VERMONT
Safe Routes to
SCHOOL

Peacham Elementary School

Safe Routes to School Travel Plan

Winter 2015

Prepared with assistance from the VT SRTS Resource Center

SafeRoutesVT.org

CONTENTS

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 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 allows 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 Peacham Elementary School Safe Routes to School Team. Creating and maintaining this Travel Plan helps to ensure a successful Safe Routes to School (SRTS) program.

SRTS programs adopted by schools 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

This Travel Plan documents our Team Vision, describes the context of Peacham Elementary School, and makes recommendations for achieving the Team Vision. The recommendations are organized according to the 5 E's. This plan was led by the SRTS team at Peacham Elementary School, which consists of parents, teachers, and other community stakeholders.

The ideas and recommendations developed during this process will guide us in creating a well-balanced approach to building our SRTS program. 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 VT 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 the recommendations can be the basis for grants and/or improvements initiated by the Town of Peacham.

Members of the Peacham Elementary School SRTS Team	
Judith Ross, Principal	

TEAM VISION

The SRTS program at Peacham Elementary School aligns with the community's efforts to promote active lifestyles through walking, hiking, and biking. The SRTS program's goals fit our school and town values.

Our vision for Peacham Elementary School (and the area around the school) is:

- To encourage a more physically active student body, reflecting our town's values as an active community
- To build community support and respect of pedestrians and bicyclists both on our roads and on our school grounds
- To develop strong regional partnerships and coordination of SRTS events with schools in surrounding communities

This Travel Plan outlines Peacham Elementary School's efforts for making walking and bicycling more sustainable and safer for students and the community. Peacham Elementary School hopes to secure 100% student participation in annual walking and biking events over the next year. We believe this goal will encourage more walking and biking in town and educate students on safe walking and biking practices.

ABOUT THIS PLAN

Our team met three times with the VT SRTS Resource Center to develop and adopt this Travel Plan. Each meeting provided education on the benefits of SRTS and highlighted successful program components and strategies. The engineering meeting included a guided walk audit of the areas around our school. We also discussed education, encouragement, enforcement, and evaluation strategies which helped identify needed and complementary programs to support proposed engineering strategies.

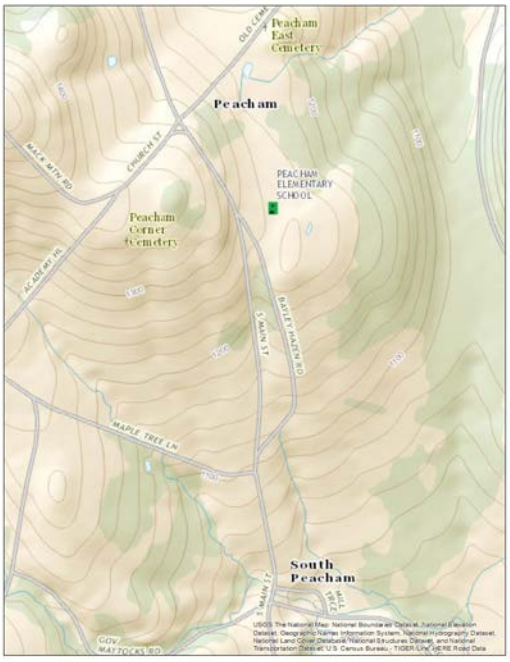
Meeting Date	Content and Outcomes
October 2014	**Kick-off Meeting: How the VT SRTS Travel Plan Works** - Award of the planning assistance grant - Overview of the planning process **Engineering Meeting** - Team visioning - Opportunity and barrier discussions - Walk audit - Observed arrival and dismissal
January 2015	**Plan Review** - Reviewed the draft plan - Identified roles and continued steps for non-engineering recommendations
February 2015	**Plan Adoption** - Adopted Plan - Discussed continuation of non-infrastructure recommendations

