MDOT
Michigan Department of Transportation

State Transportation Improvement Program

Fiscal Years 2017-2020

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1.0 Introduction

The State Transportation Improvement Program (STIP) is a federally mandated four-year planning document. The STIP lists surface transportation projects the state intends to fund with federal aid provided under the Federal Aid Transportation Program. The primary purpose of this document is to provide information regarding the programs and projects to which state and local transportation agencies have committed over the next four years. It verifies that transportation revenues are available and sufficient to finance these improvements.

The Michigan Department of Transportation (MDOT) developed the fiscal year (FY) 2017-2020 STIP in accordance with the Fixing America's Surface Transportation Act (FAST Act) and applicable federal regulations.

The transportation improvement projects reported in the STIP were developed in coordination with the state's metropolitan planning organizations (MPOs), representing urbanized areas, and with rural task forces (RTFs) and small urban areas, representing the state's rural areas. The planning process relies on the participation of state and local government officials, public and private transit providers, organizations representing the customers and providers of transportation in Michigan, and the general public.

The STIP is a compilation of transportation projects that will be authorized for funding in FY 2017-2020. The STIP is not a single report; it is comprised of 14 separate documents: 13 individual MPO Transportation Improvement Programs (TIPs) and one statewide non-MPO STIP document. All projects within MPO boundaries, whether under the jurisdiction of MDOT or a local transportation agency, are listed in the relevant MPO TIPs and are governed by that document. Each MPO TIP contains financial information for the projects listed in that TIP. MPO-approved TIPs, along with subsequent amendments, are available for review and comment at the respective MPOs throughout the state. The STIP lists only projects outside of the MPO boundaries; however, it does contain financial information for the entire state. The TIPs are included in the STIP by reference.

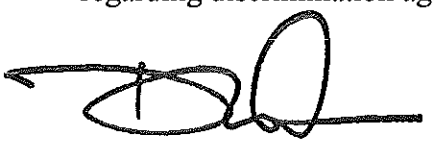
In addition to a listing of projects and programs, this report contains information on the federally mandated statewide and metropolitan transportation planning processes, MDOT's transportation goals, the public participation process for the STIP, and a financial plan that compares annual transportation revenues to commitments.

MDOT's FY 2017-2020 STIP will serve as a four-year planning document for the state. The project list will be periodically updated through the amendment process.

2.0 Certification

In accordance with 23 CFR 450.218, the Michigan Department of Transportation hereby certifies that the statewide transportation planning process is being carried out in accordance with all applicable requirements of:

1) 23 U.S.C. 134 and 135, 49 U.S.C. 5303 and 5304, and this part.
2) Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d–1) and 49 CFR Part 21.
3) 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity.
4) Section 1101(b) of the Moving Ahead for Progress in the 21st Century Act (MAP-21) and 49 CFR Part 26 regarding the involvement of disadvantaged business enterprises in U.S. Department of Transportation-funded projects.
5) 23 CFR part 230, regarding implementation of an equal employment opportunity program on federal and federal-aid highway construction contracts.
6) 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.
7) In states containing nonattainment and maintenance areas, Sections 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 U.S.C. 7504, 7506 [c] and [d]) and 40 CFR Part 93.
8) 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.
9) Section 324 of Title 23 U.S.C., regarding the prohibition of discrimination based on gender.
10) Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR Part 27 regarding discrimination against individuals with disabilities.



David E. Wresinski, Director
Bureau of Transportation Planning
Michigan Department of Transportation

August 15, 2016

Date

3.0 Statewide Transportation Planning Process

3.1 The Planning Process under 23 U.S.C.

The statewide planning process under the 23 U.S.C. Section, requires "each State to carry out a continuing, cooperative, and comprehensive statewide multi-modal transportation planning process, including the development of a long-range statewide transportation plan and statewide transportation improvement program (STIP), that facilitates the safe and efficient management, operation, and development of surface transportation systems that will serve the mobility needs of people and freight (including accessible pedestrian walkways and bicycle transportation facilities) and that fosters economic growth and development within and between States and urbanized areas, while minimizing transportation-related fuel consumption and air pollution in all areas of the State, including those areas subject to the metropolitan transportation planning requirements of 23 U.S.C.134 and 49 U.S.C. 5303." (From 23 CFR 450.200.)

Federal regulations 23 U.S.C. 134 and 135 require MDOT and Michigan's 13 MPOs to each develop a long-range plan covering a minimum 20-year horizon that provides direction for development and implementation of multi-modal transportation programs. The MI Transportation Plan – Moving Michigan Forward is the state long-range transportation plan. The 2040 MI Transportation Plan (2040 MITP) is an update and extension of the 2005-2030 MI Transportation Plan: Moving Michigan Forward (2030 MITP) and the 2035 MI Transportation Plan (MITP 2035). The 2040 MITP consists of both of these documents, which provide an overview of the findings and a high-level summary of the current assessment of key trends, demographic changes, and initiatives that will guide the selection of transportation projects between now and 2040.

In addition to these two documents, the MITP also includes a number of technical and strategic reports published in conjunction with the 2030 MITP and 2035 MITP, and 24 newly published white papers as part of the revision. The initial technical and strategic reports should be referred to for details on specific goals, objectives, strategies, and decision principles of the MITP, while the white papers should be referred to for current assessments of key trends and demographic changes, status updates of key initiatives that were discussed in detail in the initial technical and strategic reports, and descriptions of new initiatives that have been launched to fulfill the goals and objectives of the State Long-Range Transportation Plan. Local long-range plans, whether in draft or final form, are available for review and comment at the respective MPOs around the state.

The STIP is the final planning document preceding the actual construction or implementation of projects. Implementation of the state's long-range plan and Five-Year Transportation Program is accomplished through a four-year STIP. The STIP and respective 13 MPO TIP documents identify the projects that will be implemented and how they are to be financed. The STIP, with its associated TIPs, is a culmination of multiple transportation planning processes. The projects that are selected for the STIP and TIPs are the result of the needs and policies identified in the State Long-Range Transportation Plan, the Five-Year Transportation Program, and each MPO's long-range plan. This STIP covers FYs 2017-2020 and will include by reference the FY 2017-2020 TIPs prepared by each MPO.

3.2 State Long-Range Transportation Plan 2040

The 2040 MITP revision reaffirms the policy framework of the 2030 MITP and 2035 MITP, and maintains the vision, goals, objectives, strategies, focus on Corridors of Highest Significance, and decision principles guiding program development. The most recent forecasts for population and employment were used to update the assumptions made in the 2040 MITP.

The 2040 MITP was initiated as an interim step to keep the state's long-range transportation plan current. The 2040 MITP is an update to the 2030 MITP and 2035 MITP, which extended the planning horizon to 2040. The extended planning horizon is consistent with regional and metropolitan planning processes. The 20-year planning horizon is required by federal regulations found in 23 CFR 450 Subpart B.

The 2040 MITP takes into consideration continued population growth, demographic shifts and associated travel pattern changes, land use changes, employment growth, the shift to a service economy, impacts of immigration, and the demand for public transit services. The 2040 MITP provides an assessment of state transportation revenues, needs, and gaps under current revenue trends. The 2040 MITP examines needs and gaps with available revenues and offers visions, goals, and objectives for funding the transportation system.

The 2030 MITP and 2035 MITP vision is reaffirmed in the 2040 MITP:

"Michigan's 2040 transportation system is a safe, efficient, resilient and integrated multi-modal system and serves as the foundation of the state's economic vitality and quality of life and support for its residents. Transportation providers throughout the state will work together to address the system's diverse needs. The entire system will be maintained, preserved and protected as one of the state's most important physical assets."

- **Purposeful**: Michigan's integrated transportation system will be the foundation of the state's economic vitality and will sustain quality of life for its residents.
- **Prioritized**: Capacity improvements will be needed, but the first priority will be physical or technological improvements to enhance efficiency, mobility, and access.
- **Coordinated**: All transportation providers will work together to address the system's needs holistically. All modes will be maintained, preserved, operated, and protected as one system, one of the state's most important physical assets.
- **Safe**: Safety will be a primary goal. It will be addressed as each improvement is planned and implemented. Personal and system-wide security will be enhanced, including border security.
- **Advanced**: MDOT will embrace technology and technological development. The department will innovate in every aspect of what it builds and how it builds, and in every service it provides.
- **Integrated Choices**: System integration will be achieved for both passenger and freight transportation through improvements in modal services and effective intermodal connections. The system will be responsive to the public's demand for more transit, bicycle, and pedestrian choices. The need for freight and passenger movement will be balanced, and the system will accommodate both without compromising goals for

safety or economic competitiveness.

- **Appropriate to the Setting**: Transportation will be integrated between modes, and also with land use, economic, and environmental systems. Transportation solutions will be regionally sensitive, sustainable, and energy efficient. Infrastructure improvements will be tailored to the community and natural setting and planned cooperatively so customers and partners are satisfied with the result.
- **Flexibly-Funded**: Transportation financing will be diversified to include new methods and techniques, but public funds will remain dedicated to transportation purposes. Funding will be flexible so money can be allocated to meet the highest priority user needs.
- **Responsive**: MDOT will be an open and flexible organization, responsive to customer needs and with a transparent, accountable decision-making process. MDOT will be proactive, adaptable, and able to identify and respond to change as needed.

The four long-range transportation goals and associated objectives as established in the 2030 MITP and 2035 MITP were reaffirmed in the 2040 MITP. Those goals and objectives are as follows:

- **Stewardship**: Preserve transportation system investments, protect the environment, and utilize public resources in a responsible manner.
- **System Improvement**: Modernize and enhance the transportation system to improve mobility and accessibility.
- **Efficient and Effective Operations**: Improve the efficiency and effectiveness of the transportation system and transportation services and expand MDOT's coordination and collaboration with partners.
- **Safety and Security**: Continue to improve transportation safety and ensure the security of the transportation system.

The six key strategies in the 2030 MITP and 2035 MITP that are carried forward in the 2040 MITP are:

- **Focus Improvements on Corridors of Highest Significance:** There will never be sufficient funding to make every transportation improvement that is identified, however worthy. In order to be an appropriate steward of public trust, and to make the most effective use of limited transportation revenue, MDOT will focus on improvement to the condition and efficient operation of multi-modal corridors of highest significance to the Michigan economy.
- **Measure Performance for All Modes:** MDOT has been very successful in establishing and achieving its goals for highway pavement and bridge conditions. A similar focus must be brought to bear on highway operations, safety, and the condition and performance of other modes by establishing targets, measuring performance, and investing appropriately to achieve improvement.
- **Integrate the Transportation System:** The public has expressed its wish for more modal choices. In the years to come, as Michigan's population ages, single-occupancy vehicles may no longer be the most practical or preferable transportation option for many

residents. Commercial traffic also increasingly uses more than one mode, and seamless connections are vital to keeping the economy moving. Michigan must plan and invest now to ensure a greater array of well-connected transportation options. Transportation Systems Management and Operations (TSM&O) is an integrated program to optimize the performance of existing multi-modal infrastructure by implementing systems, services, and projects to maximize capacity and improve the security, safety, and reliability of the transportation system. MDOT employs TSM&O strategies and solutions to provide more efficient use of existing transportation resources by implementing strategies, deploying technologies, and integrating systems to address freeway and arterial congestion, improve safety and mobility, and encourage sustainability.

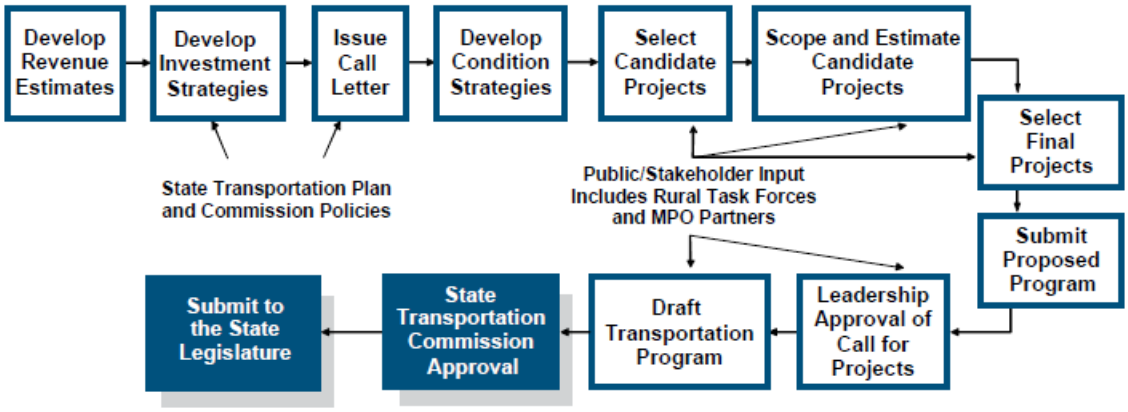
- **Encourage Context Sensitive Solutions:** MDOT will conduct dialogues with local governments, road commissions, industry groups, land use advocates, the general public, and state agencies early in a project's planning phase. These dialogues help ensure that bridges, interchanges, bike paths, and other transportation projects "fit" into their communities. To make effective decisions, transportation agencies need to consider community values while making sound design choices that follow federal standards and meet or exceed regulatory agency requirements. Stakeholder input is a key component for good transportation decision-making.
- **Avoid, Minimize or Mitigate for Adverse Impacts:** MDOT works closely with federal, state, and local agencies and the 12 federally recognized tribes throughout the corridor and project planning processes to ensure appropriate stewardship and preservation of Michigan's cultural and natural resources. In the initial stages of corridor planning, MDOT will confer with these partner agencies and the federally recognized tribes to evaluate prospective projects for potential negative impacts on property owners, archaeological and historic resources, endangered species, farmlands, public recreational properties, air quality, flood plains, wetlands, land uses, contaminated sites, and noise levels, as required by various federal, state, and local laws, rules, and regulations. The MI Transportation Plan Environmental Technical Report includes a list of partners who assist MDOT's efforts to protect Michigan's natural and cultural resources.
- **Identify Appropriate Funding:** Current transportation revenue streams will not be sufficient over the next 30 years to sustain the good condition of highway pavement and bridges, let alone improve operations, integration among modes, or the performance of non-highway modes. Providing flexibility to invest in a range of mutually supportive and integrated modal programs will be the first step toward meeting the vision. The public supports new and innovative transportation funding solutions as necessary, but a new focus on operations and integrated transportation will help move Michigan closer to its goals regardless of the level of funding.

For additional information, go to Michigan's MI Transportation Plan website at www.michigan.gov/slrp or contact any MDOT facility (region office, Transportation Service Center (TSC), or the central office). Appendix B provides contact information for each MDOT region office and TSC.

3.3 Five-Year Transportation Program 2017-2021

MDOT, at the direction of the governor and the State Transportation Commission (STC), has annually published a rolling five-year transportation program since 1999. The 2016-2020 Five-Year Transportation Program, adopted by the STC on Jan. 21, 2016, contains current multi-modal investment strategies, as well as a list of MDOT road and bridge projects to be undertaken during this time frame.

Throughout this process, MDOT continues to engage transportation stakeholders and the general public to develop the Five-Year Transportation Program. MDOT regions and TSC offices share project lists with local agencies, stakeholders, and the general public. Information regarding the key steps in the development of the Five-Year Program are reflected in the diagram below.



For more information on the MDOT Five Year Transportation Program, visit: http://www.michigan.gov/fiveyeartransportationprogram.

3.4 Metropolitan Planning

In metropolitan areas exceeding 50,000 residents, 23 U.S.C. 134 requires that MPOs be designated by agreement between the governor and all affected local governments in order "to carry out a continuing, cooperative, and comprehensive multi-modal 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; and (b) encourages continued development and improvement of metropolitan transportation planning processes guided by the planning factors set forth in 23 U.S.C. 134(h) and 49 U.S.C. 5303(h)." (From 23 CFR 450.300.) As you can see, the metropolitan planning process parallels and compliments, and is required to be coordinated with the statewide transportation planning process.

The metropolitan planning process requires development of local long-range transportation plans for each of Michigan's MPOs. MPO long-range plans require greater detail than the state plan. All regional-significant projects must be identified and have financial constraint demonstrated and air quality conformity requirements met to be implemented within the 20-year period of the MPO long-range plans. The MPO's plan must be updated every five years (four years in air

quality nonattainment areas) and be consistent with the statewide goals and objectives established in the state long-range plan and by MDOT.

Each MPO is also responsible for developing a four-year TIP document by working with city and county transportation agencies, local transit operators, and state transportation officials. The MPO planning process is used to identify needs and prioritize projects within the metropolitan area boundaries. MPOs are required to develop and implement a PPP that provides a "reasonable opportunity" for comment on the TIP "at key decision points." Each TIP lists all federal-aid and regionally significant road, street, highway, and transit projects within its boundaries, whether under state or local jurisdiction. MPO TIPs are incorporated by reference into the STIP.

Michigan's MPOs and primary urbanized areas within those MPOs are identified below. Many smaller cities, towns, and townships are also represented by the MPOs.

Table 1: MPOs and Primary Urbanized Areas in Michigan

Metropolitan Planning Organization (MPO)	Acronym	Urbanized Area(s) Served
Battle Creek Area Transportation Study	BCATS	Battle Creek
Bay City Area Transportation Study	BCATS	Bay City
Genesee County Metropolitan Alliance	GCMA	Flint
Grand Valley Metro Council	GVMC	Grand Rapids
Kalamazoo Area Transportation Study	KATS	Kalamazoo
Macatawa Area Coordinating Council	MACC	Holland/Zeeland
Midland Area Transportation Study	MATS	Midland
Region 2 Planning Commission	R2PC	Jackson
Saginaw Metropolitan Area Transportation Study	SMATS	Saginaw
Southeast MI Council of Governments	SEMCOG	Ann Arbor, Detroit, Port Huron, Monroe County, Brighton/Howell/South Lyon, Toledo, OH
Southwest MI Planning Commission	SWMPC	Benton Harbor, St. Joseph, and Niles
Tri-County Regional Planning Commission	TCRPC	Lansing
West Michigan Metropolitan Transportation Planning Program	WestPlan	Muskegon, Grand Haven, and North Ottawa County

3.5 MDOT-MPO Cooperative Planning Process

MDOT and the state's MPOs are committed to the continuing, cooperative, and comprehensive transportation planning process in Michigan. The goal of the process is to foster closer coordination in all aspects of the transportation plan development process.

The process encourages teamwork and consensus-building to identify state and local transportation needs, evaluate proposed projects to address those needs, and utilize agreed to planning tools to reach agreement for metropolitan transportation systems. The following are the seven factors to be considered in the overall planning process as established in the Transportation Equity Act for the 21st Century (TEA-21); these same factors remain unchanged with the 2012 legislation, MAP-21.

1) Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
2) Increase safety and security of the transportation system for motorized and nonmotorized users.
3) Increase security of the transportation system for motorized and nonmotorized users.
4) Increase accessibility and mobility options available to people and for freight.
5) Protect and enhance the environment, promote energy conservation, and improve quality of life.
6) Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
7) Promote efficient system management and operations.
8) Emphasize preservation of the existing transportation system.

Also established in TEA-21 and unchanged in MAP-21 is the requirement for MPOs to develop a documented public involvement plan. This public involvement plan establishes how the public would be involved in all transportation issues and the overall planning process.

MPOs and MDOT have established an overall process for tying together the State Long-Range Plan, Five-Year Transportation Program, local long-range plans, and STIP/TIP documents and associated project lists.

3.6 Rural Task Force Program

Local, federally funded transportation projects to be implemented in rural areas (areas outside of federal-aid urban boundaries) are selected by the applicable rural task force (RTF). The 22 RTFs represent the jurisdictions and agencies providing transportation services and include: cities and villages with fewer than 5,000 residents; rural transit providers; county road commissions/departments; MDOT; and where appropriate, tribal governments. Each RTF receives staff support from one of Michigan's 14 regional planning agencies (RPAs).

RTF funding levels are set by MDOT and, in the case of federal Surface Transportation Program funding, based on formulas agreed upon by the RTF Oversight Board. The RTF Oversight Board is a coalition of state, county, municipal, and transit officials formed to provide statewide guidance and policy concerning the transportation program and to enhance the current transportation planning process in the rural areas. Each RTF selects projects in accordance with

the established funding levels. MDOT reviews projects for eligibility and consistency with the criteria established for the state's Transportation Economic Development Fund and the federal Surface Transportation Program.

RTF projects covered in this STIP include local surface transportation improvements and selected transit projects to be implemented over the next four years outside the federal-aid urban boundaries. Typically, these projects are grouped together in a single line item in the statewide section of the STIP.

Appendix B includes a list of RPA contacts. For project lists or additional information, go to MDOT's RTF program website (http://www.michigan.gov/ruraltaskforce), contact the appropriate RPA, or contact MDOT's Rural Program coordinator:

Darrell Harden, Transportation Planner, Rural Program Coordinator
Michigan Department of Transportation
Bureau of Transportation Planning
PO Box 30050
Lansing, MI 48909
E-mail: hardend1@michigan.gov
Telephone: 517-373-1881

3.7 Small Urban Program

In direct response to requests by local officials, MDOT makes funds available for eligible road and transit capital projects to cities, villages, transit agencies, and road commissions located within or serving urban areas that have a population between 5,000 and 50,000. The funds are distributed to individual small urban areas through a competitive funding program administered by the state. MDOT strives for an equitable distribution of funds statewide to ensure that eligible communities can implement meaningful projects.

Consistency with 23 U.S.C. requirements is a key component in the determination of project eligibility. All road and transit projects must be federal-aid-eligible within the federal urban area boundary and consistent with regional land use and development plans. The small urban area task forces must demonstrate that city, village, transit providers, and county road commissions have been included as full partners in the project selection process and that the necessary public participation has been conducted prior to project submittal. Consultation with tribal governments is also required, where applicable. The Urban Area Project Selection Committee must hold a public meeting to allow citizens within their community to participate in the project selection and prioritization process. Small urban areas within a metropolitan area boundary (MAB) must participate in the MPO planning process as well, and gain the MPO's approval of the project before submitting it to MDOT for funding.

