#### APPENDIX A: FINANCIAL CONSTRAINT AND RESOURCES

#### FINANCIAL CONSTRAINT TABLES

Comparison of estimated revenues and expenditures by funding source for MDOT, ITP, and local jurisdictions

#### LIST OF AVAILABLE FEDERAL-AID HIGHWAY AND TRANSIT RESOURCE

Not intended to be an exhaustive list of all eligible activities

### FINANCIAL ASSUMPTIONS

Funding growth rates and Year of Expenditure (YOE) Rates

Fiscal Year 2020 - Fiscal Year 2023

**Grand Valley Metropolitan Council (GVMC)** 

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Total Revenue	Federal Revenue	Federal Commitment	State Commitment	Local Commitment	Total Commitment		
Fiscal Year - 2020, Local MPO Based Constraint							
\$3,717,954	\$2,985,054	\$2,985,054	\$302,500	\$430,400	\$3,717,954		
\$878,750	\$703,000	\$703,000	\$0	\$175,750	\$878,750		
\$1,700,000	\$1,213,000	\$1,213,000	\$0	\$487,000	\$1,700,000		
\$1,200,000	\$877,000	\$877,000	\$0	\$323,000	\$1,200,000		
\$11,789,250	\$8,929,000	\$8,924,959	\$0	\$2,860,250	\$11,785,209		
\$2,191,594	\$0	\$0	\$1,753,275	\$438,319	\$2,191,594		
\$1,135,943	\$706,397	\$343,699	\$0	\$429,546	\$773,245		
\$22,613,491	\$15,413,451	\$15,046,712	\$2,055,775	\$5,144,265	\$22,246,752		
\$1,376,821	\$1,107,867	\$1,107,867	\$0	\$268,954	\$1,376,821		
\$73,179	\$0	\$0	\$73,179	\$0	\$73,179		
\$1,450,000	\$1,107,867	\$1,107,867	\$73,179	\$268,954	\$1,450,000		
\$1,344,065	\$1,189,358	\$1,189,358	\$0	\$154,707	\$1,344,065		
\$2,412,835	\$1,546,676	\$1,546,676	\$0	\$866,159	\$2,412,835		
\$3,756,900	\$2,736,034	\$2,736,034	\$0	\$1,020,866	\$3,756,900		
\$2,486,478	\$2,194,086	\$2,194,086	\$292,392	\$0	\$2,486,478 Page 50 of 249		
	\$3,717,954 \$878,750 \$1,700,000 \$1,200,000 \$11,789,250 \$2,191,594 \$1,135,943 \$22,613,491 \$1,376,821 \$73,179 \$1,450,000 \$1,344,065 \$2,412,835 \$3,756,900	\$3,717,954 \$2,985,054  \$878,750 \$703,000  \$1,700,000 \$1,213,000  \$1,200,000 \$877,000  \$11,789,250 \$8,929,000  \$2,191,594 \$0  \$1,135,943 \$706,397  \$22,613,491 \$15,413,451  \$1,376,821 \$1,107,867  \$73,179 \$0  \$1,450,000 \$1,107,867  \$1,344,065 \$1,189,358  \$2,412,835 \$1,546,676  \$3,756,900 \$2,736,034	\$3,717,954 \$2,985,054 \$2,985,054 \$2,985,054 \$878,750 \$703,000 \$703,000 \$1,700,000 \$1,213,000 \$1,213,000 \$1,213,000 \$1,213,000 \$1,213,000 \$877,000 \$877,000 \$877,000 \$877,000 \$8,924,959 \$2,191,594 \$0 \$0 \$0 \$1,135,943 \$706,397 \$343,699 \$22,613,491 \$15,413,451 \$15,046,712 \$1,376,821 \$1,107,867 \$1,107,867 \$73,179 \$0 \$0 \$0 \$1,450,000 \$1,107,867 \$1,107,867 \$1,107,867 \$1,107,867 \$1,107,867 \$1,344,065 \$1,189,358 \$1,189,358 \$2,412,835 \$1,546,676 \$1,546,676 \$3,756,900 \$2,736,034 \$2,736,034	\$3,717,954 \$2,985,054 \$2,985,054 \$302,500 \$6703,000 \$0 \$703,000 \$0 \$1,700,000 \$1,213,000 \$1,213,000 \$0 \$1,200,000 \$877,000 \$877,000 \$877,000 \$0 \$11,789,250 \$8,929,000 \$8,924,959 \$0 \$0 \$1,135,943 \$706,397 \$343,699 \$0 \$1,135,943 \$15,413,451 \$15,046,712 \$2,055,775 \$1,376,821 \$1,107,867 \$1,107,867 \$0 \$73,179 \$0 \$73,179 \$1,450,000 \$1,107,867 \$1,107,867 \$1,107,867 \$73,179 \$1,450,000 \$1,189,358 \$1,189,358 \$0 \$2,412,835 \$1,546,676 \$1,546,676 \$0 \$3,756,900 \$2,736,034 \$2,736,034 \$0	\$3,717,954 \$2,985,054 \$2,985,054 \$302,500 \$430,400 \$878,750 \$703,000 \$703,000 \$0 \$175,750 \$1,700,000 \$1,213,000 \$1,213,000 \$0 \$487,000 \$1,200,000 \$877,000 \$877,000 \$0 \$323,000 \$1,176,750 \$1,769,250 \$8,929,000 \$8,924,959 \$0 \$2,860,250 \$2,191,594 \$0 \$0 \$1,753,275 \$438,319 \$1,135,943 \$706,397 \$343,699 \$0 \$429,546 \$22,613,491 \$15,413,451 \$15,046,712 \$2,055,775 \$5,144,265 \$1,376,821 \$1,107,867 \$1,107,867 \$0 \$268,954 \$73,179 \$0 \$0 \$73,179 \$0 \$0 \$1,450,000 \$1,107,867 \$1,107,867 \$73,179 \$0 \$0 \$1,450,000 \$1,107,867 \$1,107,867 \$73,179 \$0 \$0 \$1,450,000 \$1,107,867 \$1,107,867 \$1,107,867 \$73,179 \$268,954 \$1,344,065 \$1,189,358 \$1,189,358 \$0 \$154,707 \$2,412,835 \$1,546,676 \$1,546,676 \$0 \$866,159 \$3,756,900 \$2,736,034 \$2,736,034 \$0 \$1,020,866		