CONTEXT

PEACHAM ELEMENTARY SCHOOL AND TOWN OF PEACHAM OVERVIEW

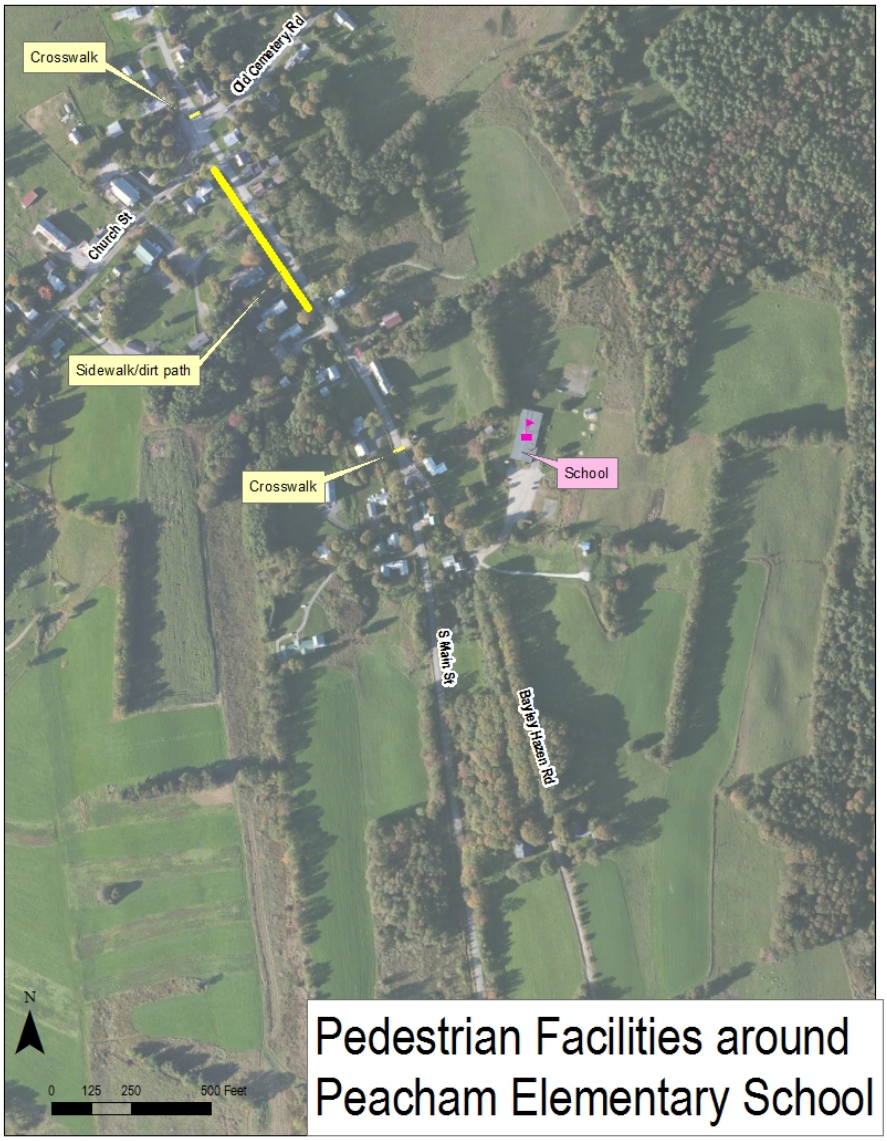
Peacham Elementary School is located in the Town of Peacham in Caledonia County, VT. Peacham has a population of approximately 732 year-round residents. The town does not have any numbered state highways and is surrounded by a rural landscape.

Peacham Elementary School is located on Bayley-Hazen Road – a Class 3 town road. The school is located near the intersection of Bayley-Hazen Road and South Main Street, the main road through town. The posted speed limit on both Main Street and Bayley-Hazen Road is 30 miles per hour near the school. Other segments of Bayley-Hazen Road have a



Peacham Elementary School Context Map

posted speed limit of 50 miles per hour. Bayley-Hazen Road carries approximately 600 vehicles per day near the school.[1] There is an informal sidewalk/dirt path along Bayley-Hazen Road between the Peacham Store/Church Street and the intersection with South Main Street as shown in the map below. There are no shoulders and the road does not have dedicated bicycle facilities.



[1] Based on Annual Average Daily Traffic (AADT) on Bayley-Hazen Road, 1000 feet north of Old Cemetery Road, collected in 2013.
http://www.nvda.net/town_files/Peacham_2013%20Traffic%20Counts_Peacham13_BayleyHazenRd_NofOldCemeteryRd.pdf

The SRTS program at Peacham Elementary 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 bicycles and pedestrians within town. The characteristics that make Peacham special– dispersed population, low-density development patterns, hilly terrain– create some engineering challenges in creating safe routes to school. Therefore, this plan focuses mostly on education, enforcement, encouragement, and evaluation strategies to increase physical activity and teach students safe walking and bicycling.

