

Purpose of study was to identify the effects of restricting School Street traffic flow on the area roadways and intersections.

The scope of study included a review of V/C ratios and LOS at the intersections under the following:

- Existing conditions – 2022
- Opening year conditions without modifications (2027 No-Build)
- Opening year conditions with modifications (2027 Build)
 - i. Closing School Street Scenario 1
 - ii. Temporary Closure of School Street 7:00 AM – 3:00 PM Scenario 2
 - iii. School Street one-way EB Scenario 3
 - iv. School Street one-way WB Scenario 4

These time frames and scenarios were understood as those identified and requested by the School Building Committee and Traffic Division of Brookline DPW



StreetLight Trip Types

- i. Home-Based Work – Travel between home and work in either direction
- ii. Home-Based Other – Travel to and from the home, to anywhere other than work
- iii. Non-Home Based – All travel not to or from the home

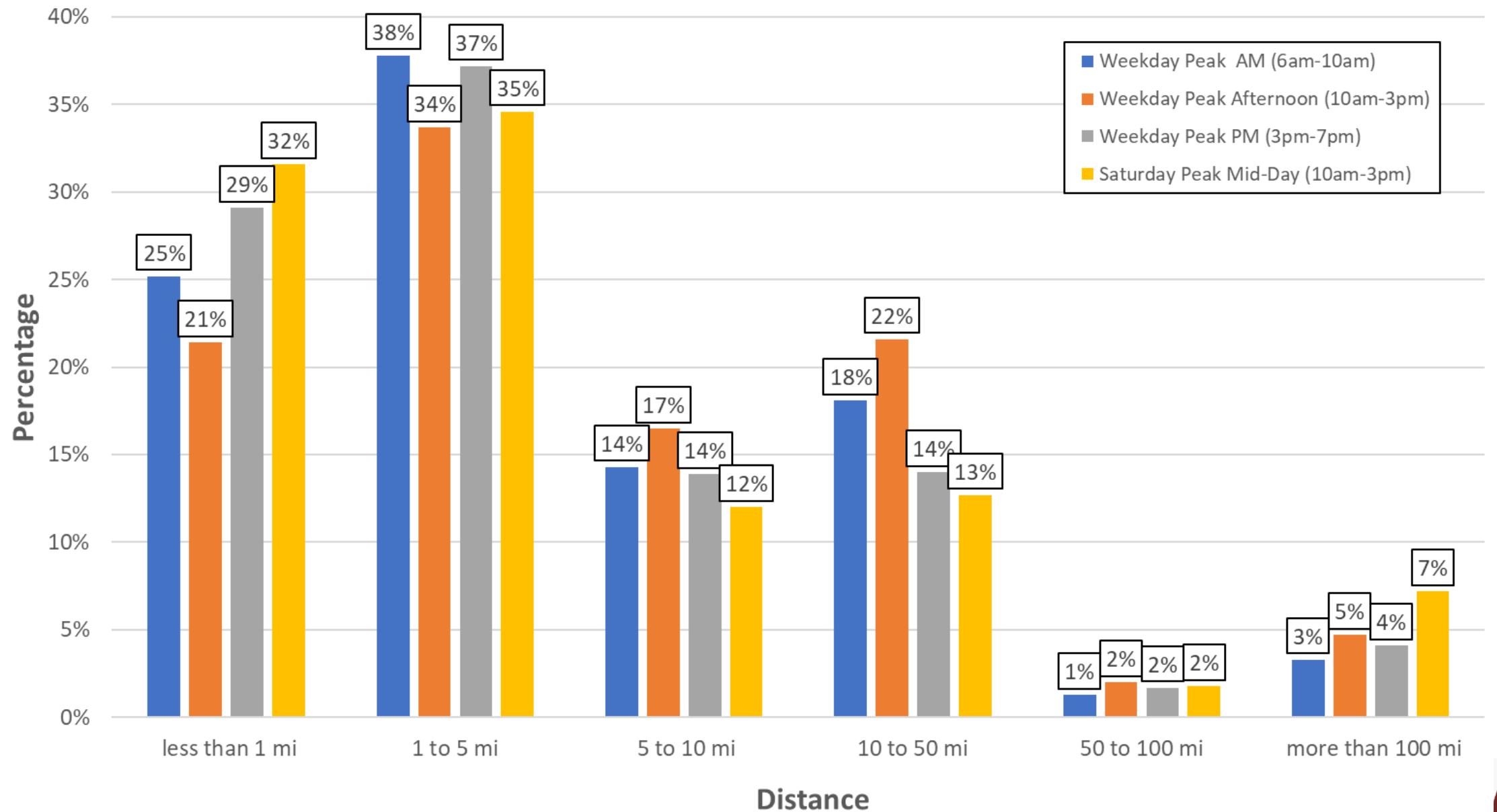
Trips are calculated using GPS and Location Based Services (LBS) data and cross-referenced against traffic data from area traffic counts.

