



Woodstock Elementary School

Safe Routes to School Travel Plan

February 2012



Prepared with assistance from the VT SRTS Resource Center SafeRoutesVT.org

INTRODUCTION

This Travel Plan represents the work of the Woodstock Elementary Safe Routes to School Team. Our school is a Silver Level partner with the Vermont Safe Routes to School Resource Center. We believe this is a good way to ensure an on-going Safe Routes to School program at our school.

A SRTS team consisting of parents, teachers and other community stakeholders was organized and provided input, guidance and oversight in writing our plan.

The ideas and recommendations developed during this process will guide us in creating a well-balanced approach to building our SRTS program at Woodstock Elementary School. Our school team will use this document as a resource to plan our encouragement, education, enforcement and evaluation efforts with assistance from the VT SRTS Resource Center. The plan also includes recommendations for engineering projects near Woodstock that would have a positive impact on walking and biking to school. It is our hope that our recommendations can be the basis for grants and/or improvements initiated by the Village of Woodstock and the Two-Rivers Ottauquechee planning commission.

The Five E's

SRTS combines many different approaches to make it safer for children to walk and bicycle to school and to increase the number of children doing so.

Engineering strategies create safer environments for walking and bicycling to school through improvements to the infrastructure surrounding schools. These improvements focus on reducing motor vehicle speeds and conflicts with pedestrians and bicyclists, and establishing safer and fully accessible crossings, walkways, trails and bikeways.

Education programs target children, parents, caregivers and neighbors, teaching how to walk and bicycle safely and informing drivers on how to drive more safely around pedestrians and bicyclists. Education programs can also incorporate health and environment messages.

Enforcement strategies increase the safety of children bicycling and walking to school by helping to change unsafe behaviors of drivers, as well as pedestrians and bicyclists. A community approach to enforcement involves students, parents or caregivers, school personnel, crossing guards and law enforcement officers.

Encouragement activities promote walking and bicycling to school to children, parents and community members. Events such as Walk to School Day, contests such as a Frequent Walker/Bicyclist challenge, or ongoing programs such as a Walking School Bus or Bicycle Train can promote and encourage walking and bicycling as a popular way to get to school.

Evaluation is an important component of SRTS programs that can be incorporated into each of the other E's. Collecting information before and after program activities or projects are implemented allow communities to track progress and outcomes, and provide information to guide program development.

- Excerpted from "Safe Routes to School: A Transportation Legacy", the report of the National Safe Routes to School Task Force

Members of the Woodstock Elementary								
Travel Plan Team								
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Principal	Chief of Police							
Woodstock Elementary								
Jackie Fischer	Sally Miller							
Executive Director	Director							
Ottauquechee Community	Sustainable Woodstock							
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Jim Grossman	Gretchen Czaja							
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Partnership/Parent	Woodstock Elementary							
Bob Pear	Anne Jones							
Village Trustee	Parent							
Village of Woodstock	Woodstock Resident							
Rita Seto	David Steele							
Senior Planner	Parent							
Two-Rivers Ottauquechee	Woodstock Resident							
RPC								
Cindy Towne	Vermont Safe Routes to							
Crossing Guard	School Resource Center							
Woodstock Elementary	Staff							

Technical Assistance was provided by the VT SRTS Resource Center.

TEAM VISION

The Safe Routes to School (SRTS) program at Woodstock Elementary aligns with the Woodstock's efforts towards promoting walkability. The SRTS program goals of combining engineering, education, enforcement, evaluation and encouragement strategies (also known as the Five E's) to improve the safety and health of students who walk to school fit our school and town's values.

Our vision for Woodstock Elementary (and the surrounding neighborhoods) is:

- To be a place for improved pedestrian accessibility to school and all people who use it;
- To be a place to reach community assets by foot/bike while giving youth independence and allows for greater experiences;

- To be a place where the community is actively involved with getting to school on foot and bike;
- To be a place where walking and biking is valued by the community;
- To be a place where there are safe, friendly, and designated routes to school;
- To be a place with improved driver awareness of bicyclists and pedestrians
- To be a place that has a safe community wide network for bicyclists and pedestrians;
- To be a place where bicyclists and pedestrians are considered equal to cars.

This SRTS Travel Plan outlines our school's intentions for making walking to and from school more sustainable and safer for students and the community. Through our SRTS program and efforts, we hope to reach a rate of 20% of our students walking or biking to school at least two days a week. We believe this goal is attainable, as 30% of our students live within 1 mile of school.

ABOUT THIS PLAN

Our Safe Routes to School team met four times with the VT SRTS Resource Center to develop and adopt this SRTS plan. Each meeting provided education on the benefits of SRTS and highlighted successful program components and strategies. The "observation meeting" included a guided walk audit of the area around our school to assess current conditions and potential for improvements. We also discussed education, encouragement, enforcement, and evaluation strategies, which helped us to identify needed and complimentary programs to support proposed engineering strategies.

This school travel plan is intended to be a living document that will be amended each spring and fall as the SRTS team vision evolves. With this 2012 version completed, the SRTS team is committed to several immediate actions to works towards creating a walkable Woodstock!

The SRTS team's next steps for Woodstock Elementary and the plan in spring of 2012 are:

- Use the Principal's newsletter to strive toward increased parent engagement with SRTS
- Share this SRTS travel plan with the PTO and at community meetings
- Provide the travel plan to Trustees on February 8th, 2012 for an agenda item and discussion at the February 14th, 2012 meeting
- Announce the SRTS travel plan at Trustee, village and town meetings
- Present the plan at the planning commission meeting (1st Wednesday in April 2012) and open a public comment period

Meeting Date	Content and Outcomes
August 2011	 Kick-off Meeting: How the VT SRTS Travel Plan Works Award of the planning assistance grant Overview of the planning process
October 2011	Observation Meeting Team visioning Opportunity and barrier discussions Walk audit Observed dismissal
November 2011	 Plan Review Reviewed the draft plan Identified roles and immediate steps for non-engineering recommendations
January 2012	 Plan Adoption Adopted plan Began implementation of non-infrastructure recommendations
March/April 2012	Community/Trustee - Review the draft plan - Adopt plan

TRAVEL PLAN CONTEXT

WOODSTOCK ELEMENTARY AND WOODSTOCK OVERVIEW

Woodstock Elementary is located in Woodstock, VT, a small, rural community in central Vermont. The town has experienced steady growth since the 1980's and is a popular tourism destination year round.

Woodstock Elementary is sited on South Street (State Route 106), which is just off State Route 4, the gateway into downtown Woodstock. Nearly all traffic into town passes by the school. South Street is classified as an arterial with a speed limit of 25 mph. Despite being located on a busy street, the areas surrounding the school are low/moderate-density neighborhoods. All of the local roads have access to South Street.

This direct access to the main road makes it easy for students to map out walking and biking routes and presents opportunities to increase walking and biking. However, the traffic conditions along South Street and the condition of pedestrian and bicycle infrastructure, deter parents from allowing their children to walk or bike to school.



Context Map for Woodstock Elementary

The Safe Routes to School (SRTS) program at Woodstock Elementary is a key component in the school's efforts to improve the health of its students. The SRTS program also complements Woodstock's Comprehensive Town Plan (2007) efforts towards promoting active transportation.

The Comprehensive Town Plan (2007) speaks to encouraging and providing appropriate use of town public rights of way through recreation, cultural and active transportation.

Vermont worked in 2011 to pass Complete Streets legislation which took effect July 1, 2011. Complete Streets policies ensure that state and local transportation agencies design and operate the right of way to make roads safer and more accessible for all users regardless of age or ability. The Complete Streets policies working in tandem with the SRTS travel plan will continue Woodstock's walkable, bikeable and sustainable approach.

CURRENT SCHOOL DEMOGRAPHICS

Our school has a total of 190 students enrolled for the 2011-2012 school year. Our school serves grades K -6.

Demographic	Count	Percentage of student body
Free/Reduced Lunch	40	22%
Students with Disabilities	16	9%
Limited English proficient students	3	1%
Distance From School		
Students living within 1/4 mile of school	22	12%
Students living within 1/2 mile of school	15	8%
Students living within 1 mile of school	60	33%
Students living within 2 mile s of school	41	23%
Students in grades K-3	86	48%
Students in grades 3-6	94	52%

CURRENT STUDENT TRAVEL MODES

Travel Mode	Walk	Bike	School Bus	Family Vehicle	Carpool	Public Transit	Other
Percentage of Student Body (AM)	6%	1%	22%	69%	.9%	0%	0.3%
Percentage of Student Body (PM)	21%	1%	26%	47%	3	0%	0.3%

Woodstock Elementary provides busing to all enrolled students.

SCHOOL ARRIVAL AND DISMISSAL PROCEDURES

Woodstock Elementary relies on policies, practices, and support activities to ensure a safe and orderly arrival and dismissal process for students, regardless of how they travel to school. Parents are reminded of these procedures in the student handbook and in monthly newsletters that are mailed to students' homes.

Woodstock Elementary has one designated curbside location on South Street that all parent vehicles use to drop-off and pick-up students. Parents drop-off students at the front entrance of the school where the children gather in the playground area during nice weather or inside the gym to gather before the first bell. Parent drivers are asked to stay in the car at all times to reduce congestion and double parking on South Street.

Students walking or biking to school must use the school's main entrance as all other doors to the school are locked.

