



## **TRANSPORTATION ADVISORY COMMITTEE.**

Arlington Planning Department,  
730 Mass Ave, Arlington MA

Date: October 11, 2023.

To: Select Board.

From: Transportation Advisory Committee.

Subject: Recommended Changes for the Wachusett – Appleton Intersection

### **Memorandum**

#### **1 Background**

A question was raised by a resident asking that the town investigate traffic behavior at this intersection. Specifically to investigate traffic rolling through the Stop signs.

A prior planning activity resulted in a proposal for this intersection on which no action was taken. As a part of this activity that proposal was examined and rejected as not sufficiently addressing the core issue.

#### **2 Summary Observations**

- Intersection presents drivers with a huge expanse of asphalt
- 6 feeder legs, five with stop signs and one does not (Appleton Eastbound)
- Drivers routinely slow but do not stop, preferring to roll out into the intersection
- When a second car is present, drivers stop
- When a pedestrian is present, drivers stop
- When more than 2 cars are at the intersection, drivers cautiously roll into the intersection – feeling out who has the right of way
- Once traffic proceeds, it uses the expanse of pavement without clear lanes
- Traffic behaves reasonably from a speed point of view
- Very few accidents - most recent in 2017 and only 4 in the last 20 years

### **3 Recommendations**

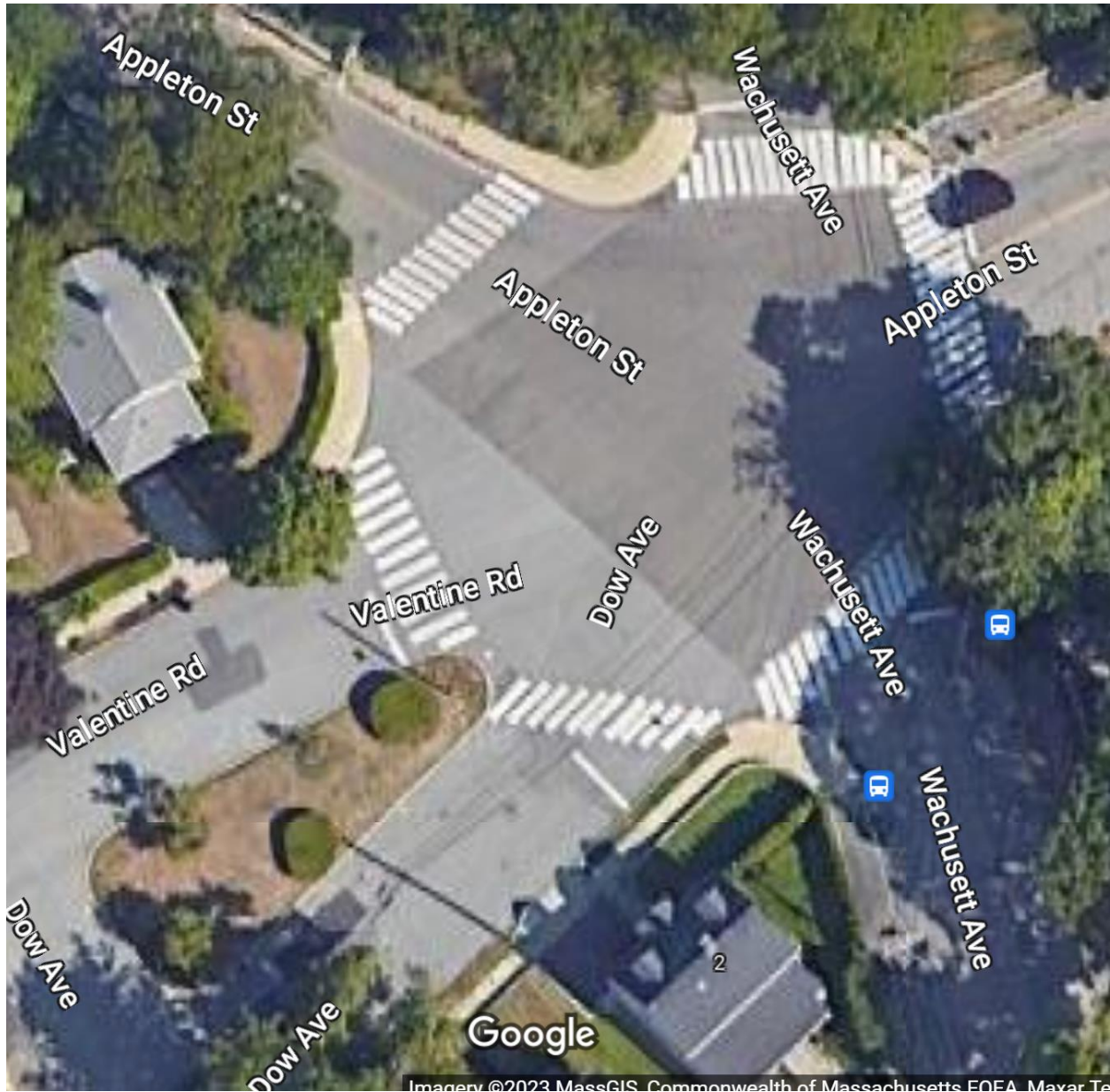
- Add a Stop Sign to Appleton Eastbound
- Add ALL WAY Plaques per MUTCD section 2B.05 (R1-3P) under the Stop Signs at all approaches
- Add a Stop Ahead sign before the new Stop Sign
- Add a stop line painted in the road before the new Stop Sign