Requests for data are sent to StreetLight for processing, and StreetLight weighs the request against privacy regulations, particularly due to the proximity of the Pierce School.

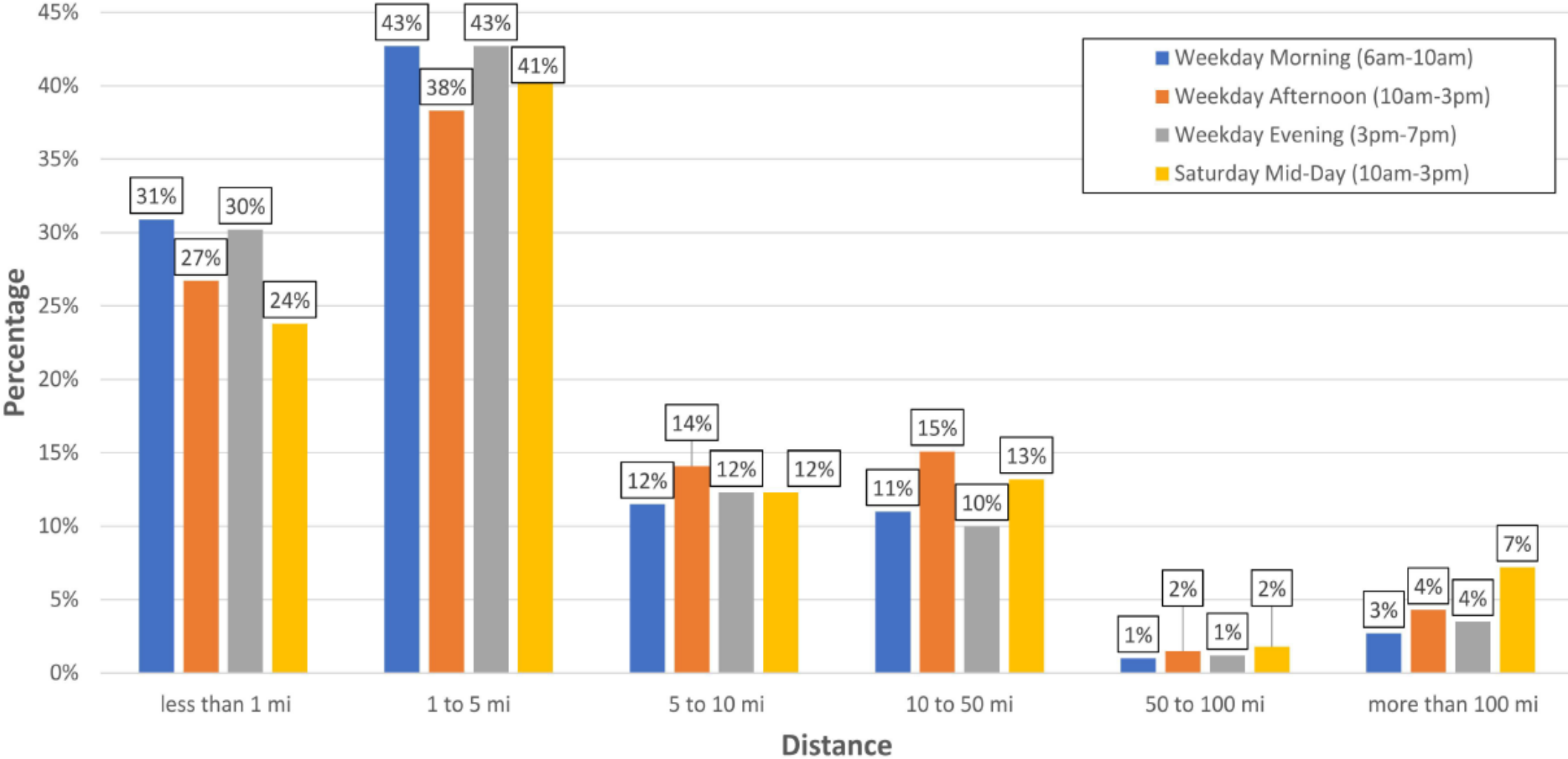
This limited the 'ask' for data to focus on trips passing through on School Street.



