

2015 Safe Routes to School Walk Audit Findings Report

EMERSON - WILLIAMS
SCHOOL

*Emerson-Williams Elementary School
Wethersfield, CT*

Submitted By:
VN Engineers, Inc.
116 Washington Avenue
North Haven, CT 06473
Phone (203) 234-7862

October, 2015



VN Engineers, Inc.

Table of Contents

- 1 Existing Features and Walking Routes 3**
- 1.1 Emerson-Williams Elementary School Surrounding Area 3**
- 1.2 Walking Route 1 7**
 - 1.2.1 Traffic and Pavement Markings..... 8
 - 1.2.2 Signs..... 8
 - 1.2.3 Sidewalks 8
 - 1.2.4 Crime 8
- 1.3 Walking Route 2 10**
 - 1.3.1 Traffic and Pavement Markings..... 11
 - 1.3.2 Signs..... 11
 - 1.3.3 Sidewalks 11
 - 1.3.4 Crime 11
- 1.4 Walking Route 3 12**
 - 1.4.1 Traffic and Pavement Markings..... 13
 - 1.4.2 Signs..... 13
 - 1.4.3 Sidewalks 13
 - 1.4.4 Crime 13
- 1.5 Crash Experience 14**
- 2 Assessment of Walking Routes and School Grounds 15**
- 2.1 Best Practices 15**
- 2.2 Key Issues..... 16**
- 3 Recommendations 17**
- 3.1 Short-Term Improvements 17**
 - 3.1.1 Education..... 17
 - 3.1.2 Encouragement 17
 - 3.1.3 Enforcement..... 17
 - 3.1.4 Engineering..... 17
- 3.2 Long-Term Improvements 19**
 - 3.2.1 Education..... 19
 - 3.2.2 Encouragement 19
 - 3.2.3 Enforcement..... 19
 - 3.2.4 Engineering..... 19
- Appendix A – Walk Audit Application 20**

LIST OF TABLES

Table 1: Roadway Inventory 5
 Table 2: Emerson-Williams Elementary School Area Crash Data and Affected Walking Routes (2012-2014) 14
 Table 3: Accidents by Location and Walking Route across Entire Day (2012-2014) 14
 Table 4: Accidents by Location and Walking Route during Arrival and Dismissal Times (2012-2014) .. 14

LIST OF FIGURES

Figure 1: Emerson-Williams Elementary School Location Map 2
 Figure 2: Drop-off Process on School Grounds 3
 Figure 3: Police Trained School Crossing Guard 3
 Figure 4: School Crossing Guard 4
 Figure 5: Parent Pick up and Drop-off pattern 4
 Figure 6: Emerson-Williams Elementary School Plan Map 6
 Figure 7: Walking Route 1 7
 Figure 8: 25 mph Speed Limit Sign 8
 Figure 9: NO PARKING Signs on Mapleside Drive 8
 Figure 10: Safe Routes to School Guide online 8
 Figure 11: Walking Route 2 10
 Figure 12: Speed Limit Sign on Mapleside Drive 11
 Figure 13: Walking Route 3 12
 Figure 14: Wood Trail North of School 13
 Figure 15: Western Boulevard (Looking South) 13
 Figure 16: Sidewalk wrapping around the bus loop 15
 Figure 17: Two Large Bike Racks Available for Students 15
 Figure 18: Parents Accompanying Walking Students 16
 Figure 19: Current parent drop-off and pick up site 17
 Figure 20: Pedestrian Signal Located on North Side of Wells Road 17
 Figure 21: Crosswalk Across Wells Road to Southbound Mapleside Drive 17
 Figure 22: Missing Crosswalk across Dix Road to Southbound Mapleside Drive 18
 Figure 23: MUTCCD S1-1 Sign 18
 Figure 24: SRTS pedestrian education 18
 Figure 25: Faded Paint at crosswalk 19

INTRODUCTION

A walk audit was performed by CTDOT's "Safe Route to School" (SRTS) consultant, VN Engineers, Inc. for Emerson-Williams Elementary School in Wethersfield, on May 22, 2015. Emerson-Williams Elementary School serves 422 students from kindergarten through 6th grade. The purpose of a SRTS walk audit is to assess the existing conditions of the walking and biking routes to schools and to identify the issues that may discourage or prevent walking and bicycling. SRTS audits are performed by transportation professionals experienced in traffic, pedestrian, and bicycle operations and design. These professionals assess and review factors that can promote or obstruct safe walking and bicycling routes to school. Some of these factors include social aspects, traffic volumes and speeds, topography or presence/absence of sidewalks and/or bicycle lanes.

The audit for Emerson-Williams Elementary School followed standard walk audit protocol. Before the site visit was conducted, the CTDOT SRTS team analyzed the collected parent/teacher surveys, the area topography, and the routes surrounding the school. Available online imagery was used to study and assess the most prevalent routes, adjacent land use, sight distance issues, sidewalk locations, on-street parking, and other site-specific issues. In the 2014, the team initially introduced the SRTS program to the Wethersfield Schools Parents Committee (WSPC) which consists of PTO representatives from all the elementary and middle schools, including representatives from the Wethersfield School Board. The team also contacted Ms. Darka Jara, the current SRTS Champion for Emerson-Williams Elementary.

Following the initial review, the CTDOT SRTS team visited the site to observe arrival and dismissal operations. During class sessions, the team walked and drove throughout the surrounding neighborhoods to evaluate pedestrian walking and biking routes. Measurements and photographs were taken of the focus area, and school officials were interviewed to document current perceptions and conditions surrounding school transportation. Upon completion of the site visit, a meeting was held with Ms. Jara and the school Principal, Ms. Neela Thakur, to gather additional input for this audit report.

The SRTS audit team found that the area around Emerson-Williams Elementary School and the various walking routes are in fair to good condition, with many of the appropriate safety amenities already in place. The team noted a few infrastructure issues that could be addressed in the short- and long-term.

The school is located in a fairly dense residential area with some sidewalks on the roads leading to the school. In areas where the sidewalks are not present, the roads range from 24 to 32 feet wide and there is room for walkers to share the road with vehicles.

None of the sidewalks surrounding the school meet the current ADA requirements for width and ramps. However, there are handicap ramps and painted crosswalks in most of the critical locations. The percentage of walking students at Emerson-Williams Elementary School is low. Specifically, only five to ten percent of the students on any given day are walking or biking to school. Most of the students are bussed or dropped off by their parents. If the school wishes to increase the number of students safely walking and biking to school, then they could initiate pedestrian and bicycling educational and encouragement campaigns.

The following subjects are discussed below:

- Existing Features and Walking Routes
- School parent drop-off and bus drop-off area
- Assessments of Various Pedestrian and Bike Routes
- Recommendations

Figure 1 shows an overview of the Emerson-Williams Elementary School study area.