Two proposals were made (square off the intersection or install a rotary) but were tabled due to the low traffic volumes and high costs associated with these.

Request that DPW review options the next time this area comes up on the regular schedule.

**Detailed Observations:** Four one hour sessions were spent observing this intersection on foot as well as multiple drives back and forth through each leg of the intersection.

**Images:**



## Detailed Observations:

Walking observation dates and times:

- 8/1/22 10:00 to 10:30 AM
- 8/2/22 – 7:30 to 8:15 AM
- 8/3/22 – 4:30 to 5:15 PM
- 3/3/23 – 1:00 to 2:00 PM

Walking observations:

- Huge expanse of asphalt with good visibility except as noted below for Appleton eastbound
- Traffic was light during morning and noon observation periods and moderate/light in the afternoon rush
- Should revisit after school starts in the fall
- Very few pedestrians other than myself (10 or fewer)
- No children
- The only serious safety issue is related to Appleton coming eastbound – there is no stop sign there. Due to the layout of the intersection and plantings traffic is entering at speed and cannot see the pedestrians just entering the crosswalk or the traffic coming up Valentine after the stop sign
- Traffic flows well and self regulates well
- As volume increases, there is more hesitancy on the part of drivers trying to look at 5 different directions at the same time!
- Single cars entering the intersection - >90% of the time do not come to a complete stop
- Come through slowly with a rolling stop to see if all clear then go
- Can easily stop as needed – see below
- More than one car or a car and pedestrian at the intersection - >90% come to a complete stop to self-regulate auto and / or pedestrian flow
- The evening rush time is a little more chaotic
- People pull out and stop past the stop line to get better visibility and then it is not clear who has right of way
- People entering from Appleton eastbound stop even though they do not have to

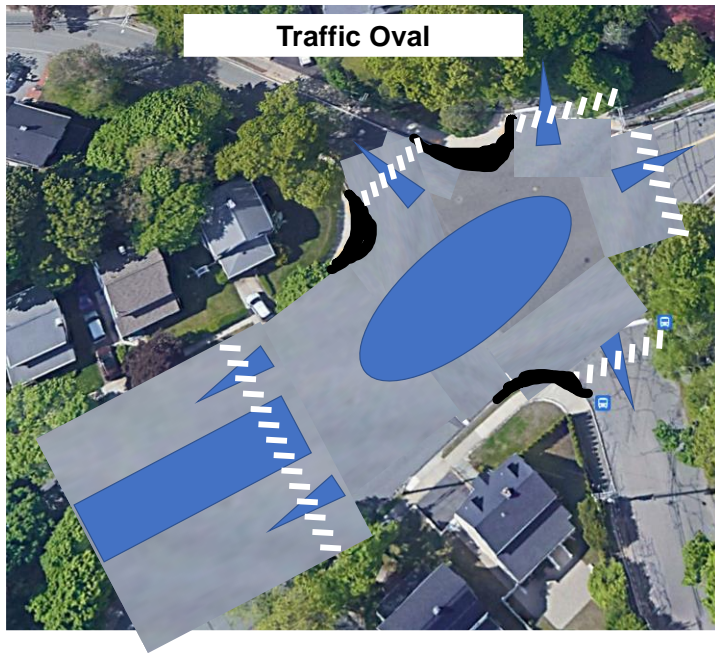
Driving observations (multiple drives):

- Drove through the intersection entering and exiting through every one of the six legs two different times: mid-morning and afternoon rush
- Overall traffic flows relatively smoothly and self regulates
- Visibility is good even for Appleton eastbound
- As noted above is that you have to look around a large area and assess who is moving or not before proceeding

10/11/23 Final

**Potential Solutions:**

Roundabout:



Square off intersection: