
5	Machine Grading	18.05	Sta	$ 1,000.00	$ 18,050.00
6	Embankment, CIP	1500.00	Cyd	$ 15.00	$ 22,500.00
7	Sidewalk, Conc, 4 inch	8900.00	Sft	$ 4.00	$ 35,600.00
8	Sidewalk, Conc, 6 inch	1400.00	Sft	$ 5.00	$ 7,000.00
9	Sidewalk Ramp, Conc, 6 inch	200.00	Sft	$ 6.00	$ 1,200.00
10	Detectable Warning Surface	10.00	Ft	$ 40.00	$ 400.00
11	Driveway,Nonreinf Conc, 6 inch	140.00	Syd	$ 40.00	$ 5,600.00
12	Driveway, Gravel	30.00	Syd	$ 10.00	$ 300.00
13	Curb and Gutter, Rem	160.00	Ft	$ 9.00	$ 1,440.00
14	Curb and Gutter, Conc, Det C4	160.00	Ft	$ 25.00	$ 4,000.00
15	Dr Structure, 48 inch dia	7.00	Ea	$ 2,500.00	$ 17,500.00
16	Dr Structure Cover, Type B	7.00	Ea	$ 550.00	$ 3,850.00
17	Culv, Cl A, 24 inch	1165.00	Ft	$ 55.00	$ 64,075.00
Subtotal: Proposed Improvements - Sidewalk Extension					**$ 183,415.00**

Summary

Construction Subtotal:		**$ 208,415.00**
Contingency:	**20%**	**$ 41,685.00**
Project Total: US-12 Sidewalk Extension		**$ 250,100.00**

2024-2026 Congestion Mitigation and Air Quality Project Application

Click "Enable Editing" to begin filling out this form. You may save this form at any time.
If you need assistance, please contact Brandon Kovnat, SWMPC Associate Planner.
Email kovnatb@swmpc.org or call (269) 925-1137 x 1524

Section 1. Applicant Information

Applicant Name	Village of Berrien Springs		
Contact Name	Jesse Hibler	Title	Village President
Phone Number	269-930-2619	Email	president@villageofberriensprings.com
Sponsor (If applicable)	Village of Berrien Springs		
Engineer/Consultant (If applicable)	VIRIDIS Design Group		
Phone Number	269-978-5143	Email	john@virdg.com

Section 2. Project Information & Costs

Project Name: Lake Chapin Interurban Non-Motorized Bridge			
City/Village/ Township: Village of Berrien Springs/Berrien Township		County: Berrien	
Project Location *(short description of where the project is located)*	Project is located in the Village of Berrien Springs and Berrien Township, Berrien County and includes a non-motorized bridge over Lake Chapin, which is a dammed up lake on the St Joesph River, and follows the interurban rail line between Grove Park in the Village (at Main St) and Range Line Park in Berrien Township.		
Which Emissions form is being used? (list the form name not the MDOT form number)	FHWA Bicycle and Pedestrian Improvements Tool		
Work Description (Short description of work being performed. Please provide enough information for eligibility to be determined)	Work includes the construction of an approx. quarter-mile long non-motorized transportation/pedestrian bridge over Lake Chapin on existing concrete piers and includes pre-manufactured bridge sections, abutments, paved connections and either ends, open seating areas between bridge sections and site furnishings.		
Describe how the project will reduce congestion and/or emissions	Will provide an alternative non-motorized mode of transportation and thus reducing vehicle trips.		
Project Cost *Only include CMAQ eligible expenses*	$ 4,800,000	Proposed Year of Funding	2025
Minimum Local Match – 20% of eligible costs	$960,000		

Can you supply additional match beyond the minimum required 20% If so how much?		☒ Yes ☐ No Amount $40,000		
Emissions Benefit (from Emissions form)	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Nitrogen Oxide (NO_x)	Particulate Matter (PM 2.5)
	0.739	**11.303**	**0.778**	**0.032**

Section 3. Performance measures

Besides emissions reductions what other performance measures will the project contribute to? *(select all that apply)*	If you checked any of the Performance Measures please indicate how the project will improve them:
☒ Safety ☐ Pavement Condition ☐ System Reliability ☒ Pedestrian/Bicycle Connectivity ☐ Transit State of Good Repair	Will provide a safe non-motorized transportation route by removing conflicts with vehicles for bicyclists and pedestrians. Will provide non-motorized transportation alternative for bicycles, pedestrians, and other non-motorized uses between Village of Berrien Springs and Berrien Township including the connection of existing green space/parks. The project is also a piece of the Michigan Indiana River Valley trail that currently runs from Niles Michigan to Mishawaka Indiana.

