## Average Daily Traffic in the MATS Area

Average Daily Traffic measurements are more than just numbers; they are the foundation upon which communities build their transportation systems. These metrics influence planning efforts, guide road maintenance decisions, and impact environmental policies, ultimately shaping the quality of life in a region.

Local road agencies in the MATS area (such as the City of Midland, the Midland, Bay, and Saginaw County Road Commissions) conduct traffic counts each year, collecting data on the volume of vehicles that use the roads at various locations. These traffic counts are usually done with a device that is attached to a pneumatic tube which stretches across the road. Sometimes counts are also done by a video system, or by hand. Equipment is sometimes only in place for a day or two, or for a week, to collect the type of data required for that location.

MATS collects this traffic count data and produces maps like those presented on the following pages to better communicate the information to the public. The maps illustrate the most current traffic count at a given location, and show the overall range of daily traffic volumes on major streets. You can use these maps to find your area and see what the traffic volume is on nearby streets and roads, if a count has been taken. Please note, however, that traffic data for MDOT-owned Roads is not included.

As can be seen from the maps, the vast majority of rural, 2-lane roads have volumes less than 2,000 vehicles per day, total. At the opposite end of the spectrum, roads and streets within the City of Midland tend to have higher

volumes, with some locations having volumes between 15,000 to 23,000 vehicles per day.

To put these numbers into perspective, it might be useful to imagine traffic at a minute-by-minute level. The vast majority of rural roads will be an average of less than one vehicle, in either direction, per minute; examples would include Hubbard Road, Stark Road, and Flajole Road. At the other end of the scale, the busiest streets and roads would include Saginaw Road and Eastman Road. Both are 4 or 5 lanes, and a stationary observer is likely to see, on average, between 14 and 18 vehicles per minute, from either direction, This will vary somewhat, depending on the time of day and the day of the week.

Note that the maps show some locations with traffic counts in close proximity to one another. This is because it is useful for engineers and planners to see the distribution of traffic at an intersection, i.e. turning movements.



**Overall, vehicle traffic in the MATS area** is operating efficiently with generally low travel delays, and indicates that the roadway network is able to handle the current volumes. In other words, there is very little congestion in the MATS area, and when there is, it only happens during the busiest times of the day and in limited locations. This is usually during the 7-9 AM period, or during the 4-6 PM period in the afternoon.

In addition to the traffic volumes present, the perception of "congestion" may be a function of the number and proximity of traffic control devices i.e. traffic lights and stop signs. It is noteworthy that the area near Eastman Road and Wackerly Street has received lane and traffic control upgrades recently, resulting in a significantly decreased perception of congestion and a visibly improved traffic flow.