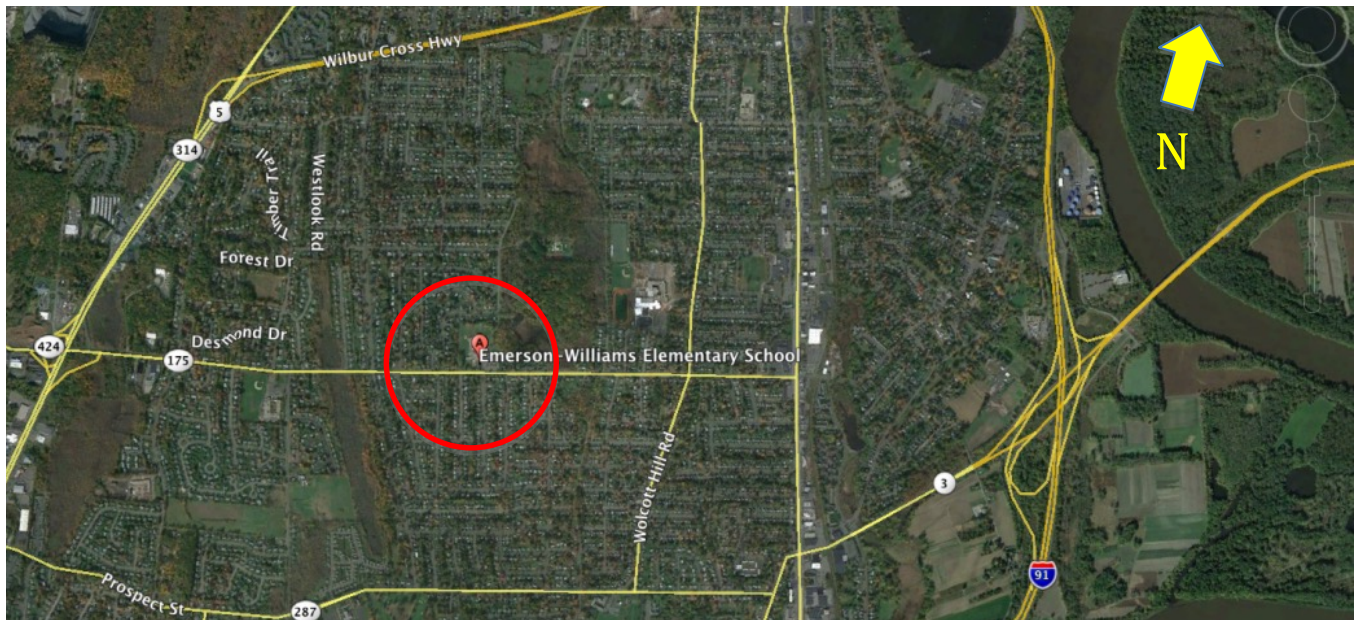


Figure 1: Emerson-Williams Elementary School Location Map

1 EXISTING FEATURES AND WALKING ROUTES

The SRTS Committee members ascertained that the following three routes were used by most of the pedestrian students attending Emerson-Williams Elementary School. According to the SRTS Guide a school walk zone is typically a subset of the enrollment zone. School walk zones may be defined by State or Local policy, but if not, a general rule of thumb is that the walking boundary is 1/2 mile or 1-mile out from an elementary school, sometimes further for middle and high schools. Route 1 begins at Wells Road to Mapleside Drive to Dale Road to Linden Street to Brimfield Road, ending at Folly Brook. Route 2 follows Wells Road and proceeds left to Midwell Road. Route 3 consists of exiting the school cafeteria and heading north along a wooded path to Western Boulevard.

Although the SRTS Champion identified these as the main walking routes, there are other walking routes that were accessed. This study examines these main routes, along with all other walking routes within a 0.5 mile radius of Emerson-Williams Elementary School.

1.1 Emerson-Williams Elementary School Surrounding Area

Emerson-Williams Elementary School is situated in a suburban Wethersfield neighborhood. School begins at 8:30 a.m., but students are allowed to enter the building at 8:10 a.m. Walkers and bikers tend to arrive around 8:00 am, while bussed students typically arrive around 8:10 am. Student drop-offs both by driving and walking with parents, started around 8:00 am, with the highest concentration of students arriving was from 8:10-8:25 am, as shown in **Figure 2**. Parents tend to drive their cars all the way to end of the parent drop off area before the students exit the cars. This slows the drop-off process. The school has adequate separation between the busses and the parent car drop-off and staff parking lot. In addition, parents were not observed dropping students off on Wells Road. During dismissal, one car was witnessed picking up students on Wells Road.

The Town of Wethersfield has assigned a trained crossing guard at the intersection of Wells Road and the main entrance to the School. The crossing guard was observed doing an excellent job of guiding students across the crosswalk, with the proper personal protective equipment and a hand held stop sign (**Figure 3**).

In addition to the crossing guard at the intersection, the school has a trained crossing guard at the crosswalk leading from the main parking lot to the sidewalk near the main entrance. The crossing guard was well-trained and also had the correct personal protective equipment and handheld stop sign, **Figure 4**.



Figure 2: Drop-off Process on School Grounds



Figure 3: Police Trained School Crossing Guard

In general, the drop-off process functions orderly. The only significant concern was the driveway lane configuration, as the cars exit the school grounds. The main entrance consists of three lanes, one for *busses only* entering the school campus. The other two lanes are for *exiting* cars and busses. After the students exit the vehicles, parents have to maneuver to the correct lane to either turn left and thru, or turn right at the intersection of Wells Road. This weaving slows the exiting vehicles and causes some confusion and distraction as they proceed through the crosswalk **Figure 4**. The timing of the traffic signal seems appropriate for the traffic volumes, as no long queues or delays were observed.



Figure 4: School Crossing Guard

The audit team also observed that the school officials have placed cones along the crosswalk that connects the student drop off and pick-up section with the main entrance sidewalk. The cones serve to further protect the crossing students from the vehicular traffic. (**Figure 2**).

Dismissal Procedures: Bikers and walkers are dismissed at 2:45 p.m. followed by the bus riders at 2:50 pm. The staggered dismissal limits on-site congestion and is considered a best practice.

The walk audit team walked and drove on all the major walking routes. **Table 1** provides an inventory overview of streets leading to the school. **Figure 6** depicts all the pedestrian routes to Emerson-Williams Elementary School. The school boundaries are shown in light blue line.