Fiscal Year 2020 - Fiscal Year 2023

**Grand Valley Metropolitan Council (GVMC)** 

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Fund Source	Total Revenue	Federal Revenue	Federal Commitment	State Commitment	Local Commitment	Total Commitment	
Fiscal Year - 2020	Fiscal Year - 2020						
Fiscal Year - 2020, MDOT Project Templates							
Bridge Replacement	\$1,700,000	\$1,530,000	\$1,530,000	\$170,000	\$0	\$1,700,000	
Road - Capital Preventive Maintenance	\$5,314,501	\$4,407,363	\$4,407,363	\$889,333	\$17,805	\$5,314,501	
Road - Rehabilitation and Reconstruction	\$26,300,000	\$23,670,000	\$23,670,000	\$2,630,000	\$0	\$26,300,000	
Traffic & Safety	\$850,742	\$766,166	\$766,166	\$84,576	\$0	\$850,742	
Other	\$5,804,117	\$4,778,942	\$4,778,942	\$1,010,033	\$15,142	\$5,804,117	
FY 2020, MDOT Project Templates Total	\$42,455,838	\$37,346,557	\$37,346,557	\$5,076,334	\$32,947	\$42,455,838	
Fiscal Year - 2020, Transit Project Categories							
5307	\$12,793,079	\$10,234,462	\$10,234,462	\$2,558,617	\$0	\$12,793,079	
5310	\$383,000	\$306,400	\$306,400	\$76,600	\$0	\$383,000	
5339	\$1,208,024	\$966,419	\$966,419	\$241,605	\$0	\$1,208,024	
FY 2020, Transit Project Categories Total	\$14,384,103	\$11,507,281	\$11,507,281	\$2,876,822	\$0	\$14,384,103	
Fiscal Year - 2020 Grand Total	\$84,660,332	\$68,111,190	\$67,744,451	\$10,082,110	\$6,467,032	\$84,293,593	
Fiscal Year - 2021							
Fiscal Year - 2021, Local MPO Based Constraint							
CMAQ	\$1,766,207	\$1,190,207	\$1,190,207	\$100,000	\$476,000	\$1,766,207	
NHPP	\$900,000	\$717,000	\$717,000	\$0	\$183,000	\$900,000	
STP - Flexible - Urban Counties	\$1,724,343	\$1,237,000	\$1,232,000	\$0	\$487,343	\$1,719,343	
STP - Rural - Urban Counties	\$1,200,000	\$895,000	\$895,000	\$0	\$305,000	\$1,200,000 Page 51 of 249	