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 Peacham as a walkable, bikeable, and sustainable community.

CURRENT SCHOOL DEMOGRAPHICS

Peacham Elementary School has a total of 48 students enrolled for the 2013-2014 school year. Our school serves grades K-6. Peacham Elementary School offers busing to all enrolled students. One bus serves this school.

Demographic	Count	Percentage of student body
Free/Reduced Lunch	22	46%
Students with Disabilities		%
Limited English proficient students		%
Distance From School		
Students living within 1/4 mile of school	1	3%
Students living within 1/2 mile of school	4	14%
Students living within 1 mile of school	9	32%
Students living within 2 miles of school	16	57%
Students in grades K-3		%
Students in grades 4-6		%

CURRENT STUDENT TRAVEL MODES

Travel Mode	Walk	Bike	School Bus	Family Vehicle	Carpool	Public Transit	Other
Number of Students (AM)	6%	0%	45%	49%	0%	0%	0%
Number of Students (PM)	6%	0%	28%	66%	0%	0%	0%

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

SCHOOL ARRIVAL AND DISMISSAL PROCEDURES

Peacham Elementary 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.

The school day begins at 8:00 am when morning activities begin and breakfast is served.

Students walking, biking, and travelling by car arrive staggered before school starts – typically between 7:50 am and 8:00 am. The school bus arrives at 7:50 am, dropping students off on the southeast side of school at the front entrance. Students remain outside until the morning assembly at 8:00 am.

Students gather outside before the day starts

The parking lot functions as a one-way loop in front of the school for vehicles. Parents dropping off children pull into the parking lot entrance and park or proceed to the main entry walkway. They then exit the lot via the driveway.

Dismissal begins at 3:00 pm with all students dismissed at once when teachers walk students to the front door. Students riding the bus board directly from the door on the southeast side of the school building. Parents picking up their students are requested to wait in the front hallways or outside until after the bus has left to walk their children to their cars. Students who walk or bike to school must wait until the bus and all cars have left the parking lot to leave the premises. School staff are present at dismissal to ensure that children are

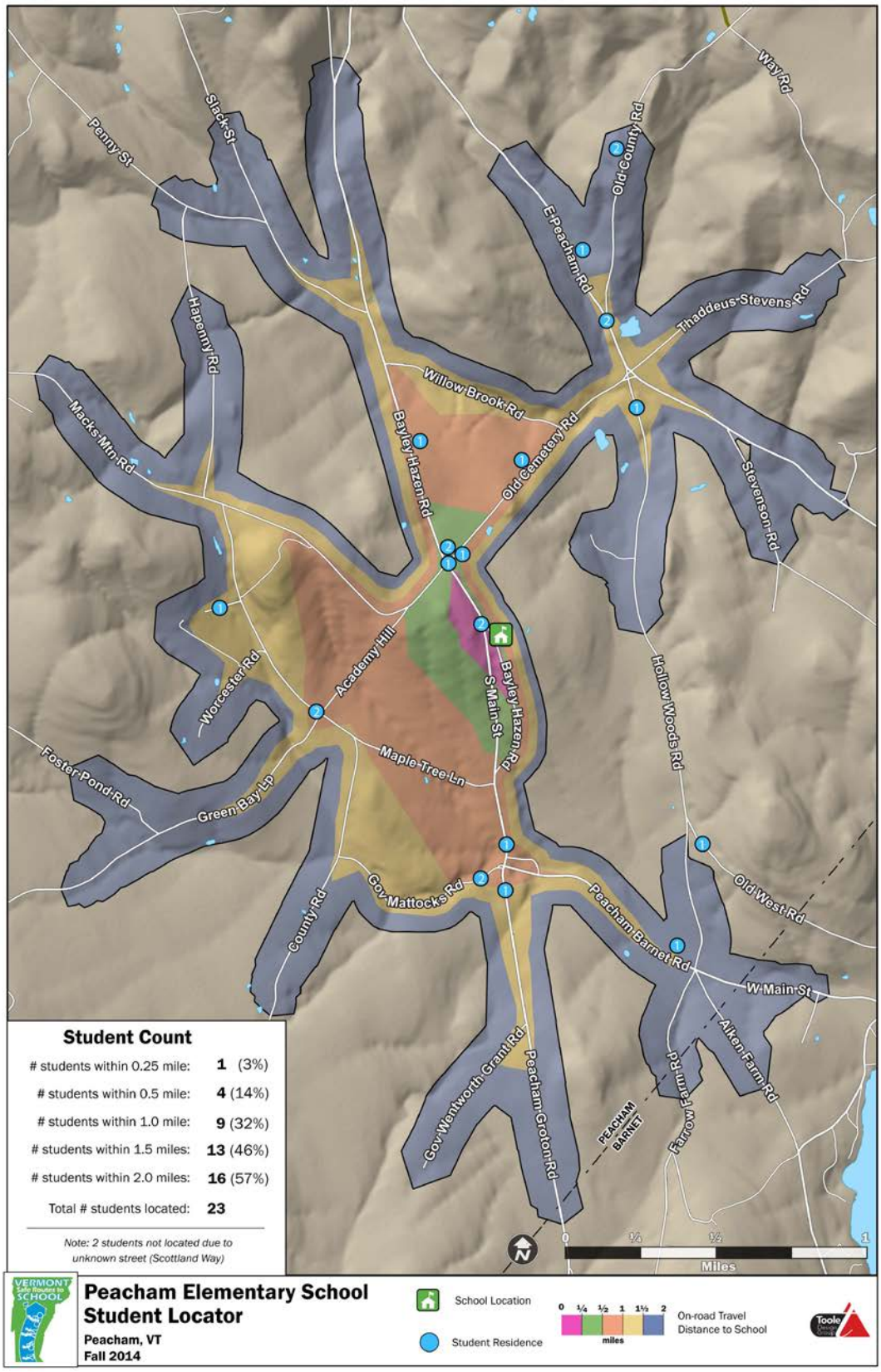
Tracks from the school bus in the Peacham School gravel parking lot can be seen in the above aerial photo.

