

DETROIT METRO AREA REPORT CARD

TRIP has assigned the following letter grades to the components comprising the Detroit metro area highway system.

	GRADE	COMMENT
Roads	F	<i>In 2004 (the latest year for which data is available), 36 percent of major roads in the Detroit metro area were rated in poor condition and an additional 37 percent were in mediocre condition. TRIP has provided a list of heavily traveled roads in the Detroit area that have significant deterioration and are in need of repair.</i>
Bridges	F	<i>Forty-one percent of bridges (20 feet or longer) in the Detroit area are in substandard condition. Eighteen percent of bridges in the Detroit area are rated as structurally deficient and 23 percent are functionally obsolete. TRIP has provided a list of the most structurally deficient, heavily traveled bridges in the Detroit area.</i>
Congestion	D	<i>More than half, 54 percent, of urban arterial roads in the Detroit area are considered congested because they often experience rush hour delays. The average Detroit rush hour trip takes 38 percent longer to complete than during non-rush hour. TRIP has provided a list of the sections of roadway in Detroit that experience the highest level of traffic congestion.</i>
Safety	C	<i>The Detroit area has a traffic fatality rate of 8.9 fatalities per 100,000 people, lower than the statewide average of 12.8 fatalities per 100,000 population and the national rate of 14.5 fatalities per 100,000 population. Over the last five years, the Detroit area has averaged approximately 362 traffic fatalities per year. Roadway safety features such as widened lanes, added or improved medians, improved intersection design, paved shoulders and added rumble strips, where appropriate, can reduce traffic fatalities and serious accidents.</i>

ROADS

Pavement conditions on Detroit’s major roads are below desirable standards, with more than one-third of major roads in the Detroit metro area in poor condition.

- Thirty-six percent of Detroit’s major roads are rated in poor condition, and an additional 37 percent are in mediocre condition. This includes Interstates, highways, connecting urban arterials, and key urban streets that are maintained by state, county or municipal governments.
- Roads rated in poor condition often have significant rutting, potholes or other visible signs of deterioration. Roads in poor condition typically need to be resurfaced or reconstructed. Roads rated in mediocre condition show signs of significant wear and may also have some visible pavement distress. Most pavements in mediocre condition can be repaired by resurfacing, but some may need more extensive reconstruction to return them to good condition.
- Twenty-one percent of Detroit’s major roads are in good condition. A desirable goal for state and local organizations that are responsible for road maintenance is to keep 75 percent of major roads in good condition.

The following is a list of 10 heavily traveled sections of road in the Detroit area that have significant deterioration and are in need of repair:

Route Name	County or Closest City	From	To	Length (Mi.)	Reason Work Needed	Average Daily Traffic
M-14	Wayne/ Plymouth Twp	West Wayne Co. Line	Sheldon	3.9	Reconstruct	65,000
M-153	Wayne/ Dearborn	Mercury Drive	US-12	2.6	Reconstruct	59,000
I-94	Macomb/ St Clair Shores & Clinton Twp	Masonic	M-29	11.7	Rehabilitate	80,000
M-10	Oakland/ Southfield	8 Mile Road	Beck	6.8	Reconstruct	150,000
M-85	Wayne/ Detroit	Schaefer	Clark	4.6	Reconstruct	12,000
I-75	Wayne/ Flat Rock & Woodhaven	South Wayne Co. Line	Sibley	7.3	Reconstruct	64,000
I-96	Oakland/ Novi & Farmington Hills	Novi Road	Halstead	2.8	Rehabilitate	152,000
M-1	Wayne/ Detroit	Tuxedo	Adams	4.4	Rehabilitate	18,000
US-12	Wayne/ Detroit	Livernois	Rosa Parks	2.5	Reconstruct	14,000
US-24	Wayne/ Flat Rock & Brownstown Twp	Vreeland	Pennsylvania	5.4	Reconstruct	23,000

BRIDGES

A total of 41 percent of bridges in the Detroit metro area are in substandard condition.

- Eighteen percent of bridges in the Detroit area are rated as structurally deficient, showing significant deterioration to decks and other major components.
- Twenty-three percent of bridges in the Detroit area are functionally obsolete. These bridges no longer meet modern design standards for safety features such as lane widths or alignment with connecting roads or are no longer adequate for the volume of traffic being carried.

