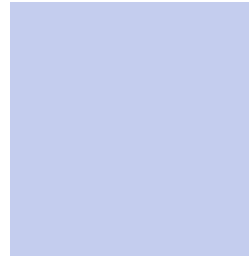
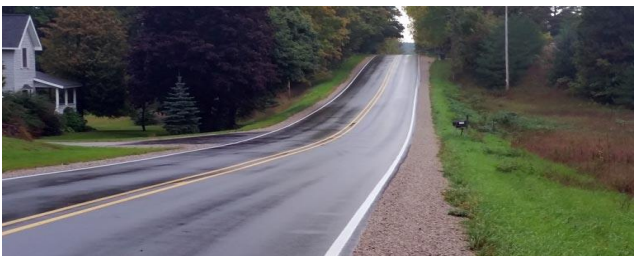
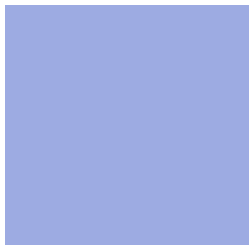
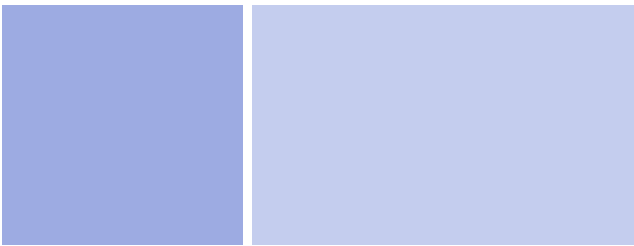


TRANSPORTATION IMPROVEMENT PROGRAM

2020-2023

Niles Buchanan Cass Urbanized Area



NOTICE

The Southwest Michigan Planning Commission (SWMPC) prepared this document in cooperation with the Michigan Department of Transportation, municipalities, transportation agencies, organizations, and departments throughout Berrien, Cass, and Van Buren Counties in Michigan. Document preparation was financed in part by the United States Department of Transportation, the Michigan Department of Transportation, the SWMPC and its members. The information, opinions, findings and conclusions in this publication are the SWMPC's and not necessarily those of the Federal Highway Administration, the Federal Transit Authority, or Michigan Department of Transportation. The Southwest Michigan Planning Commission reaffirms its nondiscrimination policy, its Title VI Civil Rights Plan and Limited English Proficiency Plan (LEP) that were updated and re-adopted in 2014.

The SWMPC will not discriminate against any employee or applicant for employment, or firm or service provider because of race, color, national origin, religion, sex, gender, handicap or age, and will take affirmative action to ensure that applicants are evaluated without regard to their race, color, national origin, religion, sex, gender orientation, gender identity, handicap or age. This requirement shall apply to and not be limited to the following: employment, upgrade or demotion; recruitment; temporary and permanent layoff or termination; rates of pay or other forms of compensation; selection for any training or apprenticeship and participation in recreational and educational activities. The Southwest Michigan Planning Commission complies with all applicable statutes on equal employment opportunity and is governed by the provisions of such statutes including enforcement provisions.

The Commission complies with the regulations pursuant to the provisions of Title VI of the Civil Rights Act of 1964. An employee or volunteer of the Southwest Michigan Planning Commission whose job or participation requires direct involvement in its projects must be willing to follow those operational procedures established as policy by the SWMPC and the directives of its administrators. Further, the Southwest Michigan Planning Commission shall provide as part of its formulation of housing policy plans and any other plans, that it will address the elimination of the effects of discrimination in housing and planning based on race, color, national origin, religion, sexual orientation, gender, disability, or age. The Southwest Michigan Planning Commission will address the real relationship between housing problems and the location of racial minorities. They shall also provide safeguards for the future pursuant to Title VIII of the Civil Rights Act of 1968.

Further, it is the policy that the Southwest Michigan Planning Commission will not, on the basis of disability, directly or indirectly through contractual licensing or other arrangements: a) Deny a qualified disabled person the opportunity to participate or benefit from any aid, benefit, or service that is not equal to that afforded persons who are not disabled; b) Deny or limit a qualified disabled person the opportunity to participate in conferences or planning or in the enjoyment of any right, privilege, advantage, or opportunity enjoyed by others receiving an aid, benefit, or service; c) Does not require that disabled and non-disabled persons produce the identical result or level of achievement, but does afford equal opportunity to obtain the same result, benefit and/or level of achievement; d) Deny a qualified disabled person the opportunity to participate in programs that are not separate or different.

CONTENTS

Introduction	5
Federal Transportation Planning Process.....	6
NATS Metropolitan Area Boundaries	7
MPO Organization	8
Partner Relationships	9
MPO Self Certification	9
Transportation Improvement Program	11
TIP Adoption	12
Relationship to the Statewide Transportation Improvement Program	12
Revising the TIP.....	13
Transportation Project Development Process	15
Project Selection Process.....	17
Transportation Performance Management.....	18
Performance Measure Targets	19
Safety	20
Pavement and Bridge Condition.....	22
System Reliability- Performance Measures Target-Setting.....	24
Transit Asset Management.....	26
Financial Plan	27
Available Highway and Transit Funding	27
Fiscal Constraint and Project Selection	29
Estimate of Operations and Maintenance Costs for the Federal-Aid Highway System.....	30
Demonstration of Financial Constraint	31
2020-2023 Transportation Projects.....	32
Map of Projects on Locally Maintained Roads	343
Tables of STBG funded Projects on Locally Maintained Roads	34
Tables of Other Federal Funded Projects on Locally Maintained Roads	36
Table of Transit Projects	37
Map of MDOT Projects	41
Tables of MDOT Projects	42

Summary Tables of All Funding Sources by Year (Fiscal Constraint Tables)	46
Environmental Justice	50
Methodology	51
Analysis and Results.....	53
Air Quality Conformity	56
Overview	56
Analytical Process	58
Findings.....	58
Public Participation	59
Engaging the Public.....	59
APPENDIX A GLOSSARY OF TERMS.....	61
APPENDIX B NATS Policy & Technical Advisory Committee	65
Appendix C MPO Self Certification.....	67
APPENDIX D NATS Amendment Policy.....	68
APPENDIX E Project Prioritization Process.....	73
APPENDIX F Project Sheets	78
APPENDIX G List of Available Federal-Aid Highway & Transit resources.....	88
APPENDIX H Financial - Operations/Maintenance Assumptions.....	90
Appendix I MITC-IAWG Minutes	97
Appendix J Public Participation	99
Appendix K Consultation	100
Appendix L Approvals.....	102

INTRODUCTION

Recognizing that many transportation actions and their impacts are by nature regional in scope, the transportation planning process is aimed at creating a forum in which local, State and Federal agencies responsible for developing transportation improvements can act in a coordinated manner. This approach facilitates comprehensive and orderly development of transportation facilities and services.

Every urbanized area with a population of more than 50,000 must have a designated Metropolitan Planning Organization (MPO) for transportation to qualify for federal highway or transit assistance. The United States Department of Transportation (USDOT) relies on the MPOs to ensure that highway and transit projects that use federal funds are products of a credible planning process and meet local priorities. USDOT will not approve federal funding for urban highway and transit projects unless they are on the MPO's program. Thus, the MPO's role is to develop and maintain the necessary transportation plan for the area to assure that federal funds support these locally developed plans. The MPOs have also been given the responsibility to involve the public in this process through expanded citizen participation efforts. The Southwest Michigan Planning Commission (SWMPC) was designated by the Governor in 1981 to serve as the MPO for the Michigan portions of the South Bend urbanized area and Elkhart Urbanized Area.

The Transportation Improvement Program (TIP) is an integral part of the transportation planning process. According to joint regulations of the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA), the TIP is "a prioritized listing/program of transportation projects covering a period of four years that is developed and formally adopted by a Metropolitan Planning Organization (MPO) as part of the metropolitan transportation planning process, consistent with the metropolitan transportation plan, and required for projects to be eligible for funding under Title 23 U.S.C. and Title 49 U.S.C. Chapter 53".

The major purpose of the TIP is to identify and prioritize Federal-Aid projects and programs in local urbanized areas. An equally important objective of the TIP is to ensure that scheduled transportation improvements are consistent with current and projected financial resources. A TIP developed in consideration of the purposes mentioned above, provides for the efficient use of available financial resources in addressing the area's transportation needs in an orderly and efficient manner.

FEDERAL TRANSPORTATION PLANNING PROCESS

Title 23 of the United States Code of Federal Regulations (CFR), Section 450, Subpart C, states that MPOs are to carry out a:

“...continuing, cooperative, and comprehensive multimodal transportation planning process, including the development of a metropolitan transportation plan and a transportation improvement program (TIP), that encourages and promotes the safe and efficient development, management, and operation of surface transportation systems to serve the mobility needs of people and freight (including accessible pedestrian walkways and bicycle transportation facilities) and foster economic growth and development, while minimizing transportation-related fuel consumption and air pollution.”

Section 450.306 identifies ten planning factors to identify the “scope of the metropolitan transportation planning process.” These include:

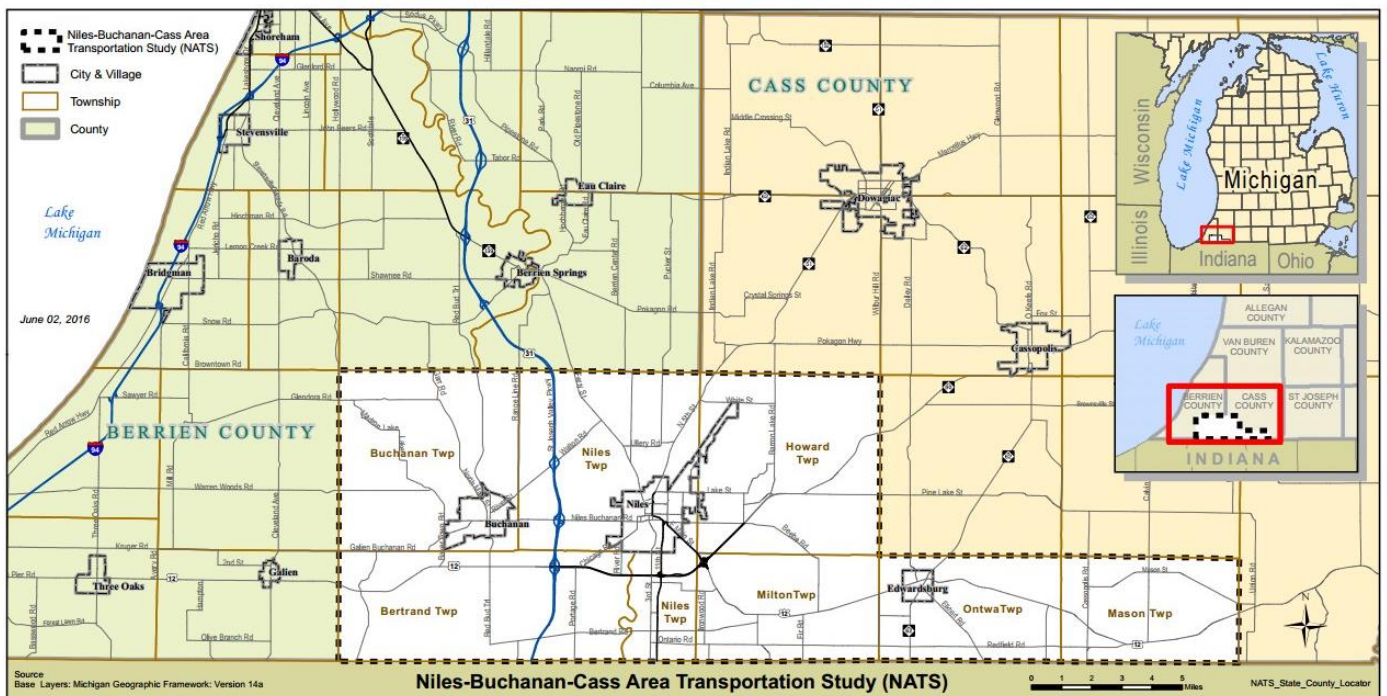
1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
2. Increase the safety of the transportation system for motorized and nonmotorized users;
3. Increase the security of the transportation system for motorized and nonmotorized users;
4. Increase accessibility and mobility of people and freight;
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic patterns;
6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
7. Promote efficient system management and operation;
8. Emphasize the preservation of the existing transportation system;
9. Improve the resiliency and reliability of the transportation system and reduce or mitigate storm water impacts of surface transportation; and
10. Enhance travel and tourism.



NATS METROPOLITAN AREA BOUNDARIES

The geographic boundaries of the Niles Area Transportation Study (NATS) planning area encompass 213 square miles. The urbanized area is defined by the 2010 Bureau of the Census, which includes the Michigan portions of the South Bend Urbanized Area and the Elkhart Urbanized Area, plus the contiguous area expected to become urbanized within a 20-year forecast period for the metropolitan plan (**See map below**).

The NATS planning area includes the cities of Buchanan and Niles, the townships of Bertrand Township, Buchanan Township, Howard Township, Mason Township, Milton Township, Niles Charter Township, Ontwa Township, and the Village of Edwardsburg.



MPO ORGANIZATION

The Southwest Michigan Planning Commission (SWMPC) is one of fourteen regional planning and development regions in the state of Michigan. In 1973 SWMPC was designated the Metropolitan Planning Organization (MPO) for the Michigan Portions of the South Bend Urbanized Area and the Elkhart Urbanized Area. The SWMPC relies on the members of the Niles Buchanan Cass Area Transportation Study (NATS) to provide local, state, and federal input toward the development of essential MPO work products.

The staff at SWMPC provides transportation planning services for NATS and is guided by the advice of members from the NATS Policy Committee and Technical Advisory Committee. Members, such as cities, townships, villages, counties, public transit agencies, and road commissions appoint representatives to serve on the following NATS committees:

1. The Technical Advisory Committee is comprised of planners, engineers, transit operators, and local units of government. This committee provides technical assistance to SWMPC staff and makes recommendations to the Policy Committee on potential actions.
2. The Policy Committee is comprised of representatives from similar agencies as the Technical Advisory Committee and is responsible for establishing transportation policies, overseeing the planning process, and providing a forum for cooperative decision-making.

A complete list of NATS Technical and Policy Committee members can be found in Appendix B

Voting Membership

Cities & Villages	Townships	Counties	State & Local Agencies
City of Buchanan	Bertrand Township	Berrien County	Michigan Department of Transportation
City Niles	Buchanan Township	Cass County	Niles Dial a Ride
Village of Edwardsburg	Howard Township		Buchanan Dial a Ride
	Mason Township		Niles Area Economic Development
	Milton Township		Kinexus
	Niles Township		
	Ontwa Township		

In addition to the identified government, agencies listed above the following agencies serve as advisory non-voting representatives to NATS:

Federal Highway Administration
Federal Transit Administration

Michiana Area Council of Governments
Disability Network

PARTNER RELATIONSHIPS

In multistate metropolitan areas, the Governors with responsibility for a portion of the multistate metropolitan area, the appropriate MPO(s), and the public transportation operator(s) are strongly encouraged to coordinate transportation planning for the entire multistate metropolitan area.

SWMPC has several Memorandums of Understanding with its MPO counterpart in Indiana, the Michiana Area Council of Governments (MACOG). The Bi-State agreement is in place to address any unresolved policy issues concerning the Indiana or Michigan MPOs (MACOG and SWMPC). This agreement was updated in 2017, which essentially agreed to leave the Bi-State process in place. This committee meets only when issues before it require action to be taken.

The executive director of MACOG serves as the executive director of the Bi-State Coordinating Committee, as established by the agreement that originally created the Committee. MACOG is also the office the Bi-State Commission Office of Record. MACOG staff attends the Niles Area Transportation Study (NATS) meetings and participates in their highway and transit plans. Staff members from the two bodies work together to assure that the Niles Dial-A-Ride and Transpo (the South Bend public transit agency) equitably agree to Federal Transit Administration funding allocations.



MPO SELF CERTIFICATION

As the Metropolitan Planning Organization (MPO) for the Niles Buchanan Cass metropolitan area, the SWMPC is required to certify that projects selected through the planning process conform with all applicable federal laws and regulations. The Southwest Michigan Planning Commission, in its capacity as the MPO for the Niles, Buchanan Cass region, certifies via the resolution provided in **Appendix C** that the transportation planning process is conducted in a manner that complies with the requirements of 23 USC 134, 49 USC 5303, 23 CFR Part 450 and 49 CFR Part 613, and Sections 174 and 176(c) and (d) of the Clean Air Act. The certification requirement directs members of the SWMPC to review the planning process that has been under way and ascertain that the requirements are being met. The review serves to maintain focus on essential activities. The SWMPC's commitment to comply with applicable federal transportation planning requirements is evidenced by the following:

- The SWMPC has a continuing, cooperative and comprehensive (3-C) transportation planning process;
- The SWMPC has adopted a public participation process that fulfills the requirements and intent of public participation and outreach as defined in the Metropolitan Planning Regulations;
- The SWMPC adopted a financially constrained long-range transportation plan for the NATS planning area consistent with the metropolitan planning factors in Moving Ahead for Progress in the 21st Century (MAP-21) and reaffirmed in the FAST Act.



TRANSPORTATION IMPROVEMENT PROGRAM

The NATS Fiscal Years 2020-2023 Transportation Improvement Program (2020-2023 TIP) serves as a list of federally funded surface transportation improvements for the NATS planning area. The TIP identifies all federal funds programmed during the four-year period (2020-2023). Additionally, the TIP identifies all projects by Federal funding program and by the year.

Title 23 of the CFR, Section 450.324, indicates the TIP must cover a period of no less than four years, be updated at least every four years, and be approved by the MPO and the Governor (or in the case of the State of Michigan, the TIP will be approved by the Michigan Department of Transportation). Additionally, Section 450.324 states the TIP shall include:

- Capital and non-capital surface transportation projects within the boundaries of the metropolitan planning area proposed for funding;
- All regionally significant projects proposed to be funded with Federal funds other than those administered by FHWA or the FTA, as well as all regionally significant projects to be funded with non-Federal funds;
- A financial plan that demonstrates how the approved TIP can be implemented, indicates resources from public and private sources that are reasonably expected to be made available to carry out the TIP, and recommends any additional financing strategies for needed projects and programs;
- A project, or a phase of a project, only if full funding can reasonably be anticipated to be available for the project within the time period contemplated for completion of the project; and,
- Sufficient descriptive material, estimated total project cost, amount of Federal funds proposed to be obligated during each program year, and identification of the agencies responsible for each project or phase.
- A description of the anticipated effect of the TIP toward achieving the performance targets identified in the metropolitan transportation plan, linking investment priorities to those performance targets. Designed such that once implemented, it makes progress toward achieving the performance targets.

TIP ADOPTION

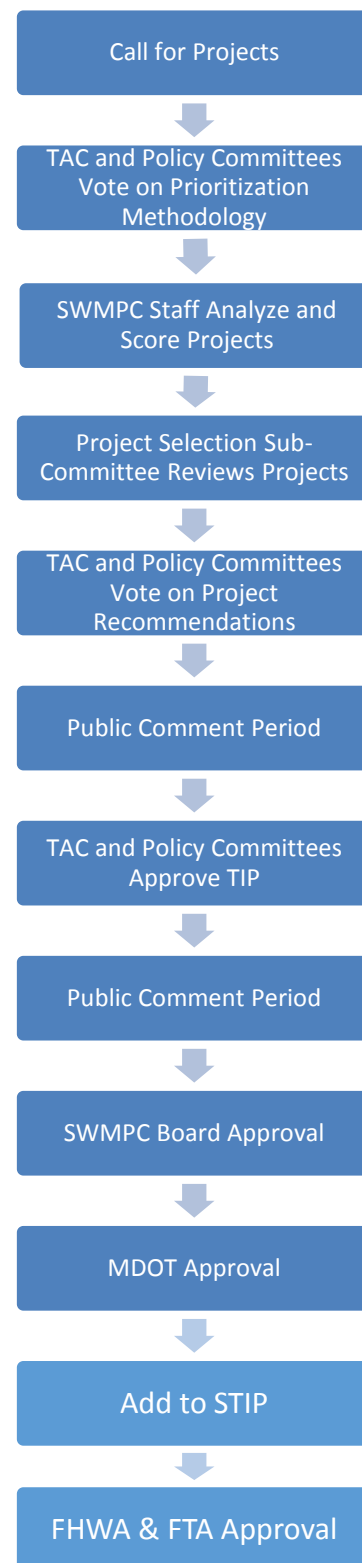
Adoption of the NATS 2020-2023 is subject to review and adoption by the NATS Policy Committee. Once the TIP is reviewed and adopted, the SWMPC Governing Board affirms the decisions of the NATS Committee by having final approval of the TIP.

The review process consists of a public comment period that offers opportunities for review and comment of the draft 2020-2023 TIP. At the conclusion of the public review period, SWMPC staff reviews, and summarizes all submitted comments and presents the findings to the NATS committees for consideration into the final 2020-2023 TIP.

The SWMPC staff submits the final (Locally approved) 2020-2023 TIP, with a copy of the formal resolution, to MDOT that reviews the plan to ensure compliance with federal regulations.

RELATIONSHIP TO THE STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM

After approval by the NATS and MDOT, the TIP shall be included without modification, directly or by reference, in the STIP program. The exception to that rule is in non-attainment and maintenance areas, where a conformity finding by the FHWA and the FTA must be made before it is included in the STIP. After approval by NATS and MDOT, a copy shall be provided to the FHWA and the FTA. The state shall notify the SWMPC when a TIP including projects under the jurisdiction of these agencies, has been included in the State Transportation Improvement Plan.



