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) met with staff of Henry James Memorial School (HJMS) in Simsbury, Connecticut and subsequently conducted a site audit of the school on March 24, 2010.

HJMS has an enrollment of 838 students in grades seven and eight. School begins at 7:32 AM and dismissal occurs at 2:10 PM. The principal of the school, Ms. Sue Homrok-Lemke, suggested that the FHI team observe morning arrival.

The observation of school arrival was focused on areas of concern for walkers and bikers. 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. Some or all of these recommendations can be included in the school's Safe Routes to School Plan as it is developed.



Traffic Counts (Conducted by Simsbury Police)

Traffic counts were found to be in the expected range for a middle school such as Henry James. An average of 275 vehicles was found to enter the parent drop-off during the morning drop-off. With most vehicles carrying only one child, this suggests that approximately 1/3 of students traveling to school are dropped off by parents in the school driveway. Peak afternoon traffic in the driveway averaged 98 vehicles between the hours of 4:00 and 5:00 PM.

This suggests that many students walk home or take the bus immediately after school and that there are a large number of students that are picked up by parents following after-school activities.

Given this information, improving the flow and safety of morning drop-off traffic would be a priority for HJMS.

Observations and Issues

Upon meeting with school officials, FHI was informed that one of the primary concerns was the safety of students walking to and from the school campus while crossing Firetown Road. Heavy parent drop-off traffic was also noted as a concern. FHI observed these issues at the site audit.

During the site audit, both on and off campus activity was observed by the FHI team. On campus activity primarily involved issues related to parent drop-off, while off campus activity was notable due to student crossings on Firetown Road.

On Campus Activity

Parent drop-off occurs in the driveway directly in front of HJMS. This driveway provides one-way access entering north and exiting south (see Figure 1). Less than 50 students were observed walking to school via Firetown Road, with only a few students cycling to school. The number of walkers is expected to be higher in the afternoon when many of the students who are driven in the morning likely walk home after school.



Figure 1: Parents drop off and pick up directly in front of HJMS. Buses drop off and pick up at the rear of the school, which is accessed by a separate driveway. Several crosswalks on Firetown Road lead from residential streets to the east of the school to the front of HJMS.

Bus loading and unloading occurs at the rear of the school and buses access this area via a parking lot entrance. The bus operations appeared to be conflict-free and did not interfere with students walking to school or parent drop-off.

Students that walk or bike to HJMS also typically enter and leave through the front doors of the school. There is a sidewalk directly in front of the school which follows the school driveway and leads to a sidewalk on the school's side of Firetown Road. Students walking to or from Oakwood Road cross at a marked crosswalk on Firetown Road, but then must walk on the school's front lawn before crossing the marked crosswalk in the school's driveway which leads to HJMS' front doors.

The most notable traffic was the parent drop-off within HJMS' driveway and on Firetown Road itself. Given the high volume of vehicles queuing at the entrance of the parent drop-off driveway, several students were observed exiting parents vehicles on Firetown Road. This bottleneck of traffic is created when parents stop at the beginning of the driveway and let student exit there, while the southern half of the driveway is relatively unused. This occurrence suggests that improvement could be made to facilitate a more effective drop-off within the school's driveway thereby minimizing traffic congestion on Firetown Road.



Bus unloading at rear of school appeared conflict-free.



Ample bike parking, with few riders observed.



The exiting half of the school's driveway is under-utilized during morning drop-off.

Off Campus Activity

Henry James Memorial School is located on Firetown Road which has one lane travelling in each direction. The speed limit on this segment of road is 25 miles per hour. This is not exclusive to the school zone. There are several marked crosswalks on Firetown Road in the vicinity of HJMS.

School zone signage was limited to school crosswalk signs which were not located directly at crosswalk locations but rather 20 to 50 feet in advance of the crosswalks. A crosswalk from Oakwood Street to the school was also lacking a sidewalk or curb ramp on the school side of Firetown Road. This impedes a smooth transition from the roadway to HJMS.