Home



Work



Primary purpose of study was to identify vehicular impacts of the proposed restrictions to School Street within the study area, and how they relate to pedestrian and bicycle movements.

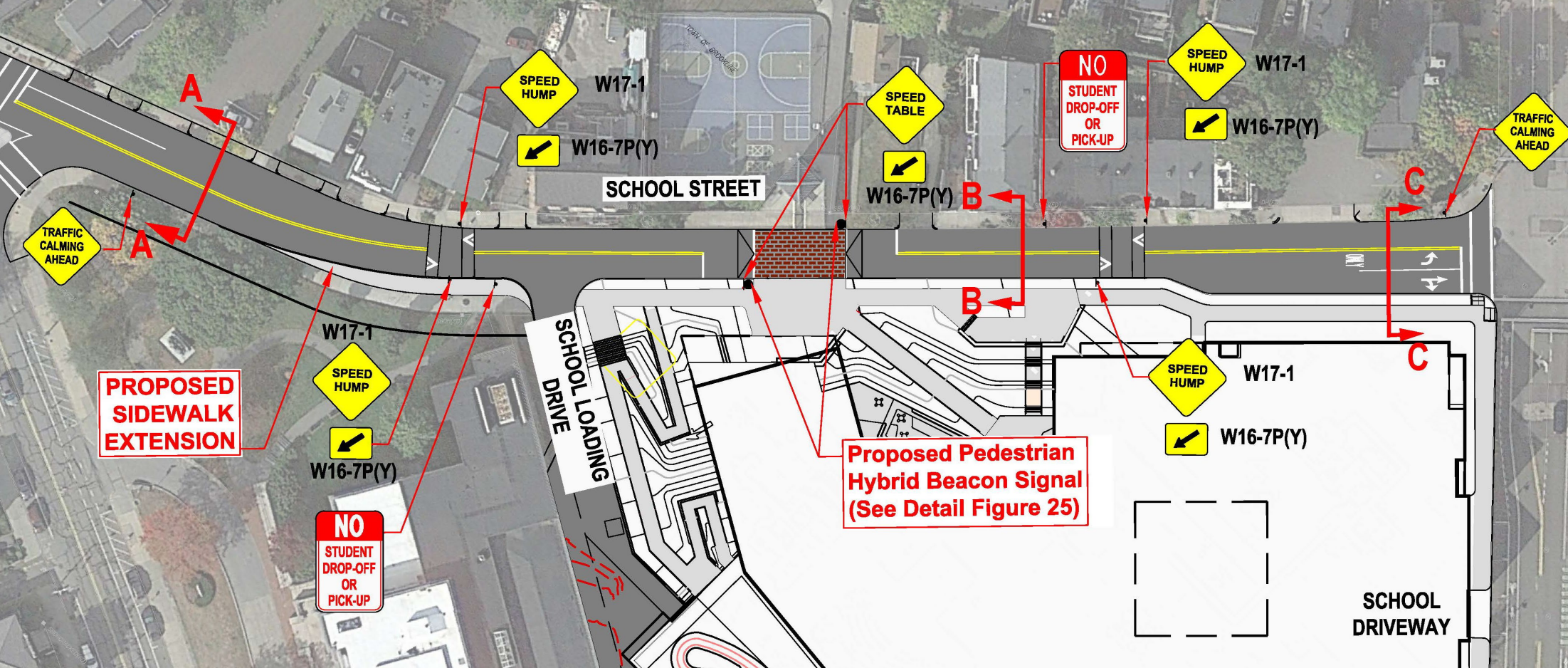
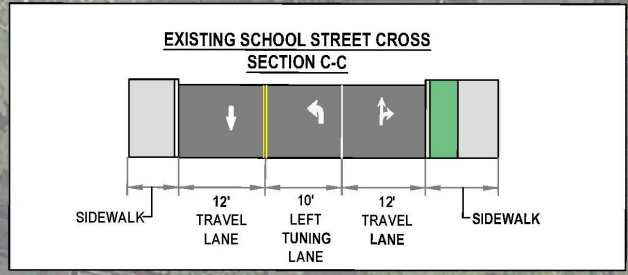
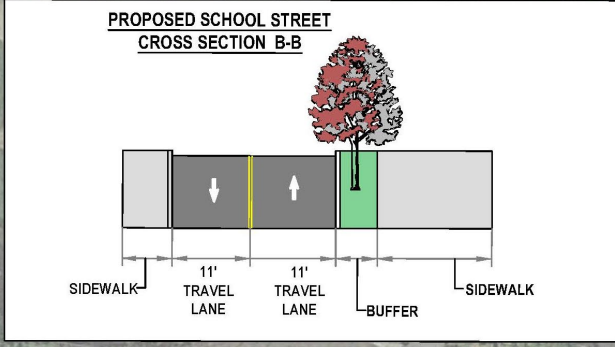
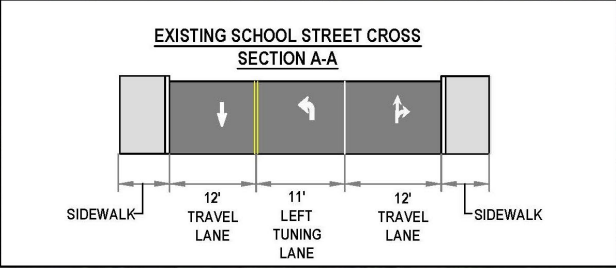
The proposed design for School Street prioritizes pedestrian safety by narrowing the road to provide the shortest crossing distance possible for students. However, if the town chooses to prioritize bicycle movements, one option would be the installation of dedicated bike lanes. These were initially considered as a design alternative.

