

For immediate release: November 2, 2022

Contact: SEMCOG Information Center, 313-324-3330

SEMCOG invites public comment on an amendment to the FY 2023-2026 Transportation Improvement Program and the 2045 Regional Transportation Plan

SEMCOG, the Southeast Michigan Council of Governments, announces the public comment period for an amendment to the FY 2023-2026 Transportation Improvement Program (TIP) and the 2045 Regional Transportation Plan (RTP). The RTP is a long-range vision and strategy that directs investment in the regional transportation system. The TIP is a list of specific projects which implement the policies of the RTP and are recommended by cities, villages, county road agencies, transit providers, and the Michigan Department of Transportation (MDOT) over a four-year period. SEMCOG's Executive Committee makes the final approval of the TIP project list.

Background

The 2022 Fall Amendment revises 83 phases in the TIP:

- 70 additions
- Six changes in cost
- Four scope changes
- One deletion
- One year change from FY 22 to FY 23
- One change from a Line Item to be programmed under a General Program Accounts (GPA).

This amendment, as proposed, primarily pertains to changes in projects related to pavement and bridge condition.

There are a number of proposed cost adjustments to GPA's, which are used to group smaller, routine projects by type. Federal regulation 23 CFR 450.324 (f) states projects that are not considered to be of appropriate scale for individual identification in a given program year may be grouped by function, work type, and/or geographic area using the applicable classifications under 23 CFR 771.117(c) and (d) and/or 40 CFR part 93. These proposed changes can be found with the other amendment materials on SEMCOG's website.

Amendment evaluations

The amendment requires all proposed projects undergo a series of evaluations, including identification of financial resources, an air quality conformity analysis, an environmental justice analysis, an environmental sensitivity analysis, an assessment for consistency with the regional Intelligent Transportation System (ITS) architecture and Congestion Management Process, and a public comment process.

Project details and evaluation results are available <u>online</u> or by contacting SEMCOG's Information Center at 313-324-3330.

How to comment

Please address written comments to SEMCOG Information Center, 1001 Woodward Avenue, Suite 1400, Detroit, MI 48226; send faxes to 313-961-4869; call 313-324-3330, or e-mail InfoCenter@semcog.org.

Comments can also be made during the following in-person meetings, in which the amendment will be considered:

- Transportation Coordinating Council, Thursday, November 17, 2022 at 9:30 a.m., SEMCOG Information Center, 1001 Woodward Avenue, Suite 1400, Detroit, MI 48226 (register here);
- Executive Committee, Friday December 2, 2022, 1 p.m., SEMCOG Information Center, 1001 Woodward Avenue, Suite 1400, Detroit, MI 48226, (register here).

Coverage of this notice

Public notice of public participation activities and time established for public review of, and comments on, the TIP will satisfy the Program of Projects (POP) requirements of the Federal Transit Administration (FTA).

-##-

SEMCOG is the only organization in Southeast Michigan that brings together all governments to solve regional challenges and enhance the quality of life.

Learn more about what SEMCOG does.

2023-2026 Transportation Improvement Program (TIP) Executive Committee, December 2, 2022

					Revised November 30, 2022												
Line	TIP or RTP Amendment	Fiscal Year	Job Number	Phase	County	Responsible Agency	Project Name	Limits	Project Description	Length (miles)	Primary Work Type	Total Phase Cost	Total Job Cost	Change Type	Change Description	AQ Exempt?	AQ Analysis Model Run Needed
1	TIP only	2023	217071	NI	Livingston	Livingston County Board of Commissioners	Transit Operating	Areawide	FY23 Spec.SrvcServices for the elderly and individuals with disabilities	0.0	SP09-Specialized Service	\$70,080	\$70,080	Add	Add phase to the FY23-26 TIP.	Exempt	No
2	TIP only	2023	217565	NI	Livingston	Livingston County Board of Commissioners	Transit Operating	Areawide	FY23 Local Bus Operating	0.0	SP05-Local Bus Operating	\$1,993,220	\$1,993,220	Add	Add phase to the FY23-26 TIP.	Exempt	No
3	TIP only	2023	217702	CON	Macomb	Eastpointe	E 9 Mile Rd	9 Mile Rd from Tuscany Ave east to Kelly Rd	Road Reconstruction	0.7	Reconstruction	\$733,963	\$4,043,875	Add	Add phase to the FY23-26 TIP.	Exempt	No
4	TIP only	2023	213262	CON	Macomb	Macomb County	28 Mile Rd	28 Mile Rd over Deer Creek	Bridge Removal	0.0	Bridge Miscellaneous	\$214,753	\$233,753	Add	Add phase to the FY23-26 TIP.	Exempt	No
5	TIP only	2023	213262	PE	Macomb	Macomb County	28 Mile Rd	28 Mile Rd over Deer Creek	Bridge Removal	0.0	Bridge Miscellaneous	\$19,000	\$233,753	Add	Add phase to the FY23-26 TIP.	Exempt	No
6	TIP only	2023	215809	CON	Macomb	Macomb County	E 10 Mile Rd	10 Mile Rd from Lorraine Ave west to Sherwood Ave	Road Reconstruction	1.1	Reconstruction	\$7,500,000	\$7,500,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
7	TIP only	2023	217033	CON	Livingston, Macomb, Monroe, Washtenaw	Areawide	Areawide	Four Structures Areawide	Bridge Replacements	0.0	Bridge Replacement	\$8,988,577	\$8,988,577	Add	Add phase to the FY23-26 TIP.	Exempt	No
8	TIP only	2023	208656	UTL	Monroe	MDOT	I-75 Connector	I-75 Connector over Norfolk Southern Railroad & Grand Truck Western Railroad	Bridge Replacement	0.0	Bridge Replacement	\$25,000	\$15,114,493	Add	Add phase to the FY23-26 TIP.	Exempt	No
9	TIP only	2023	213488	PE	Monroe	MDOT	US-23	School Rd to Ida Center Rd	Road Reconstruction	4.2	Reconstruction	\$2,500,000	\$59,845,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
10	TIP only	2023	217599	CON	Monroe	MDOT	I-75 Connector	I-75 Connector over Norfolk Southern Railroad and Grand Truck Western Railroad	Railroad oversight	0.0	Bridge Miscellaneous	\$31,421	\$31,421	Add	Add phase to the FY23-26 TIP.	Exempt	No
11	TIP only	2023	204314	ROW	Oakland	MDOT	M-150	Avon to Clinton River and Paint Creek to Tienken	Reconstruction	1.5	Reconstruction	\$751,000	\$22,751,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
12	TIP only	2023	209677	CON	Oakland	MDOT	I-75 N	I-75 NB over Dixie Highway	Railing Replacement	0.0	Bridge Rehabilitation	\$712,858	\$845,097	Add	Add phase to the FY23-26 TIP.	Exempt	No
13	TIP only	2023	209904	CON	Oakland	MDOT	I-75 N	Eight Culverts on I-75 in Oakland County	Culvert Replacement	1.1	Reconstruction	\$549,500	\$549,500	Add	Add phase to the FY23-26 TIP.	Exempt	No
14	TIP only	2023	210074	CON	Oakland	MDOT	I-75	M-15 to Oakland County Line	Road rehabilitation	14.6	Road Rehabilitation	\$139,559,000	\$145,185,124	Add	Add phase to the FY23-26 TIP.	Exempt	No
15	TIP only	2023	210599	ROW	Oakland	MDOT	I-75 Business Loop (Woodward Ave Loop)	I-75 Business Loop (Woodward Ave Loop), M-59, and US-24 Business Route (N Cass Ave)	Reconstruction	2.7	Reconstruction	\$1,000,000	\$30,860,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
16	TIP only	2023	214051	CON	Oakland	MDOT	M-1	M-1 (Woodward) NB at N of Forest	Traffic signal installation	0.0	Traffic Safety	\$283,716	\$283,716	Add	Add phase to the FY23-26 TIP.	Exempt	No
17	TIP only	2023	217183	SCOP	Oakland	MDOT	I-696 E	I-696 over I-75 and Ramps; M-38 Ramps K & L over I-94	Bridge Scoping	0.0	Bridge Miscellaneous	\$249,100	\$249,100	Add	Add phase to the FY23-26 TIP.	Exempt	No
18	TIP only	2023	212901	CON	Oakland	Oak Park	Nine Mile Rd	Cloverlawn St to Republic Ave	Road Rehab	1.6	Asphalt Pavement Repair	\$2,958,558	\$2,958,558	Cost	Phase cost increased by 121.0%.	Exempt	No
19	TIP only	2023	211347	ROW	Oakland	Oakland County	W 12 Mile Rd	12 Mile Rd, Beck Rd to Dixon Rd	Widening	1.8	Major Widening	\$3,000,000	\$3,000,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
20	TIP only	2023	217521	NI	St. Clair	Blue Water Area Transportation Commission	Transit Operating	Areawide	FY23 Local Bus Operating	0.0	SP05-Local Bus Operating	\$4,282,853	\$4,282,853	Add	Add phase to the FY23-26 TIP.	Exempt	No
21	TIP only	2023	211793	PE	St. Clair	MDOT	I-94 E	Blue Water Bridge Plaza	Blue Water Bridge Plaza Expansion	0.9	Reconstruction	\$2,841,000	\$31,250,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
22	TIP only	2023	213929	PE	St. Clair	MDOT	M-29	Transportation service center wide	Non-Freeway Signing Upgrade	38.7	Traffic Safety	\$200,000	\$1,695,000	Other	Changed from a Line Item project to a project programmed under a General Program Account (GPA).	Exempt	No

2023-2026 Transportation Improvement Program (TIP) Executive Committee, December 2, 2022

