



Big Cross Elementary School Access Plan

Glens Falls, New York

Prepared for:
Adirondack/Glens Fall
Transportation Council

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Final Report

Report Prepared by:



60 Lake Street, Suite 1E, Burlington, Vermont 05401
TEL 802.383.0118 ■ FAX 802.383.0122 ■ www.rsginc.com

TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	School Background.....	1
2.0	EXISTING CONDITIONS	2
2.1	Functional Classification.....	2
2.2	Roadway Characteristics.....	3
2.3	Pedestrian and Bicycle Facilities	6
2.4	School Access Characteristics	8
2.5	Traffic Volumes and Speeds.....	15
2.6	Parking	17
3.0	SAFETY	19
4.0	SCHOOL SURVEY	19
5.0	ISSUES.....	21
6.0	RECOMMENDATIONS.....	21
6.1	Plan 1: Immediate School Area	21
6.2	Plan 2: Greater School Area	24
6.3	Plan 3: Signs	24
6.4	Neighborhood Sidewalks	25
6.5	Programmatic Strategies.....	25
6.6	Cost Estimates.....	27
7.0	PUBLIC INPUT.....	27
8.0	SUMMARY.....	28

LIST OF FIGURES

Figure 1: Big Cross Elementary School in Glens Falls, New York	1
Figure 2: Functional Classification (NOTE: local roads will be shown in next plan revision).....	2
Figure 3: Cross-Section Locations.....	3
Figure 4: Typical Cross-Sections	3
Figure 5: Speed Limits & Traffic.....	4
Figure 6: Advance Warning Sign and Reduced Speed Limit Assembly	5
Figure 7: School Signage Deficiencies.....	6
Figure 8: Pedestrian and Bicycle Facilities (As of May 2009)	7
Figure 9: Sidewalks in the School's Catchment Area.....	7
Figure 10: Crossing Guard at Big Cross-Second Street	8
Figure 11: School Access Points.....	9
Figure 12: Second Street Curb Cut at Rear School Entrance	10

Figure 13: Arrival Drop off on Big Cross Street	11
Figure 14: Second Street during Dismissal.....	12
Figure 15: Third Street during Dismissal.....	12
Figure 16: Big Cross Street during Dismissal.....	13
Figure 17: Broad Street/Staple Street Intersection (looking south)	14
Figure 18: Hudson Street/South Street Intersection (looking west)	14
Figure 19: AM & PM Traffic Volumes at Staple Street/ 3 rd Street Intersection	15
Figure 20: Level-of-Service Criteria for Signalized and Unsignalized Intersections	16
Figure 21: Level of Service Results – Existing Conditions.....	16
Figure 22: Level of Service Results - Optimized	17
Figure 23: Speed Study Results.....	17
Figure 24: Parking	18
Figure 25: Parking Inventory.....	18
Figure 26: Crash Locations 2005-2008.....	19
Figure 27: Student Travel Mode to School (AM)	20
Figure 28: Student Travel Mode to Home (PM).....	20
Figure 29: Exclusive Pedestrian Phase Pavement Markings	22
Figure 30: Pavement Treatments	23
Figure 31: Pedestrian Crossing Sign.....	24
Figure 32: Flashing Beacons and Speed Limit Sign	25
Figure 33: Recommendation Cost Estimates.....	27

Appendix A: Conceptual Plans

Appendix B: Meeting Notes

Appendix C: Travel-to-School Survey

Appendix D: Traffic Data

Appendix E: Speed Data

Appendix F: Safety Data

Appendix G: Sample Message to Parents

Appendix H: Walking School Bus Information

Appendix I: AAA Northway's School Safety Patrol Program Information



1.0 INTRODUCTION

This study examines walking, biking and vehicular access issues at the Big Cross Elementary School in Glens Falls, NY. The school is classified as a “walking school,” as it is not dominated by excessive bus traffic or an auto-centric campus and most of its students all reside less than one mile away. This report presents a summary of existing conditions, summarizes the major access and safety issues and includes program and transportation facility design recommendations to help improve access for all transportation modes serving the school.

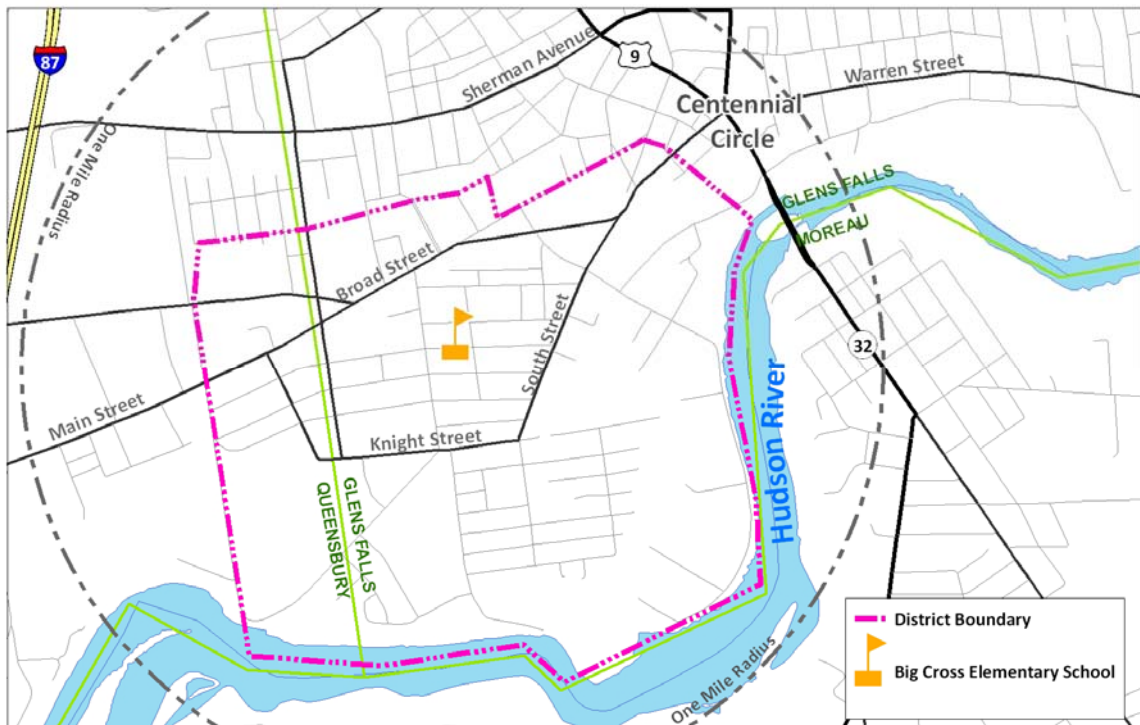
The study is funded by the Adirondack/Glens Falls Transportation Council (AGFTC) and has been prepared by Resource Systems Group, a traffic engineering and transportation planning consulting firm. This report is based on three primary sources of information: field observations by Resource Systems Group, Inc. (RSG) in May 2009, meetings with school officials and traffic and safety data provided by AGFTC.

1.1 School Background

The Big Cross Elementary School is part of the Glens Falls City School District and has roughly 220 students in daily attendance. The school has Kindergarten through Fifth Grades and also hosts a Special Education program which is managed by the Board of Cooperative Educational Services (BOCES). There are about 55 to 60 faculty and staff members at the school including teachers, administrative staff, maintenance staff, and others.

The school is located between Staple Street and Big Cross Street to the west and east, respectively, and between 2nd and 3rd Streets to the north and south, respectively. The location of the school proximate to downtown Glens Falls and the school catchment boundary (which extends approximately 0.9 miles from the school) is shown in Figure 1.

Figure 1: Big Cross Elementary School in Glens Falls, New York



2.0 EXISTING CONDITIONS

2.1 Functional Classification

Big Cross is located within a grid of streets and roads that serve different functions within the overall highway system. Functional classification is a means of grouping similar roadways based on their role within the transportation system. The groupings are based on each road's ability to perform two functions, which work in opposition:

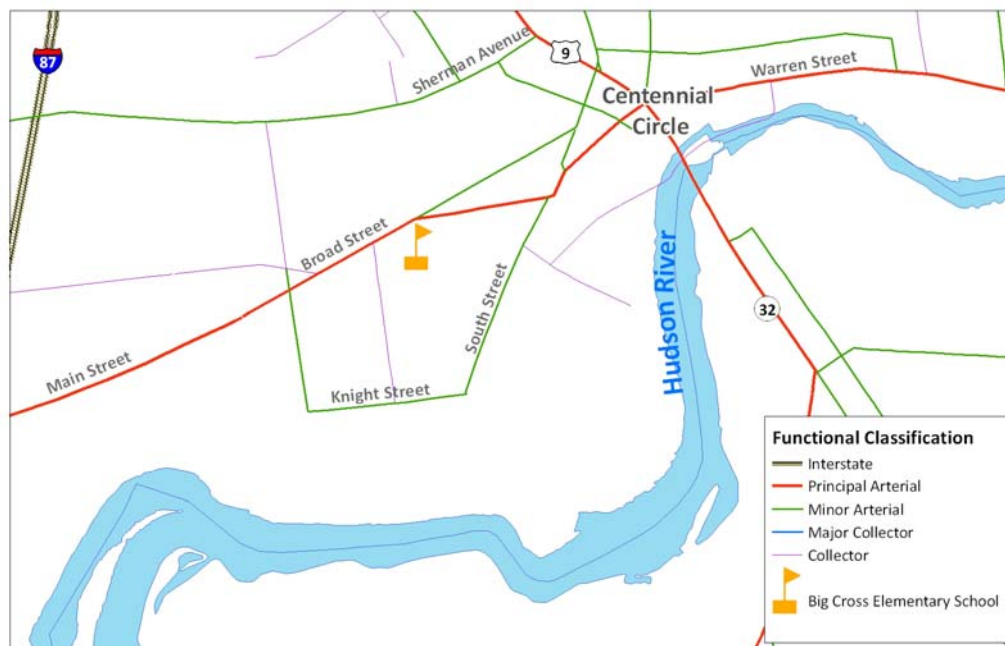
- The ability to move vehicles through the network, and
- The ability to provide access to other roadways, businesses, or residences.

Listed in order from greatest mobility/least access to least mobility/greatest access, the system follows the following hierarchy:

- Interstates – provide the least amount of access and the greatest amount of mobility
- Principal Arterials – the highest traffic volume corridors; serve the longest trip desires
- Minor Arterials – interconnects the principal arterial system; provides both access to adjacent land and mobility for through travel
- Collector Roads – provide land access and traffic circulation; may enter residential areas; connects arterials to local roads
- Local Roads – typically residential in nature; through traffic is discouraged; access to land is the highest priority.

The functional classification of roads immediately surrounding the Big Cross Elementary school is primarily local. There is one principal arterial that students may encounter (Broad Street), and two minor arterials (South Street and Knight Street) (Figure 2).

Figure 2: Functional Classification (NOTE: local roads will be shown in next plan revision)



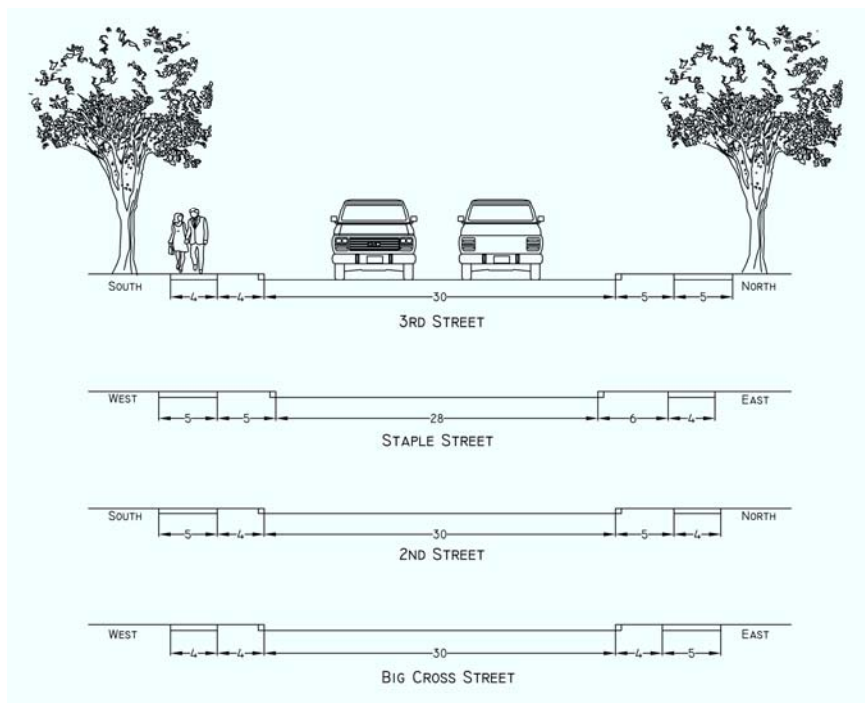
2.2 Roadway Characteristics

The roads surrounding Big Cross Elementary School are all two-way with one lane in each direction of travel. There are no intersection turn lanes in the study area. Four to five foot sidewalks line both sides of the street. Figure 3 and Figure 4 show the typical cross sections for the four roads that bound the Big Cross School property.

Figure 3: Cross-Section Locations



Figure 4: Typical Cross-Sections



The intersection of Staple Street and Big Cross Street is controlled by a traffic signal with “No Turn on Red (during school days)” restrictions for all approaches. This signal has a 69 second cycle length: 45 seconds for the North/South approaches, 16 seconds for the East/West approaches, 4 seconds of yellow and zero seconds of red clearance per phase. (Note that typical signal phasing includes 1-2 seconds of red clearance per phase). This signal timing is in effect during the AM and PM peak hours. There are pedestrian crosswalks on all approaches, however no pedestrian signal equipment.

The intersections of Big Cross Street with Second Street and Third Street are controlled by stop signs on four approaches (All-way stop). The intersection of Staple Street with Second Street is controlled by a stop sign on the Second Street approach.

Speed limit restrictions to 15 miles per hour during school hours and days are in place throughout the study area. School crossing signs accompany most school zone speed limit signs. Outside of the school speed zone the speed limit is 30 miles per hour. The locations of existing signs marking these areas are shown in Figure 5.

Figure 5: Speed Limits & Traffic



Per the 2003 Manual on Uniform Traffic Control Devices (MUTCD)¹ there are three guidelines that pertain to school warning and speed limit signage:

1. The School Advance Warning assembly shall be used...in advance of the first installation of the School Speed Limit assembly (Figure 6).
2. If used, the School Advance Warning assembly shall be installed not less than 45 m (150 ft) nor more than 210 m (700 ft) in advance of the school grounds or school crossings.

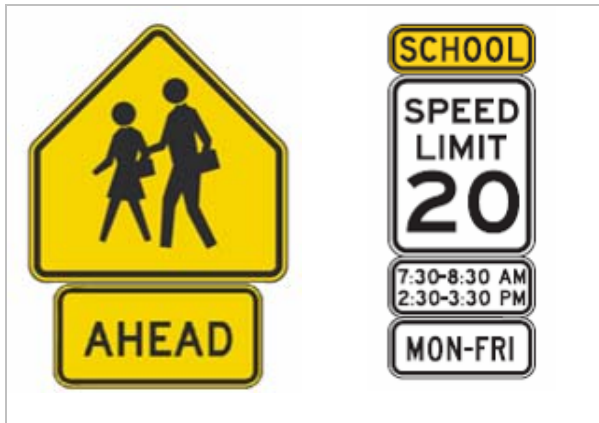
¹ Federal Highway Administration, *Manual on Uniform Traffic Control Devices, Part 7: Traffic Controls for School Areas*, 2003 ed.



3. The reduced speed zone should begin either at a point 60 m (200 ft) from the crosswalk, or at a point 30 m (100 ft) from the school property line, based on whichever is encountered first as traffic approaches the school.

The MUTCD also recommends using flashing beacons in critical situations, “...where greater emphasis of the special school speed limit is needed.” Comments from school officials indicate that most other elementary schools in the Glens Falls area have flashing beacons on their advance warning assembly signs.

Figure 6: Advance Warning Sign and Reduced Speed Limit Assembly



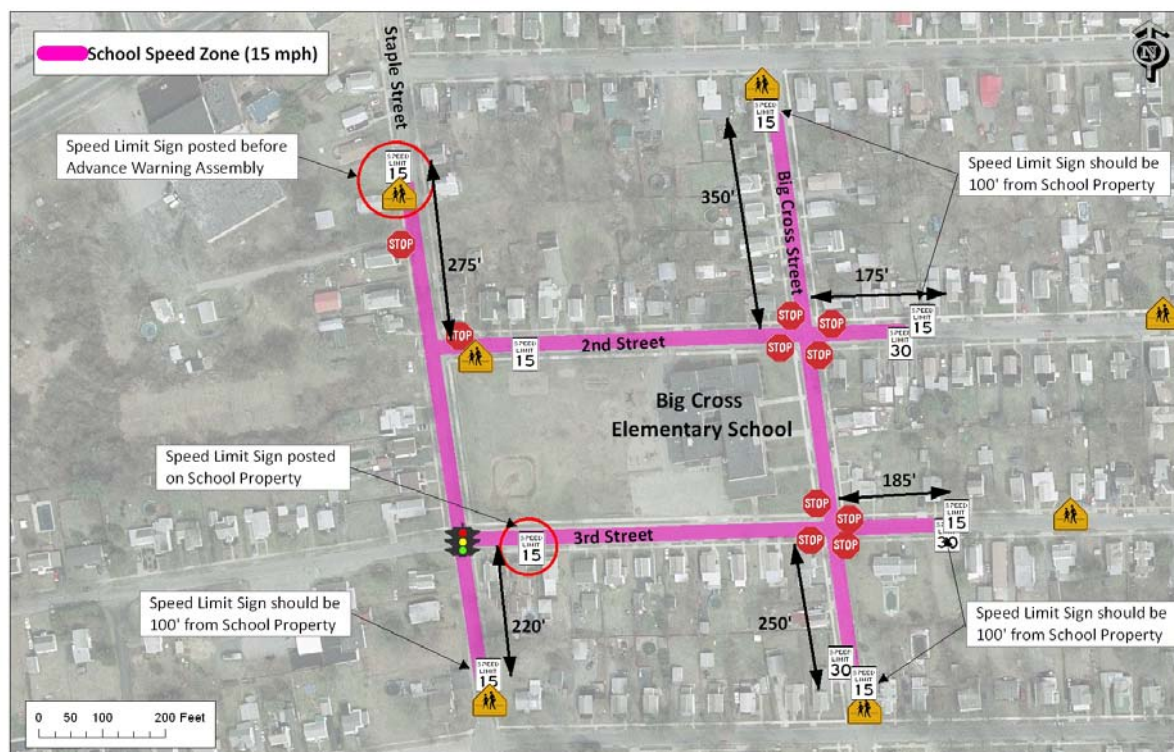
The following sign locations are inconsistent with the MUTCD guidelines:

- Relative to guideline number 1 - the Advance Warning sign at the northern location on Staple Street is located before the reduced speed zone sign;
- Relative to guideline number 2 - the Advance Warning sign on Third Street is posted on school property, whereas the minimum is 150' from the property line; and
- Relative to guideline number 3 - none of the signs locations satisfy this guideline. Signs should 100 ft) from the school property line with school speed limit 15 mph signs posted between 150' and 395' from the school property or on school property itself.

These inconsistencies are noted in Figure 7.



Figure 7: School Signage Deficiencies



2.3 Pedestrian and Bicycle Facilities

Four to five foot wide sidewalks line both sides of the streets in the immediate vicinity of the school. Just outside of the school's perimeter, there are two locations that lack sidewalk connections: the south side of 3rd Street proximate to Dobert's Dairy and the east side of Big Cross Street just south of 3rd Street. These sections are circled in blue in Figure 8. Crosswalks, most of which are worn and faded, are also shown.

NOTE: The missing section of sidewalk on Big Cross Street was constructed in 2009 after the field inventory for this study was conducted.

With a few minor exceptions, sidewalks do not exist along the residential streets south of Knight Street (see Figure 9 on the following page). The lack of sidewalks combined with the distance to Big Cross School, make walking from the neighborhoods south of King Street less likely.

All 4th and 5th grade students are eligible to ride their bicycle to school. Any 3rd grade students that have participated in the "Bike Rodeo" (discussed further in section 2.4.3) are also allowed to ride their bicycle to school.¹ The school bike rack is located at the end of the school parking lot.