As of the 2010 Census, there are 56 small urban areas in Michigan. For small urban areas that are within MABs, the MPO is indicated; all others are in rural/non-MPO areas.

Projects selected for funding through the Small Urban Program are typically grouped together in a single line item in the rural/non-MPO section of the STIP; however, each project is listed

individually by fiscal year on the Small Urban Program website (http://www.michigan.gov/smallurbanprogram). For additional information, go to the MDOT website or contact the Small Urban Program coordinator:

David Fairchild, Small Urban Program Coordinator
Michigan Department of Transportation
Bureau of Transportation Planning
P.O. Box 30050
Lansing, Michigan 48909
E-mail: fairchildd1@michigan.gov
Telephone: 517-335-1510

4.0 Public Participation

Public participation or involvement is a fundamental requirement, as specified in 23 U.S.C. Agencies are required to have a documented process that is implemented for the development of the long-range plan. The act clearly requires not only a documented process but also implementation of that process for the long-range plan and the STIP. "In carrying out the statewide transportation planning process, including development of the long-range statewide transportation plan and the STIP, the State shall develop and use a documented public participation process that provides opportunities for public review and comment at key decision points." (From 23 CFR 450.210 {a}.)

The rural (non-MPO) public participation requirements are summarized below:

- Use a documented process.
- Provide early and continuous involvement activities (of issues and decision-making process).
- Provide reasonable access to information, including a website, if feasible.
- Provide adequate notice of meetings.
- Provide meetings at convenient and accessible locations and times.
- Use visualization techniques.
- Demonstrate explicit consideration and response to public input.
- Seek out and consider needs underserved (low-income, minorities, etc.).
- Have a documented process for consulting with non-MPO local officials.
- Have a documented process for consulting with tribal governments and federal land management agencies.

MDOT has developed a FY 2017-2020 STIP Public Participation Plan (PPP). This document outlines the multiple opportunities available for public involvement in the overall planning process, starting with the State Long-Range Transportation Plan, 2035 MITP; 2017-2021 Five-Year Transportation Program; and FY 2017-2020 STIP. The first two documents and associated processes drive the projects that will eventually be in the FY 2017-2020 STIP document. While transportation planning is a continuous and ongoing process, it is essentially initiated with the development of the State Long-Range Transportation Plan and further refined through the Five-Year Transportation Program development process.

The department's annual Five-Year Transportation Program provides the foundation for MDOT's shorter-range planning and program development. It is a rolling five-year document. Each year, MDOT conducts the annual Call for Projects, which starts the process for identifying and adding the fifth year to the program. An annual notification of MDOT's program, upon which the STIP is developed, is presented to the STC for approval, and then it is provided to the Legislature as required by state law.

MDOT's goal, through its continuous outreach to the public throughout all planning processes, is to provide quality participation for transportation stakeholder and decision-making. This is achieved when customers are identified and brought into the planning process. To achieve this goal, major planning and program development objectives include:

1) Solicit public participation in each phase of the statewide planning process.
2) Seek broad identification and representative involvement of customers and users of all transportation modes.
3) Utilize effective and equitable avenues for distributing information and receiving comments.
4) Provide educational materials and design participation initiatives that will support and encourage effective participation.
5) Maintain and develop staff expertise in all aspects of participation.
6) Support and encourage continuous improvement in the methods used to meet the public need for information and involvement.

MDOT engages in a broad range of activities to provide public outreach and involvement opportunities in conjunction with general transportation issues, the implementation of projects, and the development of multi-year improvement programs. Activities include responding to letters and e-mails sent by citizens covering a variety of transportation topics, such as specific projects, MDOT's performance, and transportation services. MDOT issues between 300 and 400 news releases annually. Additionally, MDOT maintains an active website and social media presence to communicate with the public.

Other public outreach activities by MDOT include holding focus group sessions; conducting surveys; collecting information through questionnaires and public comment forms; and issuing newsletters and brochures on programs, initiatives, or transportation issues. With most major projects and proposals, MDOT establishes a community involvement process to enable interest groups and individuals to participate through work groups, task forces, and committees. In addition, MDOT holds public hearings in conjunction with preparation of federally required environmental assessments and environmental impact statements, and on most projects that involve significant right-of-way acquisition. Information on these activities is advertised in major newspapers whose circulation encompasses the location of a project or proposal.

The STIP is the final planning document preceding the actual construction or implementation of projects. Opportunities for public participation are provided throughout the project selection process at the local, regional, and state levels. This cooperative effort includes but is not limited to open meetings at the state and local levels where project selection and programming decisions are publicly considered, opportunities to comment on proposed projects at city council and city manager meetings, and public notices in local newspapers throughout the state requesting public comment on proposed projects. A review of MDOT's news releases reveal that, in addition to those public participation opportunities outlined above for the Five-Year Transportation Program, MDOT regions and TSCs host annual rural elected officials and tribal member meetings, in addition to spring summits for the general public. Invitations are mailed to the clerks of all counties, cities, villages, townships, and tribal officers within non-MPO areas. The State Regional Planning Agency also conducts direct mailings on MDOT's behalf. In addition, general public meetings are also advertised through radio announcements and news releases.

Michigan takes pride in its commitment to involve "citizens, affected public agencies, representatives of public transportation employees, freight shippers, private providers of transportation, representatives of users of public transportation, representatives of users of

pedestrian walkways and bicycle transportation facilities, representatives of the disabled, providers of freight transportation services, and other interested parties" in system-wide planning, project selection processes, project-level planning, and decision-making associated with these efforts. In developing the STIP, state officials worked cooperatively with local officials, public and private transportation providers, and interested citizens. Many of the projects included in the STIP are the result of numerous public information meetings and hearings, as well as requests by local officials and the public for specific transportation improvements.

Projects selected for the STIP and TIPs are the result of the needs, policies, and projects identified in the State Long-Range Transportation Plan, each MPO's long-range plan, and the Five-Year Transportation Program. The STIP is the official federally approved document through which the State Long-Range Transportation Plan and Five-Year Transportation Program are implemented. Throughout this entire process, public participation remains a continuous process and is paramount in delivering the transportation programs that meet Michigan's needs now and in the future.

4.1 Public Review of the Draft STIP

The draft FY 2017-2020 STIP document will be available on MDOT's STIP website for public review and comment for 30 days before it is sent to the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) for final approval. An e-mail notification was sent to county road commissions, RTF agencies, small urban communities, RPAs, and cities and villages, etc.

Also, every two months, the STIP can be amended in accordance with the STIP amendment calendar. Whenever the STIP is amended, it will be posted to the MDOT STIP website for public review and comment for two weeks before it is sent to FHWA for review and final approval. Once the STIP is approved by FHWA, the approved document will be posted to the MDOT STIP website.

MDOT posted the STIP for the required 30 days on the MDOT website from July 15 to August 15, 2016. MDOT sent a press release to media outlets that the draft was available on the website and also posted this information was available on Facebook and Twitter. MDOT received three public comments on this document during the comment period. Please continue to visit MDOT's STIP website at http://www.michigan.gov/stip for regular updates on the STIP.

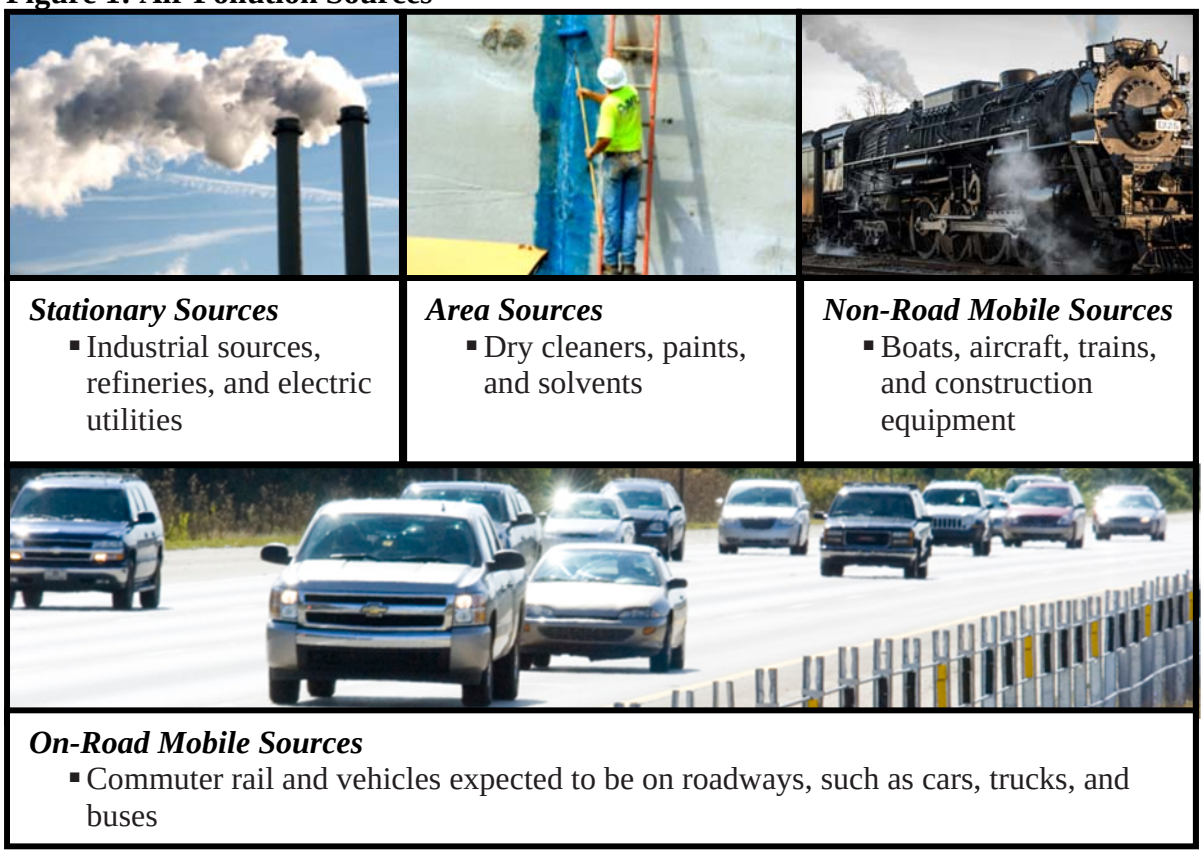
5.0 Air Quality Transportation Conformity

The Clean Air Act (CAA) was established to improve the air, protect public health, and protect the environment. The CAA has been amended over the years, most significantly in the 1990s. 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:

1) Ozone (O_3),
2) Nitrogen dioxide (NO_2),
3) Carbon monoxide (CO),
4) Lead (Pb),
5) Sulfur dioxide (SO_2),
6) Particulate matter (PM), which is subdivided into particulate sizes:
    a. Less than 10 micrometer in diameter ($PM_{2.5}$),
    b. Less than 2.5 micrometer in diameter (PM_{10}).

Generators of air pollution are classified into four main types: stationary sources, area sources, non-road mobile sources, and on-road mobile sources. Example of generators by source category are shown in Figure 1.

Figure 1: Air Pollution Sources



Source: MDOT Photography Unit

The CAA links together air quality planning and transportation planning through the transportation conformity process. Air quality planning is controlled by Michigan's State Implementation Plan (SIP) that includes the state's plans for attaining or maintaining the NAAQS. The main transportation planning tools are the metropolitan transportation long-range plan (LRP) and the metropolitan TIP. Transportation conformity ensures that federal funding and approval are given to highway and transit activities that are consistent with the SIP and that these activities will not affect Michigan's ability to achieve the NAAQS.

Transportation activities that are subject to conformity are LRPs, TIPs, and all non-exempt federal projects that receive federal Highway or FTA funding or approval. The conformity process ensures emissions from the LRP, TIP, or projects are within acceptable levels specified within the SIP and meet the goals of the SIP.

Transportation conformity only applies to on-road sources and transportation-related pollutants: ozone, carbon monoxide, nitrogen dioxide, and particulate matter. In addition to emissions that are directly emitted, regulations specifically 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 oxides of nitrogen (NOx) and volatile organic compounds (VOC) react with sunlight. Shown in Table 2 are the transportation pollutants and associated precursors. Pollutants can be both directly emitted and also 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.

Table 2: Transportation Pollutants and Precursor Emissions

Transportation Pollutant	Direct Emissions	Precursor Emissions			
		Nitrogen Oxides	Volatile Organic Compounds	Ammonia	Sulfur Dioxide
Ozone		X	X		
Particulate Matter $_{2.5}$	X	X	X		
Particulate Matter $_{10}$	X	X	X	X	X
Nitrogen Dioxide		X			
Carbon Monoxide	X				

The Michigan Department of Environmental Quality (MDEQ) uses monitors throughout the state to measure pollutant levels to determine if concentrations exceed acceptable levels. For each pollutant, an area is classified as either: attainment (under the standard), nonattainment (area has more pollutant then allowed), 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.

Currently in Michigan, only the Southeast Michigan Council of Governments (SEMCOG) MPO area has to conduct transportation conformity. SEMCOG is a maintenance area for carbon monoxide and particulate matter 2.5. SEMCOG's maintenance area for carbon monoxide is an area containing parts of Wayne, Oakland, and Macomb counties. The area has been attaining the carbon monoxide standard since 1995 and is near the end of its maintenance period. Since 2013, SEMCOG has achieved maintenance status for particulate matter 2.5. This pollutant has standards for an annual and 24-hour level. SEMCOG is a maintenance area for both levels for an area covering the whole seven-county MPO. For greater details, see SEMCOG's TIP, which is included by reference in this document.

In 2015, the EPA lowered the ozone NAAQS to 0.070 parts per million (ppm). The State of Michigan is currently in the process of recommending nonattainment areas to the EPA around five monitors that are exceeding the 2015 ozone standard as measured by the most current three years (2013 – 2015) of data. The state has until Oct. 1, 2016, to make these recommendations. The EPA will make final official designations by Oct.1, 2017, using the most current available three years of data for that time (2014 – 2016). Consequently, state-recommended areas could be different than the EPA's final designations because of the additional years of data being analyzed. Therefore, areas currently exceeding the standard might drop out while other areas could become nonattainment.

6.0 Financial Chapter

6.1 Introduction

The function of the financial chapter is to manage available federal-aid highway and transit resources in a cost-effective and efficient manner. It specifically 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.

6.2 Available Highway and Transit Funding

The majority of federal highway and transit funding is derived from federal motor fuel taxes, currently 18.4 cents per gallon on gasoline and 24.4 cents per gallon on diesel. 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 A contains a list of these programs. Federal highway funds are apportioned to the states (*apportionment* is the 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. MDOT spends approximately $1.1 billion annually for capital needs on state-owned highways (I, US, and M roads) in the region.

Public Act 51 of 1951 (Act 51) mandates how transportation funds are distributed in Michigan and spent between MDOT and local entities. The intent of Act 51 in regard to federal highway aid is to distribute approximately 25 percent of federal aid to local jurisdictions for use on federal-aid-eligible local roads. The remainder is to be used by MDOT.

Like the highway programs, there are a number of federal transit programs, the list of which can also be found in Appendix A. Transit funds are distributed according to a complex set of distribution formulas.

State funding for transportation comes from vehicle registration fees and motor fuel taxes. Currently, state motor fuel taxes are set at 19 cents per gallon on gasoline and 15 cents per gallon on diesel. The state also levies a 6 percent sales tax on the wholesale and federal tax portion of each gallon of motor fuel. Virtually none of this sales tax revenue goes to transportation. Funding from motor fuel taxes and registration fees (but not the sales tax) is deposited in the Michigan Transportation Fund (MTF), which is analogous to the federal HTF. The current gross receipts to the MTF are approximately $2.05 billion annually. The funds

collected from state fuel tax and vehicle registration revenues are deposited into the MTF, the distribution fund for transportation revenues. MDOT receives approximately 39 percent of this fund, known as the State Trunkline Fund (STF), county road commissions receive 39 percent, and cities receive about 22 percent.

The Comprehensive Transportation Fund (CTF) within the MTF is used for transit. Currently, a little under $220 million is deposited by the state into the CTF each year. MTF funding, after set-asides, is distributed to the STF (I, US, and M-designated roads) and to counties, cities, and villages throughout the state. The CTF also receives about $91 million in auto-related sales taxes annually.

A series of laws enacted in November 2015 increased state funding for transportation. The gasoline tax will be increased from 18.7 to 26.3 cents per gallon on Jan. 1, 2017, and the diesel fuel tax will increase from 15.0 to 26.3 cents per gallon. The motor fuel tax will be applied to natural gas as well. Fuel tax rates will be tied to inflation beginning in 2022 to remedy the decline in purchasing power of the fuel tax. Registration fees for most cars and trucks will increase by 20 percent on Jan. 1, 2017. New electric car fees of $100 per year, and $30 for plug-in hybrid cars, will equalize road-user fees for vehicles that use little or no taxed fuel. The user fee increases will generate an additional $600 million per year for the MTF. Starting Oct. 1, 2019, income tax revenues will be appropriated for roads, increasing from $150 million to $600 million over three years, until 2021. These revenues will be distributed to roads agencies only, under the usual Act 51 formula.

6.3 Fiscal Constraint and Project Selection

The most important financial consideration when creating and/or maintaining a S/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 FHWA and FTA. The MTPA has determined that recent federal transportation funding shortfalls make it prudent to hold federal funding levels at a 2 percent annual rate of increase for all four years of the FY 2017-2020 TIP.

The STC establishes policies, goals, and objectives that provide the basis for highway funding allocation decisions. MDOT developed an investment strategy process to accomplish the effective use of financial resources on the state trunkline Highway Program. The process allocates an investment amount to various program categories (bridge, road, safety, etc.) annually, based on program improvement strategy, goals, and statewide priorities. It sets the level of funding to achieve highway improvement priorities and provides a tool to constrain the overall statewide program against available revenues.
Project criteria can include pavement condition, traffic volumes, number of years since last

repair, and/or other factors. Michigan local agencies have a similar project selection process. Agencies throughout the state use asset management principles approved by the Michigan Transportation Asset Management Council, whose duties are prescribed by state law. Transit agencies each select projects based on internal assessment of capital and operational needs.

6.4 Year of Expenditure (YOE)

When MDOT, federal-aid committees (FAC), and public transit agencies program their projects, they are expected to adjust costs using 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 as discussed in the previous section. Each FAC and agency has its own inflation factor(s), based on past experience. However, MDOT has developed YOE factors for itself and any agency that has not developed its own. For the upcoming FY 2017-2020 TIP cycle, they are 5 percent for FY 2017 and FY 2018, 4.5 percent for FY 2019, and 4 percent for FY 2020.

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

Table 3 contains a summary of the predicted resources that will be available for capital needs on the federal-aid highway system over FY 2017-2020. The only local (non-federal) funding included is funding required to match federal-aid funds. This is usually about 20 percent of the cost of each project.

Table 3: Forecast of Resources Available for Capital Needs on the Federal-Aid Highway System (millions of dollars)

2017	2018	2019	2020
$1,952.2	$1,972.9	$1,650.5	$1,742.1

6.6 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). 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. Table 4 contains a summary O and M cost estimate for roads on the federal-aid highway system. These funds are not shown in the STIP because most highway O and M costs are not eligible for federal aid. The amounts shown are increased by the agreed-upon estimated YOE (i.e., inflation) factors.

Table 4: Forecast of Operations and Maintenance Costs on the Federal Aid System (millions of dollars)

2017	2018	2019	2020
$690.2	$695.7	$702.1	$710.0

6.7 Summary: Resources Available for Capital Needs of Public Transit Agencies

Transit agencies receive their funding from a variety of federal, state, and local sources. Federal funding is distributed, in large part, according to the population of the urbanized area and/or state. For example, Section 5307 (Urbanized Area Formula Grant) is distributed directly to large transit agencies located within the Ann Arbor, Detroit, and Toledo transportation management areas (TMAs), urbanized areas with more than 200,000 residents. Section 5307 funds are distributed to federally specified transit agencies in urbanized areas between 100,000 and 199,999 residents. For areas under 100,000 population, the state can generally award funding at its discretion.

Other sources of funding are more specialized, such as Section 5310 (Transportation for Elderly and Persons with Disabilities) and Section 5311 (for rural areas). See Appendix A for more information on federal transit resources.

The State of Michigan, through the MDOT Office of Passenger Transportation (OPT), also distributes CTF funding to match federal aid for job access reverse commutes (providing access to available employment for persons in low-income areas), and for local bus operations (LBO). LBO funds are very important to the agencies as federal-aid funding for transit, like federal-aid funding for highways, is almost entirely for capital expenses.

Local funding can come from farebox revenues, a community's general fund, milages, and other sources. As with local highway funding, local transit funding can be difficult to predict. Therefore, this chapter will only include federal and state resources available for transit.

Table 5 contains a summary of the predicted resources that will be available for capital needs (and some operational needs, depending on the program) for public transit agencies during FY 2017-2020. Federal funding reasonably expected to be available is included. CTF funding expected to be distributed by the MDOT OPT to public transit agencies is also included.

Table 5: Forecast of Resources Available for Public Transit Capital Needs (millions of dollars)

2017	2018	2019	2020
$557.5	$349.8	$355.7	$349.5

6.8 Demonstration of Financial Constraint, FY 2017-2020

After determination of resources available for federal-aid highway and transit capital needs for FY 2017-2020, 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 2017-2020 STIP. The list must be adjusted to each year's YOE factor and then fiscally constrained to available revenues. Table 6 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 table shows that the FY 2017-2020 TIP is fiscally constrained. Note: O and M 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 O and M costs are ineligible for federal-aid funding.