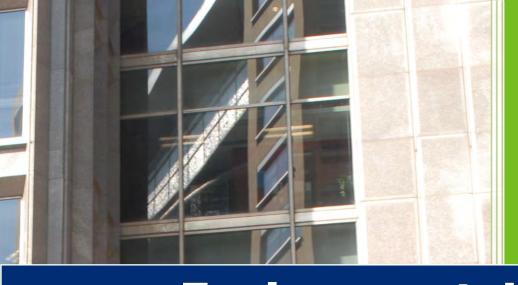
Line	TIP or RTP Amendment	Fiscal Year	Job Number	Phase	County	Responsible Agency	Project Name	Limits	Project Description	Length (miles)	Primary Work Type	Total Phase Cost	Total Job Cost	Change Type	Change Description	AQ Exempt?	AQ Analysis Model Run Needed
23	TIP only	2023	216501	CON	St. Clair	MDOT	I-94 Business Loop	Lake State Railway	Roadway approach and maintenance of traffic for railroad crossing reconstruction	0.0	Railroad	\$172,141	\$180,111	Add	Add phase to the FY23-26 TIP.	Exempt	No
24	TIP only	2023	209838	CON	St. Clair	St. Clair County	Church Rd	Church Rd over Jerome Creek Str# 10090 - St. Clair County	Bridge Replacement	0.0	Bridge Replacement	\$848,000	\$848,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
25	TIP only	2023	217048	NI	Washtenaw	Ann Arbor Area Transportation Authority	Transit Operating	Areawide	FY23 Spec.SrvcServices for the elderly and individuals with disabilities	0.0	SP09-Specialized Service	\$207,024	\$207,024	Add	Add phase to the FY23-26 TIP.	Exempt	No
26	TIP only	2023	217505	NI	Washtenaw	Ann Arbor Area Transportation Authority	Transit Operating	Areawide	FY23 Local Bus Operating	0.0	SP05-Local Bus Operating	\$855,725	\$855,725	Add	Add phase to the FY23-26 TIP.	Exempt	No
27	TIP only	2023	217595	NI	Washtenaw	Ann Arbor Area Transportation Authority	Transit Operating	Areawide	FY23 Local Bus Operating	0.0	SP05-Local Bus Operating	\$15,001,829	\$15,001,829	Add	Add phase to the FY23-26 TIP.	Exempt	No
28	TIP only	2023	214012	CON	Washtenaw	MDOT	I-94 Business Loop	I-94 Business Loop at 7th St	Modernize signalized intersection	0.0	Traffic Safety	\$389,400	\$389,400	Add	Add phase to the FY23-26 TIP.	Exempt	No
29	TIP only	2023	205642	CON	Washtenaw	Saline	Clark St	Clark St. Harris to Maple	3R (resurfacing, restoration or rehabilitation)	0.3	Reconstruction	\$1,126,000	\$1,126,000	Scope	Primary work type changed from Asphalt Pavement Repair to Reconstruction.	Exempt	No
30	TIP only	2023	216928	CON	Washtenaw	Ypsilanti	N Huron River Dr	North Huron River Dr from Cornell St to Ann St	Construction of new non- motorized pathway & new sidewalk	0.6	New Facilities	\$465,471	\$465,471	Add	Add phase to the FY23-26 TIP.	Exempt	No
31	TIP only	2023	213473	CON	Washtenaw, Lenawee	MDOT	M-52	Washtenaw County	Chip Seal with Fog Seal	5.3	Road Capital Preventive Maintenance	\$533,500	\$580,000	Cost	Total job cost decreased by 40.8%.	Exempt	No
32	TIP only	2023	212832	CON	Wayne	Detroit	Citywide	Citywide - Detroit	Michigan Mobility Collaborative - Automotive Driving System Demonstration	0.0	Planning, Research & Design	\$2,250,000	\$2,250,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
33	TIP only	2023	217597	NI	Wayne	Detroit Transportation Corporation	Transit Operating	Areawide	FY23 Local Bus Operating	0.0	SP05-Local Bus Operating	\$3,520,455	\$3,520,455	Add	Add phase to the FY23-26 TIP.	Exempt	No
34	TIP only	2023	217062	NI	Wayne	Detroit, City of	Transit Operating	Areawide	FY23 Spec.SrvcServices for the elderly and individuals with disabilities	0.0	SP09-Specialized Service	\$199,860	\$199,860	Add	Add phase to the FY23-26 TIP.	Exempt	No
35	TIP only	2023	217596	NI	Wayne	Detroit, City of	Transit Operating	Areawide	FY23 Local Bus Operating	0.0	SP05-Local Bus Operating	\$36,093,406	\$36,093,406	Add	Add phase to the FY23-26 TIP.	Exempt	No
36	TIP only	2023	131388	CON	Wayne	Highland Park	Davison	Davison North and South Service Drives	Reconstruct Davison Service Drives	0.6	Reconstruction	\$777,749	\$777,749	Add	Add phase to the FY23-26 TIP.	Exempt	No
37	TIP only	2023	200963	CON	Wayne	MDOT	I-94	Second Ave over I-94	Landscaping associated with Bridge Replacement	0.0	Bridge Miscellaneous	\$331,250	\$331,250	Year	Moved from 2022 of the FY20-23 TIF to 2023 of the FY23-26 TIP.	Exempt	No
38	TIP only	2023	201574	CON	Wayne	MDOT	M-10	M-10 (Jefferson Ave) from Griswold to Beaubien	Signal Modernization with Interconnection	0.0	Traffic Safety	\$2,852,000	\$3,255,070	Add	Add phase to the FY23-26 TIP.	Exempt	No
39	TIP only	2023	202543	CON	Wayne	MDOT	I-94 E	From Burns St to Barrett Ave, City of Detroit	Road Reconstruction	2.3	Reconstruction	\$281,400,000	\$299,600,000	Cost	CON phase cost increased.	Non-exempt	No : Part of I-94 modernization project, already included in previous analysis
40	TIP only	2023	206118	ROW	Wayne	MDOT	I-94	from I-96 to Connor	Final ROW	6.4	Contracts	\$8,000,000	\$8,000,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
41	TIP only	2023	208609	ROW	Wayne	MDOT	I-94	Wayne Rd to Middlebelt Rd	Reconstruct	3.1	Reconstruction	\$100,000	\$95,100,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
42	TIP only	2023	210991	CON	Wayne	MDOT	I-94 E	Beaubien St over I-94, Seminole St Walkover over I-94, McClellan over I-94	Bridge Removal	0.0	Bridge Miscellaneous	\$2,050,000	\$2,650,000	Add	Add phase to the FY23-26 TIP.	Non-exempt	No : Part of I-94 modernization project, already included in previous analysis

2023-2026 Transportation Improvement Program (TIP) Executive Committee, December 2, 2022

Line	TIP or RTP Amendment	Fiscal Year	Job Number	Phase	County	Responsible Agency	Project Name	Limits	Project Description	Length (miles)	Primary Work Type	Total Phase Cost	Total Job Cost	Change Type	Change Description	AQ Exempt?	AQ Analysis Model Run Needed
43	TIP only	2023	210991	PE	Wayne	MDOT	I-94 E	Beaubien St over I-94, Seminole St Walkover over I-94, McClellan over I-94	Bridge Removal	0.0	Bridge Miscellaneous	\$100,000	\$2,650,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
44	TIP only	2023	211426	ROW	Wayne	MDOT	I-94	Middlebelt Rd to Beech Daly Rd	Reconstruct	2.5	Reconstruction	\$100,000	\$101,300,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
45	TIP only	2023	213479	PE	Wayne	MDOT	US-24	US-24, Pennsylvania to Connector	Milling & One Course Asphalt Overlay	0.8	Road Capital Preventive Maintenance	\$60,000	\$1,410,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
46	TIP only	2023	217121	EPE	Wayne	MDOT	I-94 W	Various locations adjacent to the I-94 Mega Project	I-94 Drain Agreement Costs	0.0	Environmental	\$1,719,434	\$39,485,610	Add	Add phase to the FY23-26 TIP.	Exempt	No
47	TIP only	2023	217442	CON	Wayne	MDOT	M-153	M-153 at Gulley Rd	Modernize signalized intersection	0.0	Traffic Safety	\$402,576	\$402,576	Add	Add phase to the FY23-26 TIP.	Exempt	No
48	TIP only	2023	217636	CON	Wayne	MDOT	M-10	Spruce St Walkover	Pedestrian Bridge Removal	0.0	Bridge Miscellaneous	\$472,162	\$539,614	Add	Add phase to the FY23-26 TIP.	Exempt	No
49	TIP only	2023	217636	PE	Wayne	MDOT	M-10	Spruce St Walkover	Pedestrian Bridge Removal	0.0	Bridge Miscellaneous	\$24,235	\$539,614	Add	Add phase to the FY23-26 TIP.	Exempt	No
50	TIP only	2023	217636	PES	Wayne	MDOT	M-10	Spruce St Walkover	Pedestrian Bridge Removal	0.0	Bridge Miscellaneous	\$43,217	\$539,614	Add	Add phase to the FY23-26 TIP.	Exempt	No
51	TIP only	2023	217094	NI	Wayne	Suburban Mobility Authority for Regional Transportation	Transit Operating	Areawide	FY23 Spec.SrvcServices for the elderly and individuals with disabilities	0.0	SP09-Specialized Service	\$922,294	\$922,294	Add	Add phase to the FY23-26 TIP.	Exempt	No
52	TIP only	2023	217496	NI	Wayne	Suburban Mobility Authority for Regional Transportation	Transit Operating	Areawide	FY23 Local Bus Operating	0.0	SP05-Local Bus Operating	\$105,440	\$105,440	Add	Add phase to the FY23-26 TIP.	Exempt	No
53	TIP only	2023	217582	NI	Wayne	Suburban Mobility Authority for Regional Transportation	Transit Operating	Areawide	FY23 Local Bus Operating	0.0	SP05-Local Bus Operating	\$1,820,525	\$1,820,525	Add	Add phase to the FY23-26 TIP.	Exempt	No
54	TIP only	2023	217598	NI	Wayne	Suburban Mobility Authority for Regional Transportation	Transit Operating	Areawide	FY23 Local Bus Operating	0.0	SP05-Local Bus Operating	\$38,928,835	\$38,928,835	Add	Add phase to the FY23-26 TIP.	Exempt	No
55	TIP only	2023	214411	CON	Wayne	Wayne County	Southfield Rd	Southfield Rd, Str.#12039 over Ecorse Creek, Wayne County	Bridge Replacement	0.0	Bridge Replacement	\$3,438,000	\$3,438,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
56	TIP only	2023	217037	CON	Wayne	Wayne County	Miller Rd	Miller Rd and Rotunda Dr over Conrail and open area	Bridge Replacements	0.0	Bridge Replacement	\$60,000,000	\$60,000,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
57	TIP only	2023	217037	PE	Wayne	Wayne County	Miller Rd	Miller Rd and Rotunda Dr over Conrail and open area	Bridge Replacements	0.0	Bridge Replacement	\$80,000	\$60,000,000	Delete	PE phase abandoned.	Exempt	No
58	TIP only	2024	214368	CON	Livingston	Livingston County	W Grand River Ave	At Cemetery Rd Intersection	Construct Roundabout	0.9	Minor Widening	\$1,278,896	\$1,278,896	Scope	Primary work type changed from Reconstruction to Minor Widening.	Exempt	No
59	TIP only	2024	217039	CON	Livingston, Monroe, Oakland, Washtenaw, Wayne	MDOT	Areawide	Five Structures Areawide	Bridge Replacements and Superstructure Replacement	0.0	Bridge Replacement	\$12,630,788	\$12,630,788	Add	Add phase to the FY23-26 TIP.	Exempt	No
60	TIP only	2024	216924	CON	Macomb	Macomb County	25 Mile Rd	25 Mile Rd and Broughton Rd; off Rd path connecting	New construction of non- motorized pathway	0.3	New Facilities	\$395,870	\$395,870	Add	Add phase to the FY23-26 TIP.	Exempt	No
61	TIP only	2024	217652	CON	Macomb	Macomb County	23 Mile Rd	23 Mile Rd from Gratiot Ave to Canadian National Railroad	Road Reconstruction	0.3	Reconstruction	\$4,000,000	\$4,000,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
62	TIP only	2024	217653	CON	Macomb	Macomb County	Garfield Rd	Garfield Rd from 14 Mile Rd north to 15 Mile Rd	Road Reconstruction	1.0	Reconstruction	\$5,500,000	\$5,500,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
63	TIP only	2024	213488	CON	Monroe	MDOT	US-23	School Rd to Ida Center Rd	Road Reconstruction	4.2	Reconstruction	\$57,075,000	\$59,845,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
64	TIP only	2024	200122	CON	Oakland	MDOT	I-696	37 structures on or over I-696 between Lahser and Dequindre Rd	Miscellaneous Bridge capital preventive maintenance	0.0	Bridge capital preventive maintenance	\$20,964,900	\$22,356,222	Add	Add phase to the FY23-26 TIP.	Exempt	No
65	TIP only	2024	204305	CON	Oakland	MDOT	I-696	Lahser Rd to Dequindre Rd	Reconstruct	9.9	Reconstruction	\$243,000,000	\$258,000,000	Add	Add phase to the FY23-26 TIP.	Exempt	No

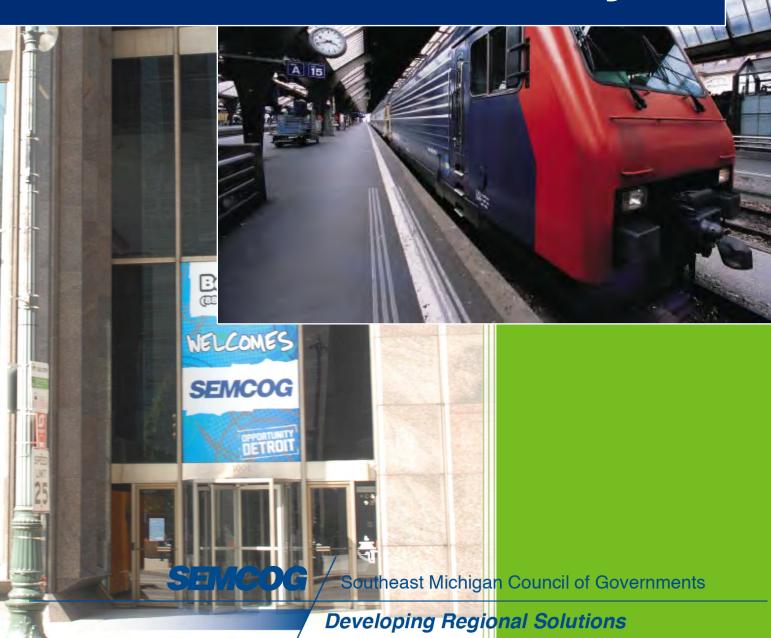
2023-2026 Transportation Improvement Program (TIP) Executive Committee, December 2, 2022