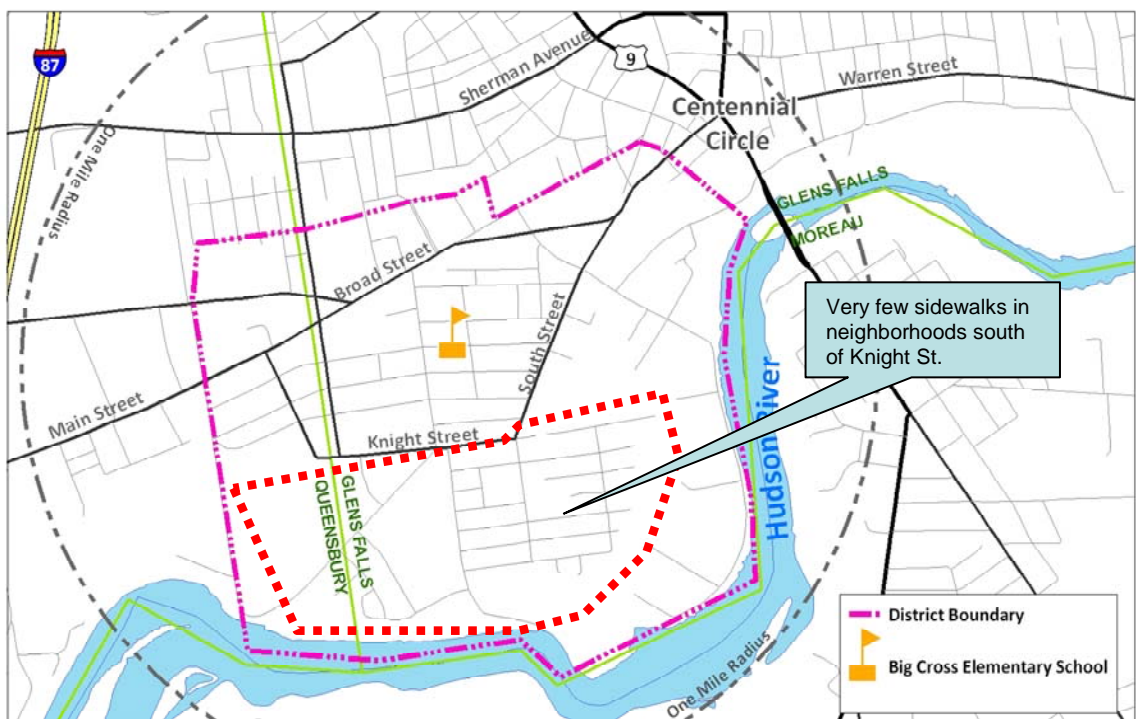
¹ Glens Falls City School District, 2008-2009 Student-Parent Handbook, Page 15.



Figure 8: Pedestrian and Bicycle Facilities (As of May 2009)



Figure 9: Sidewalks in the School's Catchment Area



2.4 School Access Characteristics

Based on conversations with school officials, roughly one-third of school students walk to school and an additional 10-12 ride their bike; all others either carpool, are dropped off at school, or arrive via a different mode.¹

Crossing guards monitor two intersections adjacent to the school: Staple Street/3rd Street and Big Cross Street/2nd Street. During the field observations on 30 May 2009 by RSG, the crossing guard at Staple St/3rd St was observed to have a STOP paddle but not a retroreflective vest. The crossing guard at Big Cross St/2nd Street was observed to have a retroreflective vest but not a STOP paddle (Figure 10). Per the MUTCD, there are two standards for crossing guards:

- Adult crossing guards shall wear high-visibility retroreflective safety apparel labeled as ANSI 107-1999 standard performance for Class 2 as described in Section 6E.02.
- Adult crossing guards should use a STOP paddle. The STOP paddle should be the primary hand signaling device. The STOP paddle shall be an octagonal shape. The background of the STOP face shall be red with at least 150 mm (6 in) series capital white letters and border. The paddle shall be at least 450 mm (18 in) in size and have the word message STOP on both sides. The paddle shall be retroreflectorized or illuminated when used during hours of darkness.

Figure 10: Crossing Guard at Big Cross-Second Street



There are seven school access points for students, including the gymnasium in the rear of the building and main entrance facing Big Cross Street. Five of these entrances were used for student arrival and departure during the 2008/2009 school year; however this will change to three entrances for primary arrivals and departures during the 2009/2010 school year plus one for Breakfast Program students. The future entrances are marked in Figure 11. During school hours, all entrances are closed except for the Main Entrance.

¹ Confirmed by the Parent Survey discussed in section 4.0.



Figure 11: School Access Points



Fourth and Fifth graders and special needs students access the building from a rear entrance. The area serves as a loading dock and the pavement is used for basketball and hopscotch courts (Figure 12). In the past, some vehicles used the paved connection to travel between the curb cut on Second Street and the faculty/staff parking lot curb cut on Third Street. A gate was installed that prevents this movement, but the Second Street access still appears as if through traffic is possible.



Figure 12: Second Street Curb Cut at Rear School Entrance



During the drop-off and pick-up periods, vehicles typically are parked on both sides of 2nd, 3rd, and Big Cross Streets. The school bus staging area is on 2nd Street in the vicinity of the rear school entrance and handicap ramp. The following is a schedule of typical start and end times throughout the school day:

- 7:55 am – Pre-school Bus arrives
- 8:00 am – Breakfast door opens
- 8:10 am – Crossing guards arrive
- 8:30 am – School Begins/Special Education bus arrives
- 8:35 am – Crossing guards depart
- - School in Session -
- 1:30 pm – Pre-School Bus departs
- 2:20 pm – Crossing guards arrive
- 2:45 pm – School Ends
- 3:00 pm – Crossing guards depart
- 3:15 pm – Math program ends

During the morning arrival period on May 29, 2009, RSG observed few if any vehicular access issues. There are several reasons why traffic during the arrival period is relatively un-congested (at least when snow banks do not constrict flow). The school is accessed on all four sides of the building, three of which are adjacent to streets. Parking is not permitted along these segments which keeps them clear for short-term drop offs. Since the turn-over is fast, and there is plenty of curb-side drop-off area available, vehicles do not block travel lanes. Students can step directly from the vehicles to the street (Figure 13).



Figure 13: Arrival Drop off on Big Cross Street



During the afternoon, parents begin to arrive ten or fifteen minutes before the 2:45 pm dismissal. Parked vehicles begin to accumulate on both sides of Second, Third and Big Cross Streets. For a period of ten to fifteen minutes after dismissal, traffic is hectic around the school. The most intense congestion occurred on Second Street. RSG noted that some vehicles double-parked on Second Street blocking traffic (Figure 14). Double parking was not observed on Big Cross or Third Streets, although these streets were also busy (Figure 15 and Figure 16). Because parents park on both sides of the street (for all adjacent streets), more students are forced to cross travel lanes at random locations around the school.



Figure 14: Second Street during Dismissal



Figure 15: Third Street during Dismissal



Figure 16: Big Cross Street during Dismissal



2.4.1 Winter Access Issues

The drop-off and pick-up routines are most critical during the winter months when large snow banks can decrease the width of the streets and reduce sight distance, effectively reducing traffic to one-way. During the 2008-2009 school year, vehicles were observed by school officials backing down streets to avoid waiting for the blocked traffic to clear. The Glens Falls School District removes the snow banks on the school's side of the streets, which is then piled onto the playground. The City Department of Public Works is responsible for removing the rest of the snow banks. Generally the school removes snow quickly but has to wait for the city crew to clear the streets.

2.4.2 School Dynamics

According to school officials (See notes in Appendix B), the southern part of the school's catchment area tends to have multi-generational families. The northern section of the catchment area tends to have more transient families due to the greater number of rental units. The students from the northern part of the catchment area tend to be more of the walkers and bike-riders. Big Cross has some students from a recently completed public housing project (Village Green) located near the South Street/Hudson Street intersection. Although that area is in the Sanford School catchment area, residents send their children to Big Cross because that's the school they were attending before moving to Village Green. Sanford School also had limited capacity for the additional students.

Because of this dynamic, the Big Cross's practical boundary extends beyond Broad Street. As a result, there are two intersections that are of concern to the school:

1. The Broad Street/Staple Street intersection is commonly used by Big Cross students. Wide driveways at a new bank on the southwest corner and a convenience store/gas station on the southeast corner create large potential conflict areas between vehicles and pedestrians. The intersection is signalized and there are cross-walks, but there are no pedestrian phases or



equipment. A crossing guard monitors this intersection during peak school crossing times (AM and PM).

2. The Hudson Street/South Street intersection is close to the Village Green. Because it is on a horizontal curve and there are turning lanes, the intersection can be confusing. The intersection does not have a traffic signal. A pedestrian walkway was painted with no evident signage crossing Hudson Street on the east side of the intersection.

Pictures of these two intersections are shown in Figure 17 and Figure 18.

Figure 17: Broad Street/Staple Street Intersection (looking south)



Figure 18: Hudson Street/South Street Intersection (looking west)



2.4.3 Training & Awareness Programs

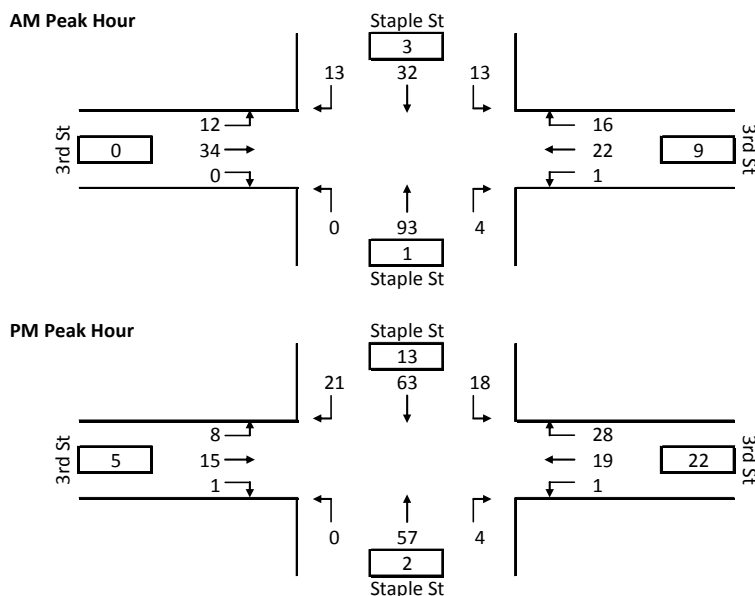
The Big Cross Elementary School participates in an annual “Bike Rodeo” program that is held each year in the spring to educate students on safety, bicycle etiquette, and school rules. These rules also apply to students using skateboards, scooters, etc.

Occasionally a DARE officer will be brought into school for informational sessions to reinforce the need and requirement to wear helmets. The school also periodically sends informational flyers home with students that encourage safe bicycling habits. Helmet use is typically the focus of the message. A sample message is included in Appendix G.

2.5 Traffic Volumes and Speeds

Turning movement counts were conducted by RSG at the Staple Street/3rd Street intersection during the AM (7:45 – 8:45) and PM (2:30 – 3:30) peak hours on 30 May 2009. The volumes at this intersection are shown in Figure 19.

Figure 19: AM & PM Traffic Volumes at Staple Street/3rd Street Intersection



2.5.1 Level of Service Definition

Level-of-service (LOS) is a qualitative measure describing the operating conditions as perceived by motorists driving in a traffic stream. LOS is estimated using the procedures outlined in the 2000 Highway Capacity Manual. In addition to traffic volumes, key inputs include the number of lanes at each intersection and the traffic signal timing plans. The LOS results are based on the existing lane configurations and control types (signalized or unsignalized) at each study intersection.

The 2000 Highway Capacity Manual defines six qualitative grades to describe the level of service at an intersection. Level-of-Service is based on the average control delay per vehicle. Figure 20 shows the various LOS grades and descriptions for signalized and unsignalized intersections.



Figure 20: Level-of-Service Criteria for Signalized and Unsignalized Intersections

LOS	Characteristics	Unsignalized	Signalized
		Total Delay (sec)	Total Delay (sec)
A	Little or no delay	≤ 10.0	≤ 10.0
B	Short delays	10.1-15.0	10.1-20.0
C	Average delays	15.1-25.0	20.1-35.0
D	Long delays	25.1-35.0	35.1-55.0
E	Very long delays	35.1-50.0	55.1-80.0
F	Extreme delays	> 50.0	> 80.0


The delay thresholds for LOS at signalized and unsignalized intersections differ because of the driver's expectations of the operating efficiency for the respective traffic control conditions. According to HCM procedures, an overall LOS cannot be calculated for two-way stop-controlled intersections because not all movements experience delay. In signalized and all-way stop-controlled intersections, all movements experience delay and an overall LOS can be calculated.

Detailed Synchro LOS worksheets are available in Appendix C.

2.5.2 Level of Service Analysis

Synchro (v7) was used to assess level of service at the Staple Street/3rd Street intersection during the AM and PM peak hours. The results are presented in Figure 21. In addition to level of service and delay, the Volume to Capacity Ratio (v/c) is shown, which represents the amount of congestion on the roadway, where a value of 1.0 or greater indicates that the intersection is operating above capacity.

Figure 21: Level of Service Results – Existing Conditions

Signalized Intersections	2009 - Existing Conditions					
	LOS	AM Delay	v/c	LOS	PM Delay	v/c
 Staple St/3rd St						
Overall	B	11	0.10	A	10	0.11
Eastbound, on 3rd Street	C	22	0.12	C	21	0.06
Westbound, on 3rd Street	C	21	0.10	C	22	0.13
Northbound, on Staple Street	A	5	0.09	A	4	0.05
Southbound, on Staple Street	A	4	0.06	A	5	0.10

These results indicate that there is very light volume relative to the capacity of the intersection. However, the delay on the eastbound/westbound approaches is relatively high given the number of vehicles passing through the intersection.


To improve the performance of this intersection for all modes, three changes are recommended:

- The addition of all-red clearance time, to allow vehicles to clear the intersection before the next signal phase;
- The addition of a pedestrian interval after every cycle during school hours, which will stop traffic in all directions; and
- Optimization of the cycle length and splits.

The results of these changes are given in Figure 22.



Figure 22: Level of Service Results - Optimized

Signalized Intersections		2009 - Optimized					
		LOS	AM Delay	v/c	LOS	PM Delay	v/c
	Staple St/3rd St						
	Overall	B	16	0.15	B	17	0.17
	Eastbound, on 3rd Street	B	19	0.12	B	17	0.06
	Westbound, on 3rd Street	B	19	0.10	B	17	0.11
	Northbound, on Staple Street	B	15	0.17	B	16	0.12
	Southbound, on Staple Street	B	14	0.11	B	17	0.22

This optimization assumes a 60-second cycle length with the following phases;

- 25 seconds North/South; 21 sec green, 4 sec yellow and 2 sec all-red clearance;
- 21 seconds East/West; 17 sec green, 4 sec yellow and 2 sec all-red clearance;
- 14 seconds Pedestrian Phase; 4 sec walk, 8 sec flash don't walk, and 2 sec yellow.

2.5.3 Speeds

Speed data were collected on the same day on 2nd Street and 3rd Street using tube traffic counters. The 85th percentile speed, which is commonly used to establish posted speed limits, represents the speed at which 85% of drivers feel comfortable driving at or below (i.e. only 15% of drivers are observed driving faster than the 85th percentile speed). Figure 23 shows the recorded 85th percentile speeds during three observation periods: the AM peak hour, the PM peak hour, and the total day.

Figure 23: Speed Study Results

	85th Percentile Speeds (mph)		
	AM	PM	TOTAL
2nd Street	20	18	24
3rd Street	25	26	27

The posted speed limit on these two streets is 15 mph. Note that 2nd Street speeds are relatively close to the posted speed limit – likely due to the number of obstacles and conflicts (school bus, parked cars, etc.) – whereas 3rd Street, which has fewer roadway impediments, showed speeds that were sizably greater than the posted speed limit.

Detailed speed data can be found in Appendix E.

2.6 Parking

On-Street parking is available on all adjacent roadways opposite the school (for instance the north side of 2nd Street, the east side of Big Cross Street, etc.) for faculty and staff. There are three different parking prohibitions on the school-side of the street:

- “No Parking Anytime” on the east side of Staple Street,
- “No Parking This Side” on the north side of 2nd Street and south side of 3rd Street, and
- “No Parking 7AM – 5PM Monday thru Friday” on west side of Big Cross Street.

These parking restrictions are generally ignored during arrival and dismissal periods.



On-site parking is provided in the school parking lot, which holds 31 vehicles including one handicap space. There are also two specified handicap parking spaces on-street; one directly in front of the school entrance on Big Cross Street and a second just east of the rear school entrance on 2nd Street (Figure 24).

Staff and faculty typically park in the school parking lot. Overflow vehicles are most often found on the east side of Big Cross Street and the north side of 2nd Street closest to the school, which has unmarked on-street parking.

Figure 24: Parking



Note that the two on-street handicap parking spaces are located in no-parking zones.

Although spaces are not marked, the number of available spaces was estimated based on a standard parking space length based of 22' and accounting for the location of driveways. There are approximately 72 parking spaces available in the vicinity of Big Cross Elementary School (Figure 25).

Figure 25: Parking Inventory

Parking Area	Regular Spaces	Handicap Spaces	Total Spaces
School Lot	30	1	31
2nd Street	11	1	12
3rd Street	13	0	13
Big Cross Street	7	1	8
Staple Street	8	0	8
TOTAL	69	3	72



3.0 SAFETY

Crash data was obtained from the Adirondack/Glens Falls Transportation Council for the period from November 30, 2005 – November 30, 2008 for the streets generally within the school's catchment area. During this three-year period, there were a total of 46 crashes including 17 crashes with injuries. There were zero fatalities. There was one reported bicycle/pedestrian crash. There were two crashes reported on the section of 2nd Street adjacent to the school; the first was a vehicle collision with a utility pole in snowy conditions. The other collision on 2nd Street involved a backing vehicle and a parked vehicle. Crash locations are shown in Figure 26. Detailed crash data can be found in Appendix F.

Figure 26: Crash Locations 2005-2008¹



4.0 SCHOOL SURVEY

The Warren-Washington County Healthy Heart Program conducted a survey of parents' opinions and feelings about their children walking or bicycling to school. The surveys were conducted in October 2006 and October 2008. The results of the survey are provided in Appendix C. This section of the report summarizes the major findings.

The results of this survey indicate that there has been a 7-9% increase in students walking to school over the past two years. Students being dropped off has remained relatively flat (increase in the AM and decrease in the PM), and carpool and other modes have decreased. The results are shown in Figure 27 and Figure 28.

¹ One crash was reported on South Street with an unknown cross street location and therefore is not shown on this map.



Figure 27: Student Travel Mode to School (AM)

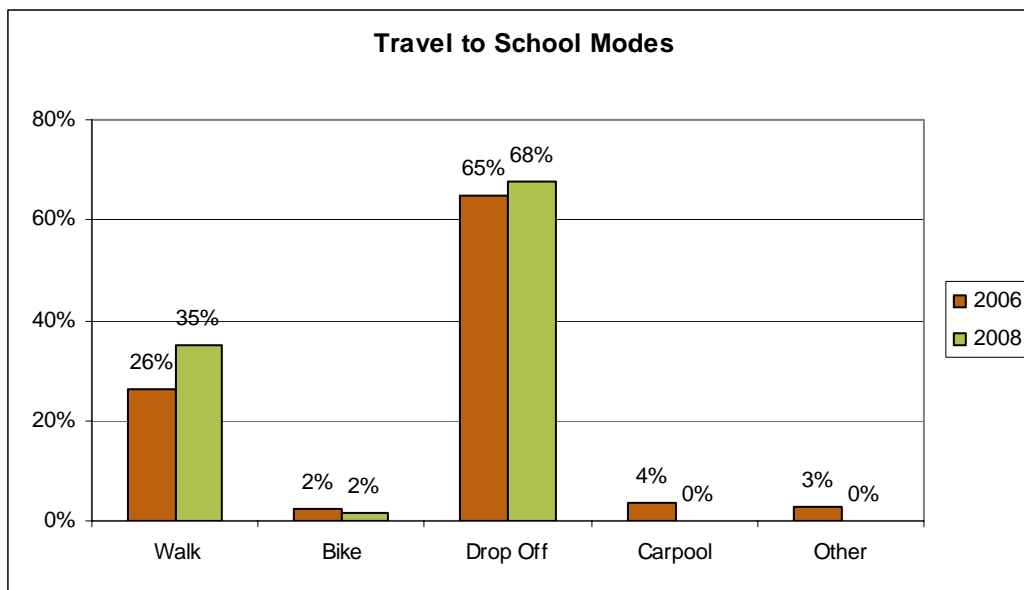
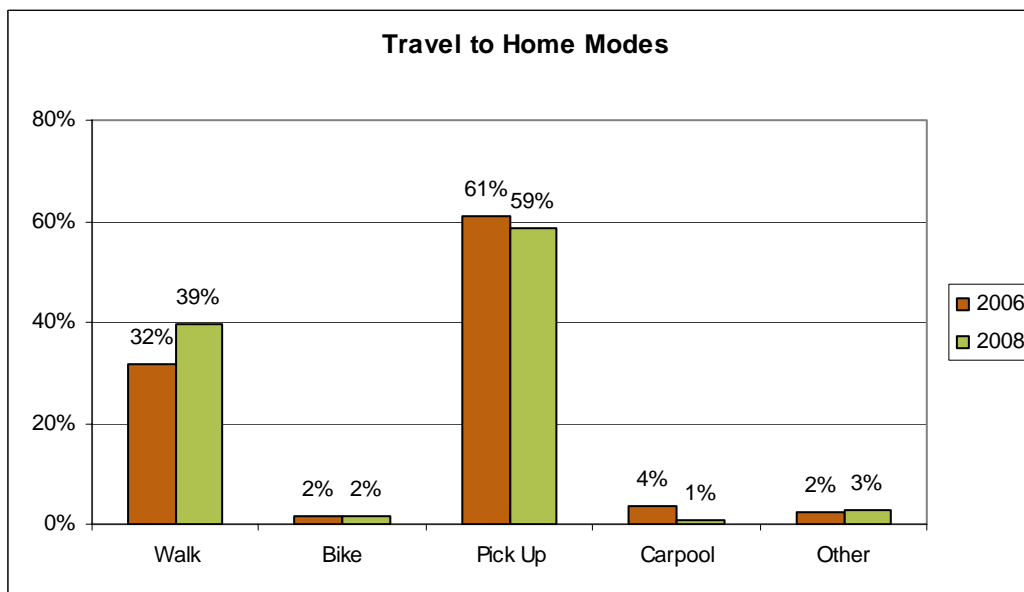


Figure 28: Student Travel Mode to Home (PM)



The parents responded that crime was the number one concern with their children walking or bicycling to school. Traffic, sidewalks, speeding, weather, and traveling alone were listed as other significant concerns. The number one change that parents would like to see to encourage their students to walk or bike to school was the installation of a Crime Watch program. Other changes included another student or parent to walk with, less traffic, and improved sidewalks.

