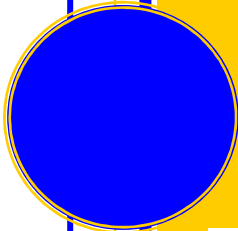


# SIMONDS ELEMENTARY SAFE ROUTES TO SCHOOL TRAVEL PLAN

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Prepared by the Simonds Elementary School SRTS Task Force  
with assistance from the Central New Hampshire Regional  
Planning Commission



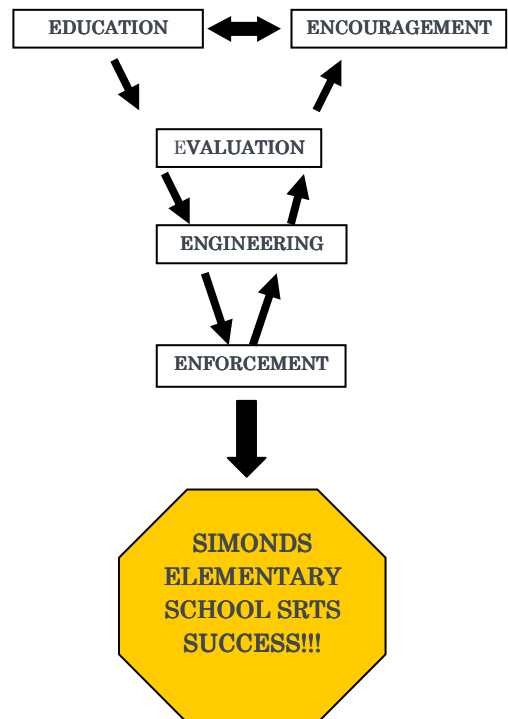
## Introduction

The purpose of the Simonds Elementary School Safe Routes to School (SRTS) Travel Plan is to identify measures that may encourage more students to bike and walk to school in Warner. This travel plan will focus on the area within a two mile radius of Simonds Elementary School (Grades K – 5).

The Simonds Elementary School SRTS Committee has sought and received funding over the last several years in an effort to improve access and safety to the elementary school campus. The committee has completed a vast amount of work to date in ensuring that access to and from the school campus is improved and that the safety of children, and parents alike, is of paramount importance in the area. This SRTS Travel Plan aims to compliment the work already undertaken by the Committee, and highlights the needs of the local community in ensuring that the Simonds Elementary School Campus becomes a safer, healthier and more sustainable education resource for the town and its surrounding areas.

Simonds Elementary school is located on Church Street in the center of the Town of Warner’s village core at the intersection of West Main Street and Kearsarge Mountain Road. During the study process a wide array of transportation data were collected, including traffic counts (speed, volume, and turn counts), a review of pedestrian and bicycle levels of service (PLOS/BLOS), and the compilation of all known accident data for the area to identify possible accident hot spots. Furthermore, a comprehensive survey was distributed to parents. Survey responses were reviewed and students at the school were asked to discuss their concerns regarding walking and biking to school. The result of the study is a list of potential projects to make walking and biking to school in Warner safer and more appealing.

This travel plan actively promotes the five E’s of a successful SRTS program – education, encouragement, engineering, enforcement and evaluation. These categories provide the framework for the recommendations of the plan. Throughout the study process the five E’s have been actively pursued and will continue to be promoted throughout the implementation phase of this SRTS Travel Plan. This SRTS Travel Plan for Simonds Elementary School is funded through a planning grant from the New Hampshire Department of Transportation.



## SRTS Recommendations

The SRTS Committee has identified the need for flashing school zone signs on Kearsarge Mountain Road located in strategic positions on the approach to the school campus. The new flashing signs will heighten motorists' awareness of hazards inherent within a school zone, calm traffic and provide children and parents with a perceptible level of security.

Furthermore, the SRTS Committee has determined based on published research, Warner Police Department and town resident input, and observations on the effectiveness of similar signs in school zones throughout the state, that the new school zone speed limit signs should be enhanced with driver feedback capability. Driver feedback signs use radar to record the motorists speed and report back the speed on a display that states: "Your speed XX mph." These signs are effective in reducing motorist speed and increasing driver awareness of pedestrians in the school zone.

As a result of this study, the committee looks toward the possibility of a significant SRTS infrastructure project in the future that might include extending the existing sidewalk northwards along Kearsarge Mountain Road to create an improved pedestrian environment for students and parents alike who have the potential to travel this route to school. The committee has also recommended that the school bus drop-off and collection point located on the elementary school campus be improved to create a safer area for kids walking to and from the waiting school buses. It is also recommended that an engineering consultant be engaged to complete a comprehensive engineering study to examine the possibility of improving pedestrian and biking facilities along Route 103 (Main Street) from Warner Village center to the Exit 9 Area.

Sidewalk improvements and additions on Geneva Street will greatly enhance the walking environment in the immediate vicinity of the school, while improved connections to the Warner Ball Fields along North Village Road will make this facility a safer, healthier and more sustainable resource for both school students and town residents.