Bike sharrows were one option mentioned as a possibility for School Street to increase awareness of bicycle use on the road due to limited road width under the current design.



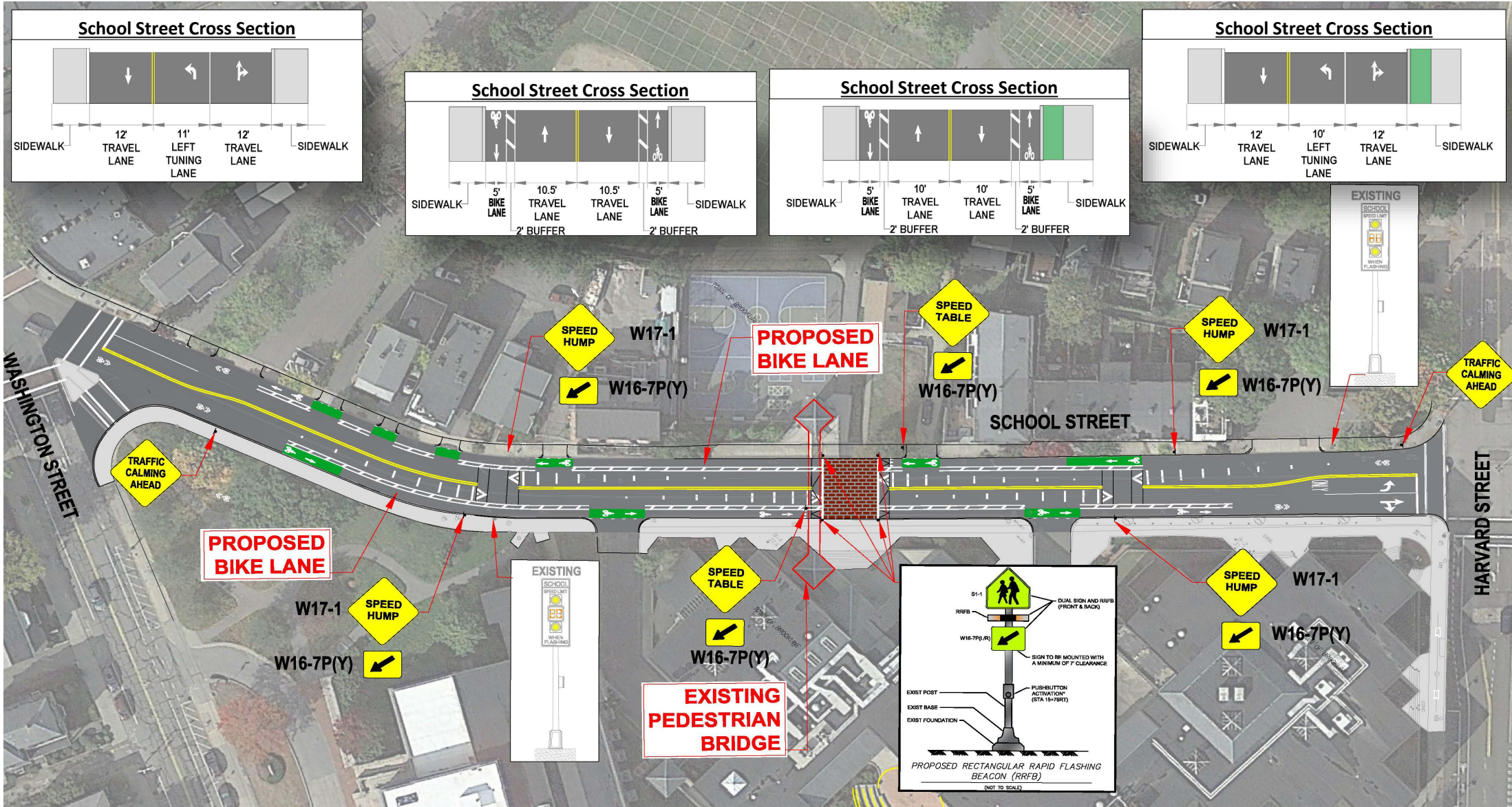
WASHINGTON STREET

HARVARD STREET



Current Conceptual Improvement Plan

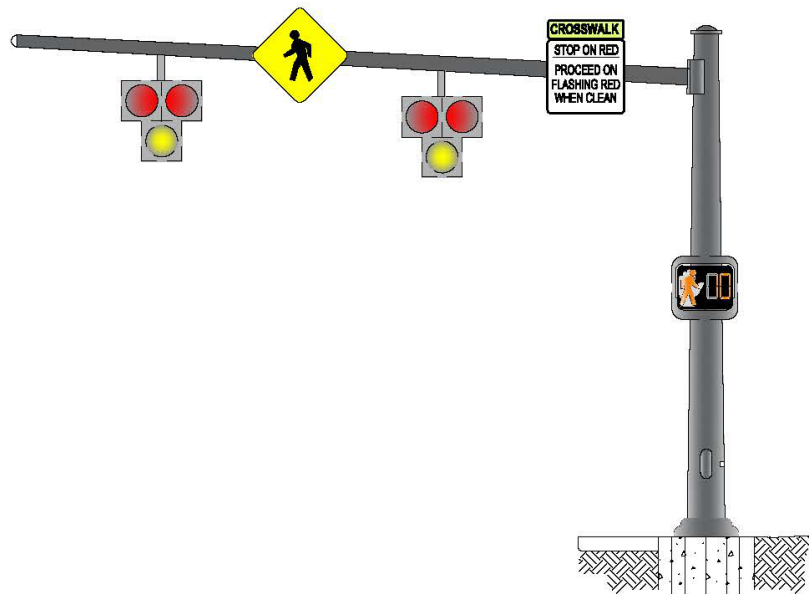




School Street Bicycle Lane Concept