Parents also reported that their primary reasons for encouraging their students to walk or bike to school include physical activity as a means to combat obesity related health concerns, to increase self-esteem and decrease stress and anxiety, and to establish life-long patterns of physical activity.

These priorities were relatively unchanged between 2006 and 2008.



5.0 ISSUES

The summary of existing conditions, in combination with on-site field observations, has revealed several issues with regard to student arrivals and departures, and general school safety procedures, at the Big Cross Elementary School. These include:

- Snow Banks – during winter months, snow banks restrict vehicular access which reduces roadway capacity, restricts drop-off and pick-up routes, and creates hazardous conditions via reduced sight distances. These issues also tend to prompt unsafe driving behaviors.
- Crime – based on the parent survey feedback, concern about crime is the leading issue that prevents parents from encouraging kids to walk to school.
- Drop-off/Pick-up areas – congestion is more intense during the afternoon dismissal period because parked vehicles accumulate on both sides of all three streets surrounding the school. Double-parking was observed on Second Street which blocked traffic. Students cross the streets at random locations to reach vehicles parked on opposite sides of the street. Congestion may increase along Big Cross Street and Second Street when the Third Street entrance is closed in the upcoming 2009/2010 school year. The hopscotch and 4-square court area is sometimes used as a through route from 2nd Street to the school parking lot.
- Sidewalks – there are two key sections of sidewalk missing within close proximity to the school; one on 3rd Street and one on Big Cross Street (which was constructed in the Fall of 2009 after the inventory for this study was completed). Sidewalks are lacking in the neighborhood south of Knight Street.
- Signs – the location of school Advance Warning and speed limit signs is inconsistent with guidelines published in the Manual on Uniform Traffic Control Devices (MUTCD).
- Parking – the location of handicap parking spaces within designated no-parking areas and their proximity to ADA compliant entrances is not optimal. The staff parking lot has an unclear layout and causes confusion. There is frequently greater demand for parking than the existing parking lot provides, and on-street parking is inefficiently designated. Parking restrictions are ignored during arrival and dismissal periods.
- Safety – crossing guards should utilize proper equipment. The Broad Street/Staple Street intersection, a higher-volume intersection where students cross a major street, lack sufficient pedestrian equipment. There is no red clearance time and no pedestrian phase at the Staple Street/Third Street signalized intersection.

6.0 RECOMMENDATIONS

Based on the issues described in the previous section, a series of recommendations have been developed for the Big Cross Elementary School to address these deficiencies. The focus of these recommendations is to create more efficient and safer methods for approaching, circulating and departing from the school. Each of these recommendations is also depicted in plan form (if applicable), which is included in Appendix A of this report. Following this discussion is Figure 33 which presents 2009 order of magnitude cost estimates.

6.1 Plan 1: Immediate School Area

The immediate school area is defined by the four streets that bound the school property: 2nd Street, 3rd Street, Big Cross Street and Staple Street. Each of these recommendations can be implemented



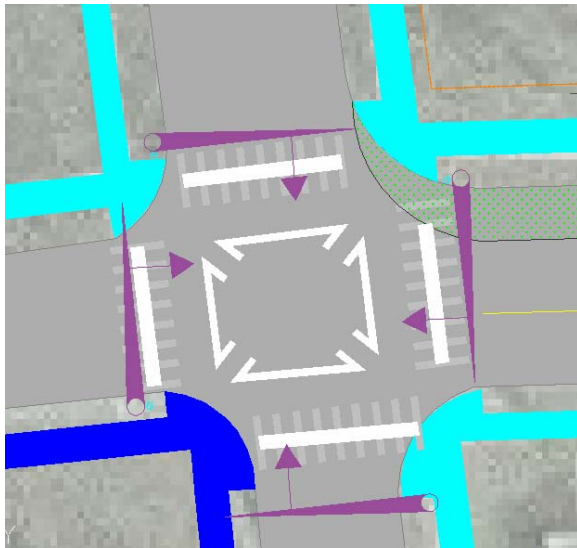
individually over time, or concurrently. The recommendations presented in this section are shown in Plan 1.

6.1.1 Staple St/3rd St Intersection

The Staple Street/3rd Street intersection traffic signal should be updated with the revised signal timings discussed in section 2.5.2. At a minimum, the industry standard of 4 seconds yellow time and 2 seconds red clearance should be installed.

Although a school crossing guard is present during key school hours, pedestrian safety would be enhanced at this intersection by installing pedestrian equipment and an exclusive pedestrian phase in the signal timing. These changes would allow pedestrians to cross the street in any direction, or diagonally (which is the desired path of many students, based on site observations) while vehicles on all approaches are stopped by a red light. A pedestrian-actuated push-button would allow this phase to be called whenever a pedestrian is present (rather than every cycle), which would minimize delay to drivers. Lastly, the addition of exclusive pedestrian phase pavement markings and Streetprint Duratherm crosswalks would further increase driver awareness and encourage student safety (Figure 29).

Figure 29: Exclusive Pedestrian Phase Pavement Markings



6.1.2 2nd Street, 3rd Street and Big Cross Street

School visibility is a key priority to the safety of its students. To this end, we recommend marking the pavement with the word “SCHOOL” on both approaches of these streets, for a total of six locations as shown in Plan 1 in Appendix A. Existing crosswalks would be enhanced by having long-lasting Streetprint Duratherm Textured Asphalt Paving (or similar), which imprints the look of brick or pavers into the existing asphalt. This textured surface is an additional reminder to drivers to slow down. Examples of these two recommendations are shown in Figure 30.



Figure 30: Pavement Treatments



6.1.2.1 Roadway Design Changes

Changes to the existing roadway design are recommended to slow vehicles down, increase driver awareness, and to encourage orderly parking. Recommendations shown in Plan 1 in Appendix A include:

- Install curb bump-outs – to reduce roadway widths
- Define parking spaces – to minimize impact of parked vehicles to neighbors, confusion in parking areas, and improve access to sidewalks and crosswalks that directly access the school. Marked parking spaces are relocated to the opposite side of the street, adjacent to the school.
- Define loading zones – to create short-term parking for students being dropped off and to move temporarily stopped vehicles out of the drive aisle
- Define bus area – to create a safe and efficient means for the school bus to drop off and pick up students
- Stripe centerlines – to indicate to drivers that stopping in the travel lanes is not permitted

All new loading zones and parking areas should be signed as such. Pavement markings should be used to reinforce the signage.

6.1.2.2 Staff Parking Lot

The existing staff parking lot should be re-organized to provide a one-way circulation pattern. Additionally, the parking lot entrance should be relocated to the west side of the lot so that it is further from the student drop-off area, thereby decreasing potential vehicle-pedestrian conflicts. To accommodate these changes while maintaining the same number of parking spaces, the lot should be extended by roughly 7ft to the west and a maximum of 10 ft to the north. Lastly, the handicap spaces that are currently designated on Big Cross and 2nd Street should be removed from those locations, and handicap spaces should be provided in the staff lot.



The potential to change the parking lot is constrained by the available distance between the building and the street. The final design of the parking lot should be based on a survey and modified as necessary.

To discourage vehicles from driving through the hopscotch and four-square area to access the lot, the pavement should be removed from a small section and shrubs should be planted in the same location. A sidewalk should be installed to maintain handicapped access from the parking lot to the school. The hopscotch and four-square courts that are disturbed in this process should be relocated to other existing paved areas.

6.2 Plan 2: Greater School Area

There are two intersections of note that need attention with regard to student safety outside of the immediate project area: Broad Street/Staple Street and Hudson Street/South Street. The recommendations in this section are shown in Plan 2 in Appendix A.

6.2.1 Broad Street/Staple St intersection

Similar to the Staple Street/3rd Street intersection, pedestrian signal equipment, exclusive phasing and pavement markings should be installed at this location. Duratherm pavement treatments, which will further indicate to drivers that they are crossing a pedestrian area, are also recommended.

While the recent bank development on the southwest corner has established wide sidewalks in very good condition, the sidewalk on the southeast corner of the intersection is in very poor condition. Wide, undefined driveways at the gas station, coupled with overgrown brush and broken sidewalks has created a poor environment for pedestrians. Curbs should be installed to limit driveway widths to a maximum of 24 ft at the gas station and new sidewalks should be installed. Thinning and trimming of the brush between this intersection and the Staple Street/3rd Street intersection is also recommended to create better sight lines and improved pedestrian visibility.

6.2.2 Hudson Street/South Street Intersection

The Hudson Street/South Street intersection is currently unsignalized with crosswalks on the northeast approach. These crosswalks appear to go relatively unnoticed. At a minimum, “Pedestrian Crossing” signs (Figure 31) should be installed for each approach. This intersection would also be a candidate for Duratherm textured pavement treatments.

Figure 31: Pedestrian Crossing Sign



6.3 Plan 3: Signs

As noted in Figure 7: School Signage Deficiencies on page 6, the existing location for most of the school advanced warning and speed limit signs is inconsistent with MUTCD guidelines. The guidelines recommend that reduced speed limit signs should be installed 100 ft from the school property. Plan 3 in



Appendix A shows the recommended location (and the 100 ft perimeter line) of these signs. The final location may vary somewhat based on field conditions (driveways, trees, etc.).

Lastly, installing flashing beacons on the school speed limit signs will further contribute to drivers' awareness of the school zone. As there are seven approaches to the school property, these beacons can be installed in all locations, or selectively at the highest-volume approaches.

Figure 32: Flashing Beacons and Speed Limit Sign



6.4 Neighborhood Sidewalks

Sidewalks are lacking in the neighborhood south of King Street. Big Cross should work the City to expand the sidewalk network in this neighborhood. A sidewalk plan should be developed with input from the residents that prioritizes locations. For example, it would be logical to construct sidewalks first on the north/south streets. Sidewalks on these streets would collect pedestrian traffic from the east/west streets to the existing network north of King Street.

6.5 Programmatic Strategies

While changes to the physical environment can impact vehicle speeds and pedestrian safety, awareness and public perception are just as critical to the overall feelings of safety and security. The following programmatic changes are recommended; some to support the physical changes, while others can be implemented at any time.

- 1) The School District should consider assume responsibility for removing snow banks on the opposite side of the street (which is currently the responsibility of the City).
- 2) Encourage a staff member to monitor arrival and dismissal. On-site observations showed that many parents drop their child off on the opposite side of the street and allow their children to cross in front of or behind their car, thereby darting out in front of other moving vehicles. Staff supervision would aid in the training of parents to pull into the loading zone or a parking spot and escorting their children to the nearest sidewalk. The same behavior should be encouraged for dismissal.



- 3) Provide parking guards with required equipment (high-visibility retroreflective safety apparel labeled ANSI 107-1999 and retroreflective 18" octagonal STOP paddle)¹
- 4) Organize "walking school buses," which is a group of children walking to school with one or more adults. Parents can take turns walking kids to school; picking up children at their houses along the way. Safety is just one accomplishment of this program; camaraderie and fitness are other positive byproducts. Additional reference material is provided in Appendix H.
- 5) Implement AAA Northway's School Safety Patrol program – a program that supplies schools with information about forming a student patrol, and provides the necessary equipment needed for the student patrol members. This program is at no cost to the school. The "Quick Reference Checklist" for starting a patrol is included in Appendix H of this report. For additional information, including the AAA booklet and student materials, contact:

Kelley Baker, Traffic Safety Administrator, AAA Northway
(518) 761-6058
kdbaker@northway.aaa.com
- 6) Education efforts for children and parents, including:
 - One-time school assemblies or after school assemblies, with speakers ranging from teachers and parents to health officials (school nurse or public representatives) and local law enforcement officers.
- 7) Integrating educational efforts into lesson plans, such as:
 - Calculating average walking speeds or distances in math class.
 - Walking outdoors and collecting nature samples in science class.
 - Calculating heart rates and using pedometers in health class.
 - Designing posters encouraging students to walk/bike in art class.
- 8) Communicating regularly with parents, such as:
 - Sending home printed materials and posting information on the school website.
 - Posting signs and/or flyers on illegally parked vehicles reminding them of parking regulations and rules.
 - Media stories about walking and biking efforts on local news programs.
 - Offering bicycle training and safety classes for parents, who may not feel they have the skills to adequately train their children.

¹ Federal Highway Administration, *Manual on Uniform Traffic Control Devices*, Chapter 7E.04 and 7E.05, 2003 edition.



6.6 Cost Estimates

Cost estimates for each of these recommendations, if applicable, are shown in Figure 33.

Figure 33: Recommendation Cost Estimates

Plan 1: Immediate School Area	Estimated Cost	Notes
Apply roadway pavement marking: "SCHOOL"	\$1,200	Per application. Six applications shown in plan.
Install curb bump-outs & pavement markings	\$148,000	~
Stripe centerline to decrease lane width	\$1,600	Incl. stripe on 2nd, 3rd, and Big Cross Streets.
Signs for 15 minute parking area, loading zone, etc.	\$700	Per sign.
Staff parking lot modifications	\$66,000	Incl. new pavement, stripes, islands and entrance.
Remove pavement; install plantings in drive-thru area	\$2,600	Incl. 3 shrubs.
Install sidewalk from parking lot to handicap entrance	\$59,000	5ft wide.
Plan 2: Greater Study Area		
Broad St/Staple St: Re-define and add sidewalks	\$90,000	Includes 350ft sidewalk and curb.
Hudson Ave/South St: Erect "Pedestrian Crossing" signs	\$900	Per Sign. Need one sign per approach (2 total).
Recurring Recommendations		
Install signal timing changes	nominal	~
Install pedestrian signal equipment and phasing	\$17,000	Per intersection.
Exclusive pedestrian phase pavement markings	\$230	Per intersection
Enhance cross-walks with pavement treatments	\$16,000	Streetprint Durathurm Textured Asphalt Paving
Install flashing beacon speed limit sign	\$3,400	Per installation. Incl. flashing beacon, sign and footing

7.0 PUBLIC INPUT

The findings and recommendations in the August 2009 draft report were presented at the January 6, 2010 Parent Teacher Association (PTA) meeting. Prior to the meeting, the report had been reviewed by the School Board. Meeting participants included the Big Cross Elementary School principal, teachers, approximately ten parents and a Councilman from the City's Fifth Ward. Meeting participants generally agreed with the findings and recommendations in the report and offered the following comments:

- Concern about crime was noted as the primary reason that parents do not allow their children to walk to school.
- There is a lack of sidewalks on the streets in the southern part of the school's catchment area south of Knight Street that create a barrier to walking for Big Cross students that reside in that neighborhood.
- The intersection of Staple Street /Third Street does not operate well. The light sometimes appear to be stuck in one phase (green in one direction only).
- Meeting participants agreed that the intersection of Broad Street with Staple Street would benefit from pedestrian equipment and enhancements to the cross-walks. Some parents instruct



their children to avoid that area due to concern about questionable activities centered around the gas station/convenience store.

- Meeting participants agreed that the Hudson/South Street intersection also warrants some improvements and noted that the intersection also serves as a transit stop. Participants also felt that other intersections thought the study area may need some enhancements as well.
- Meeting participants supported the recommendation to provide parking on the same side of the street as the school.
- There is concern about truck traffic on the local streets surrounding the school and diversion of through traffic from Broad Street.
- Additional pedestrian strategies discussed included crossing flags and pedestrian bollards near cross-walks.

8.0 SUMMARY

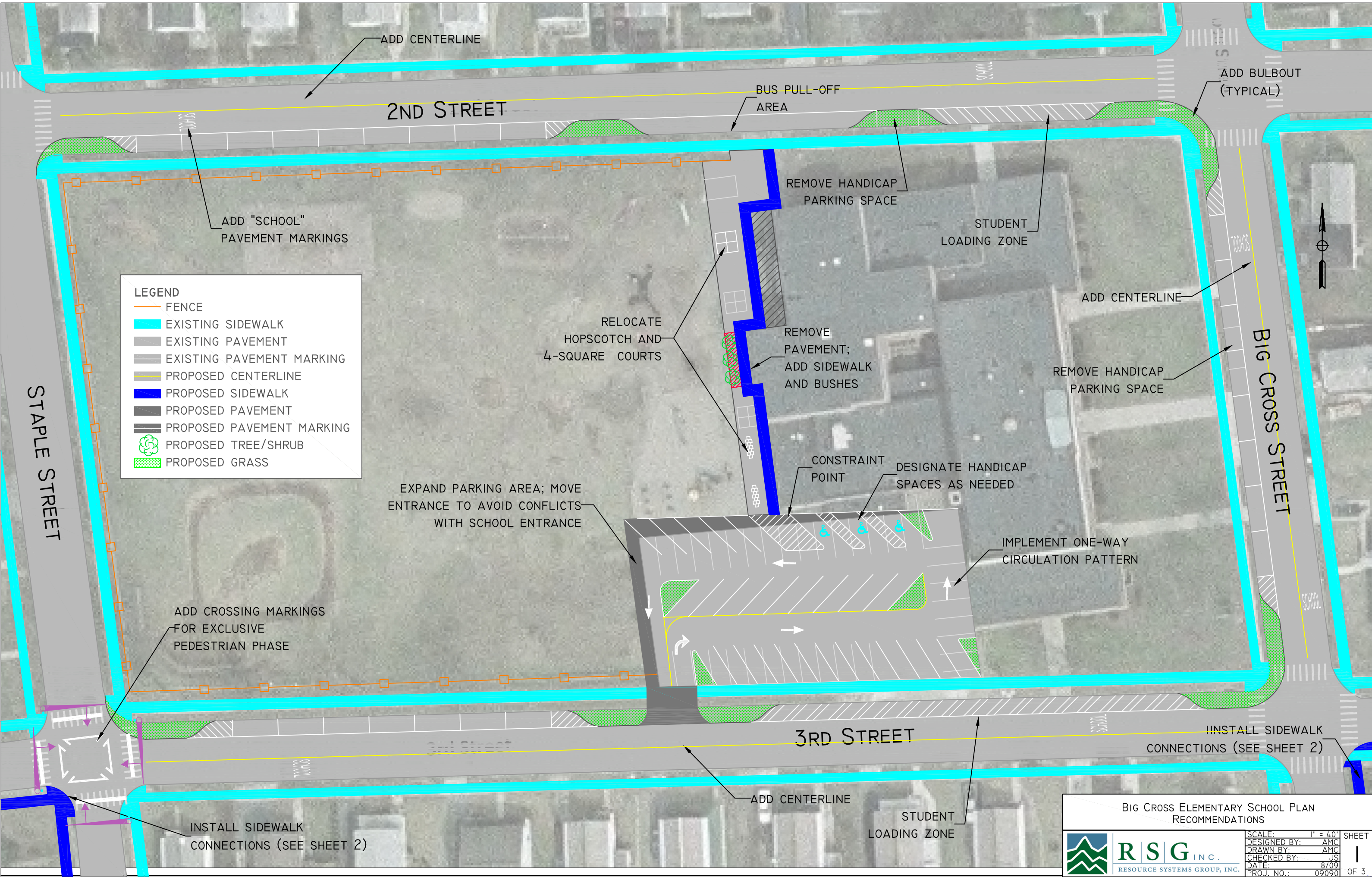
This study identifies and evaluates walking, biking and vehicular access issues at the Big Cross Elementary School in Glens Falls, NY. This report presents a summary of existing conditions, summarizes the major access and safety issues and includes program and transportation facility design recommendations to help improve access for all transportation modes serving the school. The study was funded by the Adirondack/Glens Falls Transportation Council (AGFTC) and has been prepared by Resource Systems Group, Inc.



APPENDIX A

Conceptual Plans





LEGEND

- FENCE
- EXISTING SIDEWALK
- EXISTING PAVEMENT
- EXISTING PAVEMENT MARKING
- PROPOSED CENTERLINE
- PROPOSED SIDEWALK
- PROPOSED PAVEMENT
- PROPOSED PAVEMENT MARKING
- PROPOSED TREE/SHRUB
- PROPOSED GRASS

BIG CROSS ELEMENTARY SCHOOL PLAN
RECOMMENDATIONS



R S G INC.
RESOURCE SYSTEMS GROUP, INC.

SCALE: 1" = 40'
DESIGNED BY: AMC
DRAWN BY: AMC
CHECKED BY: JS
DATE: 8/09
PROJ. NO.: 09090

SHEET
1
OF 3



ADD PEDESTRIAN
CROSSING SIGNS
(ONE PER APPROACH)



REDUCE CURB
CUT WIDTH

REPAIR/REPLACE
SIDEWALK; TRIM BRUSH
TO CREATE SAFE
WALKING ENVIRONMENT

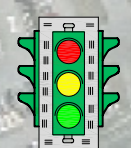
STAPLE STREET

SEE SHEET 1

*BIG CROSS
ELEMENTARY
SCHOOL*

ADD NEW SIDEWALK

ADD PEDESTRIAN
SIGNAL PHASING



REDEFINE CROSSWALKS

BROAD STREET

HUDSON AVENUE

BIG CROSS STREET

SOUTH STREET

2ND STREET

3RD STREET



R S G INC.
RESOURCE SYSTEMS GROUP, INC.

