VERMONT
Safe Routes to
SCHOOL

State Street School

Safe Routes to School Travel Plan

Spring 2014

Prepared with assistance from the VT SRTS Resource Center

SafeRoutesVT.org

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INTRODUCTION

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 on-going 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

This Travel Plan represents the work of the State Street School Safe Routes to School Team. Our school believes that creating and maintaining this Travel Plan is a good way to ensure an on-going Safe Routes to School (SRTS) program. Our first School Travel Plan was completed in 2007, and this document is an update to that plan. It represents our dedication and continued support for a strong Safe Routes to School Program at State Street School.

Safe Routes to School programs adopted by schools like ours across the country have been shown to provide a variety of benefits to their communities. A strong SRTS program can help to:

1. Reduce traffic congestion around our school
2. Reduce costs and need for busing students to school
3. Increase our students' sense of freedom and responsibility
4. Teach students fundamental safety skills
5. Strengthen our sense of community
6. Provide more transportation options for everyone

Our SRTS team consists of parents, teachers, and other community stakeholders who have 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 State Street School (SSS). Our school team will use this document as a resource to plan our encouragement, education, infrastructure, enforcement, and evaluation efforts with assistance from the VT SRTS Resource Center.

The Vermont Agency of Transportation (VTrans), through the Vermont SRTS Resource Center, has provided technical assistance in producing this plan. With the help of the Resource Center, we have identified infrastructure improvements that would have a positive impact on walking and biking to school. These infrastructure recommendations are considered planning level and will require further engineering analysis to determine feasibility. It is our hope that our recommendations can be the basis for further grants and/or improvements initiated by the Town of Windsor.

Members of the State Street School SRTS Team	
Bridget Fariel Principal	**Donna Ewald** P.E. Teacher
Jason Rasmussen Planner SWCRPC	**Peggy Kehew** School Nurse
Jim Taft Facilities & Grounds Director	**Wendy Moody** Parent & PTF President
Ellen Cooper Art Teacher	**Beth Carlson** Parent
Tom Marsh Windsor Town Manager	**Barbara Rhoade** Windsor Resident
Stephen J. Soares Police Chief	**Mark Kirko** Fire Chief

TEAM VISION

The SRTS program at SSS aligns with the community's efforts towards promoting active lifestyles through walking and biking. 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 and bike to school, fit our school's and town's values.

Our vision for SSS (and the surrounding town) is:

- To continue and build on the variety of SRTS activities that we have already established as a school.
- To encourage more students to walk and bike to school.
- To increase parental participation in program activities.
- To develop strong regional partnerships and coordination of SRTS events with schools in surrounding communities.
- To develop specified routes for walking and biking to school and to encourage students to use them in groups.
- To increase the level of communication and coordination regarding walking and biking between the high and elementary schools.

This Travel Plan outlines SSS's intentions for making walking to and from school more sustainable and safer for students and the community. Through our SRTS program we hope to see 30% of our students walking or biking to school during year one to match the number of students currently walking home from school. Our goal for year two is to increase the number of active commuters by 5%, from 30% to 35%. We believe these goals are attainable through encouraging more walking and biking in town and by educating students on safe walking and biking practices.

State Street School hopes to engage 100% of its student population through the next year in our Safe Routes to School program.

ABOUT THIS PLAN

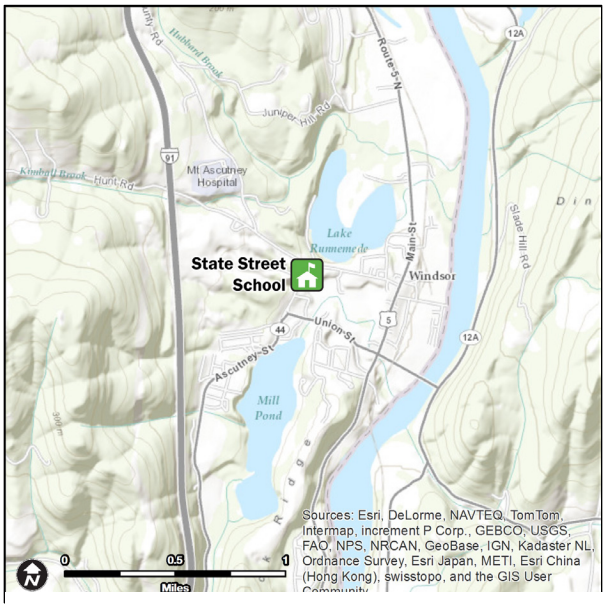
Our SRTS team met three times with the VT SRTS Resource Center to develop and adopt this SRTS Travel Plan. Each meeting provided education on the benefits of SRTS and highlighted successful program components and strategies. At the "Kick-off Meeting" we discussed education, encouragement, enforcement, evaluation, and engineering strategies which helped identify necessary and complimentary programs to support proposed engineering strategies. The "Plan Review" included a guided walk audit of the areas around our school.

Meeting Date	Content and Outcomes
February 2014	**Kick-off Meeting**: **How the VT SRTS Travel Plan Works** - Award of the planning assistance grant - Review of existing programs and School Travel Plan **Engineering Meeting** - Team visioning - Opportunity and barrier discussions
March 2014	**Plan Review** - Reviewed the draft plan - Identified roles and continued steps for non-engineering recommendations - Walk audit - Observed arrival and dismissal
April 2014	**Plan Adoption** - Adopted Plan - Discussed continuation of non-infrastructure recommendations

TRAVEL PLAN CONTEXT

STATE STREET SCHOOL AND TOWN OF WINDSOR OVERVIEW

State Street School is located in Town of Windsor, VT on the Connecticut River. Known as the birthplace of Vermont, Windsor offers a variety of historical, cultural, and recreational opportunities to its residents and visitors. The Town is small but densely settled with a population of approximately 3,700 residents. Given its compact nature, Windsor is very walkable, and has a well-connected network of sidewalks and trails.



State Street School is located on State and Ascutney Streets—both are residential, Class 2 town roads with speed limits of 25 mph. School-zone signage on these streets designates a 20 mph speed limit surrounding the school.

Elementary, Middle, and High Schools are located in the same building and share some of the same staff and facilities.

The SRTS program at State Street School is a key component in the school's efforts to improve the health of its students and community as well as to increase awareness of bicyclists and pedestrians within town.

Several years ago, the State of Vermont passed Complete Streets legislation which took effect July 1, 2011. Complete Streets policies ensure that state and local transportation agencies consider all users in the design and operation of the right of way to make roads safer and more accessible for everyone regardless of age or ability. Complete Streets policies, working in tandem with the SRTS travel plan, will help to define Windsor as a walkable, bikeable, and sustainable community.

CURRENT SCHOOL DEMOGRAPHICS

State Street School serves the town of Windsor and has a total of 351 students enrolled for the 2013-2014 school year. Our school serves grades K-8. State Street School offers busing to all enrolled students. Two buses serve the school.

Demographic	Count	Percentage of student body
Free/Reduced Lunch	142	40%
Students with Disabilities	0	0%
Limited English proficient students	3	.01%
Distance From School		
Students living within 1/4 mile of school	21	9%
Students living within 1/2 mile of school	50	20%
Students living within 1 mile of school	168	69%
Students living within 2 miles of school	178	73%
Students in grades K-2	120	48%
Students in grades 3-6	128	52%

CURRENT STUDENT TRAVEL MODES

Travel Mode	**Walk**	**Bike**	**School Bus**	**Family Vehicle**	**Carpool**	**Public Transit**	**Other**
Number of Students (AM)	19%	0.5%	24%	63%	4%	0%	0.5%
Number of Students (PM)	31%	0.3%	20%	45%	3%	0%	0.5%

Data based on SRTS Student Tally Report administered in October 2013.

SCHOOL ARRIVAL AND DISMISSAL PROCEDURES

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

Students walk up State Street toward school on International Walk to School Day, 2013

The school day begins at State Street School at 7:45 am. Prior to the bell, students are offered breakfast beginning at 7:15 am to start the day.

Students walking, biking, and travelling by car arrive staggered before school starts – typically between 7:00 am and 7:45 am. The two school buses arrive at 7:30 am. A railing-separated bus corral is located directly in front of the State Street entrance where the bus drops off and picks up students. This allows buses to pull off the road and wait for students separate from other vehicular traffic.

Students walk to school via State Street or Ascutney Street and enter the building through either of the doors located on those streets. Students travelling by bike park in racks located in the front of the school building. There is one crossing guard assigned to the school, located at the crosswalk on intersection of State Street and Farnsworth Court.

The front parking lot on Ascutney Street is used for parent vehicle pick-up and drop-off. It functions as a one-way loop for vehicular traffic. Faculty and staff as well as visitors park on the inside of the loop. Parents dropping off children pull into the south parking lot entrance and park or proceed to the main entry walkway. They then exit the lot via the north driveway.

Dismissal procedures begin at 2:30 pm with walkers, bikers, and car-riders being dismissed first and bus-riders dismissed second. Students riding the bus board directly from the State Street door on the north side of the school building. School staff and the crossing guard are present at dismissal to ensure that children are behaving properly and safely until they leave the school grounds. The high school is dismissed shortly thereafter.

Arrival		
Travel Mode	**Procedure**	**Time**
Walk	Arrive staggered	7:00-7:45 am
Bike	Arrive staggered	7:00-7:45 am
School Bus	Arrives at designated time	7:30 am
Family Vehicle	Arrive staggered	7:00-7:45 am
Dismissal		
Travel Mode	**Procedure**	**Time**
Bus	Dismissed through State Street door	2:30 pm
Family Vehicle	Dismissed all at once through playground door	2:30 pm
Walk	Dismissed all at once through playground door	2:30 pm
Bike	Dismissed all at once through playground door	2:30 pm

EXISTING TRAVEL HABITS

Newly reconstructed sidewalks on State Street leading to the school grounds

Students travel to State Street School on State Street and Ascutney Street. Main Street/US Route 5 and Union Street/VT Route 44 are also important routes to school, serving as connections to State and Ascutney from adjacent neighborhoods. About 70% of the student population lives within a mile of the school and 73% live within two miles. The majority of students live on roads that have sidewalks or quiet residential roads which are connected to roads with sidewalks. While the there are some locations in town where sidewalks are in disrepair, the Town of Windsor has recently re-constructed a number of sidewalk segments to full ADA-compliance including along State Street, Depot Ave, and River Street. Each Wednesday, students meet the school PE teacher and nurse at the Price Chopper parking lot on Main Street to travel to school together as a walking school bus. On March 12, 2013, (the day of our safety observation) 0 students were observed bicycling to school and 8 students were observed walking to school through heavy snow.

Unofficial warning signage on State Street heading toward the Hospital

A parent survey was conducted in March 2014. 244 surveys were distributed and 54 were completed and analyzed. The survey identified the following barriers to walking and biking to school in order of most to least responses:

- 76% Speed of traffic along route
- 67% Safety of intersections and crossings
- 64% Amount of traffic along route
- 61% Sidewalks or pathways are not present along entire walking route
- 61% Distance
- 58% Weather or climate
- 39% Violence or crime
- 27% Adults with whom to bike or walk

- 27% Time
- 24% School crossing guards are not present at key intersections along walking route
- 24% Child's participation in after school programs
- 21% Convenience of driving

(Data based on SRTS Parent Survey results administered March 2014)

Many of the issues in the list 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.

KEY ISSUES

The team identified the following barriers to walking and biking to school:

Issue: Traffic on Main Street, Union Street, and Ascutney Street is often fast moving and does not always stop for pedestrians in crosswalks.

The recently installed speed feedback sign monitors motorists on Ascutney Street near the Mill Pond

As local portions of state highways, much of the traffic on Main St. and Union St. is comprised of commuters or vehicles passing through town to other destinations. Traffic on these streets has often been observed travelling faster than the posted speed limits or not stopping for pedestrians at crosswalks that are not signal-controlled. Union Street and Main Street have both been identified by VTrans as high crash areas, meaning there have been more than five crashes there in the past five years. The intersection of Union and Main Streets, while signalized for automobiles, lacks a pedestrian signal. Pedestrian crossings in other locations on Union Street are often stressful for walkers and drivers due to limited sightlines and lighting.

Issue: Students living in the neighborhoods north of the Town Forest, off Route 5, do not have a safe walking route to school.

North of Price Chopper, Route 5 does not have sidewalks. The character of the road changes from that of a main street business district to a highway. The lack of sidewalks here and wide shoulders make walking very risky adjacent to vehicles travelling at high-speeds. Many of the

streets connecting to Route 5 are dead-ends or loops that do not connect to other streets in town, making Route 5 the only on-road connection for students living there.

Issue: Many of the primary barriers to children walking to school may not be infrastructure related.

The wide roadway is designed for high speeds on US Route 5 just north of Price Chopper.

Up to 30% of the students at State Street School typically walk home from school on any given day. However, about 70% of the student population lives within walking distance (1 mile) of the school. The majority of streets that serve as walking routes to school have sidewalks on one or both sides. While it is possible for a large majority of students to walk to school, the fact that they do not may be based on parents' perceptions, attitudes, or other practicalities associated with walking to school.

TRAVEL PLAN RECOMMENDATIONS

This Travel Plan is comprised of several sections detailing activities and programs for SSS to implement now, and projects for us to develop over time 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 F**.

16–Month SRTS Activity Calendar

Our team will pursue a smaller subset of items in the non-engineering plan during the next 16 months. We will review our work periodically, adding additional activities that will build the SRTS program momentum. The Calendar is located in **Appendix A**.

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. Engineering Recommendations can be found in **Appendix C,** along with typical Infrastructure recommendations in **Appendix B**.

Snow Removal Toolkit

Snow, sleet, slush, ice, and rain impact all modes of transportation, and the timely clearance and removal of the elements are essential for the functionality and accessibility of a Safe Routes to School program. A Snow Removal Toolkit can better inform communities about snow removal policies and procedures, providing tools to increase compliance and safety. Snow removal recommendations are located in **Appendix G**.