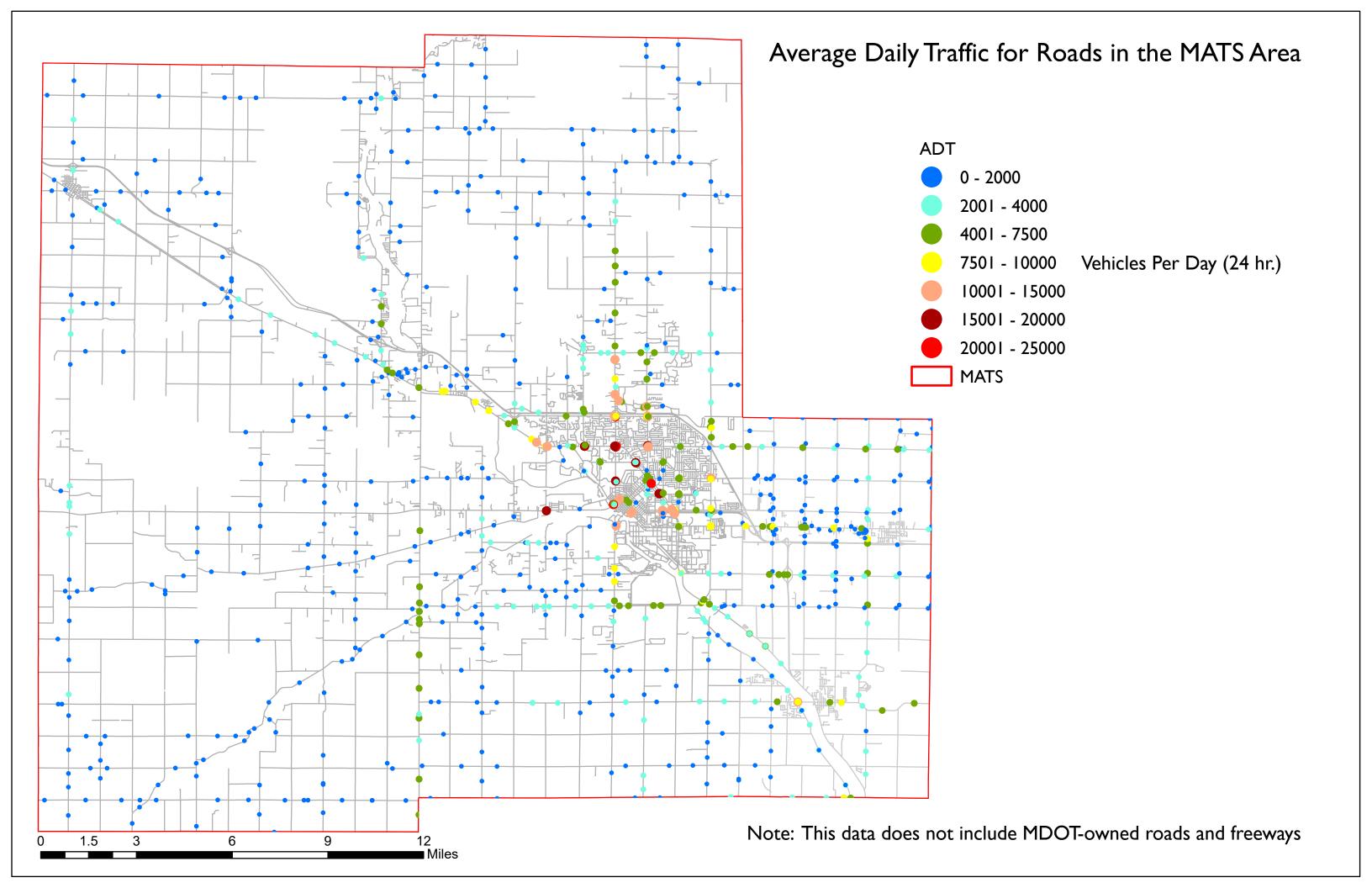


**Average Daily Traffic (ADT)** counts provide valuable insights into the usage patterns of roads and streets, important for transportation planning, road maintenance, and environmental considerations.

They help to identify the busiest intersections and routes, enabling local and state governments to distribute funds for road maintenance efficiently. Very high ADT numbers on some roads may indicate the need for added lanes, traffic signal improvement, or even new infrastructure. On the other hand, streets with low ADT may generate discussions about changing them to accommodate different usage, including bike lanes or pedestrian walkways, leading to more sustainable and accessible urban and rural landscapes.

Roads experiencing heavy traffic loads tend to deteriorate more quickly, leading to increased repair and maintenance costs. Understanding ADT, in conjunction with road rating systems such as PASER, helps transportation agencies prioritize which roads require immediate attention and which needs can wait, ensuring that resources are allocated efficiently to extend the lifespan of critical infrastructure. Moreover, this data is essential for implementing preventive maintenance strategies, reducing the long-term financial burden on local governments and taxpayers.

Lastly, ADT metrics have environmental implications. High traffic volumes may be associated with increased air pollution and greenhouse gas emissions, which can harm both public health and the environment. By monitoring ADT, agencies can pinpoint areas with excessive congestion and explore strategies to reduce traffic and its environmental impacts. This strategy supports sustainability and emphasizes the linkage between transportation planning and environmental management.



## City of Midland Inset Map - Average Daily Traffic

