

Codman Academy Charter School Report

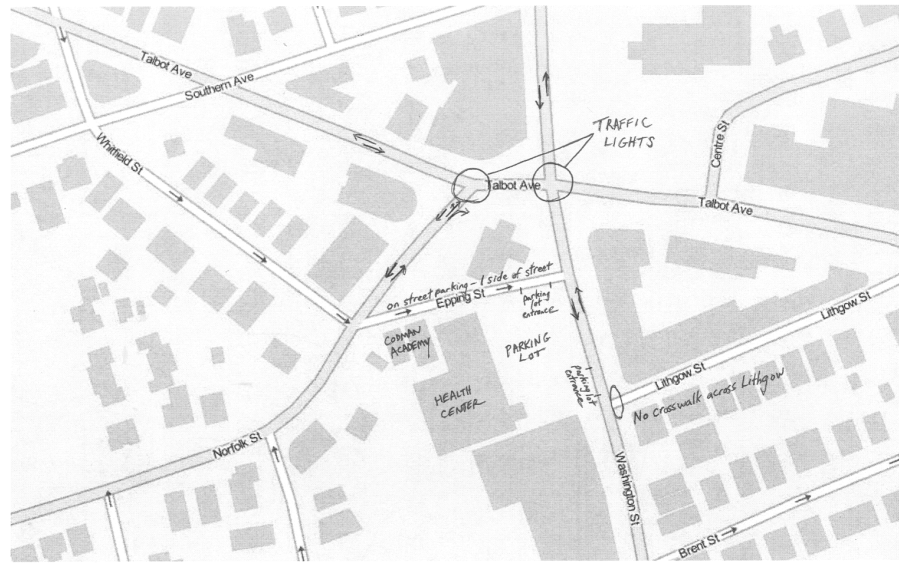
January 24, 2015

Purpose of this Report

In 2014, a student was struck and seriously injured on Epping Street, a one block, one lane roadway bordering the Codman Academy. The 9th grade student got off an MBTA bus and started walking across Epping Street and was hit by a car. The student was hospitalized.

Epping Street is a one-way street used by drivers to avoid traffic signals at Norfolk and Talbot. This usage represents safety hazards for the students and faculty at Codman Academy. This report looks at the safety benefits of closing Epping Street.

Information for this report was collected and analyzed by 10th grade students at Codman Academy as part of their physics and math classes in the fall and winter of 2014-2015. They were assisted in this effort by staff from WalkBoston, a non-profit walking advocacy organization.



Codman Academy - Context Map
January 16, 2015

Introducing Codman Academy

The Academy, established in 2001, is a charter school within the City of Boston. Approximately 270 students in the Lower School (K1, K2, 1, 2, 5, 6) and Upper School (9 – 12) attend the Academy. The school day is 8 hours and the school week is six days, Monday through Saturday.

The Codman believes in, and is very passionate about strengthening students' physical, mental, and emotional states and supports its students with extra curricular classes and multiple

partnerships like The Huntington Theatre Company and YMCA. The staff and faculty are very involved and professional, providing role models for their students for whom they show the utmost care. The college acceptance rate for Academy students is 100%.

Academy students live in Dorchester, Roxbury and Mattapan and walk to the Academy or commute by bus or train.

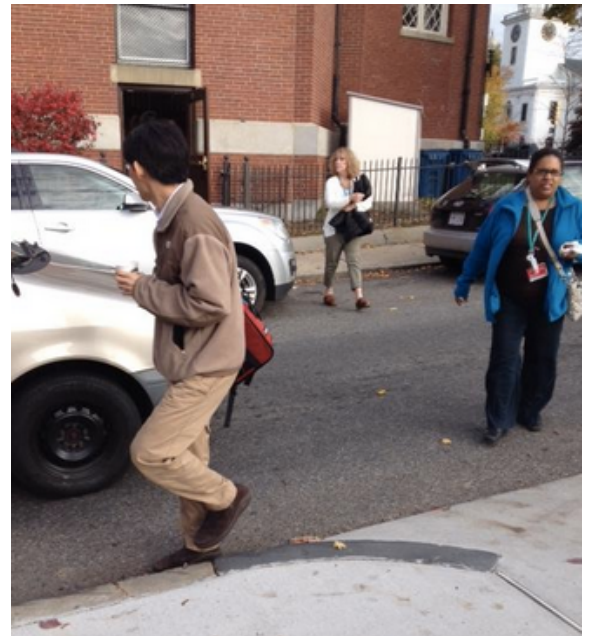
Academy Setting

The Academy is located within Codman Square, a bustling commercial area of small shops, several non-profit organizations and the Codman Health Center that is adjacent to the Academy and has 110,000 patient visits per year. The area is well served by public transportation: three bus routes (#22, #23 and #26) and two rail lines, Talbot Station on the Fairmount Line and Shawmut Station on the Red Line.