Further potential infrastructural recommendations, listed in order of priority, are discussed in the Engineering section of this SRTS Travel Plan, as well as other general recommendations related to Education, Encouragement and Enforcement. It is the recommendation of the SRTS Committee that this travel plan serve as a key planning tool in any future infrastructural improvements in Warner Village.

The Simonds Elementary School SRTS Travel Plan has been designed as a living document which can be updated and amended as the Safe Routes program in Warner continues to grow.

## Community Organizing Efforts

The Simonds Elementary School Safe Routes to School Committee was formed in 2008 in order to promote safer and more sustainable access to and from the elementary school campus. The SRTS Committee has met approximately once every two weeks since it was formed. Participants regularly attending include representatives of the School Board and the Town of Warner, school officials, a representative of the Central New Hampshire Regional Planning Commission (CNHRPC) along with several parents and community members. The membership includes a broader list of community members who may attend from time to time, including other interested parents, teachers and representatives from the Board of Selectmen, as well as members of the Police, Fire and Recreation and Highway Departments, who are kept informed of the meeting schedule, agendas and minutes via email.

Throughout the process the Simonds Elementary School SRTS Committee has pursued an open and transparent meeting process in order to enhance public interaction and involvement.

Members of the Simonds Elementary School SRTS Committee:

<b>Name</b>	<b>Affiliation</b>
Allan Brown	Road Agent, Town of Warner
Richard Brown	Fires Chief, Town of Warner
Laura Buono	Town Administrator
Anne Carey	School Nurse
Linda Cermak	School Guidance
William Chandler	Police Chief, Town of Warner
Wendy Grimes	Office Manager
Krista Katz	Parent, Community Member
David Kurick	Selectman, Town of Warner
David Hartman	Selectman, Town of Warner
Edward Mical	Emergency Management Director
Dan Noyes	Facilities Director
Judith Pellettieri	School Principal
Kathleen Sweet	Facilities Manager, Simonds Elementary
Matt Waite	Highway Foreman, Town of Warner

School Contact Information:

Dr. Judith Pellettieri, Principal

Simonds Elementary School

14 Church Street

Warner, New Hampshire, 03278

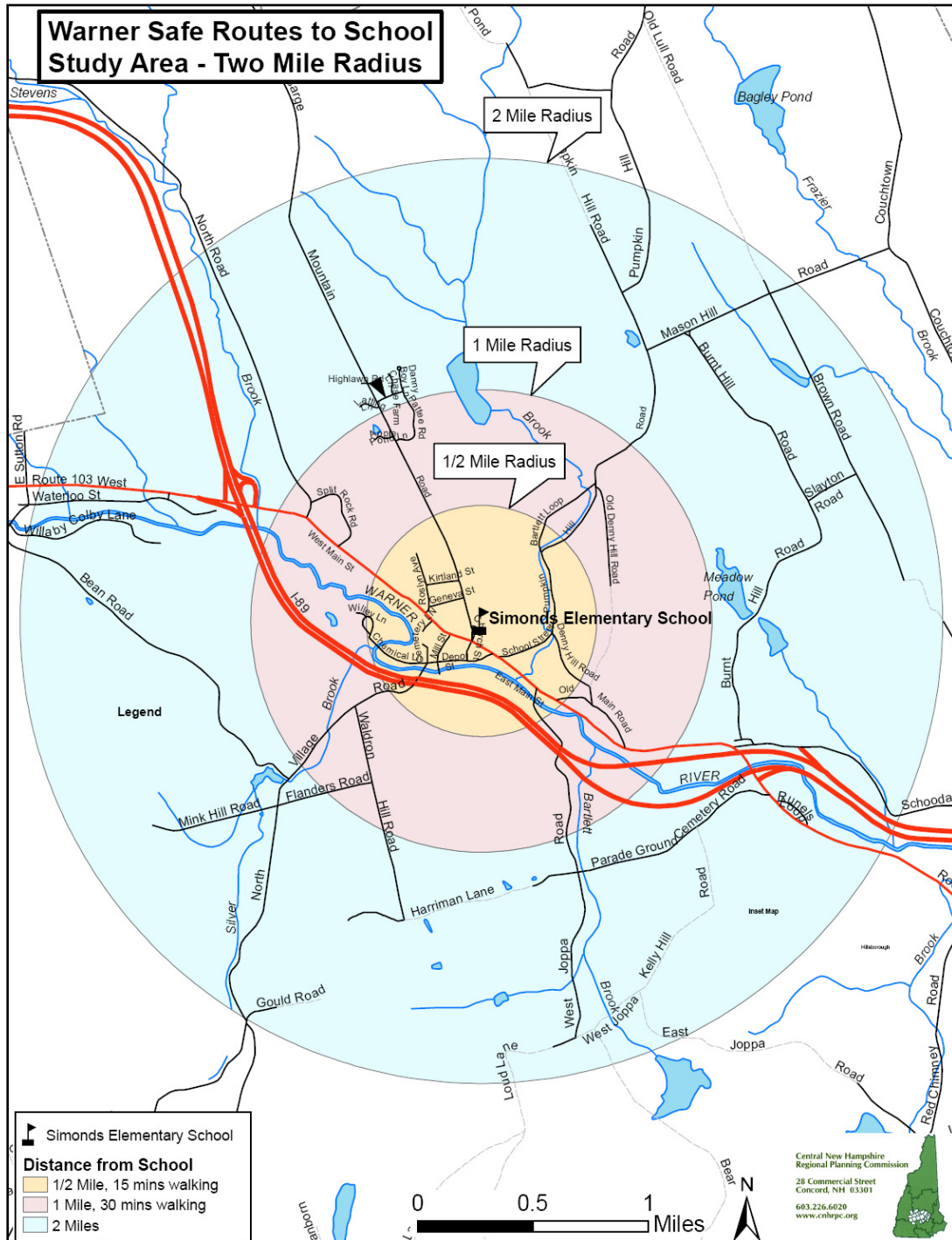
603-456-2241(phone) 602-456-3084 (fax)

