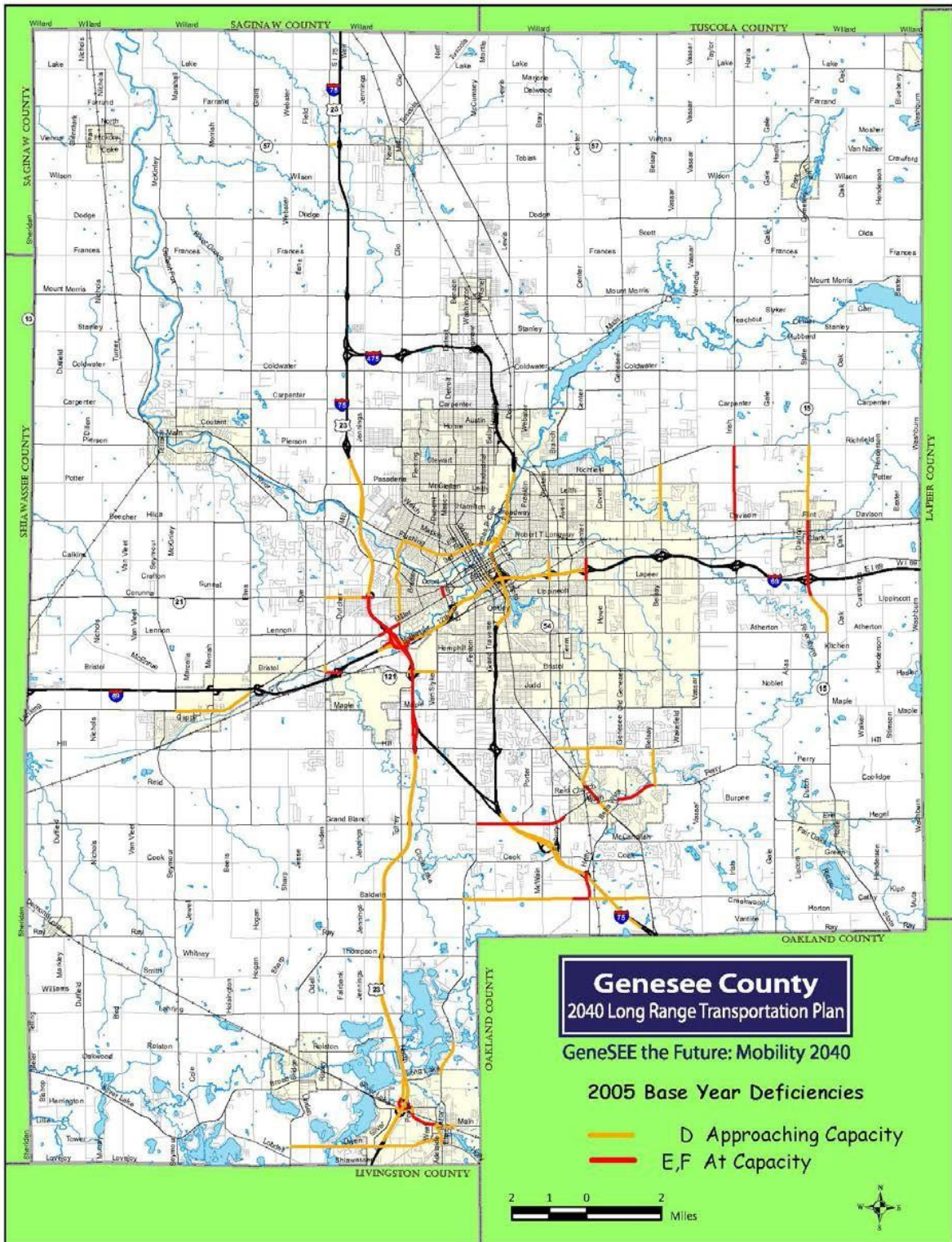


## **Transportation Deficiency Analysis**

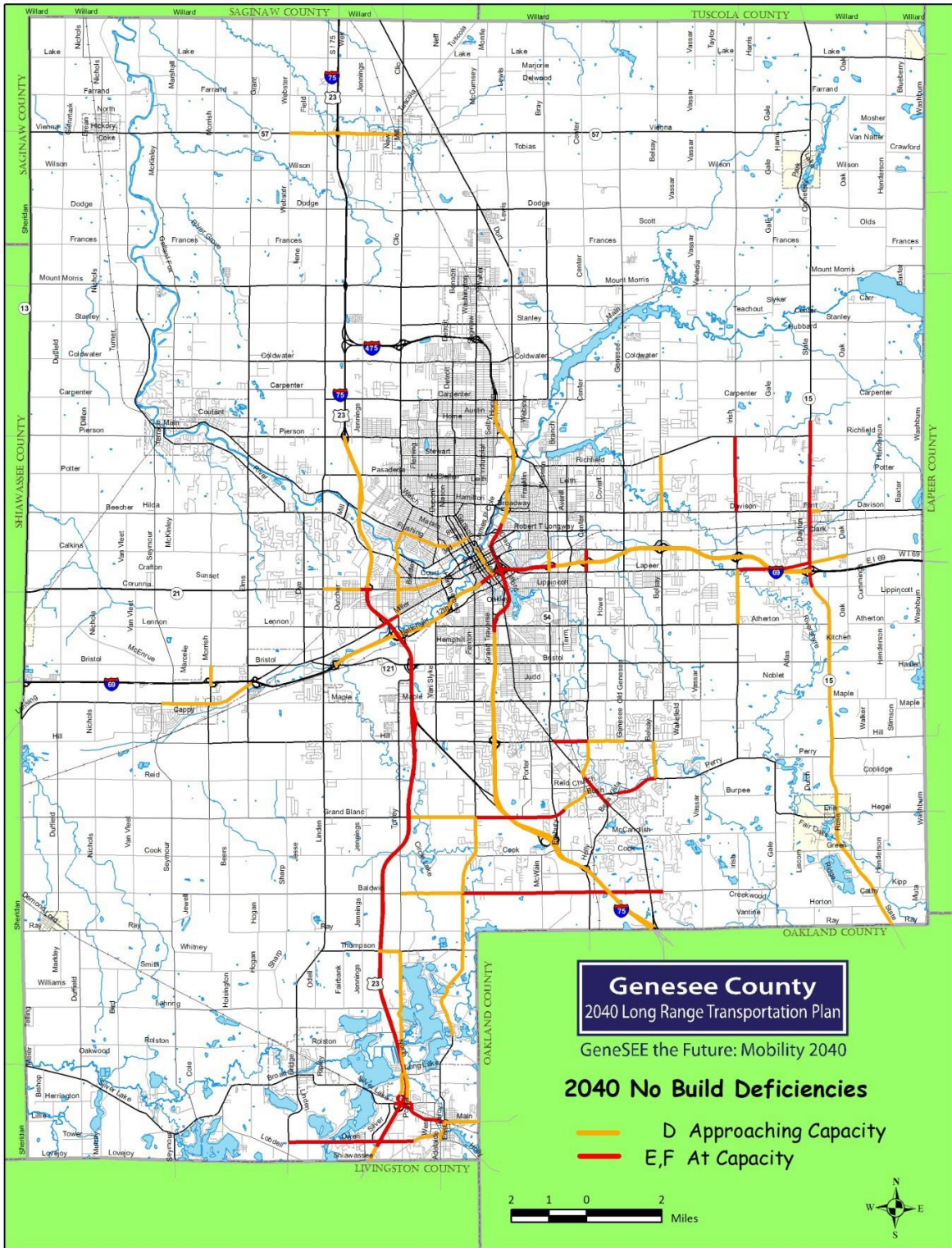
Using the outputs of the Genesee County Travel Demand Model, staff analyzed the corridors in Genesee County for their level of existing congestion using the base year of the model, 2005, and future congestion using the out year of the plan, 2040. The data is provided in map form on Pages 41 and 42 and included in a list of congested areas on Pages 43 and 44.

Areas were considered approaching congestion if they were at a level of service D and over capacity if the level of service was E or F. Areas that were congested during AM or PM peak periods or areas that were showing congestion for the entire 24-hour period were treated as a congested corridor.