REVISING THE TIP

Under Federal law, NATS may revise the TIP at any time under the policy and procedures agreed to by FHWA, FTA, MDOT, and NATS. There are two types of revisions to the TIP: major revisions (amendments) and minor revisions (administrative modifications).

Federal Amendment, also referred to as an amendment, is any change to the TIP that requires Federal Highway Administration (FHWA) or Federal Transit Administration (FTA) approval. The amendment process requires public notice to allow for public review and comment in accordance with the SWMPC public participation plan. An amendment requires approvals from the NATS policy committee, MDOT, FHWA, and FTA. An amendment only applies to federally funded projects or projects that require air quality conformity (non-exempt).

Administrative Modification, also referred to as a modification, is any change to the TIP, which does not require federal approval. A modification does not require NATS committee approval or public notice.

Type of Change	Federal Amendment	Administrative Modification
Adding or removing any project that affects air quality conformity or requires a conformity determination regardless of cost or funding source	x	
Adding or deleting a federally funded project or job phase to the TIP	x	
Moving a federally funded project from the illustrative list to the fiscally constrained list or vice versa	x	
Changing a non-federally funded project to a federally funded project	x	
Changing the cost of the total phase budget by more than 25%*	x	
Any change to any project that would affect capacity or air quality conformity	x	
A significant change to work type or project description	x	
Changing the limits by 1/2 mile or more	x	
Addition or removal of project items (sidewalk, bike lane, ADA enhancement, etc.) for 1/2 mile or more	x	
Adding or removing a project with no federal funding and not needing air quality conformity determination		x
Adding or deleting a project from the Illustrative List		x
Changing from one federal funding source to another federal source (except CMAQ) provided work type remains the same.		x
Moving fiscal years within the current TIP		x
Changing the cost of the total phase budget by less than 25%*		x
Adding or removing advance construct funding		x
Any change to a non-federally funded project so long as it doesn't affect capacity or air quality conformity		x
Technical corrections such as typos, misspellings, or other data entry errors		x

*Cost changes are cumulative based on the last federal approval. This means that a project cost may be increased multiple times administratively as long as the combined cost has not increased or decreased by more than 25%

The complete policy can be found in Appendix D

TRANSPORTATION PROJECT DEVELOPMENT PROCESS

The federal metropolitan planning requirements exert a direct influence on the types of projects that are developed and submitted to the MPO for inclusion in TIP. However, project development typically occurs at the state and local levels and may be pursued for a variety of reasons and may have multiple sponsors.

Identifying Needs

Projects can originate from a variety of sources. Most originate through the following agencies: local governments, the state government and public transit providers; each of which are listed below.

Local Government

Transportation projects are often first identified through local planning, which is performed by the Berrien County Road Department and the Cass County Road Commission for townships and by municipal governments in cities and villages. Local capital improvement plans and asset management plans can identify specific projects that a local government has determined will be needed over the period of the plan. The following local agencies have Capital Improvement Plans or Asset Management Plans in place currently:

- Berrien County Road Department

State

The Michigan Department of Transportation has their own methods for identifying projects needed to maintain the integrity of the transportation system, enhance safety, and improve mobility. Priority is usually given to maintenance needs or structural deficiencies. Project recommendations are often based upon the state's regular analysis of pavements, bridges, congestion levels and safety issues. In some cases, MDOT may recommend new capacity- new or widened roads, or expanded transit service- however, new projects have become less frequent as the transportation system matures and funding tightens.

Public Transit

Transit agencies select projects based internal assessment of capital and operational needs. The projects programmed in the TIP by the Niles Dial a Ride Transportation (NDAR) and Buchanan Dial a Ride, use funding from the Federal Transit Administration, MDOT, and the transit authority's own funds. Each of the transit systems are issued targets and their program of projects are based on these figures. DART is the designated recipient of the Michigan allocation of 5307 federal funding which is utilized for the following activities: operations, replacement buses, preventative maintenance, communications and computer hardware, and facility maintenance.

NDAR currently has a Transit Asset Management plan that outlines the following:

- Percent of revenue vehicles that have exceeded useful life.
- Percent of non-revenue vehicles that have exceeded useful life
- Percent of facilities within an asset class rated 3 or below on the FTA TERM scale.

The Berrien County Transit Human Service Coordination Plan provides another mechanism to identify projects in the TIP. The plan outlines strategies to address transportation gaps by utilizing three types of federal funding: the closed SAFETELU *New Freedom program* (5317), the closed SAFETELU *Job Access/Reverse Commute (JARC) program* (5316), as well as the MAP-21 enacted *Enhanced Mobility of Seniors and Individuals with Disabilities Program* (5310).



PROJECT SELECTION PROCESS

NATS Technical and Policy committee members are responsible for selecting projects that utilize Surface Transportation Block Program (STBG) funds, which are allocated to NATS annually by MDOT. For the 2020-2023 TIP, MDOT has estimated that NATS allocation will be approximately \$2.3 million over the four-year period. For the 2020-2023 TIP NATS received requests for \$4.0 million in STBG funding, \$1.7 million over the allocated amount. Projects that were not selected are added to the 2020-2023 illustrative list of projects.

All projects using NATS STBG funding must:

- Be sponsored by one or more of the NATS member jurisdictions, Niles Dial a Ride, or Buchanan Dial A Ride
- Contribute at least 18.15 percent local match towards the project.
- Reflect the investment priorities established in the NATS 2045 Long Range Transportation Plan
- Make progress toward achieving the National Performance Measures and established performance targets.

To assist the NATS committee in choosing projects that meet the above requirements a NATS Project Prioritization Scoring System was created and approved by NATS Policy Committee on October 23, 2018. **(Appendix E)**



TRANSPORTATION PERFORMANCE MANAGEMENT

A key feature of the FAST Act is the establishment of a performance and outcome-based program for the investment in projects that collectively will make progress toward achieving national goals. National performance goals for the Federal-aid Highway Program must be established in seven areas: Safety, Infrastructure Condition, Congestion Reduction, System Reliability, Freight Movement, Environmental Sustainability, and Reduced Project Delivery Delays.

The 2020-2023 TIP is the first to be developed subsequent to official federal guidance regarding performance-based planning, and the initial sets of targets being released. Following these developments, NATS has supported the targets derived by MDOT and utilized performance measures in the planning process. Project selection incorporated performance measures into its scoring of projects. NATS has analyzed the projects programmed for this TIP to review their linkage with recent compliance requirements.



PERFORMANCE MEASURE TARGETS

The Moving Ahead for Progress in the 21st Century Act (MAP-21) requires State DOTs and Metropolitan Planning Organizations (MPO) to conduct performance-based planning and programming by tracking performance measures, setting data-driven targets for each measure, and selecting projects to help meet those targets. These requirements were continued and strengthened in the Fixing America's Surface Transportation (FAST) Act and help to ensure the most efficient investment of federal transportation funds through increased accountability and transparency and providing for better investment decisions that focus on key outcomes related to seven national goals:

Goal Area	National Goal
Safety	To achieve a significant reduction in traffic fatalities and serious injuries on all public roads
Infrastructure Condition	To maintain the highway infrastructure asset system in a state of good repair
Congestion Reduction	To achieve a significant reduction in congestion on the National Highway System
System Reliability	To improve the efficiency of the surface transportation system
Freight Movement & Economic Vitality	To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development
Environmental sustainability	To enhance the performance of the transportation system while protecting and enhancing the natural environment
Reduce Project Delivery Delays	To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices

Before Performance Measure Targets were required, NATS used a performance based scoring system. This is illustrated on the 2020-2023 TIP call for project scoring criteria, found in **Appendix E**. NATS continues to weigh performance targets in its project selection and analyze projects for their contribution to the national performance targets. Many projects help to contribute to more than one performance target. Due to limited funding resources, NATS also encourages local jurisdictions to apply for statewide, competitive grant funding sources to help contribute to performance targets. Performance Targets are derived annually by calendar year for safety and transit performance measures. Bridge and Pavement performance measures are derived on a 2-year and 4-year reporting cycle. The NATS Policy Committee elected to support the MDOT and Niles Dial a Ride Transportation provided targets in all the required categories. NATS will continue to coordinate with the State and other stakeholders to address performance measure targets.

SAFETY

The Highway Safety Improvement Program final rule (23 CFR Part 490) requires States to annually set targets for five safety performance measures. MDOT coordinated the establishment of safety targets with the fourteen MPOs in Michigan through monthly Target Coordination meetings and through discussions at various meetings of the Michigan Transportation Planning Association (MTPA). MDOT adopted the 2019 state safety targets in the Highway Improvement Program annual report dated August 31, 2018. On February 19, 2019, NATS adopted MDOT'S 2019 Safety targets.

Performance Measure	Description	Base Data - 2017		State Target 2019	Data Source
		NATS	State		
Number of fatalities.	The number of fatalities due to a vehicular crash.	9.2	968.0	1,023.2	Michigan Crash Facts
Fatalities per 100 million vehicle miles traveled (VMT).	The rate of serious injuries based on the total miles driven in the area.	1.87	1.01	1.02	Michigan Crash Facts & HPMS
Number of serious injuries.	The number of serious injuries due to a vehicular crash	32.4	5,186.8	5,406.8	Michigan Crash Facts
Serious injuries per 100 million vehicle miles traveled (VMT).	The rate of serious injuries based on the total miles driven in the area.	7.21	5.32	5.41	Michigan Crash Facts & HPMS
Non-motorized fatalities, serious injuries.	The number of pedestrians and bicyclists seriously injured or killed due to a vehicular crash.	2.6	741.8	759.8	Michigan Crash Facts

All values reported are 5 yr. averages, HPMS = Highway Performance Monitoring System

Anticipated Effect of the Safety Performance Measures

The 2020-2023 TIP is anticipated to have a positive effect towards meeting Michigan's established safety performance targets. The TIP reflect approximately \$1.8 million in FHWA Safety funds. These projects address both existing high-incident locations (reactive projects) and proactive projects that preemptively address safety. Projects utilizing Surface Transportation Block Grant (STBG) also address safety.

"A CRF should be regarded as a generic estimate of the effectiveness of a countermeasure. The estimate is a useful guide, but it remains necessary to apply engineering judgment and to consider site-specific environmental, traffic volume, traffic mix, geometric, and operational conditions, which will affect the safety impact of a countermeasure."

FHWA CFR Desktop Reference Guide

The member communities that make up NATS are committed to improving transportation safety. This is reflected in the safety-related scoring criteria included in the NATS solicitation and selection of projects.

To quantify safety benefits of each local project, SWMPC staff used MDOT Crash Reduction Factors (CRF).

- 2020-2023 Call for Project Application included a list of safety counter measures provided by MDOT with the associated CRF for each.
- SWMPC staff identified all of the crashes on the project's road segment over the last five years (2013-2017).
- Based on the type of crash (rear end, turning, head on etc.) staff calculated what percentage of each type would be reduced due to a given counter measure.
- The total reduction is the summary of reduction in each crash type due to the combined effects of all safety counter measures.

Fifty percent of the selected local projects below did not include safety counter measures. Front Street in the City of Buchanan included several countermeasures as part of an intersection improvement project.

Year	Project	Work Type	Safety counter measures	Total reduction	Crashes (5 yr.) average	Expected annual reduction
2020	Lake Street	Resurface	None	0	3.8	0
2020	Third Street	Resurface	High Friction Surface Treatment	20%	6.4	1.3
2021	Portage Road	Resurface	High Friction Surface Treatment	20%	4.4	.9
2021	Barron Lake Road	Resurface	None	0%	12.6	0
2022	13th Street	Resurface	None	0%	3	0
2022	Mason Street	Rehabilitation	None	0%	0.6	0
2023	Front Street*	Reconstruction	Pedestrian signals Add All-Red Clearance Interval Signal Optimization Improved signage	23%	3.8	1
2023	Bertrand Road	Resurface	High Friction Surface Treatment	20%	5.2	1
TOTAL ANTICIPATED REDUCTIONS IN CRASHES						

*Combined with CMAQ funds for signal & intersection improvements

PAVEMENT AND BRIDGE CONDITION

Pavement and bridge condition performance measures require MDOT and NATS to assess the following on the National Highway System to carry out the National Highway Performance Program (NHPP):

- **Percent of Interstate Pavement in Good Condition:** Pavement condition is calculated in accordance with the HPMS Field Manual and is based on three condition ratings of Good, Fair, and Poor calculated for each pavement section. Good condition suggests no major investment is needed.
- **Percent of Interstate Pavement in Poor Condition:** Pavement condition is calculated in accordance with the HPMS Field Manual and is based on three condition ratings of; Good, Fair, and Poor calculated for each pavement section. Poor condition suggests major reconstruction investment is needed.
- **Percent of Non-Interstate NHS Pavement in Good Condition:** Pavement condition is calculated in accordance with the HPMS Field Manual and based on three condition ratings of Good, Fair and Poor calculated for each pavement section. Good condition suggests no major investment is needed.
- **The percent of Non-Interstate NHS Pavement in Poor Condition:** Pavement condition is calculated in accordance with the HPMS Field Manual and based on three condition ratings of Good, Fair and Poor calculated for each pavement section. Poor condition suggests major reconstruction investment is needed.
- **Percent of NHS Bridge by Deck Area in Good Condition:** Measures are based on deck area. Deck area is computed using National Bridge Inventory (NBI) data. Classification is based on NBI condition ratings for deck, superstructure, substructure, and culvert. Condition is determined by lowest rating of these. If the lowest rating is greater than or equal to seven the bridge is classified as good.
- **Percent of NHS Bridges by Deck Area in Poor Condition:** Measures are based on deck area. Deck area is computed using National Bridge Inventory (NBI) data. Classification is based on NBI condition ratings for deck, superstructure, substructure, and culvert. Condition is determined by lowest rating of these. If the lowest rating is less than or equal to four, the bridge is classified as poor.

On September 25, 2018, the NATS Technical and Policy Committees voted to support the Michigan Department of Transportation individual four-year pavement condition, bridge condition, and system reliability performance measure targets. NATS will support these targets by planning and programming projects so they contribute to the accomplishment of the statewide targets.

Established Statewide Infrastructure Condition Targets

Pavement Condition

Performance Measure	Description	State Target 2021
Percentage of pavement on the Interstate System in good condition.	The percentage of pavement on the Interstate system considered in good condition.	47.8%
Percentage of pavement on the Interstate System in poor condition.	The percentage of pavement on the Interstate system considered in poor condition.	10.0%
Percentage of pavement on the non-Interstate National Highway System in good condition.	The percentage of pavement on the non-Interstate National Highway System considered in good condition.	43.7%
Percentage of pavement on the non-Interstate National Highway System in poor condition.	The percentage of pavement on the non-Interstate National Highway System considered in poor condition.	24.9%

Bridge Condition

Performance Measure	Description	State Target 2021
Percentage of National Highway System (NHS) bridge deck area in good condition.	The percentage of bridges on the NHS considered in good condition.	26.2%
Percentage of National Highway System (NHS) bridge deck area in poor condition.	The percentage of bridges on the NHS considered in poor condition.	7.0%

While FHWA will determine whether MDOT has met or made significant progress toward meeting these targets, it will not directly assess progress toward meeting targets at the regional level. NATS will continue to review these performance measures and will update these targets on a two- or four-year cycle, following updates completed by the state.

SYSTEM RELIABILITY- PERFORMANCE MEASURES TARGET-SETTING

The final rule on system reliability target setting was the third of a series of rules related to target setting, effective May 20, 2017. System Performance measures require MDOT to assess the following on the NHS to carry out the National Highway Performance Program (NHPP):

- Interstate Travel Time Reliability
- Non-Interstate NHS travel Time Reliability
- Interstate Truck Travel Time Reliability
- Total Emissions Reductions
- Annual Hours of Peak Hour Excessive Delay Per Capita
- Percent of Non-Single Occupancy Vehicle Travel

NATS is only subject to the first three- travel time reliability measures listed above. On September 25, 2018, the NATS Technical and Policy Committees voted to support the Michigan Department of Transportation's individual four-year system performance targets by planning and programming projects so they contribute to the accomplishment of the overall statewide targets, thereby fulfilling the requirements related to system performance measure target setting established under MAP-21 and the FAST Act. These targets are below

Established Statewide System Reliability Targets

Performance Measure	Description	State Target 2021
Percentage of the person-miles traveled on the Interstate that are reliable.	The percentage of miles traveled by a person on the Interstate that are reliable.	75%
Percentage of the person-miles traveled on the non-Interstate NHS that are reliable.	The percentage of miles traveled by a person on the non-Interstate NHS that are reliable.	70%
Truck Travel Time Reliability (TTTR) Index	The sum of maximum TTTR for each reporting segment, divided by the total Interstate system miles	1.75

The System Performance Measures Final Rule Reliability measures are:

- **Interstate Travel Time Reliability** – This is a measurement describing the predictability of travel times for all the Interstates in the planning area. A lower value means there is higher unpredictability. It is not the level of congestion. In cities that are congested people can plan for ‘normal’ delays, therefore 100% reliability is possible even in congested areas. Travel time reliability only measures the extent of unexpected delay. A formal definition for travel time reliability is the percentage of people (not vehicles) who have travel that have consistent travel times. Using person-miles and not vehicle miles of travel takes into account the travel on buses or by carpooling.
- **Non-Interstate NHS travel Time Reliability** - This is the same measure as above, except for it includes highways designated as part of the National Highway System that are not Interstates. Again, it is not level of congestion; it is the predictability of travel.
- **Interstate Truck Travel Time Reliability (TTTR)** – The TTTR is an assessment of for the reliability of freight movement. TTTR is defined as the ratio the time it takes 95 percent of trucks to travel a given segment divided by the ‘average’ time (50 percent of trucks) it takes to travel the segment.

TIP Impacts

All projects utilizing federal funding in the TIP are subject to a thorough performance-based analysis regarding their contribution to attaining the performance measure targets by utilizing a variety of quantitative measures as well as staff analysis. Criteria related to infrastructure condition and included in project evaluation include: identification of improvements focused on reconstruction, rehabilitation, repair, bridge condition, operations, and average daily traffic volumes. System preservation is a primary category used for evaluating projects for inclusion in the TIP, accounting for 42% of a project’s possible score. Additionally, addressing system preservation was a qualitative criteria of project evaluation. Transit projects are also evaluated and selected based upon their contributing to the attainment of transit state of good repair targets. Based on this, the NATS program of projects and investment priorities included in the TIP do prioritize the accomplishment of performance measure objectives.

Next Scheduled Update

Under current federal law, NATS Transportation Improvement Program must be updated at least once every four years. Major revisions to the adopted TIP will be carried out, as needed, in the form of formal amendments. All amendments are publicly-noticed according to the procedures contained in the Southwest Michigan Planning Commission Public Participation Plan prior to their adoption.

TRANSIT ASSET MANAGEMENT

Working collectively, MDOT, NATS, Niles Dial a Ride Transportation are required to establish performance targets for each applicable measure established by federal legislation. The Transit Asset Management final rule requires targets to be set for three performance measures. Niles Dial a Ride Transportation and NATS must establish and adopt targets for the performance of their transit assets annually for the ensuring year.

Niles Buchanan Cass Area Transportation Study (NATS) 2019-2020 Asset Management Targets

Asset Category	Performance Measure	Asset	MPO 2019 Target	MPO 2020 Target
Rolling Stock Revenue Vehicles	Age – Percent of revenue vehicles within a particular asset class that have met or exceeded their useful life benchmark (ULB)	CU- Cutaway Busses	43% exceed ULB	29% exceed ULB
Equipment Non-revenue Vehicles	Age – Percent of non-revenue vehicles that have met or exceeded their useful life benchmark (ULB)	Service Truck	100% exceed ULB	100% exceed ULB
Facilities	Condition – percent of facilities with a condition rating below 3.0 on the FTA TERM Scale	Administration/ Maintenance Building	0% rated below a 3.0 on the FTA TERM Scale	0% rated below a 3.0 on the FTA TERM Scale

Source: Niles DART

SWMPC will continue to coordinate with the State and other stakeholders to address performance measure targets. There are several resources to track performance:

- Michigan Department of Transportation(MDOT) <https://www.michigan.gov/mdot>
- Transportation Asset Management Council (TAMC) <http://www.mcgi.state.mi.us/mitrp/tamcDashboards>
- Federal Highway Administration (FHWA) <http://www.fhwa.dot.gov/tpm/>
- Federal Transit Administration (FTA) <http://www.fta.dot.gov/map21/>

FINANCIAL PLAN

The function of the TIP financial plan is to manage available federal-aid highway and transit resources in a cost-effective and efficient manner. Specifically the Financial Plan details:

1. Available highway and transit funding (federal, state, and local);
2. Fiscal constraint (cost of projects cannot exceed revenues reasonably expected to be available);
3. Expected rate of change in available funding (unrelated to inflation);
4. Year of Expenditure (YOE) factor to adjust for predicted inflation;
5. Estimate of Operations and Maintenance (O and M) costs for the federal-aid highway system (FAHS).

AVAILABLE HIGHWAY AND TRANSIT FUNDING

The United States federal excise tax on gasoline is 18.4 cents per gallon and 24.4 cents per gallon for diesel fuel. The federal tax was last raised in 1993 and is not indexed to inflation, which increased by a total of 73 percent from 1993 until 2018. Beginning in 2022, fuel tax rates will be tied to inflation to help remedy the decline in purchasing power of the fuel tax. These funds are deposited in the Highway Trust Fund (HTF). A portion of these funds is retained in the Mass Transit Account of the HTF for distribution to public transit agencies and states. In recent years, the HTF has seen large infusions of cash from the federal General Fund, due to declining collections from motor fuel taxes. This is mostly due to increased fuel efficiency in conventionally powered vehicles, as well as a growing number of hybrid and fully electric vehicles that require little to no motor fuel.