Table 6: Demonstration of Fiscal Constraint FY 2017-2020 TIP (millions of dollars)

	2017	2018	2019	2020
Highway Funding	$1,952.2	1,972.9	$1,650.5	$1,742.1
Highway Programmed	$1,802.7	$1,755.9	$891.2	$945.2
Transit Funding	$557.5	$349.8	$355.7	$349.5
Transit Programmed	$557.5	$349.8	$355.7	$349.5
Total Funding	$2,509.7	$2,322.7	$2,006.2	$2,091.6
Total Programmed	$2,360.2	$2,105.7	$1,246.9	$1,294.7
Difference	**$149.5**	**$217.0**	**$759.3**	**$796.9**

Tables 7 -10 demonstrate financial constraint for the entire highway and transit programs, which includes both rural (non-MPO) and MPO programs in their entirety. All MPO tables from the TIP's and the rural/non-MPO table from this document are combined for an overall view of the entire program. Total new resources are equal to or more than total commitments for each of the four fiscal years.

Overall, the financial information in this plan demonstrates that there are sufficient dollars available each fiscal year to deliver the proposed programs and projects contained in this report and the individual MPO TIPs. The financing of the plan is fundamentally sound and based on the best information currently available.

Table 7: FY 2017 Highway Statewide Fiscal Constraint

FY 2017 Highway Statewide Fiscal Constraint				
(in millions)				
Highway	**Estimated Federal Revenue**	**Estimated Non-Federal Revenue**	**Total Estimated Revenue**	**Total Proposed Commitments**
Revenue Available	$1,091.40	$860.80	$1,952.20	$1,802.69
Reductions for AC Conversions				
GANS Debt Service	($46.00)		($46.00)	
Prior Year Advance Construction Conversions	($265.00)	$265.00		
Same Year Advance Construction Conversions	($102.00)	$102.00		
Net Revenue Available	$678.40	$1,227.80	**$1,906.20**	**$1,802.69**
Advance Construction and 100% State Program (for MDOT projects only)		$6.85	$6.85	**$6.85**
Highway Federal-Aid Program Total	**$678.40**	**$1,220.95**	**$1,899.35**	**$1,795.84**

FY 2018 Highway Statewide Fiscal Constraint				
(in millions)				
Highway	**Estimated Federal Revenue**	**Estimated Non-Federal Revenue**	**Total Estimated Revenue**	**Total Proposed Commitments**
Revenue Available	$1,113.22	$859.70	$1,972.92	$1,755.93
Reductions for AC Conversions				
GANS Debt Service	($46.00)		($46.00)	
Prior Year Advance Construction Conversions	($265.00)	$265.00		
Same Year Advance Construction Conversions	($102.00)	$102.00		
Net Revenue Available	$700.22	$1,226.70	**$1,926.92**	**$1,755.93**
Advance Construction and 100% State Program (for MDOT projects only)		$3.65	$3.65	**$3.65**
Highway Federal-Aid Program Total	**$700.22**	**$1,223.05**	**$1,923.27**	**$1,752.28**

FY 2019 Highway Statewide Fiscal Constraint				
(in millions)				
Highway	**Estimated Federal Revenue**	**Estimated Non-Federal Revenue**	**Total Estimated Revenue**	**Total Proposed Commitments**
Revenue Available	$1,135.49	$515.00	$1,650.49	$891.19
Reductions for AC Conversions				
GANS Debt Service	($46.00)		($46.00)	
Prior Year Advance Construction Conversions	($265.00)	$265.00		
Same Year Advance Construction Conversions	($102.00)	$102.00		
Net Revenue Available	$722.49	$882.00	**$1,604.49**	**$891.19**
Advance Construction and 100% State Program (for MDOT projects only)		$2.31	$2.31	**$2.31**
Highway Federal-Aid Program Total	**$722.49**	**$879.69**	**$1,602.18**	**$888.88**

FY 2020 Highway Statewide Fiscal Constraint				
(in millions)				
Highway	**Estimated Federal Revenue**	**Estimated Non-Federal Revenue**	**Total Estimated Revenue**	**Total Proposed Commitments**
Revenue Available	$1,158.20	$583.90	$1,742.10	$945.15
Reductions for AC Conversions				
GANS Debt Service	($46.00)		($46.00)	
Prior Year Advance Construction Conversions	($265.00)	$265.00		
Same Year Advance Construction Conversions	($102.00)	$102.00		
Net Revenue Available	$745.20	$950.90	**$1,696.10**	**$945.15**
Advance Construction and 100% State Program (for MDOT projects only)		$4.21	$4.21	**$4.21**
Highway Federal-Aid Program Total	**$745.20**	**$946.69**	**$1,691.89**	**$940.94**

Table 8: FY 2017 Transit Statewide Fiscal Constraint

FY 2017 Transit Statewide Fiscal Constraint (millions)				
	Estimated Federal Revenue	**Estimated Non-Federal Revenue**	**Total Estimated Revenue**	**Total Proposed Commitments**
Comprehensive Transit Fund (CTF)		$57.87	$57.87	$57.87
Section 3038 - Over the Road Bus Program				
Section 3045 - Nation Fuel Cell Technology Development				
Section 5303 - Metropolitan Transportation Planning				
Section 5304 - Statewide Transportation Planning				
Section 5305 - Metropolitan and Statewide Planning				
Section 5307 - UZA Formula	$114.47	$158.01	$272.48	$272.48
Section 5308 - Clean Fuels Program				
Section 5309 - Capital Bus and Capital New Starts				
Section 5310 - Elderly and Disabled	$9.67	$2.60	$12.27	$12.27
Section 5311 - Non-UZA Formula	$7.84	$110.75	$118.59	$118.59
Section 5312 Research, Development, Demonstration, and Deployment				
Section 5313 - Transit Cooperative Research Program				
Section 5314 - National Research and Technology Program				
Section 5316 - Job Access/Reverse Commute	$0.04	$0.04	$0.08	$0.08
Section 5317 - New Freedom Initiative	$0.37	$0.40	$0.78	$0.78
Section 5320 Alternative - Transportation in Parks and Public Lands				
Section 5322 - Human Resources and Training				
Section 5324 - Emergency Relief				
Section 5326 - Asset Management Provisions				
Section 5329 - Safety				
Section 5337 - State of Good Repair Grants	$3.18	$0.80	$3.98	$3.98
Section 5339 - Bus and Bus Facilities	$43.43	$48.09	$91.52	$91.52
Section 5505 - University Transportation Centers Program				
Transit Total	**$179.00**	**$378.56**	**$557.57**	**$557.57**

FY 2018 Transit Statewide Fiscal Constraint (millions)				
	Estimated Federal Revenue	**Estimated Non-Federal Revenue**	**Total Estimated Revenue**	**Total Proposed Commitments**
Comprehensive Transit Fund (CTF)		$0.57	$0.57	$0.57
Section 3038 - Over the Road Bus Program				
Section 3045 - Nation Fuel Cell Technology Development				
Section 5303 - Metropolitan Transportation Planning				
Section 5304 - Statewide Transportation Planning				
Section 5305 - Metropolitan and Statewide Planning				
Section 5307 - UZA Formula	$92.99	$124.67	$217.66	$217.66
Section 5308 - Clean Fuels Program				
Section 5309 - Capital Bus and Capital New Starts				
Section 5310 - Elderly and Disabled	$6.37	$4.64	$11.02	$11.02
Section 5311 - Non-UZA Formula	$2.43	$99.32	$101.75	$101.75
Section 5312 Research, Development, Demonstration, and Deployment				
Section 5313 - Transit Cooperative Research Program				
Section 5314 - National Research and Technology Program				
Section 5316 - Job Access/Reverse Commute	$0.04	$0.04	$0.08	$0.08
Section 5317 - New Freedom Initiative	$0.08	$0.09	$0.17	$0.17
Section 5320 Alternative - Transportation in Parks and Public Lands				
Section 5322 - Human Resources and Training				
Section 5324 - Emergency Relief				
Section 5326 - Asset Management Provisions				
Section 5329 - Safety				
Section 5337 - State of Good Repair Grants	$1.95	$0.49	$2.43	$2.43
Section 5339 - Bus and Bus Facilities	$9.08	$7.12	$16.20	$16.20
Section 5505 - University Transportation Centers Program				
Transit Total	**$112.94**	**$236.94**	**$349.88**	**$349.88**

FY 2019 Transit Statewide Fiscal Constraint (millions)				
	Estimated Federal Revenue	**Estimated Non-Federal Revenue**	**Total Estimated Revenue**	**Total Proposed Commitments**
Comprehensive Transit Fund (CTF)		$0.57	$0.57	$0.57
Section 3038 - Over the Road Bus Program				
Section 3045 - Nation Fuel Cell Technology Development				
Section 5303 - Metropolitan Transportation Planning				
Section 5304 - Statewide Transportation Planning				
Section 5305 - Metropolitan and Statewide Planning				
Section 5307 - UZA Formula	$97.77	$126.48	$224.25	$224.25
Section 5308 - Clean Fuels Program				
Section 5309 - Capital Bus and Capital New Starts				
Section 5310 - Elderly and Disabled	$5.55	$4.02	$9.57	$9.57
Section 5311 - Non-UZA Formula	$2.38	$99.18	$101.55	$101.55
Section 5312 Research, Development, Demonstration, and Deployment				
Section 5313 - Transit Cooperative Research Program				
Section 5314 - National Research and Technology Program				
Section 5316 - Job Access/Reverse Commute	$0.04	$0.04	$0.08	$0.08
Section 5317 - New Freedom Initiative	$0.08	$0.09	$0.17	$0.17
Section 5320 Alternative - Transportation in Parks and Public Lands				
Section 5322 - Human Resources and Training				
Section 5324 - Emergency Relief				
Section 5326 - Asset Management Provisions				
Section 5329 - Safety				
Section 5337 - State of Good Repair Grants	$2.03	$0.51	$2.54	$2.54
Section 5339 - Bus and Bus Facilities	$9.39	$7.64	$17.04	$17.04
Section 5505 - University Transportation Centers Program				
Transit Total	**$117.24**	**$238.53**	**$355.77**	**$355.77**

FY 2020 Transit Statewide Fiscal Constraint (millions)				
	Estimated Federal Revenue	**Estimated Non-Federal Revenue**	**Total Estimated Revenue**	**Total Proposed Commitments**
Comprehensive Transit Fund (CTF)		$0.57	$0.57	$0.57
Section 3038 - Over the Road Bus Program				
Section 3045 - Nation Fuel Cell Technology Development				
Section 5303 - Metropolitan Transportation Planning				
Section 5304 - Statewide Transportation Planning				
Section 5305 - Metropolitan and Statewide Planning				
Section 5307 - UZA Formula	$94.68	$126.45	$221.14	$221.14
Section 5308 - Clean Fuels Program				
Section 5309 - Capital Bus and Capital New Starts				
Section 5310 - Elderly and Disabled	$5.65	$4.05	$9.70	$9.70
Section 5311 - Non-UZA Formula	$2.41	$99.24	$101.65	$101.65
Section 5312 Research, Development, Demonstration, and Deployment				
Section 5313 - Transit Cooperative Research Program				
Section 5314 - National Research and Technology Program				
Section 5316 - Job Access/Reverse Commute	$0.04	$0.04	$0.08	$0.08
Section 5317 - New Freedom Initiative	$0.27	$0.11	$0.38	$0.38
Section 5320 Alternative - Transportation in Parks and Public Lands				
Section 5322 - Human Resources and Training				
Section 5324 - Emergency Relief				
Section 5326 - Asset Management Provisions				
Section 5329 - Safety				
Section 5337 - State of Good Repair Grants	$2.11	$0.53	$2.64	$2.64
Section 5339 - Bus and Bus Facilities	$10.75	$2.65	$13.40	$13.40
Section 5505 - University Transportation Centers Program				
Transit Total	**$115.91**	**$233.64**	**$349.56**	**$349.56**

Table 9: FY 2017 Highway Rural (Non-MPO) Fiscal Constraint

FY 2017 Highway Rural (Non-MPO) Fiscal Constraint (millions)				
	Estimated Federal Revenue	**Estimated Non-Federal Revenue**	**Total Estimated Revenue**	**Total Proposed Commitments**
MDOT Advance Construction and "M" Program		$4.50	$4.50	$4.50
MDOT Federal-Aid Program	$187.88	$42.21	$230.09	$230.09
Subtotal MDOT	**$187.88**	**$46.71**	**$234.59**	**$234.59**
Local STP	$50.89	$22.54	$73.42	$73.42
Local Bridge	$21.91	$5.48	$27.39	$27.39
Local CMAQ	$1.12	$0.29	$1.41	$1.41
Local Safety				
Local Equity Bonus (TEDF)				
Local Other FHWA	$5.34	$0.08	$5.42	$5.42
Local Advance Construction Starts				
Local Non-Federal				
Subtotal Local	**$79.26**	**$28.39**	**$107.64**	**$107.64**
Highway Total	**$267.14**	**$75.10**	**$342.23**	**$342.23**

Notes: Estimated federal revenue is apportionment (not obligation authority) for all phases for each trunkline and local project. Estimated non-federal revenue includes state and local match and other funds for all phases for each trunkline and local project

FY 2018 Highway Rural (Non-MPO) Fiscal Constraint (millions)				
	Estimated Federal Revenue	**Estimated Non-Federal Revenue**	**Total Estimated Revenue**	**Total Proposed Commitments**
MDOT Advance Construction and "M" Program				
MDOT Federal-Aid Program	$109.17	$29.24	$138.41	$138.41
Subtotal MDOT	**$109.17**	**$29.24**	**$138.41**	**$138.41**
Local STP	$29.89	$15.52	$45.41	$45.41
Local Bridge	$18.84	$4.71	$23.55	$23.55
Local CMAQ				
Local Safety	$0.02		$0.02	$0.02
Local Equity Bonus (TEDF)				
Local Other FHWA	$7.33	$0.94	$8.26	$8.26
Local Advance Construction Starts				
Local Non-Federal				
Subtotal Local	**$56.08**	**$21.17**	**$77.24**	**$77.24**
Highway Total	**$165.25**	**$50.41**	**$215.65**	**$215.65**

Notes: Estimated federal revenue is apportionment (not obligation authority) for all phases for each trunkline and local project. Estimated non-federal revenue includes state and local match and other funds for all phases for each trunkline and local project

FY 2019 Highway Rural (Non-MPO) Fiscal Constraint (millions)				
	Estimated Federal Revenue	**Estimated Non-Federal Revenue**	**Total Estimated Revenue**	**Total Proposed Commitments**
MDOT Advance Construction and "M" Program				
MDOT Federal-Aid Program	$108.50	$19.66	$128.16	$128.16
Subtotal MDOT	**$108.50**	**$19.66**	**$128.16**	**$128.16**
Local STP	$28.92	$13.66	$42.58	$42.58
Local Bridge				
Local CMAQ				
Local Safety				
Local Equity Bonus (TEDF)				
Local Other FHWA	$1.56	$0.35	$1.91	$1.91
Local Advance Construction Starts				
Local Non-Federal				
Subtotal Local	**$30.48**	**$14.01**	**$44.49**	**$44.49**
Highway Total	**$138.98**	**$33.67**	**$172.65**	**$172.65**

Notes: Estimated federal revenue is apportionment (not obligation authority) for all phases for each trunkline and local project. Estimated non-federal revenue includes state and local match and other funds for all phases for each trunkline and local project

FY 2020 Highway Rural (Non-MPO) Fiscal Constraint (millions)				
	Estimated Federal Revenue	**Estimated Non-Federal Revenue**	**Total Estimated Revenue**	**Total Proposed Commitments**
MDOT Advance Construction and "M" Program		$1.90	$1.90	$1.90
MDOT Federal-Aid Program	$72.86	$14.51	$87.37	$87.37
Subtotal MDOT	**$72.86**	**$16.41**	**$89.27**	**$89.27**
Local STP	$29.07	$12.16	$41.23	$41.23
Local Bridge				
Local CMAQ				
Local Safety	$0.21	$0.02	$0.23	$0.23
Local Equity Bonus (TEDF)				
Local Other FHWA				
Local Advance Construction Starts				
Local Non-Federal				
Subtotal Local	**$29.28**	**$12.18**	**$41.46**	**$41.46**
Highway Total	**$102.14**	**$28.59**	**$130.73**	**$130.73**

Notes: Estimated federal revenue is apportionment (not obligation authority) for all phases for each trunkline and local project. Estimated non-federal revenue includes state and local match and other funds for all phases for each trunkline and local project

Table 10: FY 2017 Transit Rural (Non-MPO) Fiscal Constraint

FY 2017 Transit Rural (Non-MPO) Fiscal Constraint (millions)				
	Estimated Federal Revenue	**Estimated Non-Federal Revenue**	**Total Estimated Revenue**	**Total Proposed Commitments**
Comprehensive Transit Fund (CTF)				
Section 3038 - Over the Road Bus Program				
Section 3045 - Nation Fuel Cell Technology Development				
Section 5303 - Metropolitan Transportation Planning				
Section 5304 - Statewide Transportation Planning				
Section 5305 - Metropolitan and Statewide Planning				
Section 5307 - UZA Formula				
Section 5308 - Clean Fuels Program				
Section 5309 - Capital Bus and Capital New Starts				
Section 5310 - Elderly and Disabled	$1.88	$0.47	$2.34	$2.34
Section 5311 - Non-UZA Formula	$0.19	$0.23	$0.42	$0.42
Section 5312 Research, Development, Demonstration, and Deployment				
Section 5313 - Transit Cooperative Research Program				
Section 5314 - National Research and Technology Program				
Section 5316 - Job Access/Reverse Commute				
Section 5317 - New Freedom Initiative	$0.19	$0.23	$0.42	$0.42
Section 5320 Alternative - Transportation in Parks and Public Lands				
Section 5322 - Human Resources and Training				
Section 5324 - Emergency Relief				
Section 5326 - Asset Management Provisions				
Section 5329 - Safety				
Section 5337 - State of Good Repair Grants				
Section 5339 - Bus and Bus Facilities	$37.28	$46.60	$83.89	$83.89
Section 5505 - University Transportation Centers Program	$0.00	$0.00	$0.00	$0.00
Transit Total	**$39.54**	**$47.53**	**$87.07**	**$87.07**

FY 2018 Transit Rural (Non-MPO) Fiscal Constraint (millions)				
	Estimated Federal Revenue	**Estimated Non-Federal Revenue**	**Total Estimated Revenue**	**Total Proposed Commitments**
Comprehensive Transit Fund (CTF)				
Section 3038 - Over the Road Bus Program				
Section 3045 - Nation Fuel Cell Technology Development				
Section 5303 - Metropolitan Transportation Planning				
Section 5304 - Statewide Transportation Planning				
Section 5305 - Metropolitan and Statewide Planning				
Section 5307 - UZA Formula				
Section 5308 - Clean Fuels Program				
Section 5309 - Capital Bus and Capital New Starts				
Section 5310 - Elderly and Disabled	$1.27	$0.32	$1.59	$1.59
Section 5311 - Non-UZA Formula	$0.01	$0.02	$0.03	$0.03
Section 5312 Research, Development, Demonstration, and Deployment				
Section 5313 - Transit Cooperative Research Program				
Section 5314 - National Research and Technology Program				
Section 5316 - Job Access/Reverse Commute				
Section 5317 - New Freedom Initiative	$0.03	$0.04	$0.07	$0.07
Section 5320 Alternative - Transportation in Parks and Public Lands				
Section 5322 - Human Resources and Training				
Section 5324 - Emergency Relief				
Section 5326 - Asset Management Provisions				
Section 5329 - Safety				
Section 5337 - State of Good Repair Grants				
Section 5339 - Bus and Bus Facilities	$4.90	$6.12	$11.02	$11.02
Section 5505 - University Transportation Centers Program				
Transit Total	**$6.21**	**$6.50**	**$12.71**	**$12.71**

FY 2019 Transit Rural (Non-MPO) Fiscal Constraint (millions)				
	Estimated Federal Revenue	**Estimated Non-Federal Revenue**	**Total Estimated Revenue**	**Total Proposed Commitments**
Comprehensive Transit Fund (CTF)				
Section 3038 - Over the Road Bus Program				
Section 3045 - Nation Fuel Cell Technology Development				
Section 5303 - Metropolitan Transportation Planning				
Section 5304 - Statewide Transportation Planning				
Section 5305 - Metropolitan and Statewide Planning				
Section 5307 - UZA Formula				
Section 5308 - Clean Fuels Program				
Section 5309 - Capital Bus and Capital New Starts				
Section 5310 - Elderly and Disabled	$0.59	$0.15	$0.74	$0.74
Section 5311 - Non-UZA Formula	$0.01	$0.02	$0.03	$0.03
Section 5312 Research, Development, Demonstration, and Deployment				
Section 5313 - Transit Cooperative Research Program				
Section 5314 - National Research and Technology Program				
Section 5316 - Job Access/Reverse Commute				
Section 5317 - New Freedom Initiative	$0.03	$0.04	$0.07	$0.07
Section 5320 Alternative - Transportation in Parks and Public Lands				
Section 5322 - Human Resources and Training				
Section 5324 - Emergency Relief				
Section 5326 - Asset Management Provisions				
Section 5329 - Safety				
Section 5337 - State of Good Repair Grants				
Section 5339 - Bus and Bus Facilities	$5.29	$6.62	$11.91	$11.91
Section 5505 - University Transportation Centers Program				
Transit Total	**$5.92**	**$6.83**	**$12.75**	**$12.75**

FY 2020 Transit Rural (Non-MPO) Fiscal Constraint (millions)				
	Estimated Federal Revenue	**Estimated Non-Federal Revenue**	**Total Estimated Revenue**	**Total Proposed Commitments**
Comprehensive Transit Fund (CTF)				
Section 3038 - Over the Road Bus Program				
Section 3045 - Nation Fuel Cell Technology Development				
Section 5303 - Metropolitan Transportation Planning				
Section 5304 - Statewide Transportation Planning				
Section 5305 - Metropolitan and Statewide Planning				
Section 5307 - UZA Formula				
Section 5308 - Clean Fuels Program				
Section 5309 - Capital Bus and Capital New Starts				
Section 5310 - Elderly and Disabled	$0.53	$0.13	$0.66	$0.66
Section 5311 - Non-UZA Formula	$0.01	$0.00	$0.02	$0.02
Section 5312 Research, Development, Demonstration, and Deployment				
Section 5313 - Transit Cooperative Research Program				
Section 5314 - National Research and Technology Program				
Section 5316 - Job Access/Reverse Commute				
Section 5317 - New Freedom Initiative	$0.22	$0.06	$0.28	$0.28
Section 5320 Alternative - Transportation in Parks and Public Lands				
Section 5322 - Human Resources and Training				
Section 5324 - Emergency Relief				
Section 5326 - Asset Management Provisions				
Section 5329 - Safety				
Section 5337 - State of Good Repair Grants				
Section 5339 - Bus and Bus Facilities	$2.42	$0.60	$3.02	$3.02
Section 5505 - University Transportation Centers Program				
Transit Total	**$3.18**	**$0.79**	**$3.98**	**$3.98**

7.0 Environmental Justice

In February 1994, President William J. Clinton signed Executive Order 12898. Its major goal was to ensure that no minority or low-income population suffers "disproportionately high and adverse human health or environmental effects" due to any "programs, policies, and activities" undertaken by a federal agency or any agency receiving federal funds. Since MDOT receives federal funding, the above-mentioned order applies to its programs, policies, and activities. Environmental Justice (EJ), however, is not a new requirement. In fact, since no additional legislation accompanied the president's order, its authority rests in Title VI of the Civil Rights Act of 1964, and MDOT has long considered these principles in its planning processes.