#### Fiscal Year 2020 - Fiscal Year 2023

### **Grand Valley Metropolitan Council (GVMC)**

Fund Source	Total Revenue	Federal Revenue	Federal Commitment	State Commitment	Local Commitment	Total Commitment
Fiscal Year - 2021						
Fiscal Year - 2021, Local MPO Based Constraint						
STP - TMA	\$13,126,287	\$9,780,630	\$9,780,630	\$0	\$3,345,657	\$13,126,287
TEDF Category C	\$3,830,000	\$0	\$0	\$2,184,000	\$1,646,000	\$3,830,000
FY 2021, Local Projects from Statewide Sources Total	\$22,546,837	\$13,819,837	\$13,814,837	\$2,284,000	\$6,443,000	\$22,541,837
Fiscal Year - 2021, Local Projects from Statewide Sources						
Off-System Bridge	\$436,000	\$348,800	\$348,800	\$65,400	\$21,800	\$436,000
STP - Flexible (Bridge)	\$1,909,000	\$1,527,200	\$1,527,200	\$286,350	\$95,450	\$1,909,000
FY 2021, Local Projects from Statewide Sources Total	\$2,345,000	\$1,876,000	\$1,876,000	\$351,750	\$117,250	\$2,345,000
Fiscal Year - 2021, MDOT Project Templates						
Bridge Replacement	\$7,632,221	\$6,868,999	\$6,868,999	\$763,222	\$0	\$7,632,221
Road - Rehabilitation and Reconstruction	\$11,500,000	\$10,350,000	\$10,350,000	\$1,150,000	\$0	\$11,500,000
Traffic & Safety	\$10,330,620	\$9,797,558	\$9,797,558	\$533,062	\$0	\$10,330,620
Other	\$9,849,582	\$8,061,883	\$8,061,883	\$1,787,699	\$0	\$9,849,582
FY 2021, MDOT Project Templates Total	\$39,312,423	\$35,078,440	\$35,078,440	\$4,233,983	\$0	\$39,312,423
Fiscal Year - 2021, Transit Project Categories						
5307	\$13,703,119	\$10,962,494	\$10,962,494	\$2,740,625	\$0	\$13,703,119
5339	\$1,226,145	\$980,916	\$980,916	\$245,229	\$0	\$1,226,145
FY 2021, Transit Project Categories Total	\$14,929,264	\$11,943,410	\$11,943,410	\$2,985,854	\$0	\$14,929,264
Fiscal Year - 2021 Grand Total	\$79,133,524	\$62,717,687	\$62,712,687	\$9,855,587	\$6,560,250	\$79,128,524