There are a number of federal highway programs serving different purposes. Appendix G contains a list of these programs. Federal highway funds are apportioned to the states (distribution of funds according to formulas established by law) and then a portion is allocated to local agencies based on the population in each region. Local agencies within the NATS area will receive approximately \$900,000 in federal-aid highway funding each year. In addition, The Michigan Department of Transportation (MDOT) will spend approximately \$9.5 million in Federal funding annually for capital needs on state-owned highways in the NATS area (I-, US-, and M roads).

Like the highway programs, there are a number of federal transit programs, the list of which can also be found in Appendix G. Transit funds are distributed according to a complex set of distribution formulas. Niles Dial a Ride Transportation and Buchanan Dial a Ride will receive approximately \$345,000 in transit operating and capital federal-funding each year.

Like the highway programs, there are a number of federal transit programs, the list of which can also be found in **Appendix G**. Transit funds are distributed according to a complex set of distribution formulas. Niles Dial a Ride Transportation and Buchanan Dial a Ride receive approximately \$300,000 in transit operating and capital federal-funding each year.

On Nov. 10, 2015, Gov. Rick Snyder signed into law a funding package that provides more state transportation revenue. The nine-bill package included registration fee increases, motor fuel tax increases, and appropriations from the income tax revenue.

The new revenue package is expected to generate \$1.2 billion for transportation when it takes full effect in FY 2021: \$600 million from gas taxes and registration fees, and \$600 million from income tax revenues. Almost 94 percent of the new revenue will be distributed through the Act 51 formula for road agencies: 39.1 percent for state highways, 39.1 percent for Michigan's 83 county road agencies, and 21.8 percent for 533 villages and cities.

The gasoline tax increased from 19 to 26.3 cents per gallon on Jan. 1, 2017, and the diesel fuel tax increased from 15 to 26.3 cents per gallon. The motor fuel tax was applied to natural gas (CNG) as well. Beginning in 2022, fuel tax rates will be tied to inflation to help remedy the decline in purchasing power of the fuel tax.

Registration fees for most cars and trucks increased 20 percent on Jan. 1, 2017. New electric car fees of \$100 per year, and \$30 per year for plug-in hybrid cars, equalize road-user fees for vehicles that use little or no taxed fuel.

Local funding is much more difficult to predict. There is a patchwork of transportation millages, special assessment districts, downtown development authorities, and other funding mechanisms throughout the region. Therefore, this Financial Plan does not attempt to quantify current nonfederal funding or forecast future non-federal funding revenues, except for MTF and CTF



FISCAL CONSTRAINT AND PROJECT SELECTION

The most important financial consideration when creating and/or maintaining a TIP is fiscal constraint. This means that each year's list of projects cannot exceed the amount of funding reasonably expected to be available in the fiscal year. Funding is considered "reasonably expected to be available" if the federal, state, and local funding amounts are based on amounts received in past years, with rates of change developed cooperatively between MDOT, transportation planning agencies, and public transportation agencies. Note that these rates of change are not the same as inflation; rather, they are forecasts of the amount of funding that will be made available by the federal, state, and local governments. In Michigan, this cooperative process is facilitated by the Michigan Transportation Planning Association (MTPA), whose members include the aforementioned agencies, plus the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA). The MTPA has determined that recent federal transportation funding shortfalls make it prudent to hold federal funding levels at a two percent annual rate of increase for all four years of the 2020-2023 TIP

In the NATS planning area there are various implementing agencies eligible for federal-aid funding including, MDOT which is responsible for proposing/implementing trunkline highway projects. Each of the following agencies (City of Buchanan, City of Niles, Village of Edwardsburg, Berrien County Road Department, Cass County Road Commission) may submit projects to be considered for NATS annual allocation of local urban STBG funds.

These projects are then reviewed/approved based on NATS adopted project selection process. Projects are generally selected based on pavement condition, traffic volumes, crash history, and/or other factors. Local rural projects that fall within the NATS planning area (proposed by Berrien County Road Department and Cass County Road Commission) are selected by a Rural Task Force (RTF) comprised of representatives from various regional county road commissions, cities and villages and MDOT.

Public Transit

Because Niles DART is located within the South Bend/Elkhart, Indiana urbanized area, there is a Memorandum of Understanding in place between the Michiana Area Council of Governments, the South Bend Public Transportation Corporation, Niles DART, and the Southwest Michigan Planning Commission to define the process by which federal funds, made available from the U.S. Department of Transportation Federal Transit Administration (FTA), are allocated between Niles DART and the South Bend Public Transportation Corporation.

Year of Expenditure (YOE)

When MDOT and NATS member agencies program their projects in the TIP, the agencies are expected to adjust their costs using year of expenditure (YOE) dollars. YOE simply means that project costs have been adjusted for expected inflation. This is not the same as expected rates of funding change (see previous section). MDOT has developed YOE factors for itself and any agency that has not developed

its own. For the upcoming 2020-2023 TIP cycle, they are five percent for FY 2020 and FY 2021, 4.5 percent for FY 2022, and four percent for FY 2023. See Appendix H for more details.

Summary: Resources available for Capital Needs on the Federal-Aid Highway System

The table below contains a summary of the predicted total resources (federal, state, local) that will be available for capital needs on the federal-aid highway system in the NATS S area over fiscal years 2020 through 2023. Federal funding beyond FY 2020 is estimated to grow about 2 percent annually, the rate assumed throughout the FAST Act.

**Forecast of Resources Available for Capital Needs on the Federal-Aid Highway System
In the NATS Area (Millions of Dollars)**

2020	2021	2022	2023
\$3.7	\$2.6	\$1.3	\$43.9

ESTIMATE OF OPERATIONS AND MAINTENANCE COSTS FOR THE FEDERAL-AID HIGHWAY SYSTEM

Almost all federal-aid highway funding is restricted to capital costs; i.e., the cost to build and maintain the actual physical assets of the federal-aid highway system (essentially, all I-, US-, and M- designated roads, plus most public roads functionally classified as “collector” or higher). Operations and maintenance (O and M) costs, such as snow and ice removal, pothole patching, rubbish removal, electricity costs to operate streetlights and traffic signals, etc. are the responsibility of MDOT or local road agencies, depending on road ownership. Nevertheless, federal regulations require an estimate of O and M costs on the federal-aid highway system over the years covered by the TIP. **Appendix H** explains the method and assumptions used to formulate the estimate.

The table below contains a summary O and M cost estimate for roads on the federal-aid highway system in the NATS area. These funds are in the TIP, because most highway operations and maintenance costs are not eligible for federal-aid. The amounts shown are increased by the agree-upon estimated YOE (i.e., inflation factors (see Appendix H for a discussion of YOE adjustments).

Forecast of Operations and Maintenance Costs on the Federal-Aid System in the NATS Area

	Trunkline	Local Federal Aid	Total
2020	4.32	1.90	6.22
2021	4.36	1.97	6.33
2022	4.46	2.04	6.5

2023	4.55	2.12	6.67
------	------	------	------

DEMONSTRATION OF FINANCIAL CONSTRAINT

After determination of resources available for federal-aid highway and transit capital needs in the Southwest Michigan region from FY 2017 through FY 2020, and matching those available resources to specific needs, a four-year program of projects is created within the context of the region's transportation policies as contained in the 2045 Long Range Plan. The list must be adjusted to each year's YOE factor and then fiscally constrained to available revenues (**See Appendix**). The table below contains the amount of funding for STBG urban and CMAQ that we reasonably expect to receive over the four-year period of this TIP. The estimate in Appendix I is that funding for NATS STBG urban will grow at 2% per year, while the real value of funding could shrink due to inflation (YOE factor). NATS decided to program funding based on an annual two percent increase to the STBG urban funding for the four-year period of the TIP.

Demonstration of Fiscal Constraint for Funding Sources with Local Allocation

FY	STBG Urban		CMAQ*	
	Available	Programmed	Available	Programmed
2020	\$569,000	\$531,268	\$0	\$0
2021	\$580,000	\$580,000	\$0	\$0
2022	\$592,000	\$590,000	\$0	\$0
2023	\$604,000	\$604,000	\$287,000	\$287,000

* Note: CMAQ funds are programmed on a countywide competitive basis. Only the amount awarded to projects within the NATS area are presented above.

The table below contains a summary of the cost of highway and transit projects programmed over the four-year TIP period, matched to revenues available in that same period. This includes federal, state, and local costs. This table shows that the FY 2020 through FY 20234 TIP is fiscally constrained. Note: Operations and maintenance costs of the federal-aid highway system are included in the text of this chapter. However, these costs are not included in the TIP itself, as nearly all highway operations and maintenance costs are ineligible for federal-aid funding.

	2020	2021	2022	2023
Highway Funding	\$3,719,142	\$2,595,132	\$1,291,382	\$43,938,848
Highway Programmed	\$3,681,410	\$2,595,132	\$1,291,382	\$43,938,848
Transit Funding	\$870,614	\$861,739	\$912,641	\$906,348
Transit Programmed	\$870,614	\$861,739	\$912,641	\$906,348
Total Funding	\$4,589,756	\$3,456,871	\$2,204,023	\$44,845,196
Total Programmed	\$4,552,024	\$3,456,871	\$2,204,023	\$44,845,196
Difference	\$37,732	\$0	\$0	\$0

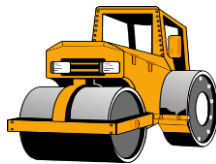
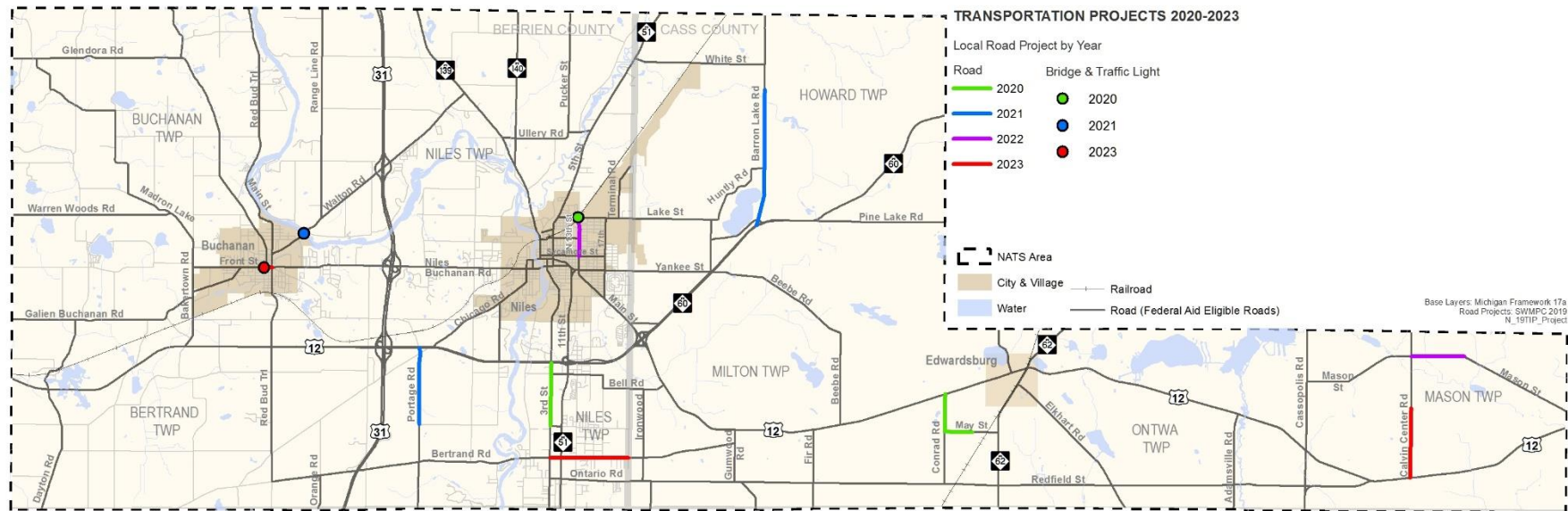
2020-2023 TRANSPORTATION PROJECTS

Projects included in the FY 2020-2023 TIP can be found in the following tables. Tables are broken down by funding source and subsequently by year and include key information regarding the projects including the responsible agency, project name, location and limits, as well as the funding amounts and the local funding source. The following project tables and maps are included:

- Federally Funded Projects on Locally Maintained Roads Map
- STBG Funded Projects on Locally Maintained Roads – Table
- Other Federally Funded Projects on Locally Maintained Roads - Table
- Transit Projects
- MDOT Projects - Map
- MDOT Projects - Table
- 2020-2023 Fiscal Constraint Tables

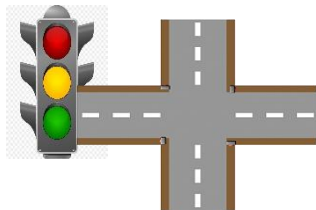


Federally Funded Projects on Locally Maintained



13 miles

New **PAVEMENT** on roads
in poor or fair condition



1 project

INTERSECTION improvements

**BRIDGE
REPAIRS**

2 projects

Rehabilitation of **BRIDGES** that are
currently rated in poor or fair condition

STBG FUNDED PROJECTS ON LOCALLY MAINTAINED ROADS

2020 STBG Funded Projects							
Job #	Agency	Project	Limits	Description	Federal	Local	Total
130763	Cass CRC Howard Township	Lake Street	Airport Rd. to Huntly Rd.	Mill & resurface	\$233,191	\$51,709	\$284,900
130769	Berrien CRD Niles Township	Third Street	US-12 to Fulkerson Rd.	Crush & Shape resurface	\$269,996	\$60,004	\$330,000
130776	Cass CRC Mason Township	Mason Street	Cassopolis Rd. to Calvin Center Rd.	Asphalt Overlay	\$28,081	ACC form 2018	\$28,081
Total Funds Programed					\$531,268	\$111,713	\$642,981
Federal STBG Funds Allocated					\$569,000		
Balance					\$37,732		

2021 STBG Funded Projects							
Job #	Agency	Project	Limits	Description	Federal	Local	Total
206326	Berrien CRD Bertrand Township	Portage Road	Briar Rd. to US - 12	Asphalt overlay	\$300,750	\$179,250	\$480,000
206327	Cass CRC Howard Township	Barron Lake Road	M 60 to Cook St.	Asphalt Overly	\$279,250	\$120,000	\$399,250
Total Funds Programed					\$580,000	\$299,250	\$879,250
Federal STBG Funds Allocated					\$580,000		
Balance					\$0		

STBG FUNDED PROJECTS ON LOCALLY MAINTAINED ROADS

2022 STBG Funded Projects							
Job #	Agency	Project	Limits	Description	Federal	Local	Total
206392	City of Niles	13th Street	Sycamore St. to Lake St.	Mill & Resurface	\$357,381	\$79,248	\$436,629
206393	Cass CRC Mason Township	Mason Street	Calvin Center Rd. to Tharp Lake Rd.	Crush & Shape Resurface	\$234,619	\$94,381	\$329,000
Total Funds Programed					\$592,000	\$173,629	\$765,629
Federal STBG Funds Allocated					\$592,000		
Balance					\$0		

2023 STBG Funded Projects							
Job #	Agency	Project	Limits	Description	Federal	Local	Total
206395	Berrien CRD Bertrand Township	Bertrand Road	M-51 East to County Line	Asphalt overlay	\$304,000	\$236,000	\$540,000
206394	City of Buchanan	Front Street	Red Bud Trail to Oak Street	Reconstruction	\$300,000	\$385,276	\$685,276
Total Funds Programed					\$604,000	\$621,276	\$1,225,276
Federal STBG Funds Allocated					\$604,000		
Balance					\$0		

2020-2023 Other Federal Funded Projects on Locally Maintained Roads

Job #	Year	Agency	Project	Limits/Location	Description	Source	Federal	State	Local	Total
202425	2020	City of Niles	Lake Street	Over Amtrak RR, Str# 1059.	Bridge Preventative Maintenance	BHT	\$555,200	\$104,100	\$34,700	\$694,000
207718	2021	Berrien CRD Buchanan Township	Walton Road	Over St. Joseph River, Str# 994.	Bridge Preventative Maintenance	BHT	\$456,500	\$0	\$456,500	\$913,000
206618	2023	City of Buchanan	Front Street	Front and Oak Street Intersection	Replace Traffic Signal	CMAQ	\$287,341	\$0	\$81,848	\$369,189

BHT = Federal Bridge Funds

2020 Transit Projects

Job #	Description	Federal	State	Local	Total
-------	-------------	---------	-------	-------	-------

Niles Dial A Ride 5307 Funded Items						Fiscal Constraint	
206452	Operating	\$133,080	\$164,500	\$134,060	\$431,640	5307 Available:	\$252,420
206688	Preventative Maintenance	\$119,340	\$29,835		\$149,175	5307 Programed:	252,420
						Balance:	\$0
Niles Dial A Ride 5339 Funded Items							
206696	Bus Purchase	\$60,800	\$15,200		\$76,000	5339 Available:	\$60,800
						5339 Programed:	\$60,800
						Balance:	\$0
Buchanan Dial A Ride 5311 Funding						Fiscal Constraint	
206717	Operating	\$24,219	\$80,380	\$99,700	\$204,299	5311 Available:	\$24,219
						5311 Programed:	\$24,219
						Balance:	\$0
Buchanan Dial A Ride 5399 Funded items							
207673	Onboard cameras	7,600	\$1,900	\$0	\$9,500	5339 Available:	\$7,600
						5339 Programed:	\$7,600
						Balance:	\$0

Summary of Transit Funding in 2020

	Federal	State	Local	Total
Revenue in 2020	\$337,439	\$289,915	\$233,760	\$861,114
Amount programed	\$337,439	\$289,915	\$233,760	\$861,114
Balance	\$0	\$0	\$0	\$0

2021 Transit Projects

Job #	Description	Federal	State	Local	Total
-------	-------------	---------	-------	-------	-------

Niles Dial A Ride 5307 Funded Items						Fiscal Constraint	
206689	Operating	\$133,080	\$164,500	\$134,060	\$431,640	5307 Available:	\$252,420
206691	Preventative Maintenance	\$119,340	\$29,835		\$149,175	5307 Programed:	\$252,420
						Balance:	\$0
Niles Dial A Ride 5339 Funded Items							
206697	Onboard AEDs	\$8,400	\$2,100		\$10,500	5339 Available:	\$50,000
206697	Replace a service truck and snow plow	\$41,600	\$10,400		\$52,000	5339 Programed:	\$50,000
						Balance:	\$0
Buchanan Dial A Ride 5311 Funding						Fiscal Constraint	
207667	Operating	\$27,595	\$90,829	\$100,000	\$218,424	5311 Available:	\$27,595
						5311 Programed:	\$27,595
						Balance:	\$0

Summary of Transit Funding in 2021

	Federal	State	Local	Total
Revenue in 2021	\$330,015	\$297,664	\$234,060	\$861,739
Amount programed	\$330,015	\$297,664	\$234,060	\$861,739
Balance	\$0	\$0	\$0	\$0

2022 Transit Projects

Job #	Description	Federal	State	Local	Total
-------	-------------	---------	-------	-------	-------

Niles Dial A Ride 5307 Funded Items						Fiscal Constraint	
206692	Operating	\$133,080	\$164,500	\$134,060	\$431,640	5307 Available:	\$252,420
206693	Preventative Maintenance	\$119,340	\$29,835		\$149,175	5307 Programed:	\$252,420
						Balance:	\$0
Niles Dial A Ride 5339 Funded Items							
206698	Bus Purchase	\$79,200	\$19,800		\$99,000	5339 Available:	\$79,200
						5339 Programed:	\$79,200
						Balance:	\$0
Buchanan Dial A Ride 5311 Funding						Fiscal Constraint	
207671	Operating	\$30,906	\$100,820	\$101,100	\$232,826	5311 Available:	\$30,906
						5311 Programed:	\$30,906
						Balance:	\$0

Summary of Transit Funding in 2022

	Federal	State	Local	Total
Revenue in 2022	\$362,526	\$314,955	\$235,160	\$912,641
Amount programed	\$362,526	\$314,955	\$235,160	\$912,641
Balance	\$0	\$0	\$0	\$0

2023 Transit Projects

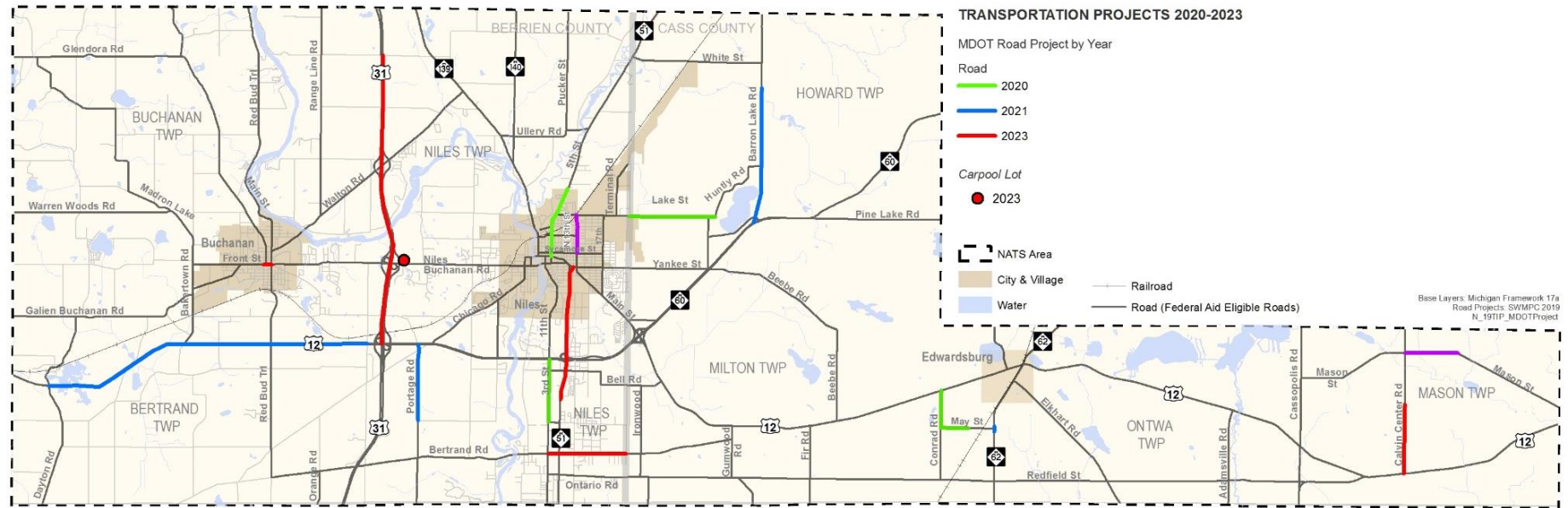
Job #	Description	Federal	State	Local	Total
-------	-------------	---------	-------	-------	-------

Niles Dial A Ride 5307 Funded Items						Fiscal Constraint	
206694	Operating	\$133,080	\$164,500	\$134,060	\$431,640	5307 Available:	\$252,420
206695	Preventative Maintenance	\$119,340	\$29,835		\$149,175	5307 Programed:	\$252,420
						Balance:	\$0
Niles Dial A Ride 5339 Funded Items							
206699	Bus Purchase	\$60,800	\$15,200		\$76,000	5339 Available:	\$60,800
						5339 Programed:	\$60,800
						Balance:	\$0
Buchanan Dial A Ride 5311 Funding						Fiscal Constraint	
207672	Operating	\$34,615	\$112,918	\$102,000	\$249,533	5311 Available:	\$34,615
						5311 Programed:	\$34,615
						Balance:	\$0
Buchanan Dial A Ride 5399 Funded items							
207674	Replace 3 buses	\$218,880	\$54,720	\$0	\$273,600	5339 Available:	\$218,880
						Total 5339 Programed:	\$218,880
						Balance:	\$0

Summary of Transit Funding in 2020

	Federal	State	Local	Total
Revenue in 2020	\$347,835	\$322,453	\$236,060	\$906,348
Amount programed	\$347,835	\$322,453	\$236,060	\$906,348
Balance	\$0	\$0	\$0	\$0

MDOT Federally Funded Projects



17 miles

New **PAVEMENT** on roads
in poor or fair condition



11 projects

Roadway **SAFETY** improvements



33 miles

Center lane miles of **ROADWAY**
improvements.