[jpellettieri@kearsarge.org](mailto:jpellettieri@kearsarge.org)

### Evaluation

The evaluation completed during the SRTS study process included a review of survey responses, the compilation of traffic count data, as well as accident data and an analysis of current pedestrian and bicycle levels of service in Warner. All data discussed in this SRTS Travel Plan concerns the area consisting of a radius of approximately two miles around the Simonds Elementary School Campus.

**Map 1: Simonds Elementary School SRTS Travel Plan Study Area**



## Surveys

The SRTS Committee, in partnership with Simonds Elementary School and the Central New Hampshire Regional Planning Commission, undertook a comprehensive survey of parents whose children attend the elementary school, using standard forms and procedures for SRTS programs through a web-based survey platform known as Survey Monkey (<http://www.surveymonkey.com>). The results of this December 2008 survey revealed strong parental support for transportation enhancements in Warner which create increased opportunities for children who wish to walk or bike to school.

Predictably, safety issues are of high concern to parents in considering whether to allow their children to walk or bike to school. For example, 67% of parents identified the speed and volume of traffic in Warner as a reason why they do not allow their children to walk/bike to or from school. To the same question, 69% said that the reason was the condition of sidewalks/pathways.

The responses to the question “Would you let your child walk or bike to/from school if these problems were changed or improved?” highlight that specific transportation improvements would result in more favorable conditions for children to walk or bike to school. Just over 51% of respondents said yes if sidewalks or pathways were improved, and 41% agreed that reductions in traffic speed in the vicinity of the school would result in them looking more favorably on their children walking or cycling to Simonds Elementary School. Potential attitudes toward these issues helped to frame the SRTS Committee’s discussions and form a basis for the projects targeted for development through each phase of Simonds Elementary School’s SRTS applications.

*There is no way I'd allow my child to walk or bike down Route 103. However, if the speeds were lower and sidewalks available I'd gladly allow it. – Simonds Elementary School Parent – SRTS Survey 2008*