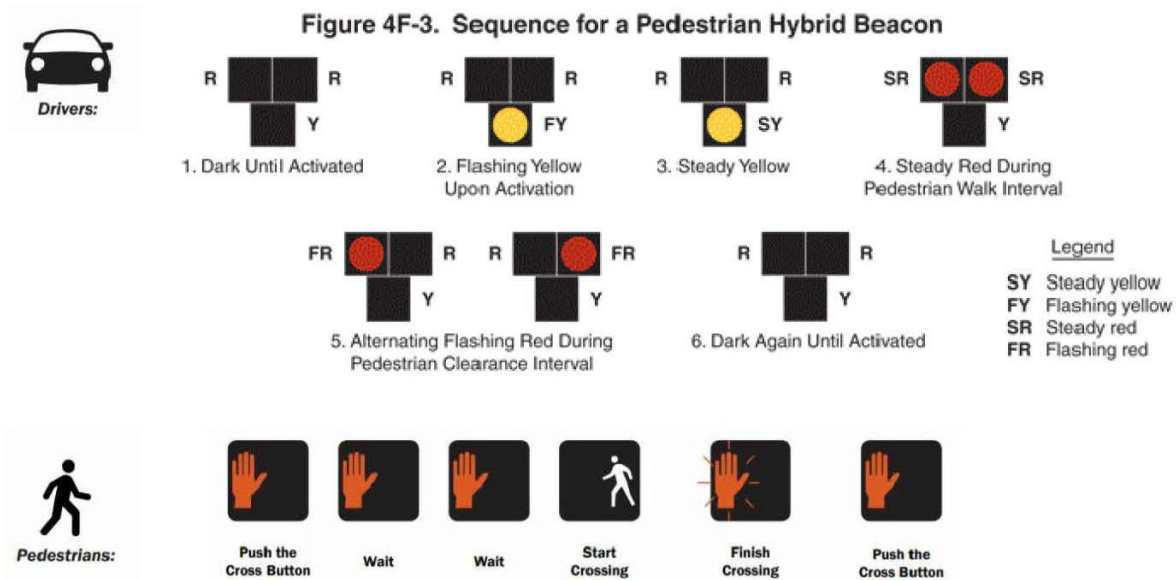
Comments: “HAWKs not recommended for urban environments with frequent ped crossings”, “ pros and cons of ped-activated flashing signal vs full signal”, “option of relying on kids not pushing button is not what we want”, “need studies of HAWK signals improving safety in densely developed urban areas such as north Brookline”



