



TOWN OF WELLESLEY TRAFFIC COMMITTEE

Background

While it is true there is a long history of concerns and study at this location, that does not mean there has been inaction. In complicated traffic situations such as this, the Town relies on professional advice from outside traffic engineering consultants. In this case, there have been several studies undertaken over the years that highlighted the uncomfortable geometry of the roadway but that only recommended changes such as striping and signage. The town has followed the recommendations of consultants that specialize in traffic engineering and safety during past reviews.

The studies have consistently pointed out that a traffic light is either not justified or only marginally justified based on recognized traffic engineering standards. The studies generally state that a traffic light will improve the function of side streets, aid with pedestrian activity, but may not reduce crashes and will result in extended queues. Discussions with professional traffic consultants have highlighted the awkward geometry of the location and the heavy commuter traffic patterns. In this case, the layout of the surrounding properties does not provide a reasonable solution to altering the layout of the intersection. Addressing one situation will likely cause the worsening of a different situation.

Police For Traffic

There are seven elementary schools that all have their own challenging traffic patterns at pick up and drop off. The Police Department already assists with road crossing when crossing guards are unavailable for their shift. Staffing levels do not provide adequate personnel to assist individual schools with traffic circulation issues on a daily basis.

Crosswalk at Hastings Street

There is not a crosswalk across Cedar St at Hastings St due to the geometry of the intersection. The intersection is too busy with poor sightlines to place a crosswalk. The crosswalk is intentionally down the street at the rear of the school because that location offers good sightlines from both directions. That location is all equipped with a flashing beacon to notify drivers of pedestrians in the roadway and a crossing guard to help students crossing during school hours. Individuals should not be attempting to cross Cedar St near Hastings, they should use the crosswalk at the rear of the school that was designed with safety in mind.

Rates of Speed

We have collected the speeds of vehicles travelling on various points of Hunnewell St numerous times. We have data from 2022, 2020 and can look back to 2005 for comparison. The data is consistent and shows that speeds on Hunnewell St in the vicinity of the Cedar St intersection averages 25 mph with 85% of the vehicles travelling at 30 mph or less. The 85% statistic is of particular note, as traffic engineering

practices use the 85% speed as one of the markers for what a roadway speed should be when developing speed limits. 30 mph is the speed limit of all thickly settled residential streets by state statute, so the speed limit and actual speed are in alignment even though it may seem much faster because of the roadway geometry.

Speed Bumps

The Town of Wellesley has experimented with speed bumps, speed tables and other vertical elements that are intended to reduce traffic speeds in the past. Our experience is that while vertical elements were somewhat effective at reducing speeds, they are not completely effective and they caused several undesirable results, including noise, increased exhaust, road debris and vehicle damage. After our pilot tests the Town developed a policy to eliminate the installation of vertical elements on public roadways. Even without this policy a primary corridor like Hunnewell / Cedar with over 7,000 vehicles per day would not be an advisable location for vertical elements like speed bumps.

Mirrors

The Town relies on a combination of roadway geometry, roadside management and speed regulations to meet minimum safe sight distance requirements for intersecting roadways. Traffic studies that we are aware of indicate that mirrors have limited benefits and require specific angles, very slow speeds and close proximity to have any effectiveness. We have only allowed mirror use in very specific, limited conditions and only after an assessment of the benefit and liability. A mirror is not a solution at this location based upon the sight distance, speed and volume of vehicles.

Roundabout

Although a roundabout would address many of the issues at the intersection it would require a large land taking by the Town. In order to create the appropriate geometry for a roundabout the Town would have to take land from six different homeowners, some of which would cause significant infringements onto their property. This does not feel like a viable option at this time.

Hastings St Connection

The site plan approval for the Hastings Village project created the physical disconnection of Hastings Street. Current street grades make rejoining the road and maintaining the existing driveways and parking areas almost impossible. Further reconnecting the road will create a traffic cut through that is broadly considered as undesirable to the surrounding neighborhood.

20 MPH School Zone

A 20 mph School Zone may only be designated on property that directly abuts the school.

Flashing Warning Light

Hunnewell St and Cedar St are commuter collection roads, leading to and from Route 9. As such, much of the traffic that travels on the road travels it regularly. A flashing yellow light or warning beacon might help warn drivers who have never been in the area to pay attention, but it would likely have no impact to the majority of traffic. Drivers who regularly drive the section of roadway know the geometry of it and are not going to change their driving behavior because there is now a yellow light flashing. It would likely have little to no effect.

Make Hastings a One-Way

Making Hastings Street a one way road from Cedar St to towards the Fiske School would create less overall traffic at the intersection, since there would no longer be exiting traffic. It would remove the uncomfortable turn exiting Hastings St, thereby removing the most difficult sightlines for turning. In doing so it would force the residents of the street to leave their homes only in one direction and it would force school traffic onto Sheridan Rd and the surrounding streets. It would also increase the volume of traffic that had to exit via Oakland St, another uncomfortable intersection, but one with better sight lines.

Conclusion

The Traffic Committee feels that there are limited options to mitigate concerns at this intersection. The geometry of the intersection is less than desirable and it makes people uncomfortable when navigating it, particularly to/from the minor legs. Fully signalizing the intersection would address the uncomfortableness in entering and exiting from the minor legs (Hasting/McLean), but it brings other issues. The sightlines are poor for traffic approaching a red light from Hunnewell St and would require an advance notice red light signal prior to the intersections main signal lights. Stopping for the light with poor sightlines could cause an increase in rear end collisions. Traffic backups from the light will impede residents close to the light from entering and exiting their driveways during commuting hours. There will be an increase in emissions from vehicles having to stop and que.