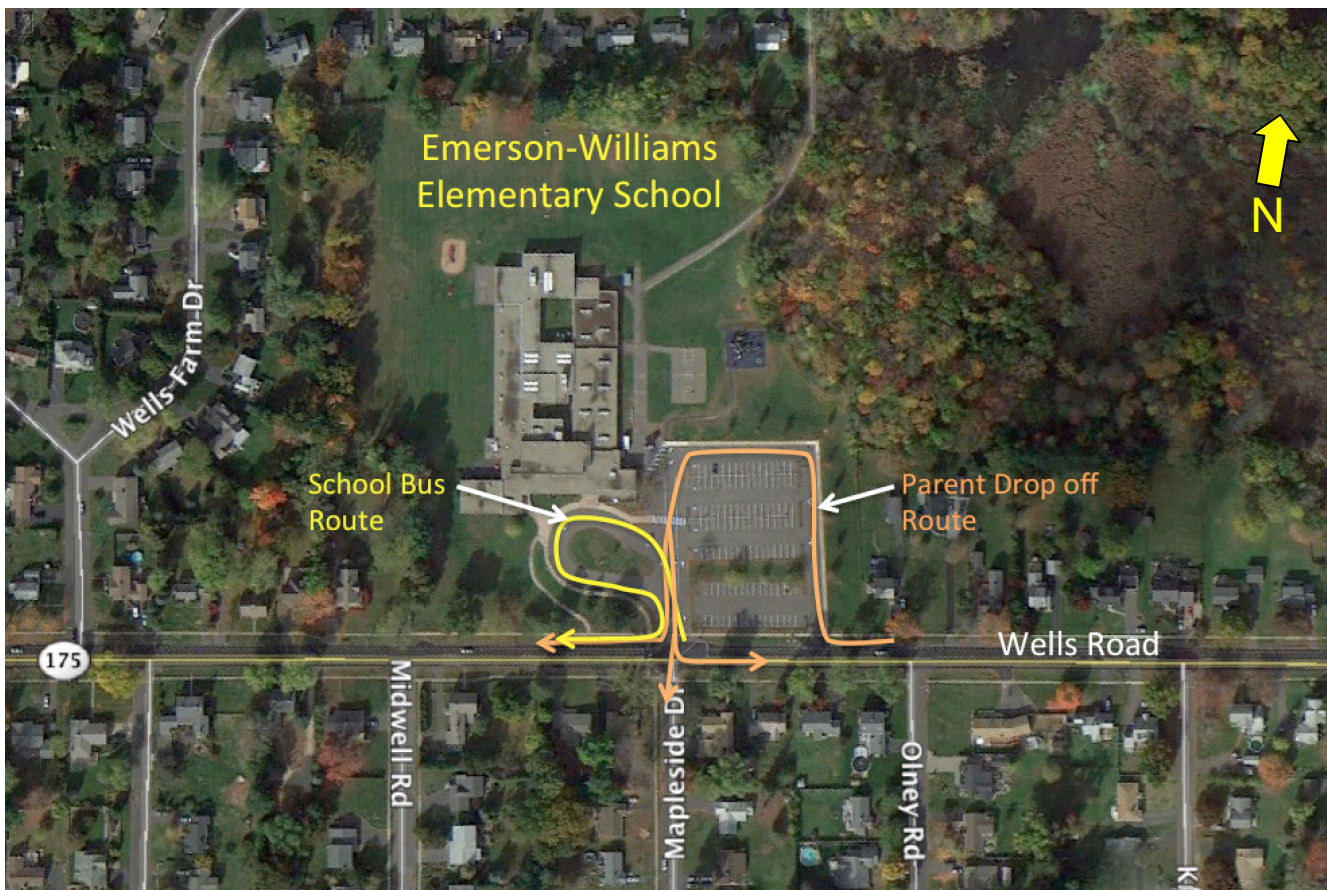
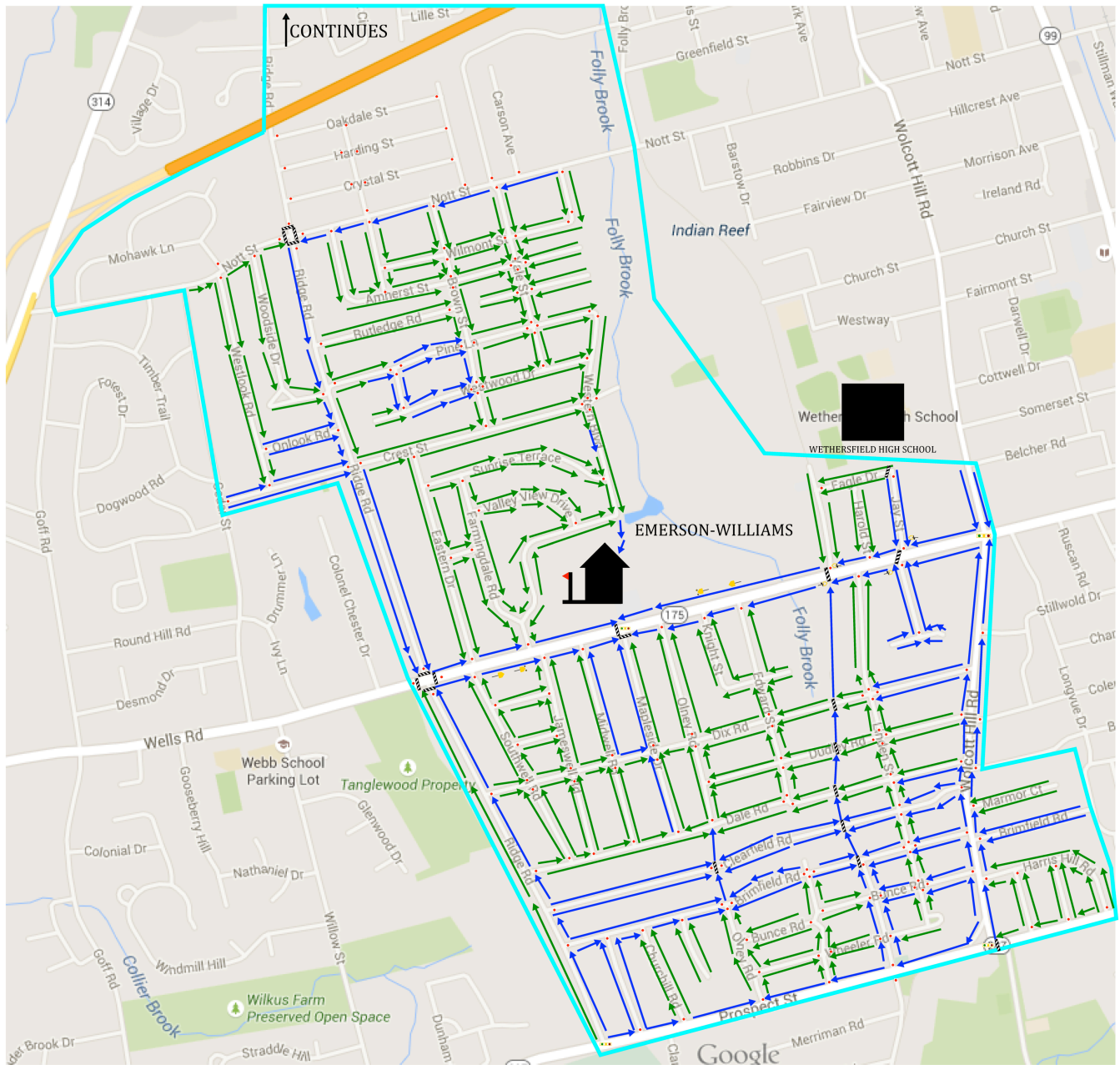


Figure 5: Parent Pick up and Drop-off pattern

Table 1: Roadway Inventory

Street Name	Street Width	Direction of Travel	Existing Sidewalk	Sidewalk Width	Sidewalk Condition	Curb Ramps	Curb	Buffer	Crime Area
MAPLESIDE DRIVE (South of RTE 175)	26ft	Two way traffic	YES (West side only)	4ft	Good	YES-not ADA compliant	YES	6-7ft	NO
DALE ROAD	28ft	Two way traffic	NO	N/A	N/A	N/A	YES	NO	NO
LINDEN STREET	24ft	Two way traffic	NO	N/A	N/A	N/A	NO	NO	NO
MIDWELL ROAD	32ft	Two way traffic	YES (Both Sides)	4ft	Good	Yes-not ADA compliant	YES	4-5ft	NO
WELLS ROAD (Rte. 175)	32ft	Two way traffic High Volume	YES (Both Sides)	4ft	Poor (concrete/ uneven sidewalk with large joints)	Some-not ADA compliant	YES	13-15 feet	NO
WESTERN BOULEVARD	28ft	Two way traffic	NO	N/A	N/A	N/A	YES	N/A	NO
BRIMFIELD ROAD	28	Two way traffic	YES(Both Sides)	4ft	Good	Yes-Not ADA Compliant	YES	6ft	NO
FOLLY BROOK	28	Two way traffic	YES (Both sides)	4ft	Good	Yes-Not ADA compliant	YES	10ft	NO

Note: Most of the ramps within the project area, as determined by observation, are not ADA handicap accessible compliant.



KEY:

- CROSSWALK
- STOP SIGN
- TRAFFIC SIGNAL
- CROSSING GUARD
- SCHOOL SIGN
- CROSSWALK SIGN
- FLASHING SCHOOL SIGN
- WALKING DIRECTION
- WALKING DIRECTION WITH SIDEWALK
- SCHOOL ZONE

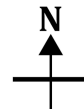


Figure 6: Emerson-Williams Elementary School Plan Map

1.2 Walking Route 1

Walking Route One begins at the school main entrance and proceeds along Wells Road to Mapleside Drive to Dale Road to Linden Street to Brimfield Road, ending at Folly Brook. From the farthest point on Folly Brook, the path is about 1.0 miles to the main entrance of the school as shown in **Figure 7**.