School Street is closed to public vehicular traffic at the South Street intersection during school arrival and departure hours (7:30-8:00am and 2:30-3:00pm). Students receiving bus service arrive and depart from a side door on School Street; a staff person aids in directing loading/unloading students



Students gather and walk from playground to the main entrance.

and bus traffic. During the morning hours, high school students gather at the side entrance on School Street and wait for bus transport to the high school while the elementary students are arriving at Woodstock Elementary.

Students who have received parental permission to walk or bike to and from school are released at the same time as school bus riders at 2:50pm. These students are released from the main entrance doors. School staff walks them to the intersection with South Street and Cross Street. The crossing guard helps students cross South Street and Cross Street intersection safely.

In the afternoon, buses line up along School Street. Students who ride the bus are released at 2:50pm. Students waiting for their parents are ushered to the gym, where they are organized by grade. A staff person identifies each driver and escorts the child to the appropriate car. Parents are not permitted to get out of their car while in the pick-up line.

Parents were observed queuing along South Street around 2:00pm waiting to pick-up students.

	Arrival	
Travel Mode	Procedure	Time
Walk	Arrive staggered	7:30-7:50
Bike	Arrive staggered	7:30-7:50
School Bus	Multiple buses unload	7:20- 7:50
Family Vehicle	Arrive staggered. Unload on different side of school than buses.	7:35-7:50
	Dismissal	
Travel Mode	Procedure	Time
Walk	Walkers exit the front school entrance and wait until they are cleared to leave.	2:45-3:00
Bike	Depart staggered	2:45-3:00
School Bus	Bus riders dismissed on School Street side.	2:50
Family Vehicle	Students waiting for their parents are released out of the front of school.	2:50

EXISTING TRAVEL HABITS

Students travel from all directions to Woodstock Elementary. Many live within reasonable walking distance of the school. For example, more than one out of every four students (30%) lives within one mile of school.

Students who walk to school are concentrated on the following roadway segments:

- Cross Street/High Street from South Street (State Route 106) to Central Street (State Route 4) – Almost all student walkers use Cross Street and High Street to access the school. Most walk on the north side.
- South Street from The Green (State Route 4) and Cross Street – Walkers from this area, as well as others living to the north and west, use this segment to access the school. Most walk on the west side.



Cross Street and High Street is a key walking route for students.

On the day of our safety audit the team observed five bicyclists commuting to school via High Street and Cross Street. The cyclists cross South Street utilizing the crossing guard at Cross Street and South Street intersection. Woodstock Elementary has bicycle parking adjacent the school playground.

Parent surveys will be distributed each year and were collected for the first time during the winter of 2012; there was a 17% response rate. Parents of students who do not allow their children to walk or bike presently, ranked the following reasons for doing so:

- Amount of traffic along route (73%)
- Speed of traffic along route (68%)
- Distance (64%)
- Safety at intersections and crossings (59%)
- Condition or lack of sidewalks or pathways (45%)

The survey results indicated that if some of the conditions on Route 4 were improved for bicyclists and pedestrians, parents would reconsider allowing their children to walk to school. Distance also played a major role and living too far away from school to bike or walk. Many of the issues in the table above can be addressed with either infrastructure or non-infrastructure strategies (or in some cases both). We kept these concerns in mind when picking the strategies that we want to accomplish this coming school year, 2011-2012.

KEY ISSUES AND OPPORTUNITIES

The team identified the following barriers when developing this Travel Plan;

Issue: Lack of sufficient crossings and high vehicular speeds on The Green (State Route 4) Crosswalks do exist for students to navigate across State Route 4 and The Green. However, lack of signage, heavy vehicular traffic/speed and poor sight lines make for an unsafe crossing. Motorists on North Park/South Park (State Route 4) appear unaware of school crossing, school zone and pedestrians.

In particular, the team expressed concerns about vehicular speed around The Green. The Town of Woodstock is considering pursuing designation as a Village Center under the Second Downtown Development Act (2002). This designation would allow the town to designate

speed zones below the existing 25 mph.

Issue: Sidewalk network lacks cohesiveness. Sidewalks are present on existing walking routes but appear to 'break-down' by crossing the street multiple times and/or are absent on a few streets bordering the school. High Street and River Street are examples of when the sidewalk shifts sides of the road.



Issue: Key intersections along walking routes lack pedestrian infrastructure.

The Green on State Route 4 has unsafe sight lines at crosswalks.

Lack of pavement markings and few signs

exist to alert motorists that they are approaching a school crossing. Students walking to and from school travel along routes require crosswalks at all intersections. Pavement markings and signage will help clearly define the intersection space for pedestrians.

Issue: Unorganized travel environment around the school during both arrival and dismissal. Drivers do not practice safe behavior in the travel environment.

The crossing guard does an excellent job directing traffic and students were observed paying close attention to the instructions. Some parents, however, were observed pulling out from curbside drop-off/pick-up into traffic without stopping for crossing students.

Issue: The Vermont winter months pose additional barriers for pedestrians. The municipality currently clears snow from The Green, Vail Field, and bridges throughout Woodstock. Individual property owners are responsible for clearing the public sidewalks; there is inconsistent compliance with this law. Effective and timely snow clearance on sidewalks is vital to maintaining safe walking conditions. Precedence for a snow removal toolkits have been developed to better inform communities about snow removal policies and procedures and to provide them with tools to increase compliance and safety.

TRAVEL PLAN RECOMMENDATIONS

This Travel Plan is comprised of several sections detailing activities and programs for our school to implement now and projects for us to work on with local officials.

Non-Engineering Plan

This Travel Plan identifies best practice education, encouragement, enforcement and evaluation activities and programs suitable for our school. Information on the advantages and considerations for each strategy and resources to help us implement each are included in the Appendix.

12-Month SRTS Activity Calendar

Our team will pursue a smaller subset of items in the non-engineering plan during the next 12 months. We will review our work periodically, adding additional activities that will continue the SRTS program momentum.

Engineering Recommendations

With assistance from the Vermont SRTS Resource Center, we have identified short, medium and long-term engineering treatments to make walking and bicycling to school safer for our students.



Our team met three times to create our Travel Plan.

NON-ENGINEERING TRAVEL PLAN

We identified a number of activities and programs to promote walking and biking to school. These activities and programs, while grouped by "The Five E's", are dependent upon each other for their individual success. We plan to work on our highest priority programs this year, following up with other programs in successive years. We used the timeframe below to determine when to initiate programs:

Туре	Short	Medium	Long
Encouragement, Education, Enforcement, Evaluation	Within 12 months <i>Or, what we plan</i> <i>to do this school</i> <i>year</i>	Within 2 years Or, what we plan to do next school year	Longer than 2 years Or, what we plan to do starting in two years

The activities and programs we expect to work on during the next 12 months are described below and identified in the activity calendar in **Attachment A**.

EDUCATION STRATEGIES

The education strategies included in our 12-month activity calendar are aimed at providing all students with pedestrian and bicycle skills. We will provide educational materials when school resumes in the fall for parents and will create opportunities for families to walk and bicycle together.

Other education strategies we will work on after this year are:

- Bicycle rodeo each spring K-6 school-wide during school hours
- Reminders and tip sheets in school newsletter and on school website
- Bike/Walk smart curriculum in PE classes
- "Learn by doing" education for walking school bus participants
- Distribute bicycle safety check (ABCs) stickers to students
- Use bicycle and pedestrian safety interactive computer game in technology class
- Community wide teachable moments, newspaper and newsletter
- Provide maps with best routes for kids
- Use signage to remind drivers to watch for children
- Distribute "A Parent's Guide to Safe Bicycling Essentials" to all students

ENCOURAGEMENT STRATEGIES

Encouragement strategies included in our 12-month activity calendar will help students and their parents feel more comfortable and confident about walking and bicycling to school.

Previously Woodstock organized a walking school bus. This activity will be revived in the spring. We would like to provide support for at least one additional walking school bus (one from River Street neighborhood).

Other encouragement strategies we will work on after this year are:

- Distribute maps that show preferred walking routes
- Define Park and Walk locations for students whose parents drive them to school
- Increase participation and number of walking school buses
- Create frequent walker and biker punch card program
- Launch Walking Club- track student mileage distance
- Participate in a Walk-a-thon/Relay for life
- Create a Golden show award
- Provide materials for PTO meetings
- Participate in Vermont Walk and Roll to School Day May and International Walk to School Day in October
- Create Walkable Woodstock committee
- Hold a bicycle skills rodeo

ENFORCEMENT STRATEGIES

Our SRTS enforcement strategies are aimed at both changing the behavior of drivers and making the neighborhood safer and more secure for students walking to and from school.

Partnering with the Woodstock Police Department, we will focus on reducing motor vehicle speeds and increasing compliance with existing traffic regulations.



Enforcement of existing town policies is a priority for this Travel Plan.

To address personal safety we will create a "drive safe" awareness campaign and send home information to reinforce current town policies and rules of the road for all modes of transportation.

Other enforcement strategies we will work on after this year are:

- Improve communication between school and police department
- Strict enforcement of the school zone speed limit for short periods at the beginning of the school year and partway through the year.
- Targeted positive reinforcement of parents and students displaying responsible behaviors
- Remind drivers to not block crosswalk and yield to pedestrians
- Utilize speed feedback trailer to slow traffic in front of school
- Ticket violators in progression- inform, warning, violation
- Enforce drop-off/pick-up driver behavior with police presence

EVALUATION STRATEGIES

Evaluation is an important component of our SRTS program. We plan to regularly complete inclassroom student tallies, and other evaluation tools, such as the student tally and parent survey forms provided by National Center for Safe Routes to School (NCSRTS). We first administered these in November of 2011, which provided baseline information on student travel behavior. Subsequent student tallies and parent surveys will help us measure the effectiveness of SRTS efforts over time.