Section 4. Additional Questions

Question	Y/N	If Yes, Provide Brief Explanation of How the project will meet these Criteria
Will the project be ready for obligation by July 1 of the year in which it's programmed?	☒Yes ☐No	Engineering will begin in 2024 and will follow the MDOT Local AgencyProject Planning Guide for a planned spring 2025 letting
Will this project use multiple funding sources/be combined with another Non-CMAQ project?	☒Yes ☐No	The Village will be seeking other grant opportunities such as the MDNR Trust Fund grant, local municipal grants, and private fundraising.
Is the project being carried out by a sponsored agency, or is a private entity providing funding, materials, or services in support of this project?	☒Yes ☐No	The Village of Berrien Springs is the sponsoring agency for the project.
Does the project require Right of Way (ROW) acquisition or an easement?	☐Yes ☒No	**If yes, attach a signed letter from that agency granting permission to implement all or part of this project in their right-of-way.**

Section 5. Estimated Project Schedule

Activity	Estimated Date
Resolution of Support for Local Match Submitted to SWMPC	10/6/2021

Project Application Submitted to MOT	6/2024
Grade Inspection Package Submitted to MDOT	10/2024
Grade Inspection Meeting Scheduled	11/2024
Final Plan and Estimate to MDOT	12/2024
Right of Way (ROW) certified	12/2024
Rail Road Permits	n/a
Environmental Mitigation	n/a
Project Obligated	01/2025
Project Letting	03/2025
Construction Start	05/2025
Project Completion	11/2025

Enter NA for any activity that doesn't apply to the project.

Lake Chapin Interurban Non-Motorized Bridge

Village of Berrien Springs

CMAQ Application Narrative

Project Description

This project includes the construction of an approximate quarter-mile long non-motorized bridge over Lake Chapin. The corridor is the exact location of the old Interurban railway that once existed, and the concrete piers that remain are planned to be reused. The intent is to build the bridge on the existing concrete piers in the lake that have been studied for structural integrity and have been determined to be adequate. The project will require the construction of one pier within the lake. The project will also include seating areas within the bridge structure, concrete abutments at both ends where the bridge meets land, paved trail connection at the north end of the bridge to the existing Grove Park (aka Wolf's Prairie Playground), and a paved trail connection at the south end of the bridge to the trail head on Range Line Rd. This project is expected to provide an alternative transportation route between Berrien Township and the Village of Berrien Springs in order to reduce vehicle trips and emissions, and increase bicycle and pedestrian users. It is anticipated this project could reduce the number of vehicle trips by approx. 1,428, (approx 10% of current vehicle trips) and anticipated users may include bicyclists, pedestrians, walkers, and other non-motorized users. Refer to the attached emissions form. This non-motorized connection is noted as a priority project in both the Berrien County Parks Master Plan and the Southwest Michigan Non-Motorized Transportation Plan (see attached).

Surrounding Land Uses

This project primarily consists of a non-motorized bridge and therefore the main surrounding land use is the water body of Lake Chapin, which is a lake created by a dam on the St Joseph River. To the north, the adjacent land use is Grove Park (aka Wolf's Prairie Playground) which is within the Village of Berrien Springs. The bridge will connect to sidewalks within the park and would enter the site near Main Street, which has residential properties on the east side of the road. On the south side of the bridge the surrounding land use includes the old Interurban Rail line corridor which is owned by Indiana Power which is flanked on both sides by residential properties. The old rail line connects to Range Line Road which connects to Range Line Park just to the east within Berrien Township.

Connections to other Trails

This project would be a part of the regional Indiana-Michigan River Valley Trail (IMRV) system. Currently, IMRV system has been constructed from Mishawaka, Indiana, north to the City of Niles, Michigan and spans approximately 34 miles. The IMRV connects 4 universities, 4 downtowns, 16 parks, 5 medical facilities, several historic and cultural attractions and many businesses. There is an additional section currently being planned that will extend the IMRV and connect the City of Niles north to Berrien Township which would span another 7 miles. This application would then extend IMRV trail system further north from Berrien Township to the Village of Berrien Springs and connect to the downtown. This project would connect the local parks of Grove Park (aka Wolf's Prairie Playground) on the Berrien Springs side and Range Line Park on the Berrien Township side. This would provide a connection to the sidewalk network, pathways within Grove Park, and existing bike lanes in the Village of Berrien Springs. Currently, the Village is also developing a kayak launch on Lake Chapin within Grove Park that will also have sidewalk connections to this project. Please refer to the attached maps showing both the completed section up to Niles and the proposed section up to Berrien Township.