SCALE:	1" = 200'	SHEET 2 OF 3
DESIGNED BY:	AMC	
DRAWN BY:	AMC	
CHECKED BY:	JS	
DATE:	8/09	
PROJ. NO.:	09090	

BIG CROSS ELEMENTARY SCHOOL PLAN
RECOMMENDATIONS



APPENDIX B

Meeting Notes





Big Cross Multimodal Transportation Plan

May 28, 2009 Meeting Notes

Glens Falls, NY

Attendees: Debbie Hall, Principal and Joe Desourdy, Maintenance, Big Cross Elementary School; Aaron Frankenfeld, Adirondack/Glens Falls Transportation Council; Joe Segale, Amanda Clancy RSG.

Prepared: May 29, 2009 by Joe Segale

Aaron provided background on how the project was initiated. Debbie described her experiences, answered RSG questions and provided information about the school as summarized below.

1. School grades: K-5. Special Ed preschool program is also provided at Big Cross, but is managed by the Board of Cooperative Educational Services (BOCES).
2. 220 students and approximately 55-60 faculty and staff.
3. Arrival
 - a. 60-80 kids per day take part in the breakfast program, which begins at 8:00 am. Participation depends on the menu and weather.
 - b. Pre-school bus arrives at about 7:55 am at the Second Street entrance and departs at 1:30.
 - c. Special Education bus arrives around 8:30 at the Second Street entrance (12 students).
 - d. Tuesdays and Thursdays – After School Math Program that ends at 3:15 pm. About 10% of students participate.
 - e. There is an afterschool program with bus service at 4:45. This program will not be continued next year.
4. Existing School Access Points. Five different access points on all sides of the building. The school will be consolidating entrances to 3 locations (see map). Teachers are currently stationed at the entrances. Teachers will have a new contract next year that does not require them to provide assistance during arrival. That duty will have to be covered by other staff, so the number of access points has to be reduced to the two entrances on Big Cross Street and the rear ramp entrance facing Staple Street.
5. A bike rodeo is offered once a year in June and the school has sent letters to parents reminding them that helmets are required when children bike or skateboard to school. A DARE officer was brought into the school to reinforce the need and requirement to wear helmets. Students are required to walk their bikes once on school property which includes all walk and drive areas surrounding the school. Bicycle racks are in the playground area.
6. Crossing guards are located at the corner of Second Street/Big Cross Street and Third Street/Staple Street. There is also a crossing guard at the Broad Street/Staple Street intersection.
7. There are approximately 8-12 kids that ride a bicycle to school. Only 4th and 5th grade students are allowed to ride a bicycle (or scooter, skateboard, etc.) About one-third of the students walk to school. This information can be verified with a survey.

8. Debbie Hall agreed that a survey would be useful. RSG will prepare a draft for review using the Abraham Wing School survey as an example. Big Cross School will distribute the survey through its students and will collect the survey. RSG will tabulate the results (Note – Surveys were conducted in Oct 2006 and October 2008 by the Healthy Heart Program. Results and has been forwarded to RSG).
9. School dynamics. The southern part of the school's catchment area tends to have multi-generational families. The northern section of the catchment area tends to have more transient families because there are more rental units. The students of these families tend to be more of the walkers and bike-riders. Big Cross has some students from a recently completed public housing project (Village Green) located near the South Street/Hudson Street intersection. Although that area is in the Sanford school catchment area, residents send their children to Big Cross because that's the school they were attending before moving to Village Green. Sanford School also had limited capacity for the additional students.
10. The northern part of Big Cross's catchment area extends beyond Broad Street. The following intersections are of concern:
 - a. The Broad Street/Staple Street intersection is commonly used by Big Cross students. Wide driveways at a new bank on the southwest corner and a convenience store/gas station on the southeast corner create large potential conflict areas between vehicles and pedestrians. The intersection is signalized, and there are cross-walks, but there are no pedestrian phases or equipment.
 - b. The Hudson Street/South Street intersection is close to the Village Green. Because it is on a horizontal curve and there are turning lanes, the intersection can be confusing. The intersection does not have a traffic signal. A pedestrian walkway was painted with no evident signage crossing Hudson Street on the east side of the intersection.
11. Winter is the critical time period relative to access. Snow banks decrease the width of the streets restricting traffic flow to one-way. Last winter, some vehicles backed out of Third Street into Big Cross Street to avoid waiting for the blocked traffic to clear. The Glens Falls School District removes the snow banks on the school's side of the streets. The snow must be piled on the playground. The City DPW is responsible for removing the rest of the snow banks and does not respond as quickly.
12. No renovation projects are planned for the school.
13. There is no record of crashes or accidents in recent history; the occasional fender-bender occurs. AGFTC provided crash data to RSG for review.
14. Occasionally vehicles try to drive through the playground via 2nd Street to the Parking Lot on 3rd Street. A chain has been put up to prevent this from continuing.
15. RSG will prepare a report that summarizes existing conditions, the survey, issues, and presents recommendations. A draft will be prepared for review by the AGFTC and Big Cross School. A presentation will be made at a PTA meeting in September.

Next Steps:

- Aaron will follow up regarding notes from the recent Town Hall Meeting and forward to RSG.
- RSG will write a draft report that summarizes findings and presents alternatives and recommendations for review by the AGFTC and School staff (mid-July)



- A final draft report will be presented at a PTA meeting in September.



APPENDIX C

Travel-to-School Survey





Warren-Washington County
Healthy Heart Program

Legend: 2006=blue/2008=green
Survey Date: 10/27/06 & 10/17/08
171 out of 232=74% & 114 out of 207=55%

Safe Routes to School Parent Survey - RESULTS

1. What grade is your child in?

28/21 Kindergarten 26/10 First 26/15 Second 31/16 Third 34/30 Fourth 26/22 Fifth

2. How does your child USUALLY get to school?

45-26%/40-35% Walk 4/2 Ride a Bicycle 111-26%/77-35% Dropped off
6/0 Driven in a Carpool with other Children 5/0 Other

3. How does your child USUALLY get home?

54-32%/45-39% Walk 3/2 Ride a Bicycle 104-61%/67-59% Picked up
6/1 Driven in a Carpool with other Children 4/3 Other

4. How far do you live from school? Most live with a block or few blocks to school

5. Rate your level of concern about your child WALKING to and from school for each of the issues below using the following rating scale: AVERAGE of all answers

1=Not important 2=Somewhat important 3= Important 4=Very important

- 4/4 Crime (stranger danger, gangs, bullying)
- 3/3 No (or inadequate) sidewalks on the route to school
- 3/3 Traffic – too much in the neighborhood or near the school
- 3/3 Speeding – cars drive too fast through the neighborhood or near the school
- 3/3 Weather
- 3/3 Child would be walking alone to school
- 2/2 Distance – school is too far away
- 2/2 School policy – school does not encourage walking
- 2/2 Length of Time – not enough time to walk
- 2/2 Time of Day – before/after school activities or care start or end too late to walk home
- 2/2 Convenience – easier to drop off on the way to work
- 2/2 Child does not want to/like to walk to school

6. Rate your level of concern about your child BICYCLING to and from school for each of the issues below using the following rating scale: AVERAGE of all answers

1=Not important 2=Somewhat important 3= Important 4=Very important

- 4/3 Crime (stranger danger, gangs, bullying)
- 3/3 Traffic – too much in the neighborhood or near the school
- 3/3 Speeding – cars drive too fast through the neighborhood or near the school
- 3/3 Weather
- 3/3 No (or inadequate) bikeways on the route to school
- 3/3 Child would be bicycling alone to school
- 2/2 Distance – school is too far away
- 2/2 School policy – school does not encourage biking

2/2 Length of Time – not enough time to ride

2/2 Time of Day – before/after school activities or care start or end too late to bike home

2/2 Convenience – easier to drop off on the way to work

2/2 Child does not want to/like to bike to school

7. Which changes would make you more comfortable with your child walking or bicycling to or from school? The number that was checked.

113/77 Crime watch

89/63 Another child to walk/ride with your children

81/54 Less traffic

79/59 An adult to walk/ride with your children

74/53 More or improved sidewalks/bikeways

73/56 Crosswalks and/or crossing guards

43/37 I would never allow my child to bicycle to or from school

39/34 I would never allow my child to walk to or from school

8. Rate the importance to you of each of the following benefits of walking or biking to school. Please use the following rating scale: AVERAGE of all answers

1=Not important 2=Somewhat important 3= Important 4=Very important

4/4 Physical activity helps combat obesity, type 2 diabetes, heart disease, high blood pressure, and high cholesterol, cancer

4/4 Physical activity increases self-esteem and lowers anxiety and stress

4/4 Helps establish lifelong patterns of physical activity

3/3 Physical activity associated with good academic performance

3/3 Less traffic congestion equals less air pollution and noise

3/3 More people walking the route to school equals less crime – more eyes on the street

3/3 Better sense of community

3/3 Increase independency in children by allowing them to be mobile

3/3 Economic benefits – save on gas – more money to spend on fun!

9. Written Comments from parents: 2006

sex offenders/safety issues

22

30%

2008

14

30%

speeding cars

19

26%

6

13%

crossing guards

8

11%

4

9%

already is active enough

7

9%

1

2%

want bussing

6

8%

3

7%

supervised/partner walking

6

8%

7

15%

to young to walk

0

0%

6

13%

crosswalks/sidewalks

4

5%

2

4%

lived to far, weather

2

3%

3

7%

APPENDIX D

Traffic Data



SimTraffic Performance Report
Baseline 8/25/2009

3: Int Performance by movement

Movement	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	All
Total Delay (hr)	0.1	0.2	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.7
Delay / Veh (s)	20.4	19.3		18.4	15.2	5.8	4.5	9.3	6.1	6.0	10.7
Stop Delay (hr)	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.6
St Del/Veh (s)	18.4	16.7		15.8	14.9	4.2	4.3	7.4	4.4	5.7	9.0
Total Stops	9	23	0	18	13	29	2	7	13	4	118
Stop/Veh	0.75	0.74		0.72	0.68	0.34	0.50	0.58	0.38	0.36	0.50
Travel Dist (mi)	2.0	5.2	0.1	5.2	4.1	12.1	0.5	1.8	5.0	1.7	37.6
Travel Time (hr)	0.1	0.3	0.0	0.3	0.2	0.5	0.0	0.1	0.2	0.1	2.0
Avg Speed (mph)	14	15	13	17	18	22	21	19	22	20	19
Fuel Used (gal)	0.1	0.2	0.0	0.2	0.1	0.4	0.0	0.1	0.2	0.1	1.2
Fuel Eff. (mpg)	28.6	29.5	18.4	30.2	31.3	31.7	41.8	34.3	32.0	34.1	31.3
HC Emissions (g)	0	2	0	1	1	3	0	0	1	0	8
CO Emissions (g)	12	42	2	26	16	82	1	8	36	7	231
NOx Emissions (g)	1	5	0	3	2	9	0	1	4	1	25
Vehicles Entered	12	31	0	25	19	87	4	12	34	12	236
Vehicles Exited	12	31	0	25	19	86	4	12	34	11	234
Hourly Exit Rate	12	31	0	25	19	86	4	12	34	11	234
Input Volume	12	34	1	22	16	93	4	13	32	13	240
% of Volume	100	91	0	114	119	92	100	92	106	85	98
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)											1746
Occupancy (veh)	0	0	0	0	0	1	0	0	0	0	2

Total Network Performance

Total Delay (hr)	0.8
Delay / Veh (s)	11.9
Stop Delay (hr)	0.6
St Del/Veh (s)	9.3
Total Stops	118
Stop/Veh	0.51
Travel Dist (mi)	78.0
Travel Time (hr)	3.5
Avg Speed (mph)	22
Fuel Used (gal)	2.7
Fuel Eff. (mpg)	28.4
HC Emissions (g)	22
CO Emissions (g)	721
NOx Emissions (g)	73
Vehicles Entered	236
Vehicles Exited	233
Hourly Exit Rate	233
Input Volume	480
% of Volume	49
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	1006
Occupancy (veh)	3

Baseline 8/25/2009

Intersection: 3: Int

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	72	74	79	62
Average Queue (ft)	28	26	26	20
95th Queue (ft)	63	58	66	54
Link Distance (ft)	875	1099	738	786
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 0

SimTraffic Report
Page 0

HCM Signalized Intersection Capacity Analysis 2009 AM - OPT.txt
3: Int 6/8/2009 2009 AM Peak Hour - Optimized

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	0	<1>	0	0	<1>	0	0	<1>	0	0	<1>	0
Volume (vph)	12	34	0	1	22	16	0	93	4	13	32	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0			6.0			6.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Flt		1.00			0.95			0.99			0.97	
Flt Protected		0.99			1.00			1.00			0.99	
Satd. Flow (prot)		1839			1759			1853			1787	
Flt Permitted		0.93			0.99			1.00			0.94	
Satd. Flow (perm)		1728			1752			1853			1693	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	37	0	1	24	17	0	101	4	14	35	14
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	50	0	0	42	0	0	105	0	0	63	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		14.0			14.0			20.0			20.0	
Effective Green, g (s)		14.0			14.0			20.0			20.0	
Actuated g/C Ratio		0.23			0.23			0.33			0.33	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Lane Grp Cap (vph)		403			409			618			564	
v/s Ratio Prot								c0.06				
v/s Ratio Perm		c0.03			0.02						0.04	
v/c Ratio		0.12			0.10			0.17			0.11	
Uniform Delay, d1		18.2			18.1			14.1			13.8	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.6			0.5			0.6			0.4	
Delay (s)		18.8			18.6			14.7			14.2	
Level of Service		B			B			B			B	
Approach Delay (s)		18.8			18.6			14.7			14.2	
Approach LOS		B			B			B			B	

Intersection Summary												
HCM Average Control Delay				16.0	HCM Level of Service						B	
HCM Volume to Capacity ratio				0.15								
Actuated cycle Length (s)				60.0	Sum of lost time (s)						26.0	
Intersection Capacity Utilization					28.2% ICU Level of Service						A	
Analysis Period (min)				15								
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis
3: Int 6/8/2009

2009 AM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	0	<1>	0	0	<1>	0	0	<1>	0	0	<1>	0
Volume (vph)	12	34	0	1	22	16	0	93	4	13	32	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Flt		1.00			0.95			0.99			0.97	
Flt Protected		0.99			1.00			1.00			0.99	
Satd. Flow (prot)		1839			1759			1853			1787	
Flt Permitted		0.94			1.00			1.00			0.96	
Satd. Flow (perm)		1758			1755			1853			1729	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	37	0	1	24	17	0	101	4	14	35	14
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	50	0	0	42	0	0	105	0	0	63	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		16.0			16.0			45.0			45.0	
Effective Green, g (s)		16.0			16.0			45.0			45.0	
Actuated g/C Ratio		0.23			0.23			0.65			0.65	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		408			407			1208			1128	
v/s Ratio Prot								c0.06				
v/s Ratio Perm		c0.03			0.02						0.04	
v/c Ratio		0.12			0.10			0.09			0.06	
Uniform Delay, d1		21.0			20.9			4.4			4.3	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.6			0.5			0.1			0.1	
Delay (s)		21.6			21.4			4.6			4.4	
Level of Service		C			C			A			A	
Approach Delay (s)		21.6			21.4			4.6			4.4	
Approach LOS		C			C			A			A	

Intersection Summary

HCM Average Control Delay	10.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.10		
Actuated Cycle Length (s)	69.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization		57.5%	ICU Level of Service
Analysis Period (min)	15		B
C Critical Lane Group			

Baseline Synchro 7 - Report
%user_name% Page 0

SimTraffic Performance Report
Baseline 8/25/2009

3: Int Performance by movement

Movement	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	All
Total Delay (hr)	0.1	0.2	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.7
Delay / Veh (s)	27.8	21.4	17.4	20.3	19.8	4.8	3.0	6.2	4.4	4.2	10.6
Stop Delay (hr)	0.1	0.2	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.6
St Del/Veh (s)	25.9	18.7	15.9	17.4	19.4	3.5	2.2	4.2	3.2	3.8	9.0
Total Stops	9	26	0	16	11	30	1	5	9	3	110
Stop/Veh	0.90	0.74	0.00	0.76	0.73	0.32	0.33	0.38	0.30	0.27	0.47
Travel Dist (mi)	1.7	5.8	0.1	4.3	3.2	13.2	0.5	1.9	4.4	1.7	36.9
Travel Time (hr)	0.1	0.4	0.0	0.3	0.2	0.6	0.0	0.1	0.2	0.1	2.0
Avg Speed (mph)	12	14	14	16	16	23	23	21	24	22	19
Fuel Used (gal)	0.1	0.2	0.0	0.1	0.1	0.4	0.0	0.1	0.1	0.0	1.2
Fuel Eff. (mpg)	26.1	27.1	25.4	30.4	29.9	32.3	37.2	37.2	32.2	35.8	31.0
HC Emissions (g)	0	2	0	1	0	4	0	0	2	0	10
CO Emissions (g)	10	54	1	18	15	94	1	8	42	6	250
NOx Emissions (g)	1	6	0	2	1	12	0	1	6	1	30
Vehicles Entered	10	35	1	21	15	95	3	13	30	11	234
Vehicles Exited	10	35	1	21	15	94	3	13	30	11	233
Hourly Exit Rate	10	35	1	21	15	94	3	13	30	11	233
Input Volume	12	34	1	22	16	93	4	13	32	13	240
% of Volume	83	103	100	95	94	101	75	100	94	85	97
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)											1775
Occupancy (veh)	0	0	0	0	0	1	0	0	0	0	2

Total Network Performance

Total Delay (hr)	0.8
Delay / Veh (s)	11.8
Stop Delay (hr)	0.6
St Del/Veh (s)	9.3
Total Stops	110
Stop/Veh	0.47
Travel Dist (mi)	77.3
Travel Time (hr)	3.4
Avg Speed (mph)	22
Fuel Used (gal)	2.7
Fuel Eff. (mpg)	28.4
HC Emissions (g)	27
CO Emissions (g)	759
NOx Emissions (g)	83
Vehicles Entered	234
Vehicles Exited	233
Hourly Exit Rate	233
Input Volume	480
% of Volume	49
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	1016
Occupancy (veh)	3

Baseline 8/25/2009

Intersection: 3: Int

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	92	69	75	76
Average Queue (ft)	29	24	27	15
95th Queue (ft)	70	60	61	49
Link Distance (ft)	875	1099	738	786
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 0

SimTraffic Report

Page 0

HCM Signalized Intersection Capacity Analysis 2009 PM Peak Hour - Optimized

3: Int 6/8/2009

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	0	<1>	0	0	<1>	0	0	<1>	0	0	<1>	0
Volume (vph)	8	15	1	1	19	28	0	57	4	18	63	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6			6			6			6	
Lane Util. Factor		1			1			1			1	
Flt		0.99			0.92			0.99			0.97	
Flt Protected		0.98			1			1			0.99	
Satd. Flow (prot)		1822			1716			1848			1794	
Flt Permitted		0.92			1			1			0.95	
Satd. Flow (perm)		1701			1712			1848			1713	
"Peak-hour factor, PHF "		0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	9	16	1	1	21	30	0	62	4	20	68	23
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	26	0	0	52	0	0	66	0	0	111	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
"Actuated Green, G (s) "			16			16			18			18
"Effective Green, g (s) "			16			16			18			18
Actuated g/C Ratio		0.27			0.27			0.3			0.3	
Clearance Time (s)		6			6			6			6	
Vehicle Extension (s)		3			3			3			3	
Lane Grp Cap (vph)		454			457			554			514	
v/s Ratio Prot								0.04				
v/s Ratio Perm		0.02			c0.03						c0.06	
v/c Ratio		0.06			0.11			0.12			0.22	
"Uniform Delay, d1 "			16.4			16.6			15.2			15.7
Progression Factor		1			1			1			1	
"Incremental Delay, d2 "			0.2			0.5			0.4			1
Delay (s)		16.6			17.1			15.7			16.7	
Level of Service		B			B			B			B	
Approach Delay (s)		16.6			17.1			15.7			16.7	
Approach LOS		B			B			B			B	

Intersection Summary

HCM Average Control Delay	16.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.17		
Actuated Cycle Length (s)	60	Sum of lost time (s)	26
Intersection Capacity Utilization		28.00% ICU Level of Service	A

Analysis Period (min) 15
 Critical Lane Group

Baseline Synchro 7 - Report
 %user_name% Page 0

SimTraffic Performance Report
Baseline 8/25/2009

3: Int Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	All
Total Delay (hr)	0.0	0.1	0.0	0.0	0.1	0.1	0.2	0.0	0.1	0.3	0.1	1.0
Delay / Veh (s)	16.4	14.5	9.8	18.5	14.0	15.2	14.0	12.6	19.1	15.9	16.3	15.3
Stop Delay (hr)	0.0	0.1	0.0	0.0	0.1	0.1	0.2	0.0	0.1	0.2	0.1	0.9
St Del/Veh (s)	14.7	12.4	9.7	17.5	11.4	14.9	11.6	12.2	16.8	13.1	15.6	13.2
Total Stops	6	10	1	1	11	19	36	2	15	41	14	156
Stop/Veh	0.75	0.59	1.00	1.00	0.61	0.68	0.61	0.50	0.75	0.64	0.74	0.65
Travel Dist (mi)	1.4	2.9	0.2	0.1	3.9	5.7	8.3	0.6	3.0	9.5	2.9	38.4
Travel Time (hr)	0.1	0.2	0.0	0.0	0.2	0.3	0.5	0.0	0.2	0.6	0.2	2.4
Avg Speed (mph)	16	17	19	13	19	17	16	15	14	16	15	16
Fuel Used (gal)	0.0	0.1	0.0	0.0	0.1	0.2	0.3	0.0	0.1	0.4	0.1	1.3
Fuel Eff. (mpg)	31.9	31.5	39.6	26.6	31.7	30.8	29.2	31.9	27.5	27.0	27.5	29.1
HC Emissions (g)	0	0	0	0	1	2	3	0	0	3	0	10
CO Emissions (g)	5	12	0	1	20	49	72	3	21	96	22	299
NOx Emissions (g)	1	1	0	0	2	6	8	0	2	9	2	31
Vehicles Entered	8	17	1	1	18	28	59	4	21	64	20	241
Vehicles Exited	8	17	1	1	19	28	59	4	20	64	19	240
Hourly Exit Rate	8	17	1	1	19	28	59	4	20	64	19	240
Input Volume	8	15	1	1	19	28	57	4	18	63	21	235
% of Volume	100	113	100	100	100	100	104	100	111	102	90	102
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												1472
Occupancy (veh)	0	0	0	0	0	0	1	0	0	1	0	2