FY 2020 MDOT PROJECTS

Job #	Project Name	Limits	Improvement Type	Source	Phase	Federal	State	Total
206006	Pavement Markings Retro Readings	All of NATS	Retro-reflectivity pavement markings	HSIP	CON	\$1,534	\$170	\$1,704
206546	Longitudinal Pavement Marking	All of NATS	Longitudinal Pavement Marking	HSIP	PE	\$639	\$71	\$710
206546	Longitudinal Pavement Marking	All of NATS	Longitudinal Pavement Marking	HSIP	CON	\$232,596	\$25,844	\$258,440
206547	Special Pavement Markings	All of NATS	Special Pavement Markings	HSIP	PE	\$639	\$71	\$710
206547	Special Pavement Markings	All of NATS	Special Pavement Markings	HSIP	CON	\$57,510	\$6,390	\$63,900
203792	M-51	Main Street to North City Limits of Niles	Mill and One Course Hot Mix Asphalt Overlay	NH	CON	\$642,199	\$142,406	\$784,605
203698	M-139	M-139 from Niles to Berrien Springs	Overband Crack Fill	ST	CON	\$80,524	\$17,676	\$98,200
200366	M-60 E	Various	Traffic Signal Modernizations; connected vehicle installations.	STG	CON	\$856,160	\$0	\$856,160
202654	M-40	Signing Update	Non-freeway signing	STG	PE	\$50,000	\$0	\$50,000
204423	Signage	Various	Cantilevers Replacement Project	STG	CON	\$230,000	\$0	\$230,000

Total MDOT Spending						\$2,151,801	\$192,628	\$2,344,429
---------------------	--	--	--	--	--	-------------	-----------	-------------

FY 2021 MDOT PROJECTS

Job #	Project Name	Limits	Improvement Type	Source	Phase	Federal	State	Total
202018	M-62	M-62 at May Street	Offset Right Turn Lane	HSIP	CON	\$406,800	\$45,200	\$452,000
207293	Longitudinal Pavement Marking	All of NATS	Longitudinal Pavement Markings	HSIP	PE	\$1,278	\$142	\$1,420
207293	Longitudinal Pavement Marking	All of NATS	Longitudinal Pavement Markings	HSIP	CON	\$265,824	\$29,536	\$295,360
207295	Special Pavement Markings	All of NATS	Special Pavement Markings	HSIP	PE	\$1,278	\$142	\$1,420
207295	Special Pavement Markings	All of NATS	Special Pavement Markings	HSIP	CON	\$46,008	\$5,112	\$51,120
207313	Retroreflectivity Readings	All of NATS	Retro-reflectivity Readings	HSIP	CON	\$1,406	\$156	\$1,562
Total MDOT Spending:						\$722,594	\$80,288	\$802,882

FY 2022 MDOT PROJECTS

Job #	Project Name	Limits	Improvement Type	Source	Phase	Federal	State	Total
200693	E Kilgore Rd	Various	Installation of detection for actuation in traffic signals	HSIP	CON	\$138,214	\$15,357	\$153,571
207328	Longitudinal Pavement Marking	All of NATS	Longitudinal Pavement Markings	HSIP	PE	\$1,278	\$142	\$1,420
207328	Longitudinal Pavement Marking	All of NATS	Longitudinal Pavement Markings	HSIP	CON	\$272,214	\$30,246	\$302,460
207329	Special Pavement Markings	All of NATS	Special Pavement Markings	HSIP	PE	\$1,278	\$142	\$1,420
207329	Special Pavement Markings	All of NATS	Special Pavement Markings	HSIP	CON	\$58,788	\$6,532	\$65,320
207341	Retro-reflectivity Readings	All of NATS	Retro-reflectivity Readings	HSIP	CON	\$1,406	\$156	\$1,562
Total MDOT Spending:						\$473,178	\$52,575	\$525,753

FY 2023 MDOT PROJECTS

Job #	Project Name	Limits	Improvement Type	Source	Phase	Federal	State	Total
207365	Longitudinal Pavement Markings	All of NATS	Longitudinal Pavement Markings	HSIP	PE	\$1,278	\$142	\$1,420
207365	Longitudinal Pavement Markings	All of NATS	Longitudinal Pavement Markings	HSIP	CON	\$272,214	\$30,246	\$302,460
207367	Special Pavement Markings	All of NATS	Special Pavement Markings	HSIP	PE	\$1,278	\$142	\$1,420
207367	Special Pavement Markings	All of NATS	Special Pavement Markings	HSIP	CON	\$71,568	\$7,952	\$79,520
207378	Retro-reflectivity Readings	All of NATS	Retro-reflectivity Readings	HSIP	CON	\$1,406	\$156	\$1,562
201984	US-31	US-12 to Berrien Township	Asphalt Overlay	NH	CON	\$12,833,000	\$2,817,000	\$15,650,000
202003	M-51	Chestnut Lane to M-60BR	Interchange reconstruction and asphalt resurfacing	NH	CON	\$21,281,000	\$4,719,000	\$26,000,000
113735	US-12 E	US-12 and Niles Buchanan Road	Construct new carpool lot.	ST	CON	\$107,224	\$23,777	\$131,001
202654	M-40	Signing Upgrade, Signing Update	Non-freeway signing	STG	CON	\$177,000	\$0	\$177,000

Total MDOT Spending: \$34,745,968 \$7,598,415 \$42,344,383

DEMONSTRATION OF FISCAL CONSTRAINT FOR FY 2020

Fund Source	Total Revenue	Federal Revenue	Federal Programed	State Programed	Local Programed	Total Programed	Balance
Local Road Funding							
STBG-Urban	\$680,713	\$569,000	\$531,268	\$0	\$111,713	\$642,981	\$37,732
BHT	\$694,000	\$555,200	\$555,200	\$104,100	\$34,700	\$694,000	\$0
Total for Locally Maintained Roads	\$1,374,713	\$1,124,200	\$1,086,468	\$104,100	\$146,413	\$1,336,981	\$37,732
MDOT Funding							
NH	\$784,605	\$642,199	\$642,199	\$142,406	\$0	\$784,605	\$0
STBG	\$1,234,360	\$1,216,684	\$1,216,684	\$17,676	\$0	\$1,234,360	\$0
HSIP	\$325,464	\$292,918	\$292,918	\$32,546	\$0	\$325,464	\$0
Total for MOT	\$2,344,429	\$2,151,801	\$2,151,801	\$192,628	\$0	\$2,344,429	\$0
Total for All Roads	\$3,719,142	\$3,276,001	\$3,238,269	\$296,728	\$146,413	\$3,681,410	\$37,732
Transit Funding							
5307	\$580,815	\$252,420	\$252,420	\$194,335	\$134,060	\$580,815	\$0
5339	\$85,500	\$68,400	\$68,400	\$17,100	\$0	\$85,500	\$0
5311	\$204,299	\$24,219	\$24,219	\$80,380	\$99,700	\$204,299	\$0
Total for Transit	\$870,614	\$345,039	\$345,039	\$291,815	\$233,760	\$870,614	\$0
Grand Total	\$4,589,756	\$3,621,040	\$3,583,308	\$588,543	\$380,173	\$4,552,024	\$37,732

DEMONSTRATION OF FISCAL CONSTRAINT FOR FY 2021

Fund Source	Total Revenue	Federal Revenue	Federal Programed	State Programed	Local Programed	Total Programed	Balance
Local Road Funding							
STBG-Urban	\$879,250	\$580,000	\$580,000	\$0	\$299,250	\$879,250	\$0
BHT	\$913,000	\$456,500	\$456,500	\$0	\$456,500	\$913,000	\$0
Total for Locally Maintained Roads	\$1,792,250	\$1,036,500	\$1,036,500	\$0	\$755,750	\$1,792,250	\$0
MDOT Funding							
HSIP	\$802,882	\$722,594	\$722,594	\$80,288	\$0	\$802,882	\$0
Total for MDOT	\$802,882	\$722,594	\$722,594	\$80,288	\$0	\$802,882	\$0
Total for All Roads	\$2,595,132	\$1,759,094	\$1,759,094	\$80,288	\$755,750	\$2,595,132	\$0
Transit Funding							
5307	\$580,815	\$252,420	\$252,420	\$194,335	\$134,060	\$580,815	\$0
5339	\$62,500	\$50,000	\$50,000	\$12,500	\$0	\$62,500	\$0
5311	\$218,424	\$27,595	\$27,595	\$90,829	\$100,000	\$218,424	\$0
Total for Transit	\$861,739	\$330,015	\$330,015	\$297,664	\$234,060	\$861,739	\$0
Grand Total	\$3,456,871	\$2,089,109	\$2,089,109	\$377,952	\$989,810	\$3,456,871	\$0

DEMONSTRATION OF FISCAL CONSTRAINT FOR FY 2022

Fund Source	Total Revenue	Federal Revenue	Federal Programed	State Programed	Local Programed	Total Programed	Balance
Local Road Funding							
STBG-Urban	\$765,629	\$592,000	\$592,000	\$0	\$173,629	\$765,629	\$0
Total for Locally Maintained Roads	\$765,629	\$592,000	\$592,000	\$0	\$173,629	\$765,629	\$0
MDOT Funding							
HSIP	\$525,753	\$473,178	\$473,178	\$52,575	\$0	\$525,753	\$0
Total for MDOT	\$525,753	\$473,178	\$473,178	\$52,575	\$0	\$525,753	\$0
Total for All Roads	\$1,291,382	\$1,065,178	\$1,065,178	\$52,575	\$173,629	\$1,291,382	\$0
Transit Funding							
5307	\$580,815	\$252,420	\$252,420	\$194,335	\$134,060	\$580,815	\$0
5339	\$99,000	\$79,200	\$79,200	\$19,800	\$0	\$99,000	\$0
5311	\$232,826	\$30,906	\$30,906	\$100,820	\$101,100	\$232,826	\$0
Total for Transit	\$912,641	\$362,526	\$362,526	\$314,955	\$235,160	\$912,641	\$0
Grand Total	\$2,204,023	\$1,427,704	\$1,427,704	\$367,530	\$408,789	\$2,204,023	\$0

DEMONSTRATION OF FISCAL CONSTRAINT FOR FY 2023

Fund Source	Total Revenue	Federal Revenue	Federal Programed	State Programed	Local Programed	Total Programed	Balance
Local Road Funding							
STBG-Urban	\$1,225,276	\$604,000	\$604,000	\$0	\$621,276	\$1,225,276	\$0
CMAQ	\$369,189	\$287,341	\$287,341	\$0	\$81,848	\$369,189	\$0
Total for Locally Maintained Roads	\$1,594,465	\$891,341	\$891,341	\$0	\$703,124	\$1,594,465	\$0
MDOT Funding							
NH	\$41,650,000	\$34,114,000	\$34,114,000	\$7,536,000	\$0	\$41,650,000	\$0
STBG	\$308,001	\$284,224	\$284,224	\$23,777	\$0	\$308,001	\$0
HSIP	\$386,382	\$347,744	\$347,744	\$38,638	\$0	\$386,382	\$0
Total for MDOT	\$42,344,383	\$34,745,968	\$34,745,968	\$7,598,415	\$0	\$42,344,383	\$0
Total for All Roads	\$43,938,848	\$35,637,309	\$35,637,309	\$7,598,415	\$703,124	\$43,938,848	\$0
Transit Funding							
5307	\$580,815	\$252,420	\$252,420	\$194,335	\$134,060	\$580,815	\$0
5339	\$76,000	\$60,800	\$60,800	\$15,200	\$0	\$76,000	\$0
5311	\$249,533	\$34,615	\$34,615	\$112,918	\$102,000	\$249,533	\$0
Total for Transit	\$906,348	\$347,835	\$347,835	\$322,453	\$236,060	\$906,348	\$0
Grand Total	\$44,845,196	\$35,985,144	\$35,985,144	\$7,920,868	\$939,184	\$44,845,196	\$0

ENVIRONMENTAL JUSTICE

Historically low income and minority populations have received a disproportionate amount of health and environmental impacts from federal projects without seeing the full benefits. Environmental Justice (EJ) refers to methods to avoid this issue. EJ is mandated under a federal directive (Executive Order 12898, enacted in 1994) requiring all federal programs to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects as the result of its programs, policies, and activities on minority populations and low-income populations. Populations that require special consideration include historically marginalized groups such as African Americans, Asian Americans, Hispanic or Latino Americans, Native Americans, and low-income households.

In April 1997, the U.S. Department of Transportation (DOT) issued the DOT order on environmental justice to address Environmental Justice in Minority Populations and Low-Income Populations (DOT Order 5610.2). This recognizes that transportation projects may bring new benefits in terms of greater connectivity to destinations and faster, safer travel. At the same time, these projects can also bring new concerns of increased noise, air pollution, or impediments during the construction processes. The order generally describes the process for incorporating environmental justice principles into all DOT programs, policies, and activities. The order contains three fundamental concepts of environmental justice:

- To avoid, minimize, or mitigate disproportionately high and adverse human health or environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority populations and low-income populations.

SWMP staff has undertaken a variety of actions to ensure that the needs of low-income and minority populations are recognized and addressed. The primary method is through involvement with the public, community groups, and other stakeholders. The SWMP public participation plans lays out goals and strategies for gaining greater input from all groups, including low-income and minority populations. These individuals and groups are invited to participate in meetings and other involvement activities to voice their opinions and offer their input. SWMP staff also conducted an analysis of the investments in the 2020-2023 TIP to ensure that EJ concepts were met using the following methodology:

METHODOLOGY

For the purposes of the environmental justice analysis, a couple of terms need to be defined; these are “low income” and “minority”.

Low-Income is defined as a household living below the poverty level based on the U.S. Department of Health and Human Services (HHS) poverty guidelines. These guidelines change every year due to inflation and vary with the number of people within each household.

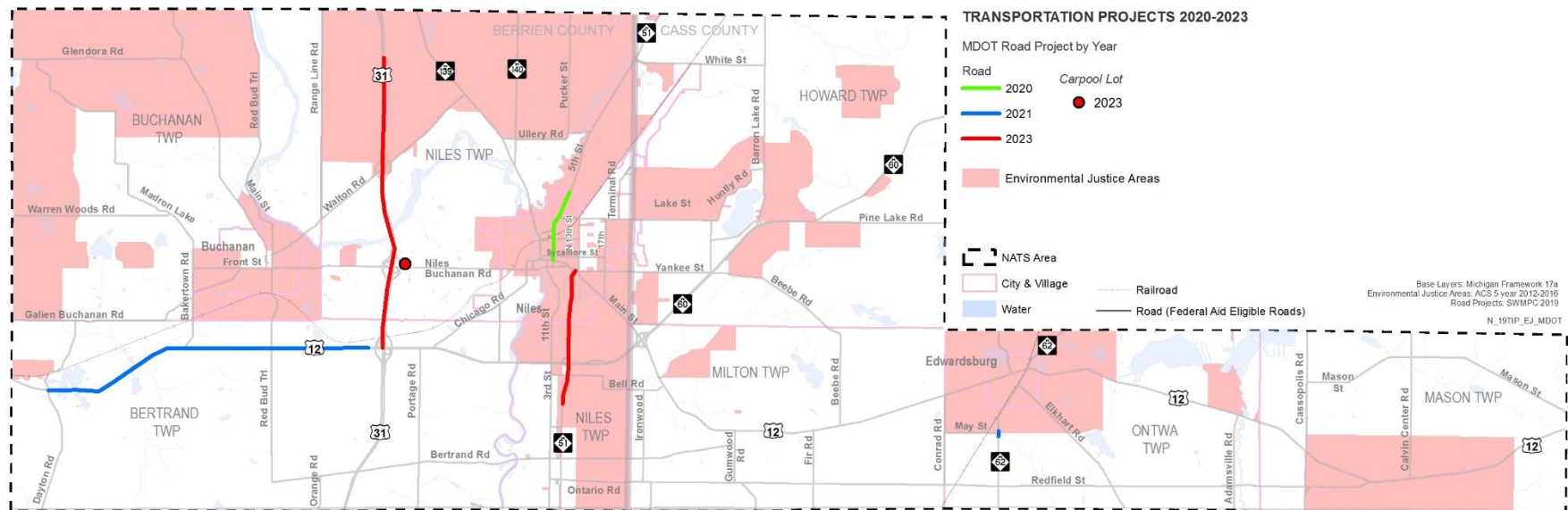
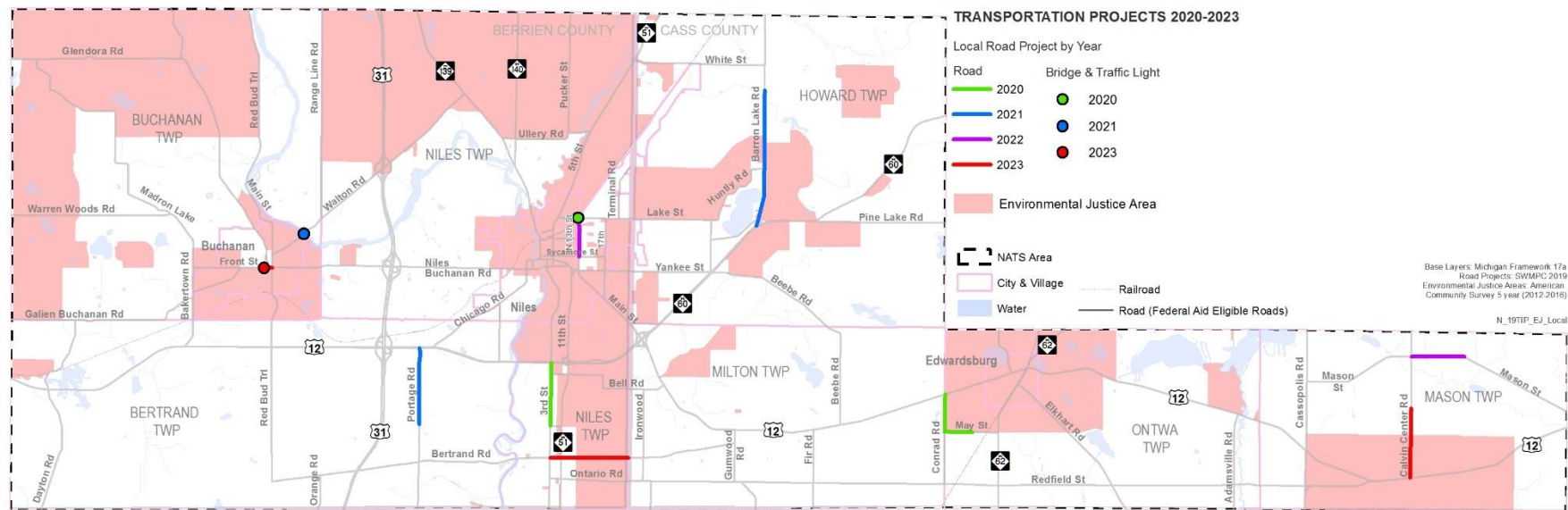
Minority is defined based on US DOT order 5610.2 as any person identifying as the following:

1. African American (a person having origins in any of the black racial groups of Africa)
2. American Indian and Alaskan Native (A person having origins in any of the original peoples of North America and who maintain cultural identification through tribal affiliation or community recognition)
3. Asian Americans (A Person having origins in any of the original peoples of the Far East, South East Asia or the Indian subcontinent)
4. Hispanic or Latino (a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race)
5. Native Hawaiian or other Pacific Islander (A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other pacific islands)
6. Other Minorities (a person having origins from regions not included in any of the above categories, but who does not identify as white)

For the environmental justice analysis SWMPC staff identified areas within the NATS boundaries where the percentage of minority populations and low-income populations are higher than the statewide average, using the following data:

Characteristic	Analysis level	Geographic Level	Data Source	Statewide average
Minority Population	Individual	Census Block	2010 Census	21.1%
Low-Income	Household	Census Block Group	2016 American Community Survey	15%

The map on the following page identifies the EJ areas defined as having either a minority population or low-income households higher than the statewide average. These areas are mapped in relation to the FY 2020-2023 proposed TIP projects in order to provide a visual analysis of potential impact.