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:

Type	Short	Medium	Long
Encouragement, Education, Enforcement, Evaluation	*What we plan to do this school year*	*What we plan to do next school year*	*What we plan to do starting in two years*

EDUCATION STRATEGIES

The education strategies included in our 16-month activity calendar are aimed at providing all students with safe pedestrian walking skills. Our education activities this year include:

- Continue to incorporate the WalkSmart/BikeSmart Vermont! Curriculum into the school year through P.E. class, teaching WalkSmart in the fall to K-2 and BikeSmart in the spring to 3-6. Coordinate with Middle School P.E. teacher to continue education for older students.
- Continue to hold a yearly Bike Safety Fair with the Rec Department and Paradise Sports. In the curriculum, include general bike safety, ABC bike checks, maintenance, and helmet fittings.
- Partner with other schools in the area and request the Bike Smart Trailer from Local Motion in order to supply bikes and equipment needed for on-bike skills training.

- Work with RSVT and VIA to lead walking school buses.
- Continue to educate students on safe pedestrian practices on the walk to school (Walking Wednesdays).
- Increase education and awareness of bicyclists and pedestrians through Drivers' Education courses, newsletters to parents, and staff meetings.

ENCOURAGEMENT STRATEGIES

Encouragement strategies included in our 16-month activity calendar will help students and their parents feel more comfortable and confident about walking and bicycling to school. Our encouragement activities this year will include:

- Host a Vermont Intergenerational Walk and Roll to School Day event in May in coordination with the High School.
- Host an International Walk and Roll to School Day event in October in coordination with the High School.
- Continue regular Walking School Bus and Bike Train routes from the Price Chopper parking lot and renew other neighborhood routes where possible.
- Encourage more parent involvement by making requests through the Parent Teacher Friends (PTF) for specifics tasks (i.e. leading walking school buses or helping with bike education days). Offer incentives such as gift cards to increase participation.
- Continue tracking student trips to school with bike/walk punch cards and holding monthly drawings for prizes.
- Hold a Winter Walk Day event offering hot cocoa and breakfast at school.
- Work with bus department to arrange drop-off at Price Chopper during event days.
- Coordinate with the Rec Department for activity scheduling and student pickup.
- Work with the high school sports teams to expand the Walking School Bus program with their help as leaders.
- Work with students to make a "Walk to School" video to build excitement about walking and biking to school.

ENFORCEMENT STRATEGIES

Our SRTS enforcement strategies are aimed both at changing the behavior of drivers and making the town safer and more secure for students walking to and from school. Our enforcement activities this year will include:

- Work with the Windsor Police Department and advocate for speed enforcement in additional locations.
- Coordinate with the Windsor Police Department on event days for logistics and postings on their Facebook page.

EVALUATION STRATEGIES

Evaluation is an important component of our SRTS program. We plan to complete regular in-classroom student tallies and evaluation tools such as the student tally and parent survey forms provided by the National Center for Safe Routes to School (NCSRTS). We administered parent surveys in March 2014. These will help us measure the effectiveness of SRTS efforts over time. We also administered student tallies in October 2013, which provided base line information on student travel behavior and parental perceptions.

We will continue to conduct walk audits on a regular basis 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:

- Administer parent surveys annually to capture opinions of new parents and changes in overall parental perceptions.
- Collect student tally data each year to measure progress toward goals.
- Keep the SRTS Travel plan updated and use it as a tool for increased SRTS activities.

Evaluation Tool	Leader	Schedule
Parent Surveys	Donna Ewald	Annually in March
Student Tallies	Donna Ewald	Annually in October
Walk Audits	SRTS Team and students	Annually, within first two months of school

ENGINEERING TRAVEL PLAN

Our goal for engineering improvements is to enhance the physical environment along walking and biking routes that students use. Engineering improvements generally fall into three categories: providing sidewalks and paths, improving crossings, and implementing infrastructure associated with improving the safety 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 State Street School, the Town of Windsor and potentially the Vermont Agency of Transportation (VTrans) to implement the projects. 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 SRTS 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 that are priorities for the school community.

Engineering Recommendations for specific locations in the vicinity of State Street School can be found in **Appendix C.**

CONSIDERATIONS FOR DESIGN AND FUNDING

Design

- All infrastructure recommendations in this plan are considered "planning level" and will 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.
- VTrans 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. For example, projects requiring right-of-way acquisition or existing utilities relocation are not typically eligible with SRTS funds, but may be funded through other sources.

More information on the types of projects eligible for SRTS funding through VTrans can be found online at: saferoutes.vermont.gov/getting_started/funding.

APPENDICES

A. Non-Infrastructure Strategies Calendar

B. Typical Infrastructure Recommendations

C. Location-Specific Engineering Recommendations and Location Key

D. Student Population Locator

E. Student Tally Report, October 2013 & Parent Survey Report, March 2014

F. Non-Engineering Strategies Resource Guide

G. Infrastructure Strategies Resource Guide

H. Snow Removal Best Practices

APPENDIX A

NON-INFRASTRUCTURE STRATEGIES CALENDAR

Appendix A: Non-Infrastructure Strategies Calendar

Activity		May 2014	June 2014	July 2014	Aug 2014	Sept 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	March 2015	April 2015	May 2015	Jun 2015	July 2015	Aug 2015
EDUCATION																	
Continue to incorporate the Walk Smart/BikeSmart Vermont! Curriculum into the school year through PE class, teaching Walksmart in the Fall to K-2 and BikeSmart in the Spring to 3-6. Coordinate with the Middle School PE teacher to continue education for older students.																	
Lead	Donna Ewald																
Plan																	
Implement																	
Continue to hold a yearly Bike Safety Fair with the Rec Department and Paradise Sports. In the curriculum, include general bike safety, ABC bike checks, maintenance, and helmet fittings.																	
Lead	Harry Ladue																
Plan																	
Implement																	
Partner with other schools in the area and request the Bike Smart Trailer from Local Motion in order to supply bikes and equipment needed for on-bike skills training.																	
Lead	Donna Ewald																
Plan	Depending on Trailer availability																
Implement																	
Work with RSVT and VIA to lead walking school buses.																	
Lead	Donna Ewald																
Plan																	
Implement																	
Continue to educate students on safe pedestrian practices on the walk to school (Walking Wednesdays).																	
Lead	Donna Ewald																
Plan																	
Implement																	
Increase education and awareness of bicyclists and pedestrians through Drivers' Education courses, newsletters to parents, and staff meetings.																	
Lead	Steve Holloway																
Plan																	
Implement																	

Activity		May 2014	June 2014	July 2014	Aug 2014	Sept 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	March 2015	April 2015	May 2015	Jun 2015	July 2015	Aug 2015
ENCOURAGEMENT																	
Host a Vermont Intergenerational Walk and Roll to School Day event in May in coordination with the High School.																	
Lead	Donna Ewald & Beth Carlson																
Plan																	
Implement																	
Host an International Walk and Roll to School Day event in October in coordination with the High School.																	
Lead	Donna Ewald																
Plan																	
Implement																	
Continue regular Walking School Bus and Bike Train routes from the Price Chopper parking lot and renew other neighborhood routes where possible.																	
Lead	Donna Ewald & Peggy Kehew																
Plan																	
Implement																	
Encourage more parent involvement by making request through the PTF for specifics tasks (i.e. leading walking school buses or helping with bike education days). Offer incentives such as gift cards to increase participation.																	
Lead	Wendy Moody																
Plan																	
Implement	on going																

Continue tracking student trips to school with bike/walk punch cards, holding monthly drawings for prizes.																	
Lead	Donna Ewald																
Plan	on going																
Implement																	
Hold a Winter Walk Day event offering hot cocoa and breakfast at school.																	
Lead	Donna Ewald																
Plan																	
Implement																	
Work with bus department to arrange drop-off at Price Chopper during event days.																	
Lead	Donna Ewald & Wendy Moody																
Plan																	
Implement																	
Coordinate with the Rec Department for activity scheduling and student pickup																	
Lead	Donna Ewald																
Plan																	
Implement																	
Work with the high school sports teams to expand the Walking School Bus program with their help as leaders.																	
Lead	Donna Ewald																
Plan																	
Implement																	
Work with students to make a "Walk to School" video to build excitement about walking and biking to school																	
Lead	Beth Carlson and Chris Cammock																
Plan																	
Implement																	
Activity		May 2014	June 2014	July 2014	Aug 2014	Sept 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	March 2015	April 2015	May 2015	Jun 2015	July 2015	Aug 2015
ENFORCEMENT																	
Work with the Windsor Police Department and advocate for speed enforcement in additional locations.																	
Lead	Donna Ewald & Stephen Soares																
Plan																	
Implement																	
Coordinate with the Windsor Police Department on event days for logisitics and postings on their Facebook page.																	
Lead	Stephen Soares & Mark Kirko																
Plan																	
Implement																	
Activity		May 2014	June 2014	July 2014	Aug 2014	Sept 2014	Oct 2014	Nov 2014	Dec 2014	Jan 2015	Feb 2015	March 2015	April 2015	May 2015	Jun 2015	July 2015	Aug 2015
EVALUATION																	
Administer parent surveys annually to capture opinions of new parents and changes in overall parental perceptions.																	
Lead	Donna Ewald																
Plan																	
Implement																	
Collect student tally data each year to measure progress toward goals.																	
Lead	Donna Ewald																
Plan																	
Implement																	
Keep the SRTS Travel plan updated and use it as a tool for increased SRTS activities.																	
Lead	Team																
Plan																	

APPENDIX B

TYPICAL INFRASTRUCTURE RECOMMENDATIONS

APPENDIX B TYPICAL INFRASTRUCTURE RECOMMENDATIONS

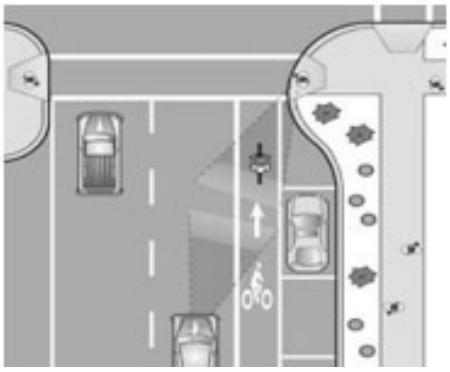
The following infrastructure recommendations are typical treatments used in SRTS projects. These recommendations may or may not be included in this travel plan. The basic information is provided to give an overall understanding and implementation guidance on each treatment.

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 Manual on Uniform Traffic Control Devices (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

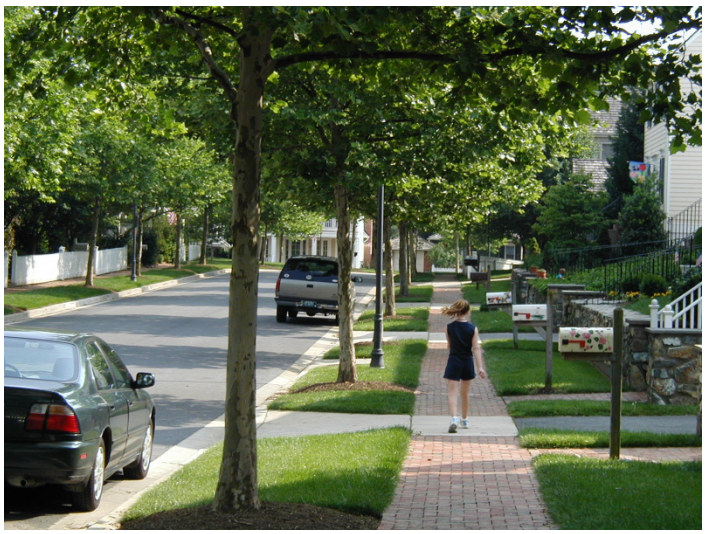
tightening the motor vehicle turning radius at an intersection, as shown to the left, without extending the curb line into a parking lane. Curb radius reductions located along school bus routes should effectively calm traffic but not impede buses from making the turn. Design considerations for curb radius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

<u>High Visibility Crosswalks:</u>

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.

<u>Sidewalks and buffers:</u>

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.

Pedestrian Refuge Island:

A Pedestrian 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. Pedestrian refuge islands should be used on multi-lane roadways or roadways with insufficient vehicular gaps to pedestrians to safely cross. Prior to design, a gap study should be conducted. Other considerations for pedestrian refuge islands include ADA compliance, maintenance concerns, and snow plow accommodations.

APPENDIX C

LOCATION SPECIFIC ENGINEERING RECOMMENDATIONS & KEY

Appendix C: Location-Specific Engineering Recommendations

Safe Routes to School (SRTS) engineering strategies create safer environments for walking and bicycling to school through improvements to infrastructure in and around school grounds. These improvements focus on reducing motor vehicle speeds and conflicts with pedestrians and bicyclists, as well as establishing safer and fully accessible crossings, walkways, trails, and bikeways.

The following tables provide a summary of the engineering strategies recommended for State Street School (SSS). These recommendations were developed by Toole Design Group, LLC based on input from the SSS SRTS Team. The tables include an estimate of the amount of time that is likely 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 SSS SRTS Team (Team Priority).

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) Latest Edition adopted by the state.

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.