These requirements can be met in a variety of ways and on a variety of levels. MDOT's first responsibility when planning specific projects is to identify populations that will be affected by a given project. If a disproportionate effect is anticipated, mitigation procedures must be followed. If mitigation options do not sufficiently eliminate the disproportionate effect, reasonable alternatives should be discussed and, if necessary, implemented. Disproportionate effects are those that are appreciably more severe for any EJ group or predominantly borne by a single EJ group.

In addition to a project-by-project analysis of EJ, MDOT is responsible for ensuring that its overall program does not disproportionately distribute benefits or negative effects to any target EJ population. Analysis at the statewide level examines the total negative and positive outcomes of transportation projects to see whether there is a disproportionate effect. This process involves establishing a baseline (a geographic representation of the location of those populations mentioned in the executive order) and then examining MDOT's program as a whole as it relates to these areas. Generally, the negative effects of projects are examined at the individual project level; however, the analysis in this report focuses on the benefits of transportation improvements to an area. For this analysis, the following definitions were used:

- **Low-Income**:
  - A person whose median household income was below the U.S. Department of Health and Human Services poverty guidelines in the past 12 months.
- **Minority:**
  - Black or African American refers to people having origins in any of the Black racial groups of Africa. It includes people who indicated their race or races as "Black, African American, Negro," or wrote in entries such as African American, Nigerian, or Haitian.
  - Hispanic or Latino refers to "Some other race" and was included in Census 2000 for respondents who were unable to identify with the five U.S. Office of Management and Budget race categories. Respondents who provided write-in entries, such as Moroccan, South African, Belizean, or Hispanic origin (for example, Mexican, Puerto Rican, or Cuban), are included in the "Some other race" category.
  - Asian refers to people having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent. It includes people who indicated

their race or races as "Asian Indian," "Chinese," "Filipino," "Korean," "Japanese," "Vietnamese," or "Other Asian," or wrote in entries such as Burmese, Hmong, Pakistani, or Thai.

- American Indian or Alaskan Native refers to people having origins in any of the original peoples of North and South America (including Central America), and who maintain tribal affiliation or community attachment. It includes people who indicated their race or races by marking this category or writing in their principal or enrolled tribe, such as Rosebud, Sioux, Chippewa, or Navajo.
- Native Hawaiian and Other Pacific Islander refers to people having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. It includes people who indicated their race or races as "Native Hawaiian," "Guamanian or Chamorro," "Samoan," or "Other Pacific Islander," or wrote in entries such as Tahitian, Mariana Islander, or Chuukese (U.S. Census Bureau 2000, March 2001).
- Elderly refers to a person whose age is 65 years or older.
- Persons with no vehicles available refers to persons who reside in occupied housing units (as defined by the U.S. Census Bureau).

Low-income and minority thresholds were developed using U.S. Census American Community Survey (ACS) five-year (2010-2014) data for low-income groups and U.S. Department of Health and Human Services data for minority groups. MPO populations were included in development of the thresholds to get a true statewide average. The location quotient (LQ) statistical method was used to arrive at the final thresholds. LQ is a "statistical method that strives to show if a local economy has a greater share than expected of a given economy. LQ helps to determine whether or not a particular block group has a greater share of its racial groupings than expected in the state. Hence, that local economy having a greater than one (>1) contribution will be recognized as an EJ zone in the state." Those EJ zone areas were mapped and overlaid on the projects contained in the FY 2017-2020 STIP.

For the purposes of the STIP EJ analysis, each project (trunkline and local) was mapped out and compared individually to each of the low-income and minority EJ zones. Figure 2 at the end of this section shows where each project is compared to the low-income and minority populations in Michigan (light blue color).

The analysis addresses two fundamental EJ principles:

1) To avoid, minimize, or mitigate disproportionate high and adverse human health or environmental effects on low-income and minority populations.
2) To prevent the denial of or reduction or significant delay in the receipt of benefits by low-income and minority populations.

Table 11 summarizes the results of the analysis of all non-MPO projects and costs in relation to all non-MPO EJ zones. For the sake of consistency and comparison with the FY 2017-2020 STIP EJ analysis, RTF projects and small urban projects are listed separately.

Table 11: FY 2017-2020 Non-MPO Environmental Justice (EJ) Analysis

Type of Project	Total Projects	Total Projects in EJ Zones	Percent of Projects in EJ Zones
Trunkline (MDOT)	418	415	99.28 %
Rural Task Force (Local)	571	564	98.77 %
Small Urban (Local)	29	28	96.12 %
Total	1,018	1,007	98.91 %

Type of Project	Total Dollars	Total Dollars in EJ Zones	Percent of Dollars in EJ Zones
Trunkline (MDOT)	$647,424,080	$644,494,920	99.55 %
Rural Task Force (Local)	$172,308,658	$169,760,874	98.52 %
Small Urban (Local)	$12,089,533	$11,620,783	96.12 %
Total	$831,822,271	$825,876,577	99.29 %

7.1 Disproportionate Adverse Effects

Adverse effects, as defined in the final U.S. DOT Order on EJ (DOT Order 5610.2) contained in the Federal Register in 1997, include but are not limited to: bodily impairment, illness or death; air, noise, or water pollution and soil contamination; destruction or disruption of natural resources or aesthetic values; disruption of community cohesion; disruption of the availability of public and private facilities and services; displacement of persons, farms, or nonprofit organizations; or increased traffic congestion.

Review of the total 1,018 trunkline and local non-MPO projects that comprise the proposed FY 2017-2020 STIP reveal that the majority fall within the preservation category (restore and rehabilitate, reconstruct, and resurface). The remainder of the projects consists of bridge, traffic and safety sign installation projects, carpool parking lots, and miscellaneous projects, including wetland mitigation and trail construction.

The proposed facility improvements located in low-income and minority population zones are similar in design and comparative to those located in non-low-income or non-minority zones. The projects are located in mostly rural, low-population areas, thereby minimizing potential adverse effects, such as noise, vibration, displacement of person or businesses, or disruption of community cohesion. All displacements and acquisition of right of way will be at the project development level and follow appropriate state and federal procedures, including the Uniform Relocation Assistance and Real Property Acquisition Policies Act, to minimize impacts on affected individuals and businesses. Therefore, it has been determined that any adverse impacts associated with the proposed system improvements do not reach the disproportionately high and adverse standard.

7.2 Receipt of Beneficial Effects

The FY 2017-2020 STIP includes 418 MDOT and significant local projects, 571 local RTF projects, and 29 local small urban projects found outside the MPO areas. This results in a

grand total of 1,018 projects. Of this 1,018 total, 1,007 projects (99.91 percent) are located within, partially within, or adjacent to an established EJ zone. Breaking it down further, of the 200 trunkline projects, 95.00 percent are within EJ zones. Of the 571 local RTF projects, 98.77 percent are within EJ zones. Of the 29 local small urban projects, 98.91 percent are within EJ zones.

Total trunkline and local project costs in the FY 2017-2020 STIP are estimated to be $831.82 million, of which about $825.87 million (99.29 percent) will benefit EJ zones. The RTF program costs are estimated at $172.31 million, of which $169.76 million (98.52 percent) will benefit EJ zones. The small urban program costs are estimated at $12.1 million, of which $11.6 million (96.12 percent) will benefit EJ zones.

A significant number of projects and associated project costs are located within, partially within, or adjacent to areas established as EJ zones. Although the benefit is 98.91 percent, this is still significantly higher than the non-MPO population percentage, which is 20.75 percent of the total population. Therefore, it has been determined that low-income and minority populations are not being denied receipt of projects, but will positively benefit from the economic impact of the proposed transportation improvements.

Table 12 shows the population that is served by transportation improvement projects in selected geographic areas within the state of Michigan. The total population of non-MPO EJ zones was calculated as approximately 1.5 million, or 15 percent, of Michigan's population. In other words, approximately 15 percent of Michigan's citizens are considered low-income or a minority. Of the total non-MPO population, 75.8 percent reside in EJ zones.

Table 12: 2010-2014 ACS Data for FY 2017-2020 STIP EJ Analysis

Geographic Area	Total Population	Percent of Total Population
In the State of Michigan	9,889,024	100.00 %
In MPOs	7,837,437	79.25 %
In Non-MPO Areas	2,051,587	20.75 %
In Non-MPO EJ Zones	1,555,103	15.73 %

EJ ensures that potential impacts and benefits derived from transportation services are provided equitably to every population in Michigan. Through careful planning and proactive involvement, MDOT guarantees the highest quality transportation services to all Michigan citizens, regardless of race or income level.

Figure 2 displays the location of all the state and local (RTF and small urban) highway projects included in this document. Projects are displayed either as colored line or point segments. A line segment represents a project that is linear in nature, such as a highway between two intersecting roads. A point segment represents a project that has minimal length, such as a bridge or intersection project. Each color represents the year of project implementation.

Figure 2: Statewide Trunkline and Local STIP Projects in EJ Zones 2017-2020

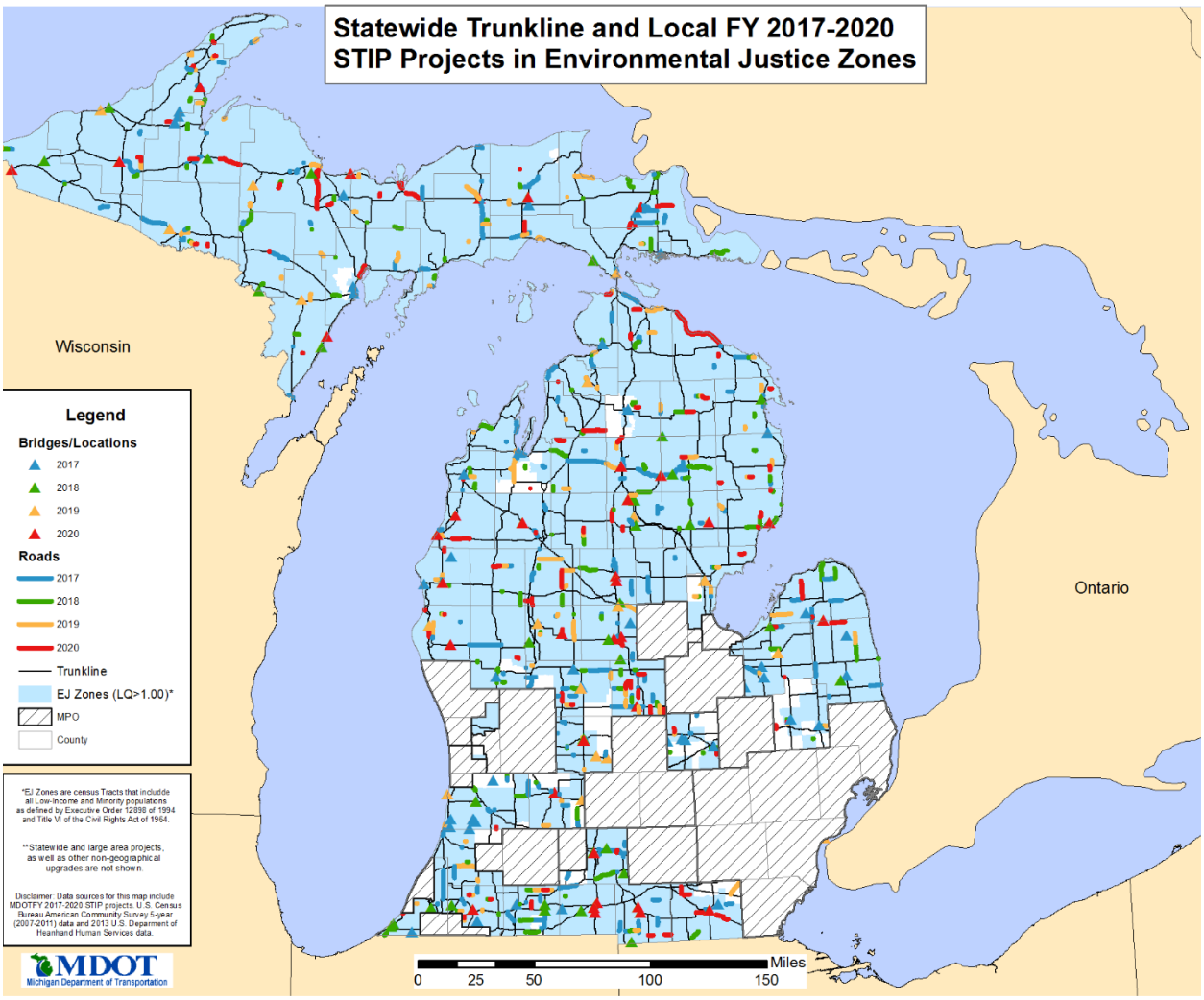


Table 13: FY 2017 – 2020 Project List

STIP Project List FY 2017-2020

Required Fields

Fiscal Year	County	Respon-sible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	Phase	Advance Construct	Federal Cost ($1000s)	Federal Fund Source	State Cost ($1000s)	State Fund Source	Local Cost ($1000s)	Local Fund Source	Total Phase Cost ($1000s)	MDOT Job No.	Local ID No.	MPO/ Rural Action Date	Amend-ment Type	Air Quality	Comments	Total Project Cost ($1000s)
2017	BARAGA	MDOT	US-41	US-41, Covington and Spur Townships, Baraga County	9.63	Restore & rehabilitate	Aggregate Grade Lift and HMA surfacing	ROW		4	NH	1	M			5	126827				NA		10,000
2017	STATEWIDE	MDOT	Statewide	Statewide		Miscellaneous	2017 Yes! Expo (RCWD)	EPE		6	ST					6	119693				NA		6
2017	CHIPPEWA	MDOT	M-28	Near the intersection of M-28/M-123 Eckerman	0.10	Roadside facility	Construct new car pool parking lot.	PE		7	ST	2	M			8	113575				NA		201
2017	STATEWIDE	MDOT	Statewide	Statewide		Miscellaneous	2017 Construction Career Days (RCWD)	EPE		10	ST					10	119688				NA		10
2017	STATEWIDE	MDOT	Statewide	Statewide		Miscellaneous	2017 Construction Fair (RCWD)	EPE		10	ST					10	119709				NA		10
2017	IONIA	MDOT	M-66	between Tupper Lake Rd and Musgrove Hwy	0.26	Roadside facility	Construct SES Type 2	PE		8	ST	2	M			10	129248				NA		150
2017	STATEWIDE	MDOT	Statewide	Statewide		Miscellaneous	2017 RCWD - National Summer Trans Institute	EPE		12	ST					12	119702				NA		12
2017	STATEWIDE	MDOT	Statewide	Statewide		Miscellaneous	2017 Y Achievers. Reimburse trans costs - college	EPE		20	ST					20	119714				NA		20
2017	OSCODA	MDOT	M-33	Cherry Creek Rd to west of the M-33/M-72 Jct	6.72	Restore & rehabilitate	HMA Crush and Shape with Minor Widening	ROW		16	ST	4	M			20	123278				NA		6,800
2017	GRAND TRAVERSE	MDOT	US-31	US-31 in Grand Traverse County	0.93	Widen - major (capacity increase)	Widen to provide a center left turn lane	ROW		18	HSIP	2	M			20	124027				NA		3,246
2017	VAN BUREN	MDOT	I-94	I-94 WB from Exit 46 to Exit 56	9.02	Miscellaneous	Install Trees	PE		21	HSIP	2	M			23	124035				NA		290
2017	GRAND TRAVERSE	Grand Traverse County	BATA	Grand Traverse Bay Area Transportation Authority		Transit vehicle additions/replacements	Shelters and Pads	CON		25	STL	5	M			30	127332				NA		30
2017	STATEWIDE	MDOT	Statewide	Statewide		Miscellaneous	2017 OHR Recruitment, Outreach, and Career Fairs	EPE		32	ST					32	119697				NA		32
2017	STATEWIDE	MDOT	Statewide	Ferris State University		Miscellaneous	2017 NSTI at FSU - 1 week trans career explor prg	EPE		35	ST					35	121561				NA		35
2017	STATEWIDE	MDOT	Statewide	Statewide		Miscellaneous	2017 Bonding & Access to Capital Education Program	EPE		40	ST					40	121549				NA		40
2017	STATEWIDE	MDOT	Statewide	Michigan Tech University		Miscellaneous	2017 NSTI MTU - two week trans exploration prog	EPE		55	ST					55	121556				NA		55
2017	SHIAWASSEE	Shiawassee Area Transportation Agency	Transit	Countywide, Shiawassee Area Transportation Agency		Transit vehicle additions/replacements	Bus Purchase	EPE		56	STL	14	M			70	119427				NA		70
2017	CASS	Cass County	Countywide	Countywide		Transit vehicle additions/replacements	Bus purchase - replace one (1) cutaway bus with a 2017 or newer cutaway bus	EPE		56	CM	14	M			70	121143				NA		70
2017	ONTONAGON	MDOT	M-28	over the Baltimore River, West of Bruce Crossing	1.00	Bridge replacement	Deck Replacement	PE		61	NH	14	M			75	126886				NA		1,902
2017	BENZIE	Benzie Transportation Authority	Areawide	Areawide-Beulah - Benzie Trans Authority		Transit vehicle additions/replacements	Bus replacement - 2009 mediun duty bus eligible for replacement in 2017. Purchase one less than 30' replacement bus. Bus #18A is a diesel and will be replaced with a gasoline engine that will be dually converted to propane which will have a cleaner emissions.	EPE		65	CM	16	M			81	119824				NA		81
2017	KALKASKA	MDOT	M-72	MDOT Kalkaska Field Operations Facility	0.13	Miscellaneous	Construction of a new PITWS	CON		72	ST	16	M			87	120447				NA		112
2017	CHIPPEWA	MDOT	M-28	Near the intersection of M-28/M-123 Eckerman	0.10	Roadside facility	Construct new car pool parking lot.	ROW		82	ST	18	M			100	113575				NA		201
2017	CASS	Cass County	Countywide	Countywide		Transit vehicle additions/replacements	Bus purchase - replace one (1) less than 30' small bus with a 2017 or newer les than 30' small bus	EPE		80	CM	20	M			100	121144				NA		100
2017	DELTA	MDOT	US-2	Westbound US-2 between Gladstone and Rapid River	5.52	Resurface	Joint repairs and HMA overlay with ASCRL	PE		82	NH	18	M			100	126833				NA		6,217
2017	STATEWIDE	MDOT	I-75	I-75 and US-23 in Genesee, Saginaw, & Bay Counties		Miscellaneous	Median and Wrong Way Delineation	PE		92	HSIP	10	M			102	127488				NA		671
2017	MONTCALM	Montcalm County	Six Lakes Road	over Flat River		Bridge replacement	Replacement	CON		83	BRO	16	M	5	CNTY	104	126595				NA		104
2017	BENZIE	MDOT	US-31	at Joyfield Road	0.10	Widen - minor	Construct right turn lane	CON		98	CM	25	M			123	116331				NA		205