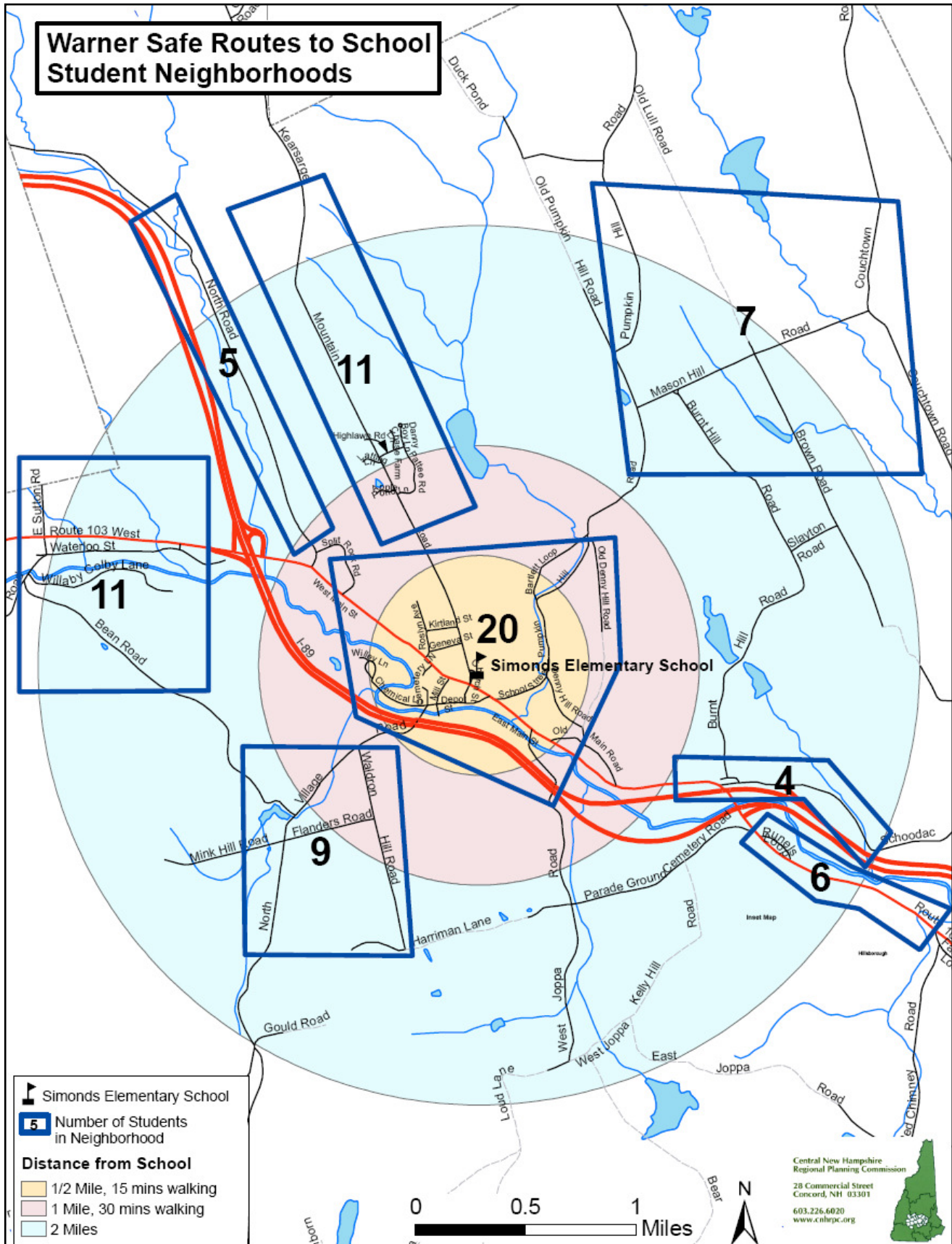
In September 2009, teachers in the elementary school completed one week walking/biking classroom tallies using the standard forms and procedures for SRTS programs. In addition, CNHRPC staff met with groups of students to further discuss the issues surrounding walking/biking to school.

The survey responses reveal that despite the relatively short distance from home to school for a number of students most have not or are not allowed to walk/bike to school. Almost 47% of respondents identified a private family vehicle as their preferred transportation option for getting to and from school. This was followed by the school bus at 42%. Only 5% of students walk to school, while not one respondent indicated that biking is the preferred transportation choice for their children. This clearly indicates that facilities for biking and walking to and from the elementary school are less than ideal, and do not present a good perception of safety. Similar results were recorded for the transportation mode of choice on leaving school.

Even though walking or using a bicycle to get to school is rare, almost 80% of parents stated that it would be healthy or very healthy for their child to walk or bike to school. Clearly, removing barriers to walking and biking would be beneficial in the minds of most parents.

Follow up surveys and traffic studies will be conducted after the infrastructure improvements are made and the results will be used to measure success and to guide an action plan for continued improvements.