We will continue to conduct annual walk audits to evaluate the existing walking and biking environment as well as monitor the progress of recommended projects.

Other evaluation strategies we will work on after this year are:

- Administering the parent surveys annually to capture opinions of new parents and change in overall parental perceptions
- Collecting student tally data each year to measure progress towards goal
- Keep SRTS Travel plan updated and use as tool for increased SRTS activities

Evaluation Tool	Leader	Schedule
Parent Surveys	Gretchen Czaja, P.E. Teacher	Annually in March
Student Tallies	Karen White, Principal	Annually in November
Walk Audits	SRTS Team	Annually, two weeks before school

ENGINEERING TRAVEL PLAN

Our goal for engineering improvements is to improve the physical environment along existing walking routes that students use. Engineering improvements generally fall into three categories: providing sidewalks and paths, improving crossings, and infrastructure projects associated with improving the safety and efficiency of school drop-off and pick-up practices. Descriptions of typical engineering recommendations can be found in **Appendix B**.

We recognize that infrastructure improvements can take time to complete and are a collaborative effort between Woodstock Elementary, the Town of Woodstock, and VTrans. The following short, medium and long timeframes are a guide for anticipated project completion, but actual timeframes may vary:

Short term	Within 2 years
Medium term	Within 5 years
Long term	Longer than 5 years

The team prioritized the infrastructure improvements as high, medium or low. The factors affecting this ranking include:

- Locations with specific safety concerns
- Locations along existing student walking or bicycling routes, or with a significant number of school family residences
- Locations within 1/2 mile of school
- Locations that are priorities for the school and community

All of the state roads within in the study area are designated at Class 1 Town Highways. This means that the Town of Woodstock oversees and maintains these roads. All of the roads within the study area have a speed limit of 25 mph.

Engineering Recommendations for specific locations in the vicinity of Woodstock Elementary can be found in **Attachment C.**

CONSIDERATIONS FOR DESIGN, PROJECT SELECTION, AND FUNDING

<u>Design</u>

- All infrastructure recommendations in this plan are considered "planning level" and may require further engineering analysis, design, or public input before implementation.
- Recommended changes to existing traffic patterns (adding a signal, adding a stop sign, changing lane patterns, etc) will require a study to evaluate the potential impact that the recommendation could have on existing traffic conditions.
- Drainage, existing utilities and ADA compliance will need to be evaluated for all recommendations at the time of design. ADA guidelines recommend particular design features to accommodate persons with disabilities. ADA design considerations for curb ramps, sidewalks and paths, include appropriate slopes, landing areas, surface conditions, and use of detectable warning materials for visually impaired pedestrians, among other design features.
- Right-of-way was not evaluated as a part of this project. Recommendations assume that sufficient right-of-way exists or that a method to gain needed right-of-way will be identified as the project progresses.
- District office staff will be involved in the planning and design process for any recommendation made on the state system.
- All infrastructure recommendations should comply with federal, state, and local standards including the American Association of State Highway and Transportation Officials' Policy on Geometric Design of Highways and Streets and the Manual on Uniform Traffic Control Devices (MUTCD).
- Refer to the Vermont Pedestrian and Bicycle Facility Planning and Design Manual for guidelines on pedestrian and bicycle accommodations.

Funding

• A variety of funding sources may be used for the recommendations, including Safe Routes to School. For example, projects requiring right-of-way acquisition or existing utilities relocation will not be eligible with SRTS funds, but may be funded through other sources.

More information on the types of projects eligible for SRTS funding through the VTrans and at http://saferoutes.vermont.gov/getting_started/funding.

ATTACHMENTS

- A. Non-infrastructure Strategy Calendar
- B. Typical infrastructure recommendations
- C. Location-Specific Engineering Recommendations (Location Key and Recommendations Table)
- D. School Profile
- E. Student Travel Tally/Parent Survey Reports November 2011
- F. Non-Engineering Strategies Resource Guide

ATTACHMENT A: NON-INFRASTRUCTURE STRATEGIES CALENDAR

Activity	Coordinator	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Complete
		2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	
EDUCATION				1		-	-	1			-	-		
	riculum in PE classes													
	P.E. Teacher													
Plan														
Implement														
ENCOURAGEMENT														
Weekly Walks														
Walking School Buse	25													
Lead	Principal													
Plan														
Implement														
International Walk t	o School Day													
First Wednesday in 0	October													
Lead	Principal													
Plan														
Implement														
VT Walk and Roll to	School Day													
First Wednesday in I	Мау													
Lead	РТО													
Plan														
Implement														
Bike skills rodeo														
Lead	P.E. teacher													
Plan														
Implement														
ENFORCEMENT														
Drive Safe Campaigr	1													
Lead														
	Trustees/Woodstock													
	Police Department													

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ATTACHMENT A: NON-INFRASTRUCTURE STRATEGIES CALENDAR

Activity	Coordinator	Jan. 2012	Feb. 2012	March 2012	April 2012	May 2012	June 2012	July 2012	Aug. 2012	Sept. 2012	Oct. 2012	Nov. 2012	Dec. 2012	Complete
Plan														
Implement														
EVALUATION														
Classroom tallies of t	ravel mode to school													
Annually														
Lead	Principal													
Plan														
Implement														
Parent survey														
Annually														
Lead	Principal													
Plan														
Implement														
Annual Walk Audit														
Lead	Principal													
Plan														
Implement														

APPENDIX B TYPICAL INFRASTRUCTURE RECOMMENDATIONS

The following infrastructure recommendations are typical treatments used in SRTS projects. These recommendations may or may not be included in this travel plan. The basic information is provided to give an overall understanding and implementation guidance on each treatment.

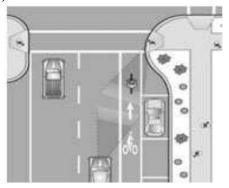


Rectangular Rapid Flashing Beacons:

Rectangular rapid flashing beacons (RRFB), as shown to the left, are warning beacons used to increase visibility of students and all pedestrians as they cross the roadway at uncontrolled crosswalks. This type of signal is pedestrian-activated, i.e., the signal will only flash if a pedestrian has pushed a button, indicating that they need to cross the street. Any proposed RRFB locations need to meet current guidance provided in the interim approval of the MUTCD. For proposed uncontrolled crosswalks on state maintained roads, VTrans approval and justification are needed.

Curb Extensions:

Curb extensions, as shown below, are recommended to reduce pedestrian crossing distances (and thus exposure to traffic) and to slow motor vehicle turning speeds at intersections. Curb extensions located along school bus routes should effectively calm traffic, but not impede buses from making the turn. Design considerations should include the appropriate design vehicle, maintenance concerns, and snow plow accommodations depending on the roadway jurisdiction.





Curb Radius Reductions:



Curb radius reductions are recommended to slow motor vehicle turning speeds and to reduce pedestrian crossing distances (and thus exposure to traffic). Curb radius reductions involve tightening the motor vehicle turning radius at an intersection, as shown to the left, without extending the curb line into a parking lane. Curb radius reductions located along school bus routes should effectively calm traffic but not impede buses from making the turn. Design considerations for curb radius reductions include the appropriate design vehicle depending on the roadway jurisdiction and ADA compliance.

High Visibility Crosswalks:

High visibility crosswalk striping improves the visibility of pedestrians to motorists. Different striping patterns can be used and the most common patterns are variations of the ladder style, shown right. Reflective durable materials should be used to resist decay.



Sidewalks and buffers:

One of our long-term goals is to establish a well-connected sidewalk network throughout the neighborhoods so that families can walk for more of their daily trips, rather than drive. Sidewalks are the most effective when they include a buffer. This buffer increases pedestrian comfort and safety and can also serve as a place for pedestrian "overflow", especially closer to the school where groups of walkers are largest. Based on Vermont Pedestrian and Bicycle



Facility Planning and Design Manual, the preferred design for sidewalks is a minimum six foot wide sidewalk with a minimum two foot wide buffer for local roadways with curbs. For downtowns and village centers on roadways with curbs, the preferred design for sidewalks is a minimum eight foot wide sidewalk with a minimum four foot wide buffer. For roadways without curbs, the buffer should be a minimum of five feet. Available right of way will impact the ultimate design of the sidewalk.

School Zone Identification:

School pavement markings are recommended to alert motorists that they are entering a school zone where pedestrians may be present both along and crossing the roadway. New pavement markings can work with existing school zone signs to reinforce the message to motorists about the school zone. The detail provided in the figure below is an excerpt of the MUTCD.





Speed Feedback Signs:

Communities may use a mobile "speed trailer" that can be placed in locations where motorists exceed the speed limit often enough that passive enforcement is appropriate. Permanently

installed feedback signs, shown right, provide ongoing information to motorists about the speed at which they are traveling. SRTS recommended any potential feedback signs be strategically located at main access points.

For towns interested in reducing the speed limit of a roadway, an engineering study needs to be conducted by the town. Approval from VTrans is needed for state maintained roads.