ANALYSIS AND RESULTS

The NATS area is predominately white in terms of race (88.1% with minorities representing 11.9 % of the population. Further, there are 3501 households below-poverty-level in the NATS area representing 15.9 percent of households.

For the EJ analysis, 15 road and non-motorized projects were evaluated (MDOT & Local); this excludes transit, region wide safety, and pavement marking projects. Of these projects, 13 are with ¼ mile of an identified EJ area. All of these projects are reconstruction, rehabilitation, maintenance, or non-motorized improvements. These preservation projects will not cause any health or environmental impacts to the surrounding area. Therefore, **we can conclude that no EJ populations will be harmed by any projects in this TIP.**



The other component of Environmental Justice is to ensure a fair distribution of projects so that EJ populations are not being denied the benefits that non-EJ populations receive. To do this SWMPC staff compared the total population to the population living in an impact area, defined as ¼ mile around a project. The following table shows the summary of the minority populations and households below poverty in the NATS Area. It also shows the populations of each group located within the impact area of a project. To estimate the population within an impact area the ratio of impact area to total block/block group area was used. If a project's impact area covered half a block group, then 50% of that block group's population is counted as being within an impact area.

The percent of impact area population shows each group as a percent of the entire population that lives within an impact area. For example, there are an estimated 11,655 people living in within ¼ mile of a project. Out of these 9,416 or 80.7% are white. Another way to visualize this is using the percent of the total NATS population living within an impact area. For example of the 49,312 total white population in the NATS area, 9,416 or 19.1% live within an impact area.

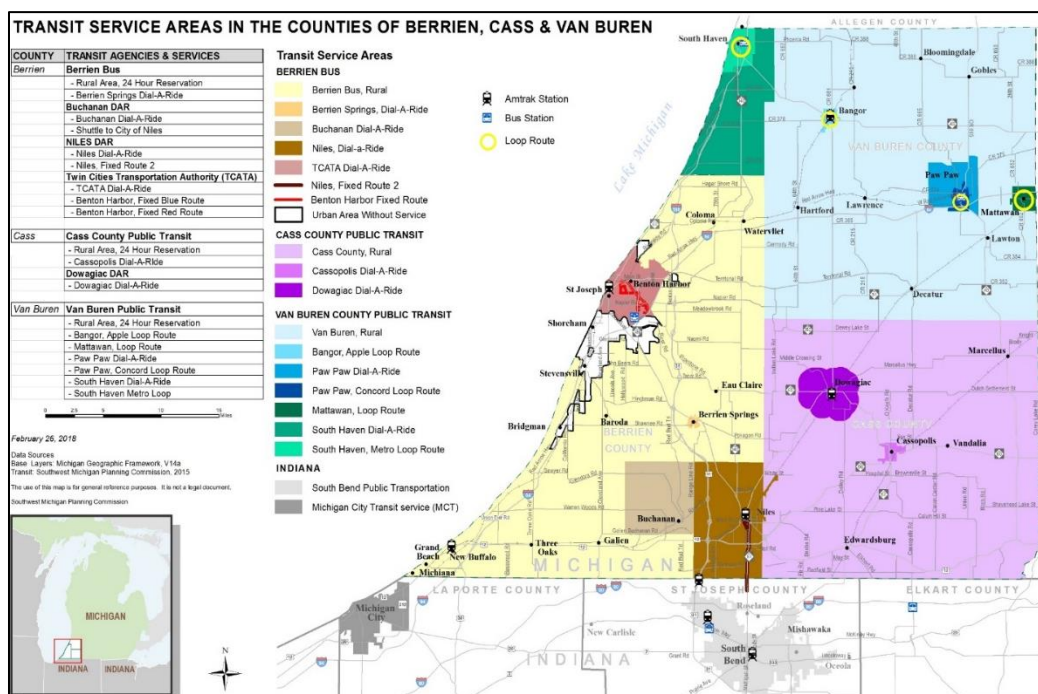
	NATS Population	NATS Percent	Estimated Population within Impact Area	Percent of Impact Area Population	Percent of NATS Total Population within Impact Area
Total Population	55,979	100%	11,665	100%	20.8%
White	49312	88.1%	9,416	80.7%	19.1%
Hispanic	1971	3.5%	718	6.2%	36.4%
African American	2699	4.8%	1,045	9.0%	38.7%
American Indian	333	0.6%	76	0.7%	22.8%
Asian	289	0.5%	62	0.5%	21.5%
Hawaiian	16	0.0%	2	0.0%	12.5%
Other Minority	43	0.1%	10	0.1%	24.3%
Two Or More Races	1316	2.4%	336	2.9%	25.5%
Total Minority	6,667	11.9%	2,249	19.3%	33.7%

	NATS Households	NATS Percent	Estimated Households within Impact Area	Percent of Impact Area Households	Percent of NATS Total Households within Impact Area
Total Households	22052	100%	4,207	100%	19.1%
Households in Poverty	3501	15.9%	876	20.8%	25.0%

For each minority group, the percentage within the impact area is either close to equal or higher than the percentage in the NATS area as a whole. The same is true for low-income population. The 20.8% of low-income (below-poverty-level) households that are within the impact area is slightly higher than the overall percentage of low-income households in the NATS area as a whole (15.9%). Similarly, the percent of minorities and low-income residents living within an impact area shows that higher percentages of minority groups and low-income population are represented within impact areas. (i.e. minorities and low income residents are slightly more likely to live near a project than the white or non low-income population). Accordingly, it is concluded that transportation system investments in this TIP are not avoiding the minority or low-income populations. Thus, we can state that the 2020-2023 TIP **projects do not disproportionately burden nor fail to meet the needs of any segment of the population.**

In addition to the road projects, NATS tries to ensure that all residents are benefiting from federal transportation investments even if they do not drive. The TIP contains many projects for transit to operate the system and maintain a state of good repair. NATS is served by four transit agencies. The City of Niles, and the urban portions of Niles township and Bertrand Township are served by the Niles Dial A Ride , while the City of Buchanan & Buchanan Township are served by Buchanan Dial A Ride. The remaining areas are served by rural transit providers that include Berrien Bus or the Cass County Transit Authority

Concerns over the need to improve transit service throughout Berrien County, led to the *Connect Berrien, Transit Service Integration Plan*. The plan was completed in 2018, and efforts are currently underway to implement this plan.



AIR QUALITY CONFORMITY

OVERVIEW

The Clean Air Act (CAA), enacted in 1970, was established to improve the air, protect public health, and protect the environment. The CAA has been amended over the years, with the significant rules governing transportation conformity added in 1990. The act requires the U.S. Environmental Protection Agency (EPA) to set, review, and revise the National Ambient Air Quality Standards (NAAQS) periodically. There are six NAAQS pollutants: ozone (O₃), nitrogen dioxide (NO₂), carbon monoxide (CO), lead (Pb), sulfur dioxide (SO₂), particulate matter (PM). PM is subdivided into particulate sizes, less than 10 micrometer in diameter (PM₁₀) and less than 2.5 micrometer in diameter (PM_{2.5}).



Transportation conformity ensures that federal funding and approval only goes to those transportation activities that are consistent with air quality goals. Transportation officials must be involved in the air quality planning process to ensure that emissions inventories, emissions budgets, and transportation control measures (TCMs) are appropriate and consistent with the transportation vision of a region. If transportation conformity cannot be determined, projects and programs cannot be approved.

Transportation activities that are subject to conformity include all projects listed in the Long range Plan or TIP that receive FHWA or FTA funding or approval. Any project, regardless of the funding source is defined as regionally significant also must meet conformity. The conformity process ensures emissions from the, Long range Plan, TIP, or projects, are within acceptable levels specified within the State Implementation Plans(SIP)and meet the goals of the SIP. Transportation conformity only applies to on-road sources and the following transportation related pollutants:

- Ozone
- Particulate matter at 2.5 and 10
- Nitrogen dioxide
- Carbon monoxide

Generators of air pollution are classified into four main types: Stationary Sources, Area Sources, Non-Road Mobile Sources, and On-Road Mobile Sources.

Air Pollution Sources

		
Stationary Sources <ul style="list-style-type: none"> Industrial, refineries, and electric utilities 	Area Sources <ul style="list-style-type: none"> Dry cleaners, paints, and solvents 	Non-Road Sources <ul style="list-style-type: none"> Boats, aircraft, trains, and construction equipment
		
On-Road Mobile Sources <ul style="list-style-type: none"> Commuter rail and vehicles expected to be on roadways such as cars, trucks, and buses 		

In addition to emissions that are directly emitted, regulations require certain precursor pollutants to be addressed. Precursor pollutants are those pollutants that contribute to the formation of other pollutants. For example, ozone is not directly emitted, but created when nitrogen oxides (NO_x) and volatile organic compounds (VOC) react with sunlight. Shown below are the transportation pollutants and associated precursors that can be directly emitted or formed due to precursors. Not all precursors are required to be analyzed for a pollutant; it depends on what is causing the pollutant to form in an area.

Pollutant	Direct Emission	Precursor Emissions			
		NO _x	VOC	Ammonia	SO ₂
Ozone		X	X		
Particulate Matter 2.5	X	X	X		
Particulate Matter 10	X	X	X	X	X
Nitrogen Dioxide		X			
Carbon Monoxide	X				

ANALYTICAL PROCESS

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) uses monitors throughout the state to measure pollutant levels and then determine if concentrations exceed the NAAQS. For each pollutant, an area is classified as either: attainment (under the standard), nonattainment (area has more pollutant than allowed), unclassifiable/attainment (insufficient information to support an attainment or nonattainment classification.) The conformity requirements are the same as for an attainment area, or maintenance (an area was nonattainment, but is now under the standard and has been for a determined time). Transportation conformity is required for areas designated nonattainment or maintenance. In 2018, Berrien County was classified as nonattainment for Ozone under the EPA's 2015 ozone standard. Cass County was classified as Attainment for the 2015 ozone standard, but still in maintenance for the 1997 ozone standard.

Because NATS is partially within Berrien County, NATS projects are a part of the conformity analysis Berrien County Air Quality Conformity Analysis. In addition, Due to the Court case, *South Coast v. EPA*, all areas in maintenance for the 1997 standard are also required to do air quality conformity.

FINDINGS

An air conformity analysis for Berrien County was conducted by MDOT using the travel demand model developed for the TwinCATS 2045 Long Range Plan, while the Cass conformity used the model from the NATS 2045 LRP. MDOT then ran the Environmental Protection Agency's Motor Vehicle Emission Simulator (MOVES) on the travel demand outputs. The findings concluded that both Berrien and Cass County are below their SIP budgets and are expected to remain below their budgets through 2045. The findings for Berrien County nonattainment area are contained in the *Air Quality Conformity Analysis For the Berrien County, MI Nonattainment Area*, published on January 14, 2019. The Finding for the Cass County maintenance area are contained *Air Quality Conformity Analysis For the Cass County, MI Nonattainment Area*, published on May 20, 2019. Both documents can be found at https://www.swmpc.org/air_quality.asp

Every time a Long Range Plan, TIP, or new Project is added or amended an interagency working group (IAWG) must determine if a new conformity analysis is required. On March 27, 2019, the IAWG for Berrien and Cass County met to review the FY 2020-2023 TIP projects for air quality conformity. Only projects that change capacity have the potential to increase or decrease emissions. Reconstruction and rehabilitation projects are therefore classified as exempt for air quality analysis. The NATS TIP does not contain any capacity altering projects which would change the existing conformity analysis. Therefore, the IAWG upheld the finding of the current Air Quality Analysis and a determined that a new analysis is not required for this TIP. The summary of the March 27, 2019 IAWG meeting can be found in appendix I.

PUBLIC PARTICIPATION

In addition to the input from NATS Technical and Policy Committee the Southwest Michigan Planning Commission (SWMPC) meets the federal transportation legislation of MAP 21 (Moving Ahead for Progress in the 21st Century) and the FAST (Fixing America's Surface transportation Act by explicitly setting forth a Public Participation Plan (PPP) that includes elements in the transportation planning process. The SWMPC values public participation because the transportation system is significant to everyone and has far-reaching, long-term impacts in communities and the region as a whole. The most recent PPP was adopted by NATS on June 19, 2017 and the SWMPC Board on July 18, 2017

The PPP is a comprehensive guidance document, which in its implementation ensures that public participation will always be a major component of the SWMPC planning process. The document is available to the public through the SWMPC website where it may be viewed and downloaded, and upon request at the SWMPC office. Opportunity for public participation in the development of the 2020-2023 TIP was in accordance with the SWMPC Public participation Plan.

ENGAGING THE PUBLIC

This section is currently under development to reflect the most recent public participation and outreach efforts for the 2020-2023 TIP. A brief overview of activities is below. Supporting documents and public comments can be found in Appendix J.

- Developed new webpage for 2020-2023 TIP with news and announcements to feature efforts such as:
 - Call for projects
 - Project selection criteria
 - Evaluation of each project and score
 - Proposed and selected projects
 - Air quality conformity
 - Opportunity for public comment
- Interactive maps featuring proposed and selected projects.
- Press Releases- Print News articles/Radio interviews
- Emails to interested parties
- Legal Notices in newspaper
- 3 public meetings

Our promise to the public:

- Keep the public informed about our activities
- Allow everyone to have meaningful input in the planning process
- Respect all people and all ideas
- Seek out feedback on our actives so we can continuously improve our processes
- Make special efforts to involve persons and groups typically under-represented in planning or with special needs, including low-income, minority, elderly, and disabled populations
- Make providing feedback simple and easy
- Make all efforts for our plans to reflect the feedback from the public
- Treat the public as an equal partner in our process
- Continuously update our public participation methods based on public feedback and effectiveness

APPENDIX

APPENDIX A | GLOSSARY OF TERMS

Administrative Modification: A minor revision to a long-range statewide or metropolitan transportation plan, transportation improvement program (TIP), or statewide transportation improvement program (STIP) that includes minor changes to project/project phase costs, minor changes to funding sources of previously included projects, and minor changes to project/project phase initiation dates. An administrative modification is a revision that does not require public review and comment, re-demonstration of fiscal constraint, or a conformity determination (in nonattainment and maintenance areas).

Amendment: A revision to a long-range statewide or metropolitan transportation plan, TIP, or STIP that involves a major change to a project included in a metropolitan transportation plan, TIP, or STIP, including the addition or deletion of a project or a major change in project cost, project/project phase initiation dates, or a major change in design concept or design scope (e.g., changing project termini or the number of through traffic lanes). Changes to projects that are included only for illustrative purposes do not require an amendment. An amendment is a revision that requires public review and comment, re-demonstration of fiscal constraint, or a conformity determination (for metropolitan transportation plans and TIPs involving "non-exempt" projects in nonattainment and maintenance areas). In the context of a long-range statewide transportation plan, an amendment is a revision approved by the State in accordance with its public involvement process. [23 CFR 450.104.]

Annual Listing of Obligated Projects: A required listing of all projects and strategies listed in the transportation improvement program (TIP) for which Federal funds were obligated during the immediately preceding program year.

Attainment Area: Any geographic area in which levels of a given criteria air pollutant (e.g., ozone, carbon monoxide, PM₁₀, PM_{2.5}, and nitrogen dioxide) meet the health-based National Ambient Air Quality Standards (NAAQS) for that pollutant.

Conformity: A Clean Air Act (42 U.S.C. 7506(c)) requirement that ensures that Federal funding and approval are given to transportation plans, programs and projects that are consistent with the air quality goals established by a State Implementation Plan (SIP).

Consultation: One or more parties confer with other identified parties in accordance with an established process and, prior to taking action(s), consider the views of the other parties and periodically inform them about action(s) taken.

Coordinated Public Transit-Human Services Transportation Plan: Locally developed, coordinated transportation plan that identifies the transportation needs of individuals with disabilities, older adults, and people with low incomes, provides strategies for meeting those local needs, and prioritizes transportation services for funding and implementation.

Financially Constrained or Fiscal Constraint: The metropolitan transportation plan, TIP, and STIP includes sufficient financial information for demonstrating that projects in the metropolitan transportation plan, TIP, and STIP can be implemented using committed, available, or reasonably available revenue sources, with reasonable assurance that the federally supported transportation system is being adequately operated and maintained. For the TIP and the STIP, financial constraint/fiscal constraint applies to each program year. Additionally, projects in air quality nonattainment and maintenance areas can be included in the first two years of the TIP and STIP only if funds are "available" or "committed."

Highway Performance Monitoring System (HPMS) data is used for assessing highway system performance under the U.S. DOT and FHWA's strategic planning and performance reporting process in accordance with requirements of the Government Performance and Results Act. The HPMS includes inventory information for all of the Nation's public roads as certified by the States' Governors annually. All roads open to public travel are reported in HPMS regardless of ownership, including Federal, State, county, city, and privately owned roads such as toll facilities.

Long-Range Transportation Plan (LRTP): A document resulting from regional or statewide collaboration and consensus on a region or state's transportation system and serving as the defining vision for the region's or state's transportation systems and services. Also known as a Metropolitan Transportation Plan.

Maintenance: In general, the preservation (scheduled and corrective) of infrastructure. The preservation of the entire highway/transit line, including surface, shoulders, roadsides, structures, and such traffic-control devices as are necessary for safe and efficient utilization of the highway/transit line.

Maintenance Area: Any geographic region of the United States that the EPA previously designated as a nonattainment area for one or more pollutants pursuant to the Clean Air Act Amendments of 1990, and subsequently redesignated as an attainment area subject to the requirement to develop a maintenance plan under section 175A of the Clean Air Act, as amended.

Management and Operations (M&O): See transportation systems management and operations.

Management System: A systematic process, designed to assist decision makers in selecting cost effective strategies/actions to improve the efficiency or safety of, and protect the investment in the nation's infrastructure.

Metropolitan Planning Area: The geographic area in which the metropolitan transportation planning process required by 23 U.S.C. 134 and Section 8 of the Federal Transit Act (49 U.S.C. app. 1607) must be carried out.

Metropolitan Planning Organization (MPO): The policy board of an organization created and designated to carry out the metropolitan transportation planning process.

Metropolitan Transportation Plan (MTP): The official multimodal transportation plan addressing no less than a 20-year planning horizon that is developed, adopted, and updated by the MPO through the metropolitan transportation planning process.

Multimodal: The availability of transportation options using different modes within a system or corridor.

Nonattainment Area: Any geographic region of the United States that has been designated by the EPA as a nonattainment area under Section 107 of the Clean Air Act for any pollutants for which a National Ambient Air Quality Standard exists.

Obligated Projects: Strategies and projects funded under title 23 U.S.C. and title 49 U.S.C. Chapter 53 for which the supporting Federal funds were authorized and committed by the State or designated recipient in the preceding program year and authorized by FHWA or awarded as a grant by the FTA.

Operational and Management Strategies: Actions and strategies aimed at improving the performance of existing and planned transportation facilities to relieve congestion and maximizing the safety and mobility of people and goods.

Operations and Maintenance (O&M): The range of activities and services provided by a transportation agency and the upkeep and preservation of the existing system. Specifically, operations include the range of activities/services provided by transportation system agencies or operators (routine traffic and transit operations,

response to incidents/accidents, special events management, work zone traffic management, etc; see "Operations"). Maintenance relates to the upkeep and preservation of the existing system (road, rail and signal repair, right-of-way upkeep, etc; see "Maintenance").

Participation Plan: MPOs must develop and utilize a "Participation Plan" that provides reasonable opportunities for interested parties to comment on the content of the metropolitan transportation plan and metropolitan TIP. This "Participation Plan" must be developed "in consultation with all interested parties."

Performance Measurement: A process of assessing progress toward achieving predetermined goals. Performance measurement is a process of assessing progress toward achieving predetermined goals, including information on the efficiency with which resources are transformed into goods and services, the quality of those outputs (how well they are delivered to clients and the extent to which clients are satisfied) and outcomes (the results of a program activity compared to its intended purpose), and the effectiveness of government operations in terms of their specific contribution to program objectives.