Map 2: Where Students Live

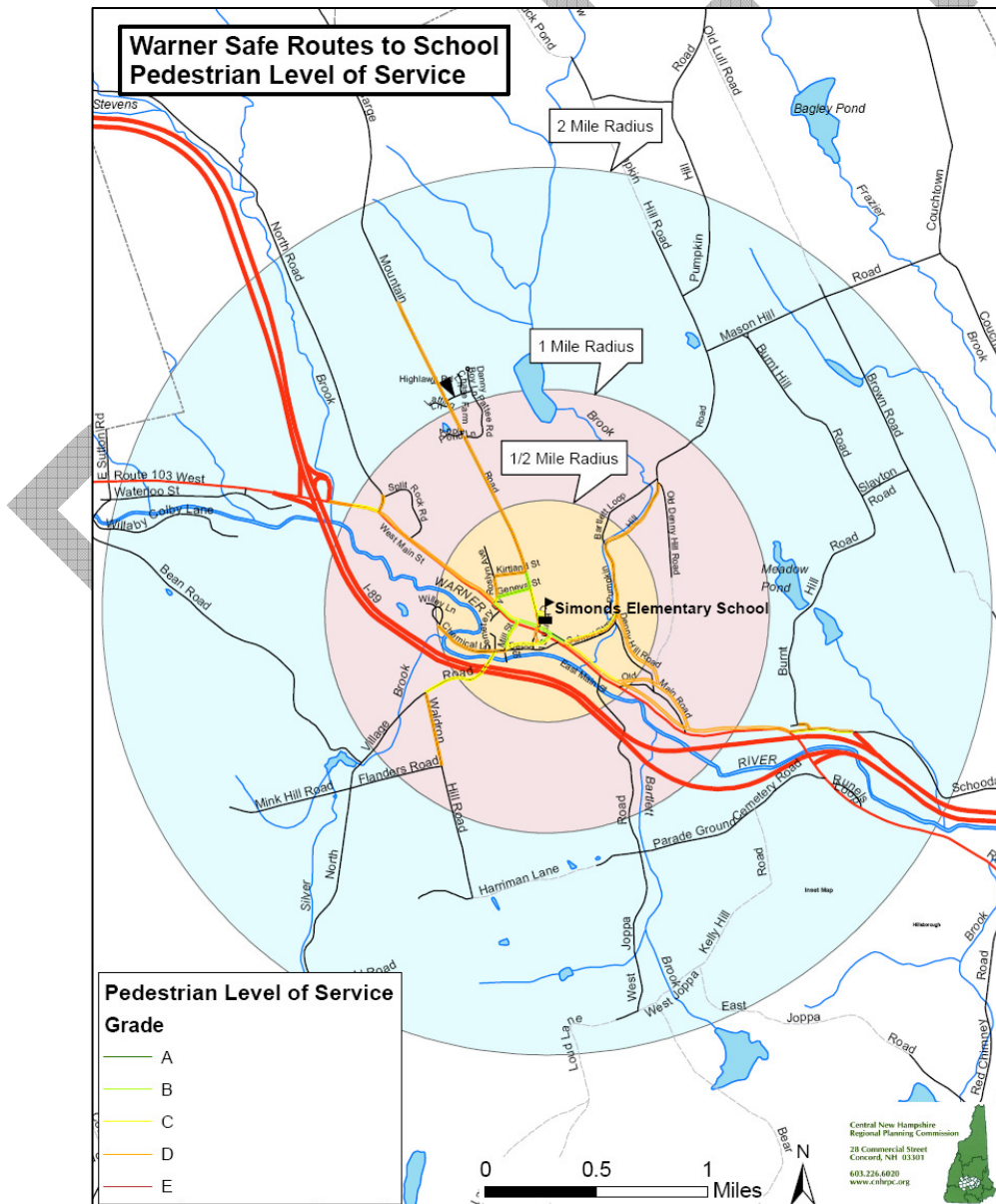


**Level of Service**

The Pedestrian Level of Service (PLOS) map below illustrates the existing sidewalk locations within the study area with its respective grade and evaluation. The PLOS calculates the walker’s perception of comfort and safety. The score does not apply to intersections (see Pedestrian Accommodation Index). Factors that increase the perception of safety for the walker include:

- Large width of the outside lane,
- Large width from outside lane stripe to pavement edge ( Shoulder, parking, bike lanes)
- High percentage of on street parking
- Large width of Sidewalk
- Large width of landscape buffer
- Close distance between trees on buffer (average)
- Low average speed of vehicles
- Multiple through lanes