Fiscal Year 2020 - Fiscal Year 2023

**Grand Valley Metropolitan Council (GVMC)** 

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Fund Source	Total Revenue	Federal Revenue	Federal Commitment	State Commitment	Local Commitment	Total Commitment		
Fiscal Year - 2022								
Fiscal Year - 2022, Local MPO Based Constraint	Fiscal Year - 2022, Local MPO Based Constraint							
CMAQ	\$1,895,000	\$1,282,000	\$1,282,000	\$105,000	\$508,000	\$1,895,000		
NHPP	\$913,750	\$731,000	\$731,000	\$0	\$182,750	\$913,750		
STP - Flexible - Urban Counties	\$1,544,370	\$1,262,000	\$1,262,000	\$0	\$282,370	\$1,544,370		
STP - Rural - Urban Counties	\$1,250,000	\$913,000	\$913,000	\$0	\$337,000	\$1,250,000		
STP - Small Urban	\$795,236	\$375,000	\$375,000	\$0	\$420,236	\$795,236		
STP - TMA	\$12,608,000	\$9,290,000	\$9,290,000	\$0	\$3,318,000	\$12,608,000		
TEDF Category C	\$2,900,000	\$0	\$0	\$2,320,000	\$580,000	\$2,900,000		
FY 2022, Local Projects from Statewide Sources Total	\$21,906,356	\$13,853,000	\$13,853,000	\$2,425,000	\$5,628,356	\$21,906,356		
Fiscal Year - 2022, Local RTF Based Constraint								
STP - Rural/Flexible	\$974,421	\$703,000	\$703,000	\$0	\$271,421	\$974,421		
TEDF Category D	\$73,179	\$0	\$0	\$73,179	\$0	\$73,179		
FY 2022, Local RTF Based Constraint Total	\$1,047,600	\$703,000	\$703,000	\$73,179	\$271,421	\$1,047,600		
Fiscal Year - 2022, MDOT Project Templates								
Bridge Preservation	\$3,066,717	\$2,760,045	\$2,760,045	\$306,672	\$0	\$3,066,717		
Road - Rehabilitation and Reconstruction	\$4,504,000	\$3,727,600	\$3,727,600	\$715,870	\$60,530	\$4,504,000		
Traffic & Safety	\$3,016,584	\$2,910,489	\$2,910,489	\$106,095	\$0	\$3,016,584		
Other	\$1,948,686	\$1,595,147	\$1,595,147	\$353,539	\$0	\$1,948,686		
FY 2022, MDOT Project Templates Total	\$12,535,987	\$10,993,281	\$10,993,281	\$1,482,176	\$60,530	\$12,535,987 Page 53 of 249		

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**Grand Valley Metropolitan Council (GVMC)** 

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Fund Source	Total Revenue	Federal Revenue	Federal Commitment	State Commitment	Local Commitment	Total Commitment
Fiscal Year - 2022						
Fiscal Year - 2022, Transit Project Categories						
5307	\$13,957,408	\$11,165,927	\$11,165,927	\$2,791,481	\$0	\$13,957,408
5339	\$1,244,537	\$995,630	\$995,630	\$248,907	\$0	\$1,244,537
FY 2022, Transit Project Categories Total	\$15,201,945	\$12,161,557	\$12,161,557	\$3,040,388	\$0	\$15,201,945
Fiscal Year - 2022 Grand Total	\$50,691,888	\$37,710,838	\$37,710,838	\$7,020,743	\$5,960,307	\$50,691,888
Fiscal Year - 2023						
Fiscal Year - 2023, Local MPO Based Constraint						
CMAQ	\$1,971,207	\$1,350,207	\$1,350,207	\$105,000	\$516,000	\$1,971,207
NHPP	\$950,000	\$746,000	\$746,000	\$0	\$204,000	\$950,000
STP - Flexible - Urban Counties	\$1,607,000	\$1,287,000	\$1,280,000	\$0	\$320,000	\$1,600,000
STP - Rural - Urban Counties	\$1,250,000	\$931,000	\$931,000	\$0	\$319,000	\$1,250,000
STP - TMA	\$12,042,501	\$9,476,000	\$9,475,999	\$0	\$2,566,501	\$12,042,500
TEDF Category C	\$2,076,614	\$0	\$0	\$1,656,614	\$420,000	\$2,076,614
FY 2023, Local Projects from Statewide Sources Total	\$19,897,322	\$13,790,207	\$13,783,206	\$1,761,614	\$4,345,501	\$19,890,321
Fiscal Year - 2023, MDOT Project Templates						
Bridge Preservation	\$3,124,969	\$2,678,865	\$2,678,865	\$446,104	\$0	\$3,124,969
Road - Rehabilitation and Reconstruction	\$16,040,000	\$14,436,000	\$14,436,000	\$1,604,000	\$0	\$16,040,000
Traffic & Safety	\$3,134,430	\$2,820,987	\$2,820,987	\$313,443	\$0	\$3,134,430
Other	\$2,080,002	\$1,702,481	\$1,702,481	\$377,521	\$0	\$2,080,002 age 54 of 249

Fiscal Year 2020 - Fiscal Year 2023

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#### **Grand Valley Metropolitan Council (GVMC)**