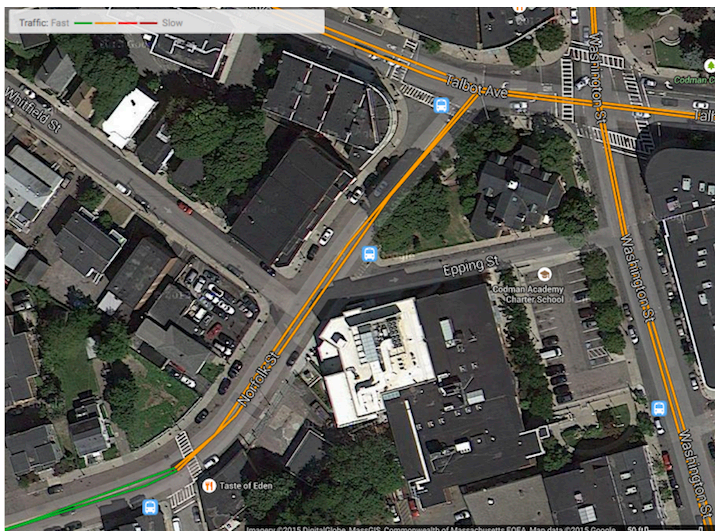
Academy's Vision for a Cohesive Campus

Historically, Codman Square has been a high pedestrian accident location. Pedestrians and cars move through Codman Square with limited congestion. However, the design of most intersections—wide curb radii, the lack of automatic WALK signals and only modest crosswalk markings—makes street crossings on foot both slow and unsafe.

Codman Academy is expanding to a K-12 program that will serve 345 students. Classrooms and support programs require that the Academy expand beyond its current facility to the Lithgow Building on Washington Street (directly north of Epping) and the Great Hall, across Epping Street. The Academy is seeking a campus-like setting for its students and staff that will facilitate safe and convenient walking amongst the various school buildings.



Moving through Codman Square



Typical weekday traffic at 8:30 AM

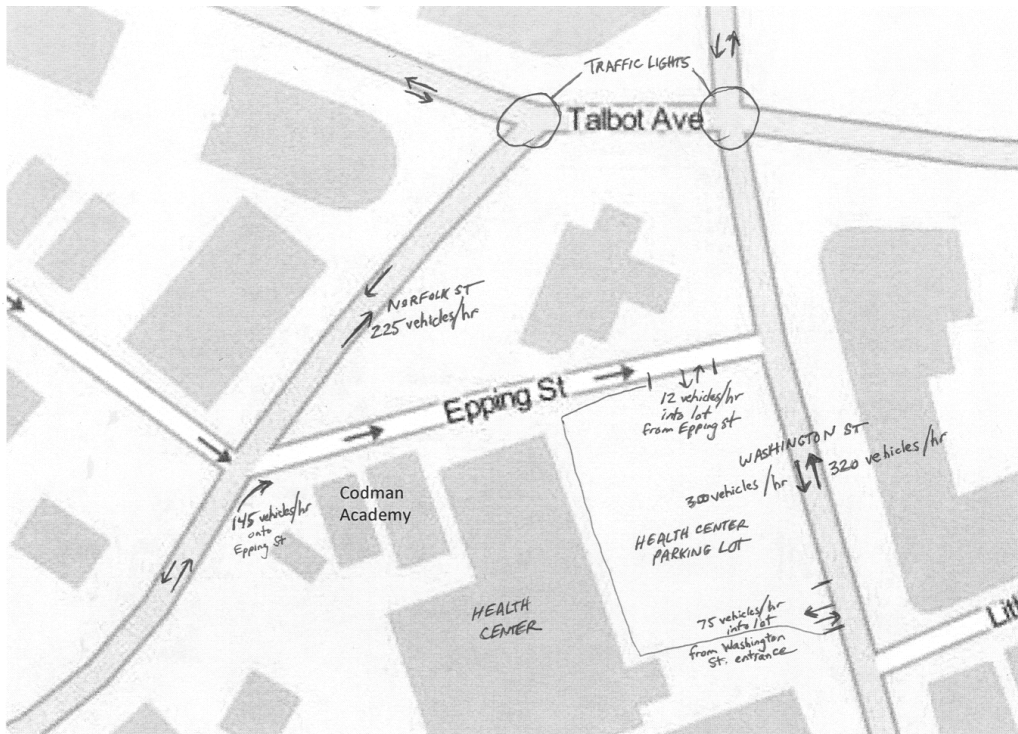
Traffic Volumes and Circulation

Students undertook speed and traffic counts on Friday, October 31, 2014. Counts were taken in the late morning; weather conditions were bright and clear. Estimated hourly vehicle volumes are based upon student counts. As shown in following table traffic is heaviest upon Washington Street, an estimated 300 – 320 vehicles per hour.