**Map 3: Pedestrian Level of Service (to be edited)**

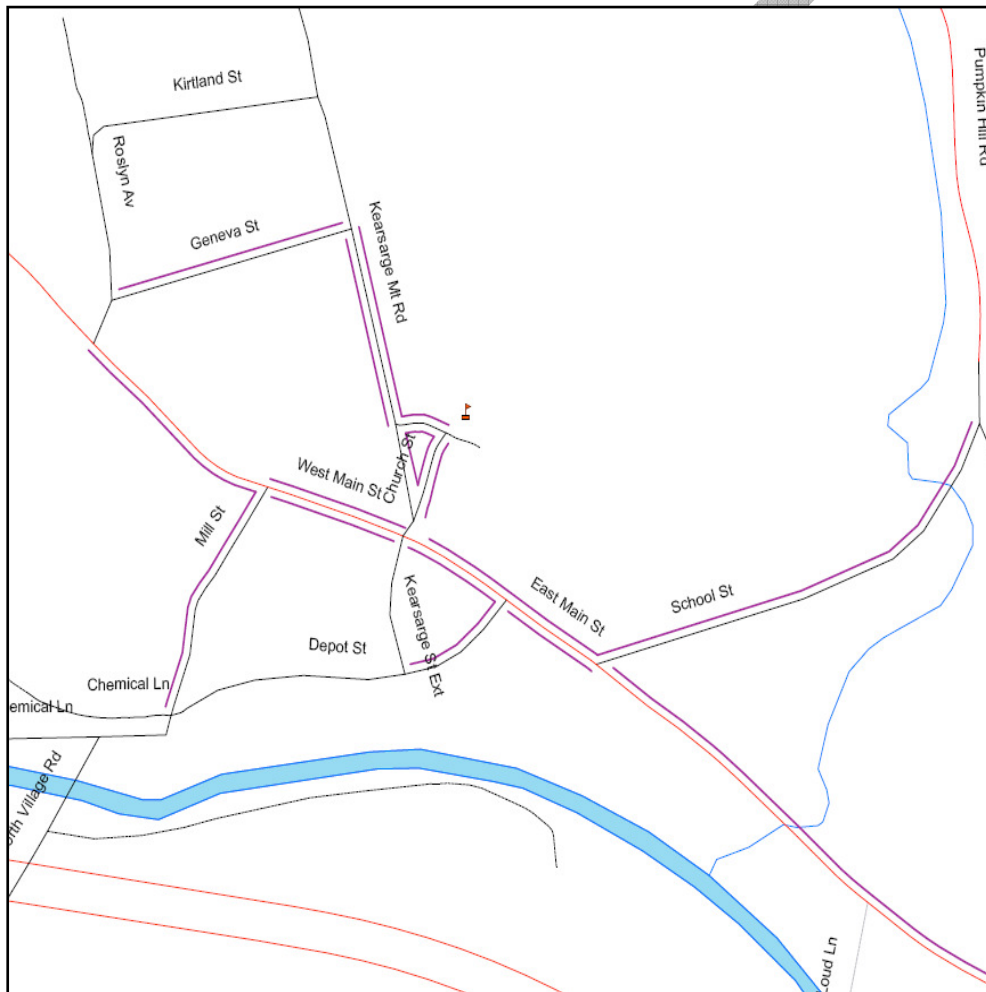




Many of the sidewalks in the immediate vicinity of the school campus received low scores in the PLOS analysis, with the exception of sections of Geneva Street and West Main Street. The need for improvements, especially near the school on Kearsarge Mountain Road and between the village and Exit 9 area, are evident when reviewing these results.

Sidewalk placement and condition is the single most important criteria in determining PLOS. In most cases, where a very low rating is received it is because of the absence of a sidewalk. The map below highlights the existing sidewalk inventory for Warner Village.

**Map 4: Sidewalk Inventory**



**Pedestrian Accommodation Index**

CNHRPC staff developed a Pedestrian Accommodation Index in order to better quantify the “friendliness” of intersections to pedestrians throughout the study area. Based on a set of specific characteristics such as crosswalk condition (or availability), approach grade, sight distance, intersection design and lighting, each intersection within the study area was analyzed and scored according to how accommodating the intersection is to pedestrians. The

index ranges from A to F, with level A representing the highest level of pedestrian accommodation and level F representing the lowest level of pedestrian accommodation.

The results of this pedestrian accommodation index are reflected below. Aside from the intersection of West Main Street and Kearsarge Mountain Road, all intersections in the study area received a grade of D or lower. In general, intersections in Warner Village are in below average condition. However, this could be directly related to the generally rural layout of the village and it is felt that the engineering recommendations contained in this plan will greatly increase safety at these key intersections.

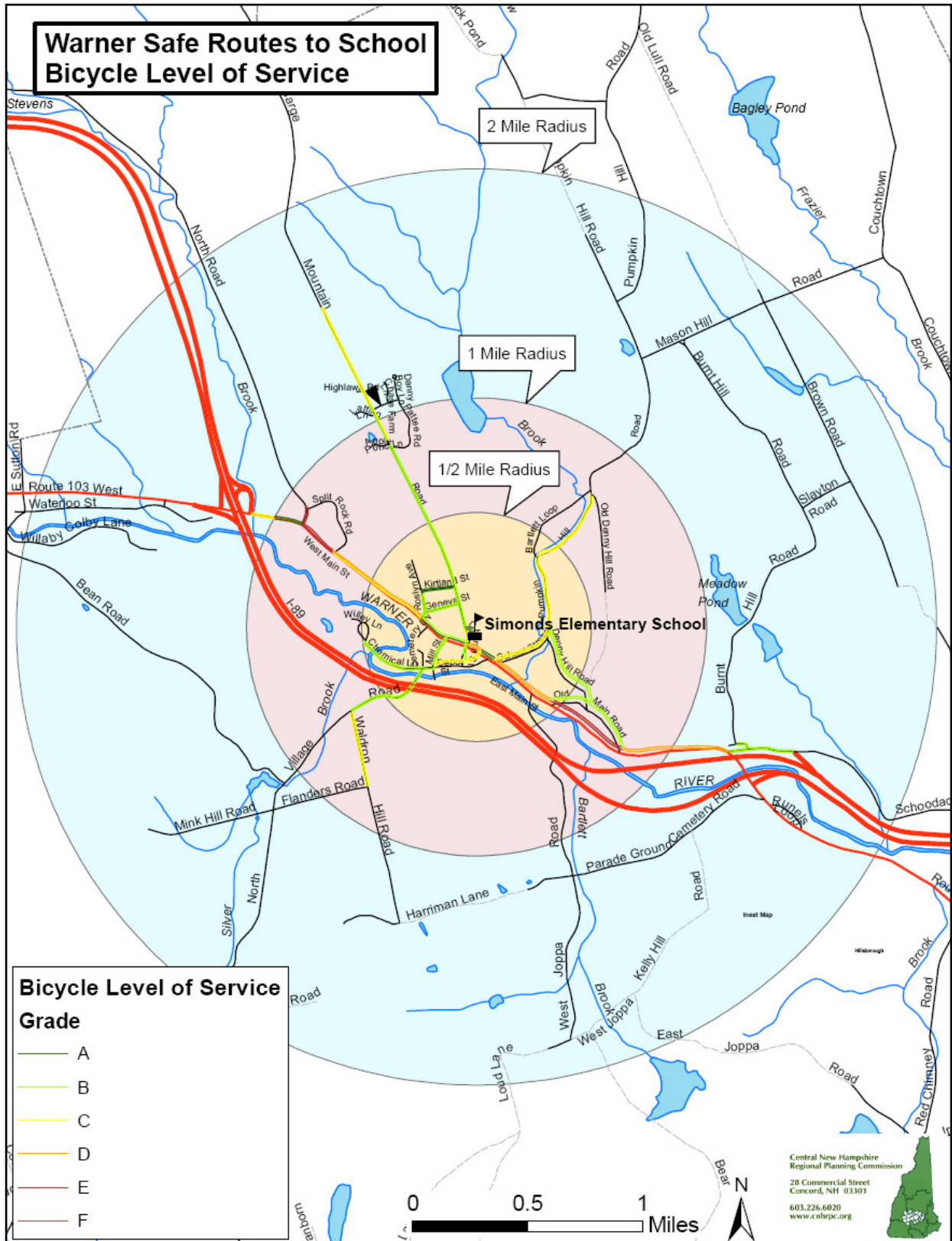
**Table 2: Intersection Pedestrian Accommodation Index Results**