Median Refuge Island:

A median refuge island, as shown right, may be used to narrow the roadway, reduce motor vehicle speeds, and improve pedestrian crossings. In locations with crosswalks, these islands improve pedestrian safety and access by reducing crossing distances and enable



pedestrians to cross roadways in two stages. Design considerations for median refuge islands should include ADA compliance, maintenance concerns, and snow plow accommodations.

Appendix C: Location-Specific Engineering Recommendations

SRTS engineering strategies create safer environments for walking and bicycling to school through improvements to the infrastructure surrounding schools. These improvements focus on reducing motor vehicle speeds and conflicts with pedestrians and bicyclists, and establishing safer and fully accessible crossings, walkways, trails and bikeways.

The following table provides a summary of the engineering strategies recommended for Woodstock Elementary School. These recommendations were developed by Toole Design Group, LLC based on input from the Woodstock Elementary SRTS Team. The table includes an estimate of the amount of time that is likely to be needed to implement the recommended improvements at each site (Estimated Time Frame). The table also indicates the priority of the proposed improvements at each site for the Woodstock Elementary SRTS Team (Team Priority).

The historical context and village landscape shall be considered for all engineering improvements and remain sensitive to the unique historical context of Woodstock, VT.

All recommended signage shall be carefully considered to prevent excessive street signage by removing existing signs and replacing with proposed signage where applicable.

The SRTS team recommended the Town of Woodstock be required to maintain all engineering recommendations.

A snow removal toolkit will be formally initiated by Woodstock to better inform the community of policies and procedures, and to provide them with necessary tools to increase compliance and safety. The SRTS team recommended teaming with the Two Rivers Ottauquechee RPC to assist with the development of the snow removal toolkit.

These recommendations are for planning purposes only and may require further engineering analysis, design, or public input before implementation and shall be in full compliance with the Manual on Uniform Traffic Control Devices for Streets and Highways, (MUTCD) 2009 Edition.

The summary table provided below is followed by information about implementation and a map, which shows where the recommendation sites are located in relation to the school.

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority	
A Intersection of	The intersection is comprised of two travel lanes on South Street and two travel lanes on Cross Street. This	1. Repaint the two existing crosswalks in the ladder style with reflective durable material.	Short term	 ✓ Safety concerns. ✓ Existing walking 	High	
South Street (State Route 106) and Cross Street This is a T-	Route 106)motorists and walkers headed for Woodstock Elementary School.StreetWhen vehicles are parked on South a T- Street, visibility for motorists and pedestrians is reduced at the South on Cross s stop-	 motorists and walkers headed for Woodstock Elementary School. When vehicles are parked on South Street, visibility for motorists and pedestrians is reduced at the South Street crossing. Motorists were observed traveling at 	2. Install ADA compliant curb extensions and accessible ramps on both quadrants of Cross Street and on South Street in front of the school.	Short term	or bicycling routes ☑ Priorities for the school community.	
intersection. Traffic on Cross Street is stop- controlled.			3. Install two rectangular rapid flashing beacons (RRFB) on South Street to allow students to cross the street safely.	Medium term		

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
B1/B2 South Street (Route 106)	travel lanes and parking on both sides of the road. (06) At the intersection of South Street and School Street, School Street is closed to public traffic from 7:30-8:00am and from 2:30-3:00pm. Bus drop-off and pick-up occurs on School Street. South Street is a direct walking route for students and is heavily used by all modes of transportation. Current signage is placed in	1. Convert or install flashing yellow lights to school zone signs which flash during arrival and dismissal school hours (7:30-8:00am and 2:30- 3:00pm).	Short term	 Safety concerns. Existing walking or bicycling routes 	High
		2. Install or upgrade 'NO RIGHT TURN/NO LEFT TURN' signage and plaques to indicate South Street operates as a one-way street during arrival and dismissal hours (7:30-8:00am and 2:30-3:00pm).	Short term	✓ Priorities for the school community.	
		3. Repaint 'SCHOOL' pavement markings at the existing locations.	Short term		

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
C Intersection of	 vehicular traffic on South Park Drive all year round. South Park Drive operates as a two-lane one-way street with parking on both sides traveling east towards Woodstock town center. This is the main route in and out of town traveling east. A crosswalk currently exists on South Street; however, the crossing distance is too long and therefore unsafe. The location of this crosswalk is appropriate. 	1. Repaint the existing crosswalk in the ladder style with reflective durable material.	Short term	 Safety concerns. Existing walking or bicycling routes Priorities for the school community. 	High
South Park Street (State Route 4) and South Street (Route 106) This is a T-		2. Install a curbed pedestrian refuge island on South Street to reduce pedestrian crossing distance.	Medium term		
intersection. Traffic on South Street is stop- controlled.		3. Install a curb radius reduction on the west side of South Street to eliminate unsafe turning speeds onto South Street and install an ADA- compliant accessible ramp.	Medium term		

Site		Need	Recommendation	Time Frame	Ranking Factors	Team Priority
	South Street receives heavy vehicular traffic all year round. The sidewalk on the east side of South Street is in poor condition. The sidewalk does not have ADA-compliant width and is not vertically separated from South Street by means of a curb. The sidewalk connects Vail Field to an off-street path that provides access to Golf Avenue and Maple Street via	1. Repaint the existing crosswalk in the ladder style with reflective durable material.	Short term	 Safety concerns. Existing walking or bicycling routes Priorities for the school community. 	High	
		2. Install advance crosswalk and crosswalk signs with high fluorescent yellow/green color reflective material.	Short term			
		a pedestrian bridge over the Kedron Brook. An existing crosswalk on South Street and an existing sidewalk is	3. Install ADA-compliant curb extensions and accessible ramps on both sides of the crosswalk on South Street at Vail Field.	Medium term		
used to connect the community to Vail Fields.	4. Reconstruct the sidewalk on the east side of South Street from Cross Street to the Vail Field driveway.	Medium term				

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority		
E1/E2 The Green Unsignalized intersection of North Park Street (Route 4) and South Park Street (Route 4)	Space for the school and community.The GreenNorth Park and South Park Streets are one-way streets around the park.UnsignalizedEach have two travel lanes and parking on both sides. Due to existing parking lanes, visibility at crosswalks are reduced and motorists wereNouth Park Streetobserved traveling at a high rate of	 Repaint the two existing crosswalks in the ladder style, with reflective durable material. Install advance crosswalk and crosswalk signs with high fluorescent yellow/green color reflective material. 	Short term Short term	 Safety concerns. Existing walking or bicycling routes Priorities for the school community. 	 Existing walking or bicycling routes Priorities for the 	 Existing walking or bicycling routes Priorities for the 	High
		3. Install four (two at each crosswalk) rectangular rapid flashing beacons (RRFB) to allow students to cross the street more safely. This type of signal would clearly define that pedestrians are attempting to cross the street.	Short term				
	4. Install four ADA-compliant curb extensions and accessible ramps at existing crosswalk locations.	Medium term					
		5. Improve and maintain the existing path through The Green connecting the crossings on North Park and South Park Street.	Short term				

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
E1/E2 (Cont.) The Green		6. Stripe pavement markings on North Park Street to establish two travel lanes. Current traffic conditions are striped as one travel lane, however the street operates as two travel lanes. Street width suggests enough room to install two travel lanes. The decreased width of travel lanes will reduce vehicle speeds and provide space for additional users.	Short term	 ☑ Safety concerns. ☑ Existing walking or bicycling routes ☑ Priorities for the school community. 	High
		7. The team expressed interest at this intersection for a crossing guard in the future.	Medium term		
		8. The long term goal is a road diet to one lane of travel on North Park Street in order to install a sidewalk on the north side of The Green. Traffic analysis would be required to confirm this change in street operations.	Long term		

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority	
F High Street	High Streetuse High Street to walk to school.High StreetCurrently, the sidewalk shifts from one side of the road to the other, causing two mid-block crossings on High Street.	1. Repaint two existing crosswalks in the ladder style with reflective durable material.	Short term	 Safety concerns. Existing walking or bicycling routes Priorities for the school community. 	High	
Street to Cross Street		2. Install advance school crossing signs and crossing signs with high fluorescent yellow/green color reflective materials.	Short term		☑ Priorities for the	
		3. Install three 'STOP' signs, 'STOP BAR' and 'STOP' pavement markings for the High Street, Golf Street and Cross Street intersection.	Medium term			
		4. Install pavement extensions or chicanes on alternating sides of the High Street in order to create a 'slalom' effect to calm traffic.	Long term			
		5. Convert High Street to a cul- de-sac or dead end roadway on the east side of Golf Avenue. A dead end of High Street would deter motorists from using High Street as a cut through road.	Long term			
	6. Install a sidewalk segment on the west side of High Street from the pedestrian bridge south to meet the existing sidewalk.	Long term		8		

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
F (Cont.) High Street From Central Street to Cross Street		6. (Cont.) This would include striping a ladder style crosswalk with reflective durable material crossing High Street at the pedestrian bridge. Install ADA-compliant curb ramps on both ends of the proposed crosswalk. Two rectangular rapid flashing beacons (RRFB) should also be installed. Snow guards should be added to the roof of the adjacent residential building in order to prevent ice/snow on the proposed sidewalk. Remove one existing crosswalk south of the pedestrian bridge and sidewalk segment on the east side from the existing crosswalk north to the proposed pedestrian bridge crossing. A Right-of-Way Study should be conducted to confirm sufficient width is available.	Long term	 Safety concerns. Existing walking or bicycling routes Priorities for the school community. 	High
		7. Install sidewalks on both sides of High Street to connect where the existing sidewalk is missing and install ADA- compliant curb ramps at Central Street/High Street and Cross Street/High Street intersections. Further Right-of- Way study will be required to confirm that the necessary width is available.	Long term		9