Line	TIP or RTP Amendment	Fiscal Year	Job Number	Phase	County	Responsible Agency	Project Name	Limits	Project Description	Length (miles)	Primary Work Type	Total Phase Cost	Total Job Cost	Change Type	Change Description	AQ Exempt?	AQ Analysis Model Run Needed
66	TIP only	2024	209084	CON	Oakland	MDOT	I-696	Plaza & Church St over I-696, 0.5 miles east of Greenfield	Superstructure Replacement	0.0	Bridge Replacement	\$43,409,941	\$47,682,088	Add	Add phase to the FY23-26 TIP.	Exempt	No
67	TIP only	2024	215069	CON	Oakland	MDOT	I-696	21 Structures Over I-696 from Barkman to Couzens	Deck Replacements and Miscellaneous Preventative Maintenance	0.0	Bridge capital preventive maintenance	\$12,000,000	\$12,000,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
68	TIP only	2024	210745	CON	Oakland	Oakland County	W Silver Bell Rd	Brown-Giddings-Silverbell from Jamm Rd to Lapeer Rd (M-24)	Road Rehab	2.7	Road Rehabilitation	\$15,000,000	\$15,000,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
69	TIP only	2024	213485	PE	Washtenaw	MDOT	US-12	Carpenter Rd to I-94	Mill and asphalt overlay with concrete patches	2.1	Road Capital Preventive Maintenance	\$152,500	\$1,526,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
70	TIP only	2024	215725	CON	Wayne	Hamtramck	Caniff St	Caniff St. (Joseph Campau Ave to Conant St.)	Reconstruction	0.4	Reconstruction	\$1,703,836	\$1,703,836	Cost	Total job cost decreased by 34.5%.	Exempt	No
71	TIP only	2024	129149	CON	Wayne	MDOT	I-96 E	Under Fullerton Ave, Greenfield Rd and CSX Railroad	Bridge removal and preservation work	0.0	Bridge Miscellaneous	\$4,359,532	\$5,200,847	Scope	Work changed from Deck Replacement to Bridge Removal.	Exempt	No
72	TIP only	2024	208609	CON	Wayne	MDOT	I-94	Wayne Rd to Middlebelt Rd	Reconstruct	3.1	Reconstruction	\$90,000,000	\$95,100,000	Cost	Switch from non-federal to federalaid funds.	Exempt	No
73	TIP only	2025	211017	CON	Livingston, Washtenaw, Monroe	MDOT	US-23 N	US-23 Freeway Signing: Monroe, Washtenaw, and Livingston Counties	Transportation service center wide - US-23 Freeway Signing Engineering, Design and	80.5	Traffic Safety	\$3,725,742	\$5,967,655	Scope	Length change.	Exempt	No
74	TIP only	2025	217084	CON	Wayne	Flat Rock	Vreeland Rd	Vreeland Rd	Road Reconstruction	0.4	Reconstruction	\$875,140	\$875,140	Add	Add phase to the FY23-26 TIP.	Exempt	No
75	TIP only	2025	200183	CON	Wayne	Livonia	Newburgh Rd	Newburgh Rd	Road Reconstruction	0.5	Reconstruction	\$1,391,500	\$1,391,500	Add	Add phase to the FY23-26 TIP.	Exempt	No
76	TIP only	2025	201581	CON	Wayne	MDOT	M-3 (Randolph)	M-3 (Randolph) at Larned, Congress, Lafayette, and Monroe.	Signal Modernization with Interconnect	0.0	Traffic Safety	\$2,443,469	\$2,733,469	Add	Add phase to the FY23-26 TIP.	Exempt	No
77	TIP only	2025	214269	CON	Wayne	MDOT	I-75	Four bridges along I-75 in Detroit.	Substructure Repair	0.0	Bridge Rehabilitation	\$25,121,751	\$26,566,434	Add	Add phase to the FY23-26 TIP.	Exempt	No
78	TIP only	2025	217121	PE	Wayne	MDOT	I-94 W	Various locations adjacent to the I-94 Mega Project	I-94 Drain Agreement Costs	0.0	Environmental	\$1,412,881	\$39,485,610	Add	Add phase to the FY23-26 TIP.	Exempt	No
79	TIP only	2025	217121	ROW	Wayne	MDOT	I-94 W	Various locations adjacent to the I-94 Mega Project	I-94 Drain Agreement Costs	0.0	Environmental	\$500,000	\$39,485,610	Add	Add phase to the FY23-26 TIP.	Exempt	No
80	TIP only	2026	217657	CON	Macomb	Macomb County	Sugarbush Rd	Sugarbush Rd from Callens Rd to Jefferson Ave.	Road Reconstruction	0.8	Reconstruction	\$1,300,000	\$1,300,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
81	TIP only	2026	129977	CON	Washtenaw	MDOT	US-23	14 bridges on US-23 in Washtenaw County	Bridge Replacement, Epoxy Overlay, Deck Patching	0.0	Bridge Replacement	\$82,942,272	\$83,509,893	Cost	CON phase cost increased.	Exempt	No
82	TIP only	2026	213485	CON	Washtenaw	MDOT	US-12	Carpenter Rd to I-94	Mill and asphalt overlay with concrete patches	2.1	Road Capital Preventive Maintenance	\$1,373,500	\$1,526,000	Add	Add phase to the FY23-26 TIP.	Exempt	No
83	TIP only	2026	217121	CON	Wayne	MDOT	I-94 W	Various locations adjacent to the I-94 Mega Project	I-94 Drain Agreement Costs	0.0	Environmental	\$35,853,295	\$39,485,610	Add	Add phase to the FY23-26 TIP.	Exempt	No



Fall Amendment, 2022

Environmental Justice Technical Analysis



SEMCOG. . . Developing Regional Solutions

Mission

SEMCOG, the Southeast Michigan Council of Governments, is the only organization in Southeast Michigan that brings together all governments to develop regional solutions for both now and in the future. SEMCOG:

- Promotes informed decision making to improve Southeast Michigan and its local governments by providing insightful data analysis and direct assistance to member governments;
- Promotes the efficient use of tax dollars for infrastructure investment and governmental effectiveness;
- Develops regional solutions that go beyond the boundaries of individual local governments; and
- Advocates on behalf of Southeast Michigan in Lansing and Washington

Environmental Justice Technical Analysis - 2045 Regional Transportation Plan and 2023-2026 Transportation Improvement Program

Fall amendment, 2022

© SEMCOG 2019

Abstract

This document outlines SEMCOG's Environmental Justice Technical Analysis for 2045 Regional Transportation Plan and 2023--2026 Transportation Improvement Program. It describes performance measures, utilizes data-driven analysis and evaluates the impact of Transportation projects on target populations in both current and future year.

Preparation of this document may be financed in part through grants from and in cooperation with the Michigan Department of Transportation with the assistance of the U.S. Department of Transportation's Federal Highway Administration and Federal Transit Administration; the Michigan Department of Natural Resources with the assistance of the U.S. Environmental Protection Agency; the Michigan State Police Office of Highway Safety Planning; and local membership contributions.

Permission is granted to cite portions of this publication, with proper attribution. The first source attribution must be "SEMCOG, the Southeast Michigan Council of Governments." Subsequently, "SEMCOG" is sufficient. Reprinting in any form must include the publication's full title page. SEMCOG documents and information are available in a variety of formats. Contact SEMCOG Information Services to discuss your format needs.

SEMCOG

Southeast Michigan Council of Governments Information Center 1001 Woodward Avenue, Suite 1400 Detroit, MI 48226-1904 313-961-4266 • fax 313-961-4869 www.semcog.org • infoservices@semcog.org

Abstract

This document outlines SEMCOG's Environmental Justice Technical Analysis for 2045 Regional Transportation Plan and 2023--2026 Transportation Improvement Program. It describes performance measures, utilizes data-driven analysis and evaluates the impact of Transportation projects on target populations in both current and future year.

Preparation of this document may be financed in part through grants from and in cooperation with the Michigan Department of Transportation with the assistance of the U.S. Department of Transportation's Federal Highway Administration and Federal Transit Administration; the Michigan Department of Natural Resources with the assistance of the U.S. Environmental Protection Agency; the Michigan State Police Office of Highway Safety Planning; and local membership contributions.

Permission is granted to cite portions of this publication, with proper attribution. The first source attribution must be "SEMCOG, the Southeast Michigan Council of Governments." Subsequently, "SEMCOG" is sufficient. Reprinting in any form must include the publication's full title page. SEMCOG documents and information are available in a variety of formats. Contact SEMCOG Information Services to discuss your format needs.

SEMCOG

Southeast Michigan Council of Governments Information Center 1001 Woodward Avenue, Suite 1400 Detroit, MI 48226-1904 313-961-4266 • fax 313-961-4869 www.semcog.org • infoservices@semcog.org

This report was written by SEMCOG staff.	Acknowledgements		
	This report was written by SEMCOG staff.		

Table of Contents

List of	List of Data Displaysiv								
1.	Introduction	1							
1.1.	Definition of Environmental Justice	1							
1.2.	SEMCOG's Approach	1							
2.	Demographics	2							
2.1.	Special Population	2							
2.2.	Distribution of Selected Population	5							
3.	Quantitative Measures	10							
3.1.	Measures Methodology	10							
3.2.	Measures Identified for Application	10							
4.	Results	14							
5.	Summary	27							

List of Data Displays

Tables

Table 1	Per Capita Transportation Funding	26
Table 2	Average Number of Jobs Accessible within 25 minutes AM peak period by auto	1
Table 3	Average Number of Jobs Accessible within 50 minutes AM peak period by transit	1
Table 4	Average Number of Shopping Opportunities Accessible within 15 minutes mid-d period by auto	•
Table 5	Average Number of Shopping Opportunities Accessible within 30 minutes mid-d period by transit	-
Table 6	Average Number of Non-Shopping Opportunities Accessible within 15 minutes may period by auto	
Table 7	Average Number of Non-Shopping Opportunities Accessible within 30 minutes may period by transit	
Table 8	Percent of Population or Households within 25 minutes AM peak period to a Colle by auto	
Table 9	Percent of Population or Households within 50 minutes AM peak period to a Colle by transit	
Table 10	Percent of Population or Households within 15 minutes mid-day period to a Hospi by auto	
Table 11	Percent of Population or Households within 30 minutes mid-day period to a Hospi by transit	
Table 12	Percent of Population or Households within 15 minutes mid-day period to a Maj Retail Center by auto	
Table 13	Percent of Population or Households within 30 minutes mid-day period to a Maj Retail Center by transit	
Table 14	Average Auto Travel Time for Work purpose	7
Table 15	Average Transit Travel Time for Work purpose	7
Table 16	Average Auto Travel Time for Shopping purpose	7
Table 17	Average Transit Travel Time for Shopping purpose	8
Table 18	Average Auto Travel Time for Other purpose	8
Table 19	Average Transit Travel Time for Other purpose	9
Table 20	Average Auto Travel Time for All purposes	9
Table 21	Average Transit Travel Time for All purposes	10
Table 22	Major Regional Colleges	11
Table 23	Major Regional Hospitals	1
Table 24	Major Regional Shopping Centers	3

Figures

Figure 1	Distribution of Minority Population, 2015 .Southeast Michigan	6
Figure 2	Distribution of Low Income Households, 2015. Southeast Michigan	7
Figure 3	Distribution of Senior Population, 2015. Southeast Michigan	8
Figure 4	Distribution of Households with No Vehicles Available, 2015. Southeast Michigan .	9
Figure 5	Average Number of Jobs within 25 minutes – AM peak by auto	14
Figure 6	Average Number of Jobs within 50 minutes - AM peak by transit	15
Figure 7	Average Shopping Opportunities within 15 minutes - MD period by auto	16
Figure 8	Average Shopping Opportunities within 30 minutes - MD period by transit	16
Figure 9	Average Non-Shopping Opportunities within 15 minutes - MD period by auto	17
Figure 10	Average Non-Shopping Opportunities within 30 minutes - MD period by transit	17
Figure 11	% Population within 25 minutes AM peak to a College by auto	18
Figure 12	% Population within 50 minutes AM peak to a College by transit	18
Figure 13	% Population within 15 minutes MD period to a Hospital by auto	19
Figure 14	% Population within 30 minutes MD period to a Hospital by transit	20
Figure 15	% Population within 15 minutes MD period to a Major Retail by auto	21
Figure 16	% Population within 30 minutes MD period to a Major Retail by transit	21
Figure 17	Average Auto Travel time for Work	22
Figure 18	Average Transit Travel time for Work	22
Figure 19	Average Auto Travel time for Shopping	23
Figure 20	Average Transit Travel time for Shopping	23
Figure 21	Average Auto Travel time for Other purpose	23
Figure 22	Average Transit Travel time for Other purpose	24
Figure 23	Average Auto Travel time for All purposes	24
Figure 24	Average Transit Travel time for All purposes	25

1. Introduction

1.1. Definition of Environmental Justice

The Environmental Justice office of US Environmental Protection Agency defines it as:

"Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies

Meaningful Involvement means that:

- people have an opportunity to participate in decisions about activities that may affect their environment and/or health;
- the public's contribution can influence the regulatory agency's decision;
- their concerns will be considered in the decision making process; and
- the decision makers seek out and facilitate the involvement of those potentially affected."

Title VI of the 1964 Civil Rights Act (42 U.S.C. 2000d-1) states that, "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." In the same spirit, President Clinton issued Executive Order 12898 on February 11, 1994, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. The stated purpose of this order is to make achieving environmental justice part of (each Federal agency's) mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations. Similar orders followed from the U.S. Department of Transportation (USDOT) and Federal Highway Administration. The USDOT order specifically defines the five populations that must be included in environmental justice (EJ) analyses

1.2. SEMCOG's Approach

Transportation investments have both positive and negative impacts that may be localized in a particular community or portion of a community. Environmental justice requires that these impacts be distributed fairly among population groups especially focusing on population groups that have been traditionally disadvantaged. SEMCOG, in its response to this important challenge, enhanced a process to assess the impacts of the transportation planning process, on the target populations.