STIP Project List FY 2017-2020

Required Fields

Fiscal Year	County	Respon-sible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	Phase	Advance Construct	Federal Cost ($1000s)	Federal Fund Source	State Cost ($1000s)	State Fund Source	Local Cost ($1000s)	Local Fund Source	Total Phase Cost ($1000s)	MDOT Job No.	Local ID No.	MPO/ Rural Action Date	Amend-ment Type	Air Quality	Comments	Total Project Cost ($1000s)
2017	STATEWIDE	MDOT	Statewide	Statewide		Miscellaneous	2017 RCAR (RCWD) program	EPE		130	ST					130	119684				NA		130
2017	EMMET	MDOT	US-31	from Liberty Street to Rosedale Avenue	1.34	Reconstruct	Realignment and reconstruction	ROW		107	NH	24	M			131	120219				NA		14,803
2017	MASON	Ludington Mass Transportation Authority	Areawide	Areawide - Ludington - Ludington Mass Trans Auth		Transit vehicle additions/replacements	Bus replacement - 2008 medium duty bus eligible for replacement in 2015. Purchase one less than 30' mediur duty replacement bus. Replace bus #21 which is a diesel with diesel which will have cleaner emissions	EPE		106	CM	26	M			132	119827				NA		132
2017	HURON	Thumb Area Transit	Countywide	Countywide		Transit vehicle additions/replacements	Bus purchase - purchase new bus for expanded service	EPE		120	CM	30	M			150	119974				NA		150
2017	DELTA	MDOT	US-2	Eastbound US-2 between Gladstone and Rapid River	5.55	Resurface	Joint repairs and HMA overlay with ASCRL	PE		123	NH	27	M			150	128711				NA		7,271
2017	LAPEER	Lapeer County	Countywide	Greater Lapeer Transportation Authority area		Transit vehicle additions/replacements	2 Clean Diesel Buses	EPE		124	CM	31	M			156	120818				NA		156
2017	ONTONAGON	MDOT	M-28	over the Baltimore River, West of Bruce Crossing	1.00	Bridge replacement	Deck Replacement	SUB		129	NH	29	M			157	126886				NA		1,902
2017	GRATIOT	MDOT	US-27	over Maple River	1.26	Bridge replacement	Deck Replacement	PE		163	NH	36	M			199	130141				NA		3,310
2017	BENZIE	MDOT	US-31	at Indian Hill Road	0.27	Widen - minor	Construct Left Turn Lane.	CON		174	CM	39	M			213	120161				NA		321
2017	STATEWIDE	MDOT	Statewide	Statewide		Miscellaneous	ITS Program Office Support	EPE		205	ST	45	M			250	116387				NA		250
2017	LAPEER	Lapeer County	Saginaw Rd	at Davis Lake Road, city of Mayfield		Traffic ops/safety	Insert passing flare on northbound Saginaw Road at the Davis Lake Road intersection.	CON		214	CM			53	CNTY	267	120021				NA		296
2017	GRATIOT	MDOT	US-27	over Maple River	1.26	Bridge replacement	Deck Replacement	SUB		239	NH	53	M			292	130141				NA		3,310
2017	STATEWIDE	MDOT	Trunkline Roadside Infrastructure Improvement	Regionwide		GPA	Trunkline Roadside Infrastructure GPA			265	ST	34	M			299					NA		299
2017	ALLEGAN	MDOT	M-40	from 134th Ave to Reimink Street	1.75	Resurface	HMA Resurfacing	ROW		246	ST	54	M			300	118847				NA		4,525
2017	LENAWEE	MDOT	M-52	M-52 at Sienna Heights		Traffic ops/safety	Upgrade and modernize existing traffic signal, sidewalk, sidewalk ramps, curb and gutter replacement	CON		300	CMG					300	120381				NA		420
2017	STATEWIDE	MDOT	Trunkline Bridge Preservation	Regionwide		GPA	Trunkline Bridge Preservation			260	ST	58	M			318					NA		318
2017	STATEWIDE	MDOT	Statewide	Statewide		Miscellaneous	2017 TRAC (RCWD) program	EPE		363	ST					363	119675				NA		363
2017	STATEWIDE	MDOT	Statewide	Statewide		Miscellaneous	2017 Wounded Vets (RCWD) program	EPE		375	ST					375	119679				NA		375
2017	STATEWIDE	MDOT	DBE Support Services	Regionwide			DBE Support Services	CON		400	ST					400					NA		400
2017	LAPEER	Lapeer County	M-53	M-90 N Jct to Marlette SCL	5.74	Resurface	Cold Milling and Two Course HMA Ovly	PE		341	NH	76	M			417	130021				NA		4,999
2017	STATEWIDE	MDOT	Section 5311	Statewide		GPA	Non-UZA Formula			185	5311	232	CTF			417					NA	Transit GPA	232
2017	STATEWIDE	MDOT	Section 5317	Statewide		GPA	RTAP			187	5317	234	CTF			421					NA	Transit GPA	234
2017	GRAND TRAVERSE	MDOT	US-31	US-31 in Grand Traverse County	0.93	Widen - major (capacity increase)	Widen to provide a center left turn lane	PE		384	HSIP	43	M			426	124027				NA		3,246
2017	ALLEGAN	Allegan County	18th St	from 142nd Ave to 144th Ave	1.00	Traffic ops/safety	1.0 mi of trenching, widening, and HMA surfacing to add a center optional left-turn lane on 18th Street from 142nd Avenue to 144th Avenue in Dorr Township, Allegan County.	CON		355	CM			99	CNTY	454	120995				NA		454
2017	ALGER	MDOT	M-28	From 0.86 mi E of FFR 2275 to 0.13 mi E. of MunAve	4.34	Resurface	Multiple Crs HMA Overlay	PE		377	NH	83	M			460	126912				NA		5,720
2017	ISABELLA	MDOT	US-127	US-127BR northerly to M-20	3.98	Restore & rehabilitate	Two Course HMA Overlay	PE		393	NH	87	M			480	130105				NA		6,423
2017	STATEWIDE	MDOT	Statewide	Statewide		Miscellaneous	Connected Vehicles	EPE		409	ST	91	M			500	116386				NA		500
2017	DELTA	MDOT	US-2	at Escanaba River (B01) Bridge	0.10	Bridge - other	Escanaba River Bridge Anti-Icing Application	CON		450	ST	100	M			550	113777				NA		650

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2017	OSCODA	MDOT	M-33	Cherry Creek Rd to west of the M-33/M-72 Jct	6.72	Restore & rehabilitate	HMA Crush and Shape with Minor Widening	PE		647	ST	144	M			791	123278				NA		6,800
2017	STATEWIDE	MDOT	Regionwide	US-127, I-75 and I-94 in Bay Region		Miscellaneous	Install ITS devices-Triangle Phase 2b	CON		532	NH	118	M			650	116498				NA		700
2017	BRANCH	Branch County	Lindley Road	over Little Swan Creek		Bridge replacement	Replacement	CON		544	BRO	102	M	34	CNTY	680	126666				NA		680
2017	MENOMINEE	Menominee County	5 Mile Road	over Little River		Bridge replacement	Replacement	CON		592	BRO	111	M	37	CNTY	741	126747				NA		741
2017	MARQUETTE	Marquette County	County Road OG	over Nelson Creek		Bridge replacement	Replacement	CON		600	BRO	113	M	38	CNTY	750	126655				NA		750
2017	TUSCOLA	Tuscola County	Caine Road	over Gooding Creek		Bridge replacement	Replacement	CON		656	BRO	123	M	41	CNTY	821	126557				NA		821
2017	TUSCOLA	Tuscola County	Millington Road	over Dead Creek		Bridge replacement	Replacement	CON		683	BRO	128	M	43	CNTY	854	126556				NA		854
2017	BARAGA	MDOT	US-41	US-41, Covington and Spur Townships, Baraga County	9.63	Restore & rehabilitate	Aggregate Grade Lift and HMA surfacing	PE		715	NH	159	M			874	126827				NA		10,000
2017	MENOMINEE	Menominee County	10 Lane	over Little River		Bridge replacement	Replacement	CON		722	BRO	135	M	45	CNTY	902	126653				NA		902
2017	BERRIEN	Berrien County	Nye Road	over Dowling Creek		Bridge replacement	Replacement	CON		786	BRO	147	M	49	CNTY	983	126669				NA		983
2017	ALLEGAN	Allegan County	51st Street	over M Fork of Black River		Bridge replacement	Replacement	CON		811	BRO	152	M	51	CNTY	1,014	126667				NA		1,014
2017	MASON	Mason County	Decker Road	over South Branch Lincoln River		Bridge replacement	Replacement	CON		823	BRO	154	M	51	CNTY	1,029	126641				NA		1,029
2017	MASON	Mason County	Stephens Road	over Big Sable River		Bridge replacement	Replacement	CON		836	BRO	157	M	52	CNTY	1,046	126642				NA		1,046
2017	SANILAC	Sanilac County	Mills Road	over Black River & Smercz Drain		Bridge replacement	Replacement	CON		847	BRO	159	M	53	CNTY	1,059	126574				NA		1,059
2017	STATEWIDE	MDOT	Statewide	Statewide		Miscellaneous	STOC Operations	CON		900	ST	200	M			1,100	116391				NA		1,100
2017	BENZIE	MDOT	US-31	M-115 south to the Betsie River	1.42	Reconstruct	Reconstruction of US-31	PE		922	NH	204	M			1,127	126968				NA		8,968
2017	HURON	Huron County	Blakely Road	over Pigeon River		Bridge replacement	Replacement	CON		955	BRO	179	M	60	CNTY	1,194	126578				NA		1,194
2017	CASS	Cass County	Mount Zion Street	Over Christiana Creek		Bridge replacement	Replacement	CON		995	BRO	187	M	62	CNTY	1,244	126671				NA		1,244
2017	MACKINAC	Mackinac County	Hill Island Road	over Flower Bay (Lake Huron)		Bridge replacement	Replacement	CON		1,015	BRO	190	M	63	CNTY	1,269	126654				NA		1,269
2017	ALLEGAN	Allegan County	30th Street	over Little Rabbit River		Bridge replacement	Replacement	CON		1,018	BRT	191	M	64	CNTY	1,273	126672				NA		1,273
2017	MONTMORENCY	Arenac County	Melita Road	over South Branch Pine River		Bridge replacement	Replacement	CON		1,115	BRO	209	M	70	CNTY	1,394	126577				NA		1,394
2017	ST. JOSEPH	St. Joseph County	Miller Road	over Fawn River		Bridge replacement	Replacement	CON		1,122	BRO	210	M	70	CNTY	1,403	126668				NA		1,403
2017	LAPEER	Lapeer County	Imlay City Road (M-21)	over Belle River Drain		Bridge replacement	Replacement	CON		1,134	BRT	213	M	71	CNTY	1,418	126581				NA		1,418
2017	CALHOUN	Calhoun County	Webster Street	over Kalamazoo River		Bridge replacement	Replacement	CON		1,417	BRT	266	M	89	CNTY	1,772	126673				NA		1,772
2017	LENAWEE	Lenawee County	Wilmoth Highway	over River Raisin		Bridge replacement	Replacement	CON		1,465	BRO	275	M	92	CNTY	1,831	126692				NA		1,831
2017	NEWAYGO	Newaygo County	Colonial Avenue	over Marquette Railroad		Bridge replacement	Replacement	CON		1,670	BRO	313	M	104	CNTY	2,088	126594				NA		2,088
2017	STATEWIDE	MDOT	Trunkline Livability and Sustainability	Regionwide		GPA	Trunkline Livability and Sustainability			1,228	ST	418	M	444	OLF	2,090					NA		2,090
2017	STATEWIDE	MDOT	Trunkline Bridge 3R	Regionwide		GPA	Trunkline Bridge 3R			1,712	ST	380	M			2,092					NA		2,092
2017	STATEWIDE		Local Transportation Livability and Sustainability	Regionwide		GPA	Local Transportation Livability and Sustainability			1,656	ST	214	M	401	OLF	2,271					NA		2,271
2017	STATEWIDE	MDOT	Section 5310	Statewide		GPA	Elderly and Disabled			1,876	5310	469	CTF			2,344					NA	Transit GPA	2,344
2017	CALHOUN	Marshall	Marshall Avenue	over Kalamazoo River		Bridge replacement	Replacement	CON		2,024	BRT	380	M	127	CITY	2,530	126749				NA		2,530
2017	MARQUETTE	MDOT	US-41	from Iroquois Street to Water Street in Negaunee	1.63	Reconstruct	Resurfacing & Restoration	CON		2,808	ST	623	M			3,431	116378				NA		3,860
2017	STATEWIDE	MDOT	Statewide	Statewide		Miscellaneous	2017 YDMP (RCWD) program	EPE		3,500	ST					3,500	119669				NA		3,500
2017	MACKINAC	MDOT	I-75 BL	from Gronden Road to Mackinac Trail	1.11	Reconstruct	Recon. multilane lane pavement.	CON		3,105	ST	689	M			3,794	115775				NA		4,194
2017	MARQUETTE	MDOT	M-553	M-553, Sands Township, Marquette County	1.55	Traffic ops/safety	Curve Re-alignment	CON		3,696	HSIP	411	M			4,106	116622				NA		4,946
2017	HURON	MDOT	M-142	M-19 to MacDonald Road	5.08	Restore & rehabilitate	Crush & Shape and HMA Resurface	CON				4,500	M			4,500	119065				NA		5,205
2017	ANTRIM	Antrim County	Jordan Rvr. Nat. Fish Hatchery	Jordan River National Fish Hatchery		Miscellaneous	Entrance and Parking	CON		5,000	FLH					5,000	105498				NA	Project Jordan River National Fish Hatchery - from ELFHD TIP	5,000
2017	CALHOUN	MDOT	M-99	From Ash Street to Vine Street in Albion	0.37	Reconstruct	Brick Paver Reconstruction.	CON		4,483	ST	994	M			5,477	116324				NA		6,150
2017	EMMET	MDOT	US-31	from Douglas Lake Road to E Levering Road	4.15	Restore & rehabilitate	HMA crush and shape and HMA resurface	CON		4,723	NH	1,047	M			5,770	120169				NA		6,770

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2017	GRATIOT	MDOT	US-127	Van Buren Road to Begole Road	3.00	Resurface	Two Course HMA Overlay	CON		5,656	NH	1,254	M			6,911	115805				NA		7,581
2017	BRANCH	MDOT	M-60	From St. Joseph County Line to 8 Mile Road	8.57	Resurface	Multicourse HMA Overlay	CON		5,893	ST	1,307	M			7,200	120269				NA		7,730
2017	ST. JOSEPH	MDOT	US-131	from Broadway Road to Coon Hollow Road	1.17	Reconstruct	Reconstruct existing, no widening	CON		6,320	NH	1,402	M			7,722	116377				NA		8,500
2017	VAN BUREN	MDOT	I-94	From 56th Street to west of M-51	5.75	Resurface	Multiple Course HMA Overlay	CON		8,765	IM	974	M			9,739	127121				NA		10,546
2017	STATEWIDE	MDOT	Trunkline Highway 3R	Regionwide		GPA	Trunkline Highway 3R			7,374	ST	2,866	M			10,240					NA		10,240
2017	STATEWIDE		Local Bridge	Regionwide		GPA	Local Bridge			8,231	ST	1,543	M	514	OLF	10,289					NA		10,289
2017	CALHOUN	MDOT	I-94	From 17 1/2 to 21 1/2 Mile Road	4.45	Resurface	Multiple Course HMA Overlay	CON		10,620	IM	1,180	M			11,800	110138				NA		13,530
2017	STATEWIDE		Small Urban	Regionwide		GPA	Small Urban			8,727	ST	189	M	4,082	OLF	12,998					NA		12,998
2017	DELTA	MDOT	US-2	over the Escanaba River	0.36	Bridge replacement	Bridge Replacement	CON		15,520	BRT	3,880	M			19,400	115866				NA		20,070
2017	STATEWIDE	MDOT	Trunkline Traffic Operations or Safety	Regionwide		GPA	Trunkline Traffic Operations or Safety			19,847	ST	1,958	M			21,805					NA		21,805
2017	OGEMAW	MDOT	I-75 NB	from Ogemaw County line northerly to Cook Road	6.63	Restore & rehabilitate	Major rehab - life cycle cost analysis dependent	CON		27,107	IM	3,012	M			30,119	125856				NA	Was JN 123239. Now combined with JN 125856 for both NB and SB I75. Total cost is $30 million with a Construction phase in 2022. PE phase was administratively updated on 09/11/2014 when these two JNs were combined to reflect that the PE phase was approved under JN 123239.	30,969
2017	STATEWIDE		Rural Task Force	Regionwide		GPA	Rural Task Force			32,191	ST	6,762	M	8,811	OLF	47,764					NA		47,764
2017	STATEWIDE	MDOT	Trunkline Highway Preservation	Regionwide		GPA	Trunkline Highway Preservation			45,536	ST	17,637	M			63,172					NA		63,172
2017	STATEWIDE	MDOT	Section 5339	Statewide		GPA	Bus and Bus Facilities			37,284	5339	46,605	CTF			83,889					NA	Transit GPA	46,605
2018	STATEWIDE		Various	Various locations in Bay Region		Miscellaneous	Systemic Safety Improvements	PE		16	HSIP	2	M			18	127503				NA		250
2018	STATEWIDE	MDOT	Section 5311	Statewide		GPA	Non-UZA Formula			13	5311	16	CTF			29					NA	Transit GPA	16
2018	BARAGA	Baraga County	Old M-28 Road	Hickory Creek Bridge		Bridge replacement	Bridge replacement	CON		38	STL			10	CNTY	48	130406				NA		48
2018	CHIPPEWA	MDOT	M-129	and M-48 North in the northwest quadrant	0.10	Roadside facility	Construct new carpool lot	CON		45	ST	10	M			55	113571				NA		100
2018	STATEWIDE	MDOT	Section 5317	Statewide		GPA	RTAP			30	5317	38	CTF			68					NA	Transit GPA	38
2018	CHIPPEWA	MDOT	M-28	Near the intersection of M-28/M-123 Eckerman	0.10	Roadside facility	Construct new car pool parking lot.	CON		76	ST	17	M			92	113575				NA		201
2018	CASS	Cass County	Sink Road	Over Dowagiac River		Bridge replacement	Replacement	CON		131	BO	25	M	8	CNTY	164	129338				NA		164
2018	ONTONAGON	Ontonagon	New village street	Giesau Rd to Rockland Rd		New route/structure (capacity increase)	New route	CON		200	STL	82	M			282	130459				NA		282
2018	MASON	MDOT	US-31	Oceana/Mason Co Line north to Meisenheimer Road	4.56	Resurface	Cold Mill, HMA Overlay	PE		238	NH	53	M			291	127032				NA		6,737
2018	BENZIE	MDOT	US-31	M-115 south to the Betsie River	1.42	Reconstruct	Reconstruction of US-31	ROW		246	NH	54	M			300	126968				NA		8,968
2018	CHIPPEWA	MDOT	M-28	Six locations in Newberry TSC area	3.79	Traffic ops/safety	2018 Newberry TSC signal modernization project	CON		469	STG					469	125836				NA		542
2018	STATEWIDE		Local Traffic Operations and Safety	Regionwide		GPA	Local Traffic Operations and Safety			337	ST			133	OLF	470					NA		470
2018	STATEWIDE	MDOT	Statewide	Statewide		Miscellaneous	Procurement of Statewide Travel Times	EPE		450	ST	100	M			550	120122				NA		550
2018	BARAGA	Baraga County	Old M-28	Over Hickey Creek		Bridge replacement	Replacement	CON		512	BO	96	M	32	CNTY	640	129348				NA		640
2018	CALHOUN	Calhoun County	28 1/2 Mile Road	Over S Br Kalamazoo River		Bridge replacement	Replacement	CON		516	BO	97	M	32	CNTY	646	129339				NA		646
2018	ALLEGAN	MDOT	M-89	over Kalamazoo River Overflow	1.50	Bridge replacement	Superstructure Replacement, Substr Repair	CON		485	BHT	121	M	40	OLF	646	115752				NA		778
2018	KALKASKA	MDOT	M-72	Valley Road to Kalkaska Road	0.93	Miscellaneous	Vertical Curve and Intersection Sight Distance Imp	CON		590	HSIP	66	M			656	120245				NA		656
2018	HOUGHTON	MDOT	M-26	various locations in Ishpeming TSC area	1.49	Traffic ops/safety	2018 Ishpeming TSC signal modernization project	CON		668	STG					668	125835				NA		783
2018	GRAND TRAVERSE	MDOT	M-37	Blair Townhall Road to M-113	4.02	Restore & rehabilitate	Crush and Shape and Resurface	PE		561	NH	124	M			686	129932				NA		6,521
2018	HILLSDALE	Hillsdale County	Territorial Road	Over W. St Joe of Maumee River		Bridge replacement	Replacement	CON		560	BRT	105	M	35	CNTY	700	129381				NA		700