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority	
G Intersection of Prospect Street, School Street and	 kreet, et and gradients characterize Prospect Street and Linden Hill Road at the intersection of School Street. h. School Street is closed to public traffic from 7:30-8:00am and from 2:30- 	intersection but it functions as a complex four-way intersection. School Street is stop controlled. Steep gradients characterize Prospect Street	1. Install stop signs, stop bars and double yellow center line pavement markings for Prospect Street and Linden Hill Road intersections.	Short term	 Safety concerns. Existing walking or bicycling routes 	Medium
Linden Hill Road This is a T- intersection.		2. Install a crosswalk in the ladder style with reflective durable material.	Short term	☑ Priorities for the school community.		
Traffic on School Street is stop- controlled.		3. Install advance school crossing signs and crossing signs with high fluorescent yellow/green color reflective material.	Short term			
is on School Street. The parking lot is open to the public on weekends and holidays.	4. Install a sidewalk on the south side of School Street to connect to the existing sidewalk segment. Install a crosswalk in the ladder style with reflective durable material and ADA- compliant ramps crossing the parking lot driveway.	Medium term				

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
G (Cont.)	5. Install a mini-traffic circle with chicanes to help calm and control neighborhood traffic. Mountable curbs should be factored into the design to allow for the necessary bus turning radius.	Medium term	 Safety concerns. Existing walking or bicycling routes Priorities for the 	Medium	
		6. The team would like to consider a long term design recommendation to convert School Street to one-way traffic operations. One-way street operations would also consider relocating the pick-up and drop-off location to School Street. Traffic analysis and further planning/engineering would be required to confirm design recommendations.	Long term	school community.	

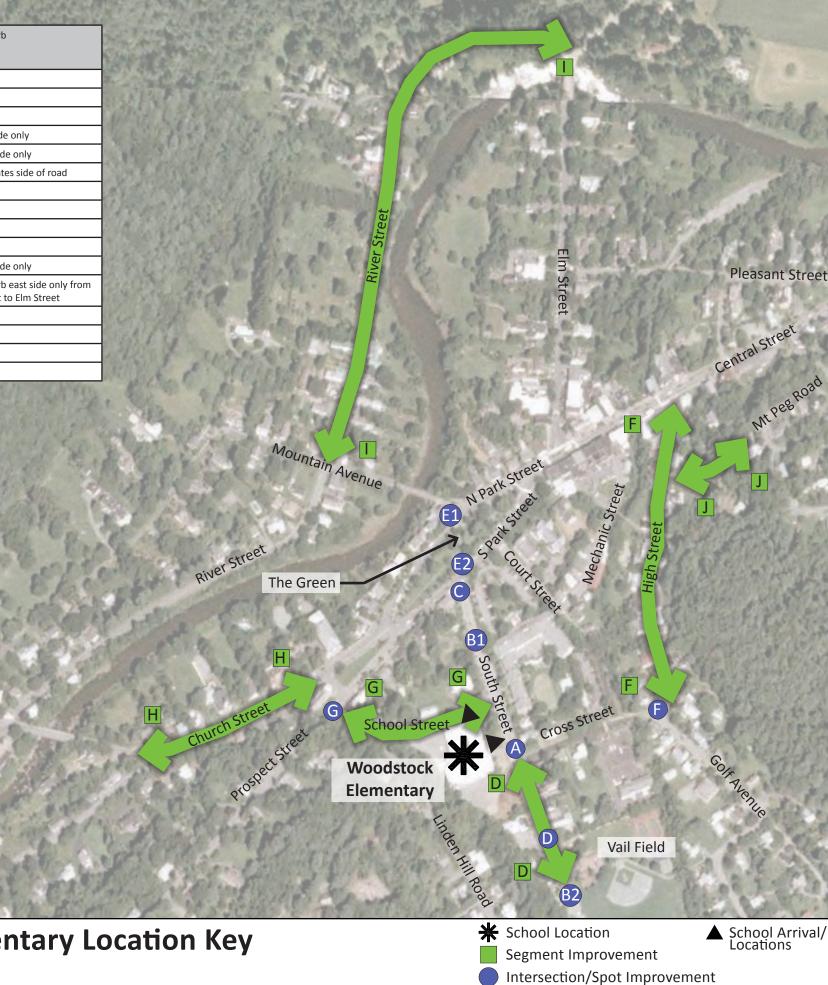
Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
H Church Street (State Route 4) College Hill to Prospect Street	e 4) The Green from the west. I to There is no sidewalk on the south	1. Repaint the existing crosswalk at the Church Street/College Hill intersection in the ladder style with reflective durable material. Install ADA-compliant curb extensions and accessible ramps at both ends of crosswalk.	Short term	 Safety concerns. Existing walking or bicycling routes Priorities for the school community. 	Medium
		2. Repaint existing crosswalk at Church Street/State Route 4/School Street intersection in the ladder style with reflective durable material. Install ADA- compliant curb extensions and accessible ramps at both ends of crosswalk.	Short term		
		3. Install two rectangular rapid flashing beacons (RRFB) for each crosswalk on Church Street.	Medium term		
		4. Install a sidewalk on the south side of Church Street from College Hill to Prospect Street.	Medium term		
		5. Install sidewalk on south side of Church Street from College Hill to Prospect Street.	Medium term		
		6. Restripe the edge line along the Church Street corridor.	Short term		12

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
		7. The existing sidewalk on the Route 4 bridge is exposed to vehicular traffic. Explore the opportunity to provide a safety handrail between the sidewalk and travel lane.	Long term	 Safety concerns. Existing walking or bicycling routes Priorities for the school community. 	Medium

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority	
I River Street This is a T- intersection. Traffic on River Street is stop- controlled.	River Streetacross the Ottauquechee River and is currently a popular walking route.This is a T- intersection.Sidewalks exist however they switch sides of the road causing walkers to cross the road at mid-block crossings. Existing sidewalk pavement quality is	 Install crosswalks in the ladder style with reflective durable material one on the north side of River Street crossing Elm Street and one crossing River Street at this intersection. Repaint three existing crosswalks in the ladder style with reflective durable material and install one crosswalk in the ladder style with reflective durable material at the intersection of River Street and Mountain Avenue. Install school crossing signs and advance crossing signs for crosswalks with high fluorescent yellow/green color reflective materials. 	Short term Short term	term ⊠ Existing walking or bicycling routes ☑ Priorities for the school community.		
		3. Install advance school crossing signs and crossing signs with high fluorescent yellow/green color reflective material.	Short term			
		4. Install sidewalks on both sides of River Street to connect to existing sidewalks that currently end mid-block. Repave existing sidewalk segments and ensure proper drainage.	Medium term			

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
J Mt Peg Road Easement/Right of Way	Easement/Right	1. Include the off-road segment between High Street and Mt. Peg Road as a priority snow clearing area for the Village of Woodstock.	Long term	 Safety concerns. Existing walking or bicycling routes 	Low
		2. Start to develop a snow removal toolkit to inform the community better about snow removal policies and procedures and to provide them with the tools to increase compliance and safety.	Short term	Priorities for the school community.	

Street name	*Classification of Town Highways	Speed Limit	Curb/No curb
Central Street (Route 4)	Class One	25	Curb
Church Street (Route 4)	Class One	25	Curb
Cross Street	Class Three	25	Curb
Elm Street (Route 12)	Class One	25	Curb east side only
Golf Street	Class Three	25	Curb west side only
High Street	Class Three	25	Curb alternates side of road
Linden Hill Road	Class Three	25	No curb
Mountain Avenue	Class Three	25	Curb
Mt Peg Road	Private Road	25	No curb
North Park Street (Route 4)	Class One	25	Curb
Prospect Street	Class Two	25	Curb west side only
River Street	Class Three	25	No curb/Curb east side only from North Street to Elm Street
School Street	Class Three	25	No curb
South Park Street (Route 4)	Class One	25	Curb
South Street (Route 106)	Class One	25	Curb



Route 4

SafeRoutes Woodstock Elementary Location Key Woodstock, VT February 2012

Woodstock **Recreation Center**



Route 4

Lincoln Street

School Arrival/Dismissal Locations



Vermont Safe Routes to School Partnership Form SafeRoutes
Please complete entire form and return to info@saferoutesvt.org or fax to 802.828.5712. Forms can also be sent to: Vermont Agency of Transportation, Program Development - LTF, 1 National Drive, Montpelier, VT 0563-5001, Attn: Aimee Pope.
School Name: Moodstock Elementary School Nr 200 2
Address: 15 South Street Woodstock, VT05091
Telephone: <u>802 - 457 - 252</u> Fax:
School Hours: 8-3:00
1. Do you have an existing Safe Routes to School Program? YES NO
If yes, please check the SRTS Elements your school currently participates in:
Education Enforcement Encouragement Evaluation Engineering
2. Has your school completed a SRTS Travel Plan? YES NO We are ready!
If no, would you like to be considered for hands-on Travel Plan assistance offered by the Resource Center?
3. How many students attend this school? List total student population per grade:
K 1 2 3 4 5 6 7 8
$\begin{bmatrix} 9 \\ 22 \\ 27 \\ 3 \end{bmatrix} = \begin{bmatrix} 30 \\ 30 \\ 31 \\ 30 \end{bmatrix} = \begin{bmatrix} 30 \\ 30 \\ 31 \end{bmatrix}$
4. Approximately what percentage of students live within one mile <u>30%</u> or two miles of the school?
5. Approximately how many students currently walk 15 or bike 5 to school?
6. How many crossing guards are assigned to this school?
7. Please CHECK the stakeholders that will participate in the SRTS Program:
Principal Parents School staff Safety/Patrol Officer Local Health Department
_ Local Planning or Engineering Department \checkmark Other: \underline{OCP}
The below contacts express their interest and support of becoming a Safe Routes to School Partner
Main Point of Contact(s) Principal Information
Name Karen White Name Karen White
Title <u>Principal</u> Signature Kareklehile Date <u>8/11/11</u>
Email Kwhite@wcsu.net Email Kwhite@wcsu.net
Telephone <u>457-2522</u>
Comments:
Questions? Please contact Abby at info@saferoutesvt.org or 802.598.8651