Total Network Performance

Total Delay (hr)	1.1
Delay / Veh (s)	16.5
Stop Delay (hr)	0.9
St Del/Veh (s)	13.5
Total Stops	156
Stop/Veh	0.65
Travel Dist (mi)	79.0
Travel Time (hr)	3.9
Avg Speed (mph)	20
Fuel Used (gal)	3.0
Fuel Eff. (mpg)	26.4
HC Emissions (g)	27
CO Emissions (g)	911
NOx Emissions (g)	89
Vehicles Entered	241
Vehicles Exited	241
Hourly Exit Rate	241
Input Volume	470
% of Volume	51
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	897
Occupancy (veh)	4

Baseline 8/25/2009

Intersection: 3: Int

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	52	65	87	105
Average Queue (ft)	15	25	33	52
95th Queue (ft)	44	57	70	92
Link Distance (ft)	875	1099	738	786
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 0

SimTraffic Report
Page 0

HCM Signalized Intersection Capacity Analysis 3: Int 6/8/2009

2009 PM Peak Hour

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	0	<1>	0	0	<1>	0	0	<1>	0	0	<1>	0
Volume (vph)	8	15	1	1	19	28	0	57	4	18	63	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Flt		0.99			0.92			0.99			0.97	
Flt Protected		0.98			1.00			1.00			0.99	
Satd. Flow (prot)		1822			1716			1848			1794	
Flt Permitted		0.93			1.00			1.00			0.96	
Satd. Flow (perm)		1728			1713			1848			1744	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	9	16	1	1	21	30	0	62	4	20	68	23
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	26	0	0	52	0	0	66	0	0	111	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		16.0			16.0			45.0			45.0	
Effective Green, g (s)		16.0			16.0			45.0			45.0	
Actuated g/C Ratio		0.23			0.23			0.65			0.65	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		401			397			1205			1137	
v/s Ratio Prot								0.04				
v/s Ratio Perm		0.02			c0.03						c0.06	
v/c Ratio		0.06			0.13			0.05			0.10	
Uniform Delay, d1		20.7			21.0			4.3			4.5	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.3			0.7			0.1			0.2	
Delay (s)		21.0			21.7			4.4			4.6	
Level of Service		C			C			A			A	
Approach Delay (s)		21.0			21.7			4.4			4.6	
Approach LOS		C			C			A			A	

Intersection Summary

HCM Average Control Delay	9.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.11		
Actuated Cycle Length (s)	69.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization		57.5%	ICU Level of Service
Analysis Period (min)	15		B
C Critical Lane Group			

SimTraffic Performance Report
Baseline 8/25/2009

3: Int Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	All
Total Delay (hr)	0.1	0.1	0.0	0.0	0.1	0.2	0.1	0.0	0.0	0.1	0.0	0.6
Delay / Veh (s)	25.7	19.5	35.2	15.2	19.7	20.0	3.9	5.8	6.3	4.4	4.3	9.4
Stop Delay (hr)	0.1	0.1	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.1	0.0	0.5
St Del/Veh (s)	24.0	17.0	35.3	14.2	17.0	19.6	2.8	5.7	4.3	3.1	4.0	8.0
Total Stops	7	12	1	1	11	22	15	2	7	18	6	102
Stop/Veh	0.88	0.71	1.00	1.00	0.61	0.79	0.25	0.50	0.35	0.28	0.32	0.42
Travel Dist (mi)	1.3	2.9	0.2	0.1	3.9	5.7	8.3	0.6	3.1	9.5	2.9	38.4
Travel Time (hr)	0.1	0.2	0.0	0.0	0.2	0.4	0.3	0.0	0.1	0.4	0.1	2.0
Avg Speed (mph)	13	15	11	14	17	16	24	19	21	24	22	19
Fuel Used (gal)	0.0	0.1	0.0	0.0	0.1	0.2	0.2	0.0	0.1	0.3	0.1	1.2
Fuel Eff. (mpg)	28.5	30.5	26.5	31.4	30.7	29.8	33.1	35.9	33.5	32.3	35.6	31.9
HC Emissions (g)	0	0	0	0	1	2	3	0	0	3	0	9
CO Emissions (g)	5	11	1	1	19	43	61	2	16	69	13	241
NOx Emissions (g)	1	1	0	0	2	5	8	0	2	8	1	28
Vehicles Entered	8	17	1	1	18	28	59	4	21	64	20	241
Vehicles Exited	8	17	1	1	19	28	59	4	20	64	19	240
Hourly Exit Rate	8	17	1	1	19	28	59	4	20	64	19	240
Input Volume	8	15	1	1	19	28	57	4	18	63	21	235
% of Volume	100	113	100	100	100	100	104	100	111	102	90	102
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												1776
Occupancy (veh)	0	0	0	0	0	0	0	0	0	0	0	2

Total Network Performance

Total Delay (hr)	0.7
Delay / Veh (s)	10.2
Stop Delay (hr)	0.6
St Del/Veh (s)	8.3
Total Stops	102
Stop/Veh	0.42
Travel Dist (mi)	79.0
Travel Time (hr)	3.5
Avg Speed (mph)	23
Fuel Used (gal)	2.7
Fuel Eff. (mpg)	28.8
HC Emissions (g)	24
CO Emissions (g)	734
NOx Emissions (g)	76
Vehicles Entered	241
Vehicles Exited	240
Hourly Exit Rate	240
Input Volume	470
% of Volume	51
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	1011
Occupancy (veh)	3

Baseline 8/25/2009

Intersection: 3: Int

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	60	79	61	70
Average Queue (ft)	18	29	16	25
95th Queue (ft)	49	64	46	60
Link Distance (ft)	875	1099	738	786
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 0

SimTraffic Report
Page 0

Staple St - 3rd St
Glen Falls, NY
AM: 5/28/2009
PM: 5/28/2009

AM (6AM-12PM) Peak	240
PM (12PM-6PM) Peak	235

AM Peak Hour

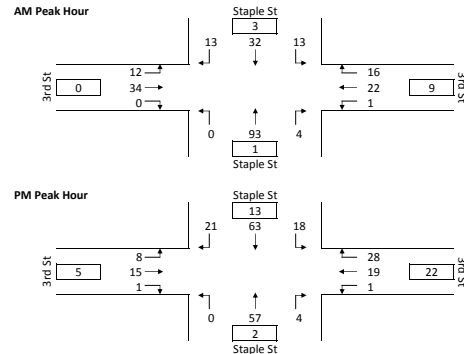
Staple St - 3rd St
Glen Falls, NY
5/28/2009
4th Thursday

% Trucks	2.2%	2.6%	3.1%	5.2%	PHF
Peds	0	9	1	3	
Peak Hour	7:45 AM - 8:45 AM Peak				0.80

PM Peak Hour

Staple St - 3rd St
Glen Falls, NY
5/28/2009
4th Thursday

% Trucks	0.0%	0.0%	3.3%	1.0%	
Peds	5	22	2	13	PHF
Peak Hour	2:30 PM - 3:30 PM Peak				0.74



APPENDIX E

Speed Data





60 Lake Street, Suite 1E
Burlington, Vermont 05401
802-383-0118

Site Code:
Station ID:
2nd Street between Staple and Big Cross
Glens Falls, NY
Latitude: 0' 0.000 Undefined

COMBINED

Report for Report From 5/28/2009 8:14:00 AM to 5/28/2009 9:00:00 AM

CLASS STATISTICS - Modified Scheme F

Class	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	No Class
Count	0	43	5	0	0	0	0	0	0	0	0	0	0	13
Percent	0.0	70.5	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.3

SPEED STATISTICS - 1 to 40+ by 3 MPH

Speed in MPH	0 - 3	4 - 6	7 - 9	10 - 12	13 - 15	16 - 18	19 - 21	22 - 24	25 - 27	28 - 30	31 - 33	34 - 36	37 - 39	40 - 999
Count	13	0	4	6	14	9	9	5	0	1	0	0	0	0
Percent	21.3	0.0	6.6	9.8	23.0	14.8	14.8	8.2	0.0	1.6	0.0	0.0	0.0	0.0
Over Speed	3	6	9	12	15	18	21	24	27	30	33	36	39	999
Count	48	48	44	38	24	15	6	1	1	0	0	0	0	0
Percent	78.7	78.7	72.1	62.3	39.3	24.6	9.8	1.6	1.6	0.0	0.0	0.0	0.0	0.0
Percentile	5%	10%	15%	45%	50%	55%	85%	90%	95%					
Speed	0	0	0	13	14	14	20	21	24					

Average (Mean) 13

Pace Speed 11-20

Number in Pace 36

Percent in Pace 59.0



60 Lake Street, Suite 1E
Burlington, Vermont 05401
802-383-0118

Site Code:
Station ID:
2nd Street between Staple and Big Cross
Glens Falls, NY
Latitude: 0' 0.000 Undefined

COMBINED

Report for Report From 5/28/2009 2:30:00 PM to 5/28/2009 3:12:10 PM

CLASS STATISTICS - Modified Scheme F

Class	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	No Class
Count	3	26	10	0	0	0	0	0	0	0	0	0	0	25
Percent	4.7	40.6	15.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.1

SPEED STATISTICS - 1 to 40+ by 3 MPH

Speed in MPH	0 - 3	4 - 6	7 - 9	10 - 12	13 - 15	16 - 18	19 - 21	22 - 24	25 - 27	28 - 30	31 - 33	34 - 36	37 - 39	40 - 999
Count	24	0	2	9	12	7	7	3	0	0	0	0	0	0
Percent	37.5	0.0	3.1	14.1	18.8	10.9	10.9	4.7	0.0	0.0	0.0	0.0	0.0	0.0
Over Speed	3	6	9	12	15	18	21	24	27	30	33	36	39	999
Count	40	40	38	29	17	10	3	0	0	0	0	0	0	0
Percent	62.5	62.5	59.4	45.3	26.6	15.6	4.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Percentile	5%	10%	15%	45%	50%	55%	85%	90%	95%					
Speed	0	0	0	11	11	12	18	20	21					

Average (Mean) 10

Pace Speed 11-20
Number in Pace 31
Percent in Pace 48.4



60 Lake Street, Suite 1E
Burlington, Vermont 05401
802-383-0118

Site Code: Apollyon
Station ID: SN:022817
3rd Street between Staple and Big Cross
Glens Falls, NY
Latitude: 0' 0.000 Undefined

COMBINED

Report for Report From 5/28/2009 7:54:00 AM to 5/28/2009 9:00:00 AM

CLASS STATISTICS - Modified Scheme F

Class	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	No Class
Count	4	66	11	0	0	0	0	0	0	0	0	0	0	8
Percent	4.5	74.2	12.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0

SPEED STATISTICS - 1 to 40+ by 3 MPH

Speed in MPH	0 - 3	4 - 6	7 - 9	10 - 12	13 - 15	16 - 18	19 - 21	22 - 24	25 - 27	28 - 30	31 - 33	34 - 36	37 - 39	40 - 999
Count	8	1	0	0	2	18	20	21	12	3	4	0	0	0
Percent	9.0	1.1	0.0	0.0	2.2	20.2	22.5	23.6	13.5	3.4	4.5	0.0	0.0	0.0
Over Speed	3	6	9	12	15	18	21	24	27	30	33	36	39	999
Count	81	80	80	80	78	60	40	19	7	4	0	0	0	0
Percent	91.0	89.9	89.9	89.9	87.6	67.4	44.9	21.3	7.9	4.5	0.0	0.0	0.0	0.0
Percentile	5%	10%	15%	45%	50%	55%	85%	90%	95%					
Speed	0	5	16	20	21	21	25	27	29					

Average (Mean) 20

Pace Speed 16-25
Number in Pace 65
Percent in Pace 73.0



60 Lake Street, Suite 1E
Burlington, Vermont 05401
802-383-0118

Site Code: Apollyon
Station ID: SN:022817
3rd Street between Staple and Big Cross
Glens Falls, NY
Latitude: 0' 0.000 Undefined

COMBINED

Report for Report From 5/28/2009 2:30:00 PM to 5/28/2009 3:02:34 PM

CLASS STATISTICS - Modified Scheme F

Class	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	No Class
Count	3	36	8	0	2	0	0	0	0	0	0	0	0	6
Percent	5.5	65.5	14.5	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.9

SPEED STATISTICS - 1 to 40+ by 3 MPH

Speed in MPH	0 - 3	4 - 6	7 - 9	10 - 12	13 - 15	16 - 18	19 - 21	22 - 24	25 - 27	28 - 30	31 - 33	34 - 36	37 - 39	40 - 999
Count	5	0	1	1	5	12	14	8	2	5	2	0	0	0
Percent	9.1	0.0	1.8	1.8	9.1	21.8	25.5	14.5	3.6	9.1	3.6	0.0	0.0	0.0
Over Speed	3	6	9	12	15	18	21	24	27	30	33	36	39	999
Count	50	50	49	48	43	31	17	9	7	2	0	0	0	0
Percent	90.9	90.9	89.1	87.3	78.2	56.4	30.9	16.4	12.7	3.6	0.0	0.0	0.0	0.0
Percentile	5%	10%	15%	45%	50%	55%	85%	90%	95%					
Speed	0	9	14	19	19	20	26	28	28					

Average (Mean) 19

Pace Speed 14-23

Number in Pace 37

Percent in Pace 67.3

APPENDIX F

Safety Data



NYSDOT Safety Information Management System
Accident Verbal Description Report
All Accidents (Links & Nodes)

Complete Accident Data From NYSDMV Is Only Available thru 31-OCT-2008

Reqn/Cnty: 17 WARREN
Street: STAPLES ST

Municipality: 01 C GLENS FALLS
Links:23835 - 23874 Thru 23847 - 23868

Dates: JAN-01-2003 - DEC-31-2007

*** Link: 23874 - 23873 ***

AUG-03-2004 TUE 09:40AM Persons Killed: 0 Persons Injured: 1 Extent of Injuries: C Case: 2004-31258355
Accident Class: INJURY Police Agency: GLENS FALLS CITY PD Num of Veh: 1
Type of Accident: COLL. W/LIGHT SUPPORT/UTILITY POLE Traffic Control: NONE
Manner of Collision: OTHER Weather: CLEAR
Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: 2950 State of Registration: NY
Num of Occupants: 1 Driver's Age: 17 Sex: MALE Citation Issued: NO
Direction of Travel: NORTH Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors: OTHER (VEHICLE) UNKNOWN

*** Node: 23872 4TH ST ***

OCT-20-2004 WED 06:15PM Persons Killed: 0 Persons Injured: 1 Extent of Injuries: C Case: 2004-31311642
Accident Class: INJURY Police Agency: GLENS FALLS CITY PD Num of Veh: 2
Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: STOP SIGN
Manner of Collision: RIGHT ANGLE Weather: CLEAR
Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DARK-ROAD LIGHTED
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: 2449 State of Registration: NY
Num of Occupants: 1 Driver's Age: 55 Sex: FEMALE Citation Issued: NO
Direction of Travel: EAST Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors: TRAFFIC CONTROL DEVICES DISREGARDED FAILURE TO YIELD RI

Veh: 2 CAR/VAN/PICKUP Registered Weight: 3830 State of Registration: NY
Num of Occupants: 1 Driver's Age: 75 Sex: FEMALE Citation Issued: NO
Direction of Travel: NORTH Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors: NOT APPLICABLE NOT APPLICABLE

JUN-22-2005 WED 04:49PM Persons Killed: 0 Persons Injured: 3 Extent of Injuries: BCC Case: 2005-31505903
Accident Class: PROPERTY DAMAGE AND INJURY Police Agency: GLENS FALLS CITY PD Num of Veh: 2
Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: STOP SIGN
Manner of Collision: RIGHT ANGLE Weather: CLEAR
Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: 3012 State of Registration: NY

NYSDOT Safety Information Management System
Accident Verbal Description Report
All Accidents (Links & Nodes)

Complete Accident Data From NYSDMV Is Only Available thru 31-OCT-2008

Reqn/Cnty: 17 WARREN
Street: STAPLES ST

Municipality: 01 C GLENS FALLS
Links:23835 - 23874 Thru 23847 - 23868

Dates: JAN-01-2003 - DEC-31-2007

*** Node: 23872 4TH ST (Continued) ***

Num of Occupants: 1 Driver's Age: 37 Sex: FEMALE Citation Issued: YES
Direction of Travel: EAST Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors:FAILURE TO YIELD RIGHT OF WAY UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: 2491 State of Registration: NY
Num of Occupants: 2 Driver's Age: 16 Sex: FEMALE Citation Issued: NO
Direction of Travel: NORTH Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors:NOT APPLICABLE UNKNOWN

DEC-22-2005 THU 09:51AM Persons Killed: 0 Persons Injured: 1 Extent of Injuries: C Case: 2005-31766682
Accident Class: INJURY Police Agency: GLENS FALLS CITY PD Num of Veh: 2
Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: STOP SIGN
Manner of Collision: RIGHT ANGLE Weather: CLEAR
Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: 3800 State of Registration: NY
Num of Occupants: 2 Driver's Age: 18 Sex: FEMALE Citation Issued: YES
Direction of Travel: WEST Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors:TRAFFIC CONTROL DEVICES DISREGARDED FAILURE TO YIELD RI

Veh: 2 CAR/VAN/PICKUP Registered Weight: 4279 State of Registration: NY
Num of Occupants: 2 Driver's Age: 43 Sex: FEMALE Citation Issued: NO
Direction of Travel: SOUTH Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors:UNKNOWN UNKNOWN

FEB-03-2007 SAT 06:46PM Persons Killed: 0 Persons Injured: 1 Extent of Injuries: C Case: 2007-32101077
Accident Class: PROPERTY DAMAGE AND INJURY Police Agency: GLENS FALLS CITY PD Num of Veh: 2
Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: STOP SIGN
Manner of Collision: RIGHT ANGLE Weather: CLOUDY
Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DARK-ROAD LIGHTED
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: UNKNOWN State of Registration: NY
Num of Occupants: 1 Driver's Age: 21 Sex: MALE Citation Issued: YES
Direction of Travel: WEST Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors:FAILURE TO YIELD RIGHT OF WAY DRIVER INATTENTION

Veh: 2 CAR/VAN/PICKUP Registered Weight: 2583 State of Registration: NY

NYSDOT Safety Information Management System
Accident Verbal Description Report
All Accidents (Links & Nodes)

Complete Accident Data From NYSDMV Is Only Available thru 31-OCT-2008

Reqn/Cnty: 17 WARREN
Street: STAPLES ST

Municipality: 01 C GLENS FALLS

Links:23835 - 23874 Thru 23847 - 23868

Dates: JAN-01-2003 - DEC-31-2007

*** Node: 23872 4TH ST (Continued) ***

Num of Occupants: 1	Driver's Age: 19	Sex: FEMALE	Citation Issued: NO
Direction of Travel: SOUTH	Public Property Damage: NO		School Bus Involved: NO
Pre-Accd Action: GOING STRAIGHT AHEAD			
Apparent Factors:UNKNOWN		UNKNOWN	

*** Link: 23872 - 23871 ***

MAR-12-2007	MON 02:47PM	Persons Killed: 0	Persons Injured: 0	Extent of Injuries:	Case: 2007-32174197
	Accident Class: PROPERTY DAMAGE		Police Agency: GLENS FALLS CITY PD		Num of Veh: 2
	Type of Accident: COLLISION WITH MOTOR VEHICLE		Traffic Control: STOP SIGN		
	Manner of Collision: RIGHT ANGLE		Weather: CLEAR		
	Road Surface Condition: WET		Road Char.: STRAIGHT AND LEVEL		Light Condition: DAYLIGHT
	Loc. of Ped/Bicycle: NOT APPLICABLE		Action of Ped/Bicycle: NOT APPLICABLE		

Veh: 1	CAR/VAN/PICKUP	Registered Weight: 2320	State of Registration: NY
	Num of Occupants: 1	Driver's Age: 43	Citation Issued: YES
	Direction of Travel: WEST	Public Property Damage: NO	School Bus Involved: NO
	Pre-Accd Action: STARTING IN TRAFFIC		
	Apparent Factors:FAILURE TO YIELD RIGHT OF WAY	UNKNOWN	

Veh: 2	CAR/VAN/PICKUP	Registered Weight: 2445	State of Registration: NY
	Num of Occupants: 2	Driver's Age: 17	Citation Issued: NO
	Direction of Travel: NORTH	Public Property Damage: NO	School Bus Involved: NO
	Pre-Accd Action: GOING STRAIGHT AHEAD		
	Apparent Factors:UNKNOWN	UNKNOWN	