The target populations consist of minorities (African-American, Asian-American, Native American, and Hispanics), low-income households, senior citizens and households without cars. SEMCOG identified three principles to ensure environmental justice considerations were properly integrated into the transportation planning process:

• Adequate public involvement of target populations in regional transportation decision making,

- Assess (i.e., travel time) whether there were disproportionately high and adverse impacts on the target populations resulting from federal programs, and
- Ensure that the target populations receive an equitable share of benefits of federal transportation investments.

Although the quantitative measures included with this analysis cannot consider every possible aspect of environmental justice, SEMCOG believes they are good indicators as to whether significant environmental justice issues are present.

This appendix provides demographics information for the Southeast Michigan seven county region and the results of the identified measures applied to the transportation projects in the 2045 Regional Transportation Plan (RTP) and 2023-2026 Transportation Improvement Program.

2. Demographics

Demographic data for the special or target population used in SEMCOG's Environmental Justice analysis was compiled from synthesized households and population based on Census 2015 American Community Survey (ACS). Since Census 2015 doesn't provides 100 percent count data, SEMCOG synthesized disaggregated households and persons with essential attributes such as age, race, income and auto ownership using Census 5-year ACS estimates and PUMS samples. In order to further analyze the data through travel demand model, data was then aggregated to Traffic Analysis Zones (TAZs). There are 2,811 internal TAZs in the SEMCOG region. The impacted demographic groups are described below along with maps showing the regional distribution of those groups (section 2.2).

2.1. Special Population

Minority Population: The U.S. Department of Transportation (DOT) Order (5610.2) on EJ defines "Minority" as the following:

- Black (having origins in any of the black racial groups of Africa).
- Hispanic (of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race).
- Asian American (having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands).
- American Indian and Alaskan Native (having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition).

In addition SEMCOG includes the following groups as defined by the U.S. Census Bureau:

- Black or African American alone not Hispanic or Latino.
- American Indian and Alaska Native alone not Hispanic or Latino.
- Asian alone not Hispanic or Latino.
- Native Hawaiian and Other Pacific Islander alone —not Hispanic or Latino.
- Some other race alone not Hispanic or Latino.
- Persons of two or more races not Hispanic or Latino.

Based on Census 2015, the SEMCOG region had a minority population of 1,446,089 which equates to about 30.6% of the total population. Figure 1 indicates the location of minority populations in the region. Traffic Analysis zones located in central cities and urban communities have higher proportions of minority population in the Southeast Michigan region.

Low Income Households: Poverty thresholds vary among different federal agencies and for different programs; hence SEMCOG used a derived measure to estimate low-income households. SEMCOG's Environmental Justice analysis includes all households that are in the lowest income quartile as low income households. SEMCOG's travel demand model uses households at TAZ level which are generated by synthesizing individual households at block group level from 2015 PUMS (Public Use Microdata Sample). These synthesized households were categorized into four income quartiles based on their household income. Lowest income quartile for SEMCOG region was identified as \$26,143, and all households with household income at or below \$26,143 are considered as low-income households for the purpose of this Environmental Justice analysis.

In 2015, there were 465,635 (25% of all households) low-income households in the region. Figure 2 shows the location and distribution of low-income households in the Southeast Michigan region. While higher proportions of low-income households are spread across the region, Detroit has considerable higher number of TAZs which have more than 60 percent of the households in low income category.

Senior Population: Southeast Michigan region, along with the nation is going through the demographic shifts associated with aging of baby boomers. Mobility barriers and age are linked together. Not every Seniors individual has mobility challenges, but the likelihood of a challenge increases as an individual ages. Population aged 65 and older is considered as senior population.

In 2015, SEMCOG region had 696,810 persons (14.8%) who were 65 years of age or older. Figure 3 shows the distribution of senior population in the region. Similar to the national trends, minority population in the Southeast Michigan region tend to be younger than white population and as a result central and older cities that have higher concentrations of minority population have much lower concentrations of senior population. On the contrary, exurban and emerging suburban communities have much higher proportions of persons who are 65 or older.

Zero Car Households: Persons in households that have no vehicles available are critical part of "transit dependent," population i.e., those who must rely on public transit for their daily travel needs and who have limited mobility. It is recognized that not owning a personal automobile may be a lifestyle choice for some, but for others automobile ownership is unattainable due to various constraints, including income or disability.

In 2015, Southeast Michigan had 158,368 households or 8.5 percent of households had no personal vehicle at their disposal. Figure 4 illustrates the distribution of zero car households in SEMCOG region. Central cities and block groups surrounding these central cores had relatively higher proportions of households with no vehicle available.

Estimating 2045 Target and non-Target Populations by Zone

In order to create population-based measures, it is necessary to estimate the target and non-target population within each TAZ. SEMCOG utilizes a separate land use simulation model called UrbanSim to simulate land development for future years in the seven County region of SEMCOG. UrbanSim simulates the location decision for both new and existing households and firms, place households and jobs in parcels, and anticipate parcel level changes in Land development based on any known future events and land development constraints.

Input data for UrbanSim model consisted of a list of all households, with current locations (by building), household size (number of members), age of the household head, race, number of workers, children and autos. Household data along with persons in those households were synthesized using 2011 - 2015 American Community Survey estimates at Census Block Group level. Subsequently these households and persons were placed on individual building using building's housing attributes and synthesized household attributes.

The output from the UrbanSim model is parcel level socio-economic data including households by type (income, age, race, household size, presence of children, vehicles available, and number of workers), jobs by type (industry and number of employees), and land use by type for all future years till 2045. The parcel level output data is aggregated to TAZs and the results are used as inputs for SEMCOG's travel demand model and for the Environmental Justice Analysis.

2.2.	Distribution of Selected Population

Figure 1
Distribution of Minority Population, 2015. Southeast Michigan

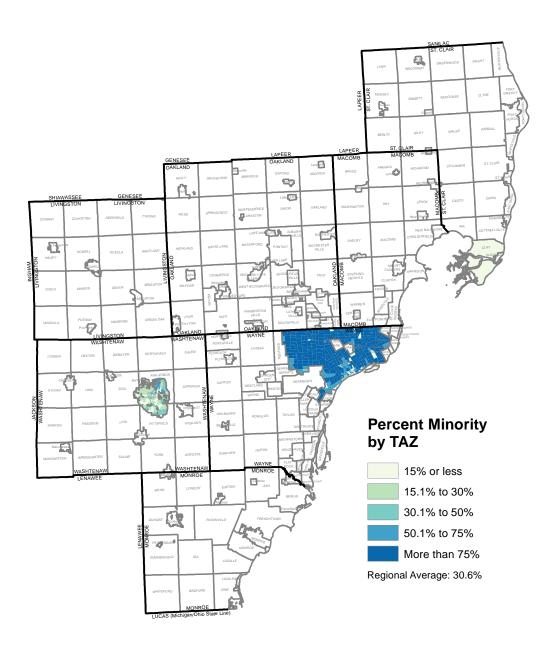


Figure 2
Distribution of Low Income Households, 2015. Southeast Michigan

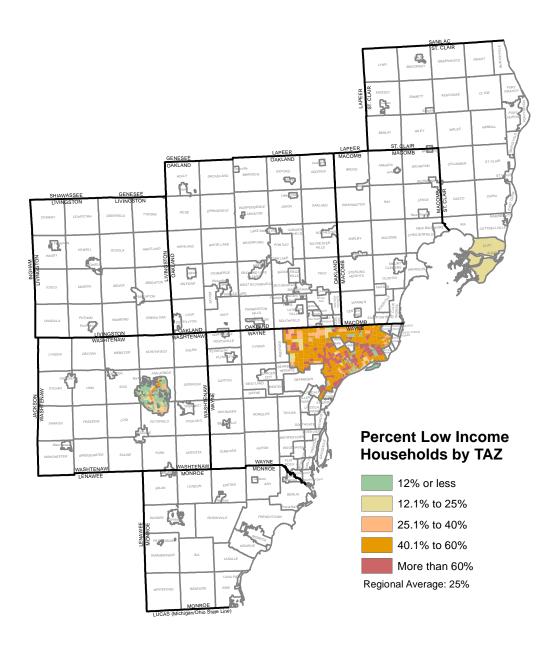


Figure 3

Distribution of Senior Population, 2015. Southeast Michigan

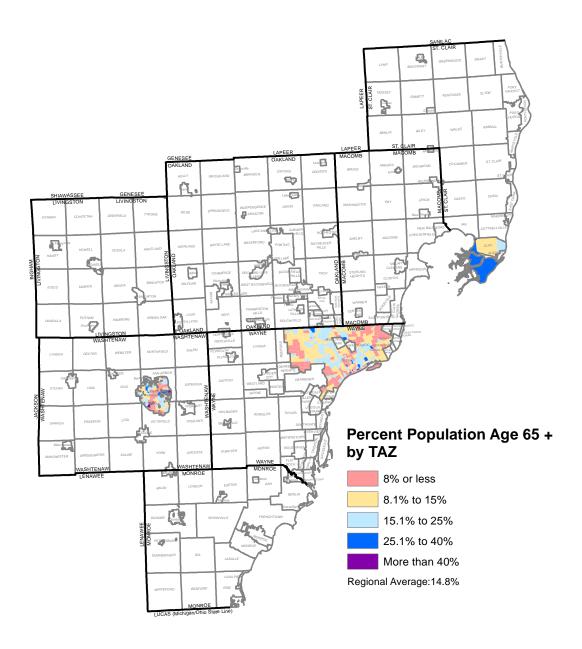
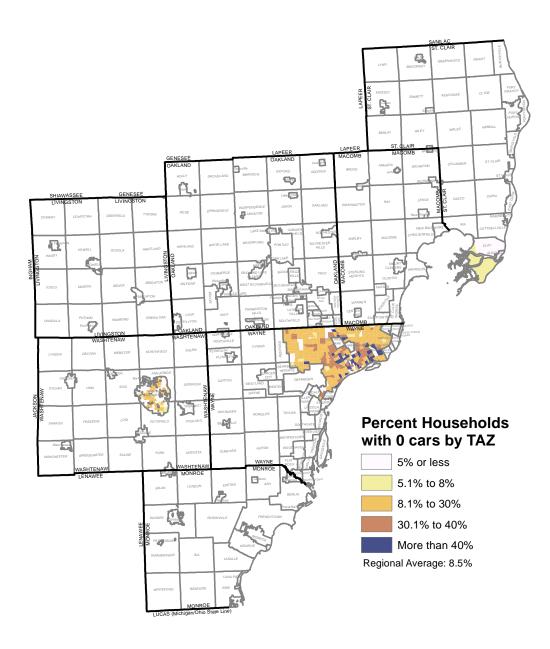


Figure 4
Distribution of Households with No Vehicles Available, 2015. Southeast Michigan



3. Quantitative Measures

3.1. Measures Methodology

This section describes all the quantitative measures identified for this technical analysis. The accessibility or travel time measures were developed based on travel time estimates from SEMCOG's 4-step travel demand forecast model (TDFM). These estimates are available for highway and transit networks, for current and future build and no-build conditions. Section 2 describes demographics data used in the process.

3.2. Measures Identified for Application

Several measures are identified for this analysis based on the data and tools available. Measures are calculated for three scenarios;

- 1. 2015 base year
- 2. 2045 no-build conditions assuming no new transportation projects constructed after 2015 despite the population and socioeconomic growth
- 3. 2045 build conditions assuming all the projects in the long range plan are constructed

Average Number of Job opportunities

This measure estimates the average number of jobs accessible from each origin or home TAZ to every other destination or work TAZ within a specified travel time. The 2045 Regional Plan employment input to the model use Bureau of Economic Analysis Equivalent Job (BEA-EJ) dataset. These jobs includes wage and salary principal jobs, self-employed jobs, and secondary jobs. Travel time estimates, commonly known as travel-time skims, for the A.M. peak period are used for auto and transit modes. Time thresholds of 25 minutes by auto and 50 minutes by transit are selected; these times reflect the regional average trip length for work trips. Employment data for each TAZ is available from SEMCOG's Regional Demographics and Socio-economic Forecast.

Job opportunities within 25 minutes by auto and 50 minutes by transit are aggregated from each origin TAZ. These jobs numbers are weighted by each group within the TAZ. Average number of jobs was calculated for each group by aggregating weighted jobs for each group for the region divided by group regional totals.

Average Shopping opportunities

This measure estimates the average retail shopping area (acres) accessible within a specified travel time.