Description of Streets with Engineering Recommendations

Street name	AOT Functional Classification	Speed Limit	Surface	Curb
Ascutney Street	Class 1, State Highway	25	Asphalt	Intermittent
State Street	Class 2	25	Asphalt	Yes
Union Street	Class 1, State Highway	25	Asphalt	Yes
Kiniry Street	Class 3	25	Asphalt	No
Sherwin Ave	Class 3	25	Asphalt	No
Enright Ave	Class 3	25	Asphalt	No
Main Street	Class 1, State Highway	25	Asphalt	Yes

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
A School Grounds The main school entry is located on the west side of the building adjacent to the main parking lot on Ascutney St. Parents use this parking lot for student drop-off and pick-up. The north entrance to the building is on the off of State Street. This entrance is used primarily by pedestrians and bus riders, who board and alight from the bus corral directly in front of the entrance.	The school grounds are generally well-connected by sidewalks along the perimeter of the school grounds and the main parking lot. There is a missing sidewalk segment on the south side of the main parking lot, recommended for improvement in the previous SSS Travel Plan. This gap forces students accessing the school to walk around the grounds, crossing two active driveways in the process. Students often travel to and from the school building and the sports fields in the southeast corner of the school grounds. No designated crossing exists on the driveway to the rear high school parking lot. There is not a formal pathway from the Elementary building to the field. A gap in the bus corral barrier poses a threat to pedestrians who may use it as a means of entering or exiting the school grounds.	A1. Study the feasibility of constructing an ADA-compliant sidewalk along the south side of the main parking lot to the end of the existing sidewalk adjacent to the school building. (approx. 150 ft.)	Medium Term	☑ *Safety concerns.* ☑ *Existing walking or bicycling routes.* ☑ *Priorities for the school community.*	Medium
		A2. Construct an ADA-compliant pathway for year-round use from the rear entrance of the Elementary building to the existing pathway on the southeast corner of the high school building.	Medium Term		
		A3. Install fencing or another impassable barrier along the western corner of the high school building to keep students from running down the hill into the high school parking lot.	Short Term		
		A4. Construct an ADA-compliant sidewalk along the northeast side of the rear high school parking lot from the parking lot access drive to the existing path leading to the sports fields. (approx. 125 ft.)	Medium Term		

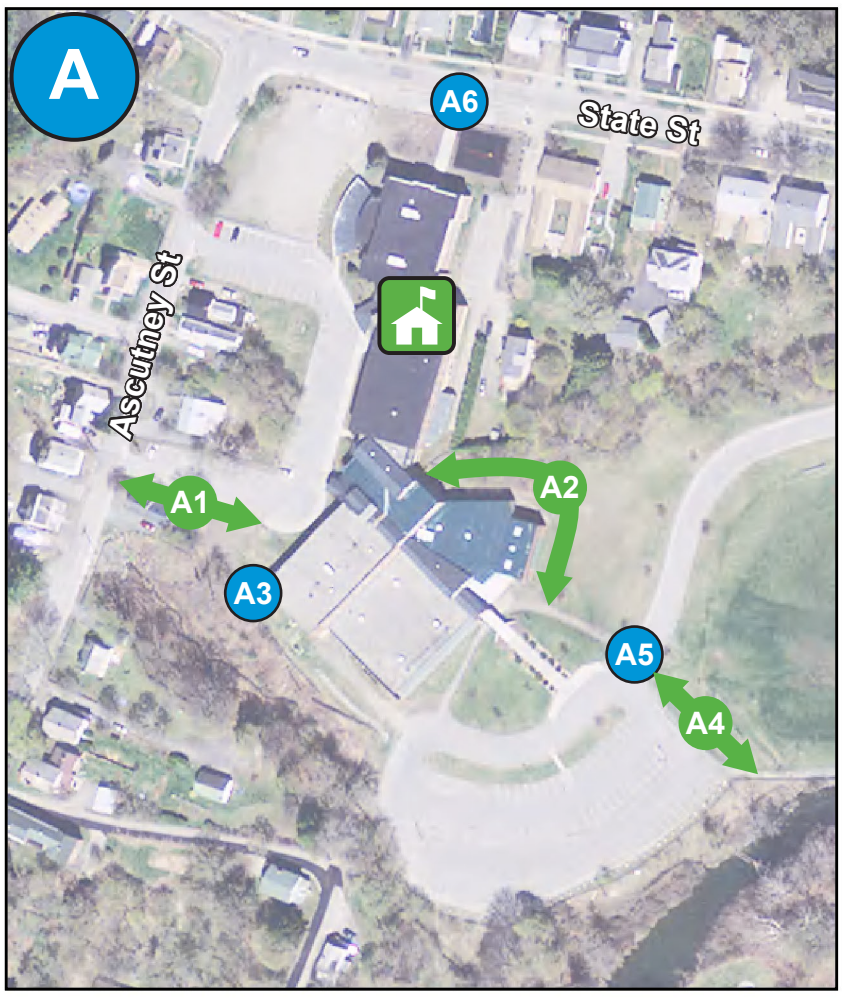
Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
A School Grounds (cont.)		A5. Install a high-visibility, durable, block-pattern crosswalk across the rear high school driveway from the existing sidewalk to the proposed sidewalk (Rec. A3). Construct ADA-compliant curb ramps with detectable warning surfaces at both ends of the crosswalk. Install crosswalk warning signage on both inbound and outbound sides of the crosswalk (W11-2, W16P-7)	Medium Term	☑ *Safety concerns.* ☑ *Existing walking or bicycling routes.* ☑ *Priorities for the school community.*	Medium
		A6. Close the gap in the bus corral barrier by extending the existing rail and curb.	Short Term		

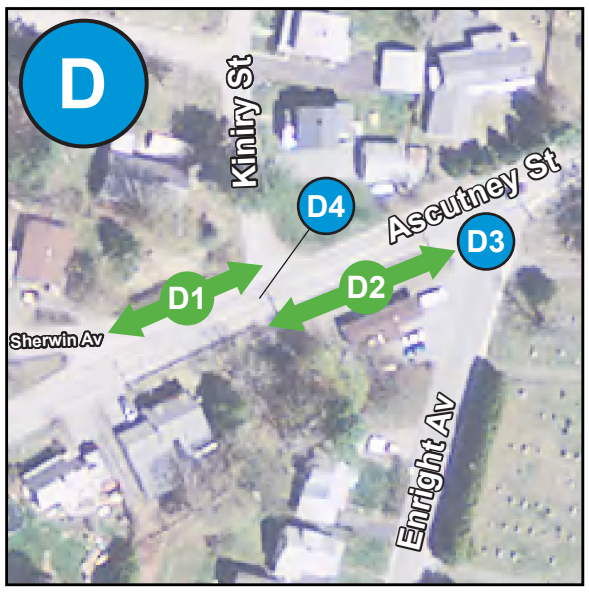
Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
B School Zone on State Street and Ascutney Street There are three existing places where 20 mph school zone signage and SCHOOL pavement markings are in place – 2 on State street approximatly 300 feet from the school, and one on Ascutney Street approximately 125 feet from the school.	The existing school zone signage is not MUTCD-compliant. The existing SCHOOL pavement markings should be accompanied by advance warning school signage (Rec. B1). School zone speed limit signage is not placed according to MUTCD standards and the existing signage is out-of-date. Note that a 20 mph school zone speed limit requires that a town ordinance be in place according to Vermont State Statue 23 VAS 1007, unless the existing school zone speed limit has been in place for at least five years.	B1. Replace existing school zone speed limit signage on State and Ascutney Streets with MUTCD-compliant school zone advance warning signage (S1-1, S4-3P) located adjacent to the existing SCHOOL pavement markings.	Short Term	☑ *Safety concerns.* ☑ *Existing walking or bicycling routes.* ☑ *Priorities for the school community.*	Low
		B2. Install MUTCD-compliant school zone speed limit signage (S4-3P, R2-1, S4-1P) approximately 100 feet toward the school from the existing SCHOOL pavement markings and proposed advance warning signage (Rec. B1) on State and Ascutney Streets.	Short Term		

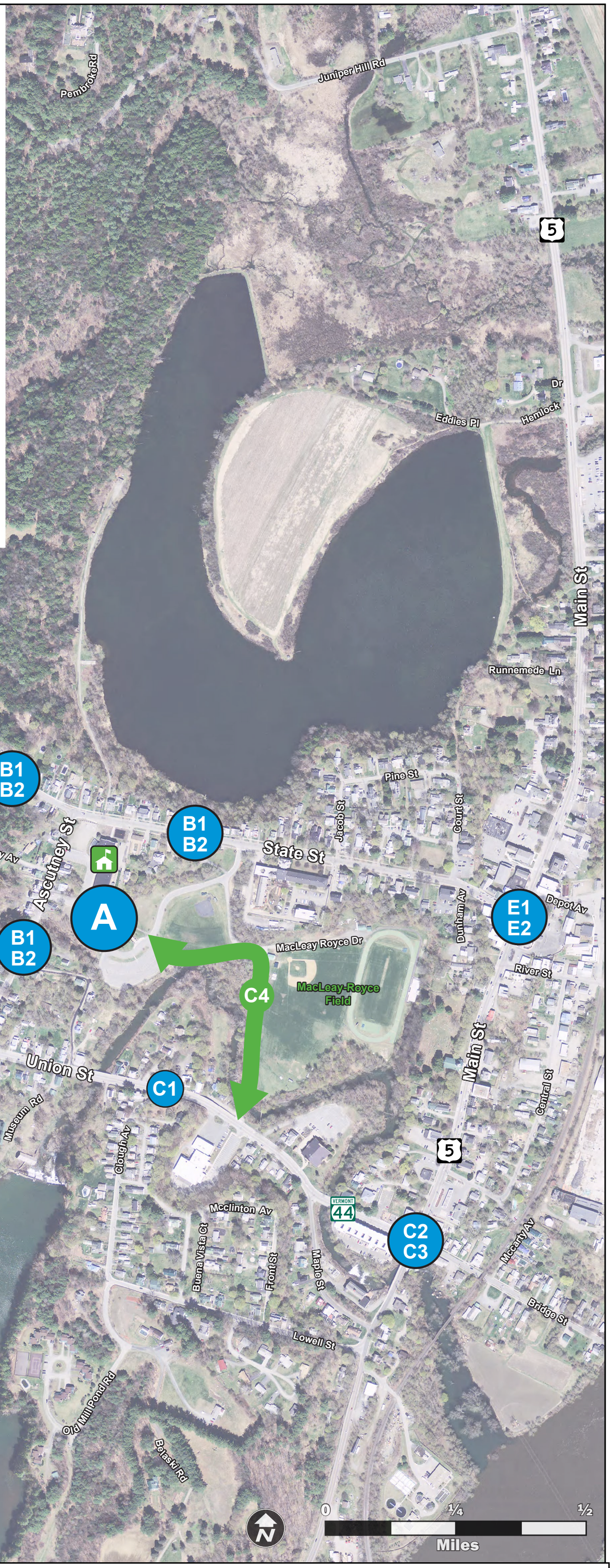
Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
C Union Street & McLeay-Royce Field Union Street is a primarily residential Class 1 town roadway running from Main Street to Ascutney Street. The posted speed limit is 25 mph, and curb-to-curb width is 40'. The annual average daily traffic (AADT) volume is 3100 vehicles. McLeay-Royce Field lies between Union Street and the school grounds. An existing pedestrian bridge connects the field to Union Street over the Mill Brook.	Union Street is a high crash area street (11 crashes in 5 years) whose functional design is for a speed greater than the posted 25 mph. The street provides a connection between downtown neighborhoods and State Street School. Students who normally travel north on Union Street to school, however, could benefit from a route which allows them to bypass the intersection of Union and Ascutney, especially if they are travelling by bicycle. The crosswalk at the intersection of Union St and Clough Ave, despite being at the apex of a hill, creates visibility issues for drivers. In dark or foggy conditions, drivers are often unable to see pedestrians in the crosswalk. The intersection of Main Street and Union Street, while signalized for vehicles, does not have a pedestrian signal. The northwest corner of the intersection is setback to allow a wide turning radius, in turn skewing the crosswalks and lengthening pedestrian crossing distances. Existing crosswalks are not MUTCD-compliant, and curb ramps are not ADA-compliant.	C1. Install a rectangular rapid flashing beacon at the crosswalk at the intersection of Clough Ave and Union St.	Short Term	☑ *Safety concerns.* ☑ *Existing walking or bicycling routes.* ☑ *Priorities for the school community.*	High
		C2. Install an ADA-compliant push-button pedestrian signal with a countdown timer at the intersection of Union Street and Main Street.	Short Term		
		C3. At the intersection of Main Street and Union Street, install ADA-compliant curb ramps with detectable warning surfaces at all corners, realign crosswalks to be perpendicular to their roadway, and install a sidewalk and curb extension on the SE corner of the intersection utilizing the existing surplus roadway space. A scoping study may need to be conducted to determine the degree of reconstruction needed for this intersection.	Medium Term		
		C4. Formalize the path through McLeay-Royce Field. Construct an ADA-compliant paved pathway from Union Street around the west side of the Fields and connecting to the proposed sidewalk on High School grounds (Rec. A3). Install a railing along the south and west sides of the path where topography is steep.	Medium Term		

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
D Ascutney Street at Kiniry St and Sherwin Ave and at Enright Ave Ascutney Street is a Class 1 town road. The width is 22′ with a posted speed limit of 25 mph and AADT of 2900. Sidewalks on Ascutney St. provide direct access to State Street School. Kiniry St and Sherwin Ave are quiet residential Class 3 town roads. Sidewalks are not present on either road.	Existing sidewalks on the south side of Ascutney Street terminate at Enright Ave, about 200′ short of Kiniry St and Sherwin Ave. Students living in the neighborhood on the north side of Ascutney St. therefore do not have a connection to the existing sidewalk network due to the lack of pedestrian facilities and crossings on the north side of the road.	D1. Study the feasibility of constructing an ADA-compliant sidewalk along the north side of Ascutney St. in the surplus undefined roadway space between Kiniry St. and Sherwin Ave. (approx. 100 ft.). Construct ADA-compliant curb ramps with detectable warning surfaces at both ends of the sidewalk on Kiniry St. and Sherwin Ave.	Long Term	☑ *Safety concerns.* ☑ *Existing walking or bicycling routes.* ☑ *Priorities for the school community.*	Medium
		D2. Study the feasibility of constructing an ADA-compliant sidewalk along the south side of Ascutney St. from Kiniry St. to Enright Ave. (approx. 150 ft.)	Long Term		
		D3. Install a high-visibility, durable, block-pattern crosswalk across Enright Ave at the intersection with Ascutney St. Construct ADA-compliant curb ramps with detectable warning surfaces at both ends of the crosswalk.	Long Term		
		D4. Install a high-visibility, durable, block-pattern crosswalk across Ascutney Street at the intersection with Kiniry St. Construct ADA-compliant curb ramps with detectable warning surfaces at both ends of the crosswalk. Install crosswalk signage assemblies at the crosswalk (W11-2 & W16-7P).	Long Term		