Benefits of the Project

This project can provide many benefits to the community both on a local and regional level which may include economic, social, health, and overall quality of life. This project is part of an overall non-motorized trail system which provides an alternative mode of transportation. Reducing vehicle trips can help lower the amount of congestion on local roads and contribute to the reduction of air pollution. Non-motorized trails may also contribute to the local economy of communities by bringing visitors into the community who in turn may spend money on goods and services and therefore helping local businesses thrive. Non-motorized facilities are desirable amenities in a community and may positively impact property values and attract new residents to the area. Further, a non-motorized network may offer health and safety benefits by providing community members a safe route to engage in physical activity and/or safely travel within the community to get to schools and parks.

View looking north towards the Village of Berrien Springs and Grove Park.

View looking south towards Berrien Township.

VILLAGE OF BERRIEN SPRINGS
COUNTY OF BERRIEN, MICHIGAN

RESOLUTION TO ESTABLISH hereinafter referred to as the Local Public Agency (LPA) in the matter of the stated described project

At a meeting of the Village Council of the Village of Berrien Springs, Berrien County, Michigan, held in said Village Hall, located at 112 North Cass Street in the Village of Berrien Springs on Monday, the 4th day of October, 2021 there were:

PRESENT: President Jesse Hibler, President Pro-Tem Barry Gravitt, Trustees: Jack Davis, Lonna Johnson, Sheila Snyder, and Sandy Swartz.
ABSENT: Trustee Kristin von Maur.

The following resolution was offered by Council Member Jack Davis and seconded by Council Member Sheila Snyder

WHEREAS, the United States Congress has set aside monies for Congestion Mitigation and Air Quality Improvement (CMAQ) projects through the Sate of Michigan, Department of Transportation (MDOT) and administered by the Southwest Michigan Planning Commission (SWMPC); and

WHEREAS, the non-motorized bridge across the interurban abutments at Lake Chapin is a transportation activity eligible to receive federal CMAQ funding; and

WHEREAS, if requested funds are granted, the Village of Berrien Springs shall be responsible for at least 20% percent of the eligible costs.

NOW, THEREFORE:
BE IT RESOLVED by the Village of Berrien Springs that:

SECTION ONE: Viridis Design Group of said LPA is hereby empowered on behalf of the LPA to prepare and execute an application of CMAQ funds for the stated described project and to submit to the SWMPC for consideration of funding.

SECTION TWO: The total cost of the project is estimated to be $4.8 million, of which the LPA, if awarded the funds, commits to pay at least 20% (hereinafter known as the local match) of the actual cost, estimated to be $960,000. The local match shall be funded by the LPA using Village funds. The LPA further agrees to pay 100% of the cost over and above the awarded amount of CMAQ funding and for all non-participation costs associated with project development activities.

SECTION THREE: Upon completion of the descripted Project, and unless otherwise agreed, the LPA shall: (1) provide adequate maintenance for the described Project in accordance with all applicable state and federal laws, including, but not limited to, 23 USC 116; (2) provide ample financial provisions, as necessary, for the maintenance of

the described Project; (3) if necessary, maintain the right-a-way, keeping it free of obstructions; and (4) if necessary, hold said right-a-way inviolate for public highway purposes.

This resolution shall be certified by the Village Clerk.

AYES:, President Pro-Tem Barry Gravitt, Trustees: Jack Davis, Lonna Johnson, Sheila Snyder, Sandy Swartz and President Jesse Hibler.

NAYES: None.

ABSENT: Trustee Kristin von Maur

Resolution declared adopted.

Sheri A. Kesterke, Village Clerk

Jesse Hibler, Village President

CERTIFICATION

I hereby certify that the foregoing is a true and complete copy of a resolution adopted by the Village Council of the Village of Berrien Springs, Berrien County, Michigan, at a meeting held on Monday, October 4th, 2021, and that said meeting was held in compliance with Act 267 of the Public Acts of 1976.

Date: October 04, 2021

Sheri A. Kesterke, Village Clerk

CMAQ Emissions Calculator Toolkit

Bicycle and Pedestrian Improvements

This calculator will estimate the reduction in emissions resulting from improvements to bicycle and pedestrian infrastructure and associated mode shift from passenger vehicles to bicycling or walking, including but not limited to sidewalks, dedicated bicycle infrastructure, improved wayfinding, mid-block crossing installations, bike share systems, and bike parking improvements.

Navigator

Bicycle and Pedestrian Improvements

INPUT

(1) What is your project evaluation year? 2025

(2) Estimate the shift in daily motorized passenger vehicle trips to non-motorized travel due to the bicycle and pedestrian project.

Daily Passenger Vehicle Trips		
Before	After	Change
14280	12852	1428

(3a) Select the data type used for entering the typical one-way trip distance of passenger vehicles below:

Trip Distance Source
Average

(3b) If you selected "Average" above, enter the typical one-way trip distance. If you selected "Distribution" above, enter the typical distribution of one-way trip distances.

Typical Trip Distance (miles one way)
2

Distribution of Trip Distances (daily fraction per mileage bin)					
x < 1	1 ≤ x < 2	2 ≤ x < 3	3 ≤ x < 4	4 ≤ x ≤ 5	Sum

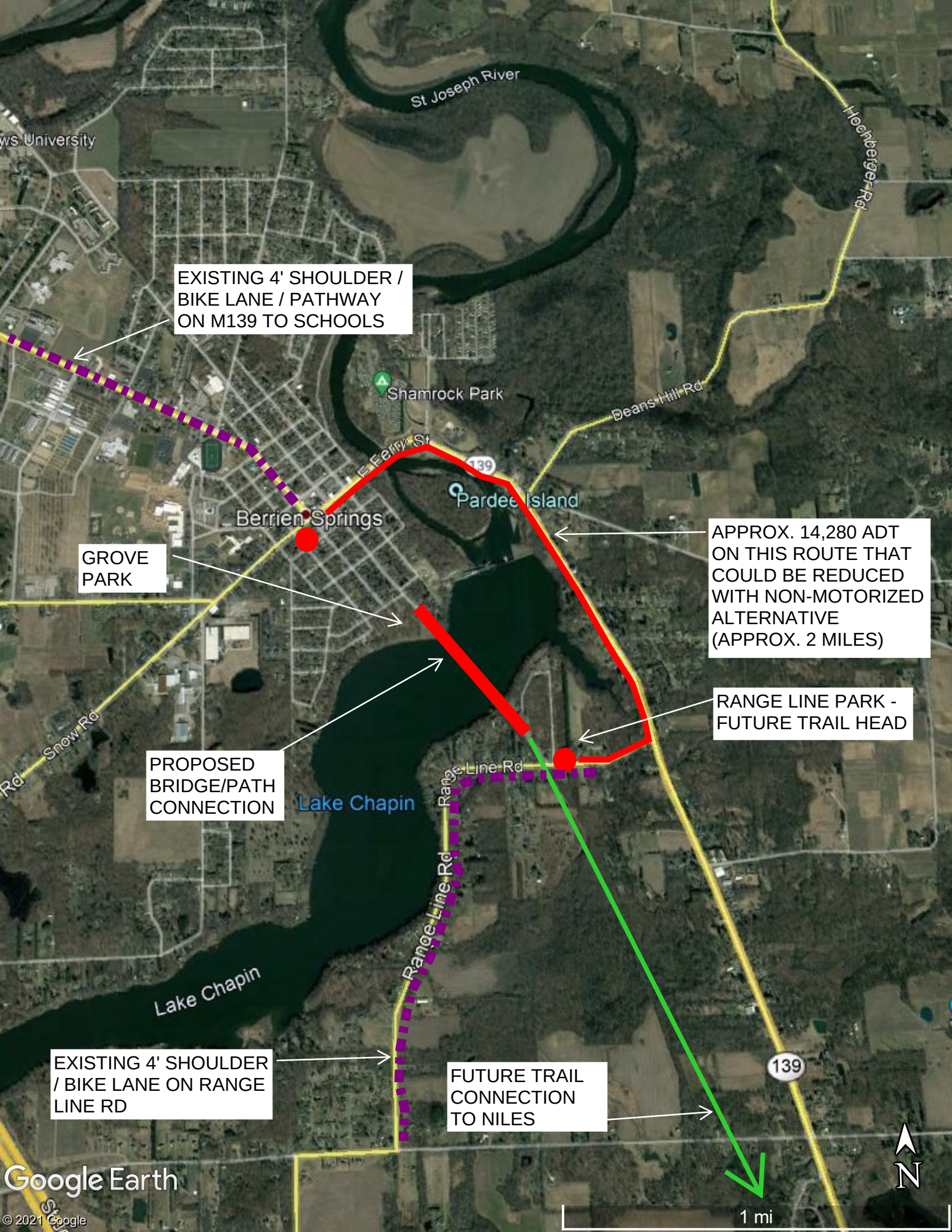
OUTPUT

EMISSION REDUCTIONS

Pollutant	Total
Carbon Monoxide (CO)	11.303
Particulate Matter <2.5 µm ($PM_{2.5}$)	0.032
Particulate Matter <10 µm (PM_{10})	0.111
Nitrogen Oxide (NOx)	0.778
Volatile Organic Compounds (VOC)	0.739
Carbon Dioxide Equivalent (CO_2e)	958.192
Total Energy Consumption (MMBTU/day)	12.438

*Units in kg/day unless otherwise noted


EXISTING DAM
E Murdock St
S Mechanic St
S Main St
Oak St
S Cass St
Park Ave
Berrien Dam Fish Ladder
Hoppe
CONNECTION TO VILLAGE OF BERRIEN SPRINGS, EXISTING PARK, SIDEWALKS, BIKE LANES, AND FUTURE KAYAK LAUNCH
GROVE PARK (WOLF'S PRAIRIE PLAYGROUND
Wolfs Prairie Park
FUTURE KAYAK LAUNCH
PROPOSED 0.25 MI NON-MOTORIZED BRIDGE
CONNECTION TO BERRIEN TOWNSHIP AND FUTURE TRAIL HEAD
FUTURE TRAIL CONNECTION TO NILES VIA INDIANA MICHIGAN RIVER VALLEY TRAIL
Casey Ln
Advent Hub
Maple Valley Dr
RANGE LINE PARK
LAKE CHAPIN
Range Line Rd
Range Line Rd
Castner Dr
EX. 4' SHOULDER / BIKE LANE
Google Earth
© 2021 Google
N
1000 ft


EXISTING 4' SHOULDER / BIKE LANE / PATHWAY ON M139 TO SCHOOLS