behaving properly and safely until they leave the school grounds.

Arrival		
Travel Mode	**Procedure**	**Time**
Walk	Arrive staggered	7:50-8:00 am
Bike	Arrive staggered	7:50-8:00 am
School Bus	Arrives at designated time	7:50 am
Family Vehicle	Arrive staggered	7:50-8:05 am
Dismissal		
Travel Mode	**Procedure**	**Time**
Bus	Dismissed all at once	3:00 pm
Family Vehicle	Dismissed all at once	3:00 pm
Walk	Dismissed after bus and vehicles have left parking lot	3:00 pm
Bike	Dismissed after bus and vehicles have left parking lot	3:00 pm

EXISTING TRAVEL HABITS

Students travel to Peacham Elementary School via Bayley-Hazen Road either from streets to the north or the south off Bayley-Hazen/South Main Street. As shown in the Student Locator Map below, about 32% of the student population lives within a mile of the school and 57% live within two miles. However, the number of students who can walk or bike to school is low due to limited sidewalks and no bicycle facilities near the school. The majority of students may be best served by bike train or walking school bus sites located closer to school. On _____, 2014, (the day of our safety observation) eight students were observed bicycling to school and eight students were observed walking to school. Of the six students who regularly walk home from school, three cross Bayley-Hazen Road, as reported by school staff.


Penny St
Slack St
Way Rd
Old County Rd
E Peacham Rd
Thaddeus Stevens Rd
Hapenny Rd
Willow Brook Rd
Macks Mtn Rd
Bayley Hazen Rd
Old Cemetery Rd
Stevenson Rd
Academy Hill
S Main St
Bayley Hazen Rd
Hollow Woods Rd
Worcester Rd
Maple Tree Ln
Foster Pond Rd
Green Bay Lp
County Rd
Gov Mattocks Rd
Old West Rd
Peacham Barnet Rd
W Main St
Aiken Farm Rd
Farrow Farm Rd
Gov Wentworth Grant Rd
Peacham Groton Rd
PEACHAM
BARNET
Student Count
students within 0.25 mile: 1 (3%)
students within 0.5 mile: 4 (14%)
students within 1.0 mile: 9 (32%)
students within 1.5 miles: 13 (46%)
students within 2.0 miles: 16 (57%)
Total # students located: 23
Note: 2 students not located due to unknown street (Scottland Way)
0 ¼ ½ 1 Miles
Peacham Elementary School
Student Locator
Peacham, VT
Fall 2014
School Location
Student Residence
0 ¼ ½ 1 1½ 2
miles
On-road Travel Distance to School