Table 1
Vehicle Traffic Near Codman Academy

Vehicle Volumes	Vehicles Per Hour	Speed
Norfolk, headed to Talbot	225	19 mph
Norfolk traffic turning unto Epping	145	17 mph
Epping traffic turn Health Ctr Parking	12	N/A
Washington turn to Health Ctr Parking	75	22 mph
Washington, south to Brent	300	23 mph
Washington, north to Talbot	320	22 mph

After collecting data, the students added it to maps for a better overview:



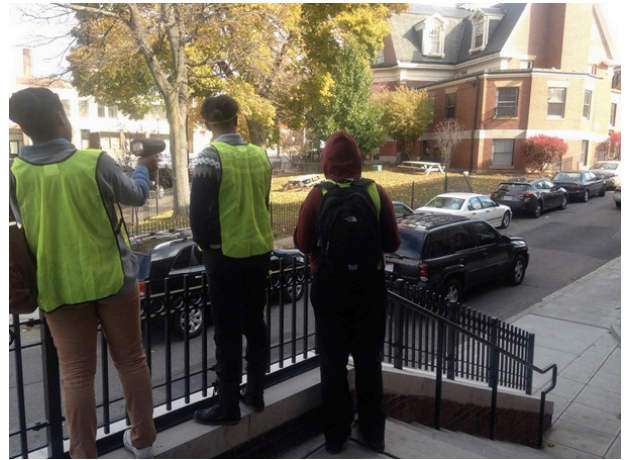
Codman Academy – Traffic Patterns

January 16, 2015

The students reported:

“Our class collected the Vehicle Volumes on Norfolk Street, Epping Street, and Washington Street. We tallied the vehicles per hour and the average speed for each vehicle. On Washington Street, 320 vehicles passed per hour, with an average speed of 22 mph. In the south direction of Washington Street, 300 vehicles per hour came with an average speed of 23 mph. Norfolk has the second highest number of vehicles - 225 vehicles per hour with the average speed of 19 mph.”

Traffic on Epping Street was much higher than anticipated, 90 vehicles per hour in late morning and 145 vehicles per hour between 8 am – 9 am when students are arriving at the Academy. Students and WalkBoston staff who observed driver behavior saw that drivers headed north on Norfolk who observed a red traffic light at the Norfolk/Talbot intersection abruptly and quickly turned right on Epping in order to avoid the traffic light and access Washington Street stopping. There is also a signal at Talbot and Washington. Drivers coming east to Norfolk from Whitfield Street also drive up Epping.



Students measured the speed and counted vehicles on Epping Street while standing on the front steps of Codman Academy

Student observers noted that very few Epping vehicles turned into the Health Center Parking Lot (about 12 per hour). The number of parking spaces in the Health Center lot is very limited (32 spaces) and these spaces are accessible by two entrance/exits on Washington Street.

There is parking on both sides of the two-way streets, but on Epping Street there is parking on only the left side of the street. There is also parking at the Codman Square Health Center. There are traffic signals at Norfolk/Talbot, and Talbot/ Washington Street.



Wide turning radius from Norfolk Street onto Epping Street with faded crosswalk. Front door to Codman Academy is on the right.

Survey Findings

When the Codman Academy conducted a survey of pedestrians in the area on December 12, 2014, they found that 45 out of 98 respondents lived in the area and 62 had arrived on foot, bicycle or public transportation; only 33 respondents drove to the area. As noted elsewhere, local pedestrian street crossings are difficult and involve considerable delays waiting for breaks in vehicle traffic.



Students interviewed neighborhood residents about traffic safety.

Survey respondents reported that Epping Street is a short cut for the pedestrians and an easier way for area commuters to get to work. However Codman Academy students and teachers feel that Epping Street should be closed for safety's sake and that the any delays caused by the closing of Epping Street would be negligible.

Some of the pedestrian surveyed said that they are patients at the Codman Health Center or they work there and they need access to Epping Street in order to get into the parking lot. But there is parking lot access from Washington Street, as well.

Summary

Codman Academy and WalkBoston strongly feel that Epping Street should be closed and the campus extended across Epping Street both to improve student and staff safety and to create a more cohesive campus.