Performance Measures: Indicators of transportation system outcomes with regard to such things as average speed, reliability of travel, and accident rates.

Planning Factors: A set of broad objectives defined in Federal legislation to be considered in both the metropolitan and statewide planning process.

Planning for Operations: Coordination of activities among transportation planners and managers with responsibility for day-to-day transportation operations.

Programming: Prioritizing proposed projects and matching those projects with available funds to accomplish agreed upon, stated needs.

Project Selection: The procedures followed by MPOs, States, and public transportation operators to advance projects from the first four years of an approved TIP and/or STIP to implementation, in accordance with agreed upon procedures.

Region- A metropolitan or other multi-jurisdictional area.

Regional Planning Organization (RPO): An organization that performs planning for multi-jurisdictional areas. MPOs, regional councils, economic development associations, rural transportation associations are examples of RPOs.

Regionally Significant Project: A transportation project (other than an exempt project) that is on a facility which serves regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc., or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area's transportation network, including at a minimum all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional highway travel.

Revision: A change to a long-range statewide or metropolitan transportation plan, TIP or STIP that occurs between scheduled periodic updates.

Stakeholder: Person or group affected by a transportation plan, program or project. Person or group believing that they are affected by a transportation plan, program or project. Residents of affected geographical areas.

Strategic Highway Safety Plan (SHSP): A statewide-coordinated safety plan that provides a comprehensive framework, and specific goals and objectives, for reducing highway fatalities and serious injuries on all public roads. OR A plan developed by the State DOT in accordance with U.S.C. 148(a)(6).

Transportation Improvement Program (TIP): A prioritized listing/program of transportation projects covering a period of four years that is developed and formally adopted by an MPO as part of the metropolitan transportation planning process. Must be consistent with the metropolitan transportation plan; required for projects to be eligible for funding under title 23 U.S.C. and title 49 U.S.C. Chapter 53.

Trunkline: The official term for Michigan's state owned roads, which are maintained by MDOT. Includes all Interstate Highways, divided highways/freeways, "US-" routes, and all "M-" routes.

Transportation Planning: A continuing, comprehensive, and cooperative process to encourage and promote the development of a multimodal transportation system to ensure safe and efficient movement of people and goods while balancing environmental and community needs. Statewide and metropolitan transportation planning processes are governed by Federal law and applicable state and local laws. [Based on language found in 23 U.S.C. Sections 134 and 135.]

APPENDIX B | NATS POLICY & TECHNICAL ADVISORY COMMITTEE

Policy Committee		
Member		Representative
Jurisdictions		
Bertrand Township		Gordon (Butch) Payton
Buchanan Township		Lynn Ferris
City of Buchanan		Don Ryman
City of Niles (1 of 3)		Serita Mason
City of Niles (2 of 3)		Georgia Boggs
City of Niles (3 of 3)		Mary McAfee
Howard Township (1 of 2)		Bill Kazprzak
Mason Township		Doug fetters
Milton Township		Susan Flowers
Niles Charter Township		Richard Cooper
Ontwa Township		Dawn Bolock
Village of Edwardsburg		Dennis Peak
County		
Berrien County Board of Commissioners (1 of 2)		Michael J. Majerek
Berrien County Board of Commissioners (2 of 2)		Jim Curran
Berrien County Planning Commission		Eric Lester M.D.
Cass County Board of Commissioners (1 of 2)		Roseann Marchetti
Cass County Board of Commissioners (2 of 2)		
Cass County Road Commission		Sandra Seanor
Transit		
Buchanan Dial-A-Ride		Kim O'Haver
Niles Dial-A-Ride		Kelly Getman-Dissette
Agencies		
Federal Highway Administration*		Andrea Dewey
Federal Transit Administration*		Susan Webber
MDOT, Bureau of Transportation Planning		Jim Sturdevant
MDOT, Coloma Transportation Service Center		Jonathan Smith
MDOT, Southwest Region		Brian Sanada
Michiana Area Council of Governments*		Vacant
Pokagon Band of Potawatomi Indians		Vacant
Southwest Michigan Planning Commission*		John Egelhaaf

*Ex-officio (nonvoting member). **Alternate

Technical Advisory Committee

Policy Committee

Member	Representative
Jurisdictions	
Bertrand Township	Gordon (Butch) Payton
Buchanan Township	Lynn Ferris
City of Buchanan	Don Ryman
City of Niles (1 of 3)	Serita Mason
City of Niles (2 of 3)	Georgia Boggs
City of Niles (3 of 3)	Joe Ray Vice Chair
Howard Township (1 of 2)	Bill Kazprzak
Mason Township	Doug feters
Milton Township	Susan Flowers
Niles Charter Township	Richard Cooper
Ontwa Township	Dawn Bolock
Village of Edwardsburg	Dennis Peak
County	
Berrien County Community Development Department	Evan Smith
Berrien County Road Commission Engineer-Manager	Kevin Stack
Cass County Planning Commission	Vacant
Cass County Road Commission Engineer-Manager	Joseph Bellina Chair
Transit	
Buchanan Dial-A-Ride	Kim O'Haver
Niles Dial-A-Ride	Kelly Getman-Dissette
Agencies	
Federal Highway Administration*	Andrea Dewey
Federal Transit Administration*	Susan Webber
Kinexus	Vacant
MDOT, Bureau of Transportation Planning	Jim Sturdevant
MDOT, Coloma Transportation Service Center	Jonathan Smith
MDOT, Southwest Region	Brian Sanada
MDEQ, Air Quality*	Vacant
MDOT Modeling (Urban Travel Analysis)*	Jon Roberts
MDOT Office of Passenger Transportation*	Fred Featherly
Michiana Area Council of Governments*	Vacant
Pokagon Band of Potawatomi Indians	Vacant
Southwest Michigan Planning Commission*	John Egelhaaf

*Ex-officio (nonvoting member). **Alternate

APPENDIX C | MPO SELF CERTIFICATION

RESOLUTION 2019 - 6 METROPOLITAN TRANSPORTATION PLANNING PROCESS CERTIFICATION (for Nonattainment and Maintenance Areas)

In accordance with 23 CFR 450.334, the Michigan Department of Transportation, the Niles-Buchanan-Cass Area Transportation Study (NATS), and the Southwest Michigan Planning Commission, the Metropolitan Planning Organization for South Bend, IN - MI urbanized area, Michigan urbanized area, hereby certify, as part of the STIP submittal, that the transportation planning process is addressing the major issues in the metropolitan planning area and is being conducted in accordance with all applicable requirements of:

- I. 23 U.S.C. 134 and 135, 49 U.S.C. 5303 and 5304, and this part;
- II. Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1) and 49 CFR part 21;
- III. 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;
- IV. Section 1101(b) of the FAST Act (Pub. L. 114-357) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects;
- V. 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;
- VI. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) and 49 CFR parts 27, 37, and 38;
- VII. The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;
- VII. 23 U.S.C. 324, regarding the prohibition of discrimination based on gender; and
- IX. Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities.


K. John Egelhaaf, Executive Director
Southwest Michigan Planning Commission

June 18, 2019
Date


Todd White, Administrator
Bureau of Transportation Planning

9-3-19
Date

APPENDIX D | NATS AMENDMENT POLICY

Approved March 27, 2018

Purpose

This document provides guidance on the procedure to change projects in the Transportation Improvement Program (TIP). This includes how to determine if the process requires a federal amendment or if an administrative modification is sufficient.

Definitions (from CFR 450.104):

Federal Amendment, also referred to as a amendment, is any change to the TIP which requires Federal Highway Administration (FHWA) or Federal Transit Administration (FTA) approval. The amendment process requires public notice to allow for public review and comment in accordance with the SWMPC public participation plan. An amendment requires approvals from the NATS policy committee, MDOT, FHWA, and FTA. An amendment only applies to federally funded projects or projects that require air quality conformity (non-exempt).

Administrative Modification, also referred to as a modification, is any change to the TIP, which does not require federal approval. A modification does not require NATS committee approval or public notice..

Job Phase is any line in the TIP. A single project can be divided into multiple phases such as preliminary engineering (PE), right of way acquisition (ROW), or Construction (CON). Each phase must be listed in the TIP separately.

Illustrative List is a list of projects, which are not committed for funding in the TIP but have been added in case additional funding is available or another project in the TIP is removed. Changes to projects that are included only for illustrative purposes do not require an amendment. A project must still go through the federal amendment process to be moved from the illustrative list to the constrained project list.

Air Quality Conformity, also referred to as Conformity, is a requirement under the Clean Air Act (42 U.S.C. 7506(c) that federal funding and approval are given to transportation plans, programs and projects that are consistent with the air quality goals. The goal of transportation conformity is to ensure that a project will not cause or worsen air quality violations. This only applies to areas deemed to be in nonattainment or maintenance. Projects that change capacity on a road always require conformity determination. Typically, any project that does not change a road's capacity does not require conformity analysis and is referred to as exempt.

Regionally significant project means a transportation project (other than an exempt project) that is on a facility which serves regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc., or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area's transportation network, including at a minimum all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional highway travel.

Both Administrative Modifications and Federal Amendments must follow:

1. **The financial constraint requirements**, which means “A demonstration of sufficient funds (Federal, State, local, and private) to implement proposed transportation system improvements, as well as to operate and maintain the entire system, through the comparison of revenues and costs.”
2. **The current Long Range Transportation Plan**
3. **Title VI Nondiscrimination**, which means “ Title VI of the Civil Rights Act of 1964 (42 U.S.C. 200d), related statutes and regulations provide that no person shall on the ground of race, color, national origin, gender, or disabilities be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal funds. The Heart of Title VI "No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."
4. **The SWMPC Public Participation Plan**, which outlines strategies that staff will use to ensure the public has opportunity to have input. <http://www.swmpc.org/participation.asp>

Federal Amendment and Administrative Modification Decision Table

Type of Change	Federal Amendment	Administrative Modification
Adding or removing any project that affects air quality conformity or requires a conformity determination regardless of cost or funding source	x	
Adding or deleting a federally funded project or job phase to the TIP	x	
Moving a federally funded project from the illustrative list to the fiscally constrained list or vice versa	x	
Changing a non-federally funded project to a federally funded project	x	
Changing the cost of the total phase budget by more than 25%*	x	
Any change to any project that would affect capacity or air quality conformity	x	
A significant change to work type or project description	x	
Changing the limits by 1/2 mile or more	x	
Addition or removal of project items (sidewalk, bike lane, ADA enhancement, etc.) for 1/2 mile or more	x	
Adding or removing a project with no federal funding and not needing air quality conformity determination		x
Adding or deleting a project from the Illustrative List		x
Changing from one federal funding source to another federal source (except CMAQ) provided work type remains the same.		x
Moving fiscal years within the current TIP		x
Changing the cost of the total phase budget by less than 25%*		x
Adding or removing advance construct funding		x
Any change to a non-federally funded project so long as it doesn't affect capacity or air quality conformity		x
Technical corrections such as typos, misspellings, or other data entry errors		x

*Cost changes are cumulative based on the last federal approval. This means that a project cost may be increased multiple times administratively as long as the combined cost has not increased or decreased by more than 25%

This table may not cover all possible changes. For additional information please contact:

Brandon Kovnat, SWMPC associate planner

kovnatb@swmpc.org

(269) 925-1137 x 1524

Amendment Process:

The following steps must be taken for all proposed changes to the Transportation Improvement Program:

1. The requesting agency must submit a letter to SWMPC requesting an amendment to the Transportation Improvement Program (TIP). The Amendment letter must be sent at least 10 calendar days prior to the regularly scheduled NATS meeting to allow for public notice. Amendments cannot be accepted after the 10-day deadline.

The letter must contain the following:

- Agency's letterhead
- A date
- Information to identify the project: Project name, limits, fiscal year of award, and MDOT job number (NA for Transit).
- The proposed changes to the project along with the current values (e.g. for a cost change: increasing from x to y)
- A brief explanation why the amendment is being requested
- A signature from an authorized individual

Letters can be sent via email or mail (see the example letters on the following pages)

2. Staff will review the amendment according to the approved TIP Amendment Policy in order to determine if the change requires a federal amendment or can be made as an administrative modification. For administrative modifications, staff will submit the request to MDOT; an administrative modification does not require committee approval or FHWA & FTA review.
3. All amendment request letters will be included in the meeting packet for the regularly scheduled NATS committee meetings. The packets are sent to committee members five business days prior to the meeting, and posted on the SWMPC website.

The following Steps only apply to changes, which require a federal amendment:

4. The requesting agency is expected to present their amendment request to the committees at the meeting and answer any questions.
5. At the regularly scheduled NATS meeting, the Technical Advisory Committee will vote on whether they recommend that the policy committee approve the amendment. This will be followed by the Policy Committee voting on approval.

6. Once an amendment has been approved by NATS , staff will follow MDOT's process to submit the amendment to MDOT for approval. Staff will copy the requesting agency on the submittal and keep them informed about the status of the amendment.
7. MDOT reviews the amendment request to ensure it complies with all applicable regulations. These include air quality conformity, environmental justice implications proper public notice, and fiscal constraint.
8. Once approved by MDOT, FHWA and FTA each review the amendment. When FHWA and FTA approve the amendment, they will send a signed copy of the transmittal forms to MDOT & SWMPC.
9. Staff will notify the requesting agency as soon as the amendment has been approved.
10. Whenever amendments are approved, a revised TIP project list will be uploaded to the SWMPC website. Staff will inform the committees of any amendment approvals and changes to the TIP, including any administrative modifications, at NATS committee meetings.

Note on Administrative Modifications: An administrative modification is a type of change to the TIP, which does not require NATS committee approval, nor does it go through the federal review process. The process for an administrative modification is the same from steps 1 through 4. Because there is no need for committee approval or federal review the amendments can be programmed as soon as staff receives the amendment request letter. Staff will let the requesting agency as soon as the administrative modification has been made. Staff will let committee members know if any administrative modification have been made at regular NATS committee meetings.

APPENDIX E | PROJECT PRIORITIZATION PROCESS

Approved October 23, 2018

NATS Road Project Prioritization System for the 2020-2023 Transportation Improvement Program.

The following pages present a methodology to score projects submitted for consideration for NATS' allocation of Surface Transportation Program (STP) dollars for the 2020-2023 Transportation Improvement Program (TIP).

This project prioritization system serves as a guiding document in project selection, but project selection will be made only after debate in an open and public process. A project selection subcommittee will recommend projects to the Technical Advisory Committee, who will then recommend projects to the NATS Policy Committee. During the initial project selection process. The public will have an opportunity to inform project selection at each stage of the process. The ultimate authority for project selection still lies with the NATS Policy Committee.

Each of these scoring categories corresponds to the relevant section on the TIP Application.

System Preservation (21 points possible total)

a. PASER Rating (11 points possible)

11 points if the most recent PASER rating is 3-4

8 points if the most recent PASER rating is 5-6

5 points if the most recent PASER rating is 1-2

b. Extension of Remaining Service Life (RSL) per MDOT's "Guidelines for Geometrics on Local Agency Projects" (10 points possible)

10 points if the project extends RSL by 15 years or more (4R project)

6 points if the project extends RSL by 10-14 years (3R Project)

4 points if the project extends RSL by 5 – 9 years (Preventative Maintenance)

2 points if the project extends RSL by 2-4 years (Preventative Maintenance)

Safety (10 points total possible)

a. Expected Crash Reduction - Based on MDOT approved Crash Reduction Factors (7 points possible)

7 points for reduction of 50% or more

6 points for a reduction between 40% and 49.9%

5 points for a reduction between 30% and 39.9%

4 points for a reduction between 20% and 29.9%

2 point for a reduction between 10% and 19.9%

0 points for a reduction between of less than 10%

b. Addressing High Crash Location (3 points possible)

Based on the 5 yr. (2013-2017) total crashes per federal aid eligible road segment
3 points if the number of crashes is 25% higher than MPO median (4 crashes or more)
1 point if the number of crashes are within 25% of MPO median (2-3 crashes)
0 points if the number of crashes is lower than 25% of the MPO median (0-1 crashes)

Non-motorized Transportation (4 points possible total)

a. Pedestrian or Bike Facility (2 points possible)

2 points if the project provides a facility for pedestrians and/or bicyclists

b. Connectivity (2 point possible)

2 points if the pedestrian and bicycle elements of the project connect to existing bicycle and pedestrian facilities or those that can reasonably expect to be completed during 2020-2023.

Regional Connectivity (5 Points total possible)

a. Traffic Volume (5 points possible)

5 points if ADT is more than 10,000 vehicles per day

4 points if ADT is between 5,000 and 9,999 vehicles per day

3 points if ADT is between 2,000 and 4,999 vehicles per day

Strategic Planning & Investment (10 points possible)

a. Asset Management (3 points possible)

3 points if the project is identified in an approved asset management plan.

b. Local Planning Document (1 point possible)

1 point if project is identified in another local planning document such as a master plan or a parks and recreation plan.

c. Cross Jurisdictional Coordination (1 points possible)

1 point if the project crosses jurisdictional boundaries (i.e. city to township) and it is arranged in such a way to be bid as a single project.

d. Project Continuity (2 points possible)

2 points if project continues resurfacing, reconstruction or Preventative Maintenance on a segment of roadway adjacent to a resurfacing, reconstruction or preventative maintenance project done during the 2017-2020 TIP cycle or through Rural Task Force funding. For example: if Elkhart Road from May to the Village limits was resurfaced in 2015, a resurfacing project on Elkhart Road within the Village of Edwardsburg would count as an adjacent segment.

e. Additional Local Match (3 points total possible)

3 points if agency is willing to provide 40% or more of the total construction cost in local match.
2 point if agency is willing to provide 30% or more of the total construction cost in local match.
An 18.15% minimum local match is **required** to proceed.

f. Project Readiness (No Points)

If the project requires relocation of utilities, purchase of ROW, or railroad crossing permits, these items must be addressed in the project schedule.

g. Coordination with sewer and water projects (No Points)

Prioritization of fiscal year if the project is coordinated with a planned sewer and/or water improvement in your community

A grand total of 50 points are possible.

Additional Information and Rationale for Question in the 2020-2023 NATS TIP Application

Section 1: Applicant Information

This section provides basic applicant information and will not be scored in any way. As noted above the agency name must be the recipient of the funds. Any project within a township must have the Berrien County Road Department as the applicant.

Section 2: Project Information

This section ask about the basic project information. We are looking for just enough information to understand the major work items in the project.

A project already scheduled for 2020 in the 2017-2020 TIP will be allowed to proceed unless there are changes to the project scope that warrant reconsideration, or the project applicant has chosen not to reapply for funding.

There is an additional question regarding if the project was previously selected for the 2017-2020 TIP but has not been completed because it was canceled or failed to be obligated before the end of the fiscal year.

Section 3. Project Funding

This section asks about the cost of the project. It is understood that this will be an estimate until further design is conducted. Use an engineer's best estimate for this section.

A local match of to 18.15% of the total construction cost is REQUIRED. Projects that provide 30% or greater local match will be prioritized because they allow the NATS member agencies to spread the limited federal dollars across more projects.

Section 4: System Preservation

NATS recognizes that STBG funding is the largest funding source that NATS receives to do roadway improvement projects, and that the 2045 NATS Long Range Plan's goal of System Preservation has become increasingly important, as a backlog of maintenance needs has developed. Projects will be

prioritized based on the appropriate timing for preventative maintenance or reconstruction, based on PASER ratings and the extent to which the proposed treatments will extend the remaining service life (RSL) of the roadway.

The most current PASER data was taken in the summer of 2017. It is currently available from the TAMC website at: <https://www.mcgi.state.mi.us/tamcMap/>,

A Roadsoft export or a GIS shapefile of the PASER ratings is available upon request.

Information on the effectiveness of a project will be determined from [MDOT's Local Agency Programs Guidelines for Geometrics on Local Projects](#). This document describes preventative maintenance treatments and gives the expected increases in RSL. It also has guidelines about reconstruction and resurfacing of roads.

Section 5: Safety

This section asks about the safety improvements that the transportation project makes. Improving safety contributes to NATS Support of the statewide safety targets.

For this call for Projects, safety is being evaluated using Crash Reduction Factors (CRFs). Attached to the application is the list of potential safety counter measures MDOT developed for the Highway Safety Improvement Program (HSIP). Staff will review the crash types that occurred on the proposed road and calculate the expected reduction in crashes based on the countermeasures included in the project. This allows each project to be given a quantifiable value for how it will improve safety.

The crash question being asked are based on the federal safety performance measures. This data can be found at michigantrafficcrashfacts.org. Users can also access this data in the Roadsoft program.

Section 6: Non-Motorized

This section asks how the project will improve to walking or bicycling, which contributes to the goal of improving conditions for all users.

Projects will also be given extra weight if they connect to existing pedestrian and bicycle facilities, or facilitate safer connections to fixed route transit through biking, walking, or facilities for people with disabilities. If this is the case, please provide a map of the connecting facilities with the application.

Section 7. Regional connectivity

This section asks about how important the roadway is to regional travel. Points are awarded to roads with higher traffic volumes which indicates that more regional traffic uses the route.

Section 6: Strategic Planning & Investment

This section asks whether the project has documented local support, whether potential issues to delay a project have been considered such as railroad permitting, and whether the project is coordinated with other investments, other jurisdictions, and other planning processes.

Inclusion in an asset management plan is especially important because it shows how this project is part of the agencies overall strategy for road maintenance.