HAWK SIGNAL
Not to scale

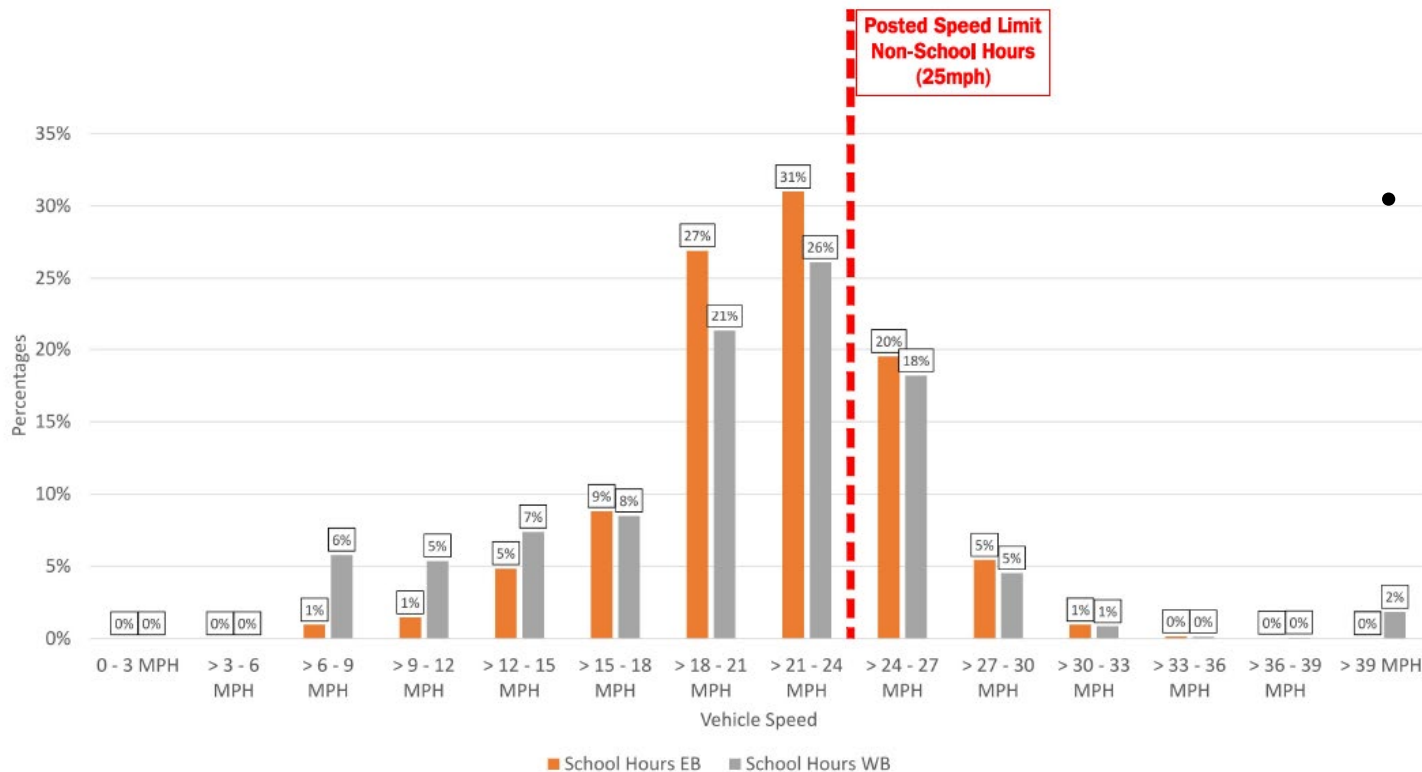
Responses:

- HAWK signal is similar in operation to full traffic signal with red indication provided to vehicles
- Based on student activity, a full traffic signal may be warranted for installation
- The majority of use would be expected during midday when traffic is lower on School Street
- Specific HAWK signal studies such as has been requested will require additional investigation