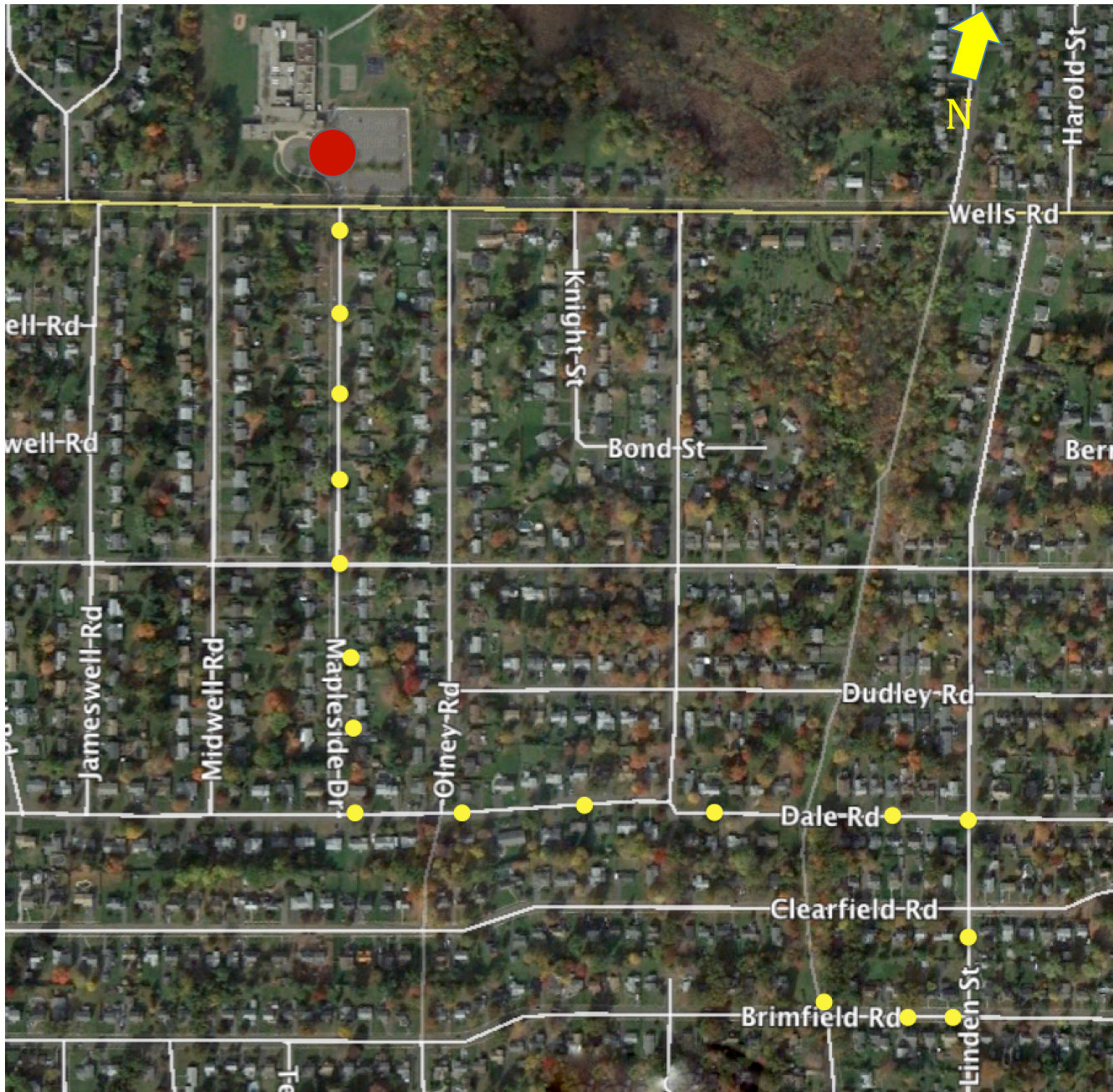
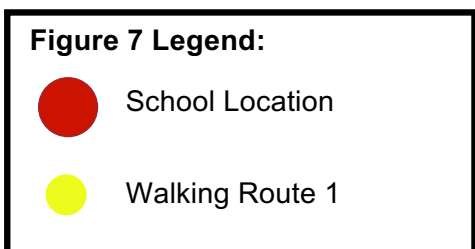


Figure 7: Walking Route 1



1.2.1 Traffic and Pavement Markings

In general, the pavement quality is in good condition. This route is in a well maintained residential neighborhood. The streets are approximately 27 feet wide with no pavement markings.

1.2.2 Signs

The speed limit on these residential streets is **25 mph**. During our audit we did not notice any cars violating this posted speed limit. However, on Wells Street, directly in front of the school, the posted speed limit is **40 mph**. The Town has established a **25 mph school zone** and has installed two flashing school zone signs. One is located 250 feet to the east of the school, and the other is 900 feet to the west. The signs are in good condition and the flashing lights are activated during arrival and dismissal times (**Figure 8**). During arrival and dismissal traffic speeds were observed to be slower than 40 mph, without police enforcement. Principal Neela Thakur has petitioned the police to intermittently enforce the posted speed limit on Wells Street, which has lessened the speed violations. All the other signs along this walking route are in good condition.

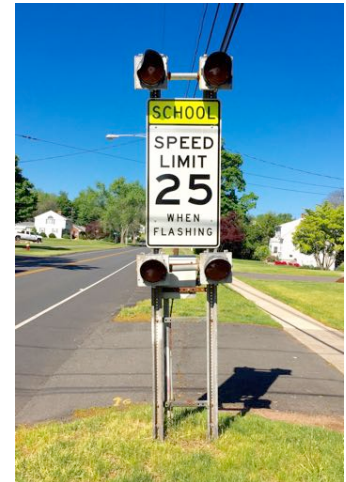


Figure 8: 25 mph Speed Limit Sign

Near the intersection of Wells Road and Mapleside Drive, the Town has installed **NO PARKING** signs south of the school on Mapleside Drive. This posted signage is to prevent parents from meeting their children on Mapleside, in front of the school, rather than entering the school property (**Figure 9**). During the arrival period, no vehicles stationed themselves at this location; however the audit team reported that at pickup there were at least ten cars parked in the street waiting for students. This is not an optimal condition, forcing students to enter the stationed vehicles on a two-way street in an undesignated parking zone. This could be mitigated by the parent education programs and police enforcement.



Figure 9: NO PARKING Signs on Mapleside Drive

1.2.3 Sidewalks

There are intermittent sidewalks throughout the areas surrounding the school. There is a 4-foot concrete sidewalk on the west side of Mapleside Drive from Wells Road to Dale Road. The handicap ramps do not meet the current Americans with Disabilities Act (ADA) standards, but the current installations are more conducive to walking and biking than having no ramps. The sidewalks in this area are categorized as being in good condition, with minimal tripping hazards. However, the team noted the sidewalk that runs along the south side of Wells Road is in poor condition with many uneven areas, gaps and tripping hazards. Despite less than perfect conditions, the students were observed walking and biking on the sidewalk without problems. The sidewalk is positioned 22 feet from the Wells Road travel lane. This wide buffer provides an excellent divider between the higher speeding traffic and students travelling on the sidewalk and is considered a SRTS best practice.