Project which continue a project from the [NATS 2017-2020 TIP](#) or an [RTF project](#) are awarded point because it means that you are creating a continuous route

The questions regarding utilities, water mains, and sewers are designed to ensure that agencies are considering the condition of their sewer, water, and utilities at the time of their road projects so that projects may be coordinated and infrastructure costs potentially saved.

Section 9: Existing and Proposed Roadway Design

This section asks about the existing and proposed roadway design. This helps to show exactly what non-motorized infrastructure the road contains and how the project may improve this. It also clearly identifies if the project will expand capacity.

Section 10: Estimated Project Schedule

This section asks for an estimate of the project schedule to ensure that applicant consider and budget for appropriate time to get the project obligated before the end of the fiscal year.

APPENDIX F | PROJECT SHEETS

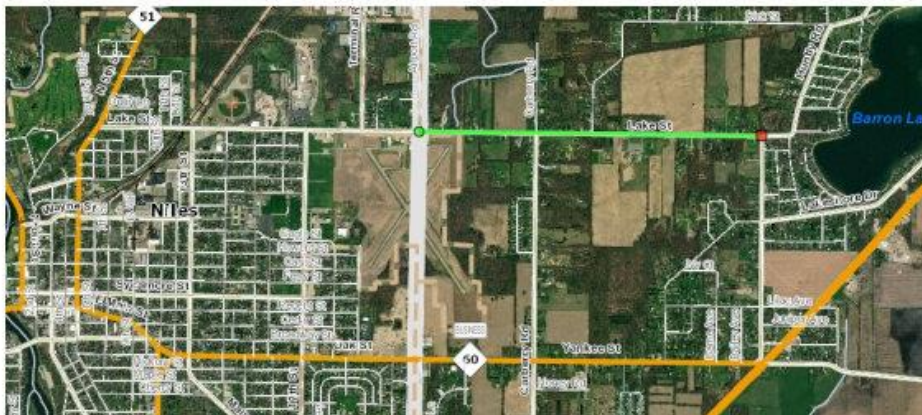
Projects begin on following page



Lake Street

2020

Job Number	130763
Project Limits:	Airport Road to Huntly Road
City/Township:	Howard Township
Responsible Agency:	Cass county Road Commission
Length:	1.51 miles
Primary Work Type:	Resurface
Work Description:	Mill and replace surface to travel lanes and paved shoulders and pavement markings.



COST

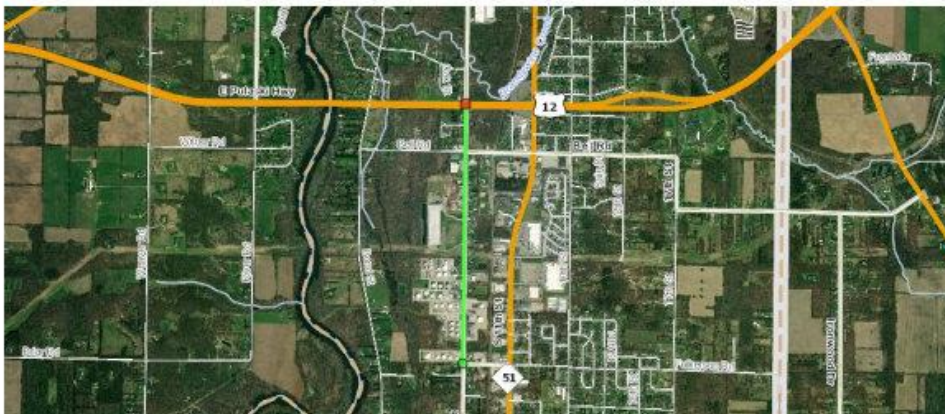
Federal Cost:	\$233,191
Local Match:	\$51,709
Total Cost:	\$284,900
Federal Fund Source:	Surface Transportation Block Grant — STU



Third Street

2020

Job Number	130769
Project Limits:	US 12 to Fulkerson Road
Qty/Township:	Niles Township
Responsible Agency:	Berrien County Road Department
Length:	1.23 Miles
Primary Work Type:	Resurface
Work Description:	Crush and Shape and Resurfacing of travel lanes, signage, and pavement markings.



COST

Federal Cost:	\$269,996
Local Match:	\$60,004
Total Cost:	\$330,000
Federal Fund Source:	Surface Transportation Block Grant — STU



Portage Road

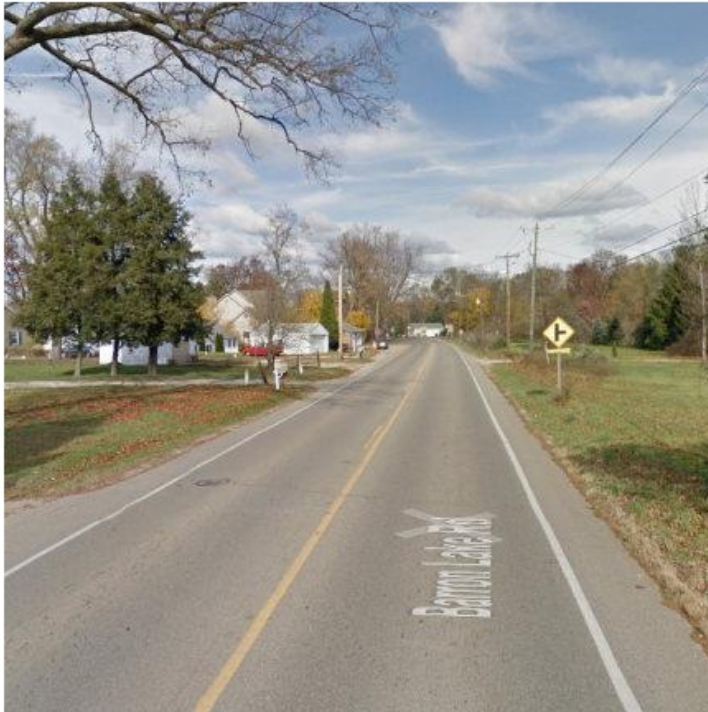
2021

Job Number	206326
Project Limits:	Briar Road to US - 12
City/Township:	Bertrand Township
Responsible Agency:	Berrien County Road Department
Length:	1.51 Miles
Primary Work Type:	Resurface
Work Description:	HMA overlay with 3 foot wide paved shoulders



COST

Federal Cost:	\$300,750
Local Match:	\$179,250
Total Cost:	\$480,000
Federal Fund Source:	Surface Transportation Block Grant — STU



Barron Lake Road

2021

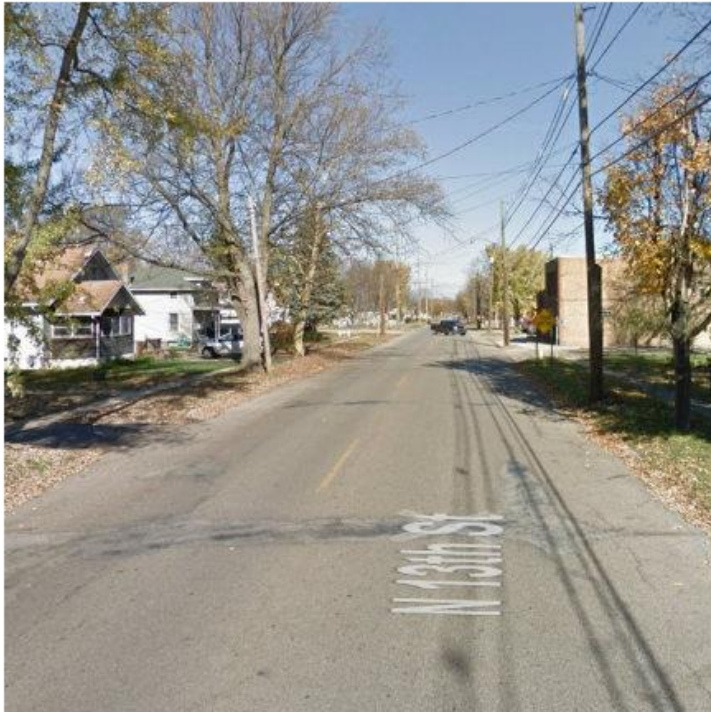
Job Number	206327
Project Limits:	M 60 to Cook Street
Qty/Township:	Niles Township
Responsible Agency:	Cass County Road Commission
Length:	2.63 Miles
Primary Work Type:	Resurface
Work Description:	Overlay of travel lanes and paved shoulder, signage, and pavement markings.



COST

Federal Cost:	\$279,250
Local Match:	\$120,000
Total Cost:	\$339,250

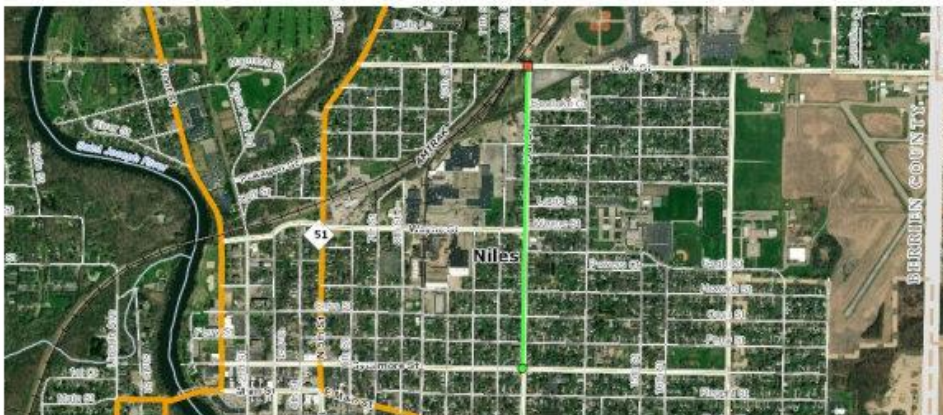
Federal Fund Source: Surface Transportation Block Grant — STU



13th Street

2022

Job Number	206392
Project Limits:	Sycamore St. to Lake St.
City/Township:	City of Niles
Responsible Agency:	City of Niles
Length:	0.75 Miles
Primary Work Type:	Resurface
Work Description:	Mill 2" and resurface with HMA. Update sidewalk ramps to meet ADA requirements



COST

Federal Cost:	\$357,381
Local Match:	\$79,248
Total Cost:	\$436,629
Federal Fund Source:	Surface Transportation Block Grant — STU



Mason Street

2022

Job Number	206393
Project Limits:	Calvin Center Rd. to Tharp Lake Rd.
Qty/Township:	Mason Township
Responsible Agency:	Cass County Road Commission
Length:	0.99 Miles
Primary Work Type:	Rehabilitation
Work Description:	Crush and Shape and Resurfacing of travel lanes, signage, and pavement markings.



COST

Federal Cost:	\$234,619
Local Match:	\$94,381
Total Cost:	\$329,000
Federal Fund Source:	Surface Transportation Block Grant — STU



Front Street

2023

Job Number	206394
Project Limits:	Red Bud Trail to Oak Street
City/Township:	City of Buchanan
Responsible Agency:	City of Buchanan
Length:	0.15 Miles
Primary Work Type:	Reconstruction
Work Description:	Full reconstruction of the roadway including curb and sidewalk upgrades to meet ADA standards.



COST

Federal Cost:	\$300,000
Local Match:	\$385,276
Total Cost:	\$685,276
Federal Fund Source:	Surface Transportation Block Grant — STU



Bertrand Road

2023

Job Number	206395
Project Limits:	M-51 East to County Line
City/Township:	Niles Township
Responsible Agency:	Berrien County Road Department
Length:	1.3 Miles
Primary Work Type:	Resurface
Work Description:	HMA overlay with 3 foot wide paved shoulders.



COST

Federal Cost:	\$304,000
Local Match:	\$336,000
Total Cost:	\$540,000
Federal Fund Source:	Surface Transportation Block Grant — STU

Illustrative List of Projects

City or Township	Project Name	Project Limits	Project Description
City of Buchanan	River Street Improvements	From the wastewater treatment plant driveway to the west side of the bridge over the St. Joseph River.	Mill 3 inches, drainage structure adjustments, drainage cover replacements, cold plastic overlays, and restoration.
City of Niles	Lake Street	North 5 th street o rail road viaduct	Mill 2 inches and replace with asphalt.
Ontwa Township	May Street	Conrad Road to Brizandine Road	Mill and replace surface to travel lanes and paved shoulders and pavement markings
Milton Township	Conrad Road	May Street to US-12	Mill and replace surface on the travel lanes and paved shoulders
Buchanan Township	Red Bud Trail	Miller Road to Hills Haven Road	HMA overlay with 3 foot wide paved shoulders
City of Buchanan	Red Bud Trail Reconstruction	Front Street to 4th Street	Full reconstruction of the roadway to allow replacement of the currently undersized and/or failing sanitary sewer, storm sewer, and watermain.

APPENDIX G | LIST OF AVAILABLE FEDERAL-AID HIGHWAY & TRANSIT RESOURCES

Highway Resources

Surface Transportation Program (STP): The purpose of this funding source is to maintain and improve the federal-aid highway system. Activities eligible for STP funding include construction, rehabilitation, or reconstruction of highways, bridges, and tunnels; transit capital projects; infrastructure-based intelligent transportation systems (ITS) capital improvements; border infrastructure; highway and transit safety projects; traffic monitoring, management, and control facilities; non-motorized projects (including projects eligible under the former Transportation Alternatives Program); and bridge scour countermeasures.

Local Bridge Program: A portion of the STP funding dedicated to local bridge projects is set aside for the funding of bridge projects. Eligible projects need to be classified as structurally deficient or functionally obsolete.

Highway Safety Improvement Program (HSIP): Utilized to decrease highway deaths and injuries. Activities eligible for HSIP funding include Intersection safety improvements; pavement and shoulder widening; rumble strips or other warning device; improvements for pedestrian or bicyclist safety or safety of persons with disabilities; Construction and improvement of a railway-highway grade crossing safety feature, including installation of protective devices; traffic calming features; elimination of a roadside hazard; and installation, replacement, and other improvement of highway signage and pavement markings, or a project to maintain minimum levels of retro-reflectivity, that addresses a highway safety problem consistent with a State strategic highway safety plan; roadside safety audits.

Congestion Mitigation and Air Quality Improvement Program (CMAQ): The intent of CMAQ funding is to reduce emissions from transportation sources. Activities eligible for funding include installing dedicated turn lanes; signal retiming, interconnection, or actuation; constructing roundabouts; diesel retrofits; projects to reduce single-occupant vehicle travel; new or reduced-headways transit routes.

National Highway Performance Program (NHPP): The purpose of this funding source is to maintain and improve the National Highway System (NHS) (i.e., the subset of the federal-aid highway system that includes roads classified as principal arterials or above). Eligible activities include construction, rehabilitation, or reconstruction of highways, bridges, and tunnels; transit capital projects on the NHS; infrastructure-based intelligent transportation systems (ITS) capital improvements on the NHS; highway and transit safety projects on the NHS; certain bicycle and non-motorized activities; and construction, rehabilitation, or reconstruction of highways, bridges, and tunnels on federal-aid highways not on the NHS, as long as they are within the same corridor as a segment of the NHS.

National Highway Freight Program: This program provides funding for infrastructure improvements that increase economic competitiveness and productivity; reduce congestion on the National Highway Freight Network; reduce shipping costs; and improve the safety, efficiency, and reliability of that network. Activities eligible for funding include construction, reconstruction, rehabilitation, real property and equipment acquisition, and operational improvements directly related to system performance; ITS improvements; rail/highway grade separation; geometric improvements to interchanges and ramps; truck-only lanes; climbing and runaway truck lanes; adding/widening shoulders; and truck parking facilities.

Transit Resources

Section 5304: State Planning and Research Program: Funds are available to carry out the state transportation planning and programming requirements of the joint FTA/FHWA planning regulations, as well as a range of activities under other eligible programs. These activities provide for the development and integrated management and operation of transportation systems and facilities that will function as an intermodal transportation system. This source of funding has been utilized for a two countywide public transit service planning studies.

Section 5307: Urbanized Area Formula Grants: Funding for transit capital needs and operations in small urbanized areas. Eligible activities include Capital projects, operating transit planning, and projects eligible under the former Job Access Reverse Commute (JARC) program (intended to link people without transportation to available jobs). One percent of funds received are to be used by the agency to improve security at agency facilities.

Section 5310: Elderly and Persons with Disabilities: The purpose of 5310 funding is to improve mobility options for seniors and disabled persons. Activities eligible include Projects to benefit seniors and disabled persons when service is unavailable or insufficient and transit access projects for disabled persons exceeding Americans with Disabilities Act (ADA) requirements. Section 5310 incorporates the former New Freedom program.

Section 5339: Bus and Bus Facilities: Provides funding for basic transit capital needs of transit agencies, including construction of bus-related facilities. Eligible activities include replace, rehabilitate, and purchase buses and related equipment, and construct bus-related facilities.

APPENDIX H | FINANCIAL - OPERATIONS/MAINTENANCE ASSUMPTIONS

Funding Growth Rates

Funding growth rates are not the same as the Year of Expenditure (i.e., inflation). Funding growth rates are the forecast of what is expected to be apportioned and/or allocated to the state and the MPOs. These funds are not indexed for inflation. Assumptions are made based on information known at a given point in time. What we know as we develop our current estimates is:

1. On December 4, 2015, the FAST Act was signed into law. The FAST Act authorizes \$305 billion in federal funding for the nation's surface transportation system over the next five years. The legislation breaks the cycle of short-term funding authorizations that have characterized the federal program for the past 10 years and, in covering nearly five full fiscal years, represents the longest surface transportation authorization bill enacted since 1998.
2. In the 10 years before the passage of the FAST Act, federal funding for Michigan's highways fluctuated. Apportioned program funding to Michigan first exceeded \$1 billion in 2004. In 2006, apportioned program funding to Michigan still barely exceeded \$1 billion. The FAST Act is expected to break this trend of level funding by providing a modest increase through 2020. These increases are assumed to continue through FY 2025. This plan assumes a 2 percent growth rate through this period.
3. Beginning in FY 2019, \$150 million will be appropriated from Michigan income tax revenue in to the MTF for distribution through the Act 51 formula for state funding. Income tax revenues will increase to \$600 million per fiscal year beginning in FY 2021. The forecasted tax revenue of \$600 million annually from FY 2022 to 2025 is included based on current state law, with the revenue distributed to road agencies under the current Act 51 formula.

Although the FAST Act has increased funding stability over the next five fiscal years, funding increases are modest at best. In keeping with the modest increases outlined in the FAST Act, MDOT is recommending two percent per year funding increases between FY 2020 and FY 2023.

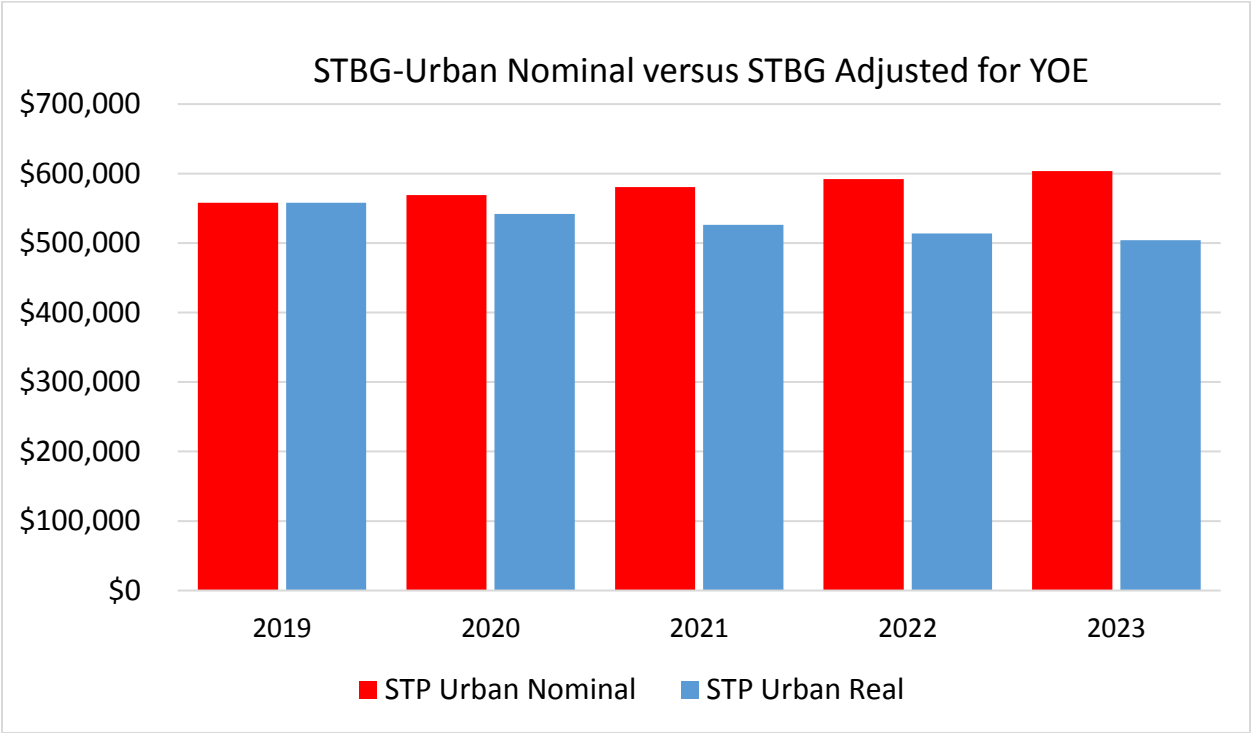
Year of Expenditure (YOE) Rates

The Year of Expenditure (YOE) rates represent the forecast of how much the cost of implementing transportation projects will increase each year, on average. In other words, YOE is the expected inflation rate in the transportation agencies' cost of doing business. YOE adjustments to project costs are essential to show the true relationship between costs and resources. In recent years, highway and transit agencies have been increasingly squeezed by this phenomenon, since the inflation rate on transportation costs has increased faster than funding growth rates. Thus, although the rate of nominal funding growth has hovered essentially around 2.47 percent, the inflation rate means that less work can be done per allocated dollar. When viewed from the point of view of purchasing power, the states and MPOs have experienced a sharp decline in funding resources.