GROVE PARK
PROPOSED BRIDGE/PATH CONNECTION
APPROX. 14,280 ADT ON THIS ROUTE THAT COULD BE REDUCED WITH NON-MOTORIZED ALTERNATIVE (APPROX. 2 MILES)
RANGE LINE PARK - FUTURE TRAIL HEAD
EXISTING 4' SHOULDER / BIKE LANE ON RANGE LINE RD
FUTURE TRAIL CONNECTION TO NILES
St Joseph River
Shamrock Park
Deans Hill Rd
E Ferry St
139
Pardee Island
Berrien Springs
Snow Rd
Range Line Rd
Lake Chapin
Hoeneberger Rd
Google Earth
© 2021 Google
1 mi
N


Vision: Master Trails Plan for Berrien County
Legend:
County Linear Park
Major Connectors
Major Trails
County Parks
College/University
Blue Star Hwy Connector
Van Buren
Paw Paw River
Coloma Rd
Rocky Gap
Silver Beach
Benton
Bainbridge
Lincoln
Sodus
Pipestone
Royalton
Stevensville
Eau Claire Village
Baroda Village
Courthouse Square
Love Creek
Shawnee Rd
Lake
Baroda
Oronoko
Red Arrow Hwy
Buchanan
Niles Twp
Cass
Chikaming
Weesaw
Buchanan City
alien River
Three Oaks Village
Galien Village
US 12
New Buffalo
Three Oaks
Galien
Bertrand
Madeline Bertrand
rquette eenway nnector
LaPorte
I N D I A N A
St. Joseph
Existing IN-MI River Valley Trail
Michigan
Indiana
Approx. project area

2033_RegionalPlan_Sep2020

Existing and Planned Non-Motorized Map

June 24, 2011

TRANSPORTATION NETWORK

Primary Roads with Traffic Volume* (Vehicles per day)

	Unpaved	Paved	Paved 4ft Shoulder/ Bike Lane
Light - Under 2,500			
Medium - 2,500 to 10,000			
Heavy - Above 10,000			

Minor Roads‡ — no volume information

Limited Access Highways — Interchanges

Active Rail Line

Non-motorized Trails

Improved Multiuse (Paved or Crushed Fines)

Unimproved Multiuse (Gravel or Dirt)

North Country Trail

* Traffic volumes are estimated based on an average 24-hour period. Rush hour (peak period) traffic volume can be much greater than at other times of the day. Traffic volumes also vary by season and day of week.