SEMCOG maintains building data layer representing digital footprint of each building in the region. Retail square footage (converted to acres) was extracted from the footprints layer and aggregated by Traffic Analysis Zones.

Time thresholds of 15 minutes by auto and 30 minutes by transit are selected; these times reflect the regional average trip length for shopping trips. Shopping opportunities within 15 minutes by auto and 30 minutes by transit during the mid-day period are calculated from each TAZ. The number of shopping

centers accessible from each TAZ is then weighted by each target population group within the TAZ to get a weighted average of the number of shopping centers accessible to each group.

Average Number of Non-Shopping opportunities

This measure estimates the average number of non-shopping opportunities accessible within a specified travel time. SEMCOG currently maintains GIS coverage of k-12 schools, libraries, parks, hospitals and medical centers. For 2045 RTP, this data will be used to measure non-shopping opportunities.

The measurement methodology is same as for shopping or job opportunities.

Time thresholds of 15 minutes by auto and 30 minutes by transit are selected; these times reflect the regional average trip length for other trips. Non-shopping opportunities within 15 minutes by auto and 30 minutes by transit during the mid-day period are calculated from each TAZ. The number of non-shopping opportunities accessible from each TAZ is then weighted by each target population group within the TAZ to get a weighted average of the number of shopping centers accessible to each group.

The next three measures analyze the population groups covered by a major destination location.

Percent of Population close to a College

This measure estimates the percentage of population groups within a specified travel time to a college location. First, a list of major college campuses in the region is established; see Table 22 for list of colleges. From these college locations, the share of population groups within specified travel times are calculated.

TDFM skims for A.M. peak period are used to calculate travel time from each college TAZ to every other TAZ. Population groups in each TAZ that is within 25 minute by auto or 50 minute by transit are aggregated and divided by the total population for that group to get percentage of each population group covered by colleges within a specified travel time.

Percent of Population close to a Hospital

This measure is developed in the same manner as for colleges. Table 23 shows a list of major hospitals in the region. This list does not include smaller medical facilities and clinics. From these hospital locations, the share of population groups within specified travel times are calculated.

TDFM skims for mid-day time period are used to calculate travel time from each hospital to each TAZ. Population groups in each TAZ that is within 15 minutes by auto or 30 minute by transit are aggregated and divided by the total population for that group to get percentage of each population group covered by hospital within a specified travel time.

Percent of Population close to a Major Retail Center

This measure also used the same measurement methodology as for colleges. Table 24 shows a list of major retail centers in the region. This list includes major regional shopping malls, lifestyle centers (such as Partridge Creek, Clinton Twp), destination centers (such as IKEA, Canton) and outlet malls. From these major retail locations, the share of population groups within specified travel times are calculated.

TDFM skims for mid-day time period are used to calculate travel time from major retail centers to each TAZ. Population groups in each TAZ that is within 15 minute by auto or 30 minute by transit are

aggregated and divided by the total population for that group to get percentage of each population group covered by major retail centers within a specified travel time.

Average Travel time for work purpose

This measure estimates the average travel time for work purpose. TDFM provides an estimate of person trips and travel time for work from each origin TAZ to employment TAZ. The total person trips are multiplied by target population shares (based on socio-economic distribution) for each TAZ to get trips for minority, seniors, and zero car households. Only exception is the low-income group, where the trips made by low income group are readily available from the TDFM. Travel time skims for work purpose are then weighted by population groups to calculate average travel time for work purpose for auto. Transit skims are used to calculate average transit travel time.

Average Travel time for shopping purpose

This measure estimates the average travel time for shopping purpose. TDFM provides an estimate of person trips and travel time for shopping purpose from each origin TAZ to destination TAZ. The total person trips are multiplied by target population shares (based on socio-economic distribution) for each TAZ to get trips for minority, seniors, and zero car households. Only exception is the low-income group, where the trips made by low income group are readily available from the TDFM. Travel time skims for shopping purpose are then weighted by population groups to calculate average travel time for shopping purpose. Transit skims are used to calculate average transit travel time.

Average Travel time for other purposes

This measure estimates the average travel time for other purposes. TDFM provides an estimate of person trips and travel time for other purposes from each origin TAZ to destination TAZ. The total person trips are multiplied by target population shares (based on socio-economic distribution) for each TAZ to get trips for minority, seniors, and zero car households. Only exception is the low-income group, where the trips made by low income group are readily available from the TDFM. Travel time skims for other purposes are then weighted by population groups to calculate average travel time for other purposes. Transit skims are used to calculate average transit travel time.

Average Travel time for All purposes

This measure estimates the average travel time for all internal purposes. Internal purposes include home based work, shopping, school, other, non-home based work and non-home based other. TDFM provides an estimate of person trips and travel time for all purposes from each origin TAZ to destination TAZ. The total person trips are multiplied by target population shares (based on socio-economic distribution) for each TAZ to get trips by each population group. Travel time skim for mid-day is then weighted by population groups to calculate average travel time for all purposes. Transit skims are used to calculate average transit travel time.

Per Capita Transportation Funding

In developing the regional transportation plan, each project was initially assigned a set of counties that the project is geographically located in. Further work was done to localize individual projects along roads and at intersections where possible. For these projects, a buffer was applied to represent the area impacted by

the project. Projects involving freeways were buffered by 2.5 miles, while all other projects that could be mapped were buffered by 0.5 miles.

In order to analyze transportation investment by population group, representation of each project – weighted by project cost – was geographically overlaid with the representation of the selected population groups by Traffic Analysis Zone (TAZ) in 2015 and as forecasted by SEMCOG in 2045. Each of the four population groups – minorities, low-income households, seniors, and no car households – were analyzed separately. As a result of the overlay, project costs were distributed on a per capita basis for the minority and senior population, and on a per household basis for low-income and no car households. Per capita and per household investment is then summarized by adding up total investment by population group and dividing by the total of persons or households in the population group in 2015 and 2045. Finally, these numbers are compared to equivalent numbers for the balance of the population or households to assess equity.

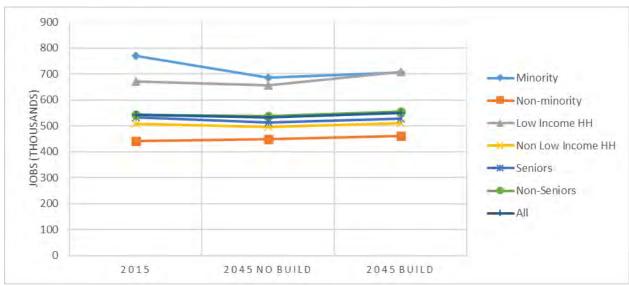
4. Results

This section presents the results of all the measure identified for this analysis. The results are compared across the three scenarios, year 2015, 2045 No build, 2045 build. The data tables are included in Attachment A.

Average Number of Job opportunities

Figures 5 and 6 show the target population on average have access to more jobs as compared to non-target population in each scenario. When compared across scenarios, the build conditions shows access to more jobs than no-build scenario by auto. The improvement in accessibility appears to be benefiting target and non-target groups in the same way. It appears that for this measure, there are no prominent disproportionate negative impacts of the transportation projects among the population groups.





200 180 - Minority 160 (STANDASANDS) 1008 (THOUSANDS) 80 60 -Non-minority -Low Income HH Non Low Income HH -Seniors Non-Seniors 60 Zero Car HH 40 -All 20 0 2015 2045 NO BUILD 2045 BUILD

Figure 6
Average Number of Jobs within 50 minutes - AM peak by transit

Average Shopping opportunities

Figures 7 and 8 show the target populations on average have access to more shopping opportunities (acres) as compared to non-target population in each scenario. When compared across scenarios, the build condition shows access to more shopping opportunities than no-build scenario by auto. The improvement in accessibility appears to be benefiting target and non-target groups in the same way.

It appears that for this measure, there are no prominent disproportionate negative impacts of the transportation projects among the population groups.

Figure 7

Average Shopping Opportunities within 15 minutes - MD period by auto

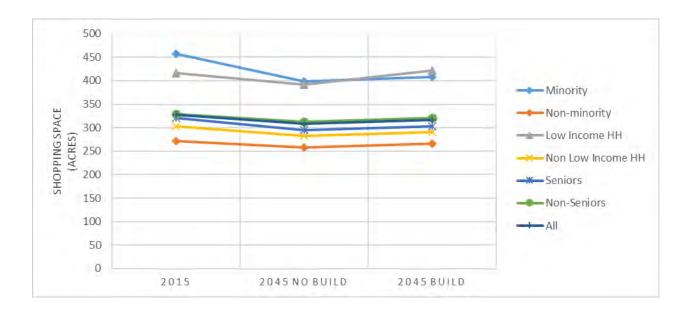
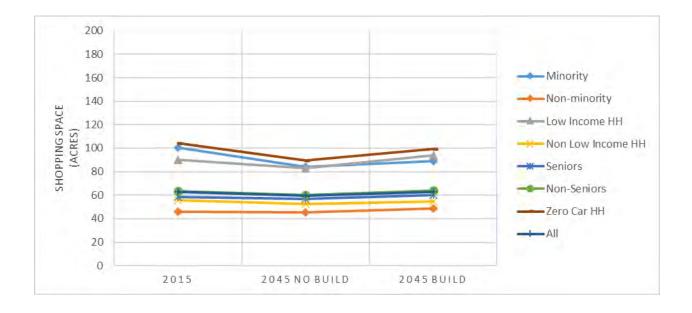


Figure 8

Average Shopping Opportunities within 30 minutes - MD period by transit



Average Number of Non-Shopping opportunities

Figures 9 and 10 show the target population on average have access to more non-shopping opportunities as compared to non-target population in each scenario. When compared across scenarios, the build condition shows access to more non-shopping opportunities than no-build scenario by auto. The improvement in accessibility appears to be benefiting target and non-target groups in the same way.

It appears that for this measure, there are no prominent disproportionate negative impacts of the transportation projects among the population groups.

Figure 9
Average Non-Shopping Opportunities within 15 minutes - MD period by auto

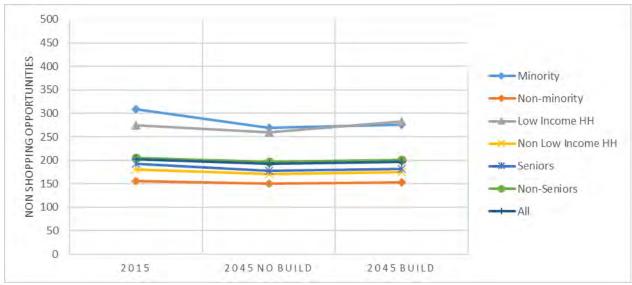
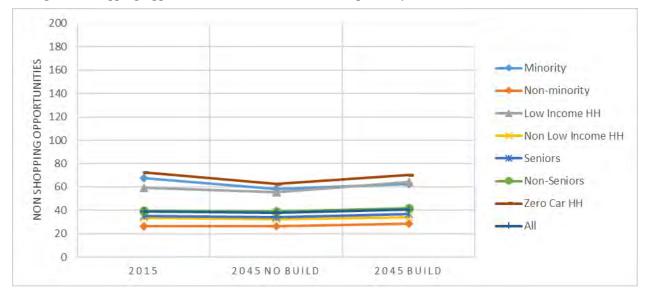


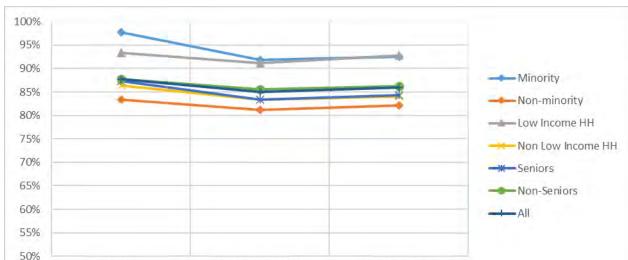
Figure 10
Average Non-Shopping Opportunities within 30 minutes - MD period by transit



Percent of Population close to a College

Figure 11 shows a higher percentage of target groups within 25 minutes by auto in the A.M peak period to a college campus as compared to non-target groups. This is true for each scenario. When compared across scenarios, the build condition shows slightly higher percentages then no-build scenario. The improvement in accessibility appears to be benefiting target and non-target groups almost similarly.

It appears that for this measure, there are no prominent disproportionate negative impacts of the transportation projects among the population groups.