Based on past experience, MDOT, in cooperation with MTPA, will use the following YOE factors:

- 1. 2019, base year;
- 2. 2020, 5 percent above 2019;
- 3. 2021, 5 percent above 2020;
- 4. 2022, 4.5 percent above 2021
- 5. 2023, 4 percent above 2022.

The table and charts below provide an example that illustrates the difference between what NATS will officially receive in STBG urban funding over the period of the 2020-2023 TIP (Nominal funding) and what that funding will be relative to purchasing power of the base year (real funding).



FY	STP Urban Nominal	STP Urban Real
2019	\$557,843	\$557,843
2020	\$569,000	\$541,905
2021	\$580,380	\$526,422
2022	\$591,988	\$513,828
2023	\$603,827	\$503,947

Estimate of Operations and Maintenance (O and M) Costs on the Federal-Aid Highway System

Repair and improvements to capital assets are only part of the total cost of the federal-aid highway system. Operations and maintenance (O and M), defined as those items (other than repair/replacement of capital assets) necessary to keep the highway infrastructure functional for vehicle travel, is just as important. Federal-aid funds cannot be used for O and M, which covers activities like grass cutting, trash removal, and snow removal. However, federal transportation planning regulations require an estimate of those costs on the federal-aid highway system.

The O and M estimate was derived in the following manner:

1. MDOT's estimate of total O and M funding available for the state trunkline system throughout Michigan is approximately \$710 million in FY 2019.
2. The total lane miles for the entire state trunkline system is determined and used as the denominator in the fraction $\$710 \text{ million} / 27,452 \text{ total state trunkline lane-miles}$ to determine a per-mile cost. Approximately 22.8 percent of the lane miles in the state trunkline system are located in Southeast Michigan.
3. Assuming a roughly equal per-lane-mile operations and maintenance cost throughout the state trunkline system, MDOT should spend approximately \$136.4 million annually in Southeast Michigan on these activities.
4. The per-lane-mile cost will also be applied to locally-owned roads on the federal-aid highway system.
5. The sum of costs from Steps 4 and 5 will constitute the required O and M estimate.
6. This base estimate is adjusted according to the inflation factors noted above in each fiscal year, since this is the *cost* of O and M, not a particular funding *source*.

FISCAL YEAR 2020 CONSTRAINT TABLE FROM JOBNET

Fund Source	Total Revenue	Federal Revenue	Federal Commitment	State Commitment	Local Commitment	Total Commitment
Fiscal Year - 2020						
Fiscal Year - 2020, Local MPO Based Constraint						
STP - Small MPO	\$13,258	\$13,258	\$28,081	\$0	\$0	\$28,081
STP - TMA	\$669,406	\$569,000	\$452,795	\$0	\$100,406	\$553,201
FY 2020, Local MPO Based Constraint Total	\$682,664	\$582,258	\$480,876	\$0	\$100,406	\$581,282
Fiscal Year - 2020, Local RTF Based Constraint						
STP - Rural/Flexible	\$155,250	\$115,200	\$115,200	\$0	\$40,050	\$155,250
FY 2020, Local RTF Based Constraint Total	\$155,250	\$115,200	\$115,200	\$0	\$40,050	\$155,250
Fiscal Year - 2020, Local Projects from Statewide Sources						
STP - Flexible (Bridge)	\$694,000	\$555,200	\$555,200	\$104,100	\$34,700	\$694,000
FY 2020, Local Projects from Statewide Sources Total	\$694,000	\$555,200	\$555,200	\$104,100	\$34,700	\$694,000
Fiscal Year - 2020, MDOT Project Templates						
Road - Capital Preventive Maintenance	\$882,805	\$722,723	\$722,723	\$160,082	\$0	\$882,805
Traffic & Safety	\$1,411,624	\$1,379,078	\$1,379,078	\$32,546	\$0	\$1,411,624
FY 2020, MDOT Project Templates Total	\$2,294,429	\$2,101,801	\$2,101,801	\$192,628	\$0	\$2,294,429
Fiscal Year - 2020, Transit Project Categories						
5307	\$580,815	\$252,420	\$252,420	\$194,335	\$134,060	\$580,815
5311	\$204,299	\$24,219	\$24,219	\$80,380	\$99,700	\$204,299
5339	\$76,000	\$60,800	\$60,800	\$15,200	\$0	\$76,000
FY 2020, Transit Project Categories Total	\$861,114	\$337,439	\$337,439	\$289,915	\$233,760	\$861,114
Fiscal Year - 2020 Grand Total	\$4,687,457	\$3,691,898	\$3,590,516	\$586,643	\$408,916	\$4,586,075

FISCAL YEAR 2021 CONSTRAINT TABLE FROM JOBNET

Fund Source	Total Revenue	Federal Revenue	Federal Commitment	State Commitment	Local Commitment	Total Commitment
Fiscal Year - 2021						
Fiscal Year - 2021, Local MPO Based Constraint						
STP - TMA	\$879,250	\$580,000	\$580,000	\$0	\$299,250	\$879,250
FY 2021, Local MPO Based Constraint Total	\$879,250	\$580,000	\$580,000	\$0	\$299,250	\$879,250
Fiscal Year - 2021, Local Projects from Statewide Sources						
STP - Flexible (Bridge)	\$913,000	\$456,500	\$456,500	\$0	\$456,500	\$913,000
FY 2021, Local Projects from Statewide Sources Total	\$913,000	\$456,500	\$456,500	\$0	\$456,500	\$913,000
Fiscal Year - 2021, MDOT Project Templates						
Traffic & Safety	\$802,882	\$722,594	\$722,594	\$80,288	\$0	\$802,882
FY 2021, MDOT Project Templates Total	\$802,882	\$722,594	\$722,594	\$80,288	\$0	\$802,882
Fiscal Year - 2021, Transit Project Categories						
5307	\$580,815	\$252,420	\$252,420	\$194,335	\$134,060	\$580,815
5311	\$218,424	\$27,595	\$27,595	\$90,829	\$100,000	\$218,424
5339	\$62,500	\$50,000	\$50,000	\$12,500	\$0	\$62,500
FY 2021, Transit Project Categories Total	\$861,739	\$330,015	\$330,015	\$297,664	\$234,060	\$861,739
Fiscal Year - 2021 Grand Total	\$3,456,871	\$2,089,109	\$2,089,109	\$377,952	\$989,810	\$3,456,871

FISCAL YEAR 2022 CONSTRAINT TABLE FROM JOBNET

Fund Source	Total Revenue	Federal Revenue	Federal Commitment	State Commitment	Local Commitment	Total Commitment
Fiscal Year - 2022						
Fiscal Year - 2022, Local MPO Based Constraint						
STP - TMA	\$765,629	\$592,000	\$592,000	\$0	\$173,629	\$765,629
FY 2022, Local MPO Based Constraint Total	\$765,629	\$592,000	\$592,000	\$0	\$173,629	\$765,629
Fiscal Year - 2022, Local RTF Based Constraint						
STP - Rural/Flexible	\$383,000	\$185,000	\$185,000	\$0	\$198,000	\$383,000
TEDF Category D	\$87,000	\$0	\$0	\$87,000	\$0	\$87,000
FY 2022, Local RTF Based Constraint Total	\$470,000	\$185,000	\$185,000	\$87,000	\$198,000	\$470,000
Fiscal Year - 2022, MDOT Project Templates						
Traffic & Safety	\$525,753	\$473,178	\$473,178	\$52,575	\$0	\$525,753
FY 2022, MDOT Project Templates Total	\$525,753	\$473,178	\$473,178	\$52,575	\$0	\$525,753
Fiscal Year - 2022, Transit Project Categories						
5307	\$580,815	\$252,420	\$252,420	\$194,335	\$134,060	\$580,815
5311	\$232,726	\$30,806	\$30,806	\$100,820	\$101,100	\$232,726
5339	\$372,600	\$298,080	\$298,080	\$74,520	\$0	\$372,600
FY 2022, Transit Project Categories Total	\$1,186,141	\$581,306	\$581,306	\$369,675	\$235,160	\$1,186,141
Fiscal Year - 2022 Grand Total	\$2,947,523	\$1,831,484	\$1,831,484	\$509,250	\$606,789	\$2,947,523

FISCAL YEAR 2023 CONSTRAINT TABLE FROM JOBNET

Fund Source	Total Revenue	Federal Revenue	Federal Commitment	State Commitment	Local Commitment	Total Commitment
Fiscal Year - 2023						
Fiscal Year - 2023, Local MPO Based Constraint						
CMAQ	\$369,189	\$287,341	\$287,341	\$0	\$81,848	\$369,189
STP - TMA	\$1,100,747	\$604,000	\$604,000	\$0	\$496,747	\$1,100,747
FY 2023, Local MPO Based Constraint Total	\$1,469,936	\$891,341	\$891,341	\$0	\$578,595	\$1,469,936
Fiscal Year - 2023, Local RTF Based Constraint						
STP - Rural/Flexible	\$223,200	\$198,400	\$198,400	\$0	\$24,800	\$223,200
TEDF Category D	\$24,800	\$0	\$0	\$24,800	\$0	\$24,800
FY 2023, Local RTF Based Constraint Total	\$248,000	\$198,400	\$198,400	\$24,800	\$24,800	\$248,000
Fiscal Year - 2023, MDOT Project Templates						
Road - Rehabilitation and Reconstruction	\$41,650,000	\$34,114,000	\$34,114,000	\$7,536,000	\$0	\$41,650,000
Traffic & Safety	\$386,382	\$347,744	\$347,744	\$38,638	\$0	\$386,382
Other	\$131,001	\$107,224	\$107,224	\$23,777	\$0	\$131,001
FY 2023, MDOT Project Templates Total	\$42,167,383	\$34,568,968	\$34,568,968	\$7,598,415	\$0	\$42,167,383
Fiscal Year - 2023, Transit Project Categories						
5307	\$580,815	\$252,420	\$252,420	\$194,335	\$134,060	\$580,815
5311	\$249,533	\$34,615	\$34,615	\$112,918	\$102,000	\$249,533
5339	\$76,000	\$60,800	\$60,800	\$15,200	\$0	\$76,000
FY 2023, Transit Project Categories Total	\$906,348	\$347,835	\$347,835	\$322,453	\$236,060	\$906,348
Fiscal Year - 2023 Grand Total	\$44,791,667	\$36,006,544	\$36,006,544	\$7,945,668	\$839,455	\$44,791,667

APPENDIX I | MITC-IAWG MINUTES

Michigan Transportation Conformity Interagency Workgroup (MITC- IAWG)
**Berrien County Nonattainment Area Cass
County Conformity Area**

New 2020 – 2023 TIP and STIP

3 – 4:00 p.m. (EDT), Wednesday, March 27, 2019
TSD 3rd floor, Van Wagoner Transportation Building, Lansing, MI

<u>Name</u>	<u>Agency</u>
In attendance:	
Andy Pickard	Federal Highway Administration (FHWA)
Michael Leslie	US Environmental Protection Agency (EPA)
Susan Weber	Federal Transit Administration (FTA)
Donna Wittl	Michigan Department of Transportation (MDOT) Brandon
Kovnat	Southwest Michigan Planning Commission (SWMPC) representing TwinCATS and NATS MPOs
Jason Latham	Berrien County Road Department (BCRD)
Ryan Gladding	MDOT
Amy Lipset	MDOT
Jim Sturdevant	MDOT
Brad Sharlow	MDOT
Katie Beck	MDOT
Brian Sanada	MDOT
Absent:	
Breanna Bukowski	Michigan Department of Environmental Quality (MDEQ)

Attendance at the meeting was in person or teleconferencing with web linking. MITC-

IAWG for two area.

- 1) Berrien County for 1997 and 2015 ozone standard Nonattainment Area
- 2) Cass County for 1997 ozone standard Conformity Area

The first part of this meeting was to review projects for the NATS 2045 LRTP. The meeting summary for that is separate and projects reviewed during that are attached to that meeting summary. The next part of the meeting was to review projects for:

- Berrien County Nonattainment Area
 - TwinCATS TIP 2020-23
 - NATS TIP 2020-23 (reviewed as part of the NATS 2045 LRTP)
 - STIP 2020-23
- Cass Conformity Area:
 - NATS TIP 2020-23 (reviewed as part of the NATS 2045 LRTP)
 - STIP 2020-23
 - NATS projects listed as outside Berrien & Cass counties (reviewed as part of the NATS 2045 LRTP)

The MITC-IAWG reviewed projects for the new 2020 to 2023 Transportation Improvement Program (TIP) and State Transportation Improvement Program (STIP). A summary for each conformity area is provided below. This meeting summary will be used for both Berrien County Nonattainment Area and Cass County Conformity Area.

The polices for reviewing projects for the areas were sent to the MITC-IAWG before the meeting.

The Berrien County Nonattainment Area

The group discussed the TwinCATS new TIP projects. It was stated the US-31 project was incorrectly labeled as “exempt” in the IAWG spreadsheet for review but has been changed to “non-exempt” with the comment “the project was modeled in the previous conformity analysis.” It was discussed that a method for tracking projects that have been modeled needs to be developed. The STIP projects were reviewed and all were considered exempt. The projects in the NATS new 2020-23 TIP were evaluated for the NATS 2045 LRTP and had not changed, all were deemed exempt.

All projects in Berrien County for the TwinCATS TIP 2020-23, NATS TIP 2020-23, and STIP 2020- 23, were determined exempt or had been modeled in a previous analysis. No new conformity analysis is required. See projects in Berrien County attached.

The Cass County Conformity Area

The STIP 2020-2023 projects in Cass County were reviewed and all were considered exempt. Projects in the NATS 2020-2023 TIP had been evaluated for the NATS 2045 LRTP and projects had not changed; all were deemed exempt. Projects were also reviewed that were part of the NATS TIP, but the county was indicated as Kalamazoo or St. Joseph because part of these projects are within the NATS planning area ; all were considered exempt.

All projects in Cass County for the NATS TIP 2020-23 and STIP 2020-23, were determined exempt or had been modeled in a previous analysis. No new conformity analysis is required, the previous analysis completed for the NATS 2045 LRTP is still applicable. See projects in Cass County attached.

APPENDIX J | PUBLIC PARTICIPATION

APPENDIX K | CONSULTATION

The newly adopted Federal legislation (FAST Act) expands upon MAP-21's requirements stating that all MPOs consult with federal, state, and local entities within their planning areas responsible for the following programs:

- Economic growth and development
- Environmental protection
- Airport operations
- Freight movement
- Land use management
- Natural resources
- Conservation
- Historic preservation
- Human service transportation providers

The goal of this process is to eliminate or minimize conflicts with other agencies' plans and programs that impact transportation, or for which transportation decisions may impact them. As required, SWMPC will consult with all possible entities responsible for programs mentioned above and welcome their input on future transportation projects. During the development of the 2020-2023 Transportation Improvement Program, SWMPC held discussions with various agencies responsible for carrying out transportation programs in the area as well as other interested and community agencies regarding any of their local plans and progress of the TIP. The agencies that were consulted regarding the proposed 2020-2023 TIP can be found on the following page.

Education

Brandywine Schools
Buchanan Schools
Edwardsburg Schools
Lake Michigan College – Niles Campus
Niles Schools

Economic Development

Niles Greater Area Chamber of Commerce
MSHDA
Kinexus
Michigan Economic Development Corporation

Environmental Protection

Fish and Wildlife Service
Michigan Department of Environmental Quality
Berrien County Conservation District
Cass County Conservation District
US Environmental Protection Agency

Health and Human Services

Lakeland Health
Area Agency on Agency
Berrien County Department of Human Services
Cass County Department of Human Services

Historic Preservation

Berrien County Historical Association
Michigan State Historic Preservation Office

Governmental Partners

MACOG
Office of State Senator
79th District State Representative
Pokagon Band of Potawatomi Indians

Natural Resources

Department of Natural Resources
Berrien County Parks
Cass County Parks

APPENDIX L | APPROVALS



Southwest Michigan Planning Commission

376 West Main Street, Suite 130 • Benton Harbor, MI 49022-3651

RESOLUTION APPROVING THE NILES-BUCHANAN-CASS AREA TRANSPORTATION STUDY (NATS) FISCAL YEARS 2020-2023 TRANSPORTATION IMPROVEMENT PROGRAM

WHEREAS, the Southwest Michigan Planning Commission is the state-designated Metropolitan Planning Organization (MPO) for the Niles – Buchanan – Cass Urbanized Area; and

WHEREAS, the Niles-Buchanan-Cass Area Transportation Study (NATS) is responsible for the development of a Transportation Improvement Program (TIP) for the Metropolitan Planning Organization; and

WHEREAS, the TIP is required by both the Federal Highway Administration and the Federal Transit Administration; and

WHEREAS, the NATS Fiscal Years 2020-2023 TIP has been developed and certified in accordance with the requirements of 23 CFR 450 in cooperation with state and local officials, with opportunities for public involvement, review and input; and

WHEREAS, the NATS FY 2020-2023 TIP meets the principles and intent of Environmental Justice; and

WHEREAS, the Federal and non-federal programmed expenditures in the NATS FY 2020-2023 TIP are constrained with the amount of revenues expected to be available during the four-year period;

NOW, THEREFORE BE IT RESOLVED, this the 25th day of June, 2019, that the NATS Policy Committee finds the NATS FY 2020-2023 TIP consistent with the goals of the NATS 2045 Long Range Transportation Plan, fiscally constrained, conforms with Air Quality Standards and hereby approves the FY 2020-2023 NATS Transportation Improvement Program.

ATTEST:


Richard Cooper, chair
NATS Policy Committee



SOUTHWEST MICHIGAN PLANNING COMMISSION

376 W Main, Benton Harbor, MI 49022
Phone: 269-925-1137 • Website: www.swmpc.org

RESOLUTION 2019 – 5

APPROVING THE NILES-BUCHANAN-CASS AREA TRANSPORTATION STUDY (NATS) FISCAL YEARS 2020-2023 TRANSPORTATION IMPROVEMENT PROGRAM

WHEREAS, the Southwest Michigan Planning Commission is the state-designated Metropolitan Planning Organization (MPO) for the Niles – Buchanan – Cass Urbanized Area; and

WHEREAS, the Niles-Buchanan-Cass Area Transportation Study (NATS) is responsible for the development of a Transportation Improvement Program (TIP) for the Metropolitan Planning Organization; and

WHEREAS, the TIP is required by both the Federal Highway Administration and the Federal Transit Administration; and

WHEREAS, the NATS Fiscal Years 2020-2023 TIP has been developed and certified in accordance with the requirements of 23 CFR 450 in cooperation with state and local officials, with opportunities for public involvement, review and input; and

WHEREAS, the NATS FY 2020-2023 TIP meets the principles and intent of Environmental Justice; and

WHEREAS, the Federal and non-federal programmed expenditures in the NATS FY 2020-2023 TIP are constrained with the amount of revenues expected to be available during the four-year period;

NOW, THEREFORE BE IT RESOLVED, this the 18th day of June, 2019, that the Southwest Michigan Planning Commission finds the NATS FY 2020-2023 TIP consistent with the goals of the NATS 2045 Long Range Transportation Plan, fiscally constrained, conforms with Air Quality Standards and hereby approves the FY 2020-2023 NATS Transportation Improvement Program.

ATTEST:


Don Hanson, Chair
Southwest Michigan Planning Commission

ATTEST:


John Egelhaaf, Executive Director
Southwest Michigan Planning Commission



U.S. Department
of Transportation
**Federal Highway
Administration**

Michigan Division

September 26, 2019

315 W. Allegan Street, Room 201
Lansing, MI 48933
517-377-1844 (office)
517-377-1804 (fax)
Michigan.FHWA@dot.gov

In Reply Refer To:
HDA-MI

Mr. Todd White
Director
Bureau of Transportation Planning (B340)
Michigan Department of Transportation
Lansing, Michigan

FY 2020-2023 Statewide Transportation Improvement Program (STIP) Approval and Federal
Planning Finding

Dear Mr. White:

Thank you for the submittal of the FY 2020-2023 Statewide Transportation Improvement Program (STIP) for the State of Michigan, per your letter of August 15, 2019 (attached). FHWA and our partners at the Federal Transit Administration (FTA) have reviewed the development of the STIP and find it was done in accordance with Federal regulations (23 CFR 450.218). With this approval, the FY2020-2023 STIP will be the officially recognized STIP for Michigan, incorporating each MPO FY2020-2023 TIP by reference.

Also attached is the Federal Planning Finding. The finding is a formal action taken by the FHWA and FTA, with the approval of the STIP, to ensure that the STIP and TIPs are developed according to Statewide and metropolitan transportation planning processes.

If you have any questions, please contact Andy Pickard of FHWA staff at andy.pickard@dot.gov or Susan Weber of FTA staff at susan.weber@dot.gov.

Sincerely,

Kelley Brookins
Regional Administrator
Federal Transit Administration

Sincerely,

Russell L. Jorgenson, P.E.
Division Administrator
Federal Highway Administration