*** Node: 23868 1ST ST ***

OCT-27-2005	THU 03:05PM	Persons Killed: 0	Persons Injured: 1	Extent of Injuries: C	Case: 2005-31658096
	Accident Class: INJURY		Police Agency: GLENS FALLS CITY PD		Num of Veh: 1
	Type of Accident: COLLISION WITH BICYCLIST		Traffic Control: STOP SIGN		
	Manner of Collision: OTHER		Weather: CLEAR		
	Road Surface Condition: DRY		Road Char.: STRAIGHT AND LEVEL		Light Condition: DAYLIGHT
	Loc. of Ped/Bicycle: PED/BICYCLIST AT INTERSECTION		Action of Ped/Bicycle: UNKNOWN		

Veh: 1	CAR/VAN/PICKUP	Registered Weight: 2671	State of Registration: NY
	Num of Occupants: 1	Driver's Age: 62	Citation Issued: YES
	Direction of Travel: WEST	Public Property Damage: NO	School Bus Involved: NO
	Pre-Accd Action: MAKING RIGHT TURN		
	Apparent Factors:TRAFFIC CONTROL DEVICES DISREGARDED	NOT APPLICABLE	

Veh: 2	BICYCLE	Registered Weight: N/A	State of Registration: N/A
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NYSDOT Safety Information Management System
Accident Verbal Description Report
All Accidents (Links & Nodes)

Complete Accident Data From NYSDMV Is Only Available thru 31-OCT-2008

Reqn/Cnty: 17 WARREN
Street: STAPLES ST

Municipality: 01 C GLENS FALLS
Links:23835 - 23874 Thru 23847 - 23868

Dates: JAN-01-2003 - DEC-31-2007

*** Node: 23868 1ST ST (Continued) ***

Num of Occupants: N/A	Bicyclist's Age: 13	Sex: MALE	Citation Issued: NO
Direction of Travel: UNKNOWN	Public Property Damage: NO		School Bus Involved: NO
Pre-Accd Action: GOING STRAIGHT AHEAD			
Apparent Factors: PEDESTRIAN'S ERROR/CONFUSION		NOT APPLICABLE	

*** Node: 23847 BROAD ST ***

MAR-18-2003	TUE 11:48AM	Persons Killed: 0	Persons Injured: 1	Extent of Injuries: C	Case: 2003-30884141
	Accident Class: INJURY		Police Agency: GLENS FALLS CITY PD		Num of Veh: 2
	Type of Accident: COLLISION WITH MOTOR VEHICLE		Traffic Control: TRAFFIC SIGNAL		
	Manner of Collision: REAR END		Weather: CLEAR		
	Road Surface Condition: DRY		Road Char.: STRAIGHT AND LEVEL	Light Condition: DAYLIGHT	
	Loc. of Ped/Bicycle: NOT APPLICABLE		Action of Ped/Bicycle: NOT APPLICABLE		

Veh: 1	CAR/VAN/PICKUP	Registered Weight: 2547		State of Registration: NY
	Num of Occupants: 1	Driver's Age: 31	Sex: FEMALE	Citation Issued: NO
	Direction of Travel: EAST	Public Property Damage: NO		School Bus Involved: NO
	Pre-Accd Action: GOING STRAIGHT AHEAD			
	Apparent Factors: DRIVER INEXPERIENCE		UNKNOWN	

Veh: 2	CAR/VAN/PICKUP	Registered Weight: 2957		State of Registration: NY
	Num of Occupants: 1	Driver's Age: 42	Sex: FEMALE	Citation Issued: NO
	Direction of Travel: EAST	Public Property Damage: NO		School Bus Involved: NO
	Pre-Accd Action: STOPPED IN TRAFFIC			
	Apparent Factors: UNKNOWN		UNKNOWN	

JUL-23-2003	WED 09:39AM	Persons Killed: 0	Persons Injured: 0	Extent of Injuries:	Case: 2003-30978581
	Accident Class: PROPERTY DAMAGE		Police Agency: NOT ENTERED		Num of Veh: 2
	Type of Accident: COLLISION WITH MOTOR VEHICLE		Traffic Control: TRAFFIC SIGNAL		
	Manner of Collision: REAR END		Weather: CLOUDY		
	Road Surface Condition: DRY		Road Char.: STRAIGHT AND LEVEL	Light Condition: DAYLIGHT	
	Loc. of Ped/Bicycle: NOT APPLICABLE		Action of Ped/Bicycle: NOT APPLICABLE		

Veh: 1	CAR/VAN/PICKUP	Registered Weight: 3015		State of Registration: NY
	Num of Occupants: 1	Driver's Age: 18	Sex: MALE	Citation Issued: NO
	Direction of Travel: WEST	Public Property Damage: NO		School Bus Involved: NO
	Pre-Accd Action: STOPPED IN TRAFFIC			
	Apparent Factors: UNKNOWN		UNKNOWN	

Veh: 2	CAR/VAN/PICKUP	Registered Weight: 4384		State of Registration: NY
	Num of Occupants: 1	Driver's Age: 37	Sex: FEMALE	Citation Issued: NO
	Direction of Travel: WEST	Public Property Damage: NO		School Bus Involved: NO
	Pre-Accd Action: SLOWED OR STOPPING			

NYSDOT Safety Information Management System
Accident Verbal Description Report
All Accidents (Links & Nodes)

Complete Accident Data From NYSDMV Is Only Available thru 31-OCT-2008

Reqn/Cnty: 17 WARREN
Street: STAPLES ST

Municipality: 01 C GLENS FALLS

Dates: JAN-01-2003 - DEC-31-2007

Links:23835 - 23874 Thru 23847 - 23868

*** Node: 23847 BROAD ST (Continued) ***

Apparent Factors:UNKNOWN

UNKNOWN

JAN-16-2004 FRI 04:23PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: 2004-31117650
Accident Class: PROPERTY DAMAGE Police Agency: NOT ENTERED Num of Veh: 2
Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: UNKNOWN
Manner of Collision: RIGHT ANGLE Weather: UNKNOWN
Road Surface Condition: UNKNOWN Road Char.: UNKNOWN Light Condition: UNKNOWN
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: 3064 State of Registration: NY
Num of Occupants: 2 Driver's Age: 16 Sex: FEMALE Citation Issued: NO
Direction of Travel: UNKNOWN Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: UNKNOWN
Apparent Factors:UNKNOWN UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: 3323 State of Registration: NY
Num of Occupants: 1 Driver's Age: 41 Sex: MALE Citation Issued: NO
Direction of Travel: UNKNOWN Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: UNKNOWN
Apparent Factors:UNKNOWN UNKNOWN

JUL-21-2004 WED 12:25PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: 2004-31246123
Accident Class: PROPERTY DAMAGE Police Agency: NOT ENTERED Num of Veh: 2
Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: UNKNOWN
Manner of Collision: REAR END Weather: UNKNOWN
Road Surface Condition: UNKNOWN Road Char.: UNKNOWN Light Condition: UNKNOWN
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: 2542 State of Registration: NY
Num of Occupants: 1 Driver's Age: 69 Sex: FEMALE Citation Issued: NO
Direction of Travel: UNKNOWN Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: STOPPED IN TRAFFIC
Apparent Factors:UNKNOWN UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: 6400 State of Registration: NY
Num of Occupants: 1 Driver's Age: 40 Sex: MALE Citation Issued: NO
Direction of Travel: UNKNOWN Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors:UNKNOWN UNKNOWN

AUG-02-2004 MON 08:03AM Persons Killed: 0 Persons Injured: 1 Extent of Injuries: C Case: 2004-31258102
Accident Class: INJURY Police Agency: GLENS FALLS CITY PD Num of Veh: 2
Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL

NYSDOT Safety Information Management System
Accident Verbal Description Report
All Accidents (Links & Nodes)

Complete Accident Data From NYSDMV Is Only Available thru 31-OCT-2008

Reqn/Cnty: 17 WARREN
Street: STAPLES ST

Municipality: 01 C GLENS FALLS

Links:23835 - 23874 Thru 23847 - 23868

Dates: JAN-01-2003 - DEC-31-2007

*** Node: 23847 BROAD ST (Continued) ***

Manner of Collision: REAR END
Road Surface Condition: DRY
Loc. of Ped/Bicycle: NOT APPLICABLE

Weather: CLEAR
Road Char.: STRAIGHT AND LEVEL
Light Condition: DAYLIGHT
Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1	CAR/VAN/PICKUP	Registered Weight: 4500	Sex: MALE	State of Registration: NY
	Num of Occupants: 1	Driver's Age: 38		Citation Issued: NO
	Direction of Travel: WEST	Public Property Damage: NO		School Bus Involved: NO
	Pre-Accd Action: GOING STRAIGHT AHEAD			
	Apparent Factors: OTHER (HUMAN)		UNKNOWN	

Veh: 2	CAR/VAN/PICKUP	Registered Weight: 3058	Sex: FEMALE	State of Registration: NY
	Num of Occupants: 1	Driver's Age: 18		Citation Issued: NO
	Direction of Travel: WEST	Public Property Damage: NO		School Bus Involved: NO
	Pre-Accd Action: STOPPED IN TRAFFIC			
	Apparent Factors: NOT APPLICABLE		UNKNOWN	

JUN-14-2005	TUE 06:30PM	Persons Killed: 0	Persons Injured: 0	Extent of Injuries:	Case: 2005-31514530
	Accident Class: PROPERTY DAMAGE		Police Agency: NOT ENTERED		Num of Veh: 2
	Type of Accident: COLLISION WITH MOTOR VEHICLE			Traffic Control: TRAFFIC SIGNAL	
	Manner of Collision: REAR END			Weather: UNKNOWN	
	Road Surface Condition: UNKNOWN		Road Char.: UNKNOWN		Light Condition: UNKNOWN
	Loc. of Ped/Bicycle: NOT APPLICABLE			Action of Ped/Bicycle: NOT APPLICABLE	

Veh: 1	CAR/VAN/PICKUP	Registered Weight: 2445	Sex: FEMALE	State of Registration: NY
	Num of Occupants: 1	Driver's Age: 60		Citation Issued: NO
	Direction of Travel: UNKNOWN	Public Property Damage: NO		School Bus Involved: NO
	Pre-Accd Action: OTHER			
	Apparent Factors: UNKNOWN		UNKNOWN	

Veh: 2	OTHER	Registered Weight: UNKNOWN	Sex: UNKNOWN	State of Registration: UNKNOWN
	Num of Occupants: 0	Driver's Age: UNKNOWN		Citation Issued: NO
	Direction of Travel: UNKNOWN	Public Property Damage: NO		School Bus Involved: NO
	Pre-Accd Action: STOPPED IN TRAFFIC			
	Apparent Factors: UNKNOWN		UNKNOWN	

NOV-19-2005	SAT 12:18PM	Persons Killed: 0	Persons Injured: 1	Extent of Injuries: C	Case: 2005-31725413
	Accident Class: INJURY		Police Agency: GLENS FALLS CITY PD		Num of Veh: 3
	Type of Accident: COLLISION WITH MOTOR VEHICLE			Traffic Control: TRAFFIC SIGNAL	
	Manner of Collision: OTHER			Weather: CLEAR	
	Road Surface Condition: DRY		Road Char.: STRAIGHT AND LEVEL		Light Condition: DAYLIGHT
	Loc. of Ped/Bicycle: NOT APPLICABLE			Action of Ped/Bicycle: NOT APPLICABLE	

Veh: 1	CAR/VAN/PICKUP	Registered Weight: 2681	Sex: MALE	State of Registration: NY
	Num of Occupants: 1	Driver's Age: 42		Citation Issued: NO

NYSDOT Safety Information Management System Accident Verbal Description Report All Accidents (Links & Nodes)

Complete Accident Data From NYSDMV Is Only Available thru 31-OCT-2008

Reqn/Cnty: 17 WARREN
 Street: STAPLES ST

Municipality: 01 C GLENS FALLS

Dates: JAN-01-2003 - DEC-31-2007

Links: 23835 - 23874 Thru 23847 - 23868

*** Node: 23847 BROAD ST (Continued) ***

Direction of Travel: EAST Public Property Damage: NO School Bus Involved: NO
 Pre-Accd Action: GOING STRAIGHT AHEAD
 Apparent Factors: DRIVER INATTENTION UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: 2647 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 64 Sex: FEMALE Citation Issued: NO
 Direction of Travel: EAST Public Property Damage: NO School Bus Involved: NO
 Pre-Accd Action: STOPPED IN TRAFFIC
 Apparent Factors: UNKNOWN UNKNOWN

Veh: 3 CAR/VAN/PICKUP Registered Weight: 3106 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 45 Sex: MALE Citation Issued: NO
 Direction of Travel: EAST Public Property Damage: NO School Bus Involved: NO
 Pre-Accd Action: STOPPED IN TRAFFIC
 Apparent Factors: UNKNOWN UNKNOWN

MAR-16-2006 THU 10:45PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: 2006-31798288
 Accident Class: PROPERTY DAMAGE Police Agency: GLENS FALLS CITY PD Num of Veh: 2
 Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NONE
 Manner of Collision: REAR END Weather: CLEAR
 Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DARK-ROAD LIGHTED
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: 2781 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 51 Sex: MALE Citation Issued: NO
 Direction of Travel: UNKNOWN Public Property Damage: NO School Bus Involved: NO
 Pre-Accd Action: UNKNOWN
 Apparent Factors: UNKNOWN UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: 4357 State of Registration: NY
 Num of Occupants: 1 Driver's Age: 27 Sex: MALE Citation Issued: NO
 Direction of Travel: UNKNOWN Public Property Damage: NO School Bus Involved: NO
 Pre-Accd Action: UNKNOWN
 Apparent Factors: UNKNOWN UNKNOWN

APR-24-2006 MON Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: 2006-31799522
 Accident Class: PROPERTY DAMAGE Police Agency: NOT ENTERED Num of Veh: 2
 Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: UNKNOWN
 Manner of Collision: LEFT TURN (WITH OTHER CAR) Weather: UNKNOWN
 Road Surface Condition: UNKNOWN Road Char.: UNKNOWN Light Condition: UNKNOWN
 Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1 OTHER Registered Weight: UNKNOWN State of Registration: UNKNOWN
 Num of Occupants: 1 Driver's Age: 16 Sex: MALE Citation Issued: NO

NYSDOT Safety Information Management System
Accident Verbal Description Report
All Accidents (Links & Nodes)

Complete Accident Data From NYSDMV Is Only Available thru 31-OCT-2008

Reqn/Cnty: 17 WARREN
Street: STAPLES ST

Municipality: 01 C GLENS FALLS
Links:23835 - 23874 Thru 23847 - 23868

Dates: JAN-01-2003 - DEC-31-2007

*** Node: 23847 BROAD ST (Continued) ***

Direction of Travel: UNKNOWN Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: STOPPED IN TRAFFIC
Apparent Factors:UNKNOWN UNKNOWN

Veh: 2 OTHER Registered Weight: UNKNOWN State of Registration: UNKNOWN
Num of Occupants: 0 Driver's Age: UNKNOWN Sex: UNKNOWN Citation Issued: NO
Direction of Travel: UNKNOWN Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: UNKNOWN
Apparent Factors:UNKNOWN UNKNOWN

JAN-20-2007 SAT 11:50AM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: 2007-32116717
Accident Class: PROPERTY DAMAGE Police Agency: GLENS FALLS CITY PD Num of Veh: 2
Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL
Manner of Collision: RIGHT ANGLE Weather: CLEAR
Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: 9000 State of Registration: NY
Num of Occupants: 2 Driver's Age: 23 Sex: MALE Citation Issued: YES
Direction of Travel: NORTH Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: MAKING RIGHT TURN
Apparent Factors:TRAFFIC CONTROL DEVICES DISREGARDED FAILURE TO YIELD RI

Veh: 2 CAR/VAN/PICKUP Registered Weight: 2254 State of Registration: NY
Num of Occupants: 1 Driver's Age: 53 Sex: FEMALE Citation Issued: NO
Direction of Travel: NORTH-WEST Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors:NOT APPLICABLE UNKNOWN

FEB-27-2007 TUE 10:01AM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: 2007-32128901
Accident Class: PROPERTY DAMAGE Police Agency: GLENS FALLS CITY PD Num of Veh: 2
Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL
Manner of Collision: RIGHT ANGLE Weather: CLEAR
Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: 2815 State of Registration: NY
Num of Occupants: 1 Driver's Age: 31 Sex: FEMALE Citation Issued: YES
Direction of Travel: EAST Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors:DRIVER INATTENTION TRAFFIC CONTROL DEV

Veh: 2 CAR/VAN/PICKUP Registered Weight: 2653 State of Registration: NY
Num of Occupants: 1 Driver's Age: 54 Sex: FEMALE Citation Issued: NO

NYSDOT Safety Information Management System
Accident Verbal Description Report
All Accidents (Links & Nodes)

Complete Accident Data From NYSDMV Is Only Available thru 31-OCT-2008

Reqn/Cnty: 17 WARREN
Street: STAPLES ST

Municipality: 01 C GLENS FALLS
Links:23835 - 23874 Thru 23847 - 23868

Dates: JAN-01-2003 - DEC-31-2007

*** Node: 23847 BROAD ST (Continued) ***

Direction of Travel: NORTH Public Property Damage: NO
Pre-Accd Action: MAKING LEFT TURN ON RED
Apparent Factors:NOT APPLICABLE

School Bus Involved: NO

UNKNOWN

JUN-15-2007 FRI 12:43PM Persons Killed: 0 Persons Injured: 1 Extent of Injuries: C Case: 2007-32239357
Accident Class: PROPERTY DAMAGE AND INJURY Police Agency: GLENS FALLS CITY PD Num of Veh: 2
Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: TRAFFIC SIGNAL
Manner of Collision: LEFT TURN (AGAINST OTHER CAR) Weather: CLEAR
Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: 2675 State of Registration: NY
Num of Occupants: 2 Driver's Age: 18 Sex: FEMALE Citation Issued: YES
Direction of Travel: SOUTH-WEST Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: MAKING LEFT TURN
Apparent Factors:FAILURE TO YIELD RIGHT OF WAY UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: 3053 State of Registration: NY
Num of Occupants: 1 Driver's Age: 19 Sex: FEMALE Citation Issued: NO
Direction of Travel: EAST Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors:NOT APPLICABLE UNKNOWN

JUL-03-2007 TUE 02:25PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: 2007-32320748
Accident Class: PROPERTY DAMAGE Police Agency: GLENS FALLS CITY PD Num of Veh: 2
Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NONE
Manner of Collision: UNKNOWN Weather: CLEAR
Road Surface Condition: DRY Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: 6154 State of Registration: NY
Num of Occupants: 1 Driver's Age: 33 Sex: MALE Citation Issued: NO
Direction of Travel: WEST Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: CHANGING LANES
Apparent Factors:FAILURE TO YIELD RIGHT OF WAY PASSING OR LANE USA

Veh: 2 CAR/VAN/PICKUP Registered Weight: 4065 State of Registration: NY
Num of Occupants: 1 Driver's Age: 49 Sex: MALE Citation Issued: NO
Direction of Travel: WEST Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors:NOT APPLICABLE UNKNOWN

AUG-30-2007 THU 02:57PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: 2007-32328007

NYSDOT Safety Information Management System
Accident Verbal Description Report
All Accidents (Links & Nodes)

Complete Accident Data From NYSDMV Is Only Available thru 31-OCT-2008

Reqn/Cnty: 17 WARREN
Street: STAPLES ST

Municipality: 01 C GLENS FALLS
Links:23835 - 23874 Thru 23847 - 23868

Dates: JAN-01-2003 - DEC-31-2007

*** Node: 23847 BROAD ST (Continued) ***

Accident Class: PROPERTY DAMAGE	Police Agency: GLENS FALLS CITY PD	Num of Veh: 2
Type of Accident: COLLISION WITH MOTOR VEHICLE	Traffic Control: TRAFFIC SIGNAL	
Manner of Collision: RIGHT ANGLE	Weather: CLEAR	
Road Surface Condition: DRY	Road Char.: STRAIGHT AND LEVEL	Light Condition: DAYLIGHT
Loc. of Ped/Bicycle: NOT APPLICABLE	Action of Ped/Bicycle: NOT APPLICABLE	

Veh: 1	CAR/VAN/PICKUP	Registered Weight: 2854	State of Registration: NY
	Num of Occupants: 2	Driver's Age: 21	Citation Issued: YES
	Direction of Travel: WEST	Sex: MALE	School Bus Involved: NO
	Public Property Damage: NO		
	Pre-Accd Action: MAKING LEFT TURN		
	Apparent Factors:FAILURE TO YIELD RIGHT OF WAY	UNKNOWN	

Veh: 2	CAR/VAN/PICKUP	Registered Weight: 3464	State of Registration: NY
	Num of Occupants: 4	Driver's Age: 36	Citation Issued: NO
	Direction of Travel: EAST	Sex: MALE	School Bus Involved: NO
	Public Property Damage: NO		
	Pre-Accd Action: GOING STRAIGHT AHEAD		
	Apparent Factors:NOT APPLICABLE	UNKNOWN	

TOTAL NUMBER OF ACCIDENTS PRINTED: 21

ABSENCE OF NODE OR LINK WITHIN A SPECIFIED ROADWAY SECTION + TIME PERIOD INDICATES NO ACCIDENTS FOUND

*** END OF REPORT ***

NYSDOT Safety Information Management System
Accident Verbal Description Report
All Accidents (Links & Nodes)