Brought to you by the Vermont Agency of Transportation

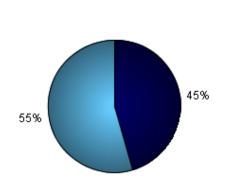
Parent Survey Summary

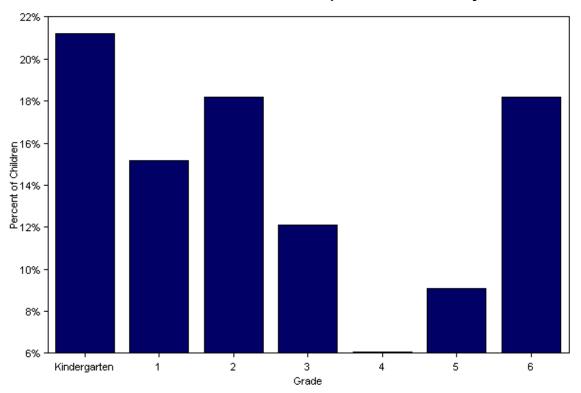
Program Name:	Woodstock Elementary	Month and Year Collected:	January 2012
School Name:	Woodstock Elementary	Set ID:	7188
School Enrollment:	190	Date Report Generated:	01/11/2012
Enrollment within Grades Targeted by SRTS Program:	190	Number of Questionnaires Analyzed for Report:	33
Number of Questionnaires Distributed:	190		

This report contains information from parents about their children's trip to and from school. The report also reflects parents' perceptions regarding whether walking and bicycling to school is appropriate for their child. The data used in this report were collected using the Survey about Walking and Biking to School for Parents form from the National Center for Safe Routes to School.

Sex of children for parents that provided information

🔳 Male 🔲 Female





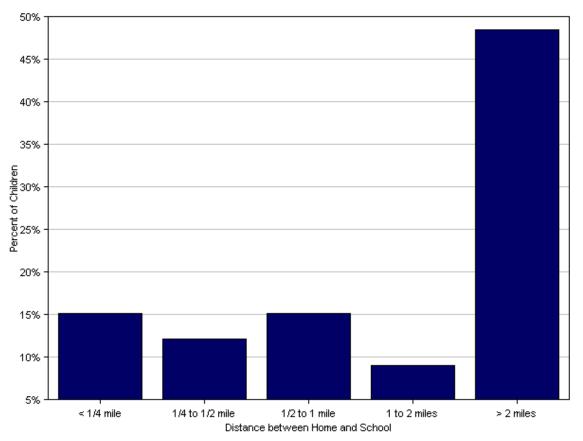
Grade levels of children represented in survey

Grade levels of children represented in survey

Grade in School	Responses per grade			
	Number	Percent		
Kindergarten	7	21%		
1	5	15%		
2	6	18%		
3	4	12%		
4	2	6%		
5	3	9%		
6	6	18%		

No response: 0 Percentages may not total 100% due to

rounding.

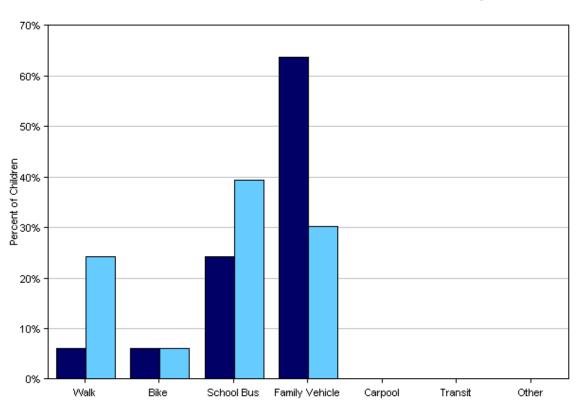


Parent estimate of distance from child's home to school

Parent estimate of distance from child's home to school

Distance between home and school	Number of children	Percent
Less than 1/4 mile	5	15%
1/4 mile up to 1/2 mile	4	12%
1/2 mile up to 1 mile	5	15%
1 mile up to 2 miles	3	9%
More than 2 miles	16	48%

Don't know or No response: 0 Percentages may not total 100% due to rounding.



Typical mode of arrival at and departure from school

Morning 🗖 Afternoon

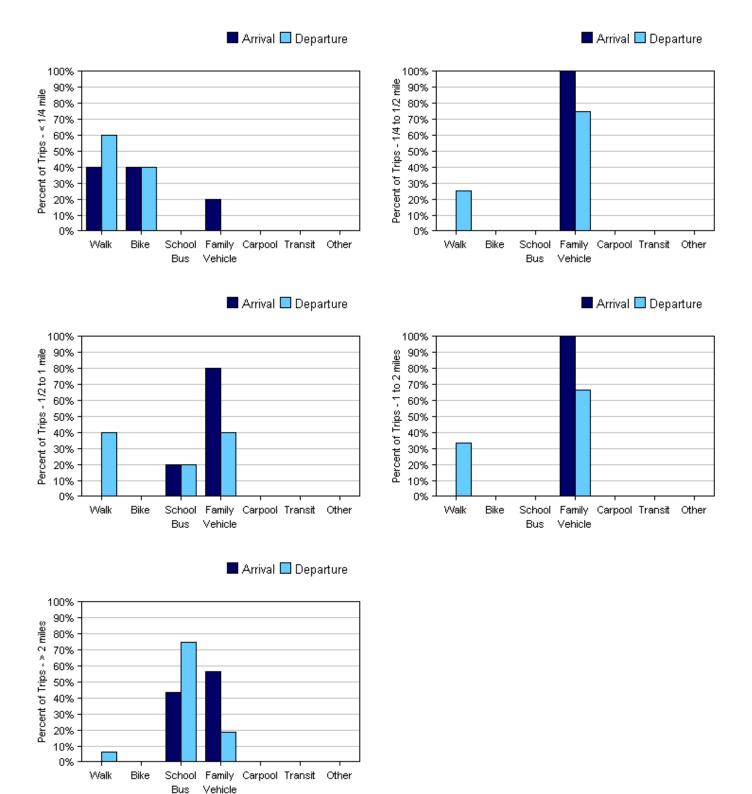
Typical mode of arrival at and departure from school

Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	33	6%	6%	24%	64%	0%	0%	0%
Afternoon	33	24%	6%	39%	30%	0%	0%	0%

No Response Morning: 0

No Response Afternoon: 0 Percentages may not total 100% due to rounding.

Typical mode of school arrival and departure by distance child lives from school



Typical mode of school arrival and departure by distance child lives from school

School Arrival

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	5	40%	40%	0%	20%	0%	0%	0%
1/4 mile up to 1/2 mile	4	0%	0%	0%	100%	0%	0%	0%
1/2 mile up to 1 mile	5	0%	0%	20%	80%	0%	0%	0%
1 mile up to 2 miles	3	0%	0%	0%	100%	0%	0%	0%
More than 2 miles	16	0%	0%	44%	56%	0%	0%	0%

Don't know or No response: 0

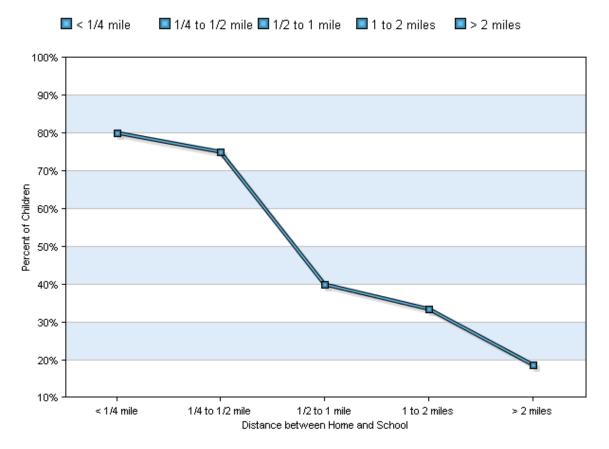
Percentages may not total 100% due to rounding.

School Departure

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	5	60%	40%	0%	0%	0%	0%	0%
1/4 mile up to 1/2 mile	4	25%	0%	0%	75%	0%	0%	0%
1/2 mile up to 1 mile	5	40%	0%	20%	40%	0%	0%	0%
1 mile up to 2 miles	3	33%	0%	0%	67%	0%	0%	0%
More than 2 miles	16	6%	0%	75%	19%	0%	0%	0%

Don't know or No response: 0 Percentages may not total 100% due to rounding.