1.2.4 Crime

The school principal stated that crime is not an issue throughout the area. According to the National Center for Safe Routes to School Guide (**Figure 10**), developed by the Pedestrian and Bicycle Information Center (PBIC) in collaboration with SRTS experts from around the country and support from the National Highway Traffic Safety Administration (NHTSA), Federal Highway



Figure 10: Safe Routes to School Guide online

Administration (FHWA), Centers for Disease Control and Prevention (CDC) and Institute of Transportation Engineers (ITE), crime includes "stranger danger, bullying, and drug dealing," as well as "unsafe behaviors on the streets around the school" including:

- Speeding through residential streets and school zones (speed is directly related to crash frequency and severity).
- Failing to yield to students walking or bicycling, especially in crosswalks, the law requires motorists to stop for pedestrians in crosswalks – it's a law that is often ignored.
- Running red lights or stop signs.
- Passing stopped school buses.
- Parking or stopping in crosswalks.

The guidance they provide states "the topics will be discussed in a general sense as it relates to parental and student concerns when walking or biking to or from school."

1.3 Walking Route 2

Walking Route 2 starts at the main exit, follows the on-site sidewalks and proceeds to Wells Road. Pedestrians, with the assistance of the crossing guard then head west on Wells Road and turn left onto Mapleside Drive. The SRTS Champion identified this route as the most heavily travelled. This route provides access to many homes. The path is less than 0.5 miles long, depending on the origin and destination of the trip, as shown in **Figure 11**.

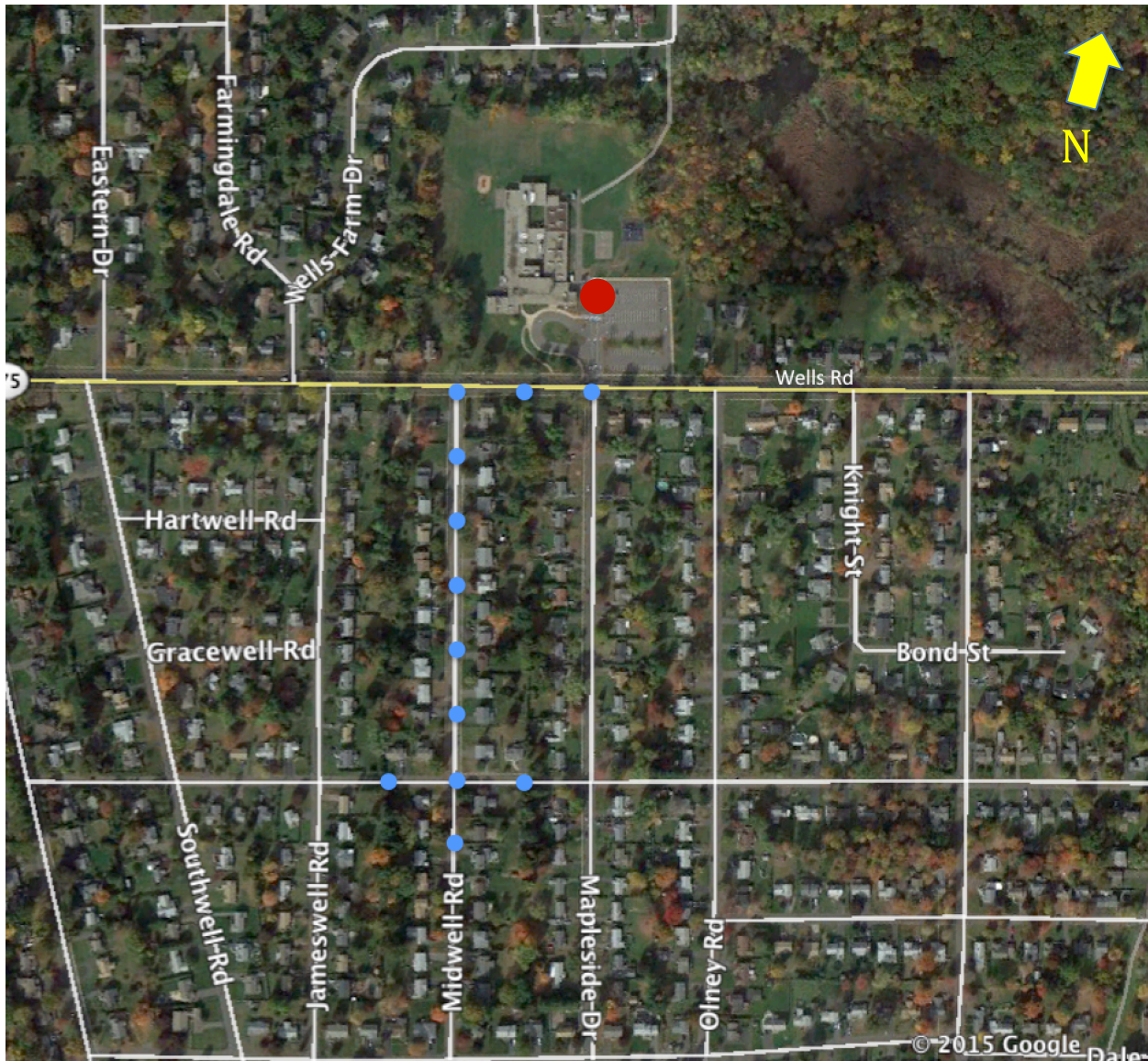


Figure 11: Walking Route 2

Figure 11 Legend
School Location
Walking Route 2

1.3.1 Traffic and Pavement Markings

In general, the pavement quality is in good condition. This route is through a well-maintained residential neighborhood. The streets are approximately 27 feet wide with no pavement markings.

1.3.2 Signs

The speed limit on these residential streets is 25 mph. During our audit the SRTS Team did not witness any vehicles speeding. All the signs along this walking route are in good condition (**Figure 12**).

1.3.3 Sidewalks

There are intermittent sidewalks throughout the areas surrounding the school. There is a 4-foot concrete sidewalk on both sides of Midwell Road. The sidewalk ends at Dix Road on the west side, but wraps around the corner for a hundred feet on the east side. After this intersection, the students are forced to walk in the road and share the pavement with the vehicles. We observed students walking on the sidewalk and bicyclists using the roadway in the morning and the afternoon without incident.

1.3.4 Crime

The school principal stated that crime is not an issue throughout the area. See 1.2.4.



Figure 12: Speed Limit Sign on Mapleside Drive

1.4 Walking Route 3

Walking Route 3 commences at the school cafeteria and heads north along a well-maintained wooded path to Western Boulevard. The SRTS Champion identified this as one of the primary walking and biking routes. There was some concern about the physical isolation and path condition, however the audit team found the path to be amenable to walking and biking. During the winter months, snow accumulation may pose a significant problem if the Town chooses not to plow this area (**Figure 14**). Once the students exit the wooded path, they emerge onto Western Boulevard (**Figure 15**). This route allows access to Crest Street, Sunrise Terrace, Valley View Drive, Wells Farm Road and other surrounding streets. It is a well-kept residential area. The path is less than 0.5 miles long depending on the origin and destination of the trip (**Figure 13**).