Site	Need	Recommendation	Time Frame	Ranking Factors	Team Priority
E Main Street at State Street Main Street is a two-lane, Class 1 State Highway, the primary road through Windsor's downtown business district. State Street is a two-lane, Class 2 residential roadway and provides direct access to the school grounds.	The meeting of Main Street and State Street forms the primary intersection in downtown Windsor, likely experiencing some of the highest pedestrian volumes in town. Enhanced red crosswalks and push-button pedestrian signals increase pedestrian comfort and safety at this signalized intersection. Pedestrian signals here are out of date, and push buttons are oriented such that users do not always know which leg of the crossing a push button activates. Users report excessive delays between activating the signal and receiving a pedestrian crossing signal. Curb ramps at this location are not fully ADA-compliant.	E1. Install updated, ADA-compliant pedestrian push-button signals with countdown timers on all corners of the intersection. Ensure that push buttons include directional arrows to designate which crossing is being activated. Retime the pedestrian signals to be more responsive to users.	Short Term	☑ *Safety concerns.* ☑ *Existing walking or bicycling routes.* ☑ *Priorities for the school community.*	Medium
		E2. Construct ADA-compliant curb ramps with detectable warning surfaces on all corners of the intersection.	Short Term		







VERMONT Safe Routes to SCHOOL

Windsor State Street School Location Key

Windsor, VT
Spring 2014

Legend

- School Location
- Segment Improvement
- Intersection/Spot Improvement

Toole Design Group

APPENDIX D

STUDENT POPULATION LOCATOR

Student Count

# students within 0.25 mile:	**21**
# students within 0.5 mile:	**50**
# students within 1.0 mile:	**168**
# students within 1.5 miles:	**178**
# students within 2.0 miles:	**192**
Total # students:	**244**

State Street School Student Locator

Windsor, VT
Spring 2014

Legend

- School Location
- Student Residence
- On-road Travel Distance to School (0, ¼, ½, 1, 1½, 2 miles)
- Multiple Students' Residence

0 ¼ ½ 1 Miles

Toole Design Group

APPENDIX E

STUDENT TRAVEL TALLY REPORT, OCTOBER 2013

PARENT SURVEY REPORT, MARCH 2014

Student Travel Tally Report: One School in One Data Collection Period

School Name: State Street School

School Group: Windsor State Street School

School Enrollment: 351

% of Students reached by SRTS activities: 76-100%

Number of Classrooms Included in Report: 13

Set ID: 13713

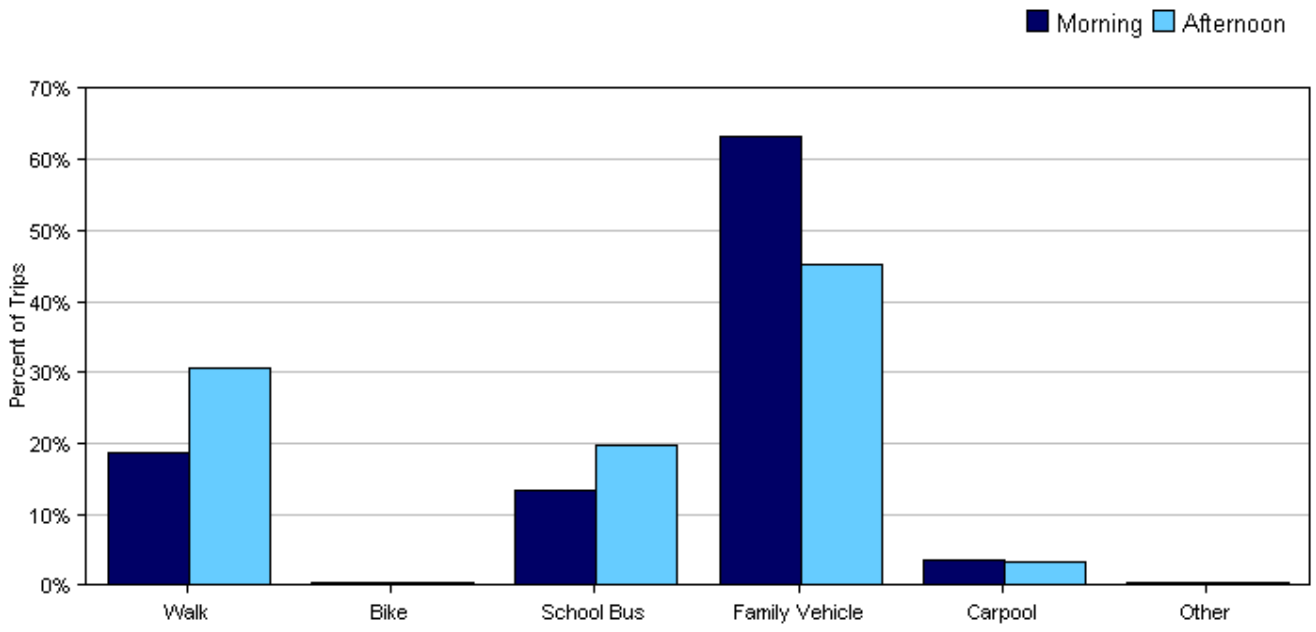
Month and Year Collected: October 2013

Date Report Generated: 11/25/2013

Tags:

This report contains information from your school's classrooms about students' trip to and from school. The data used in this report were collected using the in-class Student Travel Tally questionnaire from the National Center for Safe Routes to School.

Morning and Afternoon Travel Mode Comparison

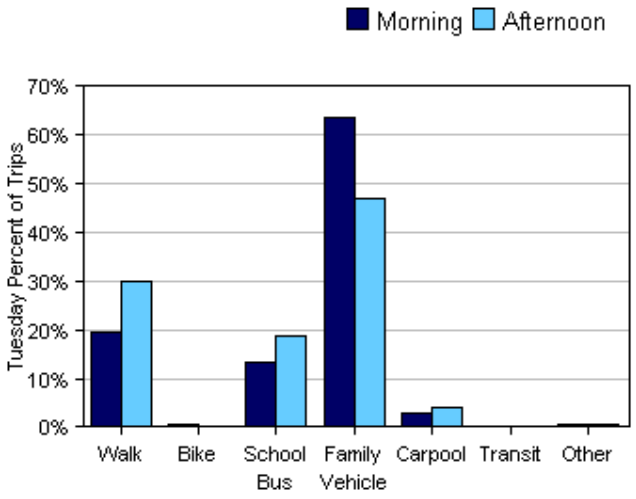


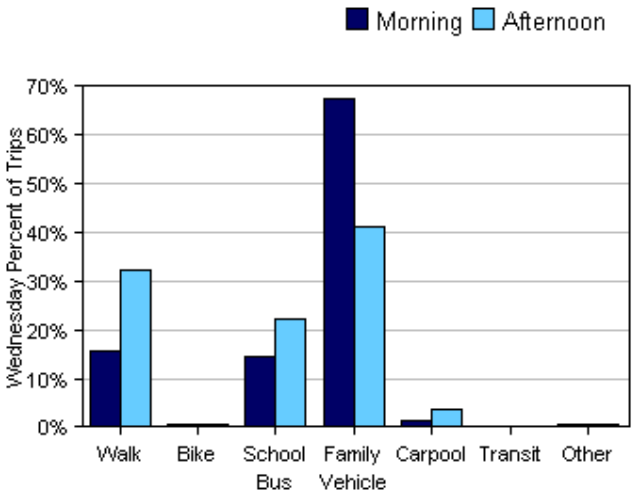
Morning and Afternoon Travel Mode Comparison

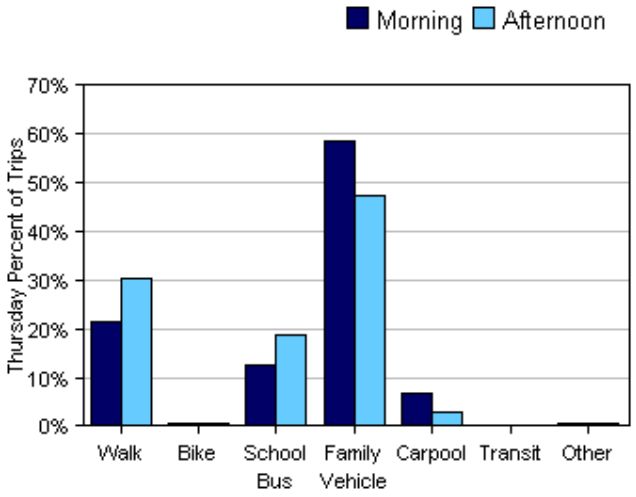
	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	659	19%	0.5%	14%	63%	4%	0%	0.5%
Afternoon	615	31%	0.3%	20%	45%	3%	0%	0.5%

Percentages may not total 100% due to rounding.

Morning and Afternoon Travel Mode Comparison by Day





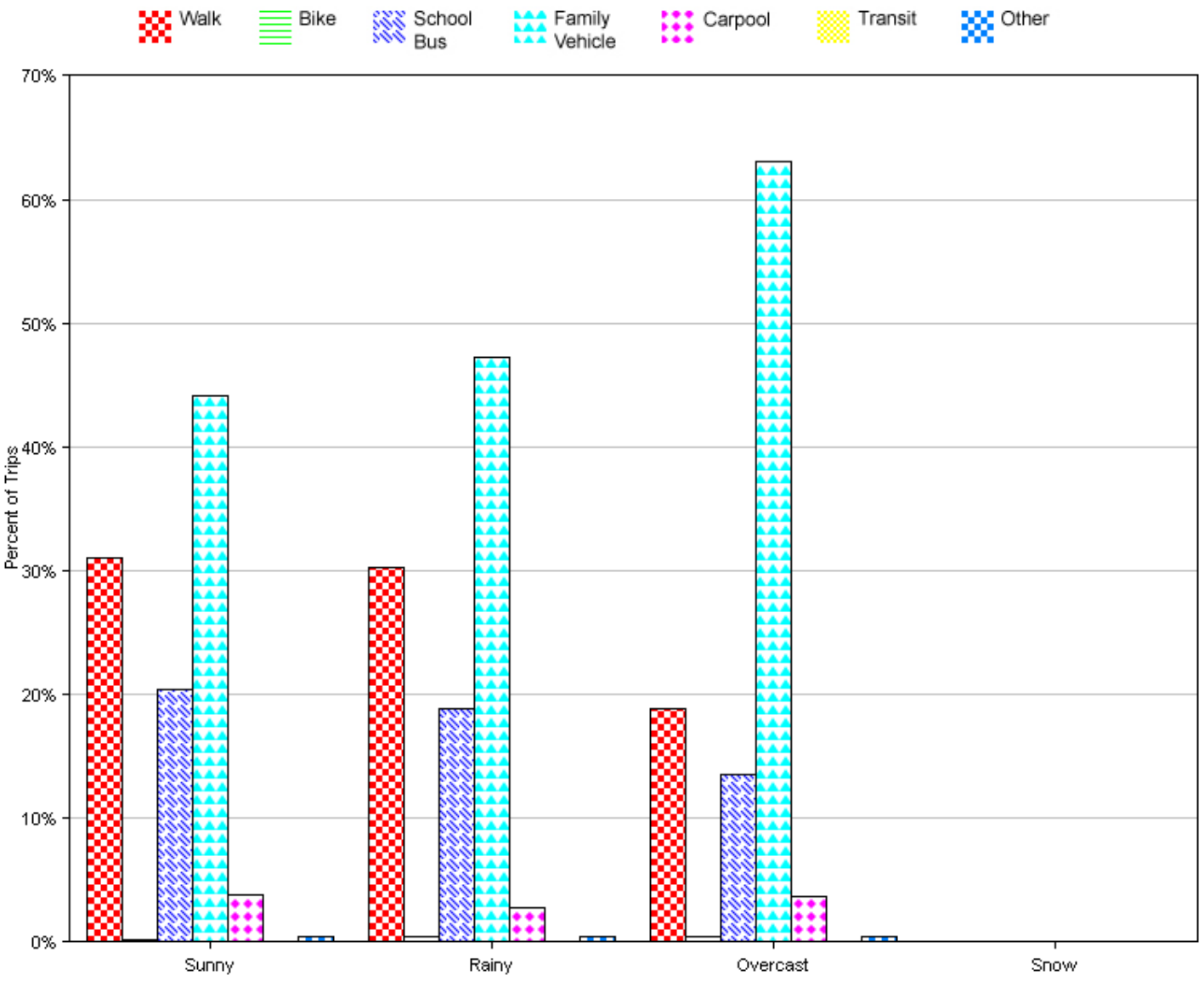


Morning and Afternoon Travel Mode Comparison by Day

	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Tuesday AM	217	19%	0.5%	13%	64%	3%	0%	0.5%
Tuesday PM	198	30%	0%	19%	47%	4%	0%	0.5%
Wednesday AM	218	16%	0.5%	15%	67%	1%	0%	0.5%
Wednesday PM	199	32%	0.5%	22%	41%	4%	0%	0.5%
Thursday AM	224	21%	0.4%	13%	58%	7%	0%	0.4%
Thursday PM	218	30%	0.5%	19%	47%	3%	0%	0.5%

Percentages may not total 100% due to rounding.

