

Roadway Congestion

The Des Moines Area MPO identifies congestion, the level at which transportation system performance is unacceptable, using two measures as outlined in the *Congestion Management Process* (2016): Travel Time Index and Planning Time Index. Using these two measures, major roadways in Greater Des Moines are scored for the level of congestion during peak commuting time periods.

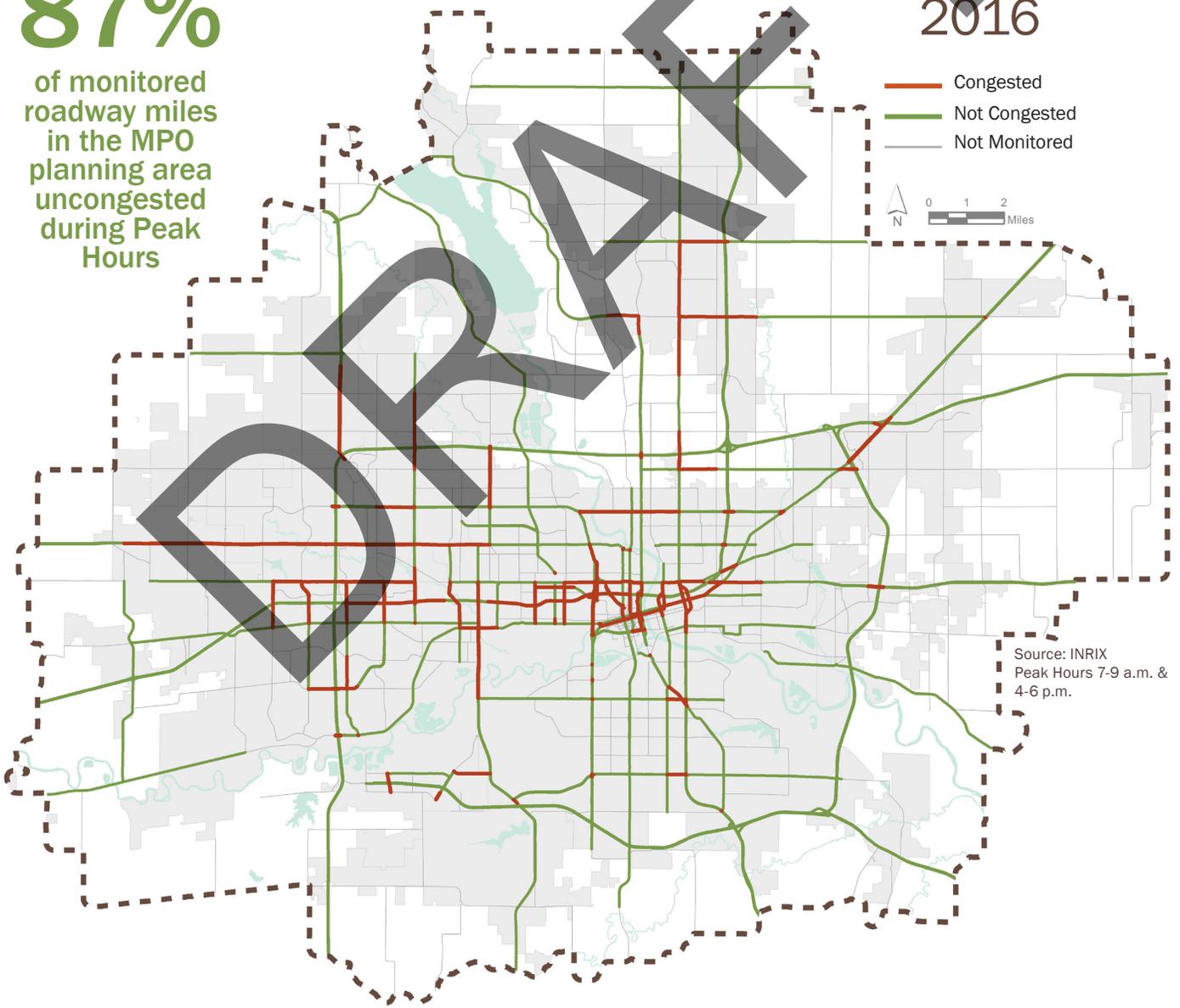
Traffic data analyzed for 2016 indicated 87 percent of monitored roadway miles in Greater Des Moines are uncongested during peak hours. Between 2015 and 2016, the region saw a 5 percent increase in congested roadway miles during peak hours. In 2016, the evening peak period saw more miles of congested roadways than the morning peak period.

87%

of monitored roadway miles in the MPO planning area uncongested during Peak Hours

CONGESTED ROADWAYS 2016

- Congested
- Not Congested
- Not Monitored



Source: INRIX
Peak Hours 7-9 a.m. & 4-6 p.m.