Fund Source	Total Revenue	Federal Revenue	Federal Commitment	State Commitment	Local Commitment	Total Commitment
Fiscal Year - 2023						
FY 2023, MDOT Project Templates Total	\$24,379,401	\$21,638,333	\$21,638,333	\$2,741,068	\$0	\$24,379,401
Fiscal Year - 2023, Transit Project Categories						
5307	\$12,931,538	\$10,345,230	\$10,345,230	\$2,586,308	\$0	\$12,931,538
5339	\$1,263,205	\$1,010,564	\$1,010,564	\$252,641	\$0	\$1,263,205
FY 2023, Transit Project Categories Total	\$14,194,743	\$11,355,794	\$11,355,794	\$2,838,949	\$0	\$14,194,743
Fiscal Year - 2023 Grand Total	\$58,471,466	\$46,784,334	\$46,777,333	\$7,341,631	\$4,345,501	\$58,464,465

## LIST OF AVAILABLE FEDERAL-AID HIGHWAY AND TRANSIT RESOURCES

Not intended to be an exhaustive list of all eligible activities

### **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 countermeasures.
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; and installation, replacement, and other improvement of highway signage and pavement markings, or a project to maintain minimum levels of retroreflectivity, that addresses a highway safety problem consistent with a State strategic highway safety plan; roadside safety audits.
Congestion Mitigation and Air Quality Improvement Program (CMAQ)	Reduce emissions from transportation sources	Installing dedicated turn lanes; signal retiming, interconnection, or actuation; constructing roundabouts; diesel retrofits; projects to reduce single-occupant vehicle travel; new or reduced-headways transit routes.
National Highway Performance Program (NHPP)	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.

## **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.

#### FINANCIAL ASSUMPTIONS

#### **Funding Growth Rates**

These rates are not Year of Expenditure (i.e., inflation). Funding growth rates are the forecast of what is expected to be apportioned and/or allocated to the state and the MPOs. These funds are not indexed for inflation: There is no "cost of living" adjustment. Assumptions are made based on information known at a given point in time. What we know as we develop our current estimates is:

- 1. Michigan has seen very little growth in its federal-aid highway apportionment over the past couple of decades. Over the past 18 fiscal years, the state's apportionment has only increased, on average, 2.47 percent per year. In recent years the average annual change in apportionment has actually been negative, with the ten-year average at -0.30 percent and the five-year average at -1.21 percent.
- 2. On December 4, 2015, the FAST Act was signed into law. The FAST Act authorizes \$305 billion in federal funding for the nation's surface transportation system over the next five years. The legislation breaks the cycle of short-term funding authorizations that have characterized the federal program for the past 10 years and, in covering nearly five full fiscal years, represents the longest surface transportation authorization bill enacted since 1998.
- 3. Reliance on non-transportation revenue to support investments in surface transportation is continued in the FAST Act. The FAST Act transfers \$70 billion from the federal General Fund into the federal Highway Trust Fund (HTF) to ensure that all investments in highways and transit during the next five fiscal years are fully paid for. This brings the total amount of non-transportation revenue that has supported investments from the HTF during the past seven years to nearly \$145 billion.

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

#### Year of Expenditure (YOE) Rates

YOE is the expected inflation rate in the transportation agencies' cost of doing business. YOE adjustments to project costs are essential to show the true relationship between costs and resources. In recent years, highway and transit agencies have been increasingly squeezed by this phenomenon, since the inflation rate on transportation costs has increased faster than funding growth rates. Due to the nature of the GVMC program (capped federal dollars), local agencies are asked to apply for the expected federal revenue they determine is needed in the fiscal year applied for. The TPSG Subcommittee then reviews those proposals and makes adjustments at the committee level to assign the appropriately adjusted funding by FY.

#### **MDOT YOE Rates**

While each local jurisdiction has its own inflation factor(s), based on past experience, MDOT has developed the following YOE factors for itself and any agency that hasn't developed its own. When using the FY 2019 estimate as the base year, the following compounded percentages apply:

FY 2020 Obligation: 4.0%
FY 2021 Obligation: 8.2%
FY 2022 Obligation: 12.5%
FY 2023 Obligation: 17.0%