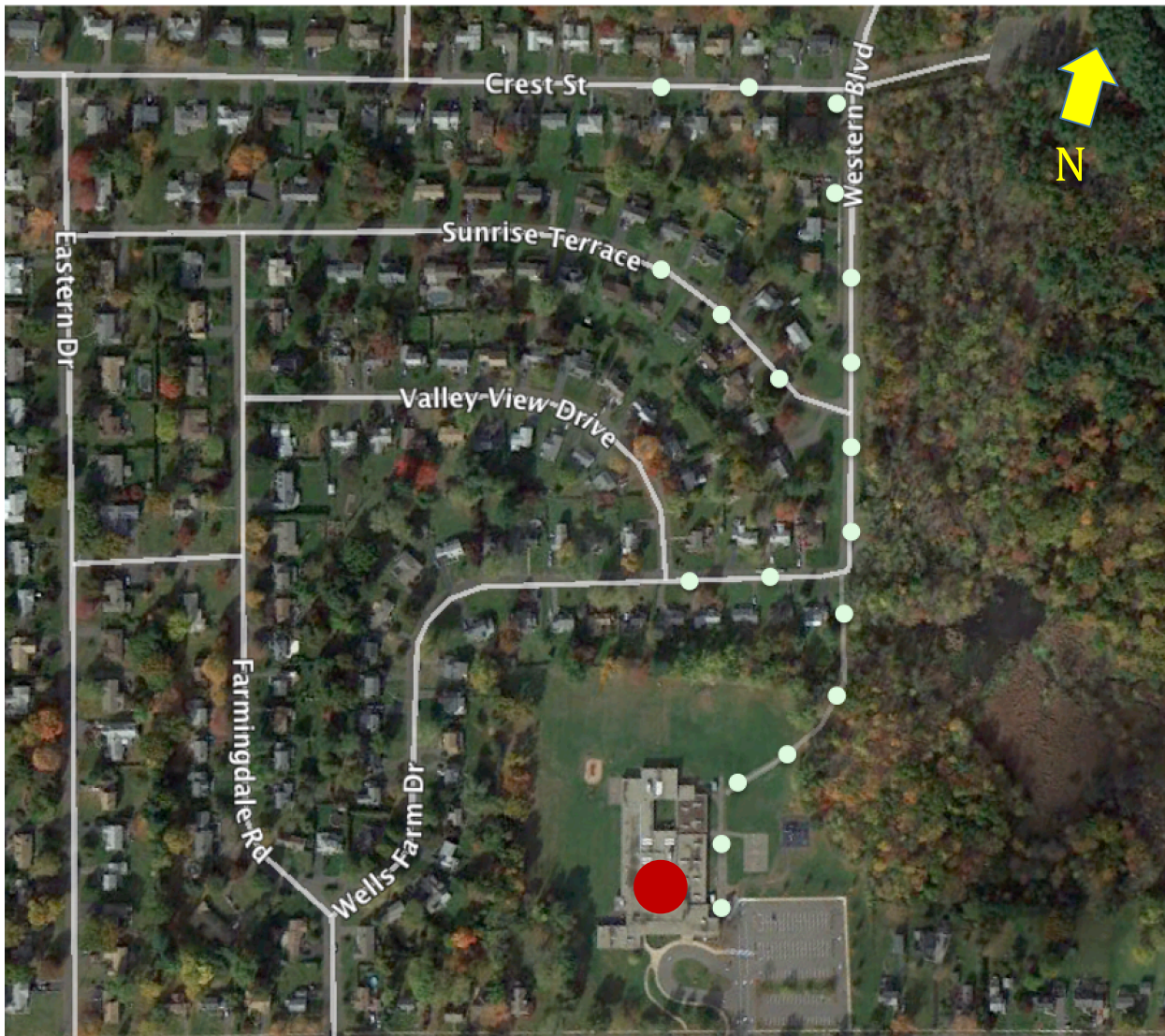


Figure 13: Walking Route 3

Figure 13 Legend

- School Location
- Walking Route 3

1.4.1 Traffic and Pavement Markings

In general, the trail and pavement quality are in acceptable repair. Western Boulevard is a low traffic volume road. It is approximately 30 feet wide, conducive for various modes of transport.

1.4.2 Signs

The speed limit on these residential streets is **25 mph**. During our audit, no speeding cars were observed. All the signs along this walking route are well-maintained.

1.4.3 Sidewalks

There are no sidewalks along Western Boulevard or any of the intersecting streets. The widths of the various streets accommodate both vehicles, cyclists and pedestrians.

1.4.4 Crime

The school principal stated that crime is not an issue throughout the area. See 1.2.4.



Figure 14: Wood Trail North of School



Figure 15: Western Boulevard (Looking South)

1.5 Crash Experience

The crash history within the project area was reviewed as part of this study. The crash history for the most recent three-year period (2012-2014) was examined, using data from the Connecticut Crash Data Depository. **Table 2** shows the location and number of crashes that occurred over the three-year span within a one mile radius on all roads that are included in the walking routes.

Table 3 serves as a summary of all the data provided in Table 2. Specifically, Table 3 shows the accidents only on each of the three walking routes. In addition, **Table 4** shows accidents during the 7:30-8:30 AM arrival time and the 2:45-3:45 PM dismissal time. These accidents could have affected bikers and walkers on the three principle walking routes.

Table 2: Emerson-Williams Elementary School Area Crash Data and Affected Walking Routes (2012-2014)

Location	Date	Time	Accident Type	Walking Route
Wells Rd/Mapleside Dr	5/11/2012	10:43 AM	Property (PDO)	1,2
Dale Rd/Linden St	11/22/2012	7:17 PM	Property (PDO)	2
Dale Rd/Linden St	07/03/2013	12:23 PM	Injury (No fatality)	2
RTE 287/Wolcott Hill Rd	5/03/2013	3:00 PM	Property (PDO)	Near 1
RTE 287/Wolcott Hill Rd	7/7/2013	3:08 PM	Property (PDO)	Near 1
RTE 287/Wolcott Hill Rd	2/15/2014	4:35 PM	Property (PDO)	Near 1
RTE 287/Wolcott Hill Rd	7/29/14	2:49 PM	Property (PDO)	Near 1
Wells Rd/Wolcott Hill Rd	8/30/2013	9:00 PM	Property (PDO)	Near 1
Wells Rd/Wolcott Hill Rd	10/19/2013	7:13 PM	Property (PDO)	Near 1
Wells Rd/Wolcott Hill Rd	8/26/14	7:28 PM	Injury (No fatality)	Near 1
Wells Rd/Wolcott Hill Rd	10/05/14	12:54 PM	Injury (No fatality)	Near 1
Wells Rd/Wolcott Hill Rd	12/13/14	1:01 PM	Property (PDO)	Near 1
Dix Rd/Southwell Rd	12/14/2013	8:21 PM	Property (PDO)	Near 2
Wells Rd/Ridge Rd	5/02/14	2:38 PM	Property (PDO)	Near 2,3
Wells Rd/Ridge Rd	6/23/14	3:02 PM	Property (PDO)	Near 2,3
Wolcott Hill Rd/ Dix Rd	7/04/14	12:04 AM	Injury (No fatality)	Near 1

Table 3: Accidents by Location and Walking Route across Entire Day (2012-2014)

Location	Route 1	Route 2	Route 3
Mapleside Dr/Wells Rd	1	1	
Dale Rd/Linden St		2	
TOTALS	1	3	0

Table 4: Accidents by Location and Walking Route during Arrival and Dismissal Times (2012-2014)

Location	Route 1	Route 2	Route 3
Mapleside Dr/Wells Rd	-	-	
Dale Rd/Linden St		-	
TOTALS	0	0	0

2 ASSESSMENT OF WALKING ROUTES AND SCHOOL GROUNDS

This section summarizes the SRTS Team's assessment of several walking routes in accordance with SRTS practices. Best Practices and Key Issues are discussed below:

2.1 Best Practices

The following SRTS best practices were observed during the walk audit:

- Two well-trained and safety-equipped crossing guards are assigned to the school. One is located on Wells Road at the main entrance to the school, and the other is on school grounds assisting safe movement of pedestrians between the parking lot and the main entrance. The crossing guards reported no history of accidents involving children within the last three years.
- The school has a sidewalk that wraps around the pickup and drop-off area and the bus loop, encouraging students to circumvent the parking lot and the bus route, see **Figure 16**.
- The school has two adequately sized bike racks, in fair condition, see **Figure 17**.
- There are sidewalks available for travel on both sides of Wells Road, with ample buffers between the edge of the road and the sidewalk. This separation of roadway and sidewalk is categorized as ideal for pedestrian travel.
- A higher percentage of walkers and bikers to the school constitutes a goal for the Emerson-Williams community, but the school currently does manifest a sufficient fraction of students travelling on foot or bicycle.
- Two of the three main routes traversed by the walking students have sidewalks for at least for a portion of the route.
- Parents/guardians accompany their children walking to school (**Figure 18**).
- The principal is stationed outside for the arrival and dismissal processes, observing the operations and supervising when warranted.
- The majority of the walking routes are located in residential neighborhoods and have posted 25 mph speed limits.