Development of the list and maps of deficiencies began with staff review of the corridors and comparison of the 2005 congested areas map to the 2005 calibration results map. Staff used local knowledge of the roadway system and comparison of model results to traffic counts to check the model data for errors. Due to the placement of centroid connectors in the model, some areas showed congestion on only part of the corridor where staff knew congestion was prevalent along the entire corridor. Centroid connectors depict local roads, driveways and parking areas in the model with one link representing hundreds of access points along a corridor. Staff used the principle of smoothing of the congested areas to match real-world roadway congestion and extended the lines to the nearest federal-aid roadway or to the point where roadway configurations change (i.e. number of lanes changed). The Long Range Transportation Plan Steering Committee, Technical Advisory Committee, and Genesee County Metropolitan Alliance approved the deficiencies for use in the Long Range Transportation Plan and Call for Projects.







## 2005 Capacity Deficiency Corridors

Street	From	To	LOS	Functional Class	Surface Condition	Current ADT	Current ADT Year	Historic ADT	Historic ADT Year	EJZone	Arterial
5th Ave	Prospect	Boulevard	D	Urban Other Principal Freeway	3	24,091	2007	25,131	2001	Yes	Yes
Adelaide	Silver Lake	S.Holly Rd	D	Urban Collector	3	7,764	2006	8,500	2004	No	No
Baldwin	Hasley	S Holly Rd	E	Urban Minor Arterial	3	10,455	2008	9,916	2004	No	Yes
Baldwin	Fenton	Hasley	D	Urban Minor Arterial	3	11,264	2008	11,313	2004	Yes	Yes
Baldwin	Holly	Saginaw	D	Urban Minor Arterial	3	9,438	2007	11,170	2004	Yes	Yes
Ballenger	Miller	Flushing	D	Urban Other Principal Freeway	3	20,738	2008	24,141	2004	Yes	Yes
Belsay	Davison	Richfield	D	Urban Minor Arterial	5	10,061	2008	12,120	2004	Yes	Yes
Belsay	Perry	Hill	D	Urban Minor Arterial	9	9,819	2008	11,068	2004	Yes	Yes
Bristol	Linden	I-69 EB Ramps	E	Urban Other Principal Freeway	4	23,144	2008	25,804	2004	Yes	Yes
Bristol	Torrey	Van Slyke	D	Urban Other Principal Freeway	4	29,230	2008	36,299	2004	Yes	Yes
Center	Lapeer	Court	E	Urban Other Principal Freeway	3	27,627	2006	31,252	2003	Yes	Yes
Center	Saginaw	Hill	D	Urban Minor Arterial	4	8,580	2008	10,308	2004	Yes	Yes
Corunna	Linden	Graham	D	Urban Other Principal Freeway	7	27,203	2007	34,309	2003	Yes	Yes
Corunna	Graham	NB I75 Ramps	E	Urban Other Principal Freeway	7	27,203	2007	34,309	2003	Yes	Yes
Dort	Lapeer	Court	D	Urban Other Principal Freeway	6	25,021	2007	24,482	2004	Yes	Yes
E I 69 ES	Center	I75	D	Urban Interstate	4	47,657	2007	40,900	2004	Yes	Yes
Fenton	S. Long Lake	Pomona	D	Urban Minor Arterial	3	11,726	2007	12,438	2004	Yes	Yes
Fenton	Pomona	Grand Blanc	C	Urban Minor Arterial	4	10,862	2008	13,329	2004	Yes	Yes
Flushing	Ballenger	5th Ave	D	Urban Other Principal Freeway	8	NA	NA	15,844	1999	Yes	Yes
