Transportation & Mobility Stephen S. Rolle, P.E., Commissioner

76 East Worcester Street, Worcester, MA 01604

P | 508-799-1300 x49500 mobility@worcesterma.gov

DTM Report: Evaluation of "No Parking Anytime"

4 Short Street June 20, 2023

Petition: Joanne Troiano request installation of "No Parking Anytime"

signage on Short St. (# 7e CC February 7, 2023)

Scheduled Committee Hearing: June 21, 2023 Traffic & Parking Committee, Item 4a

Prepared by: Todd M. Kirrane., Assistant Director

The petitioners have requested the installation of a posted No Parking Anytime sign opposite the driveway of 5 Short Street to facilitate the entry and exit from their property.

Short Street is classified by the Massachusetts Department of Transportation (MassDOT) as an Urban Collector roadway under City Jurisdiction. The roadway is approximately 18 feet curb to curb, is 270 feet long, generally runs in a northeast-southwest direction, and provides a connection between Massasoit Road and Sunderland Road. Short Street is one way northbound and provides one general purpose motor vehicle travel lane and on-street parking. On Street parking is unrestricted along both curb lines within the study area. The statutory (unposted) speed limit is 30 mph. Land use along this street is primarily residential. There are no sidewalks along the street, so pedestrians and other vulnerable users share the road with motor vehicles.

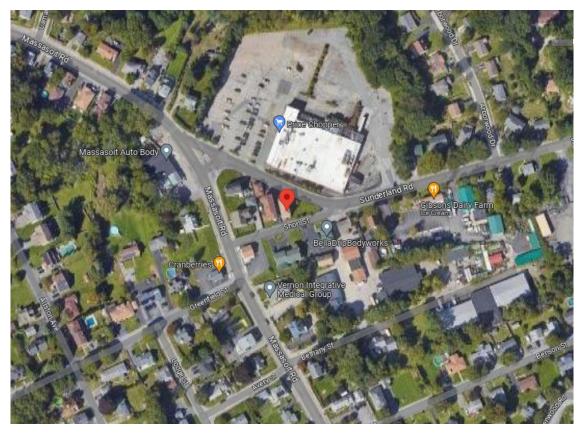




IMAGE 1: AERIAL VIEW OF STUDY AREA



IMAGE 2: STREET VIEW

Speed Study

A speed study was conducted using StreetLight Insight vehicle volume data. StreetLight vehicle speeds are calculated by StreetLight's machine learning algorithm. The learning algorithm gathers anonymized location records from smart phones and navigation devise in connected cars and trucks. The data is processed using StreetLight Route Science algorithm which uses the location data points over time into contextualized, aggregated, and normalized travel patterns.

The unposted statutory speed limit for Short Street is 30 mph per Chapter 90, Section 17 of the Massachusetts General Laws. To evaluate the incidence and severity of speeding, two measures are evaluated. The *average speed* is as the name implies, the average or mean speed of all travelers on a particular roadway segment. The 85th percentile speed is the speed below which 85% of the vehicles on the road are traveling (conversely, 15% of drivers are traveling faster than the 85th percentile speed). The results for 2021 data are an Average Speed of 20 mph and an 85th percentile speed of 31 mph. These speeds are within expected limits for a residential side street in an urban setting.

Traffic Volumes Daily Traffic

A traffic volume study was conducted also using StreetLight vehicle volume data.

As reviewed earlier, Short Street is classified as an Urban Collector roadway under City jurisdiction by the Massachusetts Department of Transportation (MassDOT). This designation is based on the fact that it creates a connection, primarily used by westbound vehicles traveling on Massasoit Road traveling to Sunderland Road. A single lane Urban Collector roadway

typically carries 1000 to 4000 vehicles per day, on average. The results for 2021 data indicate an Average Daily Volume of 524 vehicles, which is within range for an Urban Collector Roadway, though more cars than the street would expect considering the narrow width, short length, and compact residential setting with only 5 residential structures.

Crash Summaries

In order to identify crash trends and safety characteristics for the study area, crash reports were obtained from MassDOT Crash Database for the latest five-year period available. There was only one reported crash on Short Street, in 2018, between a moving vehicle that side swiped a parked vehicle. The crash data does not indicate an elevated level of collisions along the street.

Conclusion

DTM staff is concerned that the narrow width of the roadway, only 18 feet curb to curb, has the potential to be constrained to a width that is not passable for emergency vehicle access when motor vehicles are allowed to park on both sides of the street.

Recommendation: Based on the existing parking regulations, staff observations, demonstrated safety concerns for emergency vehicle access DTM staff recommends the following:

Establish a NO PARKING ANYTIME zone for the entire length along the western curbline (even number) for safety and access purposes.