BRIDGE CONDITION	NUMBER OF BRIDGES	PERCENTAGE OF BRIDGES
Structurally Deficient	318	18%
Functionally Obsolete	395	23%
Total Deficient Bridges	713	41%
Total Number of Bridges	1,727	

- Bridge deficiencies have an impact on mobility and safety within the state. Restrictions on vehicle weight may cause many vehicles – especially emergency vehicles, commercial trucks, school buses and farm equipment – to use alternate routes to avoid these bridges.
- Narrow bridge lanes, inadequate clearances and poorly aligned bridge approaches reduce traffic safety. Redirected trips lengthen travel time, waste fuel and reduce the efficiency of the local economy.

The following is a list of the 10 most heavily traveled bridges in the Detroit metro area that are structurally deficient:

Route Carried	Closest City	Route or feature intersected	Average Daily Traffic	Year Built	Number of Lanes
M-39 Northbound	Southfield	M-10	43,500	1964	3
Greenfield Road	Detroit	CSX R.R. - Fullerton	42,086	1970	7
14 Mile Road	Sterling Heights	Red Run Drain	28,001	1975	5
M-3 (Gratiot)	Detroit	I-94	27,100	1958	8
Romeo Plank Road	Mt. Clemens	Gloede Drain	20,144	1948	2
US-24	Flat Rock	Silver Creek	20,000	1922	4
M-3 Southbound	Mt. Clemens	Clinton River	18,000	1920	4
M-102 Westbound Service Road	Detroit	M-10	14,430	1965	2
Nine Mile Road	Southfield	River Rouge	14,140	1930	2
Cadillac Ave.	Detroit	I-94	11,560	1957	4

CONGESTION

Increases in vehicle travel in the Detroit metro area have led to rising levels of traffic congestion on the area's major roads and highways.

- More than half, 54 percent, of major highways and streets in the Detroit metro area are considered congested, carrying levels of traffic that often result in delays during peak hours.
- The average rush hour trip in Detroit takes 38 percent longer to complete than during non-rush hour – the ninth longest delay in the nation among cities of similar size.
- The region's major highways and streets are rated based on their level of service using the letter grades A, B, C, D, E or F. Roads rated D, E, or F are considered moderately to severely congested. The following is a definition of each level of service designation:

A	Free flow of traffic with operation of individual vehicles largely unaffected by presence of other vehicles
B	Stable flow of traffic with slight decline in freedom to maneuver
C	Stable flow of traffic, but vehicle operation is significantly affected by presence of other vehicles in traffic stream
D	Crowded roadway with some decline in speeds. Large number of vehicles restrict mobility and stable traffic flow
E	Unstable, slow traffic flow with virtually no gaps in traffic stream, subject to traffic flow breakdowns
F	Stop-and-go traffic with low speeds and little or poor maneuverability

The following is a list of major roadways in the Detroit metro area that have the greatest level of traffic congestion, based on level of service rating:

Route	From	To	Length in Miles	Level of Service	Average Daily Traffic	Lanes
US-12	I-275	Belleville	4.9	F	24,451	4
I-96/I-275	I-696	I-96/I-275	5.3	E,F	96,709	8-10
M-53	Old M-53	34 Mile	7.5	E,F	24,610	4
I-696	M-10	I-75	9.4	D,E,F	89,727	6-8
I-696	I-75	I-94	10.7	D,E,F	83,425	6-10
I-96	I-275	US-24 (Telegraph)	8.7	D,E,F	83,244	4-10
M-39	M-153 (Ford)	M-10	9.2	D,E,F	76,101	6
I-696	I-96	M-10	8.6	D,E,F	76,032	4-8
M-10	Clairmount	I-696	7.7	D,E,F	72,488	6-8
I-96	I-696	Milford	12.7	D,E,F	66,367	4-8
M-59	Crooks	Ryan	4.8	E	42,864	4
US-24	I-696	Long Lake	6.4	D,E,F	40,304	6-8
M-10	I-696/US-24	Orchard Lake	4.8	D,F	33,381	4-6

SAFETY

Improving safety features on Detroit's roads and highways would likely result in a decrease in traffic fatalities in the state. Roadway design is an important factor in approximately one-third of fatal and serious traffic accidents.

- The Detroit area has a traffic fatality rate of 8.9 fatalities per 100,000 population, lower than the statewide average of 12.8 fatalities per 100,000 population and lower than the national average of 14.5 fatalities per 100,000 population. Between 2000 and 2004, the Detroit area averaged approximately 362 traffic fatalities per year.
- Highway improvements such as removing or shielding obstacles, adding or improving medians, wider lanes, wider and paved shoulders, upgrading roads from two lanes to four lanes and better road markings and traffic signals, where appropriate, can reduce traffic fatalities and accidents.
- The Federal Highway Administration has found that every \$100 million spent on needed highway safety improvements will result in 145 fewer traffic fatalities over a 10-year period.