A parent survey was conducted from October to December 2014. Of the 48 surveys distributed, 5 were returned. The survey identified the following barriers to walking to school:

- **Speed of traffic along route** (4/5 responses, 80%)
- **Amount of traffic along route** (3/5 responses, 60%)
- **Sidewalks or pathways are not present along entire walking route** (3/5 responses, 60%)
- **Safety of intersections and crossings** (1/5 responses, 20%)
- **Weather or climate** (2/5 responses, 40%)
- **There are no adults with whom to bike or walk** (2/5 responses, 40%)
- **Distance** (3/5 responses, 60%)
- **Time** (1/5 responses, 20%)
- **Violence or Crime** (1/5 responses, 20%)
- **Child's participation in after school programs** (1/5 responses, 20%)
- **Convenience of driving** (0/5 responses, 0%)
- **School crossing guards are not present at key intersections along walking route** (1/5 responses, 20%)

(Data based on SRTS Parent Survey results administered in October 2014. See Appendix A for the complete survey)

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.

In addition to the parent surveys, school staff conducted Student Travel Tallies in October of 2014. According to the tallies, 6% of students walked to and from school, and no students bicycled to school. In the morning, 45% of students took the school bus to school and 49% were driven in a family vehicle. In the afternoon, 28% of students took the school bus home and 66% of students were driven in a family vehicle. The travel tally report can be found in Appendix B.

KEY ISSUES

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

Issue: A chaotic atmosphere in the school parking lot exists at arrival and dismissal times. Vehicles enter parking lot at high speeds. Pedestrians and vehicles are intermingled; it's not clear where pedestrians can walk safely and separately from vehicles.

The parking lot is currently unpaved and does not have designated parking or pick-up/drop-off areas so parents and students tend to walk around and behind parked cars and are not always visible to drivers. Overgrown vegetation at the intersection of the school driveway and Bayley-Hazen Road limits visibility.

No designated space for pedestrians exists around the parking lot.

Issue: The speed and amount of traffic on Bayley-Hazen Road and South Main Street combined with a lack of connected bike and pedestrian facilities creates a barrier to walking and biking safely to the school.

Parents and school staff noted that vehicles often appear to travel at speeds higher than the posted speed limit of 30 mph. High speed vehicles along with limited sightlines can make bicycling stressful or dangerous. This is especially a concern on South Main Street immediately north of the intersection with Peacham Barnet Road, where South Main Street crosses South Peacham Brook and the guardrails squeeze bicycles and pedestrians on to the road.

Issue: The crosswalk at Bayley-Hazen Road and South Main Street is located just behind the crest of the hill, limiting visibility.

The crest of the hill may obstruct northbound drivers' ability to see pedestrians, especially if they are exceeding the speed limit.

The current location of the crosswalk on Bayley-Hazen Road at South Main Street may not be visible to drivers approaching from the south.

Issue: The expanse of pavement at the Bayley-Hazen and Church Street/Old Cemetery Road intersection encourages high speeds and is unwelcoming to pedestrians.

Although there is a crosswalk and signage at this intersection, there are no pedestrian facilities on the western side of Bayley-Hazen Road in front of the Peacham Store. Pedestrians cross Bayley-Hazen Road to arrive in a wide parking lot with no separation for pedestrians. On the north side of the intersection, there is no delineation between the parking lot and the roadway. Anyone walking there would be unclear as to how to stay out of the path of vehicles, while vehicles are able to make the turn on to Church Street at a high speed since the corner is so wide.

Opportunity: There is an informal sidewalk/goat path along Bayley-Hazen Road between Church Street and South Main Street. The town takes pride in this facility, which could be formalized and used as the spine for a bicycle and pedestrian network in the town.

Opportunity: 16 students were observed walking or bicycling to school, indicating an existing interest in walking and bicycling to school.

Opportunity: There is likely adequate right-of-way on the western side of Bayley-Hazen Road and South Main Street to construct a sidepath (though some additional research is needed).

RECOMMENDATIONS

This Travel Plan recommends activities and programs for Peacham Elementary School to realize its goals. The recommendations are organized according to the 5E's, and range from relatively simple ideas that can be implemented immediately to more complex projects that will be developed over time with local officials.