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2018	ISABELLA	Isabella County	Isabella Road	Over Little Salt River		Bridge replacement	Replacement	CON		573	BO	107	M	36	CNTY	717	129277				NA		717
2018	ST. JOSEPH	MDOT	M-66	over NYC RR (ABANDONED)	0.65	Bridge - other	Bridge Removal, Backfill, and Roadway Construction	CON		603	ST	134	M			737	126093				NA		838
2018	OSCODA	Oscoda County	Park Road (County Road 489)	Over East Branch Big Creek		Bridge replacement	Replacement	CON		603	BRT	113	M	38	CNTY	754	129321				NA		754
2018	MASON	Mason County	Darr Road	Over SB Lincoln River		Bridge replacement	Replacement	CON		616	BO	116	M	39	CNTY	770	129323				NA		770
2018	MASON	Mason County	Darr Road	Over N BR Lincoln River		Bridge replacement	Replacement	CON		624	BO	117	M	39	CNTY	780	129322				NA		780
2018	MACKINAC	MDOT	US-2	over the Brevort River	5.62	Bridge replacement	Deck Replacement, Widening, Full Paint	CON		643	NH	143	M			786	119052				NA		909
2018	CALHOUN	Calhoun County	21 Mile Road	Over Rice Creek		Bridge replacement	Replacement	CON		633	BO	119	M	40	CNTY	792	129337				NA		792
2018	SANILAC	Sanilac County	Melvin Road	Over McDonald Drain		Bridge replacement	Replacement	CON		636	BO	119	M	40	CNTY	795	129284				NA		795
2018	CHEBOYGAN	MDOT	US-23	Cordwood Rd. to Duncan Ave	7.00	Restore & rehabilitate	HMA Crush and Shape and HMA Inlay	PE		674	ST	149	M			823	128479				NA		8,381
2018	MARQUETTE	Marquette County	NP Road	Over Carp River		Bridge replacement	Replacement	CON		680	BO	128	M	43	CNTY	850	129351				NA		850
2018	HILLSDALE	Hillsdale County	Territorial Road	Over E St. Joe of Maumee River		Bridge replacement	Replacement	CON		720	BRT	135	M	45	CNTY	900	129383				NA		900
2018	ISABELLA	Isabella County	Meridian Road	Over North Branch Chippewa River		Bridge replacement	Replacement	CON		805	BRT	151	M	50	CNTY	1,006	129293				NA		1,006
2018	HILLSDALE	Allegan County	56th St	Over South Branch of Black River		Bridge replacement	Teplacement	CON		836	BRT	157	M	52	CNTY	1,045	129336				NA		1,045
2018	MECOSTA	Mecosta County	20 Mile Road	Over Chippewa River		Bridge replacement	Replacement	CON		899	BO	169	M	56	CNTY	1,124	129305				NA		1,124
2018	TUSCOLA	Tuscola County	Bay City Forestville Road	Unionville VL to Colling Rd		Bridge replacement	Bridge Repalcement	CON		683	STL	123	M	348	CNTY	1,154	127977				NA		1,154
2018	MARQUETTE	Marquette County	County Road 557	Over Big West River		Bridge replacement	Replacement	CON		1,160	BRT	218	M	73	CNTY	1,450	129353				NA		1,450
2018	STATEWIDE	MDOT	Section 5310	Statewide		GPA	Elderly and Disabled			1,275	5310	319	CTF			1,593					NA	Transit GPA	1,593
2018	ONTONAGON	MDOT	M-64	& M-38 over Ontonagon River	0.29	Bridge - other	Epoxy Overlay & Joint Replacement	CON		1,356	ST	301	M			1,657	128943				NA		1,916
2018	IOSCO	Iosco County	Mill St	Over Ausable River	0.02	Bridge replacement	Replacement	CON		1,500	BO	281	M	94	CNTY	1,875	129326				NA		1,875
2018	MASON	Mason County	Custer Road	Over Pere Marquette River	0.03	Bridge replacement	Replacement	CON		1,566	BO	294	M	98	CNTY	1,958	129325				NA		1,958
2018	STATEWIDE		Local Transportation Livability and Sustainability	Regionwide		GPA	Local Livability and Sustainability			1,227	TA			936	OLF	2,163					NA		2,163
2018	BRANCH	MDOT	US-12	over Michigan Southern Railroad	0.59	Bridge replacement	Bridge Removal	CON		2,500	ST	554	M			3,055	108712				NA		3,605
2018	STATEWIDE	MDOT	Trunkline Bridge 3R	Regionwide		GPA	Trunkline Bridge 3R			3,926	ST	596	M			4,523					NA		4,523
2018	CHIPPEWA	MDOT	I-75 BS	From I-75/3 Mile ramps to M-129	1.74	Reconstruct	Bituminous Reconstruction	CON		4,256	NH	944	M			5,200	110907				NA		5,810
2018	SANILAC	MDOT	M-46	M-46 and M-25 in Port Sanilac	1.08	Reconstruct	Reconstruct on M-46, Rehab on M-25	CON		4,291	ST	951	M			5,242	119008				NA		5,926
2018	DICKINSON	MDOT	M-95	from Channing north to Marquette County Line	9.49	Restore & rehabilitate	Cold mill, Crush and shape, HMA overlay	CON		4,426	NH	982	M			5,408	120318				NA		5,808
2018	BERRIEN	MDOT	I-94	at three locations by New Buffalo, Berrien County	1.51	Restore & rehabilitate	Deep Overlay, Beam Repair, Pin and Hanger Replace	CON		5,159	IM	573	M			5,732	123135				NA		6,575
2018	STATEWIDE	MDOT	Trunkline Bridge Preservation	Regionwide		GPA	Trunkline Bridge Preservation			5,188	ST	926	M			6,114					NA		6,114
2018	DELTA	MDOT	US-2	Westbound US-2 between Gladstone and Rapid River	5.52	Resurface	Joint repairs and HMA overlay with ASCRL	CON		5,007	NH	1,110	M			6,117	126833				NA		6,217
2018	STATEWIDE		Local Bridge	Regionwide		GPA	Local Bridge			5,266	BRO	987	M	329	OLF	6,582					NA		6,582
2018	KALKASKA	MDOT	M-72	Grand Traverse County Line east to Kalkaska Road	7.73	Restore & rehabilitate	Crush and Shape	CON		5,648	NH	1,253	M			6,901	120243				NA		7,694
2018	BERRIEN	MDOT	I-94	From Indiana State Line to M-239	1.47	Resurface	Multiple Course HMA Overlay	CON		6,531	IM	726	M			7,256	127019				NA		8,096
2018	CLARE	MDOT	US-10	US-127 to Leaton Road	3.60	Restore & rehabilitate	Rubblize and HMA Resurfacing or Concrete Overlay	CON		7,979	NH	1,769	M			9,748	123643				NA		10,596
2018	STATEWIDE	MDOT	Trunkline Highway Preservation	Regionwide		GPA	Trunkline Highway Preservation			2,847	ST	7,676	M			10,523					NA		10,523
2018	STATEWIDE	MDOT	Section 5339	Statewide		GPA	Bus and Bus Facilities			4,898	5339	6,123	CTF			11,021					NA	Transit GPA	6,123
2018	IOSCO	MDOT	US-23	Tawas Beach Road to Kirkland Drive	5.63	Reconstruct	Hot Mix Asphalt Reconstruction	CON		9,310	NH	2,064	M			11,375	112946				NA		12,428
2018	STATEWIDE	MDOT	Trunkline Traffic Operations or Safety	Regionwide		GPA	Trunkline Traffic Operations and Safety			17,825	ST	1,836	M			19,661					NA		19,661

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2018	STATEWIDE	MDOT	Trunkline Highway 3R	Regionwide		GPA	Trunkline Highway 3R			17,176	ST	5,966	M		OLF	23,142					NA		23,142
2018	STATEWIDE		Rural Task Force	Regionwide		GPA	Rural Task Force			28,633	ST	5,839	M	8,988	OLF	43,459					NA		43,459
2018	SCHOOLCRAFT	Schoolcraft County	Seney National Wildlife Refuge	Seney National Wildlife Refuge		Reconstruct	Reconstruct Entrance road (route 10), Visitor Center Parking (Rte 900), & HQ Parking (Rte (901)	CON		1,000	FLH					1,000					NA	From ELFHD TIP. FW_SENE_10(1)_900(1)	5,000
2018	SCHOOLCRAFT	Schoolcraft County	Seney National Wildlife Refuge	Seney National Wildlife Refuge		Bridge restore & rehabilitate	Rehabilitation of Marsh Creek Outflow Bridge & Upper Driggs River Bridge.	CON		100	FLH					100					NA	From ELFHD TIP. FW_SENE_2012226922	5,000
2018	SCHOOLCRAFT	Schoolcraft County	Seney National Wildlife Refuge	Seney National Wildlife Refuge		Resurface	Entrance Road / Parking Paving	CON		5,000	FLH					5,000					NA	From ELFHD TIP. FW_SENE_2014248461	5,000
2019	MARQUETTE	MDOT	US-41	US-41 from Front Street to County Road HQ	3.09	Reconstruct	Resurfacing & Restoration	ROW		4	NH	1	M			5	128702				NA		9,341
2019	HOUGHTON	MDOT	US-41	US-41 from Macinnes Drive to Prospect Street	0.86	Reconstruct	Reconstruct	ROW		16	NH	4	M			20	128708				NA		6,802
2019	STATEWIDE	MDOT	Section 5311	Statewide		GPA	Non-UZA Formula			14	5311	17	CTF			31					NA	Transit GPA	17
2019	STATEWIDE	MDOT	Trunkline Roadside Infrastructure Improvement	Regionwide		GPA	Trunkline Roadside Infrastructure GPA			38	ST	9	M			47					NA		47
2019	CHEBOYGAN	MDOT	US-23	Cordwood Rd. to Duncan Ave	7.00	Restore & rehabilitate	HMA Crush and Shape and HMA Inlay	ROW		41	ST	9	M			50	128479				NA		8,381
2019	STATEWIDE	MDOT	Section 5317	Statewide		GPA	RTAP			31	5317	39	CTF			70					NA	Transit GPA	39
2019	CALHOUN	MDOT	I-69	under N Drive North and Garfield Road	2.33	Restore & rehabilitate	Deep Overlay, Full Paint, Pin and Hangers	PE		75	IM	8	M			83	129886				NA		5,697
2019	ST. JOSEPH	MDOT	US-131	over St. Joseph River	0.20	Bridge replacement	Deck Replacement, Superstructure Repais	PE		82	ST	18	M			101	129399				NA		4,728
2019	IONIA	MDOT	M-66	between Tupper Lake Rd and Musgrove Hwy	0.26	Roadside facility	Construct SES Type 2	CON		115	ST	25	M			140	129248				NA		150
2019	GRAND TRAVERSE	MDOT	M-37	Blair Townhall Road to M-113	4.02	Restore & rehabilitate	Crush and Shape and Resurface	ROW		123	NH	27	M			150	129932				NA		6,521
2019	GRAND TRAVERSE	MDOT	US-31	US-31	0.67	Widen - major (capacity increase)	Construct Left Turn Lane	PE		215	HSIP	24	M			239	128971				NA		1,562
2019	VAN BUREN	MDOT	I-94	I-94 WB from Exit 46 to Exit 56	9.02	Miscellaneous	Install Trees	CON		240	HSIP	27	M			267	124035				NA		290
2019	ST. JOSEPH	MDOT	US-131	over St. Joseph River	0.20	Bridge replacement	Deck Replacement, Superstructure Repais	SUB		310	ST	69	M			379	129399				NA		4,728
2019	MACKINAC	MDOT	US-2	Between Hiawatha Trail and Cut River, Mackinac Co.	1.39	New route/structure (capacity increase)	Relocation of Existing Route	PE		385	NH	85	M			470	128867				NA		5,840
2019	STATEWIDE	MDOT	Ricks Dr.	Statewide		Miscellaneous	Connected Vehicles	EPE		409	ST	91	M			500	125678				NA		500
2019	CALHOUN	MDOT	I-69	under N Drive North and Garfield Road	2.33	Restore & rehabilitate	Deep Overlay, Full Paint, Pin and Hangers	SUB		547	IM	61	M			608	129886				NA		5,697
2019	MENOMINEE	MDOT	US-2	over the Big Cedar River	0.72	Bridge replacement	Deck Replacement	CON		514	NH	114	M			628	123271				NA		697
2019	OCEANA	MDOT	US-31	Shelby Road north to Polk Road	4.99	Resurface	HMA Surface Rem, ASCRL, Guardrail, HMA Overlay	PE		532	NH	118	M			650	122642				NA		15,511
2019	STATEWIDE	MDOT	Ricks Dr.	Statewide		Miscellaneous	Connected Vehicle Applications	EPE		557	ST	123	M			680	125733				NA		680
2019	STATEWIDE	MDOT	Section 5310	Statewide		GPA	Elderly and Disabled			593	5310	148	CTF			741					NA	Transit GPA	741
2019	HOUGHTON	MDOT	US-41	US-41 from Macinnes Drive to Prospect Street	0.86	Reconstruct	Reconstruct	PE		638	NH	141	M			779	128708				NA		6,802
2019	ONTONAGON	MDOT	M-64	over Floodwood River	0.59	Bridge replacement	Deck Replacement, Paint	CON		639	ST	142	M			780	123247				NA		867
2019	ST. JOSEPH	MDOT	US-131 NB	Coon Hollow Road to Kalamazoo County Line	8.71	Resurface	Cold mill and one course hot mix asphalt overlay.	PE		681	NH	151	M			832	128722				NA		11,982
2019	MARQUETTE	MDOT	US-41	US-41 from Front Street to County Road HQ	3.09	Reconstruct	Resurfacing & Restoration	PE		689	NH	153	M			842	128702				NA		9,341
2019	STATEWIDE		Local Transportation Livability and Sustainability	Regionwide		GPA	Local Livability and Sustainability			558	TA	30	M	322	OLF	910					NA		910
2019	CHEBOYGAN	MDOT	NB I-75	Levering Road north 3.1 miles	3.04	Restore & rehabilitate	Unbonded Concrete overlay and ramp reconstruction	PE		777	NH	172	M			949	130014				NA		13,673
2019	GOGEBIC	MDOT	US-2	from Fairview Street to Old US-2	1.24	Reconstruct	HMA Reconstruction	PE		886	NH	196	M			1,082	109499				NA		7,739
2019	STATEWIDE	MDOT	Trunkline Highway Preservation	Regionwide		GPA	Trunkline Highway Preservation			2,035	ST	451	M			2,486					NA		2,486
2019	BARRY	MDOT	M-66	over Quaker Brook, Nashville	0.09	Bridge replacement	Bridge Replacement	CON		2,230	ST	494	M			2,724	123181				NA		3,120

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Fiscal Year	County	Respon-sible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	Phase	Advance Construct	Federal Cost ($1000s)	Federal Fund Source	State Cost ($1000s)	State Fund Source	Local Cost ($1000s)	Local Fund Source	Total Phase Cost ($1000s)	MDOT Job No.	Local ID No.	MPO/ Rural Action Date	Amend-ment Type	Air Quality	Comments	Total Project Cost ($1000s)
2019	GRAND TRAVERSE	MDOT	US-31	US-31 in Grand Traverse County	0.93	Widen - major (capacity increase)	Widen to provide a center left turn lane	CON		2,520	HSIP	280	M			2,800	124027				NA		3,246
2019	GRAND TRAVERSE	MDOT	M-72	Siganl Corridors in Traverse City Araea	2.00	Traffic ops/safety	Traffic Signal and ASCT System Design	CON		3,784	NHG					3,784	129391				NA		4,607
2019	STATEWIDE	MDOT	Trunkline Bridge Preservation	Regionwide		GPA	Trunkline Bridge Preservation			3,492	ST	578	M			4,070					NA		4,070
2019	IONIA	MDOT	I-96	I-96 under Cutler Road	0.60	Bridge replacement	Bridge Replacement	CON		3,672	IM	408	M			4,080	115817				NA		4,302
2019	BAY	MDOT	M-13	North St to Bay/Arenac County Line	3.34	Resurface	Mill and Two Course HMA Overlay	CON		4,056	ST	899	M			4,956	124147				NA		5,406
2019	MARQUETTE	MDOT	US-41	from CR HQ to west of Brickyard Road, Marquette	1.00	Reconstruct	HMA Reconstruct & Resurface	CON		4,502	NH	998	M			5,500	119937				NA		5,700
2019	MACKINAC	MDOT	US-2	from East Limits of Naubinway to Borgstrom Road	5.41	Restore & rehabilitate	HMA Crush and Shape	CON		4,502	NH	998	M			5,500	120031				NA		5,850
2019	OSCODA	MDOT	M-33	Popps Road to east of the M-33/M-72 Jct	6.72	Restore & rehabilitate	HMA Crush and Shape with Minor Widening	CON		5,058	ST	1,122	M			6,180	123278				NA		6,800
2019	STATEWIDE	MDOT	Trunkline Bridge 3R	Regionwide		GPA	Trunkline Bridge 3R			5,121	ST	1,117	M		OLF	6,238					NA		6,238
2019	CRAWFORD	MDOT	M-72	Kalkaska/Crawford County line to M-93	6.07	Restore & rehabilitate	Crush and shape with HMA overlay	CON		5,929	NH	1,315	M			7,244	116416				NA		8,095
2019	STATEWIDE	MDOT	Trunkline Highway 3R	Regionwide		GPA	Trunkline Highway 3R			7,920	ST	1,557	M			9,477					NA		9,477
2019	STATEWIDE	MDOT	Section 5339	Statewide		GPA	Bus and Bus Facilities			5,293	5339	6,616	CTF			11,909					NA	Transit GPA	6,616
2019	EMMET	MDOT	US-31	from Liberty Street to Rosedale Avenue	1.34	Reconstruct	Realignment and reconstruction	CON		10,819	NH	2,399	M			13,218	120219				NA		14,803
2019	ISABELLA	MDOT	US-10 EB	Leaton Road Bridge to Midland/Isabella County Line	5.35	Restore & rehabilitate	Concrete Overlay	CON		14,254	NH	3,161	M			17,414	118947				NA		18,583
2019	STATEWIDE	MDOT	Trunkline Traffic Operations or Safety	Regionwide		GPA	Trunkline Traffic Operations and Safety			20,099	ST	2,110	M			22,209					NA		22,209
2019	STATEWIDE		Rural Task Force	Regionwide		GPA	Rural Task Force			28,923	ST	5,750	M	7,906	OLF	42,578					NA		42,578
2019	LEELANAU	Leelanau County	Sleeping Bear Dunes National Lakeshore	Sleeping Bear Dunes National Lakeshore		Traffic ops/safety	To construct right and left turn lanes on M109 Dune Climb Entrance	CON		1,000	FLH					1,000					NA	From ELFHD TIP. NP_SLBE_0012(1)	5,000
2020	STATEWIDE	MDOT	Section 5311	Statewide		GPA	Non-UZA Formula			14	5311	4	CTF			18					NA	Transit GPA	18
2020	STATEWIDE	MDOT	Regionwide	Lake, Barry, Mason, Osceola and Allegan Counties		Roadside facility	Signing Upgrade	CON		49	ST	11	M			60	74010				NA		60
2020	STATEWIDE	MDOT	Various	Various Locations in Metro Region		Miscellaneous	High Friction Surface Treatment	PE		61	HSIP	7	M			68	127769				NA		849
2020	CHARLEVOIX	Charlevoix County	Transit	CCT area		Transit vehicle additions/replacements	Bus replacement	EPE		79	STL	20	M			99	130368				NA		99
2020	LENAWEE	MDOT	M-34	Hazen Creek to M-52	5.73	Restore & rehabilitate	2 course Mill & Resurface	ROW		115	ST	25	M			140	110627				NA		14,851
2020	STATEWIDE		Various	Various locations in Bay Region		Miscellaneous	Systemic Safety Improvements	CON		209	HSIP	23	M			233	127503				NA		250
2020	STATEWIDE	MDOT	Section 5317	Statewide		GPA	RTAP			224	5317	56	CTF			280					NA	Transit GPA	280
2020	MISSAUKEE	Missaukee County	8 Mile Road	Kelly Road south 1.75 miles		Resurface	Resurface	CON		246	STL	76	M	100	CNTY	422	129743				NA		422
2020	STATEWIDE	MDOT	I-75	I-75 and US-23 in Genesee, Saginaw, & Bay Counties		Miscellaneous	Median and Wrong Way Delineation	CON		512	HSIP	57	M			569	127488				NA		671
2020	STATEWIDE	MDOT	Section 5310	Statewide		GPA	Elderly and Disabled			527	5310	132	CTF			659					NA	Transit GPA	659
2020	STATEWIDE		Local Traffic Operations and Safety	Regionwide		GPA	Local Traffic Operations and Safety			337	ST			322	OLF	659					NA		659
2020	STATEWIDE	MDOT	Various	Various Locations in Metro Region		Miscellaneous	High Friction Surface Treatment	CON		703	HSIP	78	M			781	127769				NA		849
2020	OCEANA	MDOT	M-20	over the Gillon Lake Drain	0.51	Bridge replacement	Culvert Replacement	CON		709	ST	157	M			866	128604				NA		979
2020	OCEANA	MDOT	US-31	Shelby Road north to Polk Road	4.99	Reconstruct	Maintenance of Traffic	CON		819	NH	182	M			1,000	129989				NA		1,000
2020	STATEWIDE		Local Highway Rehab and Reconstruct	Regionwide		GPA	Local Highway Rehab and Reconstruct			815	ST	76	M	127	OLF	1,018					NA	x	1,018
2020	STATEWIDE	MDOT	Trunkline Highway Preservation	Regionwide		GPA	Trunkline Highway Preservation			1,083	ST	240	M			1,324					NA	x	1,324
2020	STATEWIDE	MDOT	Trunkline Bridge Preservation	Regionwide		GPA	Trunkline Bridge Preservation			1,263	ST	280	M			1,543					NA	x	1,543
2020	ONTONAGON	MDOT	M-28	over the Baltimore River, West of Bruce Crossing	1.00	Bridge replacement	Deck Replacement	CON		1,366	NH	303	M			1,669	126886				NA		1,902

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Fiscal Year	County	Respon-sible Agency	Project Name	Limits	Length	Primary Work Type	Project Description	Phase	Advance Construct	Federal Cost ($1000s)	Federal Fund Source	State Cost ($1000s)	State Fund Source	Local Cost ($1000s)	Local Fund Source	Total Phase Cost ($1000s)	MDOT Job No.	Local ID No.	MPO/ Rural Action Date	Amend-ment Type	Air Quality	Comments	Total Project Cost ($1000s)
2020	HOUGHTON	MDOT	US-41	City of Hancock & Franklin Twp, Houghton County	1.67	Resurface	HMA Mill & Resurface	CON				1,900	M			1,900	119942				NA		2,060
2020	STATEWIDE	MDOT	Section 5339	Statewide		GPA	Bus and Bus Facilities			2,417	5339	604	CTF			3,022					NA	Transit GPA	3,022
2020	ALGER	MDOT	M-28	From 0.86 mi E of FFR 2275 to 0.13 mi E. of MunAve	4.34	Resurface	Multiple Crs HMA Overlay	CON		4,305	NH	955	M			5,260	126912				NA		5,720
2020	STATEWIDE	MDOT	Trunkline Bridge 3R	Regionwide		GPA	Trunkline Bridge 3R			5,043	ST	712	M			5,755					NA	x	5,755
2020	ISABELLA	MDOT	US-127	US-127BR northerly to M-20	3.98	Restore & rehabilitate	Two Course HMA Overlay	CON		4,864	NH	1,079	M			5,943	130105				NA		6,423
2020	DELTA	MDOT	US-2	Eastbound US-2 between Gladstone and Rapid River	5.55	Resurface	Joint repairs and HMA overlay with ASCRL	CON		5,829	NH	1,293	M			7,121	128711				NA		7,271
2020	BENZIE	MDOT	US-31	M-115 south to the Betsie River	1.42	Reconstruct	Reconstruction of US-31	CON		6,173	NH	1,369	M			7,541	126968				NA		8,968
2020	BARAGA	MDOT	US-41	US-41, Covington and Spur Townships, Baraga County	9.63	Restore & rehabilitate	Aggregate Grade Lift and HMA surfacing	CON		7,466	NH	1,655	M			9,121	126827				NA		10,000
2020	ROSCOMMON	MDOT	US-127 SB	M-55 to Muskegon River Bridge	5.25	Restore & rehabilitate	Crush and shape and resurface and cold milling	CON		9,634	NH	2,136	M			11,770	113455				NA		12,240
2020	STATEWIDE	MDOT	Trunkline Traffic Operations or Safety	Regionwide		GPA	Trunkline Traffic Operations and Safety			11,305	ST	1,497	M			12,803					NA	x	12,803
2020	STATEWIDE	MDOT	Trunkline Highway 3R	Regionwide		GPA	Trunkline Highway 3R			11,560	ST	2,479	M			14,039					NA	x	14,039
2020	STATEWIDE		Rural Task Force	Regionwide		GPA	Rural Task Force			27,594	ST	5,685	M	5,757	OLF	39,036					NA		39,036

Appendix A - List of Available Federal-Aid Highway and Transit Resources[1]

Highway Resources

Source	Purpose	Examples of Eligible Activities
Surface Transportation Block Grant Program	Maintain and improve the federal-aid highway system.	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; nonmotorized projects (including projects eligible under the former Transportation Alternatives Program); and bridge scour
Highway Safety Improvement Program (HSIP)	Decrease highway deaths and injuries.	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; installation, replacement, and other improvement of highway signs 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; and roadside safety audits.
Congestion Mitigation and Air Quality Improvement Program (CMAQ)	Reduce emissions from transportation sources.	Installing dedicated turn lanes; signal re-timing, 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)	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).	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 nonmotorized 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	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.	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.