Intersection	Grade
West Main Street and Kearsarge Mountain Road	C
West Main Street and Mill Street	D
Kearsarge Mountain Road and Geneva Street	D
Route 103 and North Road	E
West Main Street and Roslyn Avenue	D
School Street and Denny Hill Road	E

**Bicycle Level of Service**

A bicycle level of service analysis was also undertaken by CNHRPC staff in shared roadway environments. The analysis used criteria such as volume and composition of traffic, pavement condition, curb side lane width, presence of parking, presence of bike lanes, presence of drainage structures and traffic speeds. As indicated in the map below, there is considerable room for improvement in the study area. Specifically, sections of West Main Street (NH Route 103) received scores of D or below in the bicycle level of service analysis. This is a concern as West Main Street is a well traveled route with certain sections recording over 8,000 vehicle movements per day (See Map 7: Speed and Volume Count Locations for more detail). Clearly, improving the facilities for biking on West Main Street will improve the safety of students and town residents who wish to bike in Warner.

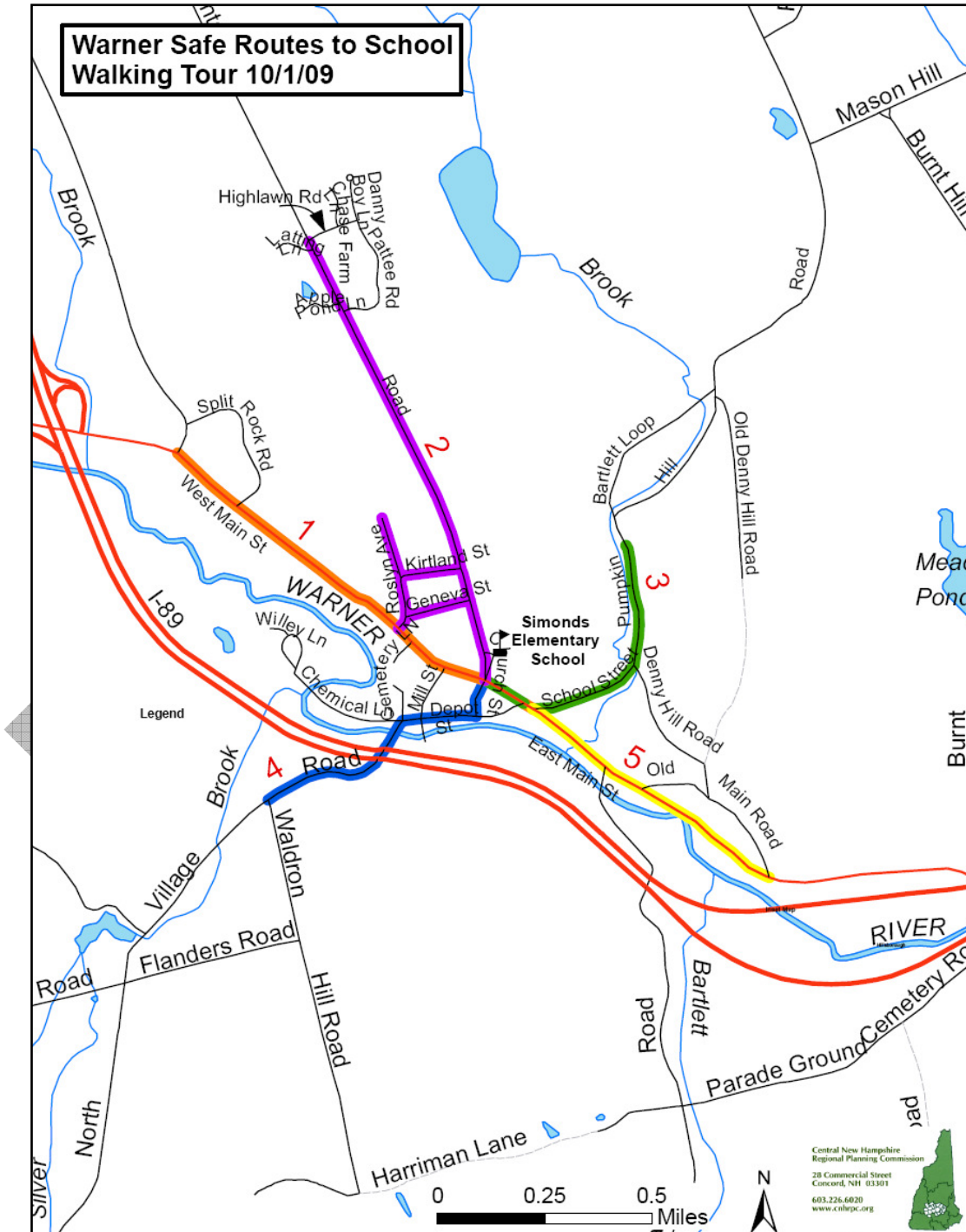
Map 5: Bicycle Level of Service



### Walking Audit

In October 2009, the SRTS Committee, accompanied by staff from the CNHRPC, carried out a comprehensive walking audit in Warner Village to examine and discuss the safety of existing and potential routes to school. The committee separated into five separate teams; each team designated a particular route, which is depicted in the map below.

Map 6: Walking Audit Routes



Factors considered during the audit were:

- Sidewalk continuity or lack of
- Sidewalk condition
- Pedestrians walking in the path of traffic due to missing or inadequate sidewalks
- Handicap accessibility
- Sight lines for both pedestrians and drivers
- Crosswalks adequately placed, visible and clearly marked
- Traffic signals adequately placed and equipped with pedestrian buttons
- Lack of traffic calming and/or lighting
- Lack of crossing guards

Each of the teams came up with a specific set of recommendations covering the 5 E's of the Safe Routes to School Program. These recommendations were then discussed in detail at a SRTS Committee Meeting. The most relevant and important recommendations were identified by the Task Force and graded in order of priority. The results of the walking audit are incorporated into the recommendations contained in this travel plan, both general recommendations and those specifically relating to engineering.