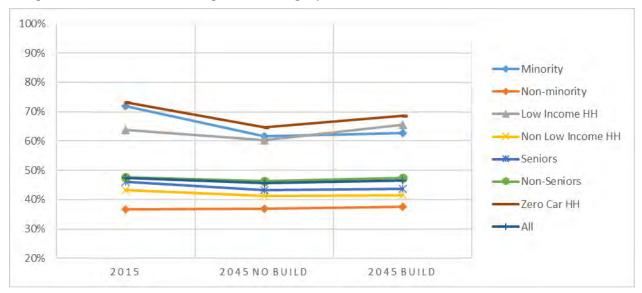
2045 BUILD

2045 NO BUILD

Figure 11 % Population within 25 minutes AM peak to a College by auto

Figure 12 % Population within 50 minutes AM peak to a College by transit

2015

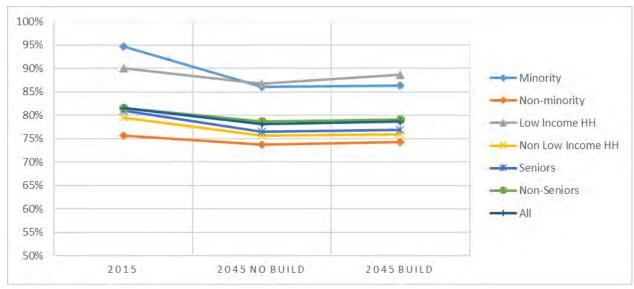


Percent of Population close to a Hospital

Figure 13 shows a higher percentage of target groups within 15 minutes by auto during the mid-day period to a major hospital as compared to non-target groups. This is true for each scenario. When compared across scenarios, the build condition shows slightly higher percentages then no-build scenario. The improvement in accessibility both by auto and transit appears to be benefiting target and non-target groups almost similarly.

It appears that for this measure, there are no prominent disproportionate negative impacts of the transportation projects among the population groups.

Figure 13 % Population within 15 minutes MD period to a Hospital by auto



100% 90% - Minority 80% -Non-minority 70% -Low Income HH 60% Non Low Income HH 50% Seniors 40% Non-Seniors -Zero Car HH 30% -All 20% 10% 2015 2045 NO BUILD 2045 BUILD

Figure 14
% Population within 30 minutes MD period to a Hospital by transit

Percent of Population close to a Major Retail Center

Figure 15 shows a higher percentage of target groups within 15 minutes by auto during the mid-day period to a major retail center as compared to non-target groups. This is true for each scenario. When compared across scenarios, the build condition shows slightly higher percentages then no-build scenario. The improvement in accessibility appears to be benefiting target and non-target groups almost similarly.

It appears that for this measure, there are no prominent disproportionate negative impacts of the transportation projects among the population groups.

Figure 15 % Population within 15 minutes MD period to a Major Retail by auto

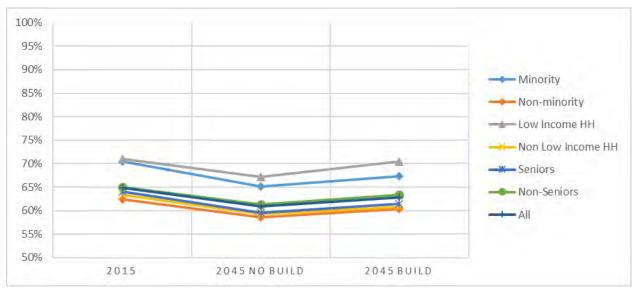


Figure 16 % Population within 30 minutes MD period to a Major Retail by transit



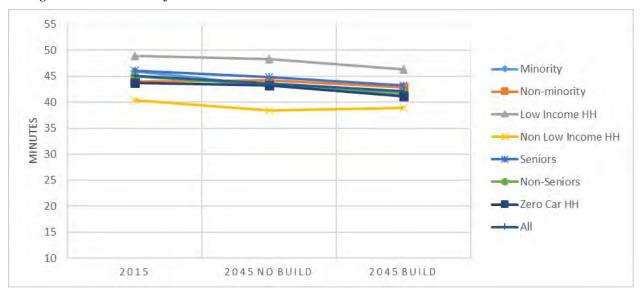
Average Travel time for Work purpose

Figure 17 shows that the regional average auto travel time for work trip is less for target groups as compared to non-target groups, in each scenario. When compared across scenarios, the build scenario travel times are less for each population group than no-build. Travel time savings are relatively similar for each of the target or non-target group. Transit travel times for some target population groups are slightly higher as compared to non-target group in some instances, but in most cases the difference is within 5%. However, the benefits of travel time savings due to improved service seems just.

Figure 17
Average Auto Travel time for Work



Figure 18
Average Transit Travel time for Work



Average Travel time for Shopping purpose

Figure 19 shows that the regional average auto travel time for shopping trip is less for target groups as compared to non-target groups, in each scenario. When compared across scenarios, the build scenario travel times are less for each population group than no-build. Travel time savings are relatively similar for each of the target or non-target group. Transit travel times for some target population groups are slightly higher as compared to non-target group in some instances, but in most cases the difference is within 5%. However, the benefits of travel time savings due to improved service seems just.

Figure 19
Average Auto Travel time for Shopping

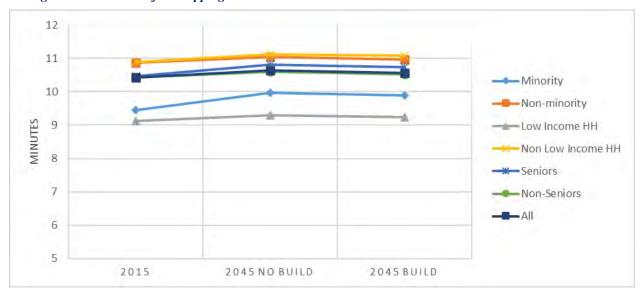
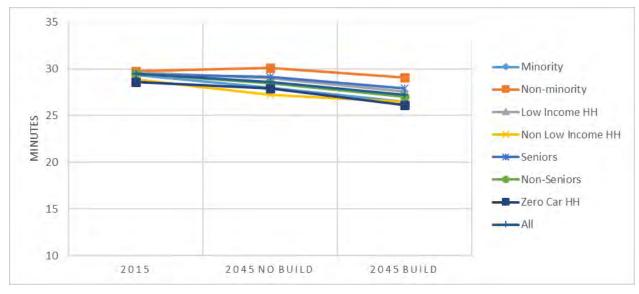


Figure 20 Average Transit Travel time for Shopping



Average Travel time for Other purposes

Figure 21 shows that the regional average auto travel time for other purpose trip is less for target groups as compared to non-target groups, in each scenario. When compared across scenarios, the build scenario travel times are less for each population group than no-build. Travel time savings are relatively similar for each of the target or non-target group. Transit travel times for some target population groups are slightly higher as compared to non-target group in some instances, but in most cases the difference is within 5%. However, the benefits of travel time savings due to improved service seems just.

Figure 21
Average Auto Travel time for Other purpose

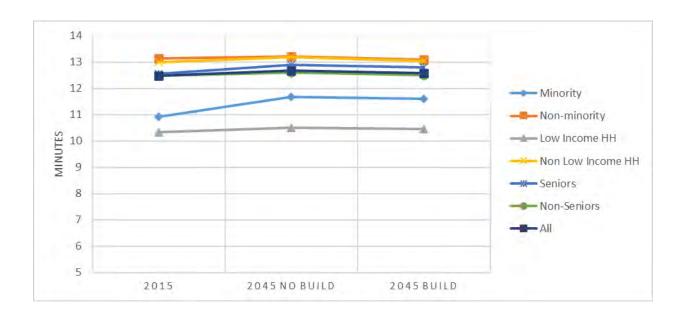
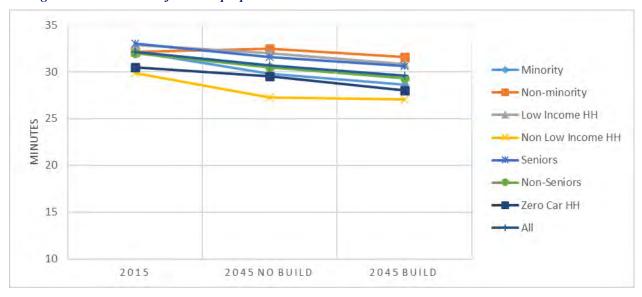


Figure 22

Average Transit Travel time for Other purpose



Average Travel time for All purposes

Figure 23 shows that the regional average auto travel time for all purposes combined is less for target groups as compared to non-target groups, in each scenario. When compared across scenarios, the build scenario travel times are less for each population group than no-build. Travel time savings are relatively similar for each of the target or non-target group.

Figure 23
Average Auto Travel time for All purposes

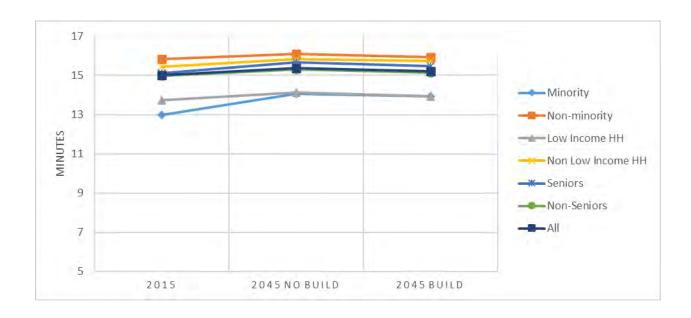
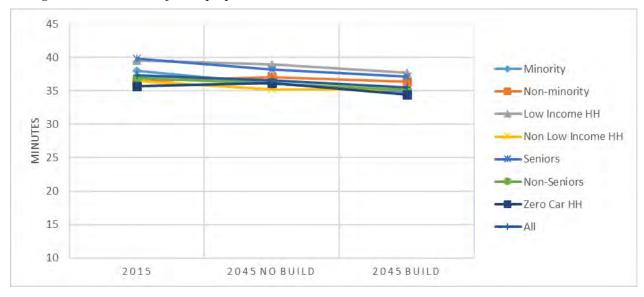


Figure 24
Average Transit Travel time for All purposes



Per Capita Transportation Funding

Table 1 shows that the minority population in 2015 accrues a benefit from these projects of nearly \$2,000 more per person in project costs compared to the balance of the population and \$1,500 more for the forecasted 2045 minority population. Low income households in 2015 and those forecasted in 2045 are getting allocated roughly \$3,000 and \$2,600 respectively more per household in project costs compared to the balance of households. Additional analysis shows equity for seniors (persons age 65 or older) and for no car households.

Table 1
Per Capita Transportation Funding

	Minorities	Non-Minorities
Population in 2015	1,446,083	3,276,681
% of Population in 2015	30.6%	69.4%
% of Total Project Costs	36.0%	64.0%
Per Capita Funding in 2015	\$9,644	\$7,552
Per Capita Funding in 2045	\$8,566	\$7,033

	Low Income	Non-Low Income
Households in 2015	465,635	1,396,869
% of Households in 2015	25.0%	75.0%
% of Total Project Costs	27.9%	72.1%
Per Household Funding in 2015	\$23,155	\$19,980
Per Household Funding in 2045	\$20,571	\$17,945

	Seniors	Non-Seniors
Population in 2015	696,810	4,025,954
% of Population in 2015	14.8%	85.2%
% of Total Project Costs	14.5%	85.5%
Per Capita Funding in 2015	\$8,058	\$8,216
Per Capita Funding in 2045	\$7,361	\$7,643

	No Car	
	Households	Households with Cars
Households in 2015	158,368	1,704,136
% of Households in 2015	8.5%	91.5%
% of Total Project Costs	10.4%	89.6%
Per Household Funding in 2015	\$25,368	\$20,347
Per Household Funding in 2045	\$21,653	\$18,304

5. Summary

The purpose of this analysis was to demonstrate the impact of the transportation plan on the various demographic groups in the region using quantitative measures, and to assess if there is a disproportionate negative impact of the plan on the target groups. Although these measures cannot encompass all the environmental justice issues, SEMCOG believes they are good indicators as to whether significant environmental justice issues are present.

In general, the measures did not suggest environmental justice issues at the regional system-wide level. In all the transportation scenarios, the target groups seem to have access to more jobs, shopping and other activities, or are close to a college, hospital or major shopping center. Average travel times for various purposes are also lower for target groups.

Comparing current and future no-build condition shows regional development pattern impact, without the transportation system improvements. Future land use policy should be studied to minimize the development impact on accessibility.