Travel Mode by Weather Conditions



Travel Mode by Weather Condition

Weather Condition	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Sunny	397	31%	0.3%	20%	44%	4%	0%	0.5%
Rainy	218	30%	0.5%	19%	47%	3%	0%	0.5%
Overcast	659	19%	0.5%	14%	63%	4%	0%	0.5%
Snow	0	0%	0%	0%	0%	0%	0%	0%

Percentages may not total 100% due to rounding.

Parent Survey Report: One School in One Data Collection Period

School Name: State Street School

School Group: Windsor State Street School

School Enrollment: 244

% Range of Students Involved in SRTS: 76-100%

Number of Questionnaires Distributed: 244

Set ID: 11307

Month and Year Collected: March 2014

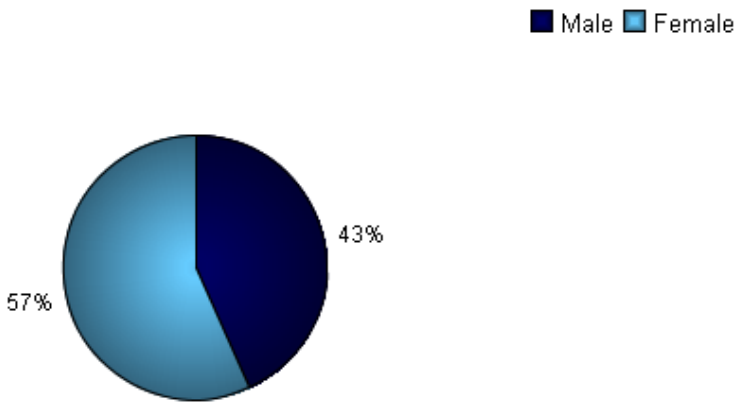
Date Report Generated: 03/21/2014

Tags:

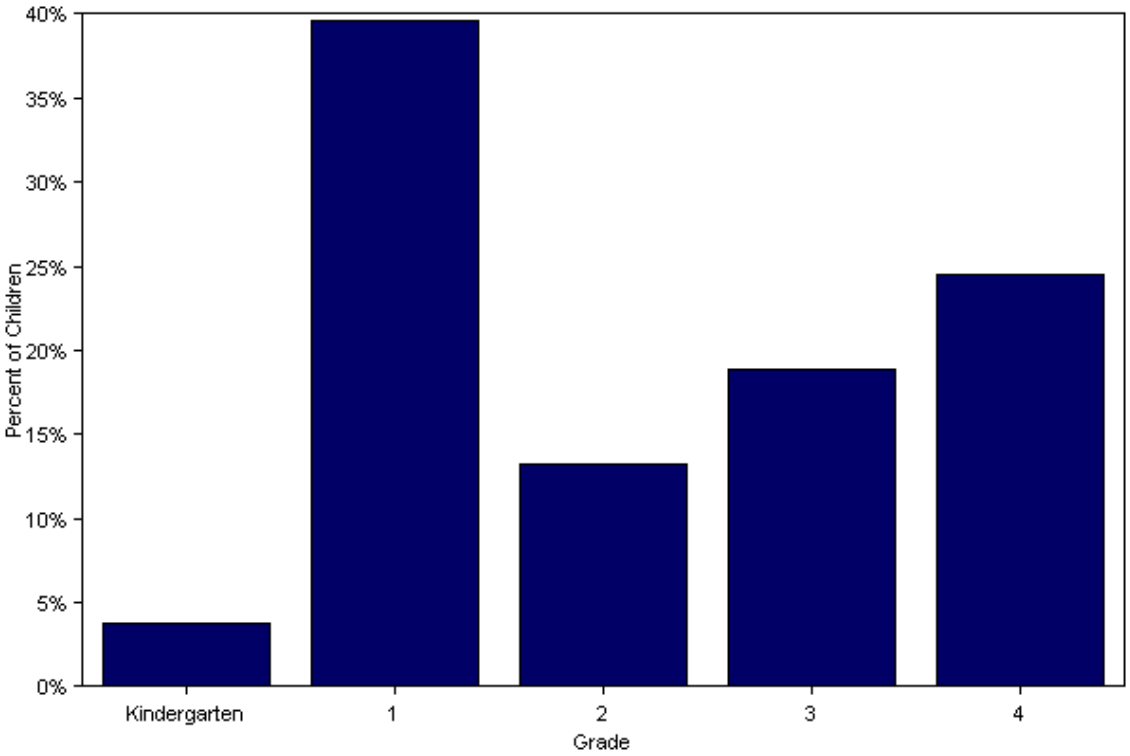
Number of Questionnaires Analyzed for Report: 54

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



Grade levels of children represented in survey

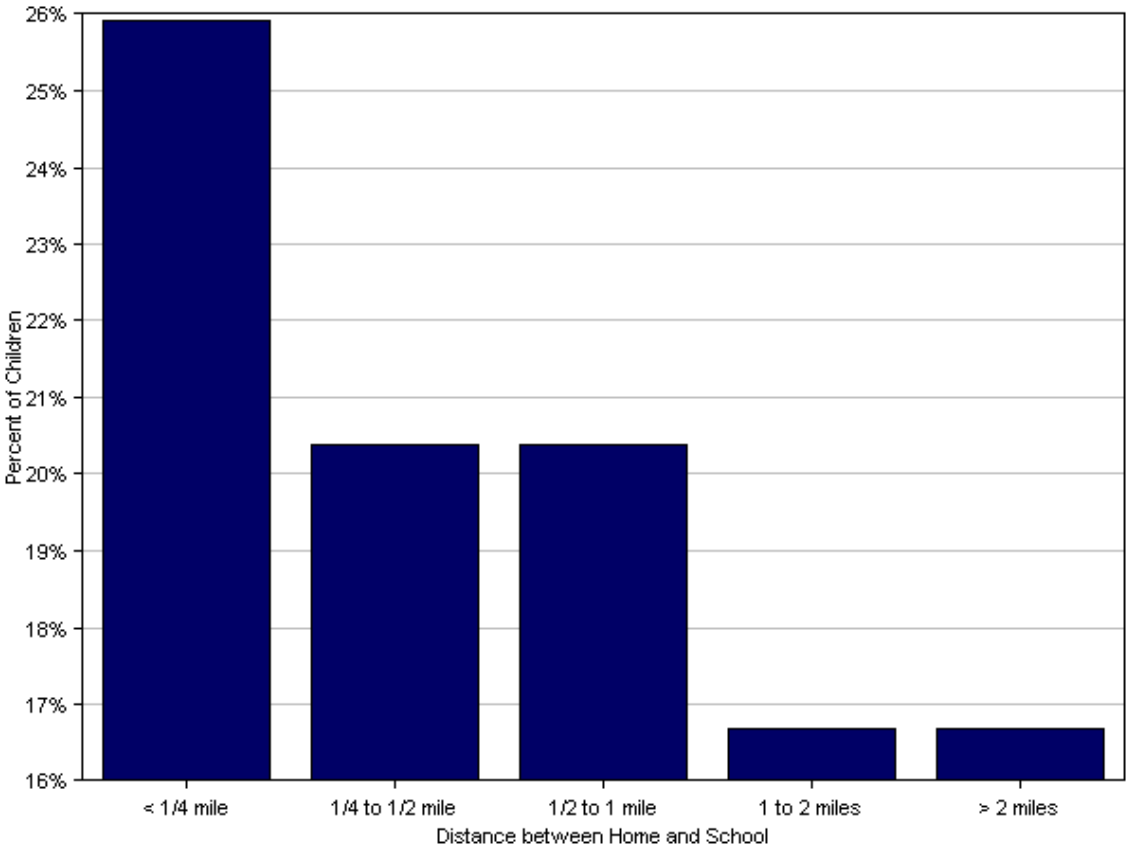


Grade levels of children represented in survey

Grade in School	Responses per grade	
	Number	Percent
Kindergarten	2	4%
1	21	40%
2	7	13%
3	10	19%
4	13	25%

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

Parent estimate of distance from child's home to school

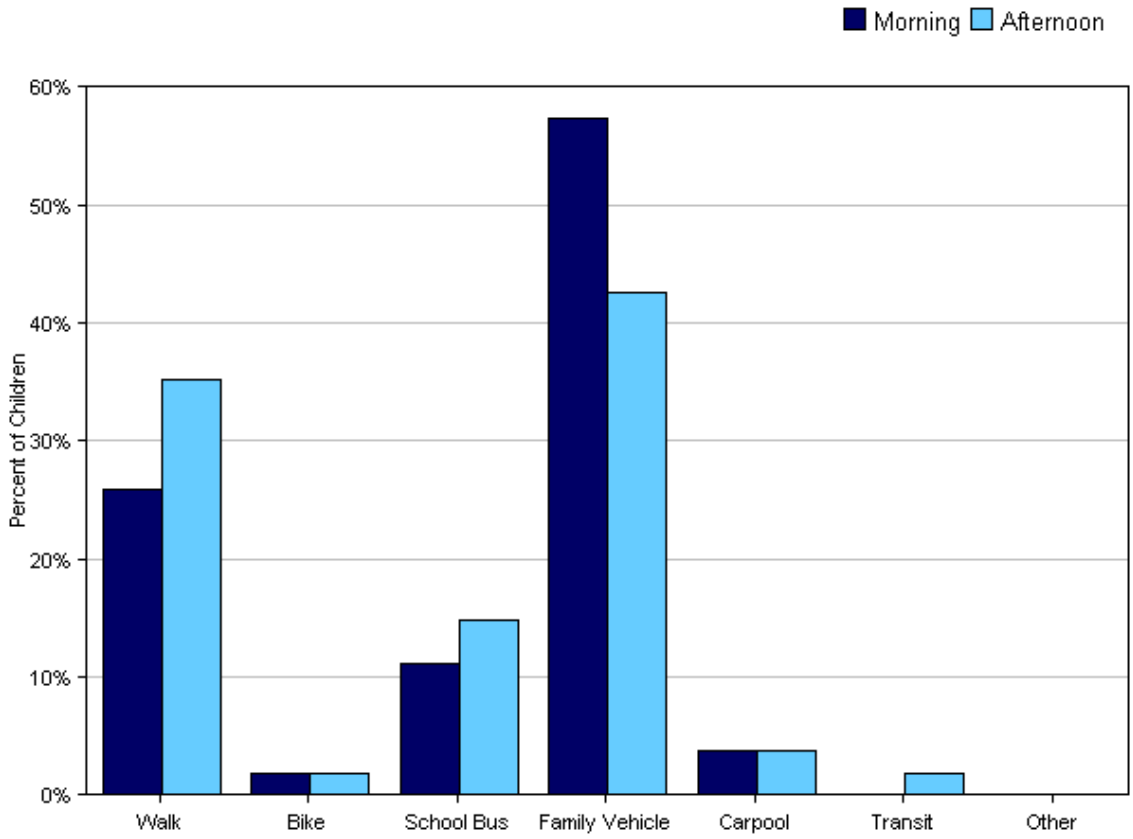


Parent estimate of distance from child's home to school

Distance between home and school	Number of children	Percent
Less than 1/4 mile	14	26%
1/4 mile up to 1/2 mile	11	20%
1/2 mile up to 1 mile	11	20%
1 mile up to 2 miles	9	17%
More than 2 miles	9	17%

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

Typical mode of arrival at and departure from school

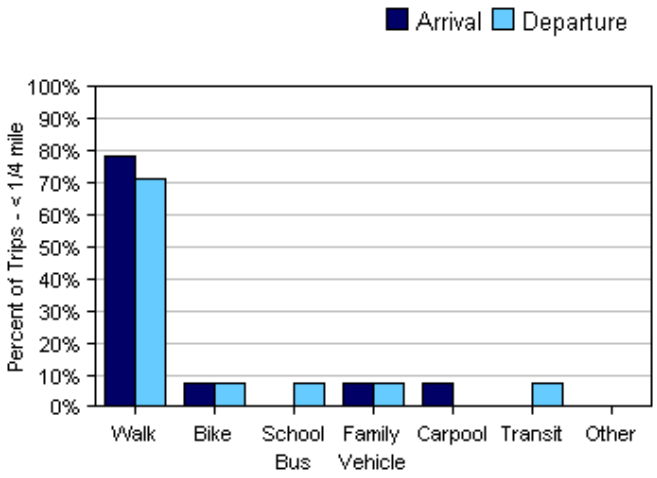


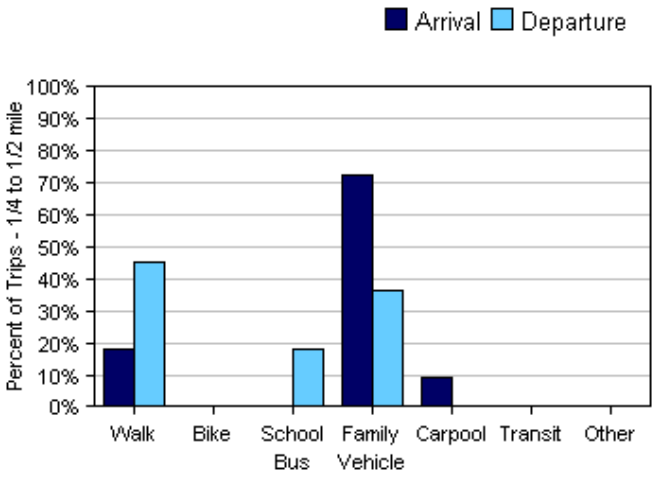
Typical mode of arrival at and departure from school

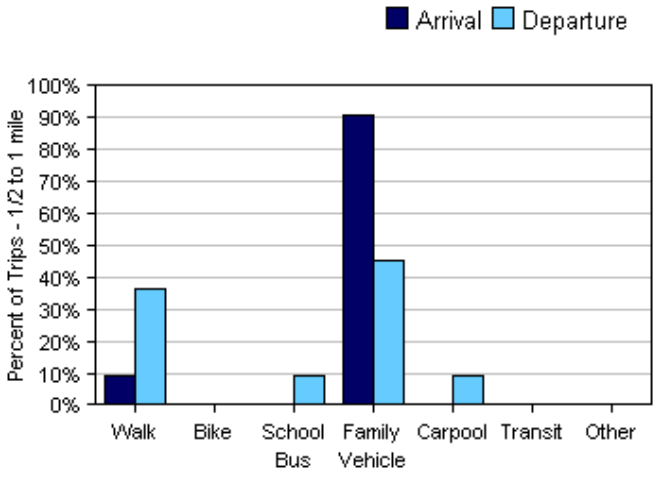
Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	54	26%	2%	11%	57%	4%	0%	0%
Afternoon	54	35%	2%	15%	43%	4%	2%	0%

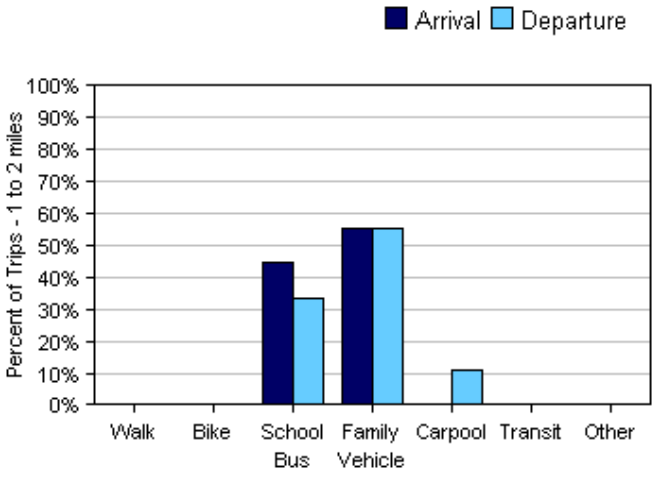
No Response Morning: 0
No Response Afternoon: 0
Percentages may not total 100% due to rounding.

