

Introduction

As part of the Safe Routes to School non-infrastructure grant program administered by the Connecticut Department of Transportation, staff from Fitzgerald & Halliday, Inc. (FHI) provided a general Safe Routes to School program overview presentation to members of the Haddam Elementary School (HES) Parent Teacher Association in Haddam, CT on April 11, 2011. In addition, after speaking with the members of the school and community, FHI conducted a site audit of the school on the afternoon of May 5, 2011 to observe the dismissal activities.



HES is an elementary school with an enrollment of 256 students in kindergarten through grade four. Doors open in the morning at 8:30 AM and dismissal occurs at 3:20 PM. Based on parent and community observations and concerns, FHI team observed the dismissal period as this is when there are the most safety concerns near the school.

The observation of school dismissal focused on areas of concern for walkers and bicyclists. FHI explored potential improvements for those areas during the audit. This memorandum presents recommendations for engineering and operational improvements that will promote safe walking and biking to school. Any of these recommendations can be included in the school's Safe Routes to School Plan as it is developed.

Observations/Issues

Upon meeting with parents and members of the community, FHI was informed that one of the primary concerns was the safety of students walking along or trying to cross Route 154. During the site audit, both on and off campus activity was observed by the FHI team. On campus activity primarily involved issues related to pick-up/drop-off, while off campus activity was focused on the walking conditions along Route 154.



Students boarding the van and bus outside the all-purpose room doors.

On Campus Activity

A large percentage of students (40-60%) are transported to HES by bus. These students come from various locations in Haddam and Killingworth. Both towns are rural in nature and all students that attend HES are eligible for busing. Seven buses and one van were observed picking students up from HES during the dismissal period. Buses arrive individually (rather than all at once), enter the school driveway, and pull up to the school al-purpose room to retrieve students (see Figure 1). As each bus fills, it will leave out the other side of the one-way driveway. FHI observed no issues or conflicts with the bus loading procedures



Figure 1: School grounds.

All students exit the school through the all-purpose room doors. Those students that are picked up by parents must be signed out by those parents in the all-purpose room. Because the school lot is small, parents typically parallel park (essentially double park) behind the second row of parked cars in the lot. These short-term parked cars block the cars parked in the formal spaces for a brief period. Because of the relatively small number of vehicles, however, this does not appear to cause a large congestion problem in the parking lot.

In addition, parents and students walking to and from the parked cars from the all-purpose room walk through various areas of the lot. There is staircase between the two rows of parking and a crosswalk that connects this staircase to the front doors of the school. While it would be safer if more parents and students used this crosswalk, there did not seem to be a big safety concern for the pedestrians in the lot because of the relatively low traffic volumes. Because students are accompanied by adults in the parking lot, this situation, while not ideal, does not seem to pose a significant safety concern.

For those students who are picked up on foot and walk home, there are a number of challenges they encounter off campus, which are described in the Off Campus Activity section.

Off Campus Activity

HES is located on State Route 154 (Saybrook Road), which has one wide traveling lane in each direction with varying shoulder widths in the study area. The speed limit on this road is 35 miles per hour (mph), with the area in front of the school signed at 25 mph. Members of the school and community voiced concerns about the high speeds of vehicular traffic in front of the school. FHI observed very high vehicular speeds (easily twice that of the posted limit) on Route 154 in front of the school. Traffic heading southbound, which is heading downhill, had particularly high speeds as they were approaching the school and Higganum Village. The southbound approach also has a slight bend in the road before



Parents double park in the parking lot when there enter the school to sign out their children.



Families walking back to their parked cars.



Faded crosswalk at school exit driveway.

the school which limited visibility of the school environment.

There are two marked crosswalks across Route 154, one at the entrance driveway sidewalk and one at the end of the exit driveway sidewalk. The southern crosswalk (at the entrance driveway) is in good condition, while the northern crosswalk (at the exit driveway) is quite faded. There are no other pavement markings to notify motorists to the presence of pedestrians, especially school aged pedestrians or the school zone.

There is one crossing guard at the northern crosswalk (at the exit driveway) to assist pedestrians wanting to cross Route 154. The crossing guard also directed traffic at times, assisting cars and buses exiting the school driveway onto Route 154. While many of the drivers attempting to exit the school likely appreciate the guard's efforts, this is not the role of a crossing guard.

There is a sign assembly, about 500 feet before the school in each direction. These signs include a school warning sign and a 25 mile per hour posted speed limit sign. There are two blinking lights on each assembly that alert drivers to the signs during arrival and dismissal periods. In addition, there are two school crosswalk signs, with the downward pointing arrow, at each crosswalk (one in each direction). None of the school signs are retro-reflective.