‡ Minor roads generally have lower traffic volume but road width and surface type may make them less appropriate as a bike route. Consult local county road commissions for more information. www.micountyroads.org

COUNTY

Southwest Michigan Planning Commission
185 East Main Street Suite 701
Benton Harbor, MI 49022
Website: http://www.swmpc.org/

Kilometers 0 2 4 6 8 10

Miles 0 2 4 6 8 10

Planning Features

Local Planning Priority Status

Status
- High
- Medium
- Low

Non-Motorized Plan Type
- Off Road
- On Road
- Undetermined

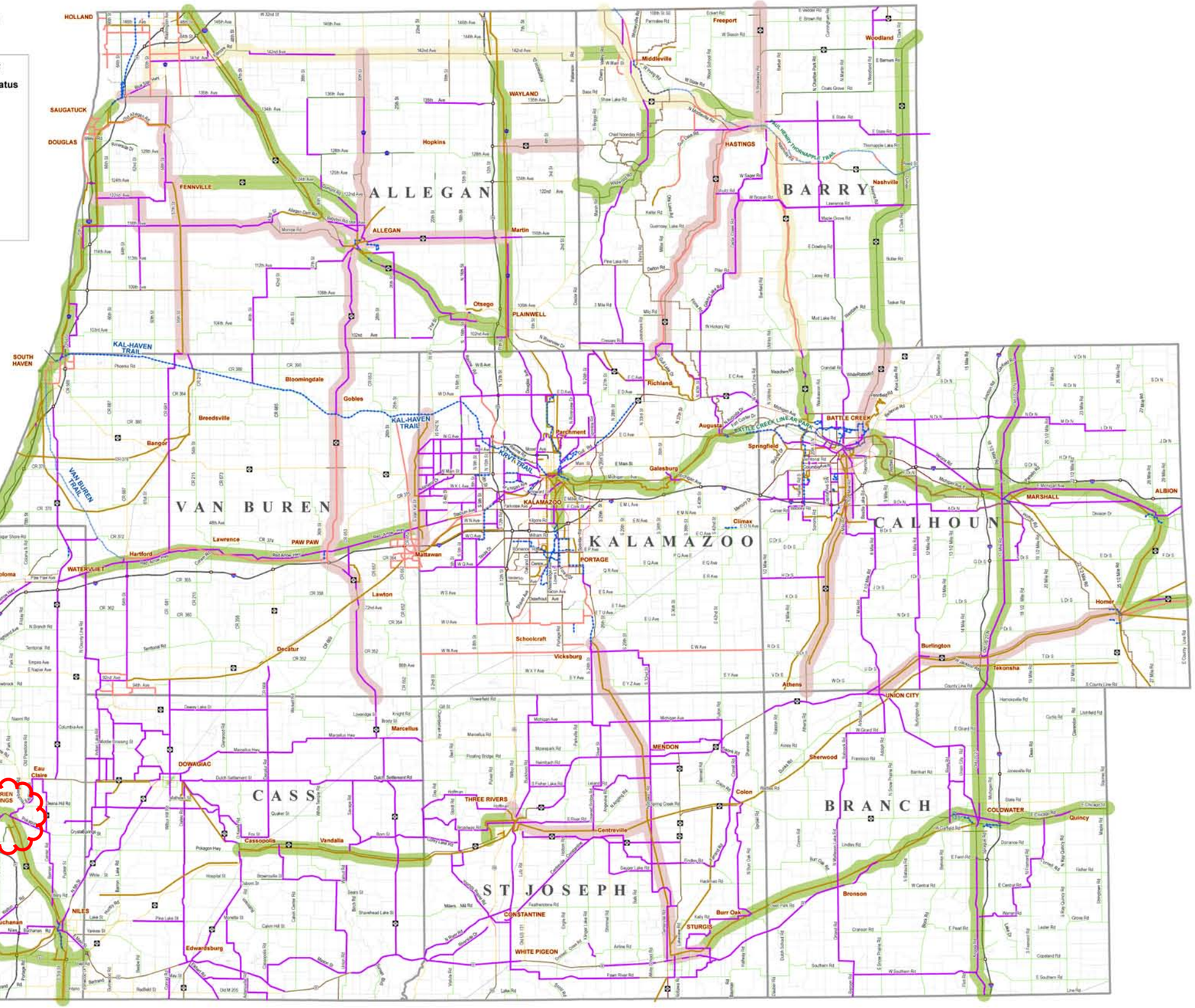


Figure 7. Local Priority Routes