Percent of children who have asked for permission to walk or bike to/from school by distance they live from school



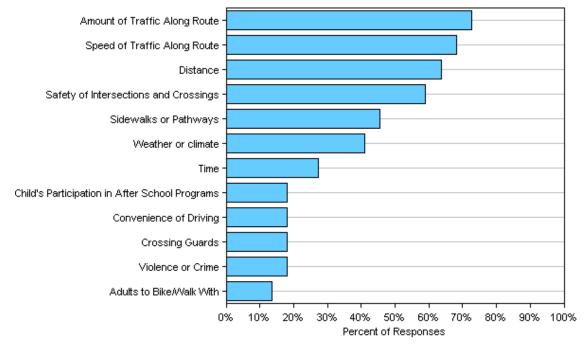
Percent of children who have asked for permission to walk or bike to/from school by distance they live from school

Asked Permission?	Number of Children	Less than 1/4 mile	1/4 mile up to 1/2 mile	1/2 mile up to 1 mile	1 mile up to 2 miles	More than 2 miles
Yes	13	80%	75%	40%	33%	19%
No	20	20%	25%	60%	67%	81%

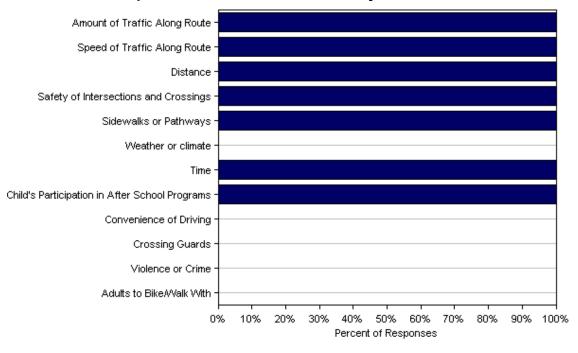
Don't know or No response: 0

Percentages may not total 100% due to rounding.

Issues reported to affect the decision to not allow a child to walk or bike to/from school by parents of children who do not walk or bike to/from school



Issues reported to affect the decision to allow a child to walk or bike to/from school by parents of children who already walk or bike to/from school



Issues reported to affect the decision to allow a child to walk or bike to/from school by parents of children who already walk or bike to/from school

Issue	Child does not walk/bike to school	Child walks/bikes to school
Amount of Traffic Along Route	73%	100%
Speed of Traffic Along Route	68%	100%
Distance	64%	100%
Safety of Intersections and Crossings	59%	100%
Sidewalks or Pathways	45%	100%
Weather or climate	41%	0%
Time	27%	100%
Child's Participation in After School Programs	18%	100%
Convenience of Driving	18%	0%
Crossing Guards	18%	0%
Violence or Crime	18%	0%
Adults to Bike/Walk With	14%	0%
Number of Respondents per Category	22	1

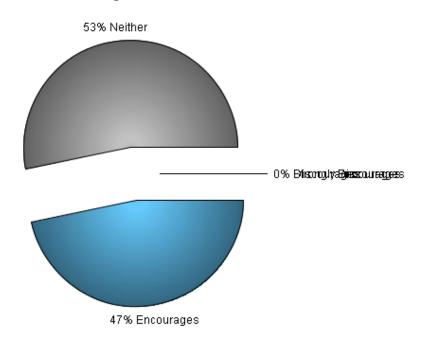
No response: 10

Note:

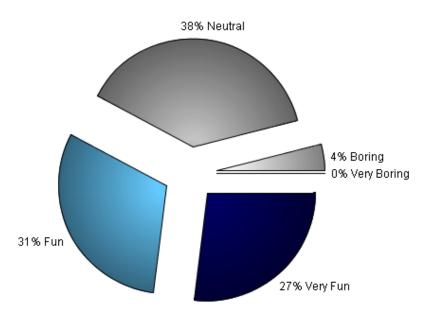
--Factors are listed from most to least influential for the 'Child does not walk/bike to school' group.

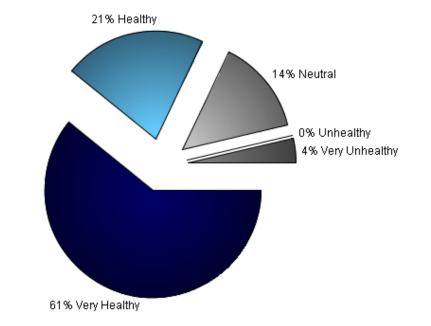
--Each column may sum to > 100% because respondent could select more than issue --The calculation used to determine the percentage for each issue is based on the 'Number of Respondents per Category' within the respective columns (Child does not walk/bike to school and Child walks/bikes to school.) If comparing percentages between the two columns, please pay particular attention to each column's number of respondents because the two numbers can differ dramatically.

Parents' opinions about how much their child's school encourages or discourages walking and biking to/from school



Parents' opinions about how much fun walking and biking to/from school is for their child





Parents' opinions about how healthy walking and biking to/from school is for their child

Comments Section

SurveyID	Comment
761277	We do not live close enough to walk/bike to school so I was unsure how to answer questions 10 and 11
761301	We live next to the high school on rt. 4. If there were a sidewalk or bike path to the village, we would bike daily; year-round. However, biking/walking on rt. 4 is not safe!
761304	We are located directly on Rt. 4, no chance of walking or biking until Jr. High School. This building can be seen from our house and they do not need to go on Rt. 4
761307	We live 15 miles from school and it is not practical to walk or bike. We may consider biking to the bus stop (2 miles) at an older age.
761308	The route from our home to school is busy and doesn't have sidewalks. Walking would take too long but riding a bike is an option. However we have a short season of bike riding in VT due to snow and ice from Nov-May. This survey is really for people who live in town.
761322	My daughter is only in kindergarten now, and it is difficult for me to anticipate when she'd be ready and safe to walk alone, although I imagine she'd enjoy it if she had friends to walk home with.
761297	My children would have to cross route 4 twice with no crossing guards and route 106 once with a crossing guard. The traffic in the morning is dangerous for anyone to cross the street. After school the buses, log trucks, and construction vehicles are ridiculous! (having witnessed the Thursday 1/5 accident after school and still grieving greatly for losing Dr. Halle)
761310	I'd be happy to walk with my kids but Rt. 4 can be very dangerous. It would also take us a long time to get there!
761288	We do walk, bike, or scooter to and from school when the temps are mild. I am anxious that someone will abduct my child and I don't like them crossing Route 4. I've seen cars stop at the crosswalks only to be passed by another driver! Too risky!
761275	In non-winter months my children get themselves to school by bike, walk, skateboard, however in winter months they ride with me as I go right by both ways.
761299	This town needs flashing lights and more police presence to get cars on board with slowing down during school hours. Also this town needs safer sidewalk and bike paths between the Elementary and High schools.
761302	I'm on the conservative side of this issue.
761316	We live too far away from the school for walking or biking but we believe that walking and biking are both healthy activities.
761274	too far, too dangerous
761276	My older child in middle school is made to ride a different bus and wait 20 minutes in the cold to walk her sister home. There is also no crosswalk/crossing guard to help 7 children cross the busy road. (Rt 4 and Mills Rd)
761278	I live in another town.
761273	I would support walking or biking to school if we lived closer. My child would love it!

Strategy	E's	Advantages	Considerations	Resources
Walking and Biking Safety Assembly These single-day events can be held in the fall to promote Walk to School Day. Guest speakers teach the students pedestrian and bicycle safety skills that they can use when walking and biking to school.	Education, Encouragement	 Assures all children learn bicycle and pedestrian safety skills Establishes habits that benefit children throughout their lives, regardless of whether they currently walk or bike to school Establishes consistent messages for young pedestrians and bicyclists Provides a refresher for parents if take home materials are provided in conjunction with the assembly. It's never too late to correct bad habits. Events can make learning fun, and help strengthen community ties with event organizers and participants. 	 Best taught using a combination of methods, including one-time instruction (e.g. assemblies), multilesson classroom curricula, and skills practice (e.g. bike rodeos). Requires able and willing instructors Should be age-appropriate Bicycle safety education may require an outside instructor, e.g. a police officer. 	 Pedestrian Safety Lesson Plan and Activities <u>http://scsaferoutes.org/downloads/SafeKid</u> <u>sWTSDMaterials.pdf</u> National Highway Traffic Safety Administration Pedestrian Safety Lessons <u>http://www.nhtsa.gov/ChildPedestrianSaf</u> <u>etyCurriculum</u> WalktoSchool.org - Classroom activities that encourage walking and biking. <u>www.walktoschool.org/eventideas/cl</u> <u>assroom.cfm</u> Willie Whistle - The National Highway Traffic Safety Association has created a video to help teach children pedestrian safety skills. <u>http://www.nhtsa.gov/people/injury/ willie/willie.zip</u>