Figure 16: Sidewalk wrapping around the bus loop



Figure 17: Two Large Bike Racks Available for Students

- A school zone speed limit sign has been established on Wells Road to reduce the speed limit from 40 mph to 25 mph during arrival and dismissal periods.

2.2 Key Issues

Operational issues to consider:

- Sidewalks along the south side of Wells Road are generally in poor condition. Portions of the sidewalk should be repaired when possible.
- The painted crosswalks on school grounds and at the intersection of Wells Road and Mapleside Drive are very faded and should be repainted.
- The SRTS team has confirmed their attendance at the June PTA meeting to introduce the SRTS program. They will offer pedestrian and bike training, while helping to inform parents about the safest way to pick up and drop-off their children. The team could also elaborate on best practices for the drop-off and pickup processes.

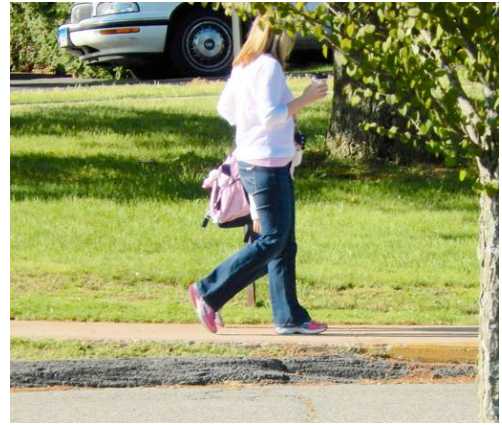


Figure 18: Parents Accompanying Walking Students

3 RECOMMENDATIONS

The team from VN Engineers, Inc. developed a list of improvements to address the issues affecting the various walking routes to Emerson-Williams Elementary School. They have been separated into two categories: short-term and long-term improvements.

3.1 Short-Term Improvements

The SRTS audit team recommends the following short-term, low cost improvements to be considered for Emerson-Williams Elementary School organized according to program's Five E's framework:

3.1.1 Education

- The SRTS Program provides free pedestrian and bike skills education for students and parents. The Emerson-Williams committee could contact the SRTS team to arrange a skills training class or clinic. These education programs would specialize in suburban-specific pedestrian techniques.
- Establish a Driver and Passenger Educational program to clarify drop-off procedures, targeting new students' parents, see **Figure 19**. This should be scheduled at the beginning of the school year, taking into account the arrival of the buses during drop-off. This discussion would deter or discourage parents from parking and waiting for children off the school site in a no parking zone on Mapleside Drive.

3.1.2 Encouragement

- Walking Wednesdays, Walking/Biking contests and mileage tracking could further encourage walking and biking to school throughout the year.
- Encouragement of the faculty and staff who monitor the traffic flow to wear safety vests for more visibility.

3.1.3 Enforcement

- Encourage law enforcement to minimize temporary illegal parking on Mapleside Drive and enforce the 25 mph speed limit on Wells Road.

3.1.4 Engineering

- All proposed signs and pavement markings shall comply with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).



Figure 19: Current parent drop-off and pick up site



Figure 20: Pedestrian Signal Located on North Side of Wells Road



Figure 21: Crosswalk Across Wells Road to Southbound Mapleside Drive

- Mid-block crosswalks should be avoided if possible. If a mid-block crosswalk is unavoidable, the town could consider installing yield lines and the corresponding “Yield Here to Pedestrians” sign in advance of the crosswalk. Refer to Figure 3B-17 in the MUTCD.
- At all unsignalized existing and proposed crosswalks, the S1-1 sign with the arrow sub-plate could be added to emphasize the crosswalk.



Figure 22: Missing Crosswalk across Dix Road to Southbound Mapleside Drive

- The pedestrian signal located on the north side of Wells Road is not functioning properly (**Figure 20**). The DONT WALK light bulb has not functioned for over a year. All of the pedestrian signal heads should be upgraded to the latest Manual on Uniform Traffic Devices (MUTCD) Count Down pedestrian head Standard. Since the traffic signal equipment at this location (Int. 159-226) is Town owned and maintained, the Town is responsible for replacing any malfunctioning equipment.



Figure 23: SRTS pedestrian education

- The crosswalks on school grounds and at the intersection of Wells Road and Mapleside Drive should be repainted, see **Figure 21**. The Department will be installing permanent epoxy resin pavement markings in 2016 which will replace the worn crosswalk on Route 175.
- The stopping sight distance should be verified at the all existing and proposed crosswalks.
- At the intersection of Mapleside Drive and Dix Road, a painted crosswalk could be added on the west side of the intersection (**Figure 22**). This would emphasize the presence of pedestrians in the intersection. In addition, the MUTCD S1-1 sign with the additional W16-7P sign should be added to mark the crosswalk (**Figure 23**).



Figure 24: MUTCCD S1-1 Sign

3.2 Long-Term Improvements

The areas surrounding Emerson-Williams Elementary School currently incorporates several features conducive to walking and bicycling to school safely. The landscape is largely residential, with sidewalks and crosswalks present. Employing the Five E's Guidelines, the following improvements are recommended; several of them are already categorized as short-term solutions:

3.2.1 Education

- The SRTS Program provides free pedestrian and bike education for students and parents, see **Figure 24**. The SRTS committee could contact the SRTS team to arrange a follow up training.
- Driver and Passenger Educational program to clarify drop-off and pick-up procedures, taking into account the arrival of the buses during drop-off.

3.2.2 Encouragement

- Walking Wednesdays, Walking/Biking contests and mileage tracking could continue the encouragement of walking and biking to school throughout the year.
- Encourage faculty and staff directing traffic to wear safety vests.

3.2.3 Enforcement

- Request an increase in police presence on Mapleside Drive to prevent on street parking and Wells Road to reduce the speed during arrival and dismissal periods.

3.2.4 Engineering

- Repaint all the crosswalks as stated in this report and add a new crosswalk at the intersection of Mapleside Drive and Dix Road, see **Figure 25**. Additional sidewalks could be constructed in the surrounding neighborhoods, to provide a safer place for walkers than in the roadway.
- All pedestrian curb ramps should be upgraded or added with detectable warning strips where the sidewalk meets the roadway, per ADA requirements.



Figure 25: Faded Paint at crosswalk

The aforementioned Safe Routes to School Walk Audit Report is an objective review intended for the School's Safe Routes Committee use to help assess the existing conditions surrounding the school. This document is an innovative planning tool to help identify bicycle, pedestrian and non-motorized transportation needs that encourage walking and bicycling to the school, as well as assists in developing recommendations to improve existing conditions. The contents of this report are not intended to be legally binding, but rather offer recommendations to improve safety in the vicinity of the school and create a more appealing transportation alternative.

Appendix A – Walk Audit Application

**Connecticut Safe Routes to School
Application for Engineering Site Assessment**

Please provide as much information as possible on your school's walking environment including the main routes to be assessed, school start and end times, parent pick-up and drop-off policies and known safety issues. Along with the request form, include aerial maps of area with the route designated. Photographs of any know issues may beneficial as well.