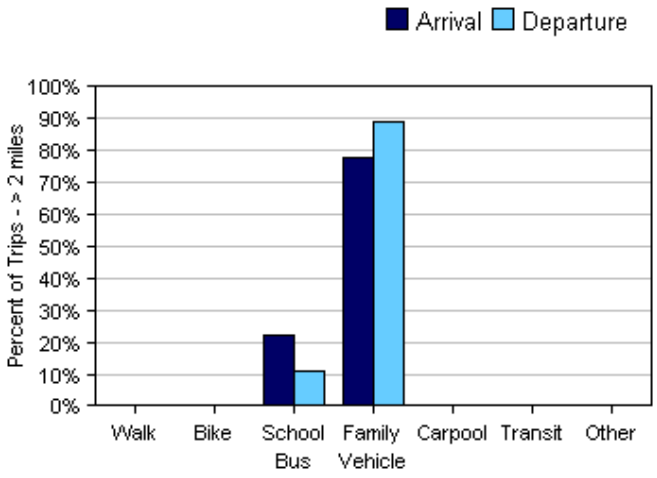
Typical mode of school arrival and departure by distance child lives from school











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	14	79%	7%	0%	7%	7%	0%	0%
1/4 mile up to 1/2 mile	11	18%	0%	0%	73%	9%	0%	0%
1/2 mile up to 1 mile	11	9%	0%	0%	91%	0%	0%	0%
1 mile up to 2 miles	9	0%	0%	44%	56%	0%	0%	0%
More than 2 miles	9	0%	0%	22%	78%	0%	0%	0%

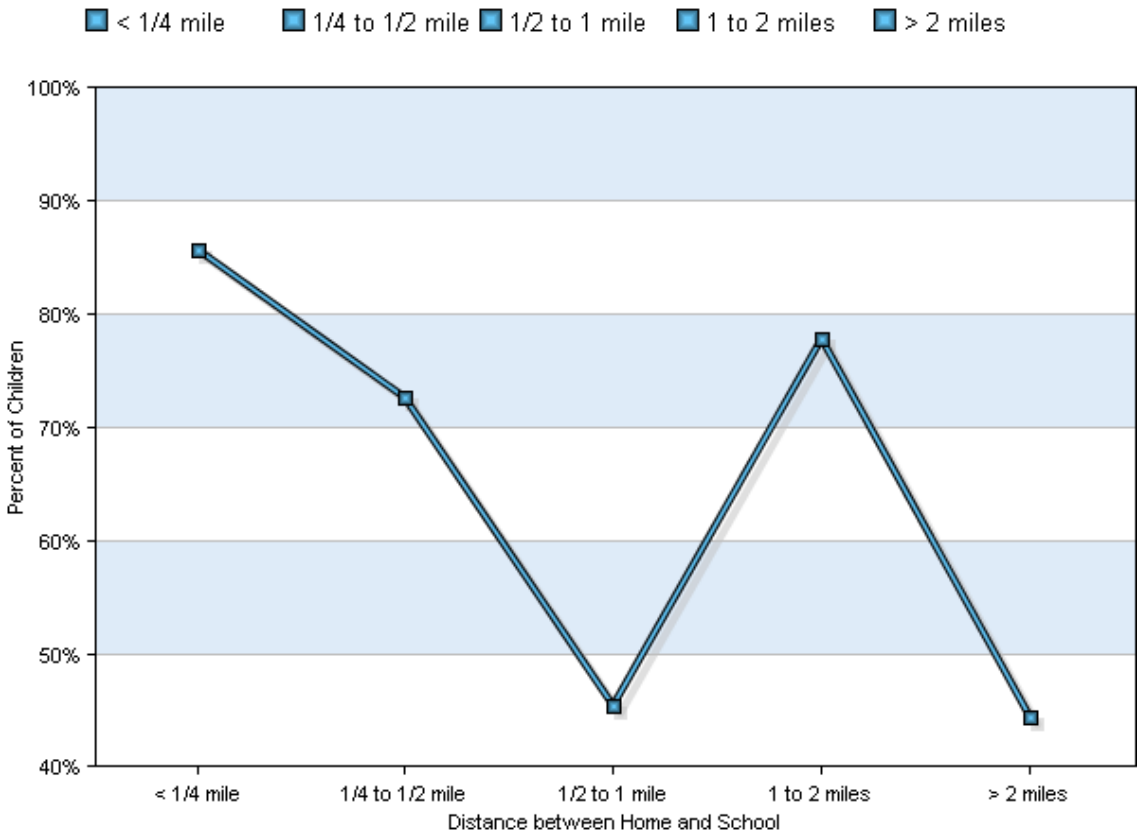
Don't know or No response: 0
Percentages may not total 100% due to rounding.

School Departure

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	14	71%	7%	7%	7%	0%	7%	0%
1/4 mile up to 1/2 mile	11	45%	0%	18%	36%	0%	0%	0%
1/2 mile up to 1 mile	11	36%	0%	9%	45%	9%	0%	0%
1 mile up to 2 miles	9	0%	0%	33%	56%	11%	0%	0%
More than 2 miles	9	0%	0%	11%	89%	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

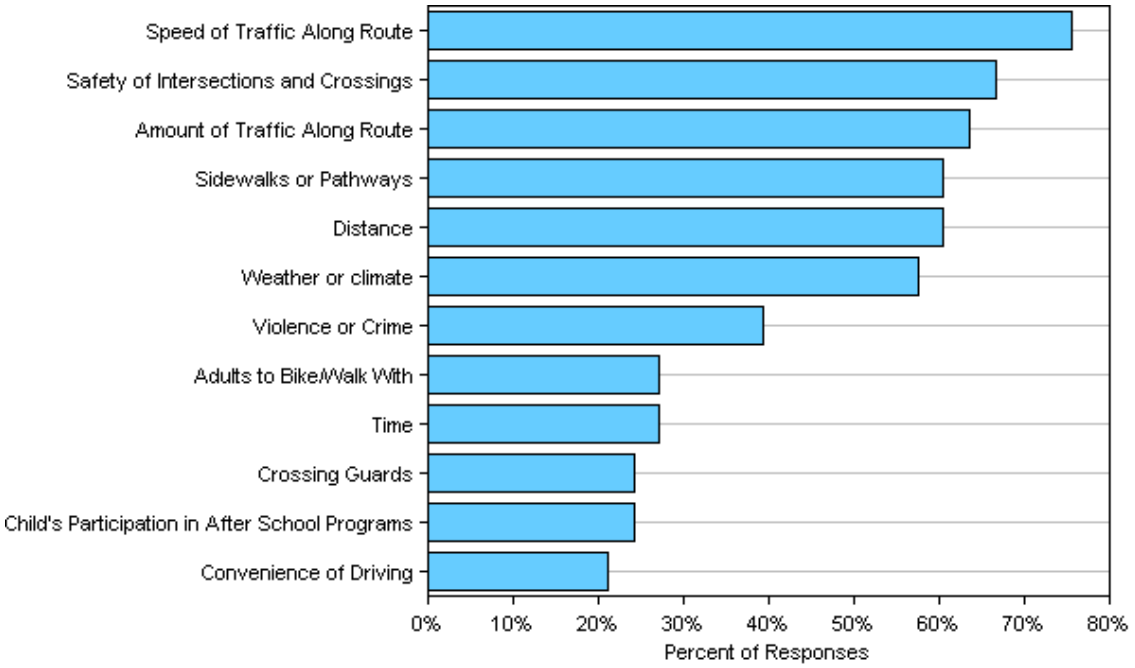


Percent of children who have asked for permission to walk or bike to/from school by distance they live from school

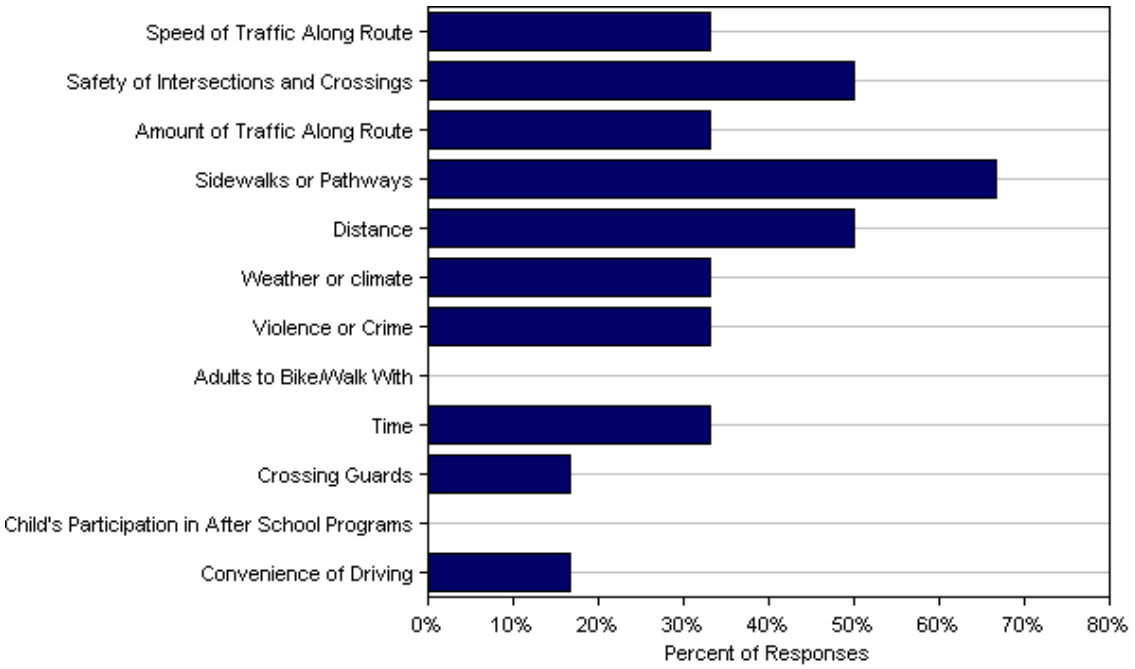
Asked Permission?	Number of Children	Less than 1/4 mile	1/4 mile up to 1/2 mile	1/2 mile up to 1 mile	1 mile up to 2 miles	More than 2 miles
Yes	36	86%	73%	45%	78%	44%
No	18	14%	27%	55%	22%	56%

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

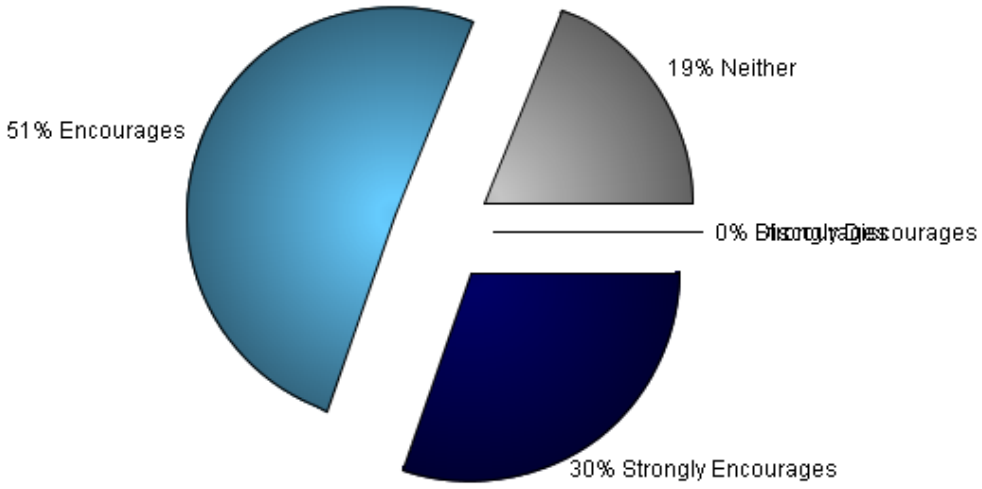


Issues reported to affect the decision to allow a child to walk or bike to/from school by parents of children who already walk or bike to/from school

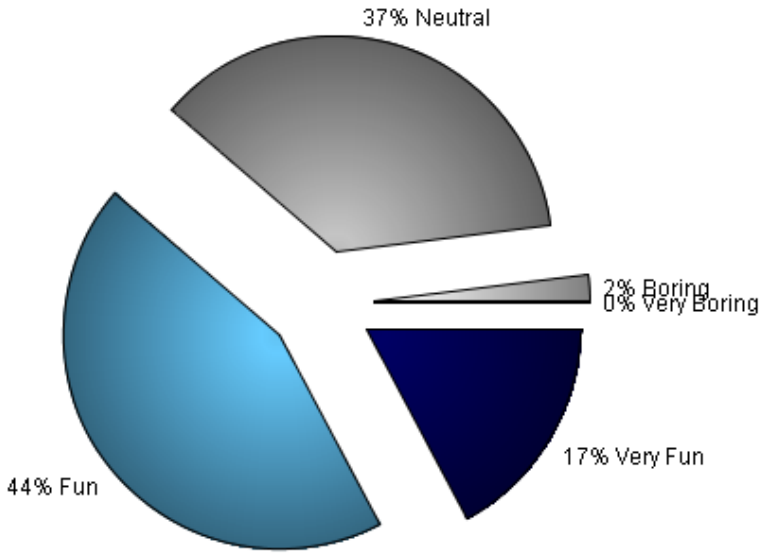
Issue	Child does not walk/bike to school	Child walks/bikes to school
Speed of Traffic Along Route	76%	33%
Safety of Intersections and Crossings	67%	50%
Amount of Traffic Along Route	64%	33%
Sidewalks or Pathways	61%	67%
Distance	61%	50%
Weather or climate	58%	33%
Violence or Crime	39%	33%
Adults to Bike/Walk With	27%	0%
Time	27%	33%
Crossing Guards	24%	17%
Child's Participation in After School Programs	24%	0%
Convenience of Driving	21%	17%
Number of Respondents per Category	**33**	**6**

No response: 15
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.