A pathway is located near the northeast corner of the intersection of Firetown Road and Seminary Road. This pathway leads to Hearthstone Drive and Kerr Farm Road, thereby shortening the walk to school for children who lives in these areas by several minutes. This pathway appeared to be in fair condition, but appeared to lack regular maintenance or lighting which poses an issue for students walking to school or walking home from after-school activities during winter months.



Morning drop-off traffic backs up onto Firetown Road.



Crosswalk signage, while present, was not located directly at crosswalk locations.



Pathway from Firetown Road to Hearthstone Drive and Kerr Farm Road.

Summary of Recommendations

Based on field observations of issues and discussions with the Henry James Memorial School principal and staff, the following recommendations are offered to improve walk conditions and safety both on campus and within the neighborhood surrounding the school. Figure 2 (below) illustrates the first recommendation.

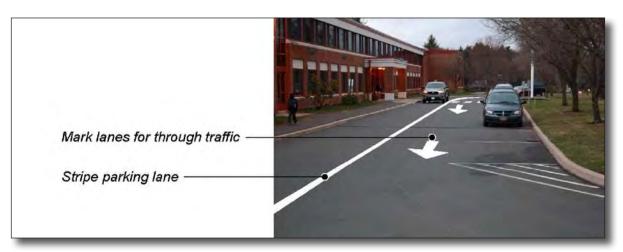


Figure 2: Stripe parking lane at school entrance. Reserve center of driveway for through traffic. Monitor parents during drop-off and enforce full use of parking lane for drop-off.

Recommendations

- 1. Separate traffic within the school's driveway (see Figure 2). Allow parking and drop-off only at curb-side and reserve center of driveway for through traffic. Assign a staff member, or other appropriate individual,, to moderate traffic, encouraging parents to pull up to the southern (exiting) end of the driveway and pull to curb before letting students. Install signage instructing parents to pull up to southern end of driveway for drop-off. An additional sign at the exit of the school driveway indicating "no left turn" during specific morning hours would help keep traffic moving.
- 2. Develop an ongoing program to educate parents on the accepted drop-off and pick-up procedures detailing the safety issues created by violating these practices. This program could be promoted through various measures such as on-line announcements, emails, flyers, social media, and periodic campaigns such as posting personnel at school entrances for periodic enforcement/education.
- 3. Improve/install additional school zone signage on Firetown Road. Install school crossing signs directly at crosswalks. Signs should be large, bright (retro-reflective). Speed limit signs should

include school zone language and post a speed of 20 miles per hour. In addition, "School" pavement marking should be considered. These markings should be maintained and repainted regularly. Additional information can be found in the Manual on Uniform Traffic Control Devices (MUTCD, December 2009 edition, http://mutcd.fhwa.dot.gov/pdfs/2009/pdf_index.htm). Part 7 of the manual provides guidance on a variety of traffic control signs for transition areas into schools.

- 4. The Town of Simsbury should consider adopting a uniform signage system, similar to that suggested above. This system should be implemented at all school areas in town so as to improve recognition by motorists.
- Install a curb ramp on the school side of the crosswalk from Oakwood Street. This would ensure a smooth transition from the roadway to HJMS and provide a waiting area for students waiting to cross from HJMS to Oakwood Street.
- 6. The town should consider regular surface treatment maintenance, and possible lighting, for the pathway that leads from Firetown Road to Hearthstone Drive and Kerr Farm Road.
- 7. To pursue the implementation of these recommendations, a Safe Routes Committee should be formed at Henry James Memorial School with the goal of coordinating with Town Staff and Public Safety to further investigate the feasibility of these recommendations. If feasible, the Committee should work with the Town to pursue funding for the installation and maintenance of improvements.



Crosswalk signage should be located directly in front of crosswalks.



School zone speed limit signage and pavement markings would increase driver awareness and slow speeds approaching crosswalks.