This section is divided into two sections: the Non-Engineering Plan and the Engineering Plan.

The Non-Engineering Plan describes the **education, encouragement, enforcement, and evaluation** activities and programs suitable for our school. The recommendations in the **Engineering** Plan were developed with assistance from the VT SRTS Resource Center. They include short, medium and long-term engineering treatments to make walking and bicycling to school safer for our students.

NON-ENGINEERING 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. Information on the advantages and considerations for each non-engineering strategy, and resources to help us implement each, are included in **Appendix C**.

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*

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. A 16-Month SRTS Activity Calendar is located in **Appendix D**.

EDUCATION STRATEGIES

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

- Provide educational materials for parents and residents regarding general safe-driving behaviors via the school newsletter and town website.
- Incorporate WalkSmart/BikeSmart Vermont! Curriculum into the 2015/2016 school year in PE class.
- Hold a Bike Rodeo in the Fall of 2016.

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 2015.
- Host International Walk to School Day in October 2015.
- Host Winter Walk Day in February 2016.
- Host monthly Walk at/to School Days year round. Students will be encouraged to walk or bike to school if they live within 2 miles and have access to safe facilities. The school will lead walking schoolbuses around the school campus or along the sidepath to the Peacham Store at lunch to allow students who cannot walk to school an opportunity to participate.
- Hold walking contests, such as Walk Across America or the 100 Mile Club.
- Organize a walking school bus and bike train for students traveling north on Bayley-Hazen Road.
- Once a bridge and pedestrian/bicycle facilities are installed on South Main Street (see the engineering recommendations), organize a walking school bus and bike train leading students traveling south on South Main Street.

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:

- Pilot a drop-off and pick up circulation process. The school will send flyers to parents explaining the process, which will be held for two weeks to determine its effectiveness in controlling the chaotic behavior in the parking lot.
- Hand out safe driver pledges and flyers to parents.
- Request a speed study from the local RPC in order to request a temporary speed feedback trailer/sign near the school.
- Invite local law enforcement to participate in annual Walk and Roll events.
- Add crossing guards / corner captains at the intersection of Bayley-Hazen and Church Street and at the Bayley-Hazen and crosswalk near South Main Street.
- Regularly share safety messages on the school website, Friday Notes, and town website.

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). Parent surveys and student travel tallies will help us measure the effectiveness of SRTS efforts over time. We first administered parent surveys and student travel tallies in October 2014, which provided baseline information on student travel behavior and parental perceptions. These surveys and tallies are critical to identifying issues and opportunities.

We will monitor the progress of recommended projects to ensure students have safe facilities to travel to school.

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, and to monitor issues and opportunities.
- Collect student tally data each year to measure progress toward goals.
- Keep this SRTS Travel Plan updated and use it as a tool for increased SRTS activities.

Evaluation Tool	Leader	Schedule
Parent Surveys		Annually in October
Student Tallies		Annually in May

ENGINEERING 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 supporting on-site circulation during arrival and dismissal. Descriptions of typical engineering recommendations can be found in **Appendix E.**

We recognize that infrastructure improvements can take time to complete and are a collaborative effort among Peacham Elementary School, the Town of Peacham and potentially VTrans to implement. The following short, medium, and long-term 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:

- Specific safety concerns
- Existing student walking or bicycling routes, or routes with a significant number of school family residences
- Priorities for the school community

Engineering Recommendations for specific locations around Peacham Elementary School can be found in **Appendix F.**

As an added resource, a Snow Removal Toolkit is included in **Appendix G.** 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 SRTS program. A Snow Removal Toolkit can better inform communities about snow removal policies and procedures, providing tools to increase compliance and safety.

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 include appropriate slopes, landing areas, surface conditions, and use of detectable warning materials for visually impaired pedestrians.
- 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' (AASHTO) *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: www.saferoutes.vermont.gov/getting_started/funding.

APPENDICES

A. Parent Survey Report, October 2014

B. Student Travel Tallies, October 2014

C. Non-Engineering Strategies Resource Guide

D. Non-Engineering Strategies Calendar

E. Typical Infrastructure Strategies Resource Guide

F. Location-Specific Engineering Recommendations *(Location Key, School Parking Lot Concept Plan, Peacham Store Parking Lot Concept Illustration)*

G. Snow Removal Best Practices