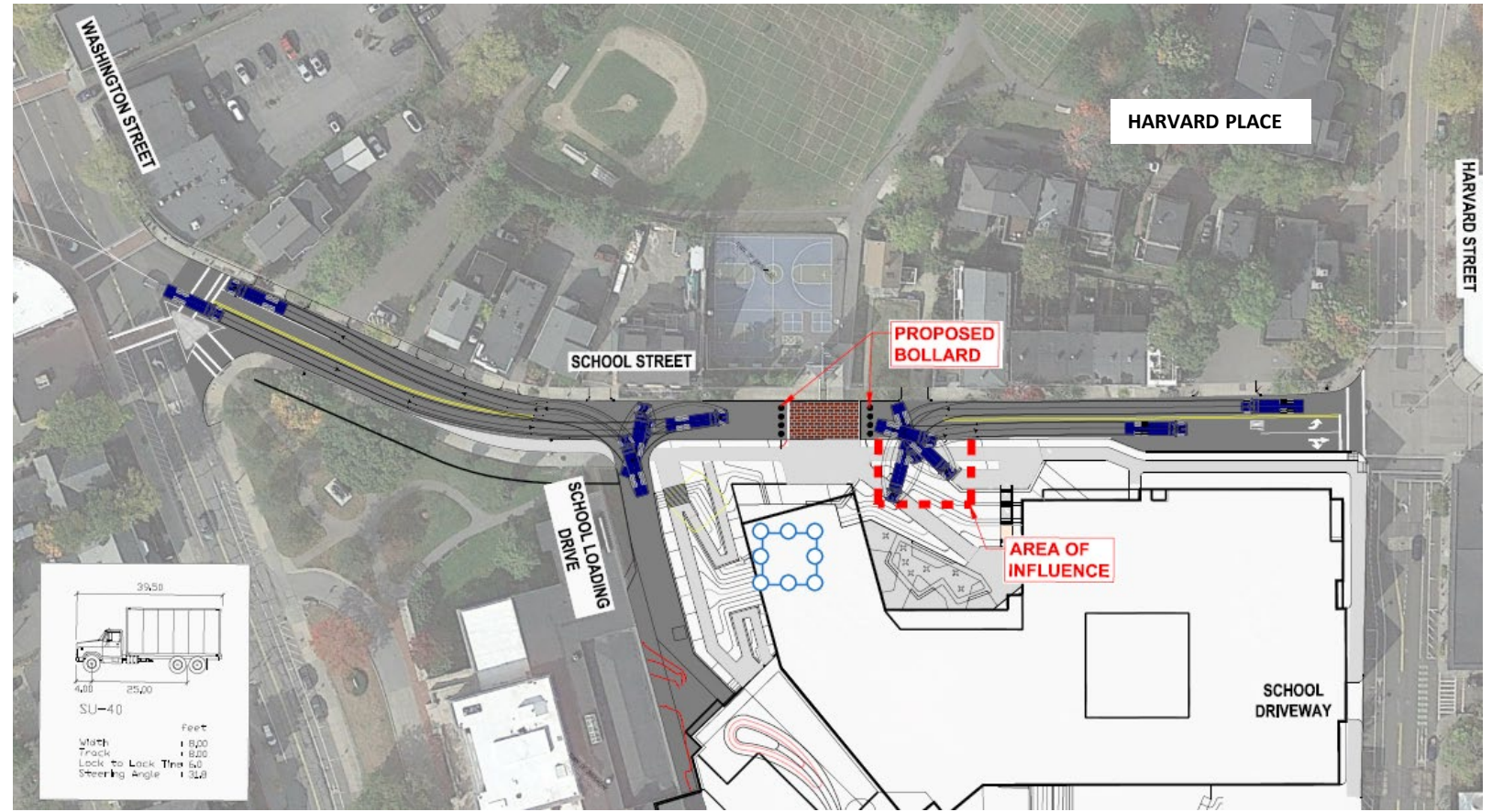
Comments: “too much traffic to speed”,
 “85th percentile speed is only one factor for
 speed limits”, “DOT no longer recommends
 using 85% since 2017”

- We acknowledged that there are vehicles traveling at a much higher rate, and this is not acceptable.
- The 85th percentile speed is still used as a basis for setting speed limits by MassDOT. It can be adjusted downward but not more than 7 mph.
- The proposed speed humps have a proven effect in reducing vehicle speeds. Data from NACTO indicates speed humps can reduce speeds 22 percent, which would drop the 85th percentile speed to 19.5 mph and the average speed to 17 mph.