Grand Blanc	Fenton	Grand Blanc City Limits	E	Urban Minor Arterial	2	16,332	2008	14,829	2004	Yes	Yes
Hill	Saginaw	Genesee	D	Urban Minor Arterial	4	13,025	2008	14,325	2004	Yes	Yes
Holly Rd	Baldwin	I75 NB Ramp	E	Urban Other Principal Freeway	4	23,639	2008	25,409	2004	Yes	Yes
Irish	Davison	Richfield	E	Urban Minor Arterial	3	14,627	2008	14,948	2004	Yes	Yes
Linden	Bristol	Miller	D	Urban Other Principal Freeway	7	18,182	2008	21,172	2004	Yes	Yes
Main	East	Leroy	D	Urban Minor Arterial	8	12,922	2003	11,880	1999	Yes	Yes
Miller	Lennon	Ballenger	E	Urban Other Principal Freeway	3	32,878	2007	32,907	2004	Yes	Yes
Miller	Seymour	Elms	D	Urban Minor Arterial	5	12,206	2007	16,242	2004	Yes	Yes
N I 475	Atherton	Stewart	D	Urban Interstate	4	36,050	2007	41,100	2004	Yes	Yes
N I 75	Corunna	Pierson	D	Urban Interstate	8	35,207	2007	41,188	2004	Yes	Yes
N I 75	Hill	Corunna	E	Urban Interstate	8	44,871	2007	49,000	2004	Yes	Yes
N I 75	S County Line	I-475	D	Urban Interstate	7	26,062	2007	25,273	2004	Yes	Yes
N US 23	Owen	Hill	D	Urban Other Freeway	7	27,962	2007	27,854	2004	Yes	Yes
N US 23	Hill	Maple	E	Urban Other Freeway	8	44,871	2007	45,482	2004	Yes	Yes
North	Ponemah	US23 Ramp	D	Urban Collector	6	4,612	2007	6,371	2004	No	No
North	US23 Ramp	Poplar	E	Urban Collector	4	10,732	2008	10,168	2004	Yes	No
Owen	Linden	Shiawassee	D	Urban Minor Arterial	3	15,244	2008	14,087	2004	Yes	Yes
Perry	Bella Vista	Belsay	E	Urban Minor Arterial	3	18,110	2008	17,563	2004	Yes	Yes
Pershing	Miller	Court	E	Urban Minor Arterial	6	7,026	2006	11,865	2001	Yes	Yes
Poplar	Silver Lake	North	D	Urban Collector	3	4,138	2006	9,097	2001	No	No
S I 475	Stewart	Atherton	D	Urban Interstate	3	36,050	2007	41,100	2004	Yes	Yes
S I 75	Pierson	Corunna	D	Urban Interstate	8	35,207	2007	41,188	2004	Yes	Yes
S I 75	Corunna	Hill	E	Urban Interstate	5	44,871	2007	49,000	2004	Yes	Yes
S I 75	I475	S. County Line	D	Urban Interstate	6	26,062	2007	25,273	2004	Yes	Yes
S US 23	Maple	Hill	E	Urban Other Freeway	8	44,871	2007	45,482	2004	Yes	Yes
S US 23	Hill	Owen	D	Urban Other Freeway	4	27,962	2007	27,854	2004	Yes	Yes
Saginaw	Center	Perry	E	Urban Other Principal Freeway	4	39,355	2007	38,472	2004	Yes	Yes
Saginaw	Perry	Bella Vista	D	Urban Other Principal Freeway	4	26,943	2006	31,419	2004	Yes	Yes
Saginaw	9th St	Court	D	Urban Other Principal Freeway	8	16,748	2006	16,704	2002	Yes	Yes
Shiawassee	Owen	Adelaide	D	Urban Minor Arterial	6	NA	NA	9,184	2004	No	Yes
Silver Lake	Poplar	Adelaide	E	Urban Minor Arterial	9	NA	NA	18,011	2004	No	Yes
Silver Lake	Alloy	NB US23 Ramps	D	Urban Minor Arterial	3	NA	NA	18,282	2001	Yes	Yes
Silver Lake	Adelaide	Leroy	D	Urban Minor Arterial	8	14,874	2006	11,846	2001	Yes	Yes
State	Davison	Lippincott	E	Urban Other Principal Freeway	5	19,942	2007	27,300	2003	Yes	Yes
State	Lippincott	Atherton	D	Urban Other Principal Freeway	7	14,108	2007	15,391	2003	Yes	Yes
State	Richfield	Davison	D	Urban Minor Arterial	6	15,243	2007	15,000	2003	Yes	Yes
Torrey	North	US23 NB Ramp	E	Urban Collector	4	14,853	2005	10,597	2003	Yes	No
Vienna	Linden	SB I75 Ramps	D	Urban Minor Arterial	8	15,496	2007	17,790	2003	No	Yes
W I 69 ES	I75 SB Ramps	Center	D	Urban Interstate	4	47,657	2007	40,900	2004	Yes	Yes

2040 Capacity Deficiency Corridors										
2040 Long Range Transportation Plan										
Name	From	To	LOS	Functional Class	Current ADT	Current ADT Year	Historic ADT	Historic ADT Year	EJ Zone	Arterial
5th Ave	Prospect	Martin Luther King	D	Urban Other Principal Arterial	19,636	2003	20,855	2000	Yes	Yes
Adelaide	Shiawassee	S. Holly Rd	D	Urban Collector	5,615	2012	NA	NA	No	No
Baldwin	Torrey	Fenton	D	Rural Major Collector	9,813	2013	9,916	2004	Yes	No
Baldwin	Fenton	Braemoor	E	Urban Minor Arterial	10,752	2013	11,313	2004	Yes	Yes
Ballenger	Miller	Flushing	D	Urban Other Principal Arterial	18,801	2013	24,141	2004	Yes	Yes
Belsay	Davison	Richfield	D	Urban Minor Arterial	10,061	2008	12,120	2004	Yes	Yes
Belsay	Perry	Hill	D	Urban Minor Arterial	10,111	2013	11,068	2004	Yes	Yes
Center	Lapeer	Court	E	Urban Other Principal Arterial	27,627	2006	31,252	2003	Yes	Yes
Center	Saginaw	Hill	D	Urban Other Principal Arterial	7,266	2013	10,308	2004	Yes	Yes
Corunna	Linden	Graham	D	Urban Other Principal Arterial	32,069	2012	27,203	2007	Yes	Yes
Corunna	Graham	NB I75 Ramps	E	Urban Other Principal Arterial	32,069	2012	27,203	2007	Yes	Yes
Corunna	Ballenger	Court	D	Urban Other Principal Arterial	10,456	2012	12,299	2010	Yes	Yes
Dort	Lapeer	Court	D	Urban Other Principal Arterial	25,327	2012	29,076	2010	Yes	Yes
E I 69	Bristol	9th	D	Urban Interstate	72,200	2012	83,200	2010	Yes	Yes
E I 69	9th St	Dort	E	Urban Interstate	91,100	2012	83,500	2010	Yes	Yes
E I 69	Dort	M15	D	Urban Interstate	80,600	2012	72,700	2010	Yes	Yes
Fenton	Pomona	Grand Blanc	D	Urban Minor Arterial	9,628	2013	13,329	2004	Yes	Yes
Flint	M15	Church	D	Urban Minor Arterial	16,295	2010	NA	NA	No	Yes
Flushing	Ballenger	5th Ave	D	Urban Other Principal Arterial	13,234	2004	15,844	1999	Yes	Yes
Grand Blanc	US23	Fenton	D	Urban Minor Arterial	13,205	2013	12,963	2005	Yes	Yes
Grand Blanc	Fenton	Grand Blanc City Limits	E	Urban Minor Arterial	12,448	2013	14,480	2004	Yes	Yes
Grand Blanc	Grand Blanc City Limits	Saginaw	D	Urban Minor Arterial	14,924	2010	NA	NA	Yes	Yes
Hill	Saginaw	Center	E	Urban Minor Arterial	13,246	2013	12,302	2004	Yes	Yes
Hill	Center	Genesee	D	Urban Minor Arterial	13,148	2013	14,325	2004	Yes	Yes
Irish	Davison	Richfield	E	Urban Minor Arterial	12,324	2012	14,948	2004	Yes	Yes
Irish	Atherton	Lapeer	D	Urban Minor Arterial	11,875	2007	18,045	2004	Yes	Yes
Lapeer	Irish	State	E	Urban Minor Arterial	12,312	2014	11,423	2004	Yes	Yes
Lapeer	State	Oak	D	Urban Collector	5,594	2013	11,423	2004	Yes	No
Leroy	Shiawassee	Silver Lake	D	Urban Minor Arterial	10,360	2012	10,724	2009	No	Yes
Main	East	E County Line	D	Urban Minor Arterial	13,560	2012	12,922	2003	Yes	Yes
Miller	Lennon	Ballenger	E	Urban Other Principal Arterial	28,853	2013	32,907	2004	Yes	Yes
Miller	Seymour	I69 EB ramps	D	Urban Minor Arterial	13,916	2010	14,650	2007	Yes	Yes
Morrish	I69	Bristol	D	Urban Collector	8,045	2009	7,278	2007	Yes	Yes
NI 475	Robert T. Longway	Carpenter	D	Urban Interstate	51,800	2012	52,600	2010	Yes	Yes
NI 475	Atherton	Robert T. Longway	E	Urban Interstate	51,300	2012	57,400	2010	Yes	Yes
NI 475	I75	Atherton	D	Urban Interstate	39,100	2012	41,600	2010	Yes	Yes
NI 75	Corunna	Pierson	D	Urban Interstate	72,385	2012	73,383	2010	Yes	Yes
NI 75	Jct US 23	Corunna	E	Urban Interstate	119,200	2012	98,500	2010	Yes	Yes
NI 75	S County Line	I475	D	Urban Interstate	58,484	2012	57,516	2010	Yes	Yes
NUS 23	Owen	Jct I 75	E	Urban Other Freeway	56,400	2012	57,839	2010	Yes	Yes
NUS 23	S. County Line	Owen	D	Urban Other Freeway	46,428	2012	52,719	2010	Yes	Yes
North	Ponemah	US23 SB Ramps	D	Urban Collector	4,612	2007	6,371	2004	No	No
North	US23 SB Ramps	Poplar	E	Urban Collector	10,740	2013	10,017	2009	Yes	No
Owen	Linden	Shiawassee	E	Urban Minor Arterial	13,433	2012	14,087	2004	Yes	Yes
Perry	Bella Vista	Belsay	E	Urban Minor Arterial	14,586	2013	17,563	2004	Yes	Yes
Poplar	Silver Lake	North	E	Urban Collector	8,912	2013	7,088	2010	Yes	No
S I 475	Carpenter	Robert T. Longway	D	Urban Interstate	51,800	2012	52,600	2010	Yes	Yes
S I 475	Robert T. Longway	Atherton	E	Urban Interstate	51,300	2012	57,400	2010	Yes	Yes
S I 475	Atherton	I75	D	Urban Interstate	39,100	2012	41,600	2010	Yes	Yes
S I 75	Pierson	Corunna	D	Urban Interstate	72,385	2012	73,383	2010	Yes	Yes
S I 75	Corunna	Jct US 23	E	Urban Interstate	119,200	2012	98,500	2010	Yes	Yes
S I 75	I475	S. County Line	D	Urban Interstate	58,484	2012	57,516	2010	Yes	Yes
S US 23	Owen	Jct I75	E	Urban Other Freeway	56,400	2012	57,839	2010	Yes	Yes
S US 23	SCL	Owen	D	Urban Other Freeway	46,428	2012	52,719	2010	Yes	Yes
Saginaw	Center	Bella Vista	E	Urban Other Principal Arterial	33,396	2009	38,472	2004	Yes	Yes
Saginaw	9th St	Martin Luther King	D	Urban Other Principal Arterial	26,645	2014	16,704	2003	Yes	Yes
Shiawassee	Owen	Adelaide	D	Urban Minor Arterial	14,232	2012	9,184	2004	No	Yes
Silver Lake	SB US23 Ramps	Leroy	E	Urban Minor Arterial	13,780	2012	13,152	2010	Yes	Yes
Silver Lake	Leroy	East	D	Urban Minor Arterial	9,392	2012	11,795	2010	No	Yes
State	S County Line	Lippincott	D	Rural Other Principal Arterial	13,790	2012	15,951	2010	Yes	Yes
State	Lippincott	Harding	E	Urban Minor Arterial	30,408	2012	27,659	2010	Yes	Yes
Thompson	US23	Torrey	D	Urban Minor Arterial	11,337	2013	10,947	2010	Yes	Yes
Torrey	North	Thompson	D	Urban Collector	9,642	2013	8,831	2004	Yes	No
Vienna	Webster	Mill	D	Urban Minor Arterial	21,438	2012	21,767	2010	Yes	Yes
W I 69	9th St	Bristol	D	Urban Interstate	72,200	2012	83,200	2010	Yes	Yes
W I 69	Dort	9th St	E	Urban Interstate	91,100	2012	83,500	2010	Yes	Yes
W I 69	M15	Dort	D	Urban Interstate	80,600	2012	72,700	2010	Yes	Yes