Complete Accident Data From NYSDMV Is Only Available thru 31-OCT-2008

Reqn/Cnty: 17 WARREN
Street: 2ND ST

Municipality: 01 C GLENS FALLS
Links:23759 - 23821 Thru 23825 - 23870

Dates: JAN-01-2003 - DEC-31-2007

*** Node: 23759 SOUTH ST ***

MAY-08-2003 THU 02:49PM Persons Killed: 0 Persons Injured: 1 Extent of Injuries: C Case: 2003-30919489
Accident Class: INJURY Police Agency: GLENS FALLS CITY PD Num of Veh: 2
Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: NONE
Manner of Collision: REAR END Weather: RAIN
Road Surface Condition: WET Road Char.: STRAIGHT AND LEVEL Light Condition: DAYLIGHT
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: 3460 State of Registration: NY
Num of Occupants: 1 Driver's Age: 24 Sex: FEMALE Citation Issued: NO
Direction of Travel: EAST Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors: PAVEMENT SLIPPERY UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: 4000 State of Registration: NY
Num of Occupants: 1 Driver's Age: 25 Sex: FEMALE Citation Issued: NO
Direction of Travel: EAST Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: STOPPED IN TRAFFIC
Apparent Factors: NOT APPLICABLE UNKNOWN

*** Link: 23825 - 23870 ***

DEC-30-2006 SAT 10:43PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: 2006-32044834
Accident Class: PROPERTY DAMAGE Police Agency: GLENS FALLS CITY PD Num of Veh: 1
Type of Accident: COLL. W/LIGHT SUPPORT/UTILITY POLE Traffic Control: NONE
Manner of Collision: OTHER Weather: CLOUDY
Road Surface Condition: SNOW/ICE Road Char.: STRAIGHT AND LEVEL Light Condition: DARK-ROAD LIGHTED
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: 3552 State of Registration: NY
Num of Occupants: 3 Driver's Age: 19 Sex: MALE Citation Issued: NO
Direction of Travel: EAST Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: GOING STRAIGHT AHEAD
Apparent Factors: TIRE FAILURE/INADEQUATE PAVEMENT SLIPPERY

TOTAL NUMBER OF ACCIDENTS PRINTED: 2

ABSENCE OF NODE OR LINK WITHIN A SPECIFIED ROADWAY SECTION + TIME PERIOD INDICATES NO ACCIDENTS FOUND

*** END OF REPORT ***

NYSDOT Safety Information Management System
Accident Verbal Description Report
All Accidents (Links & Nodes)

Complete Accident Data From NYSDMV Is Only Available thru 31-OCT-2008

Reqn/Cnty: 17 WARREN
Street: 3RD ST

Municipality: 01 C GLENS FALLS

Links:23760 - 23826 Thru 23826 - 23871

Dates: JAN-01-2003 - DEC-31-2007

*** Node: 23760 SOUTH ST ***

OCT-31-2005 MON 06:12PM Persons Killed: 0 Persons Injured: 0 Extent of Injuries: Case: 2005-31659319
Accident Class: PROPERTY DAMAGE Police Agency: NOT ENTERED Num of Veh: 2
Type of Accident: COLLISION WITH MOTOR VEHICLE Traffic Control: UNKNOWN
Manner of Collision: UNKNOWN Weather: UNKNOWN
Road Surface Condition: UNKNOWN Road Char.: UNKNOWN Light Condition: UNKNOWN
Loc. of Ped/Bicycle: NOT APPLICABLE Action of Ped/Bicycle: NOT APPLICABLE

Veh: 1 CAR/VAN/PICKUP Registered Weight: 3954 State of Registration: NY
Num of Occupants: 1 Driver's Age: 37 Sex: MALE Citation Issued: NO
Direction of Travel: UNKNOWN Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: UNKNOWN
Apparent Factors:UNKNOWN UNKNOWN

Veh: 2 CAR/VAN/PICKUP Registered Weight: 2334 State of Registration: NY
Num of Occupants: 3 Driver's Age: 27 Sex: MALE Citation Issued: NO
Direction of Travel: UNKNOWN Public Property Damage: NO School Bus Involved: NO
Pre-Accd Action: UNKNOWN
Apparent Factors:UNKNOWN UNKNOWN

TOTAL NUMBER OF ACCIDENTS PRINTED: 1

ABSENCE OF NODE OR LINK WITHIN A SPECIFIED ROADWAY SECTION + TIME PERIOD INDICATES NO ACCIDENTS FOUND

*** END OF REPORT ***

APPENDIX G

Sample Message to Parents



Big Cross Street Elementary School
15 Big Cross Street
Glens Falls, NY 12801

Deborah Hall, Principal
Telephone: (518) 792-2619
dhall@gfsd.org

<http://www.gfsd.org/bigcross.cfm>
Fax: (518) 792-2668

November 12, 2008

Dear Parents/Guardians:

Please review with your child the school's policy regarding the use of skateboards, scooters and bicycles on school property:

- At your discretion, your child in the fourth or fifth grade, may ride his or her skateboard, scooter or bicycle to school.
- In all instances students must wear a helmet.
- Upon entering and exiting school property skateboards must be picked up and hand carried into and out of the building. As per school policy, for safety reasons, skateboards are not to ridden while on school grounds.
- Scooters, as per school policy, for safety reasons, must be walked while on school grounds and should be secured at the bicycle rack supplied by the school.
- Additionally, students riding bicycles to school must obey all NYS bicycle rules. For safety reasons, students must walk the bicycle once they are on school property. Bicycles should be secured at the bicycle rack supplied by the school.
- School property is defined as all walk and drive areas surrounding the school.
- The school does not assume responsibility for theft or damages to such items.

Sincerely,

Deborah Hall
Principal

Big Cross Street Elementary School
15 Big Cross Street
Glens Falls, NY 12801

Deborah Hall, Principal
Telephone: (518) 792-2619
dhall@gfsd.org

<http://www.gfsd.org/bigcross.cfm>
Fax: (518) 792-2668

May 1, 2009

Dear Parents,

Fourth and fifth graders are permitted to ride bicycles to school throughout the year. Students must obey all New York State bicycle rules, **including the provision that all children up to 14 years of age must wear a bicycle helmet. (Please be aware that this provision also pertains to wearing a helmet while riding a skateboard.)**

Additionally, for safety reasons, students must walk their bicycle or skateboard once they are on school property. School property includes all walk and drive areas surrounding the school.

The school does not assume responsibility for theft or damages to bicycles. Therefore, it is important that bicycles be secured to the bike racks with locks. Bicycle racks are located at the playground area.

Sincerely,

Debbie Hall
Principal

APPENDIX H

Walking School Bus Information



Starting a walking school bus: the basics

Why develop a walking school bus?

Studies show that fewer children are walking and biking to school, and more children are at risk of becoming overweight. Changing behaviors of children and parents require creative solutions that are safe and fun.

Implementing a walking school bus can be both.

What is a walking school bus?

A walking school bus is a group of children walking to school with one or more adults. If that sounds simple, it is, and that's part of the beauty of the walking school bus. It can be as informal as two families taking turns walking their children to school to as structured as a route with meeting points, a timetable and a regularly rotated schedule of trained volunteers.

A variation on the walking school bus is the bicycle train, in which adults supervise children riding their bikes to school. The flexibility of the walking school bus makes it appealing to communities of all sizes with varying needs.

Parents often cite safety issues as one of the primary reasons they are reluctant to allow their children to walk to school. Providing adult supervision may help reduce those worries for families who live within walking or bicycling distance to school.

Starting simple

When beginning a walking school bus, remember that the program can always grow. It often makes sense to start with a small bus and see how it works. Pick a single neighborhood that has a group of parents and children who are interested. It's like a carpool—without the car—with the added benefits of exercise and visits with friends and neighbors. For an informal bus:

1. Invite families who live nearby to walk.
2. Pick a route and take a test walk.
3. Decide how often the group will walk together.
4. Have fun!



Apex, NC



Chester, VT

When picking a route, answer these four questions:

1. **Do you have room to walk?**
Are there sidewalks or paths?
Is there too much traffic?
2. **Is it easy to cross the street?**
3. **Do drivers behave well?**
Do they yield to walkers?
Do they speed?
4. **Does the environment feel safe?**
Are there loose dogs?
Is there criminal activity?

For more help identifying walkable routes, use the Walkability Checklist that can be found at www.walktoschool.org/buildevent/checklists.cfm.

Reaching more children

Success with a simple walking school bus or a desire to be more inclusive may inspire a community to build a more structured program. This may include more routes, more days of walking and more children. Such programs require coordination, volunteers and potential attention to other issues, such as safety training and liability. The school principal and administration, law enforcement and other community leaders will likely be involved.

► First, determine the amount of interest in a walking school bus program. Contact potential participants and partners:

Parents and children	Principal and school officials
Law enforcement officers	Other community leaders

►► Second, identify the route(s).

The amount of interest will determine the number of walking routes.

Walk the route(s) without children first.



Mill Valley, CA

►►► Third, identify a sufficient number of adults to supervise walkers.

The Centers for Disease Control and Prevention recommend one adult for every six children. If children are age 10 or older, fewer adults may be needed. If children are ages 4 to 6, one adult per three children is recommended.

►►►► Next, finalize the logistical details.

Who will participate?

How often will the walking school bus operate? Will the bus operate once a week or every day?

When do children meet the bus? It's important to allow enough time for the slower pace of children, but also to ensure that everyone arrives at school on time.

Where will the bus meet children—at each child's home or at a few meeting spots?

Will the bus operate after school?

What training do volunteers need?

What safety training do children need? See "Walking School Bus: Guidelines for talking to children about pedestrian safety" at <http://www.walkingschoolbus.org/safety.pdf>.

►►►►► Finally, kick-off the program.

A good time to begin is during International Walk to School Month each October. Walk and look for ways to encourage more children and families to be involved. Have fun!



Sacramento, CA

For more detailed instructions on how to organize a walking school bus, go to:

- How to Organize a Walking/Cycling School Bus, Go for Green Canada, <http://www.goforgreen.ca/asrts>. Pick "English," then "Tools and Resources."
- The walking bus: A safe way for children to walk to school, Friends of the Earth UK, <http://www.foe.co.uk/campaigns/transport/resource/parents.html>
- Walking School Bus - A Guide for Parents and Teachers, VicHealth Australia, <http://www.vichealth.vic.gov.au>. Select "Local Government," then "Walking School Bus." Scroll to bottom to find link to download the guide.
- KidsWalk-to-School Guide, Centers for Disease Control and Prevention, <http://www.cdc.gov/nccdphp/dnpa/kidswalk/resources.htm>

APPENDIX I

AAA Northway's School Safety Patrol Program Information





AAA SCHOOL SAFETY PATROL
**OPERATIONS
MANUAL**



Table of Contents

Message from AAA	2	Mechanics of the Street Patrol	19
Overview		Determining the Gap	20
Role of the Safety Patrol	3	Record Keeping	20
History	4	Meetings	
Benefits	5	Procedures	21
		Agenda	21
Forming Your Patrol		Minutes	22
Partnerships		Supervision	22
AAA role	6	On Patrol	
School role	6	Role of Patrol at Signalized Intersections	23
Parent Teacher Association role	6	Bus Loading and Unloading	23
Law Enforcement role	6	On the Bus	24
Community role	6	Car Pools	24
Concerns		Reporting Dangerous Practices	25
Safety of Patrols	7	Role of Police	25
"Stranger Danger"	8	Role of Adult Crossing Guards	26
Securing Official School Authorization	9		
Limiting Liability	9	Supporting Your Patrol Program	
		School Support	27
Organization, Training and Operation		Fundraising	27
Selecting the Patrol Supervisor	10	Discipline	28
Selecting Patrol Members	11	Morale Building	29
Selection of Intersections	12	Recognition Programs	30
Parental Permission	12	Lifesaving Award Medal	30
Training	13-14	National Patroller of the Year	31
Installation	15		
Officer Selection	16	Related Programs and Resources	
Officer Duties	16	School's Open Drive Safely	32
Length of Service	17	Best Route to School	32
Equipment	18	Resources	33
Equipment Care	18	Top Tips	34
Daily Operations	19		



Proud AAA tradition

AAA School Safety Patrols play an important role in helping young pedestrians learn and fulfill responsibilities regarding traffic safety.

Millions of U.S. boys and girls have honorably served their classmates since the AAA School Safety Patrol program was started in the early 1920s. Interest in the program has spread around the world. At least 30 other countries, including New Zealand, the Netherlands, England, Germany and France, have emulated the AAA School Safety Patrol program. The experience is the same — a reduction in traffic death rates.

Boys and girls who contribute their time as AAA School Safety Patrols deserve special thanks for their efforts. AAA recognizes the AAA School Safety Patrol program as an outstanding school safety activity. We commend school personnel who administer the programs and law enforcement officials who contribute to the success of programs in their communities.

For more than 75 years, AAA clubs have proudly sponsored, promoted and aided AAA School Safety Patrol programs as a community service in the interest of safety for all schoolchildren. AAA clubs have been the leading non-school civic agencies active in patrol work in most communities. During its long and distinguished history, the AAA School Safety Patrol program has provided a safer pedestrian environment and a wide spectrum of educational opportunities for millions of children. AAA has provided the means for the patrol to succeed.

This manual will serve as a resource to community organizations, school administrators and supervisors who are coordinating AAA School Safety Patrol programs. The policies and practices presented in this manual are the result of the combined efforts of several national educational, law enforcement and safety organizations. It represents the cumulative experience of AAA School Safety Patrol operations in every corner of the United States.

Consistent, uniform operating procedures across the country are essential for the motorist and pedestrian to know what to expect. For this reason, uniform AAA School Safety Patrol identification and operating procedures are highly recommended.

Robert L. Darbelnet,
AAA President and CEO



Role of the School Safety Patrol

AAA School Safety Patrols are school-sponsored student volunteers from upper elementary, middle, and junior high schools.

Patrols direct children, not traffic. As school-age leaders in traffic safety, patrol members teach other students about traffic safety on a peer-to-peer basis. They also serve as role models for younger children who look up to them.

School Safety Patrol members:

- Complete training in traffic safety
- Protect students from the hazards of crossing roads and highways on their way to and from school
- Assist bus drivers in safely transporting students to and from school
- Teach fellow students about traffic safety.
- Serve other leadership functions under the direction of school officials

Typically, teachers and principals appoint Patrol members, who participate with parental approval. A teacher usually serves as patrol supervisor.



History

As members of AAA School Safety Patrols, students have protected their classmates since 1916.

In the 1930s, three national organizations: the American Automobile Association, the National Congress of Parents and Teachers, and the National Safety Council — collaborated on Standard Rules for the Operation of School Boy Patrols. These guidelines have been updated over the years to become the operating standards for AAA School Safety Patrols.

Today, more than 50,000 schools sponsor patrols, protecting pedestrians and school bus riders in all 50 states.

School safety patrol members have grown up to be U.S. presidents, governors, members of Congress, Supreme Court justices, astronauts, and Olympic medalists, as well as educators, executives, and community leaders throughout the country.

As the value of the program has gained recognition, two national awards have been introduced. Lifesaving Awards debuted in 1945. The Patroller of the Year award was first bestowed in 2002. *For more information, please refer to pages 30-31.*



Benefits

AAA School Safety Patrols benefit students, schools, and communities.

Students gain:

- Safety awareness
- Leadership
- Teamwork
- Pride
- Citizenship
- Respect for law enforcement

Schools benefit from opportunities to promote:

- Traffic safety awareness
- Peer-to-peer education
- Character-building opportunities
- A constructive outlet for students' energy
- A positive relationship with parents, law enforcement, and the overall community

Communities benefit from:

- Safer environments for pedestrians and motorists
- A spirit of volunteerism and civic-mindedness
- A positive collaboration between students, parents, schools, and law enforcement



Partnerships

The most effective patrol programs come from a strong partnership between AAA, schools, Parent Teacher Associations, law enforcement, and the community.

The role of AAA:

- Sponsorship
- Traffic Safety Education and awareness presentations
- Public outreach and recognition
- Source for resources, such as equipment
- Source of patrol guidelines

The role of the school:

- Supervisors are responsible for implementation of school safety patrols in elementary schools within their school system.
- Principals appoint teachers to serve as patrol supervisors
- Area patrol supervisors meet to exchange best practices

The role of the Parent Teacher Association (where applicable):

- Support of the school's patrol program, including recognition programs
- Sponsors equipment and training
- Liaison between the school and the community

The role of law enforcement:

- Advisor to the program
- Advocate on behalf of the patrol to motorists and the community
- Contribute to training and development of patrols

The role of the community:

- Civic organizations may provide recognition and community awareness programs
- These organizations could include
 - Police auxiliary
 - Women's clubs
 - School booster clubs
 - American Legion posts
 - Other safety or civic groups



Concerns

Safety of Patrols

The safety of Patrols should be achieved through training on traffic safety, operation, and the responsibilities of each post; dedicated adult supervision; and regular inspections help protect safety patrols.

To remain safe on duty, patrol members must remain at their assigned posts and always properly display their belts and badges.

Patrollers are trained to seek adult help in the following examples of specific traffic situations:

- Parked cars blocking the view of an intersection
- Parked cars blocking school bus stop or student loading or unloading zone
- Failure of motorists to obey traffic control device
- Suspicious activity by adult or older students
- Vehicles turning at T-intersections
- Wrong-way traffic on one-way streets
- Emergencies and injuries
- Electrical wires down near the patrol post
- Domestic or wild animal threats
- Student fights
- Emergency vehicle response near the post.
- Any situation beyond the realm of the daily operation of duties at a patrol post



Concerns (continued)

“Stranger Danger”

Patrol members are trained to report problems with strangers to the patrol supervisor, teachers, parents, and/or law enforcement. These “Stranger Danger” precautions are part of patrol training:

Patrol members should be trained to never:

- Approach cars or allow other students to approach unknown motorists
- Accept candy or presents from strangers
- Help strangers with directions or search for a lost pet
- Allow their photos to be taken
- Divulge their name, address, phone number, or other family information

Patrol members are trained to seek immediate help if:

- They encounter someone who appears to be under the influence of drugs or alcohol
- They become suspicious of the behavior of older students or adults
- They are followed

Patrol members learn that if they are grabbed by a stranger, they should make as much noise as possible.



Securing Official School Authorization

Before school principals institute the AAA School Safety Patrol program, they must obtain approval from the school superintendent or school board.

The approval process will vary according to community and school system requirements. In some cases, principals may seek support for the program from community organizations.

Although most superintendents are familiar with patrols in general, they may not understand the details of operation.

To gain support in the community and in the school system, a principal introducing a patrol should be prepared to:

- Identify community needs
- Present the patrol's objectives
- Explain operational requirements
- Outline available resources that will support the program

Limiting Liability

- Create a statement of purpose that outlines the objectives of a school safety patrol program
- Grant authority to principals or supervisors of safety education or transportation to maintain safety patrols and establish rules and regulations for their supervision
- Limit the age group from which patrols may be selected and determine any exclusions from participation, such as health concerns
- Extend the same protection to the school safety patrol, supervisors, and those involved in the program that applies to other student volunteer programs
- Provide guidelines to ensure consistency between patrol programs so students benefit equally from participation
- Each school should develop a policy regarding times when school safety patrollers should not be on post due to inclement weather



Determining Patrol Size

Schools should work with the traffic engineering agency in their area to make the proper determinations regarding the number of patrols that should be assigned at various intersections. A traffic specialist can provide traffic data, conduct traffic studies, evaluate information about the school and help to implement safety procedures for students walking to and from school. The analysis can be used to plan school safety patrol posts where they can operate satisfactorily, keeping in mind the age and developmental nature of Patrol membership. Busy crossings require more than one Patrol member. Occasionally it will be found best NOT to use the same crossing place to-school pupil traffic as is used for from-school traffic, because of changes in traffic volumes and direction at different times of day.

Selecting the Patrol Supervisor

The School Safety Patrol Supervisor is a responsible adult, typically a teacher, appointed by the school principal to oversee the patrol. More than any other individual, the School Safety Patrol Supervisor determines the success of the program.

The ideal supervisor demonstrates:

- A strong belief in the value of the program
- Knowledge of traffic safety
- Leadership
- Organizational skills
- People skills, including the ability to share praise and constructive criticism
- Ability to inspire confidence and respect
- Dependability
- Ability to establish rapport with students, school leaders, the community, and law enforcement

Supervisor duties include:

- Serving as the source of information on all aspects of the program
- Selecting patrol members and assigning duties
- Training all patrol members, including officers
- Supervising all patrol operations
- Conducting training sessions, reviews, and administrative meetings
- Advising all adult sponsoring committees on the patrol's activities



Selecting Patrol Members

AAA encourages the formation of a patrol force that is just large enough to fulfill the needs of the school. Coordination is much easier with a smaller group. After determining the optimum size of the patrol a school needs, choose members based on demonstrated:

- Leadership
- Maturity
- Reliability
- Ability to follow rules
- Punctuality
- Health (or ability to perform duties)
- Interest in traffic safety
- Sound judgment
- Good attendance record
- Courtesy
- Respect for classmates and others
- Desire to help others

Select reserve patrol members to ensure trained patrol members are available at all times.



Selection of Intersections

In selecting intersections for posts, gather recommendations from:

- School personnel
- Law enforcement
- Bus drivers
- Area businesses
- PTA officials

Review coverage annually. New roads or subdivisions and changes in bus or walking patterns may change patrol needs.

Assign patrol posts based on:

- Intersections near the school
- The side of the street from which students approach
- Traffic direction and density
- Nearness of the post to patrol member's home

Parental Permission

Students must have permission from parents or guardians to participate in the patrol program.

When they understand the educational value, service, and character-building aspects of the program, most parents are proud to give their permission for participation.

AAA can provide a special consent form which explains the aims, objectives, and operation of the AAA School Safety Patrol. This standard form also contains the membership application and pledge taken by patrol members.



Training

Thorough training is an absolute requirement. Training may take place in school or special summer camps.

Trainers can be the Patrol Supervisor, a AAA representative, or a law enforcement officer.