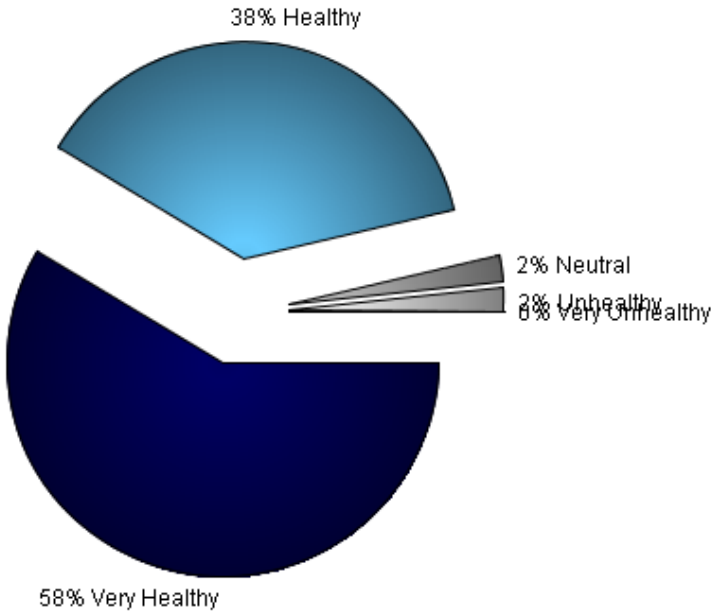
Parents' opinions about how much their child's school encourages or discourages walking and biking to/from school



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
1156939	I think there should be crossing guards at the corner of Main St. and State St. Cars on Main Street speed and there is a lot of traffic. The walk lights are not very good!
1156949	We definitely walk more in warmer weather (more light in the sky, warmer temps) Biking will come in a couple of year (more experience).
1157108	My child has asked to walk home from school. Would allow my child to walk to/from school with her brother or other kids.
1157148	Live over 3 miles away, takes me an hour and a half to walk. Too far for kids.
1156942	Juniper Hill Rd isn't the best - but once they made it to County Rd and sidewalks were made and/or improved they probably would be more apt to ride their bikes. They would even be happy to take a bus, but that isn't even an option. Donna- I would be interested in volunteering and or/helping in the SRTS. Please let me know and thanks for your efforts. Leanne Cook
1156944	We live over 3 miles away, takes me an hour and half to walk it. Too long for kids.
1156957	The sidewalks on our road are poorly taken care of and are inaccessible in the winter. Cars drive much faster than the speed limit and without good sidewalks it's hazardous.
1157107	Very dangerous route from home (Birch Heights and Route 5 South) to school
1157140	I think if people were provided with statistics of what this can do for kids they might be encouraged to participate.
1156943	Route 5 is too dangerous for walking/biking. Cars don't even stop for the school bus.
1156964	My 1st and 4th grader walks alone because we are 2 houses down and I can see them.
1157116	I strongly encourage my girls to ride their bikes when the weather permits.
1157145	We allow walking to school as we are 2 houses away and can watch them go.
1157155	The sidewalk that my children would have to walk/ride is very unsafe. It is poorly maintained and VERY close to the road. I am not comfortable with them riding a bike on that section of the sidewalk. I live at Bavier Avenue and Enright.
1157151	We live too far for it to be an option, plus I drive by the school every morning anyway.
1157152	We live too far away for my children to walk.
1157115	12-16 (how fun, how healthy, etc) are not necessary questions and require speculation

APPENDIX F

NON-ENGINEERING STRATEGIES RESOURCE GUIDE

Strategy	E's	Advantages	Considerations	Resources
Walking and Biking Safety Curriculum and/or Assembly These lessons 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. Instruction as a part of school curriculum is also vital to ensuring on-going learning of bicycle and pedestrian safety and development of skills.	**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), multi-lesson classroom curricula, and skills practice (e.g. bicycle safety fairs). • Requires able and willing instructors • Should be age-appropriate • Bicycle safety education may require an outside instructor, e.g. a police officer.	• Walk Smart/Bike Smart Vermont! http://healthandlearning.org/documents/WalkSmartBikeSmartFINAL2008_001.pdf • National Highway Traffic Safety Administration Pedestrian Safety Lessons http://www.nhtsa.gov/ChildPedestrianSafetyCurriculum • WalktoSchool.org - Classroom activities that encourage walking and biking. www.walktoschool.org/eventideas/classroom.cfm • Willie Whistle - The National Highway Traffic Safety Association has created a video to help teach children pedestrian safety skills. http://www.nhtsa.gov/people/injury/willie/willie.zip • See Partner Resource CD for more materials

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. Generally this event is scheduled for the first full week in October along with Vermont Walk and Roll to School Day in May. 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): www.walktoschool.org • International Walk to School Day website: www.iwalktoschool.org/ • Plan and promote your Walk to School Day event http://saferoutes.vermont.gov/sites/saferoutes/files/PDFs/How%20To%20-%20Special%20Events.pdf • Include students when it is too far or unsafe http://saferoutes.vermont.gov/sites/saferoutes/files/Including%20Students%20When%20It%27s%20Too%20Far%20or%20Unsafe%20VT.pdf • See Partner Resource CD for more materials
Frequent Walker/Bicyclist Program or Walking Wednesdays Track and reward students who walk and bicycle to school. Can be an individual competition or a competition among classes.	**Encouragement**	• Provides positive reinforcement for walking and bicycling. • Children respond to incentives. • Can include all students. • Can include walking and bicycling beyond the trip to school.	• 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.	• Frequent Walker Punch card template http://saferoutes.vermont.gov/sites/saferoutes/files/PDFs/VT_SRTS_Punchcard_v2_110825-1.png • Vermont Challenge: Walk Across America http://saferoutes.vermont.gov/sites/saferoutes/files/PDFs/The%20VT%20Challenge%20-%20Walk%20Across%20Vermont%21.pdf • Tips for creating a walking and bicycling route map http://saferoutes.vermont.gov/sites/saferoutes/files/PDFs/Tips%20for%20Creating%20Walking%20and%20Bicycling%20Route%20Maps.pdf • See Partner Resource CD for more materials

Strategy	E's	Advantages	Considerations	Resources
Traffic Enforcement (Staff) This can be an ongoing program for school staff. This could work well in conjunction with PBIS.	**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 with Paws of Praise in order to reinforce positive behavior.	• Requires some training and coordination with crossing guards	• Adult School Crossing Guard Guidelines (NCSRTS) http://guide.saferoutesinfo.org/crossing_guard/pdf/crossing_guard_guidelines_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 • See Partner Resource CD for more materials

Strategy	E's	Advantages	Considerations	Resources
Bicycle Safety Fair This is a single-day event that promotes bicycle safety. At the bicycle safety fair, students can borrow bicycles or bring their own.	**Education, Encouragement**	• Events such as bike safety fairs make learning fun and can help strengthen community ties with event organizers and participants. • At the bicycle safety fair students learn safety skills such as how to properly wear a helmet and how to behave while bike riding. The bicycle safety fair can also have a closed "test course" for the students to ride along. This helps the students to practice in a safe environment and gain confidence in their decision-making skills. • Possible partners for this include the Caledonia County Sheriff's Department or Kingdom Trails.	• 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	• Teaching a Bicycle Safety Fair in Vermont http://www.vtbikeped.org/what/VT_Safety_Fair_Curriculum.pdf • Bicycling Life page on bicycle safety fairs: http://www.bicyclinglife.com/SafetySkills/BicycleRodeo.htm • An organizer's guide to bicycle safety fairs http://www.bike.cornell.edu/pdfs/Bike_Rodeo_404.2.pdf • Easy steps to properly fit a bicycle helmet http://www.nhtsa.gov/people/injury/pedbimot/bike/EasyStepsWeb/
Walk Audit/Parent Surveys / Student tallies The team will meet annually (ideally in August before school starts) to review the accomplishments from the previous 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: http://www.saferoutesinfo.org/resources/evaluation_student-in-class-travel-talley.cfm • Parent Survey Form: http://www.saferoutesinfo.org/resources/evaluation_parent-survey.cfm • Instructions for Survey Administration: http://www.saferoutesinfo.org/resources/evaluation_instructions.cfm • Instructions for Data Entry: http://www.saferoutesinfo.org/resources/evaluation_cover-sheets.cfm

Strategy	E's	Advantages	Considerations	Resources
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	• How to start a walking school bus or bike train http://guide.saferoutesinfo.org/walking_school_bus/pdf/wsb_guide.pdf
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 effect positive change in the community and 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 http://apps.saferoutesinfo.org/lawenforcement/resources/driving_tips.cfm • Parents, Avoid Becoming a Traffic Hazard http://www.aaamidatlantic.com/FetchFile.ashx?id=e55bfa26-a70d-4e17-afde-073b86cc9975

Strategy	E's	Advantages	Considerations	Resources
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 http://www.activetrans.org/crossingguard

APPENDIX G

INFRASTRUCTURE STRATEGIES RESOURCE GUIDE

Strategy	Advantages	Considerations	Resources	Actions
Wide Paved Shoulders Wide paved shoulders are created by striping a roadway to provide space for a shoulder and a travel way for motor vehicles. Wide paved shoulders can be created by adding pavement to one or both sides of the paved roadway or by narrowing travel lanes. Current Vermont State Standards recommend ten-foot minimum travel lanes for state and local roads.	• Provide room for pedestrians when there is no sidewalk or other facility. • Provide a clear space for bicyclists that is separated from the motor vehicle travel way. • Research has shown that by narrowing travel lanes, motor vehicle speeds might also be reduced.	• Lane markings need to be bright and maintained to clearly delineate the motor vehicle travel lane. When lane markings fade, the travelway for motor vehicles appears to be wider, which tends to encourage motorists to travel at higher speeds. • When adding pavement to widen the roadway and accommodate shoulders, the base material for the shoulder needs to be integrated well with the base material under the existing road to minimize the potential for pavement cracking and settling that would create hazardous conditions for bicyclists and motorist. • The *Vermont State Standards* provide detailed information on appropriate travel lane and paved shoulder widths for different classifications of state roads. These standards also provide a guide for appropriate lane and shoulder widths for town roads. • Other considerations include right-of-way, drainage, grading, existing signs and structures, and utilities.	• Vermont State Standards http://www.aot.state.vt.us/progdev/standards/statabta.htm	• For town roads, start with discussions with the appropriate, Selectboard, Board of Trustees, or City Council (municipal legislators) and town officials, such as road commissioner and/or town engineer to determine the municipality's policies on travel lanes widths. Provide background information on the benefits of narrower travel lanes for speed reduction and safer conditions for pedestrians and bicyclists. • Review shoulder widening proposals with municipal officials. If sufficient pavement exists, suggest conducting an experiment with temporary striping to provide wider shoulders. • Follow up the experiment with feedback and request for comments from municipal officials and community.

Strategy	Advantages	Considerations	Resources	Actions
Speed Feedback Signs Speed feedback signs, either temporary or permanent, show motorists how fast they are traveling as calculated by radar.	• Speed feedback signs tend to slow motorists and remind motorists of the posted speed limits.	• Speed feedback signs on state roads must follow the State's placement guidelines for state roads. Installing a feedback sign requires a highway access permit from the State. • Permanent signs may be appropriate at school zones; elsewhere temporary signs, set up for short periods at various locations, can be more effective. • Speed feedback signs, including those installed through VTrans funded projects on state roads, require a maintenance and care agreement with the local municipality.	• *Guidelines for the Use of Radar Speed Feedback Signs on the State Highway System* http://www.aot.state.vt.us/documents/3014_Guidelines_on_the_Use_of_Radar_Speed_Feedback_Signs.pdf • *Classification of Vermont Roads* http://maps.vermont.gov/imf/sites/ANR_NATRESViewer/jsp/	• Review the State's speed feedback sign guidelines to be sure the proposed location is acceptable. • Contact the municipality to determine the appropriate person to contact regarding the placement of speed feedback signs, either temporary or permanent. Check with the local police or sheriff to see if they have a portable trailer that can be used on a temporary basis as a trial. • Contact the responsible party to understand their process for the placement of speed feedback signs and whether the sign should be temporary or permanent. Follow the process for installation of the speed feedback sign. • If a temporary feedback sign was installed, review the results with the municipality to determine if it has been successful. If successful, suggest the municipality install a permanent speed feedback sign. • Permanent feedback signs are an eligible use for SRTS funds. Check with the regional planning commission about this and other potential funding sources.