FHI was told that there are less than 10 students who are walked to and from school. There is a desire on the part of many families to walk their students to school; however, the poor walking conditions along Route 154 prohibit doing this safely. In particular, FHI was told that there is a desire to be able to walk safely between the school and the Christian Hill Road neighborhood. There were only a handful of pedestrians observed walking home from school on the observation day.

Route 154 lacks an adequate sidewalk network. There are no sidewalks from the school to points north along Route 154. There are partial sidewalks to points south on Route 154. There are a number of destinations on the roadway that would otherwise be served by a sidewalk, these include: HES, the Higganum green, Higgies, the neighborhood off Christian Hill Road, and other retail /service establishments in Higganum Village.



Eastbound school sign assembly on Route 154.



School crossing sign.

Summary of Recommendations

Based on field observations of issues and discussions with the Haddam Elementary School parents and community, the following recommendations are offered to improve walking conditions and safety both on campus and within the neighborhood surrounding the school. Figure 2 illustrates the suggested locations for some of these recommendations.

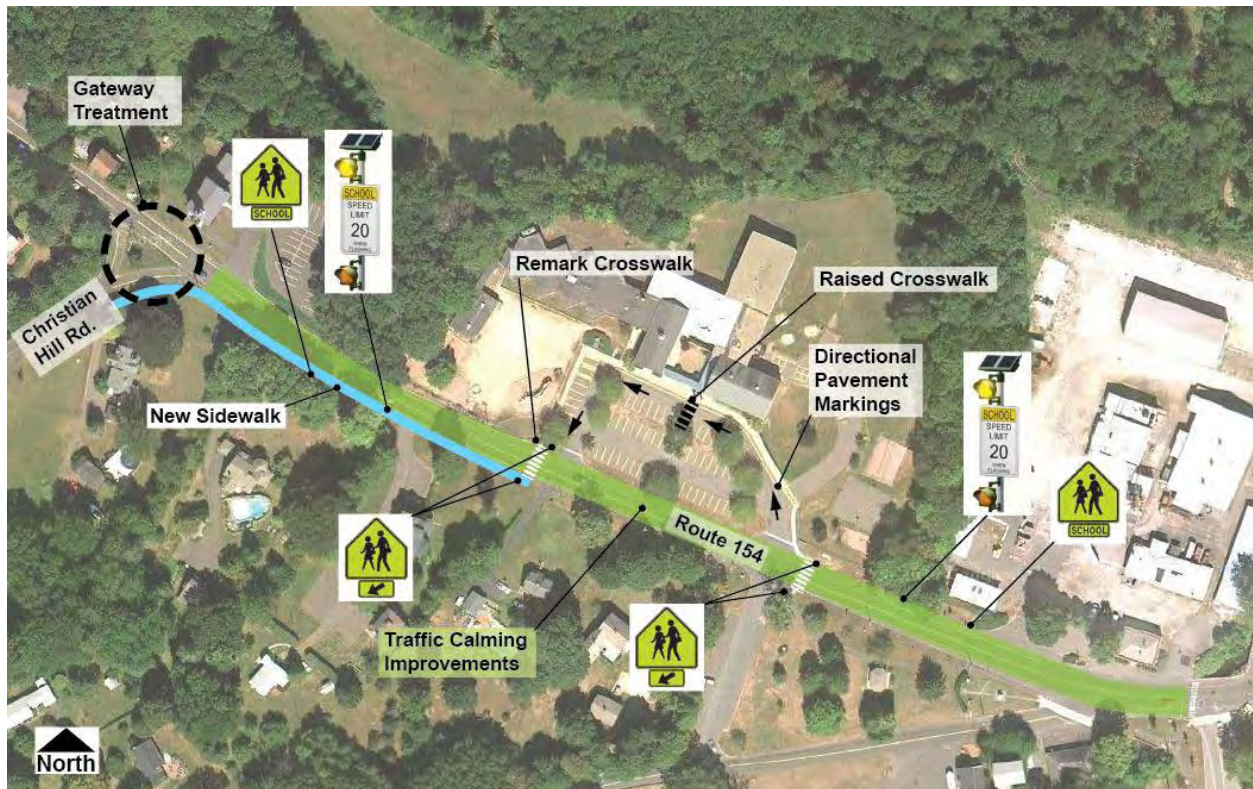


Figure 2: Route 154 Recommendations.

Recommendations

1. Install a sidewalk on the west side of Route 154 between the northern crosswalk and Christian Hill Road. This would provide a strategic connection between Haddam Elementary School and the Christian Hill area. There appears to be adequate space to construct a sidewalk along the property frontages at this location.
2. Re-mark the northern crosswalk (in front of school entrance driveway) on Route 154 to improve its visibility.
3. Update school zone signage on Route 154 near the