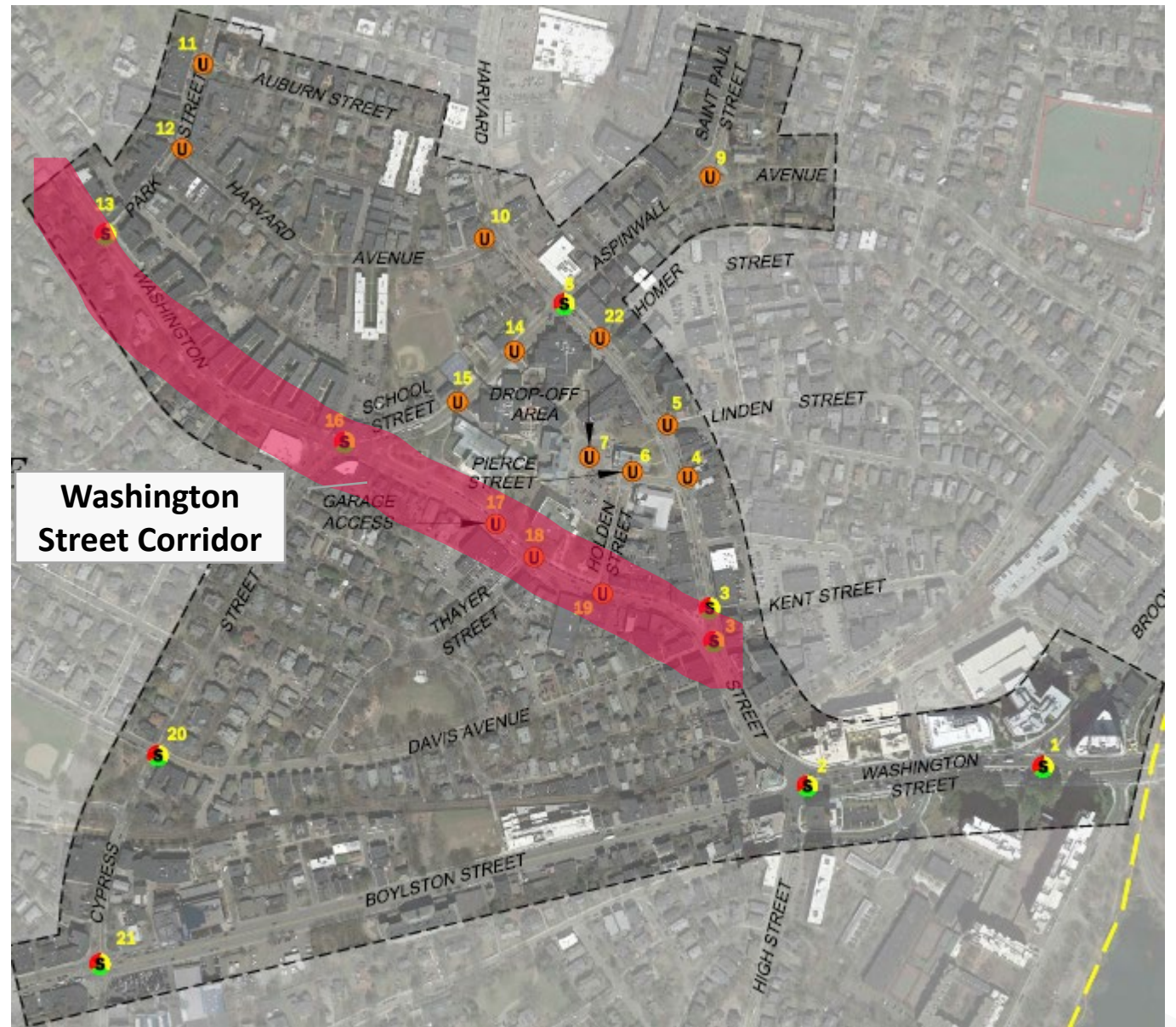
Comments: “...an urban area without cars should be created...”, and “trucks can back into School Street like they do on Harvard Place”

- Focus was on presenting the least impact to area users.
- Trucks reversing into School Street would be backing in through a signalized intersection with crosswalks and a minor street which is a different situation than Harvard Place, with more potential conflict.



DPW indicated that the Washington Street Redesign was proceeding on a different timeline than the school project and improvements identified in the draft Functional Design Report would likely change. Therefore, no improvements to Washington Street were included in the study.

It is not likely that changes or improvements to Washington Street would affect the study conclusions, since the conclusions are based on the impacts of the School Street restriction on 22 intersections, not just the 6 on Washington Street.



Questions?