When possible, train new patrol members for the upcoming year before the end of the prior year. Schedule refresher training for both new and veteran members should be provided before the school year begins.

Information to cover in your training:

- Fundamentals of traffic safety
- Duties of each patrol post
- Identifying sufficient gaps in traffic to allow safe crossing
- Special hazards
- Dealing with pedestrians
- School bus safety procedures
- Safety procedures on school grounds
- Maintaining records (for officers)

School training may be conducted as:

- Classes
- On-the-job personal direction
- Written guidelines and oral or written quizzes
- Joint clinics held in cooperation with other schools and involving new and veteran members
- Viewing of training videos from the local AAA club or AAA Foundation for Traffic Safety followed by discussion
- Diagramming a duty corner and highlighting hazards and a patrol plan for the specific crossing
- School bus drills

Training methods can be used individually or in combination.

Because officers take on more responsibility and have more complex duties, most schools provide additional training for incoming officers.

Some communities schedule a Patrol Member Training Camp over summer vacation. This camp may be open to all patrol members or officers.



Organization, Training and Operation

Training (continued)

Camps are ideally scheduled just before school reopens so the training is fresh in the minds of patrol members on the first day of school.

Camps combine traffic safety education with fun activities. Classes may be taught by law enforcement, safety experts, and representatives from your local AAA club. Veteran patrol members also may lead discussion sessions or conduct role-playing exercises.

Most camps end with an exam and “graduation” ceremony in which successful trainees receive certificates, pins, and a training camp T-shirt.

Civic organizations and PTAs may cover fees for training camps.



Installation

A formal installation ceremony instills pride and reinforces the importance of your patrol's service to the school and community.

Many schools make the installation part of a school assembly or PTA meeting. Some schools broadcast their installation ceremony on educational or public Television. Your school district's information officer may help you promote your ceremony.

Consider inviting the mayor, city official, school officer, a representative from law enforcement or AAA. Your visiting dignitary may be invited to lead the pledge and present badges.

Reciting the AAA School Safety Patrol Pledge (see appendix), or creating your own school-specific pledge, is an easy but powerful way to create a spirit of shared responsibility and teamwork.

AAA can provide a safety patrol ID card (see appendix) that includes the standard pledge. These cards can be presented at installation, along with badges, belts and other equipment.



Officer Selection

The Patrol Supervisor selects officers. The supervisor may do this individually or by supervising an election by patrol members. Officers generally serve for one semester.

Typically, a patrol has a captain, lieutenant, and a sergeant. The size of the patrol unit determines the number of officers needed. Patrol officers take on additional responsibility and help lead activities. Officers also must be trained to substitute for any post. One of the lieutenants becomes acting captain when the captain is not available for duty.

Encourage officers to rely upon respect and cooperation, rather than authority. Specific officer duties are outlined later in the manual.

Officer Duties

Captains are responsible for:

- Preparing reports for the Patrol Supervisor
- Proposing the agenda for patrol meetings
- Assigning posts
- Monitoring patrol performance
- Presenting safety talks to younger classes
- Enforcing all patrol rules
- Ensuring patrol members maintain and wear belts and badges
- Arranging for substitutes as needed
- Maintaining the Captain's Record Book

Lieutenants are responsible for:

- Acting for the captain, as assigned
- Assisting the captain in checking posts and buses
- Contributing to operational reports
- Filling in for absent patrol members

The Sergeant is responsible for:

- Acting as unit secretary
- Maintaining the patrol bulletin board
- Inventorying equipment and recommending repairs, replacements, and acquisitions



Length of Service

AAA recommends that schools appoint a set number of patrols to serve all year with a selection of alternates to fill in when regular members are absent. Assign only the necessary number of patrols to a single post.

Being a school safety patrol should be considered “special”. Do not make everyone in the class a patrol. This dilutes the special feeling of being selected a patrol and seriously limits resources.



Equipment

The two identifying pieces of equipment for safety patrol members are:

- Official patrol belts
- Badges pinned to the shoulder strap of the belt at chest level

Schools also may provide additional equipment, such as ponchos, caps, and flags.

Assigned equipment should be documented. Officers must maintain a roster with each patrol member's name and a notation of equipment provided to them.

Please contact your local AAA club for specific ordering information.

Equipment: Care

Each patrol member must wear a belt and badge when on duty. Assign a sergeant to see that patrol members are accountable for the care of equipment assigned to them. It is the sergeant's responsibility to keep a daily record of the condition of this school property.

Equipment includes:

- Belts
- Badges
- Flags
- Caps
- Ponchos

The sergeant responsible for equipment works with the captain and patrol sponsor to order replacement equipment. Equipment which is lost or misplaced must be replaced. Worn out equipment should be destroyed.

Encourage students to refer to the Patrol Member Handbook for proper wear and care of Patrol equipment.

Note: AAA has studied roadside visibility issues and is researching ways to improve existing equipment to increase the visibility of AAA School Safety Patrols to approaching motorists.



Daily Operations

Schools should distribute the list of patrollers to staff and train patrol members to leave their classes quietly and report to an assigned patrol assembly point.

The patrol captain or lieutenant:

- Takes attendance
- Ensures that all members are wearing their belts and badges
- Verifies that all posts are covered.
- Reminds patrol members to walk quietly and carefully to their posts

Mechanics of the Street Patrol

“Mechanics” are defined as the process, moves, and maneuvers of a patroller on duty. The basic mechanics are:

- Arrive at your post early
- Determine how to judge a safe gap for your posted position
- Take a position at least one step back from the curb (or edge of the street), arms down at a 45 degree angle, palms facing back
- Check all directions for traffic
- Keep students a safe distance from traffic
- Keep arms and palms positioned to hold all students from traffic until there is a safe gap
- Never allow students to walk in front of a car that stops to allow them to cross
- Step aside and motion students across the street
- Continue to monitor traffic, when the safe gap ends, cut the flow of students

A patrol member should only step into the street far enough to see around an obstruction.



Determining the Gap

The first important duty of patrol members is to determine a safe gap in traffic. The patrol captain or supervisor will assist patrol members in determining when there is a break in traffic that will allow students to safely cross the street.

To determine a safe gap, patrol members judge:

- Speed of vehicles
- Traffic volume
- Road and weather conditions
- Number of lanes of traffic
- Time required for small children to cross the street

To establish a safe gap:

- Walk across the street at normal speed when there is no traffic
- Count the seconds to cross safely and add five seconds to allow for students who start across later than the lead student
- Pick a fixed point - such as a mailbox or signpost - about 1000 feet from the student crossing point
- When a vehicle passes this point, count the seconds until the vehicle reaches the crossing

Patrol members must pay attention to parked cars that may enter traffic, and vehicles that may come from driveways or alleys.

To determine gaps at intersections with signals:

- On average, it takes 10 seconds for a child to cross
- If the signal remains green for 30 seconds, count 20 seconds, then stop students from crossing until the next green light

Record Keeping

AAA provides two resources that help captains standardize recordkeeping: the Captain's Record Book and the Monthly Patrol Record Form.

The Captain maintains the Captain's Record Book. Patrol records should cover:

- Daily attendance
- Number of times a patrol member is late
- Number of times a patrol member fails to wear proper equipment



Meetings

Procedures

Schedule meetings twice a month. At least once a month, the school safety officer should attend. It also may be appropriate to invite the principal, police, adult crossing guards and bus drivers.

When conducting a meeting, follow parliamentary procedure, which is a set of widely accepted rules that give meetings structure and order. Procedure books such as the popular, *Robert's Rules of Order* can be found in local public libraries.

The Patrol Captain presides at all meetings. The Lieutenant presides in the Captain's absence.

Patrol members wear belts and badges to meetings.

Agenda

Patrol officers should plan an agenda focused on both old and new patrol business.

Below is a sample agenda, incorporating parliamentary procedure:

- Call to order
- Pledge of Allegiance
- Roll call and inspection
- Secretary reads minutes of previous meeting
- Captain corrects or approves minutes
- Old business from previous meeting completed
- New business discussed
- Contributions from guests
- Training
- Captain requests motion to adjourn
- Captain asks for motion to be seconded
- Captain states the motion and asks for "ayes" and "nays"
- Captain officially adjourns the meeting (and may announce time and date of next meeting)



Meetings (continued)

Minutes

The secretary records meetings in a consistent format. A completed set of minutes is signed by the secretary and becomes part of the official record of the patrol.

Elements which must be in the minutes:

- School name
- Date and time of meeting
- Attendance
- Results of inspection
- Summary of old business
- Summary of new business
- Additional comments/contributions from guests
(such as police officers, principals)
- Additional information (for example, training or recognition)
- Time meeting was dismissed

The secretary signs meeting minutes before turning them in to the captain.

Supervision

Overall responsibility for the patrol rests with the Patrol Supervisor.

On a daily basis, the Captain assigns posts, enforces rules, arranges for substitutes, and maintains discipline.

The Captain is assisted by Lieutenants and a Sergeant.



Role of Patrol at Signalized Intersections

Only police officers or adult crossing guards can stop vehicles. Patrol members have specific duties based on their posts.

Duties of patrol members:

- Stand on the sidewalk, at least one step back from the curb and midway between crosswalk lines
- Watch traffic flow and children approaching
- At red lights, signal students not to enter the intersection by holding arms down at 45-degree angle to the body
- At green lights, determine all approaching traffic has stopped before allowing students to cross
- Check traffic in all directions for a suitable gap and then permit children to cross
- Before the light changes back to red, return to the outstretched arms position to prevent children from being caught in the middle of the intersection

Bus Loading and Unloading

Bus stop patrol is an important duty. Students often arrive at bus stops early and may not pay attention to traffic while waiting.

School officials should encourage students to arrive no earlier than 10 minutes before the bus is scheduled to arrive. The school also should designate a waiting area away from the road.

The bus stop patrol:

- Keeps students out of the street and away from traffic
- Lines students up for boarding when the bus arrives
- Assists small students in boarding the bus
- Checks the bus stop to ensure no belongings are left behind
- If a school bus must be evacuated, safety patrols may assist bus drivers. If a bus driver is incapacitated, the patrol may direct the evacuation.



On the Bus

Assign one to three patrol members to a bus. They remain seated when the bus is moving.

Front patrol members sit in the right front seat of the bus and:

- Disembark at all regular stops to assist students entering and leaving the bus
- Assist the driver in keeping objects out of the aisles
- Remind students to keep heads and arms inside the bus
- Reaffirm the track is clear at railroad crossings

Middle patrol members sit in the middle of the bus and:

- Monitor student noise and behavior
- Keep students seated and aisles clear
- Remind students to keep arms and heads inside the bus
- Assist loading and unloading

Rear patrol members sit near the back emergency door and:

- Check the bus for articles left behind by students
- Operate the rear emergency door in case of emergency

Note: Bus Patrol members are typically students from the first bus stops in the morning and the last bus stops in the evening that provide assistance to the bus driver for the entire route.

Carpools

Some schools place patrols at pick-up and drop-off spots in front of the school to protect carpoolers.

Patrol members assigned to these positions:

- Help students enter and exit vehicles safely
- Assist small children and students whose arms are full
- Monitor students and keep them on the sidewalk until traffic has stopped
- Direct students to proceed in an orderly fashion from the parking lot to the school



Reporting Dangerous Practices

Part of the pledge school patrollers take is a promise to “report dangerous student practices.” Just what are those practices? A dangerous practice endangers students.

When a patrol member observes a dangerous practice they should:

- Politely explain the risk to the offender (if it is another student)
- Seek an adult if the behavior continues
- Only touch another student in an emergency
- Report dangerous situations to a patrol officer or Patrol Supervisor for follow-up

If another patrol member is involved in a dangerous practice, this should be reported to the Patrol Supervisor. Individual school system guidelines should be in place to handle such disciplinary actions, including probation, suspension and dismissal.

Role of Police

In many communities, law enforcement officers work directly with patrols. They serve as safety patrol coordinators who contribute to operations, training, and development.

Law enforcement can make an important contribution to the success of your patrol program, including:

- Promoting motorist awareness of patrols
- Promoting community respect for patrols
- Contributing to patrol training

Only police officers and adult crossing guards can stop vehicles.



Role of Adult Crossing Guards

Adult crossing guards may be assigned to high-traffic areas. They can help create safe gaps in traffic, control turning traffic, and assist large groups of children crossing busy intersections. They are typically community employees supervised by law enforcement.

Adult crossing guards are typically assigned to:

- High-traffic streets with safe gaps more than a minute apart
- Signalized intersections where turning automobiles are a hazard
- Crossings near schools with a high volume of walking students
- Locations where 85 percent of the traffic speed exceeds the speed limit
- Areas of reduced visibility
- School districts with inadequate school route plans
- Locations beyond the capability of student patrols

Patrols can be deployed to assist an Adult Crossing Guard. This is particularly useful at wide crossings or locations with heavy pedestrian volumes. The adult crossing guard and the police will establish procedures consistent with guidelines for patrol deployment described in this manual.



Supporting Your Patrol Program

School Support

The more importance and visibility the school gives to the AAA School Safety Patrol, the more the potential benefit. The program deserves recognition as:

- A safety measure
- A character-building program
- As a leadership development program
- Citizenship and volunteerism in action
- A real-world “lab” that teaches life skills such as teamwork, responsibility, problem-solving, and effective communication
- Means to enhance rapport between students and authority figures (school officers, law enforcement)
- A program that creates positive role models for younger students
- An opportunity for students to learn about traffic safety and the rules of interfacing with traffic

Schools should encourage teachers to participate, involve the PTA and community groups, and make the recognition of the contribution made by the AAA School Safety Patrol a priority.

Fundraising

Schools across the country have raised funds for their school safety patrols by:

- Hosting a movie for students and selling popcorn
- Holding a bake sale
- Contacting fundraising companies that provide sale items
- Creating buttons or stickers for a small cost
- Offering a gift-wrapping service at the holidays
- Car washes
- Collecting recyclables
- Setting up a compost heap “fed” by classrooms and the cafeteria each day. Sell bags of fertilizer in the spring
- Obtaining plants or seedlings from the parks department and selling them to the community
- Setting up a booth at a town street fair or similar community celebration and providing face-painting or simple goods or services
- Holding a safety fair and inviting AAA, the Red Cross and other safety organizations to participate
- Challenging students to a walk-a-thon, bike-a-thon (with helmets!) or bowl-a-thon and asking sponsors to pledge contributions



Supporting Your Patrol Program

Discipline

Patrol members must understand there are serious consequences for breaking rules. Most patrols maintain discipline with a merit/demerit system. Parents should be advised prior to any disciplinary action.

Merit points are awarded for:

- Work in addition to regular duty
- Conducting safety talks to classes
- Making constructive suggestions
- Additional contributions to teamwork

Demerit points are awarded for:

- Attempting to direct traffic
- Leaving the sidewalk
- Allowing children to cross without ensuring the way is clear
- Leaving their post without permission
- Being tardy or absent without an acceptable reason
- Behavior unbecoming a patroller
- Arriving for duty without badge or belt
- Breaking safety rules
- Disobedience

By accumulating merit points, a patrol member may earn more important assignments. Accumulating demerits may result in suspension or dismissal from the patrol.



Morale Building

A key duty of the Patrol Supervisor is to maintain enthusiasm and commitment to the program. Attention by the school and ownership by students keep morale high.

It is important for schools to recognize the educational value and service of the entire school patrol.

Many schools recognize this service with certificates of appreciation, merit pins, and thank-yous to the school patrol in school newsletters and Web sites.

Schools also may ask area businesses for small contributions, such as gift certificates or coupons for patrol members. Examples of gifts may include inexpensive raincoats or watches, or catering for a recognition luncheon or dinner.

Activities that may be introduced to build Safety Patrol pride and morale include:

- Reserving a section of the school newsletter or school web site for safety patrol news
- Assigning a display or bulletin board to the patrol
- Writing personalized notes of appreciation to parents
- Introducing and thanking the patrol at assembly
- Involving the student council in recognition activities
- Creating a safety patrol honor guard
- Hosting an annual patrol luncheon or dinner
- Proclaiming AAA School Safety Patrol Day or Patrol Appreciation Day at a local attraction
- Promoting a friendly sporting competition between neighboring patrols
- Establishing a special weekly play period for patrol members
- Offering refreshments such as hot chocolate or ice cream to patrol members
- Hosting special events such as pizza parties, movie outings, sporting events, or end-of-year picnics



Recognition Programs

AAA makes available award certificates and a pin that can be presented at school assemblies or celebrations. Contact your local AAA Club for details.

Certificates of Merit are available for students who satisfactorily complete service as a patrol member.

Service Pin in silver is available for outstanding service while a patrol member.

There are two national awards programs to recognize the efforts of AAA School Safety Patrollers: The Lifesaving Award Medal and the National Patroller of the Year.

Lifesaving Award Medal

In 1949, AAA held the first Lifesaving Medal Awards to recognize those Safety Patrollers who while on duty saved a life or prevented the injury of a fellow student. As we approach 2005, over 380 students have been presented with prestigious honor.

The Lifesaving Medal is awarded by an independent review board to a member of any authorized School Safety Patrol when there is conclusive proof that:

1. The life of the person saved was in imminent danger;
2. The act was performed while the patrol member was on duty, going to or from a duty post, or while on duty as a bus patrol member;
3. No negligence on the part of the patrol member caused or contributed to the person rescued being in danger.

The AAA Lifesaving Medal has been presented by U.S. Presidents Ford, Johnson, Kennedy and Eisenhower; Vice Presidents Mondale, Humphrey, Nixon and Barkley; First Lady Mamie Eisenhower; justices of the U.S. Supreme Court; cabinet officials; and other dignitaries.



Recognition Programs (continued)

National Patroller of the Year

In 2002, AAA introduced the National Patroller of the Year Award to recognize the patroller that best exemplifies leadership qualities and performs their duties effectively and responsibly, without incident. The National Patroller of the Year is selected from the field of Club Patrollers of the Year that our nominated by local AAA clubs.

School Safety Patrol advisers may nominate one current-year patrol member with the following qualifications. The candidate must:

- Be enrolled in the highest participating grade level of the School Safety Patrol
- Demonstrate leadership qualities, safety skills, school involvement, and citizenship/volunteerism
- Value the patrol experience

Contact your local AAA Club for details



Resources

School's Open Drive Safely

For more than 50 years, AAA has sponsored the School's Open – Drive Safely campaign.

The goal of this awareness campaign is to reduce the number of traffic crashes involving school-age pedestrians and school bus riders by reminding drivers to be extra-cautious.

Participating schools may obtain colorful posters for display and other "School's Open" items. Contact your local AAA Club for details.

Best Route to School

Safety experts at AAA have developed 10 rules that help parents and children determine the Best Route to School. Use the following tips to aid AAA School Safety Patrols in the promotion of safe walking practices to fellow students:

- *Walk on sidewalks:* Watch out for cars pulling into, and backing out of driveways
- *Walk on the left facing traffic if there are no sidewalks:* Staying to the left allows you to watch oncoming traffic and get out of the way if necessary
- *Cross only at corners:* Avoid the dangerous practice of "jaywalking." Cross at an intersection controlled by a traffic light wherever possible
- *Stop and look all ways before crossing:* If there's no traffic light, wait until oncoming cars are at least a block away before crossing
- *Watch For Turning Cars:* Children sometimes forget to look and unintentionally walk into the side of a turning vehicle
- *Continue to look left, right and left again as you cross:* It's easy to miss an oncoming car
- *Never cross between parked cars:* It's almost impossible for drivers to see youngsters who enter the roadway from between parked cars
- *Play away from traffic:* Playgrounds, schoolyards and your own backyard are the safest places to play
- *Be especially alert in bad weather:* Rain, snow, fog and even umbrellas can obstruct vision. Also, drivers may be unable to stop quickly. Children should wear brightly colored and retro-reflective clothing
- *Obey police officers, adult crossing guards, AAA Safety Patrol members, and traffic signals:* These "safety guardians" can greatly enhance a child's safety when going to and from school



Related Programs and Resources

Resources (continued)

Check with your local AAA club for safety patrol equipment, materials, and awards to support your AAA School Safety Patrol Program. Available materials may include:

Printed Materials, Guides and Forms

- Handbooks
- Brochures
- Manuals
- Captain's Record Book
- Policies and Practices

Recognition Awards

- Certificates
- Patches
- Pins

Patrol Equipment

- Belts
- Badges
- Patrol Hats
- Ponchos
- Flags



Top Tips

- Solicit contributions and expertise from Parent Teacher Associations or Parent Teacher Organizations, bus drivers, teachers, traffic and safety experts, and law enforcement
- Dedicate a section of the school newsletter or Web site to school safety patrol news and highlight a patrol member each month
- Encourage communication between patrols by arranging get-togethers, such as shared training or recognition events
- Reward patrol members with ice cream, hot chocolate, or a meal hosted by Parent Teacher Associations or Parent Teacher Organizations
- Dedicate an exhibit case or bulletin board to school safety patrol information; including a map with posts identified. Add a photo of the patrol member assigned to each post
- Write a thank-you note to the members of your school safety patrol and their parents



How to begin a AAA School Safety Patrol

Quick Reference Checklist

- ☐ Contact your local AAA Club
- ☐ Develop partnerships with the School, AAA, PTA, Law enforcement, and the community
- ☐ Secure official school authorization
- ☐ Establish policies and procedures
- ☐ Select Patrol Supervisor
- ☐ Select Patrol Members and obtain parental permission
- ☐ Select posts and intersections for duty
- ☐ Train Patrol Members on equipment care, procedures and standards
- ☐ Select officers
- ☐ Assign duties and posts
- ☐ School announcements
- ☐ Installation of Patrol



Traffic Safety Programs