Strategy	Advantages	Considerations	Resources	Actions
High-visibility Crosswalks High-visibility crosswalks are roadway markings designating a location for pedestrians to cross a roadway. High-visibility crosswalks are typically in locations that are convenient to pedestrians and visible to motorists. High-visibility crosswalks must be installed with reflective durable material.	• Crosswalks provide notification to both pedestrians and motorists to where pedestrians may be crossing the roadway. • Pedestrians have the right-of-way when in a crosswalk and motorists are supposed to stop their vehicles until the pedestrian has cleared the roadway.	• Pedestrians should assume that a motorist may not see them or stop. • Crosswalks should have a receiving facility, such as a path, sidewalk, or adequate shoulder for use by pedestrians on either end. • Crosswalks may be marked with different striping patterns but the most common pattern is the ladder style. Further considerations may be needed for crosswalks at unsignalized intersections and at mid-block locations to determine if the crosswalk is warranted. • Crosswalks are not appropriate for every location as they may give the pedestrian a perceived sense of safety that may not exist.	• *Vermont Pedestrian and Bicycle Facility Planning and Design Manual* http://www.aot.state.vt.us/progdev/Sections/LTF%20Info/BikePedTOC.html • Vermont's *Guidelines for the Installation of Crosswalk Markings and Pedestrian Signing at Marked and Unmarked Crossings* http://www.aot.state.vt.us/progdev/sections/highway%20info/DocumentsRoadwayPages/TrafficOpsCrosswalk%20Guidelines%202004.pdf*Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations* http://www.fhwa.dot.gov/publications/research/safety/04100/04100.pdf • *Classification of Vermont Roads* http://maps.vermont.gov/imf/sites/ANR_NATRESViewer/jsp/	• For all classifications of roadways, state and local, consult with the regional planning commission about the appropriateness of the proposed location for a crosswalk. • Follow-up with the municipal road commissioner, planner, or engineer to seek their guidance and support. • For non-state roads, after gaining appropriate endorsements, work with the appropriate local official or employee to get the high-visibility crosswalk installed in the proper and safe location. • For state roads, work with the regional planning commission to get a formal study to determine if a crosswalk is warranted and safe.

	Advantages	Considerations	Resources	Actions
Shared-use Paths Shared-use paths are separate facilities for non-motorized users such as bicyclists and pedestrians. Typically these facilities have their own right-of-way rather than sharing a right-of-way with a roadway.	• Provides a safe place for non-motorized users that are typically separated from motor vehicles. • Shared-use paths appeal to users of all different skill levels, particularly those with basic or beginner skills.	• Shared-use paths should typically be a minimum of ten feet wide and paved with asphalt. • Guidelines for the construction of shared-use paths can be found in the *Vermont Pedestrian and Bicycle Facility Planning and Design Manual.* • Further considerations are needed at intersections of the shared-use path and roadways to ensure safety for all users.	• *Vermont Pedestrian and Bicycle Facility Planning and Design Manual* http://www.aot.state.vt.us/progdev/Sections/LTF%20Info/BikePedTOC.html	• Work with the municipal planning office, road commissioner, administrator, or other municipal officials to gain their support for the proposed shared-use path. • Work with municipal partners to engage the regional planning commission with the project in terms of funding or other support for an initial alignment study to determine the appropriate shared-use path alignment and end points. This study will help the community understand where the shared-use path may be located as well as the issues that will need to be addressed, the types of permits that will be needed, and the potential cost for developing the shared-use path as proposed. This study, done with community input, will help the community decide if they want to proceed further with the project. • If the community wishes to continue to pursue a shared-use path, work with the municipal partner to understand potential funding sources and the various requirements involved in obtaining them.

Strategy	Advantages	Considerations	Resources	Actions
Bicycle Routes/ Bicycle Pedestrian Warning Signs Bicycle route signs are officially designated routes for bicyclists through municipalities; they are typically used to focus bicycle travel onto roadways most suited for it. Bicycle and/or Pedestrian present warning signs (with an image of a bicycle and a pedestrian) provide a notice to motorists, that bicyclists or pedestrians are likely to be present.	• Bicycle route signs assist bicyclists in determining the best route for their travel. • Warning signs raise safety conditions for bicyclists due to greater awareness by motorists of bicyclists on the road.	• The number and location of bicycle routes and signs should be carefully studied by the community prior to implementation. Measures should be taken to reduce sign clutter. • Bicycle route signs and warning signs must meet the guidelines provided in the *Manual on Uniform Traffic Control Devices* (MUTCD). • In cases where there are on-road sections of bicycle connecting nearby trails, where a bike lane ends or a paved shoulder is reduced at a bridge, a "Share the Road Sign" may be appropriate. The "Share the Road" sign should be used to indicate a relatively brief special condition.	• *Vermont Pedestrian and Bicycle Facility Planning and Design Manual* http://www.aot.state.vt.us/progdev/Sections/LTF%20Info/BikePedTOC.html • *Manual on Uniform Traffic Control Devices, latest edition (MUTCD),* http://mutcd.fhwa.dot.gov/kno_2009r1r2.htm	• Review guidelines provided in the latest edition of the MUTCD to make sure signs are compliant. • Work with the municipal planning office, road commissioner, administrator, or other municipal officials to gain their support for the creation of bicycle routes. • Follow the recommendations of the local official or employee as to the appropriate way to proceed, which could include: - Presenting the idea to the municipal legislators; - Implementing existing recommendations in a bicycle plan for the community; - Undertaking the development of a bicycle plan for the community to make sure that the specific recommendations still work within the context of the entire municipality; and - Working with the regional planning commission.

Strategy	Advantages	Considerations	Resources	Actions
Sidewalks Sidewalks are paths separated from other roadway users along the sides of the roadway reserved for pedestrians.	• Sidewalks provide a relatively safe location for pedestrians along the sides of a roadway. • They help to separate other roadway users and pedestrians within the same right-of-way.	• The availability of sufficient right-of-way to install sidewalks, including the travel way for vehicles and standards for sidewalk width, must be assessed. • Sidewalks are most effective when they include a buffer from the paved surface of the road that is at least five feet wide. • When sufficient right-of-way is not available for a buffer, a curb can provide some degree of separation between the roadway and the sidewalk. • Other considerations include drainage, grading, existing signs, structures, and utilities. • Sidewalks can be constructed of various materials including concrete, asphalt, or stone dust.	• *Vermont Pedestrian and Bicycle Facility Planning and Design Manual* http://www.aot.state.vt.us/progdev/Sections/LTF%20Info/BikePedTOC.html • *Designing Walkable Urban Thoroughfares: A Context Sensitive Approach* (Institute of Transportation Engineers - Publication #RP 036A) http://www.ite.org/emodules/scriptcontent/orders/ProductDetail.cfm?pc=RP-036A-E	• Review the State's *Pedestrian and Bicycle Facility Planning and Design Manual* to determine the appropriate dimensions based on roadway classification. • Work with the municipal planning office, road commissioner, administrator, or other municipal officials to gain their support for the proposed sidewalk. • Work with municipal partners to determine the appropriate sidewalk location based on available right-of-way. • Review the sidewalk location to determine if any additional issues will need to be addressed, the types of permits that will be needed, and the potential cost for developing the proposed sidewalk. This review, done with community input, will help the community decide if they want to proceed further with the project. • If the community wishes to continue work on the proposed sidewalk, work with the municipal partners to understand potential funding sources and the various requirements involved in obtaining them.

Strategy	Advantages	Considerations	Resources	Actions
School Zones A school zone is an identified location on the roadway abutting a school which extends several hundred feet in each direction. It is identified with signs and pavements markings and sometimes includes a reduced speed zone.	• School zones increase motorists' awareness to look for students on or near the road and to drive with more caution.	• The creation of a school zone typically needs the approval of the municipality, either from the Selectboard, Board of Trustees, or City Council, unless they have passed on this approval to the road commissioner. • School zones created on state roads need VTrans approval. • Sight distances and other roadway conditions should inform the location of signs and pavement markings noting the limits of the school zone, within MUTCD guidelines. • With few exceptions, school zones are located on the roadway adjacent to the school's main entrance. • Must comply with State sign laws and laws for setting speed limits.	• *Manual on Uniform Traffic Control Devices, latest edition (MUTCD),* http://mutcd.fhwa.dot.gov/kno_2009r1r2.htm • Refer to *Vermont Statute 23, Section 1007* for guidance on assigning local speed limits http://www.leg.state.vt.us/statutes/fullsection.cfm?Title=23&Chapter=013&Section=01007	• Work with the municipal planning office, road commissioner, administrator, or other municipal officials to gain their support for the proposed school zone. • Discuss the creation of a school zone with local Selectboard, Board of Trustees, or City Council to gain their support. • For a school zone on a state road, work with municipal officials and/or the regional planning commission to contact VTrans to propose a school zone. • Work with the municipal planning office, road commissioner, administrator, or other municipal officials to determine the specific limits of the school zone and the methods to be used to notify motorists of its presence, including signage, warning lights during arrival and dismissal times, pavement markings, or other methods. • Work with municipal partners to determine the most appropriate way to provide funding for the notifications as appropriate and work with them to secure funding.

Strategy	Advantages	Considerations	Resources	Actions
Road Signs Road signs provide information on road conditions, direction, advisories, or mandatory actions. Road signs may be regulatory, warning, or guide signs.	• Signs notify road users about road conditions, other users, regulations, or conditions that may not be immediately apparent. • Many signs are not typically an expensive installation and can be approved and installed quickly.	• The number and type of existing signs can influence the effectiveness of new signs. Sign "clutter" can diminish the impact of new signs. • Permanent signs can become part of the background and their perception by regular road users can diminish over time. • Changing conditions, such as temporary flashing lights or periodic flags, can help to continually draw attention to a sign. • Adding new signs to a local road typically needs the approval of the municipality, either from the Selectboard, Board of Trustees, or City Council, unless they have passed on this approval to the road commissioner. • Signs added to state roads need VTrans approval. • Any proposed signage must meet the guidelines provided in the *Manual on Uniform Traffic Control Devices* (MUTCD). • Temporary devices such as in-street "Yield to Pedestrian" signs, require designated personnel to provide continuous maintenance. Such signs must be installed and removed EACH DAY of intended use and should not remain on the roadside when not in use.	• *Vermont Pedestrian and Bicycle Facility Planning and Design Manual* http://www.aot.state.vt.us/progdev/Sections/LTF%20Info/BikePedTOC.html • *Manual on Uniform Traffic Control Devices, latest edition (MUTCD),* http://mutcd.fhwa.dot.gov/kno_2009r1r2.htm • *Classification of Vermont Roads* http://maps.vermont.gov/imf/sites/ANR_NATRESViewer/jsp/	• Work with the municipal planning office, road commissioner, administrator, or other municipal officials to gain their support for the placement of new signs. • Discuss the placement of new signs with local Selectboard, Board of Trustee or City Council to gain their support. • Work with the municipal planning office, road commissioner, administrator, or other municipal officials to determine the appropriate place for the signs while meeting guidelines provided in the MUTCD. • If proposed on a state road, work with the municipal officials and the regional planning commission to contact VTrans to gain their approval and any necessary permitting for the proposed sign s.

APPENDIX H

SNOW REMOVAL BEST PRACTICES

SNOW REMOVAL BEST PRACTICES

Prompt and effective snow, ice, and slush clearance on sidewalks along Safe Routes to School is critical for maintaining safe biking and walking conditions. Snow removal of bicycle and pedestrian accommodations that are designated school routes should be planned for. According to the VT Pedestrian and Bicycle Facility Design Manual Section 10.5.1, local policies should treat the clearance of snow from walkways as equally important as clearance of snow from roadways in order to maintain year-round accessibility.

Guidelines

The responsibility of all snow and ice clearance generally falls upon the property owner of the facility. A municipality's highway department is typically responsible for snow and ice removal on roads and sidewalks on public property. Private roads and sidewalks on private property are the responsibility of the property owner.

A clear, unobstructed pathway at a minimum of 48" wide should be provided on all sidewalks, curb ramps, and through crosswalks. Snow, slush, and ice should be cleared from sidewalks, to provide a clear path of 48", ideally, within 12 hours after a storm event. Designated portions of the roadway for bicycle use should also be cleared since, even in winter, some experienced bicyclists commute by bicycle.

Pedestrian walkways, curb ramps, and crosswalks or bicycle facilities should not be used for areas of snow storage. Additional consideration should also be taken to maintain adequate sight distances at all intersections and to prevent snow storage from building up too close to walkways.

Paved shared-use paths that are designated routes to school should be kept clear of snow so that students can walk to school year-round. Snow clearance is not a consideration for natural surface paths that are used for winter activities which also allow students to cross-country ski or snow-shoe to school.

Recommendations

The following six basic recommendations can assist a community in developing a strategy to improve sidewalk snow and ice clearance.

1. Create a norm of snow and ice clearance through social awareness campaigns.
2. Identify a municipal point person for snow removal.
3. Determine priority sidewalks and paths for snow clearance.
4. Improve monitoring and enforcement.
5. Design sidewalks for easier snow removal.

6. Train municipal and private snow plowing personnel on the guidelines for pedestrian and bicycle facility clearance (i.e., 48" clear path and priority routes.)

Monitoring and Enforcement

There are three primary ways in which the clearance of sidewalks can be monitored and enforced;

1. Identify who monitors and enforces.
2. Define penalties and how they will be enforced.
3. Implement a social awareness campaign.