Attachment A – Data Tables	

Table 2
Average Number of Jobs Accessible within 25 minutes AM peak period by auto

	2015	% of Total	2045 No Build	% of Total	2045 Build	% of Total	% Over No Build
Minority	768,484	27.70%	685,864	23.17%	705,524	23.84%	2.87%
Non-Minority	441,860	15.93%	447,768	15.13%	462,100	15.61%	3.20%
Low Income HH	669,862	24.15%	655,274	22.14%	706,816	23.88%	7.87%
Non Low Income HH	508,531	18.33%	496,845	16.79%	509,782	17.22%	2.60%
Seniors	533,120	19.22%	512,508	17.31%	528,375	17.85%	3.10%
Non-Seniors	543,385	19.59%	538,591	18.20%	554,930	18.75%	3.03%
All	541,870	19.53%	532,678	18.00%	548,910	18.54%	3.05%
Total Jobs in the region		2,774,223		2,959,998		2,959,998	

Table 3
Average Number of Jobs Accessible within 50 minutes AM peak period by transit

	2015	% of Total	2045 No Build	% of Total	2045 Build	% of Total	% Over No Build
Minority	165,435	5.96%	146,543	4.95%	167,788	5.67%	14.50%
Non-Minority	67,215	2.42%	70,874	2.39%	82,011	2.77%	15.71%
Low Income HH	141,656	5.11%	139,466	4.71%	172,038	5.81%	23.35%
Non Low Income HH	85,367	3.08%	85,319	2.88%	97,367	3.29%	14.12%
Seniors	91,129	3.28%	91,182	3.08%	104,575	3.53%	14.69%
Non-Seniors	98,356	3.55%	99,816	3.37%	114,954	3.88%	15.17%
Zero-Car HH	170,770	6.16%	155,742	5.26%	186,978	6.32%	20.06%
All	97,290	3.51%	97,859	3.31%	112,601	3.80%	15.06%
Total Jobs in the region		2,774,223		2,959,998		2,959,998	

Table 4
Average Shopping Area (acres) Accessible within 15 minutes mid-day period by auto

	2015	% of Total	2045 No Build	% of Total	2045 Build	% of Total	% Over No Build
Minority	458	8.17%	398	7.10%	408	7.28%	2.49%
Non-Minority	271	4.83%	258	4.61%	266	4.74%	2.83%
Low Income HH	416	7.42%	391	6.98%	421	7.52%	7.72%
Non Low Income HH	303	5.41%	282	5.04%	290	5.18%	2.73%
Seniors	320	5.71%	295	5.26%	303	5.41%	2.71%
Non-Seniors	330	5.88%	312	5.57%	320	5.71%	2.66%
All	328	5.85%	308	5.50%	316	5.64%	2.66%
Retail building space (acres) in							
the region		5,604		5,604		5,604	

Table 5
Average Shopping area (acres) Accessible within 30 minutes mid-day period by transit

	2015	% of Total	2045 No Build	% of Total	2045 Build	% of Total	% Over No Build
Minority	101	1.80%	84	1.50%	89	1.59%	5.71%
Non-Minority	46	0.82%	46	0.81%	48	0.86%	6.37%
Low Income HH	90	1.61%	83	1.48%	94	1.67%	13.03%
Non Low Income HH	56	1.00%	52	0.93%	55	0.98%	4.97%
Seniors	59	1.05%	57	1.01%	60	1.07%	5.64%
Non-Seniors	64	1.13%	60	1.07%	64	1.14%	5.99%
Zero-Car HH	104	1.86%	90	1.60%	99	1.77%	10.47%
All	63	1.12%	59	1.05%	63	1.12%	6.44%
Retail building space (acres)							
in the region		5,604		5,604		5,604	

Table 6
Average Number of Non-Shopping Opportunities Accessible within 15 minutes mid-day period by auto

	2015	% of Total	2045 No Build	% of Total	2045 Build	% of Total	% Over No Build
Minority	308	8.11%	270	7.09%	275	7.24%	2.15%
Non-Minority	156	4.10%	150	3.93%	153	4.02%	2.27%
Low Income HH	275	7.22%	260	6.83%	283	7.45%	9.01%
Non Low Income HH	181	4.75%	170	4.48%	175	4.59%	2.46%
Seniors	192	5.06%	178	4.68%	182	4.78%	2.25%
Non-Seniors	204	5.37%	197	5.17%	201	5.29%	2.19%
All	203	5.33%	192	5.06%	197	5.17%	2.23%
Number of non-shopping							
opportunities identified		3,803		3,803		3,803	

Table 7
Average Number of Non-Shopping Opportunities Accessible within 30 minutes mid-day period by transit

	2015	% of Total	2045 No Build	% of Total	2045 Build	% of Total	% Over No Build
Minority	68	1.78%	58	1.53%	63	1.64%	7.39%
Non-Minority	27	0.70%	27	0.70%	29	0.75%	7.52%
Low Income HH	59	1.56%	56	1.47%	64	1.69%	15.23%
Non Low Income HH	34	0.89%	32	0.85%	34	0.90%	6.50%
Seniors	35	0.93%	34	0.90%	37	0.97%	6.69%
Non-Seniors	40	1.05%	39	1.02%	42	1.10%	7.46%
Zero-Car HH	73	1.91%	63	1.65%	70	1.85%	12.28%
All	39	1.03%	38	1.00%	41	1.07%	7.39%
Number of non-shopping opportunities identified		3,803		3,803		3,803	

Table 8

Percent of Population or Households within 25 minutes AM peak period to a College by auto

	2015	2045 No Build	2045 Build	
Minority	97.7%	91.9%	92.5%	
Non-Minority	83.3%	81.2%	82.2%	
Low Income HH	93.4%	91.1%	92.8%	
Not Low Income HH	86.4%	83.3%	84.0%	
Seniors	87.3%	83.4%	84.3%	
Non-Seniors	87.7%	85.5%	86.3%	
All	87.7%	85.0%	85.9%	

Table 9
Percent of Population or Households within 50 minutes AM peak period to a College by transit

	2015	2045 No Build	2045 Build
Minority	71.9%	61.6%	62.8%
Non-Minority	36.7%	36.9%	37.6%
Low Income HH	63.8%	60.4%	65.5%
Not Low Income HH	43.2%	41.2%	41.5%
Seniors	46.2%	43.2%	43.7%
Non-Seniors	47.7%	46.4%	47.5%
Zero-Car HH	73.2%	64.7%	68.6%
All	47.4%	45.7%	46.6%

Table 10
Percent of Population or Households within 15 minutes mid-day period to a Hospital by auto

	2015	2045 No Build	2045 Build
Minority	94.7%	86.0%	86.4%
Non-Minority	75.7%	73.8%	74.3%
Low Income HH	90.0%	86.7%	88.7%
Not Low Income HH	79.5%	75.6%	75.9%
Seniors	81.0%	76.5%	76.9%
Non-Seniors	81.6%	78.6%	79.1%
All	81.5%	78.1%	78.6%

Table 11
Percent of Population or Households within 30 minutes mid-day period to a Hospital by transit

	2015	2045 No Build	2045 Build
Minority	53.7%	45.5%	46.9%
Non-Minority	26.9%	27.3%	28.1%
Low Income HH	49.1%	46.6%	50.9%
Not Low Income HH	31.8%	30.1%	30.4%
Seniors	34.2%	32.6%	33.4%
Non-Seniors	35.3%	34.1%	35.2%
Zero-Car HH	56.4%	49.3%	52.6%
All	35.1%	33.8%	34.8%

Table 12

Percent of Population or Households within 15 minutes mid-day period to a Major Retail Center by auto

	2015	2045 No Build	2045 Build
Minority	70.4%	65.2%	67.3%
Non-Minority	62.4%	58.6%	60.3%
Low Income HH	71.0%	67.2%	70.5%
Not Low Income HH	63.3%	59.3%	60.8%
Seniors	64.0%	59.6%	61.4%
Non-Seniors	65.0%	61.3%	63.3%
All	64.9%	60.9%	62.8%

Table 13

Percent of Population or Households within 30 minutes mid-day period to a Major Retail Center by transit

	2015	2045 No Build	2045 Build
Minority	20.5%	18.0%	18.2%
Non-Minority	16.0%	14.8%	14.9%
Low Income HH	22.0%	19.2%	21.6%
Not Low Income HH	16.1%	14.7%	14.6%
Seniors	16.0%	15.3%	15.7%
Non-Seniors	17.6%	16.1%	16.2%
Zero-Car HH	21.9%	18.5%	19.7%
All	17.3%	15.9%	16.1%

Table 14
Average Auto Travel Time for Work purpose

	2015	2045 No Build	% Inc over 2015	2045 Build	% Inc Over 2015	2045 Build Vs No Build	
						Minutes Saved	% Minutes Saved
Minority	20.23	22.13	9.4%	21.93	8.4%	0.20	0.90%
Non-Minority	24.42	25.1	2.8%	24.78	1.5%	0.32	1.27%
Low Income HH	19.05	19.66	3.2%	19.4	1.8%	0.26	1.32%
Not Low Income HH	26.23	27.16	3.5%	26.21	-0.1%	0.95	3.50%
Seniors	23.38	24.41	4.4%	24.12	3.2%	0.29	1.19%
Non-Seniors	23.3	24.04	3.2%	23.76	2.0%	0.28	1.16%
All	23.31	24.13	3.5%	23.85	2.3%	0.28	1.16%

Table 15
Average Transit Travel Time for Work purpose

	2015	2045 No Build	% Inc over 2015	2045 Build	% Inc Over 2015	2045 Build Vs No Build	
						Minutes Saved	% Minutes Saved
Minority	45.97	43.21	-6.0%	41.5	-9.7%	1.71	3.96%
Non-Minority	43.94	44.24	0.7%	42.91	-2.3%	1.33	3.01%
Low Income HH	48.9	48.23	-1.4%	46.28	-5.4%	1.95	4.04%
Not Low Income HH	40.36	38.41	-4.8%	38.86	-3.7%	-0.45	-1.17%
Seniors	46.01	44.79	-2.7%	43.26	-6.0%	1.53	3.42%
Non-Seniors	44.93	43.34	-3.5%	41.78	-7.0%	1.56	3.60%
Zero-Car HH	43.76	43.19	-1.3%	41.08	-6.1%	2.11	4.89%
All	45.07	43.64	-3.2%	42.08	-6.6%	1.56	3.57%

Table 16
Average Auto Travel Time for Shopping purpose

	2015	2045 No Build	% Inc over 2015	2045 Build	% Inc Over 2015	2045 Build Vs No Build	
						Minutes Saved	% Minutes Saved
Minority	9.45	9.96	5.4%	9.89	4.7%	0.07	0.70%
Non-Minority	10.88	11.05	1.6%	10.96	0.7%	0.09	0.81%
Low Income HH	9.13	9.3	1.9%	9.24	1.2%	0.06	0.65%
Not Low Income HH	10.89	11.13	2.2%	11.08	1.7%	0.05	0.45%
Seniors	10.46	10.81	3.3%	10.73	2.6%	0.08	0.74%
Non-Seniors	10.42	10.61	1.8%	10.53	1.1%	0.08	0.75%
All	10.43	10.65	2.1%	10.57	1.3%	0.08	0.75%

Table 17
Average Transit Travel Time for Shopping purpose

	2015	2045 No Build	% Inc over 2015	2045 Build	% Inc Over 2015	2045 Build	Vs No Build
						Minutes Saved	% Minutes Saved
Minority	29.33	27.96	-4.7%	26.46	-9.8%	1.5	5.36%
Non-Minority	29.75	30.13	1.3%	29.07	-2.3%	1.06	3.52%
Low Income HH	29.63	29.02	-2.1%	27.57	-7.0%	1.45	5.00%
Not Low Income HH	28.87	27.21	-5.7%	26.47	-8.3%	0.74	2.72%
Seniors	29.43	29.12	-1.1%	27.9	-5.2%	1.22	4.19%
Non-Seniors	29.46	28.46	-3.4%	27.04	-8.2%	1.42	4.99%
Zero-Car HH	28.57	27.88	-2.4%	26.14	-8.5%	1.74	6.24%
All	29.46	28.58	-3.0%	27.21	-7.6%	1.37	4.79%

Table 18
Average Auto Travel Time for Other purpose

	2015	2045 No Build	% Inc over 2015	2045 Build	% Inc Over 2015	2045 Build V	s No Build
						Minutes Saved	% Minutes Saved
Minority	10.91	11.68	7.1%	11.59	6.2%	0.09	0.77%
Non-Minority	13.14	13.21	0.5%	13.09	-0.4%	0.12	0.91%
Low Income HH	10.34	10.51	1.6%	10.45	1.1%	0.06	0.57%
Not Low Income HH	12.99	13.19	1.5%	13.05	0.5%	0.14	1.06%
Seniors	12.55	12.9	2.8%	12.79	1.9%	0.11	0.85%
Non-Seniors	12.47	12.61	1.1%	12.5	0.2%	0.11	0.87%
All	12.48	12.67	1.5%	12.57	0.7%	0.1	0.79%