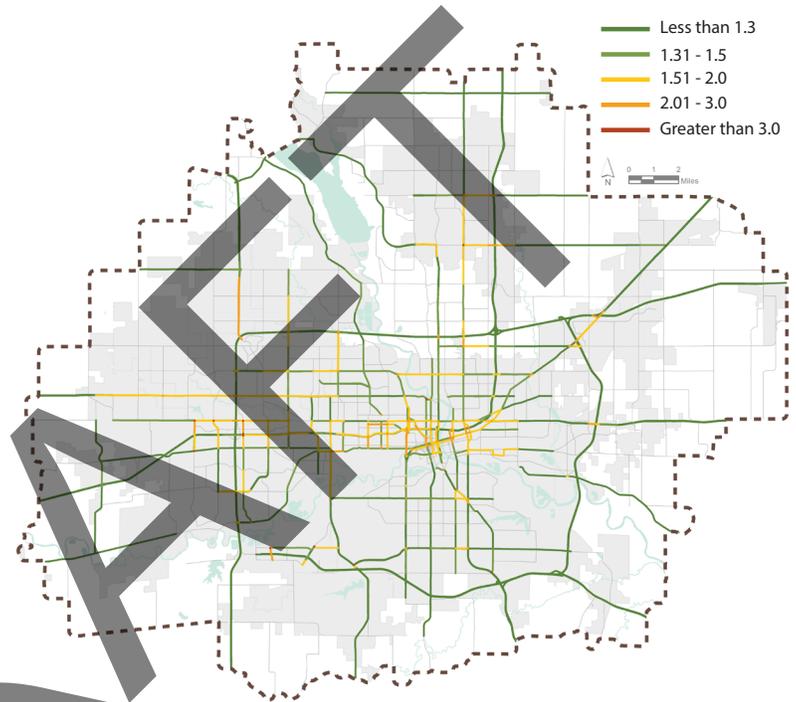


CONGESTION MANAGEMENT

In early 2016, the Des Moines Area MPO completed an update of the *Congestion Management Process (CMP)* for Greater Des Moines. The CMP defined a scoring methodology for identifying congested roadways based on the Travel Time and Planning Time Indices. Using the methodology in the CMP, a roadway is considered congested when the combined Travel Time and Planning Time scores are seven (7) points or greater. Using INRIX data collected in 2016, the regions travel time index and planning time index are mapped below.

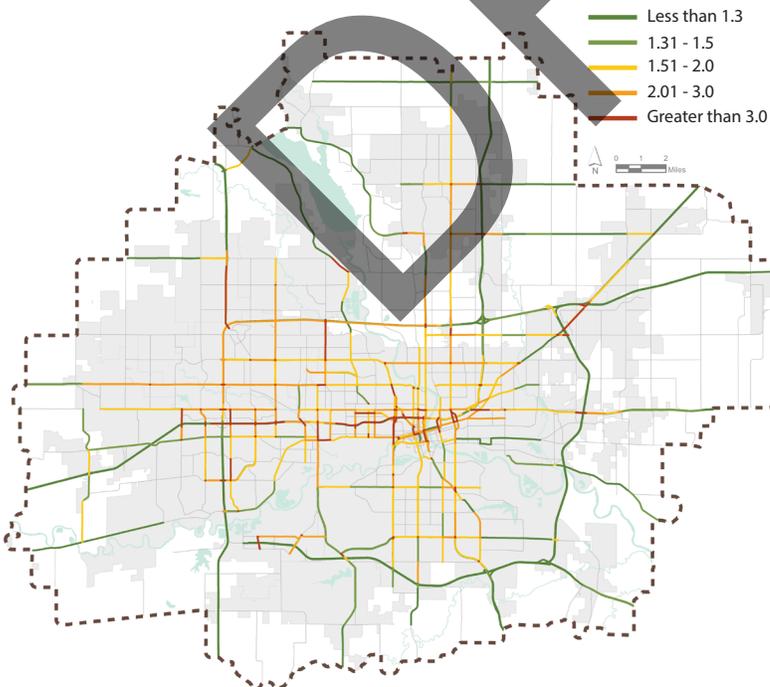
Travel Time

The majority of major roadways in Greater Des Moines have a travel time index of 1.5 or below. The travel time index compares the average observed travel time along the roadway to the free-flow travel time. For example, a roadway with a free-flow travel time of 10 minutes takes a commuter 15 minutes due to additional traffic. The travel time index for the roadway is 1.5. Congestion begins to occur as the travel time index approaches 1.5.



86%

monitored roadway miles with Travel Time Index 1.5 or below

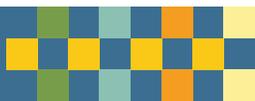


Planning Time

The 43 percent of major roadways in Greater Des Moines require users to plan additional time into trips greater than half the free-flow travel time. The planning time index measures the total time travelers should anticipate to arrive on-time to their destinations. For example, a roadway segment has a travel time of 10 minutes, but the commuter decides to leave 17 minutes prior to their scheduled arrival. The roadway has a planning time of 17 minutes and a planning time index of 1.7.

57%

monitored roadway miles with Planning Time Index below 1.5



How We Move

The mode travelers select for their commute is important to planners and engineers as it explains how individuals get around the region. In the Des Moines Area MPO planning area, more than 80% of individuals commute to work by personal vehicles with no other passengers.

The MPO recently participated in the National Household Travel Survey (NHTS) Add-On process to better understand how residents move around the region. Data from the NHTS will be available later this year and will inform decisions about the future of transportation in Greater Des Moines.

According to the American Community Survey (ACS) data for the 2011 to 2015 timeframe, primary modes for cities in the planning area were Drive Alone, Carpool, and Work From Home.

MODE SHARE BY CITY



Commute Trips

The average commute time for commuters in Greater Des Moines varies by city based on proximity of jobs to households, employment centers, neighborhoods, and the road network.

Overall, Greater Des Moines residents on average commute between 15 and 30 minutes to work. The regional average commute time to work is 20.4 minutes. The median commute distance for the region is 6.6 miles.



Average commute time of MPO planning area is 20 minutes



Median commute distance of MPO planning area is 6.6 miles