[1] Not intended to be an exhaustive list of all eligible activities.

Transit Resources

Source	Purpose	Examples of Eligible Activities
Sec. 5307 Urbanized Area Formula Grants	Funding for basic transit capital needs of transit agencies in urbanized areas.	Capital projects, transit planning, and projects eligible under the former Job Access Reverse Commute (JARC) program (intended to link people without transportation to available jobs). Some of the funds can also be used for operating expenses, depending on the size of the transit agency. 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	Improving mobility options for seniors and disabled persons.	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 5311, Non-Urbanized Area Formula Grants	Improving mobility options for residents of rural areas.	Capital, operating, and rural transit planning activities in areas under 50,000 population.
Section 5337, State of Good Repair Grants	Maintaining fixed-guideway transit systems in a state of good repair.	Capital, maintenance, and operational support projects. Recipients develop and implement an asset management plan. Half of Section 5337 funding is distributed by a formula accounting for vehicle revenue miles and directional route miles; half is based on ratios of past funding received.
Section 5339, Bus and Bus Facilities	Funding for basic transit capital needs of transit agencies, including construction of bus-related facilities.	Replace, rehabilitate, and purchase buses and related equipment, and construct bus-related facilities.

Appendix B - Other Useful Links

MDOT Region Offices and Transportation Service Centers
http://www.michigan.gov/mdot/0,4616,7-151-9623-36042--,00.html

Bay Region and TSCs
http://www.michigan.gov/mdot/0,1607,7-151-9623_10695-25512--,00.html

Grand Region and TSCs
http://www.michigan.gov/mdot/0,1607,7-151-9623_10695-25502--,00.html

Metro Region and TSCs
http://www.michigan.gov/mdot/0,1607,7-151-9623_10695-25529--,00.html

North Region and TSCs
http://www.michigan.gov/mdot/0,1607,7-151-9623_10695-25475--,00.html

Southwest Region and TSCs
http://www.michigan.gov/mdot/0,1607,7-151-9623_10695-25518--,00.html

Superior Region and TSCs
http://www.michigan.gov/mdot/0,1607,7-151-9623_10695-25465--,00.html

University Region and TSCs
http://www.michigan.gov/mdot/0,1607,7-151-9623_10695-25525--,00.html

Metropolitan Planning Organizations
List of Michigan's MPOs
http://www.mtpa-mi.org/members.asp

Map of Michigan's MPOs
http://www.mtpa-mi.org/membermap.asp
http://www.fhwa.dot.gov/midiv/midivmpo.cfm

Regional Planning Associations and Rural Task Forces
http://www.miregions.com/michigan-planning-regions/region-1.html
http://www.michigan.gov/mdot/0,4616,7-151-9621_17216_54903---,00.html

Small Urban Program
http://www.michigan.gov/mdot/0,1607,7-151-9621_17216_40829---,00.html

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http://www.michigan.gov/mdot/0,4616,7-151-9621---,00.html

Federal Transit Administration
About Federal Transit Administration
https://www.transit.dot.gov/about-fta

FTA Grants and Financing
https://www.transit.dot.gov/funding/grants/grant-programs

U.S. Department Of Transportation
A Guide to Transportation Decisionmaking
https://www.planning.dot.gov/documents/GuidetoTransportationDecisionmaking.pdf

Federal Highway Administration
A Guide to Federal-Aid Programs and Projects
http://www.fhwa.dot.gov/federalaid/projects.cfm

MAP-21 Summary
http://www.fhwa.dot.gov/map21/summaryinfo.cfm

MAP-21 Fact Sheets
http://www.fhwa.dot.gov/map21/factsheets/

Michigan Department of Transportation
MI Transportation Plan (State Long-Range Plan)
www.michigan.gov/slrp

Michigan Five-Year Transportation Program
www.michigan.gov/mdot/0,4616,7-151-9621_14807_14810_59639---,00.html

Michigan Asset Management
http://www.michigan.gov/mdot/0,4616,7-151-9621_15757---,00.html

Michigan Strategic Highway Safety Plan
http://www.michigan.gov/mdot/0,4616,7-151-9615_11261---,00.html

Rail and Public Transportation
http://www.michigan.gov/mdot/0,4616,7-151-11056---,00.html

Federal Passenger Transportation
http://www.michigan.gov/mdot/0,4616,7-151-11056_13849---,00.html

MDOT Office of Passenger
Transportation
http://www.michigan.gov/mdot/0,4616,7-151-9625_21607---,00.html

MDOT's Annual Financial Report
http://www.michigan.gov/mdot/0,4616,7-151-9622_11045_13782---,00.html

MDOT's Local Bridge Program
http://www.michigan.gov/mdot/0,4616,7-151-9625_25885_40558---,00.html

Transportation Economic Development Fund
http://www.michigan.gov/mdot/0,4616,7-151-9621_17216_18230---,00.html

MDOT's Local Highway Safety Program
http://www.michigan.gov/mdot/0,4616,7-151-9625_25885_40552---,00.html

Safe Routes to School
http://www.michigan.gov/mdot/0,4616,7-151-9615_11261_41987---,00.html

MDOT STIP Public Participation Plan
http://www.michigan.gov/documents/mdot/MDOT_FY11-14_STIP_Comments_Summary_Report_338493_7.pdf

Michigan Transportation Fund
MTF Gas and Registration Tax Payments
http://www.michigan.gov/mdot/0,4616,7-151-9625_14406_54348---,00.html

MTF - Act 51 Frequently Asked Questions
https://www.michigan.gov/documents/MDOT_MTF_FAQ_165493_7.pdf

MTF Distribution History
http://mdotnetpublic.state.mi.us/act51public/PaymentHistoryReport.aspx

Environmental Protection Agency - Clean Air Act
https://www.epa.gov/laws-regulations/summary-clean-air-act

Appendix C - Funding Codes

Description	Code
CTF METRO TRANSPORTATION PLANNING	5303
CTF STATEWIDE TRANSPORTATION PLANNING	5304
CTF URBANIZED FORMULA	5307
CTF CLEAN FUELS PROGRAM	5308
CTF CAPITAL PROGRAM	5309
CTF ELDERLY AND DISABLED	5310
CTF NON URBAN FORMULA	5311
CTF JOB ACCESS REVERSE COMMUTE	5316
CTF NEW FREEDOM	5317
CTF ALTERNATIVE TRNSP. PARKS AND PUBLIC LAND	5320
CTF ALTERNATIVE ANALYSIS	5339
AMERICAN RECOVERY - CTF URBANIZED FORMULA	A307
AMERICAN RECOVERY - CTF NON URBAN FORMULA	A311
AERONAUTICS METRO STANDARD RATE	AA
AERONAUTICS AVIATION SERVICES	AAS
AERONAUTICS FEDERAL BLOCK GRANTS	AB
ADV CON BRIDGE REHAB FED SYSTEM PRIOR 1991	ABH
ADV CON BRIDGE REHAB INTERSTATE	ABHI
ADV CON BRIDGE REHAB NATL HIGHWAY SYSTEM	ABHN
ADV CON BRIDGE REHAB SURFACE TRANSPORTATION	ABHT
ADV CON BRIDGE REPLACEMENT FED SYS PRIOR 1991	ABR
ADV CON BRIDGE REPLACEMENT INTERSTATE	ABRI
ADV CON BRIDGE REPLACEMENT NHS	ABRN
ADV CON BRIDGE REPLACEMENT SURFACE TRANS	ABRT
ADV CON CONSOLIDATED PRIMARY RURAL	ACFR
ADV CON CONSOLIDATED PRIMARY URBAN	ACFU
ADV CON INTERSTATE	ACI
ADV CON INTERSTATE RECONSTRUCT	ACIR
ADV CON CONGESTION MITIGATION	ACM
AMERICAN RECOVERY - DBE OJT	ADBE

ADV CON ISTEA DEMO 80% FEDERAL NOT CLASSIFIED	ADPO
AMERICAN RECOVERY - FERRY BOATS	AFBD
AMERICAN RECOVERY - FOREST HIGHWAYS	AFFH
AMERICAN RECOVERY - NATIONAL PARK ROADS	AFLH
AERONAUTICS FEDERAL	AFM
ADV CON CONSOLIDATED PRIMARY RURAL	AFR
ADV CON RECONSTRUCT ON FRI	AFRI
ADV RECON CONSOLIDATED PRIMARY RURAL 4R	AFRR
ADV CON CONSOLIDATED PRIMARY URBAN	AFU
ADV RECON CONSOLIDATED PRI URBAN HWY 100% FED	AFUG
ADV RECON CONSOLIDATED PRIMARY URBAN 4R	AFUR
AERONAUTICS NOISE PROGRAM	AG
AERONAUTICS 90% STATE 10% LOCAL	AH
ACCELERATED INNOVATION DEPLOYMENT DEMONSTRATION	AID
ADV CON RECONSTRUCT IM NO ADDED LANES	AIM
ADV CON RECONSTRUCT ON IMG	AIMG
ADV CON RECONSTRUCT ON IR	AIR
AMERICAN RECOVERY - INDIAN RESERVATION ROADS	AIRR
AERONAUTICS STANDARD AIP AIP 2004 & AFTER	AK
AERONAUTICS STANDARD AIP PRE 2004 and POST 2011	AL
AERONAUTICS 50% STATE & 50% LOCAL	AM
ADV CON RECONSTRUCT ON NH	ANH
ADV CON RECONSTRUCT NHF SAFETY 100% FEDERAL	ANHG
ADV CON RECONSTRUCT ON NHI	ANHI
ADV CON RECONSTRCT NHS MDOT SAFETY	ANHS
AMERICAN RECOVERY - ANY AREA	AR
AMERICAN RECOVERY - 120 DAY OBLIGATION	AR1
AMERICAN RECOVERY - AERONAUTICS	ARA
AMERICAN RECOVERY - ENHANCEMENT	ARE
AMERICAN RECOVERY - ENHANCEMENT 120 DAY OBL	ARE1
AMERICAN RECOVERY - RURAL	ARL
ARRA TIGER GRANT	ARTG

AMERICAN RECOVERY - TMA	ARU
AMERICAN RECOVERY - SMALL MPO, SMALL URBAN	ARUL
AERONAUTICS 100% STATE PROGRAM	AS
ADV CON RECONSTRUCT SFC TRANS ANY AREA	AST
ADV CON RECONSTRUCT SFC TRANS SAFETY	ASTG
ADV CON SURFACE TRANS SAFETY HAZARD ELIMIN	ASTH
ADV CON SURFACE TRANSPORTATION LOCAL RURAL	ASTL
ADV CON RECONSTRUCT SFC TRANSPORTATION	ASTT
ADV CON SURFACE TRANS URBAN AREA > 200K POP	ASTU
AERONAUTICS 95% STATE & 5% LOCAL	AT
AERONAUTICS 9/11 SECURITY REIMBURSEMENTS 2002	AW
BOND EDF LOCAL ROADS FOR FIRST ISSUE	BE01
BOND EDF LOCAL ROADS FOR SECOND ISSUE	BE02
BOND EDF LOCAL ROADS FOR THIRD ISSUE	BE03
BOND FUNDS CNSL PRI URBAN	BFU
BOND GARVEE	BG
BICYCLE GRANT PROGRAM	BGP
BOND HAZARD ELIMINATION	BHES
BRIDGE REHAB PRIOR 1991 BILL	BHF
BRIDGE REHAB PRIOR 1991 BILL INTERSTATE	BHI
BRIDGE REHAB PRIOR 1991 BILL URBAN SYSTEM	BHM
BRIDGE REHAB NHS	BHN
BRIDGE REHAB NOT CLASSIFIED OFF SYSTEM	BHO
BRIDGE REHAB PRIOR 1991 BILL SECONDARY	BHS
BRIDGE REHAB SURFACE TRANSPORTATION	BHT
BOND FUNDS INTRASTATE	BI
BOND ISSUE 2004	BI04
BOND ISSUE 2006	BI06
BOND ISSUE 2008	BI08
BOND ISSUE 2011	BI11
BOND ISSUE 2012	BI12
BOND ISSUE 2008 MATCH	BI8M

BUREAU OF INDIAN AFFAIRS	BIA
BRIDGE INTERSTATE	BIN
BOND INTERSTATE RECONSTRUCT 4R	BIR
BOND INTERSTATE SAFETY	BIS
BOND INTERSTATE URBAN	BIU
BOND STATE FUNDS MI BETTERMENT	BM
BOND METRO URBAN FEDERAL	BMU
BRIDGE NATIONAL HIGHWAY SYSTEM	BN
BRIDGE NOT CLASSIFIED OFF SYSTEM	BO
OJT TRAINING SUPPORTIVE SERVICES	BOWD
BRIDGE REPLACEMENT FEDERAL SYS PRE 91 PR	BRF
BRIDGE REPLACEMENT PL PRE 91 INTERSTATE	BRI
BRIDGE REPLACEMENT METRO URBAN SYSTEM	BRM
BRIDGE REPLACEMENT NATIONAL HIGHWAY SYSTEM	BRN
BRIDGE REPLACEMENT NOT CLASSIFIED OFF SYSTEM	BRO
BRIDGE REPLACEMENT SECONDARY	BRS
BRIDGE REPLACEMENT SURFACE TRANSPORTATION	BRT
BRIDGE SURFACE TRANSPORTATION	BST
BOND TRUNKLINE ROADS FIRST ISSUE	BT01
BOND TRUNKLINE ROADS SECOND ISSUE	BT02
BOND TRUNKLINE ROADS THIRD ISSUE	BT03
BIKEWAY/NON-MOTORIZED PATH	BWM
COUNTY	C
CNTRL ADVERTISING PRIMARY	CAF
CNTRL ADVERTISING INTERSTATE	CAI
CORRIDOR & BORDER CROSSING DISCRETIONARY	CBCD
CORRIDOR & BORDER INFRASTRUCTE SAFETEA-LU	CBIP
CNTRL JUNK YARD PRIMARY	CJF
CNTRL JUNK YARD INTERSTATE	CJI
CONGESTION MITIGATION AIR QUALITY	CM
CONGESTION MITIGATION 100% FEDERAL	CMG
CONGESTION MITIGATION 100% LOCAL	CMX

CMAQ PROJECTS TO REDUCE PM 2.5 EMISSIONS	CPM
CMAQ REDUCTION OF PM 2.5 EMISSIONS 100% FEDERAL	CPMG
COUNTY SECONDARY	CS
COUNTY SECONDARY 100% FEDERAL	CSG
COUNTY SECONDARY 4R	CSR
COUNTY SECONDARY 100% LOCAL	CSX
COMPREHENSIVE TRANSPORTATION FUND	CTF
DEMONSTRATION SURF TRANS PRIORITIES SECTION 129	D129
SPL 87 APPR 50% DEMO 30% DISCRETIONARY	DE
GENERAL FUND APPR 100% FEDERAL ANY	DFG
APPRP FROM GENERAL FUND PRIMARY FUNDS	DFUR
ISTEA DEMONSTRATION 100% FEDERAL INTERSTATE	DIG
ISTEA DEMONSTRATION AUTH ACT FED INTLGNT VEHI	DIV
ISTEA DEMONSTRATION 100% FEDERAL NHS	DNG
ISTEA DEMONSTRATION 100% FEDERAL NOT CLSFD	DOG
DEMONSTRATION FEDERAL AID SYSTEM	DP
DEMONSTRATION FEDERAL AID SYS PRIMARY	DPF
DEMONSTRATION FEDERAL AID SYS INTERSTATE	DPI
DEMONSTRATION FEDERAL AID SYS URBAN SYSTEM	DPM
ISTEA DEMONSTRATION 80% FEDERAL NHS	DPN
ISTEA DEMONSTRATION 80% FEDERAL NOT CLSFD	DPO
ISTEA DEMONSTRATION 80% FEDERAL STP	DPS
DEMONSTRATION SECTION 112 DIVISION A	DPSA
DEMONSTRATION FEDERAL AID SYSTEM URBAN	DPU
DEMONSTRATION 100% LOCAL	DPX
DONOR BONUS SURFACE TRANSPORTATION	DST
DEMONSTRATION SURFACE TRANSPORTATION PRIORITIES	DSTP
DONOR BONUS SURFACE TRANS MDOT SAFETY	DSTS
DONOR BONUS SURFACE TRANS RURAL TRUNKLINE	DSTT
DONOR BONUS SURFACE TRANS URBAN OVER 200	DSTU
ECON DEVELOP CATEGORY A WITH BOND	EBA
ECON DEVELOP CATEGORY A WITH BOND & FED	EBAF

ECON DEVELOP CATEGORY A WITH BOND 100% LOCAL	EBAX
ECON DEVELOP CATEGORY B WITH BOND	EBB
ECON DEVELOP CATEGORY B WITH BOND & FED	EBBF
EQUITY BONUS SAFETEA-LU	EBSL
ECON DEVELOPMENT 100% LOCAL	EBX
EMERGENCY COUNTY SECONDARY FEDERAL ER	ECS
ECON DEVELOPMENT CATEGORY A	EDA
ECON DEVELOPMENT CATEGORY A WITH FEDERAL	EDAF
ECON DEVELOPMENT CATEGORY A 100% LOCAL	EDAX
ECON DEVELOPMENT CATEGORY B	EDB
ECON DEVELOPMENT CATEGORY B WITH FEDERAL	EDBF
ECON DEVELOPMENT CATEGORY C	EDC
ECON DEVELOPMENT CATEGORY C WITH FEDERAL	EDCF
ECON DEVELOPMENT CATEGORY D	EDD
ECON DEVELOPMENT CATEGORY D WITH FEDERAL	EDDF
ECON DEVELOPMENT CATEGORY F	EDF
ECON DEVELOPMENT CATEGORY F WITH FEDERAL	EDFF
ECON DEVELOPMENT 100% LOCAL	EDX
DELAYED FEDERAL AID FEDERAL ROADWAY USU	EMU
EMERGENCY RELIEF	ER
UNKNOWN	EXP
PRIMARY FUNDS	F
FERRY BOAT & TERMINAL DISCRETIONARY	FBD
FERRY BOAT PROGRAM	FBP
PRIORITY PRIMARY	FF
FEDERAL FOREST HIGHWAY	FFH
FEDERAL FOREST HIGHWAY 100% LOCAL	FFHX
PRIORITY PRIMARYNON-MOTORIZED	FFN
RAIL ROAD GRADE CROSSINGS PRIMARY	FG
PRIMARY ON INTERSTATE	FI
CONSOLIDATED PRIMARY	FIR
FEDERAL LANDS ACCESS PROGRAM	FLAP

FEDERAL LANDS HIGHWAYS PUBLIC LANDS	FLH
PRIMARY ROUTE M FUNDS	FM
PRIMARY ROUTE NON-MOTORIZED 100% FEDERAL	FNG
PRIMARY NON-MOTORIZED	FNM
CONSOLIDATED PRIMARY RURAL	FR
CONSOLIDATED PRIMARY RURAL RAIL HWY 100% FED	FRG
CONSOLIDATED PRIMARY RURAL ON INTERSTATE	FRI
CONSOLIDATED PRIMARY RURAL NON-MOTORIZED	FRN
CONSOLIDATED PRIMARY RURAL 4R	FRR
CONSOLIDATED PRIMARY RURAL 4R ON INTERSTATE	FRRI
CONSOLIDATED PRIMARY RURAL 4R SAFETY	FRRS
CONSOLIDATED PRIMARY RURAL SAFETY	FRS
FEDERAL TRANSIT ADMINISTRATION	FTA
CONSOLIDATED PRIMARY URBAN	FU
CONSOLIDATED PRIMARY URBAN RAIL HWY 100% FED	FUG
CONSOLIDATED PRIMARY URBAN ON INTERSTATE	FUI
CONSOLIDATED PRIMARY URBAN NON-MOTORIZED	FUN
CONSOLIDATED PRIMARY URBAN 4R	FUR
CONSOLIDATED PRIMARY URBAN 4R ON INTERSTATE	FURI
GENERAL FUND MONEY - GF15	GF15
GENERAL FUND MONEY - GF16	GF16
GENERAL TRANSPORTATION FUND	GTF
HIGHWAY BRIDGE OBLIGATION AUTHORITY	HBOA
HAZARD ELIMINATION 90% FEDERAL	HES
HAZARD ELIMINATION 100% LOCAL	HEX
HIGHWAYS FOR LIFE	HFL
HIGH HAZARD LOCATIONS 90% FEDERAL	HHS
HIGHWAY INFRASTRUCTURE PROGRAM	HIP
HIGH PRIORITY PROJECTS DEMONSTRATION	HPP
HIGHWAY PLANNING RESEARCH	HPR
HIGHWAY PLANNING RESEARCH 100% FEDERAL	HPRG
HIGH PRIORITY PROJECTS SAFETEA-LU	HPSL