Table 19
Average Transit Travel Time for Other purpose

	2015	2045 No Build	% Inc over 2015	2045 Build	% Inc Over 2015	2045 Build Vs No Build	
						Minutes Saved	% Minutes Saved
Minority	32.12	29.82	-7.2%	28.64	-10.8%	1.18	3.96%
Non-Minority	32.14	32.44	0.9%	31.58	-1.7%	0.86	2.65%
Low Income HH	32.86	31.99	-2.6%	30.85	-6.1%	1.14	3.56%
Not Low Income HH	29.88	27.24	-8.8%	27.02	-9.6%	0.22	0.81%
Seniors	33	31.59	-4.3%	30.63	-7.2%	0.96	3.04%
Non-Seniors	32	30.45	-4.8%	29.35	-8.3%	1.1	3.61%
Zero-Car HH	30.51	29.52	-3.2%	28.04	-8.1%	1.48	5.01%
All	32.13	30.66	-4.6%	29.59	-7.9%	1.07	3.49%

Table 20
Average Auto Travel Time for All purposes

	2015	2045 No Build	% Inc over 2015	2045 Build	% Inc Over 2015	2045 Build Vs No Build	
						Minutes Saved	% Minutes Saved
Minority	12.97	14.06	8.4%	13.92	7.3%	0.14	1.00%
Non-Minority	15.85	16.11	1.6%	15.92	0.4%	0.19	1.18%
Low Income HH	13.74	14.12	2.8%	13.95	1.5%	0.17	1.20%
Not Low Income HH	15.44	15.84	2.6%	15.74	1.9%	0.1	0.63%
Seniors	15.12	15.67	3.6%	15.49	2.4%	0.18	1.15%
Non-Seniors	14.98	15.31	2.2%	15.14	1.1%	0.17	1.11%
All	15	15.39	2.6%	15.22	1.5%	0.17	1.10%

Table 21
Average Transit Travel Time for All purposes

	2015	2045 No Build	% Inc over 2015	2045 Build	% Inc Over 2015	2045 Build Vs No Build		
						Minutes Saved	% Minutes Saved	
Minority	38	36.12	-4.9%	34.87	-8.2%	1.25	3.46%	
Non-Minority	36.45	37.09	1.8%	36.35	-0.3%	0.74	2.00%	
Low Income HH	39.55	38.99	-1.4%	37.71	-4.7%	1.28	3.28%	
Not Low Income HH	36.47	35.19	-3.5%	35.21	-3.5%	-0.02	-0.06%	
Seniors	39.8	38.18	-4.1%	37.11	-6.8%	1.07	2.80%	
Non-Seniors	36.99	36.12	-2.4%	35.09	-5.1%	1.03	2.85%	
Zero-Car HH	35.67	36.16	1.4%	34.46	-3.4%	1.7	4.70%	
All	37.32	36.52	-2.1%	35.47	-5.0%	1.05	2.88%	

Table 22 Major Regional Colleges

Eastern Michigan University
Henry Ford Community College
Lawrence Technological University
Macomb Community College, Central Campus
Macomb Community College, South Campus
Madonna University
Marygrove College
Monroe County Community College
Oakland Community College, Auburn Hills Campus
Oakland Community College, Highland Lakes Campus
Oakland Community College, Orchard Ridge Campus
Oakland Community College, Royal Oak Campus
Oakland Community College, Southfield Campus
Oakland University
Schoolcraft College
St. Clair County Community College
University of Detroit Mercy
University of Michigan-Ann Arbor
University of Michigan-Dearborn
Walsh College
Washtenaw Community College
Wayne County Community College District, Downriver Campus
Wayne County Community College District, Downtown Campus
Wayne County Community College District, Eastern Campus
Wayne County Community College District, Northwestern Campus
Wayne County Community College District, Western Campus
Wayne State University

Table 23
Major Regional Hospitals

Beaumont Health System, Grosse Pointe Beaumont Health System, Royal Oak Beaumont Hospital, Dearborn Beaumont Hospital, Farmington Hills Beaumont Hospital, Taylor Beaumont Hospital, Trenton Beaumont Hospital, Wayne Beaumont Hospital, Troy Crittenton Hospital Medical Center Detroit Medical Center, Receiving Hospital Detroit Medical Center, Hutzel Women'S Hospital Detroit Medical Center, Harper University Hospital Detroit Medical Center, Rehabilitation Institute Detroit Medical Center, Children'S Hospital Forest Health Medical Center
Beaumont Hospital, Dearborn Beaumont Hospital, Farmington Hills Beaumont Hospital, Taylor Beaumont Hospital, Trenton Beaumont Hospital, Wayne Beaumont Hospital, Troy Crittenton Hospital Medical Center Detroit Medical Center, Receiving Hospital Detroit Medical Center, Hutzel Women'S Hospital Detroit Medical Center, Harper University Hospital Detroit Medical Center, Rehabilitation Institute Detroit Medical Center, Children'S Hospital Forest Health Medical Center
Beaumont Hospital, Farmington Hills Beaumont Hospital, Taylor Beaumont Hospital, Trenton Beaumont Hospital, Wayne Beaumont Hospital, Troy Crittenton Hospital Medical Center Detroit Medical Center, Receiving Hospital Detroit Medical Center, Hutzel Women'S Hospital Detroit Medical Center, Harper University Hospital Detroit Medical Center, Rehabilitation Institute Detroit Medical Center, Children'S Hospital Forest Health Medical Center
Beaumont Hospital, Taylor Beaumont Hospital, Trenton Beaumont Hospital, Wayne Beaumont Hospital, Troy Crittenton Hospital Medical Center Detroit Medical Center, Receiving Hospital Detroit Medical Center, Hutzel Women'S Hospital Detroit Medical Center, Harper University Hospital Detroit Medical Center, Rehabilitation Institute Detroit Medical Center, Children'S Hospital Forest Health Medical Center
Beaumont Hospital, Trenton Beaumont Hospital, Wayne Beaumont Hospital, Troy Crittenton Hospital Medical Center Detroit Medical Center, Receiving Hospital Detroit Medical Center, Hutzel Women'S Hospital Detroit Medical Center, Harper University Hospital Detroit Medical Center, Rehabilitation Institute Detroit Medical Center, Children'S Hospital Forest Health Medical Center
Beaumont Hospital, Wayne Beaumont Hospital, Troy Crittenton Hospital Medical Center Detroit Medical Center, Receiving Hospital Detroit Medical Center, Hutzel Women'S Hospital Detroit Medical Center, Harper University Hospital Detroit Medical Center, Rehabilitation Institute Detroit Medical Center, Children'S Hospital Forest Health Medical Center
Beaumont Hospital, Troy Crittenton Hospital Medical Center Detroit Medical Center, Receiving Hospital Detroit Medical Center, Hutzel Women'S Hospital Detroit Medical Center, Harper University Hospital Detroit Medical Center, Rehabilitation Institute Detroit Medical Center, Children'S Hospital Forest Health Medical Center
Crittenton Hospital Medical Center Detroit Medical Center, Receiving Hospital Detroit Medical Center, Hutzel Women'S Hospital Detroit Medical Center, Harper University Hospital Detroit Medical Center, Rehabilitation Institute Detroit Medical Center, Children'S Hospital Forest Health Medical Center
Detroit Medical Center, Receiving Hospital Detroit Medical Center, Hutzel Women'S Hospital Detroit Medical Center, Harper University Hospital Detroit Medical Center, Rehabilitation Institute Detroit Medical Center, Children'S Hospital Forest Health Medical Center
Detroit Medical Center, Hutzel Women'S Hospital Detroit Medical Center, Harper University Hospital Detroit Medical Center, Rehabilitation Institute Detroit Medical Center, Children'S Hospital Forest Health Medical Center
Detroit Medical Center, Harper University Hospital Detroit Medical Center, Rehabilitation Institute Detroit Medical Center, Children'S Hospital Forest Health Medical Center
Detroit Medical Center, Rehabilitation Institute Detroit Medical Center, Children'S Hospital Forest Health Medical Center
Detroit Medical Center, Children'S Hospital Forest Health Medical Center
Forest Health Medical Center
Garden City Hospital
Henry Ford Health Center, Brownstown
Henry Ford Hospital
Henry Ford Medical Center, Cottage
Henry Ford Medical Center, Detroit Northwest
Henry Ford Medical Center, Fairlane
Henry Ford Medical Center, Sterling Heights
Henry Ford West Bloomfield Hospital
Henry Ford Wyandotte Hospital
Huron Valley-Sinai Hospital
Lake Huron Medical Center

Mclaren Macomb
Mclaren Oakland
Mclaren Port Huron
Oakland Regional Hospital
Oakwood Healthcare Center
Pontiac General Hospital
Promedica Monroe Regional Hospital
Providence Hospital
Providence Park Hospital
Saint Joseph Mercy Livingston Hospital
Select Specialty Hospital - Macomb County
Sinai-Grace Hospital
Southeast Michigan Surgical Hospital
St John Hospital And Medical Center
St John Macomb-Oakland Hospital, Macomb Center
St John Macomb-Oakland Hospital, Madison Heights
St John River District Hospital
St Joseph Mercy Hospital
St Joseph Mercy Oakland
St Mary Mercy Hospital
St. John Providence Health System
St. Joseph Mercy Chelsea
Straith Hospital For Special Surgery
University Of Michigan Health System



Table 24

Major Regional Shopping Centers

Birchwood Mall
Briarwood Mall
Cabela's Inc.
Eastland Center
Fairlane North
Fairlane Town Center
Fountain Walk
Great Lakes Crossing Mall
IKEA (Redevelopment)
Lakeside Mall
Macomb Mall
Oakland Mall
Somerset Collection North
Southland Mall
Tanger Outlets of Howell, MI
The Mall at Partridge Creek
The Village of Rochester Hills
Twelve Oaks Mall
West Oaks
Westland Mall
Birchwood Mall
Briarwood Mall
Cabela's Inc.
Eastland Center
Fairlane North
Fairlane Town Center

Possible Project Impacts

	Number of Projects Potentially Impacting Resources										
Project Type (Total Number of Projects Planned)	Water Resources ¹	Wetlands	Flood Prone Areas	Groundwater Resources ²	Woodlands	Parks & Recreation Areas	Historic Sites	Cemeteries	Heritage Routes Natural Beauty Roads	Historic Bridges	Nonmotorized Facilities
Bridge (108 projects)	60	37	48	3	105	28	5	1	8	3	15
Congestion - Capacity (22 projects)	19	19	8	2	22	3	0	1	1	1	5
Congestion - Non-Capacity (45 projects)	27	24	11	6	45	13	5	2	7	0	4
Nonmotorized (18 projects)	11	7	6	1	18	9	4	1	4	0	2
Pavement (249 projects)	197	178	106	21	249	67	25	23	19	4	44
Rail (3 projects)	0	0	0	0	3	0	0	0	0	0	1

¹Water resources consist of lakes and streams, designated trout lakes/streams, and Natural Rivers. ²Groundwater resources consist of wellhead protection areas and sinkholes.

Source: SEMCOG.

SEMCOG MITC-IAWG Meeting - 2022 Fall Amendment

Summary of October 19th, 2022 Call

Participants:

MDOT: Richard Bayus, Mike Davis, Meredith Fryer, Lane Masoud, Brad Peterson, Donna Wittl EGLE: Breanna Bukowski FTA: Susan Weber EPA: Michael Leslie WATS: Nick Sapkiewicz SCOTS: Lindsay Wallace SEMCOG: Steve Brudzinski, Jilan Chen, Michele Fedorowicz, Saima Masud, Allison Racisz, Chris Williams

On October 19th, 2022, the Michigan Transportation Conformity Interagency Workgroup (MITC-IAWG) conducted a Zoom call to review the proposed 2022 fall amendment for SEMCOG's Fiscal Year (FY) 2023-FY 2026 Transportation Improvement Program (FY 23-26 TIP) and 2045 Regional Transportation Plan (2045 RTP), The purpose of the call was to determine if any of the projects being amended into the FY 23-26 TIP and/or 2045 RTP would trigger the need for a new transportation conformity analysis and, if so, which need to be included in that analysis.

During the call, the group discussed the amendment list in general and focused on the following projects in more detail.

- JN 213262 28 Mile Road bridge removal project over Deer Creek. This portion of 28 Mile Road over Deer Creek is unpaved and not in SEMCOG's regional travel demand model roadway system. So, the group agreed this project is exempt from regional emission analysis.
- JN 202543 I-94 E reconstruction project from Burns Street to Barrett Avenue. This project is part of I-94 modernization project, and the network changes of this project were already included in SEMCOG's previous conformity analysis. This amendment is about the cost change only, so no model changes need to be made.
- JN 210991 I-94 E bridge removal project over Beaubien Street, Seminole Street and McClellan Avenue. This project is part of I-94 modernization project, and the network changes of this project were already included in SEMCOG's previous conformity analysis. So, no model changes need to be made.

By the end of this call, the group determined **SEMCOG's 2022 fall amendment does not trigger a new conformity analysis** since the two "non-exempt" projects have already been included in SEMCOG's previous conformity analysis.