Name of School EMERSON-WILLIAMS ELEMENTARY School District WETHERSFIELD
 School Address 461 WELLS ROAD WETHERSFIELD, CT 06109
 Contact Name DARKA JARA Title SAFE ROUTE CHAIRPERSON
 Email KOWALJARA@COX.NET Phone Number _____
 School District WETHERSFIELD Grades Represented at School K to 6 School Enrollment 402

Engineering Site Assessment Requirements

A successful Safe Routes to School Program requires support from many areas of the community as well as a committed and organized SRTS Committee. There are certain steps that must be taken in order for a walk audit to be effective to a SRTS Program. To qualify for a walk audit through the CT SRTS Support Team, a school must meet the following requirements:

- A SRTS Program Assistance Application submitted and approved.
- A SRTS Committee needs to be established and a Champion selected. SRTS Committees should include members from diverse areas of the community including, but not limited to school teachers, administrators, parents, health professionals, local government officials and local law enforcement.
- Community awareness efforts such as PTO/PTA presentations or letters to parents notifying them about the program.
- Parent and student surveys conducted and reviewed.
- Information gathered such a school demographics, current student/parent mode choices, walking/biking rates, distance and routes students travel, photos of issues, etc.
- Initial Walk-about/bike-about performed by school on identified walking routes and results submitted to Support Team.
- Documented support from Community Officials such as a municipality official or superintendent.

After your application has been submitted and approved, the SRTS Support Team will contact you to setup a date for the assessment and discuss any additional details.

Briefly describe how an Engineering Site Assessment will benefit your school. (Attach separate sheet if needed.)

THIS ASSESSMENT WOULD HELP US DETERMINE IF WE HAVE ANY BIKE ROUTES/WALKING ROUTES TO SCHOOL THAT MAYBE UNSAFE FOR OUR STUDENTS.

What time does school begin? 8:30am What time are students allowed to enter the school building? 8:10pm
 What time do walkers/bikers tend to arrive? 8:00am What time do students who take the bus arrive? 8:10pm
 What time does school end? 2:45pm Is there a staggered dismissal? Yes No
 If staggered, what time are walkers/bikers dismissed? 2:45pm What time are bus riders dismissed? 2:50pm
 Total enrollment by grade: K 54 1 58 2 65 3 62 4 48 5 70 6 66 7 8

How do your students travel to and from school?
 ___ % Walk/bike ___ % School bus ___ % Family vehicle ___ % Carpool ___ % Public transit % Other
 % of students within walking distance (< 1 mile) ___ How was the travel data collected? _____

Identify up to three main walking routes to school that you would like included in the assessment. (Attach maps if needed.)

Describe each route in as much detail as possible including how the students exit the school building, where students cross the road, and if they cross intersections diagonally or use the crosswalk (if existing). The more detail you are able to provide about each route, the better prepared the assessment team will be. Be sure to highlight any safety concerns such as:

- Poor or missing sidewalks, crosswalks, or handicap ramps on identified routes or in immediate school vicinity.
- Conflicting or insufficient signage and/or pavement markings in immediate school vicinity.
- Cars, trees, shrubs or other elements that obstruct views.
- Hazardous traffic concerns (high speeds, multi-lane crossings, lack of appropriate controls at intersections, etc.)
- Pedestrian hazards such as insufficient drainage, unshoveled sidewalks, or debris on walking routes.
- Unsafe conditions during drop-off and pick-up times.
- Improperly designated school zone.
- Scary people, dogs, or high crime areas.

Walking Route #1

Route Description:

TO WELLS CROSSWALK TO MAPLESIDE TO DALE
 DALE TAKE RIGHT LINDEN RIGHT BRIMFIELD
 LEFT TO FOLLYBROOK

Describe the exit from the school building that is typically used by students taking this route:

MAIN ENTRANCE

What (if any) specific concerns exist about vehicular traffic on this route?

NO SIDEWALK ON LINDEN

What are the key intersections that students cross?

WELLS ROAD

Are there any streets along the route with crosswalks and crossing guards?

NO JUST WELLS ROAD

Walking Route #2

Route Description:

CROSS AT WELLS ROAD UP TO RIGHT (WEST)
LEFT ONTO TO MIDWELL STAYING ON SIDEWALK

Describe the exit from the school building that is typically used by students taking this route:

MAIN ENTRANCE OF BUILDING

What (if any) specific concerns exist about vehicular traffic on this route?

sign People leaving school take right on red + ignore

What are the key intersections that students cross?

WELLS ROAD

Are there any streets along the route with crosswalks and crossing guards?

JUST WELLS ROAD

Walking Route #3

Route Description:

TRAVELING BACK OF SCHOOL THRU A PATHWAY
ONTO WESTERN BLVD

Describe the exit from the school building that is typically used by students taking this route:

EXITING SCHOOL CAFETERIA

What (if any) specific concerns exist about vehicular traffic on this route?

ONCE ONTO WESTERN THERE ARE NO SIDEWALKS

What are the key intersections that students cross?

WELLS FARM DRIVE + WESTERN BLVD

Are there any streets along the route with crosswalks and crossing guards?

NO

Submit completed application to Jessica Bliven

c/o: VN Engineers Inc.

116 Washington Ave.

North Haven, CT 06473

or

Submit by Email

Phone: (203)234-7862 / Fax: (203)234-9154

jbliven@walkitbiketct.org

Emerson Williams

1. Did you have room to walk? 1 2 3 4 5 6
total only some good very good excellent
problems problems

1. Did you have room to walk?

- Yes Some problems:
- Sidewalks or paths started and stopped
 - Sidewalks were broken or cracked
 - Sidewalks were blocked with poles, signs, shrubbery, dumpsters, etc.
 - No sidewalks, paths, or shoulders
 - Too much traffic
 - Something else _____

Rating: (circle one) 1 2 3 4 5 6 3
Locations of problems: BROWN STREET

4. Was it easy to follow safety rules? Could you and your child...

- Yes No Cross at crosswalks or where you could see and be seen by drivers?
- Yes No Stop and look left, right and then left again before crossing streets?
- Yes No Walk on sidewalks or shoulders facing traffic where there were no sidewalks?
- Yes No Cross with the light?

Rating: (circle one) 1 2 3 4 5 6 5
Locations of problems: _____

2. Was it easy to cross streets?

- Yes Some problems:
- Road was too wide
 - Traffic signals made us wait too long or did not give us enough time to cross
 - Needed striped crosswalks or traffic signals
 - Parked cars blocked our view of traffic
 - Trees or plants blocked our view of traffic
 - Needed curb ramps or ramps needed repair
 - Something else _____

Rating: (circle one) 1 2 3 4 5 6 3
Locations of problems: BROWN STREET

5. Was your walk pleasant?

- Yes Some problems:
- Needed more grass, flowers, or trees
 - Scary dogs
 - Scary people
 - Not well lighted
 - Dirty, lots of litter or trash
 - Dirty air due to automobile exhaust
 - Something else _____

Rating: (circle one) 1 2 3 4 5 6 5
Locations of problems: NEED TO SEPARATE WALKING WITH ROAD

3. Did drivers behave well?

- Yes Some problems: Drivers ...
- Backed out of driveways without looking
 - Did not yield to people crossing the street
 - Turned into people crossing the street
 - Drove too fast
 - Sped up to make it through traffic lights or drove through traffic lights?
 - Something else _____

Rating: (circle one) 1 2 3 4 5 6 5
Locations of problems: _____

How does your neighborhood stack up? Add up your ratings and decide.

- 1. _____ 26-30 Celebrate! You have a great neighborhood for walking.
 - 2. _____ 21-25 Celebrate a little. Your neighborhood is pretty good.
 - 3. _____ 16-20 Okay, but it needs work.
 - 4. 16-20
 - 5. _____ 11-15 It needs lots of work. You deserve better than that.
- Total: _____ 5-10 It's a disaster for walking!

Submitted By:
VN Engineers, Inc.
116 Washington Avenue
North Haven, CT 06473



VN Engineers, Inc.