HIGH RISK RURAL ROADS HSIP SAFETEA-LU	HRRR
HIGH SPEED RAIL ROAD CROSSING 100%	HSG
HIGHWAY SAFETY IMPROVEMENT	HSIP
INTERSTATE	I
INTERSTATE DISCRETIONARY	ID
INTERSTATE DISCRETIONARY PRIOR TO 1991 ISTEA	IDR
INTERSTATE CONSOLIDATED PRIMARY URBAN	IFU
INTERSTATE 100% FEDERAL	IG
INTERSTATE MAINTENANCE NO ADDED LANES	IM
INTERSTATE MAINTENANCE DISCRETIONARY	IMD
INTERSTATE MAINTENANCE SAFETY 100% FEDERAL	IMG
INTERSTATE MAINTENANCE AND NATIONAL HIGHWAY	IMNH
INTERSTATE MAINTENANCE MDOT SAFETY	IMS
INTERSTATE NON MOTORIZED	INM
INNOVATIVE PROJECT DELIVERY	IPD
INTERSTATE RECONSTRUCTION 4R	IR
INTERSTATE RECONSTRUCTION 100% FEDERAL	IRG
INTERSTATE SAFETY	IS
INTELLIGENT TRANSPORTATION SYSTEM	ITS
INTERSTATE URBAN	IU
INTELLIGENT VEHICLE HIGHWAY	IVH
85% MINIMUM FLOOR COUNTY SECONDARY	JCS
85% MINIMUM FLOOR COUNTY SECONDARY 4R	JCSR
85% MINIMUM FLOOR CONSOLIDATED PRIMARY RURAL	JFR
85% MIN FLOOR CONSOLIDATED PRIMARY RURAL INT	JFRI
85% MIN FLOOR CONSOLIDATED PRIMARY RURAL 4R	JFRR
85% MINIMUM FLOOR CONSOLIDATED PRIMARY URBAN	JFU
85% MIN FLOOR CONSOLIDATED PRIMARY URBAN 100%	JFUG
85% MIN FLOOR CONSOLIDATED PRIMARY URBAN 4R	JFUR
85% MINIMUM FLOOR HAZARD ELIMINATION	JHES
85% MINIMUM FLOOR INTERSTATE 4R	JIR
85% FEDERAL AID URBAN SYSTEM	JMU

85% FEDERAL AID URBAN SYSTEM 100% FEDERAL	JMUG
85% FEDERAL AID URBAN SYSTEM 4R	JMUR
85% MINIMUM FLOOR RURAL SECONDARY	JRS
85% MINIMUM FLOOR SURFACE TRANSPORTATION	JST
85% MINIMUM FLOOR SURFACE TRANS INTERSTATE	JSTI
85% MINIMUM FLOOR SURFACE TRANS RURAL LOCAL	JSTL
85% MINIMUM FLOOR SURFACE TRANS SAFETY	JSTS
85% MINIMUM FLOOR SURFACE TRANS RURAL TRNKLN	JSTT
85% MIN FLOOR SURFACE TRANS URBAN > 200K POP	JSTU
85% MIN FLR SURF TRANS URBAN < 200K POP TRNKLN	JSUT
JOBS TODAY BOND ISSUE 2007 GARVEE	JT07
JOBS TODAY BOND ISSUE 2007 GARVEE MATCH	JTM
LOCAL FEDERAL AID MATCH	LFA
LOCAL FUND MATCH PROGRAM	LFMP
LOCAL JOBS TODAY LOAN	LJTL
LANDSCAPE ON PRIMARY	LSF
LOCAL TECHNICAL ASSISTANCE	LTA
MICHIGAN FUNDS MICHIGAN BETTERMENT	M
MICHIGAN BITUMINOUS RESURFACING	MB
MICHIGAN BRIDGE DECK	MBD
MICHIGAN BRIDGE PAINTING	MBP
MICHIGAN BITUMINOUS RECONSTRUCTION	MBR
MICHIGAN BUDGET STABILIZATION	MBS
MICHIGAN BLUE WATER BRIDGE	MBWB
MOTOR CARRIER	MC
MICHIGAN CRITICAL BRIDGE	MCB
MINOR CONSTRUCTION PROGRAM	MCP
MICHIGAN CRITICAL STRUCTURES	MCS
MICHIGAN DRAINAGE ASSESSMENT	MDA
MICHIGAN ENVIRONMENT CLEANUP	MEC
MICHIGAN EMERGENCY	MER
MICHIGAN FEDERAL AID MATCH	MFA

MINIMUM GUARANTEE	MG
MICHIGAN INSTITUTIONAL ROADS	MIR
MICHIGAN JOBS COMMISSION	MJC
MICHIGAN JOINT REPAIR	MJT
MICHIGAN MINOR ROAD SIDE	MMR
MICHIGAN NON-MOTORIZED	MNM
MICHIGAN PEDESTRIAN OVERPASS	MPB
MICHIGAN ROAD PRESERVATION	MR
METRO URBAN FUNDS 4R 100% FEDERAL	MRG
MICHIGAN ROADSIDE PARK PROGRAM	MRP
MICHIGAN RAILROAD	MRR
MICHIGAN ADV ROW ACQUISION REVOLV REAL ESTATE	MRRF
MICHIGAN SAFETY PROGRAM	MS
MICHIGAN SHOULDERS	MSH
MICHIGAN SAFETY FOR SIGNALS	MSS
MICHIGAN TURNBACK PROGRAM	MTB
METRO URBAN FEDERAL URBAN SYSTEM	MU
METRO URBAN FEDERAL URBAN SYSTEM 100% FED	MUG
METRO URBAN SYSTEM INTERSTATE	MUI
METRO URBAN NON-MOTORIZED	MUN
METRO URBAN 4R	MUR
METRO URBAN 4R SAFETY	MURS
METRO URBAN 100% LOCAL	MUX
NON STATE FUNDED 100% LOCAL	MX
NATIONAL CORR INFRASTRUCTURE IMPR SAFETEA-LU	NCII
NATIONAL HIGHWAY SYSTEM	NH
NATIONAL HIGHWAY FREIGHT INTERSTATE	NHFI
NATIONAL HIGHWAY FREIGHT PROGRAM	NHFP
NATIONAL HIGHWAY SAFETY 100% FEDERAL	NHG
NATIONAL HIGHWAY ON I (DOES NOT QUALIFY IM)	NHI
NATIONAL HIGHWAY ON I (QUALIFIES FOR IM)	NHIM
NATIONAL COOP HIGH PLANNING 100% FEDERAL	NHPG

NATIONAL HIGHWAY SYSTEM MDOT SAFETY	NHS
NATIONAL HIGHWAY SYSTEM 100% LOCAL	NHX
NATIONAL RIDESHARE DISCRETIONARY	NRD
NATIONAL RECREATIONAL TRAILS	NRT
NATIONAL SIGNIFICANT FREIGHT AND HIGHWAY PROJECTS	NSFH
OFF SYSTEM	OS
METRO PLANNING	PL
PAVEMENT MRKNG DEMO SEC.205-L973 ACT 90% FED	PMS
PROJECTS OF NATIONAL AND REGIONAL SIGNIFICANCE	PNRS
PRIORITY ROADS INVESTMENT PROGRAM	PRIP
ADVANCE ROW ACQUISITION ON PRIMARY	QF
ADVANCE ROW ACQUISITION ON NH	QNH
RADAR ACCESS DEFENSE	RAD
RURAL PRIMARY	RF
ELIMINATION OF ROADSIDE OBSTACLES 90% FEDERAL	ROS
RESEARCH PROJECT	RP
RAIL HIGHWAY OFF SYSTEM 90% FEDERAL	RRO
RAIL HWY XING SEC.203,L973 ACT PRTCV DEV 90% FED	RRP
MICHIGAN ROADS AND RISKS RESERVE FUND	RRRF
RAIL HIGHWAY CROSSING 90% FEDERAL	RRS
RURAL SECONDARY	RS
RURAL SECONDARY 100% FEDERAL	RSG
RURAL SECONDARY 4R	RSR
RURAL TECHNICAL ASSISTANCE	RTA
SCENIC BYWAYS DISCRETIONARY	SBD
SURFACE TRANS SAFETY 100% FED FOR STH-ITEMS	SHG
STATE INFRASTRUCTURE BANK	SIB
STATE INFRASTRUCTURE BANK 100%	SIBG
SURFACE TRANS SAFETY 100% FED FOR STL-ITEMS	SLG
SAFER OFF SYSTEM ROUTES	SOS
STATEWIDE PLANNING & RESEARCH	SPR
STATEWIDE PLANNING & RESEARCH 100% FEDERAL	SPRG

SURFACE SAFETY HWY XXING HAZARD ELIMINATION 100%	SRHG
SURFACE SAFETY HWY XXING PROTECTION DEVISES 100%	SRPG
FEDERAL AID SAFER ROADS DEMO 90% FEDERAL	SRS
SAFE ROUTES TO SCHOOL EITHER SAFETEA-LU	SRSE
SAFE ROUTES TO SCHOOL INFRASTRUCT SAFETEA-LU	SRSI
SAFE ROUTES TO SCHOOL NON INFRAST SAFETEA-LU	SRSN
SECONDARY FUNDS	SS
DBE Supportive Services	SST
SURFACE TRANSPORTATION ANY AREA	ST
SURFACE TRANSPORTATION ENHANCEMENT	STE
SURFACE TRANS ENHANCEMENT ON INTERSTATE	STEI
SURFACE TRANS SAFETY 100% FED FOR ST-ITEMS	STG
SURFACE TRANS SAFETY 100% FED ON INTERSTATE	STGI
SURFACE TRANS SAFETY HAZARD ELIMINATION	STH
SURFACE TRANS ON INTERSTATE 90%	STI
SURFACE TRANSPORTATION RURAL	STL
SURFACE TRANS SAFETY 100% FED FOR STL-ITEMS	STLG
SURFACE TRANS SAFETY HWY XXING PROTECTION	STR
STP RAIL HWY SAFETY & INCENTIVE PAYMENT 100%	STRG
SURFACE TRANS SAFETY HWY XXING HAZARD ELIMINATION	STRH
SURFACE TRANS SAFETY HWY XXING PROTECTION DEVICES	STRP
SURFACE TRANS ANY AREA MDOT SAFETY	STS
SURFACE TRANS ANY AREA MDOT SAFETY ON I	STSI
SURFACE TRANS WAS RURAL SECONDARY TRUNKLINE	STT
SURFACE TRANS SAFETY 100% FED FOR STT-ITEMS	STTG
SURFACE TRANS SAFETY WAS RURAL SEC TRUNKLINE	STTS
SURFACE TRANS URBAN AREAS > 200K POP	STU
SURFACE TRANS 100% FED FOR STU	STUG
SURFACE TRANS URBAN AREAS < 200K POP LOCAL	STUL
SURFACE TRANS URBAN AREAS < 200K POP TRUNKLN	STUT
SURFACE TRANS URBAN AREAS > 200K POP 100% LOC	STUX
SURFACE TRANS ANY AREA 100% LOCAL	STX

SURFACE TRANS SAFETY 100% FED FOR STU-ITEMS	SUG
SURFACE TRANS URBAN AREAS < 200K POP	SUL
SURFACE TRANS URBAN AREAS < 200K POP 100%	SULG
TOPICS	T
TRANSPORTATION ALTERNATIVES PROGRAM FLEX	TA
TRANSPORTATION ALTERNATIVES RURAL	TAL
TRANSPORTATION ALTERNATIVES URBAN AREAS > 200K POP	TAU
TRANSPORTATION ALTERNATIVES URBAN AREAS < 200K POP	TAUL
TIMBER BRIDGE	TBR
TRAFFIC CONTROL DEMONSTRATION	TCD
TAX COMPLIANCE PROGRAM	TCP
TRANS COMMUNITY AND SYSTEM PRESERVATION	TCSP
TRANSPORTATION GRANT 100% FEDERAL	TG
TIGER II DISCRETIONARY GRANTS	TGR2
TIGER III DISCRETIONARY GRANTS	TGR3
TIGER IV DISCRETIONARY GRANTS	TGR4
TIGER DISCRETIONARY GRANT (USDOT)	TIGR
TRANS IMPROVEMENT PROJECTS SAFETEA-LU	TIP
UNKNOWN	TMI
TOPICS FUNDS ON FEDERAL AID URBAN SYSTEM	TMU
TRUE ADV CON SPECIAL CONVERSION PROCESS	TNH
TRUCK PARKING FACILITIES DISCRETIONARY	TPFD
TRANSITIONAL QUARTER ON PRIMARY	TQF
TRANSITIONAL QUARTER ON URBAN SYSTEM	TQM
TRANSITIONAL QUARTER AND URBAN SYSTEM	TQMM
TRANSITIONAL QURATER ON SECONDARY	TQS
TRANSPORTATION SYSTEM MANAGEMENT	TSM
URBAN FUNDS	U
URBAN AREA (POPULATION URBANIZED AREA) 'M'	UM
URBAN MASS TRANSIT	UMT
URBAN FUNDS NON-MOTORIZED	UNM
URBAN TECHNICAL ASSISTANT	US

URBAN TECHNICAL ASSISTANCE PROGRAM UTA

Appendix D - Primary Work Types

Primary Work Types

SURFACE TRANSPORTATION (Highways, Bridges, Roadside and Nonmotorized)

Reconstruct

Restore and rehabilitate

Widen - major (capacity increase)

Widen - minor

New route/structure (capacity increase)

Roadside facility

Traffic operations/safety

Bridge restore and rehabilitate

Bridge replacement

Bridge - other

TRANSIT

Transit operations

Transit communication equipment

Transit maintenance equipment and parts

Transit operations equipment

Transit facility

Transit vehicle rehabilitation

Transit vehicle additions/replacement

MISCELLANEOUS

Studies

Planning and research – Planning Research and Design

Aviation

Marine/port

Intermodal/multimodal

Rail

Wetland mitigation

Heritage Routes/Byways

Miscellaneous

GPA (specific type of GPA is identified in the *Project Name* column)

Contracts

Environmental

Air Quality Improvement

Primary Work Type Descriptions

SURFACE TRANSPORTATION (Highways, Bridges, Roadside and Nonmotorized)

Reconstruct

Reconstruction

Concrete Reconstruction

Asphalt Reconstruction

Restore & Rehabilitate

Two Course Asphalt Resurfacing

Thin Concrete Overlay (less than or equal to 4 inches)

Concrete Overlay (greater than 4 inches)

Shoulder Work

Culvert Rehabilitation

Unbonded Concrete Overlay

Asphalt Pavement Repair

Concrete Pavement Inlay

Concrete Pavement Repair

Crush and Shape and Asphalt Resurfacing

Cold-In-Place Recycle and Asphalt Resurfacing

Concrete Pavement Rubblize and Asphalt Resurfacing

Multiple Course Asphalt Overlay with ASCRL

Milling and Two-Course Asphalt Resurfacing

Three-Course Asphalt Resurfacing

Cold Milling

Drainage Improvement

Curb and Gutter

Multiple Course Chip Seal

Cape Seal

Fog Seal

Diamond Grinding

Partial Depth Concrete Pavement Repair

Overband Crack Fill

Concrete Crack Sealing

Ultra-Thin Asphalt Overlay (3/4 inches)

Milling and Asphalt Overlay (1 1/2 inches)

Hot In-Place Asphalt Recycling

Single Course Micro-Surfacing

Multiple Course Micro-Surfacing

Concrete Joint and Surface Spall Repair

Dowel Bar Retrofit

Paver Placed Surface Seal

New Treatment Technology - Concrete Pavements

Single Course Chip Seal

Slurry Seal

Skip Patching

Asphalt Overlay (equal to 1 1/2 inches)

Profile Milling

Full Depth Concrete Pavement Repair

Underdrain Outlet Repair and Cleaning

Shoulder Slurry Seal

Shoulder Chip Seal

Asphalt Crack Treatment

Concrete Joints Reseal

New Treatment Technology-Flexible and Comp Pavements

Widen - Major (Capacity Increase)

Additional Lane(s) More Than 1/2 Mile Long

Interchange Redesign and Upgrading

Widen - Minor

Left-Turn Lane

Right-Turn Lane

Additional Lane(s) Less Than 1/2 Mile Long

Passing Relief Lane(s)

New Route/Structure (Capacity Increase)

New Road

New Road - Relocating an Existing Route

New Interchange on Existing Route

New Structure on New Route

New Structure on Relocated Route

New Structure on Existing Route

New Nonmotorized Path

Carpool Lots - New

New Rest Area

New Welcome Center

Landscaping

Roadside Facility

Rest Area or Welcome Center Rehabilitation

Miscellaneous Roadside

Streetscaping

Nonmotorized Path Rehabilitation

Carpool Lots - Preservation

Carpool Lots - Expansion

Landscaping - Improve

Facility Expansion

Parking Area Expansion

Fence Upgrading

Rest Area Repair or Rebuild

Bike/Pedestrian Facility

Traffic Operations

Relocate Roadside Obstacles

Rumble Strips - Shoulder

Intersection Geo Improvements for Signalization

Vertical and Horizontal Alignment Revision(s)

Non-Freeway Sign Replacement

Pavement Marking

Traffic Signals

Overhead Sign Structures

Freeway Sign Replacement

Intersection Improvements

Construct Median Barrier

Guardrails and Attenuator

Remove Roadside Obstacles

Slope Flattening

Delineation

Pedestrian Improvements

High Friction Surface

Rumble Strips-Centerline

Segment Geometric Improvements for Safety

ADA Ramps

Maintaining Traffic

Traffic Flow Improvement

ITS Infrastructure and Device Installation

Transportation Center Operations

ITS Device Maintenance

Freeway Courtesy Patrol Operations

ITS Studies

Traveler Information Systems

Connected Vehicles
ITS Operations
Construct Roadway Lighting
Pump Station Rehabilitation
Weigh Station Modifications
Drainage Assessments
Ride Share
Sound Barrier Rehabilitation
Weigh Station Replace or Rehabilitate
New Sound Barrier Type II
New Weigh Station
New Sound Barrier Type I
Freight and Intermodal

Bridge Restore and Rehabilitate

Substructure Repair
Substructure Replacement
Widen-Maintain Lanes
Miscellaneous Rehabilitation
Overlay - Shallow
Overlay - Deep
Bridge Barrier Railing Replace
Superstructure Repair, Steel
Superstructure Repair, Concrete
Overlay - Epoxy
Deck Patching
Scour Protection
Miscellaneous Bridge CPM
Painting Complete
Pin and Hanger Replacement
Joint Replacement
Substructure Patching

Asphalt Cap (no membrane)
Painting - Zone
Asphalt Overlay w/Waterproofing Membrane
Deck Patching - Full Depth
Bridge Barrier Railing Repair
Three Beam Retrofit
Bridge Approach
Superstructure Wash
Vegetation Control
Drain System Clean/Repair
Paint - Spot
Joint Repair
Concrete Surface Coating
Crack Sealing
Minor Concrete Patching
Approach Pavement Relief Joints
Slope Protection Repair
Miscellaneous Bridge CSM
Healer Sealer
Metal Mesh Panels

Bridge Replacement

Deck Replacement
Superstructure Replacement
Bridge Replacement
Miscellaneous Replace
Culvert Replacement

Bridge - Other

Widen - Add Lanes
Miscellaneous Bridge

New Technologies

Bridge Inspection

Studies/Scoping

Bridge Removal

Special Needs

Railroad Oversight

Relocation of Railroad Facilities

TRANSIT

Operations
5307 (urban) operations
Section 18 (rural and intercity) operations

Communication Equipment
Radios, towers, antennas, and/or other related equipment
Phone/dispatch systems
Vehicle locator systems

Maintenance Equipment and Parts
Roller cabinets
Hand tools and stands
Compressors
Portable hoists
Diagnostic equipment
Engines
Transmission stands
Portable bus washers
Power jacks, cleaners
Oil or fuel pump
Miscellaneous parts

Operations Equipment
Facility equipment
Office equipment/supplies
Office furnishings
Non-revenue (service) vehicles

Transit Facility
Purchase or renovation of transit/multi-modal facility and terminal
Cost of real estate and/or building acquisition
Facility construction

Site improvements
Environmental clean-up

Vehicle Rehabilitation
Rehabilitation of revenue vehicles

Vehicle Additions/Replacement
Purchase additional revenue vehicles (fleet expansion)
Purchase replacement revenue vehicles

MISCELLANEOUS

Studies
Planning, Research, and Design
Aviation
Marine/port
Intermodal/multimodal
Rail
Wetland mitigation
Contracts
Environmental
GPA (specific type of GPA is identified in the *Project Name* column.)

MDOT

Michigan Department of Transportation

Providing the highest quality integrated transportation services for economic benefit and improved quality of life.

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BUREAUS/TRANSPORTATION PLANNING/STATEWIDE PLANNING/INTERMODAL POLICY DIVISION/STIP (3/16 CJ)