APPENDIX F: NON-ENGINEERING STRATEGIES RESOURCE GUIDE

Strategy	E's	Advantages	Considerations	Resources
Continue to Participate in Walk to School Day Walk to School Day is a one-day event that celebrates walking and biking to school that {School Name} already participates in. Generally this event is scheduled for the first full week in October. Why not use this strategy multiple times a year?	Education, Encouragement	 Excellent kick-off event for Safe Routes to School program Generates enthusiasm for walking and biking Way to raise community awareness about safety issues Can be as simple as a few kids and parents meeting to walk to school or very elaborate celebrations Can be folded into studies of international cultures as it is an international event Date is flexible- to be counted by the National Center for Safe Routes to school the event need only take place before Dec 1. 	 Preparations for elaborate celebrations must begin several months in advance to allow time to identify partners, plan activities, and promote the event Should provide bicycle and pedestrian safety information to children and parents International Walk to School Day takes place in October but some schools organize multiple Walk to School Day (or "Walk and Roll Day") events over the course of the school year (e.g. one in the fall and one in the spring). 	 U.S. Walk to School Day website (provides resources and event registration): <u>www.walktoschool.org</u> International Walk to School Day website: <u>www.iwalktoschool.org/</u> Spice up Walk to School Day <u>http://scsaferoutes.org/downloads/E ncouragement/SC-SRTS-Tip-Sheet_SpiceUpWTS.pdf</u> Plan and promote your Walk to School Day event <u>http://scsaferoutes.org/downloads/E ncouragement/SC-SRTS-Tip-Sheet_PlanPromote.pdf</u> Include students when it is too far or unsafe <u>http://scsaferoutes.org/downloads/E ncouragement/SC-SRTS-Tip-Sheet_IncludeStudents.pdf</u>

Frequentreinforcement for walking and bicycling.Walker/Bicyclistand bicycling.Program or• Children respond to incentives.Walking• Can include all students.	 Necessary to identify a coordinator. Establish a simple record-keeping system. Establish age-appropriate goals. Consider giving rewards to parents as well, since parents are often involved in the commute to school. 	 Walking School Bus tip sheet <u>http://scsaferoutes.org/downloads/E</u> <u>ncouragement/SC-SRTS-Tip-Sheet_WalkingSchoolBus.pdf</u> Invitation to parents to join the Walking School Bus <u>http://scsaferoutes.org/downloads/E</u> <u>ncouragement/SC-SRTS-Letter-WalkingSchoolBus.docx</u> Frequent Walker Punch card template <u>http://scsaferoutes.org/downloads/E</u> <u>ncouragement/SC-SRTS- Punchcard.pdf</u>
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Traffic Enforcement (Staff/Crossing Guards) This can be an ongoing program for school staff and crossing guards. This works well if the school has an existing reward point program.	Education, Enforcement, Encouragement	 Crossing guards play an important role in helping children cross the street at key locations, reminding drivers of the presence of pedestrians, and making parents feel more comfortable about letting their children walk and bicycle to school. Staff and crossing guards can also reward students who are "caught being good" by issuing School Reward Points. 	• Requires some training and coordination with crossing guards	 Adult School Crossing Guard Guidelines (NCSRTS) http://guide.saferoutesinfo.org/crossi ng_guard/pdf/crossing_guard_guidel ines_web.pdf Florida School Crossing Guard Training Guidelines http://saferoutesinfo.org/program- tools/florida-school-crossing-guard- training-guidelines Lessons from Florida's Crossing Guard Program http://saferoutesinfo.org/events-and- training/srts-webinars/lessons- floridas-crossing-guard-program
Student Safety Patrol Program This can be an ongoing program for 5th grade students.	Education, Enforcement, Encouragement	 Students can also issue citations if condoned by the school. Excellent way to educate parents and encourage appropriate behaviors while supporting the 	 Requires an adult organizer such as a parent, teacher, or law enforcement officer Materials such as sashes and badges are encouraged Requires adult supervision while students are "on-duty" Student safety patrols will also be trained to set the model example for 	Giveaways for students when they cash-in their Reward points AAA Safety Patrol Program: <u>http://www.aaamidatlantic.com/</u> <u>Foundation/</u> <u>SchoolPrograms/SchoolSafetyPatrol</u>

Student safety patrols can offer educational literature to offenders to let them know about traffic safety issues (and proper behavior) surrounding the school zone.		school's SRTS program. • Teaches students valuable leadership skills.	 younger students. In the last month of school, student patrols can "train" 3rd graders who are interested in being trained in the fall. One option is to host an end of the year party to honor the graduating safety patrols 	
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Bike Rodeo This is a single-day event that promotes bicycle safety. At the rodeo, students can borrow bicycles or bring their own.	Education, Encouragement	 Events like bike rodeos make learning fun and can help strengthen community ties with event organizers and participants. At the rodeo students learn safety skills such as how to properly wear a helmet and how to behave while bike riding. The rodeo can also have a closed "test course" for 	 Requires able and willing instructors Should be age-appropriate Bicycle safety education may require an outside instructor, e.g. a police officer. These events require planning and materials to share with students 	 Bicycling Life page on bicycle rodeos: <u>http://www.bicyclinglife.com/Saf</u> <u>etySkills/BicycleRodeo.htm</u> An organizer's guide to bicycle rodeos <u>http://www.bike.cornell.edu/ pdfs/Bike_Rodeo_404.2.pdf</u> Easy steps to properly fit a bicycle helmet <u>http://www.nhtsa.gov/people</u> /injury/pedbimot/bike/EasySt <u>epsWeb/</u>

		 the students to ride along. This helps the students to practice in a safe environment and gain confidence in their decision- making skills. One possible partner for this is the local police department. 		
Walk Audit/Parent Surveys / Student tallies The team will meet annually (ideally in August before school starts) to review the accomplishments and progress from the previous school year and set new goals for the upcoming school year.	Evaluation	 Establishes baseline information on student travel behavior and perceived barriers to walking and biking Helps determine existing needs Helps determine success of SRTS efforts and identify needed adjustments 	 Best to conduct initial surveys before SRTS measures have been implemented Requires teacher buy-in and administrative organization Getting parents to fill out and return surveys can be a challenge. Follow up is necessary. Consider a contest among classes for highest rate of return. 	 Student In-Class Travel Tally Form: <u>http://www.saferoutesinfo.org/resour</u> <u>ces/evaluation_student-in-class-</u> <u>travel-talley.cfm</u> Parent Survey Form: <u>http://www.saferoutesinfo.org/resour</u> <u>ces/evaluation_parent-survey.cfm</u> Instructions for Survey Administration: <u>http://www.saferoutesinfo.org/resour</u> <u>ces/evaluation_instructions.cfm</u> Instructions for Data Entry: <u>http://www.saferoutesinfo.org/re</u> <u>sources/evaluation_cover-</u> <u>sheets.cfm</u>

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Walking School Buses/ Bicycle Trains Walking school buses and bicycle trains are adult supervised groups of students walking and/or bicycling to school.	Education, Encouragement	 Adult supervision on the walk to school Can be loosely structured or highly organized Can include a meeting point in a parking lot so children and parents who must drive can participate. Adults can rotate who will lead each time. 	 Need to identify routes where conditions support walking and there is sufficient demand for supervised walking Requires parents willing to walk with children and learn about how Walking school buses are organized and conducted. More organized structure requires considerable planning 	 Walking School Bus tip sheet <u>http://scsaferoutes.org</u>/downloads/Encourag ement/SC-SRTS-Tip- <u>Sheet_WalkingSchoolB</u> <u>us.pdf</u> Bicycle Train guide <u>http://scsaferoutes.org</u>/downloads/Encourag ement/SC_SRTS_Bike_ <u>Train%20Guide.pdf</u>
Drive Safe Campaigns Some parents are not aware of how their driving behavior can put walking students at risk. This teaches parents how their unsafe driving habits can put their children in danger.	Education	 Has the ability to positively effect change in and community around the school Improves the safety of the walking environment Good drivers can help to set the example for good behavior. This is especially true for helping to control speeds. 	 This requires a person to organize and administer the campaign. May not be effective at schools where parent/teacher organizations are weak Law enforcement officers would be great at speaking at the campaign events. Sometimes, due to their heavy schedules that can be difficult to pin down. A good way to contact parents is at back to school night and PTA meetings. Starting at the beginning of the year helps to prevent bad habits from starting. Law enforcement officers (or other teachers) can hold a brief assembly to explain the dangers of unsafe driving in school areas. Law enforcement officers can provide a demonstration of how difficult it is to quickly stop a moving vehicle at 50, 40 and 30 mph. The National Center has information on how the speed of the vehicle can affect the severity of injury that the pedestrian experiences in a crash. 	 Driving Around Schools: Keeping Children Safe <u>http://apps.saferoutesi</u> <u>nfo.org/lawenforceme</u> <u>nt/resources/driving_t</u> <u>ips.cfm</u> Parents, Avoid Becoming a Traffic Hazard <u>http://www.aaamidatl</u> <u>antic.com/FetchFile.as</u> <u>hx?id=e55bfa26-a70d-</u> <u>4e17-afde-073b86cc9975</u>

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Crossing Guard Appreciation Day Crossing guards help our children cross the road safely in the mornings and afternoons, in all weather conditions. Remind them that you appreciate their service and dedication. Students can create thank you cards that they deliver themselves during their walks home, or teachers and administrators can honor them formally during a school assembly.	Encouragement	 Maintains a positive relationship between the crossing guards and the school/community. Can inspire crossing guards to continue to be reliable, safety figures. Creates an opportunity to remind students why it is important to practice safe walking skills. 	 Requires coordination between the crossing guards, school administrators and school instructors. May require materials to create the thank-you cards. Is most effective with newsletter and in-school announcements. Relatively inexpensive strategy 	 Active Transportation Alliance webpage for Crossing Guard Appreciation Day <u>http://www.activetrans.org/crossingguard</u>