Some of the key issues identified during the walking audit process include:

- Lack of sidewalks in the vicinity of the school campus. Pedestrians have no option but to walk in the path of traffic due to missing or inadequate sidewalks
- No clear facilities for biking in Warner
- Lack of signage
- Certain sections of sidewalks are in need of repair
- Issue regarding sight lines for both pedestrians and motorists
- High speed of traffic along certain routes in the vicinity of the school

### **Speed Counts**

The speed count data displayed in the following tables was collected during a three day period in June 2009 when school was still in session. The speed analysis for this travel plan consists of providing a comparison data between the schools hours (AM and PM) with the overall speed of a week day average. The speed data was broken down by intervals of 5 miles per hour (MPH) in order to obtain more detailed information on the speed flows at different times. According to the speed data, there are many cases of vehicles that did not obey the speed limit during school hours. Of key interest is the percentage of cars traveling above the 25 mph posted speed limit on Kearsarge Mountain Road. Significant speed counts were also recorded at the Exit 9 area which again is a concern due to the high percentage of turn movements in this area and the lack of a safe and friendly pedestrian environment.

**Kearsarge Mountain Rd. North of Kirtland Ave.**

Speed		<20 MPH	21-25 MPH	26-30 MPH	31-35 MPH	36-40 MPH	41-45 MPH	>46 MPH	
School hours (7-9am, 2-4pm)	am	4	12	39	81	160	103	44	443
	pm	6	18	55	102	165	81	53	480
Percentage		<20 MPH	21-25 MPH	26-30 MPH	31-35 MPH	36-40 MPH	41-45 MPH	>46 MPH	
School hours (7-9am, 2-4pm)	am	0.90%	2.71%	8.80%	18.28%	36.12%	23.25%	9.93%	100%
	pm	1.25%	3.75%	11.46%	21.25%	34.38%	16.88%	11.04%	100%

**NH 103 Between School St. and Joppa West Rd.**

Speed		<20 MPH	21-25 MPH	26-30 MPH	31-35 MPH	36-40 MPH	41-45 MPH	>46 MPH	
School hours (7-9am, 2-4pm)	am	58	169	618	585	148	10	16	1,604
	pm	126	328	689	405	81	9	56	1,694
Percentage		<20 MPH	21-25 MPH	26-30 MPH	31-35 MPH	36-40 MPH	41-45 MPH	>46 MPH	
School hours (7-9am, 2-4pm)	am	3.62%	10.54%	38.53%	36.47%	9.23%	0.62%	1.00%	100%
	pm	7.44%	19.36%	40.67%	23.91%	4.78%	0.53%	3.31%	100%

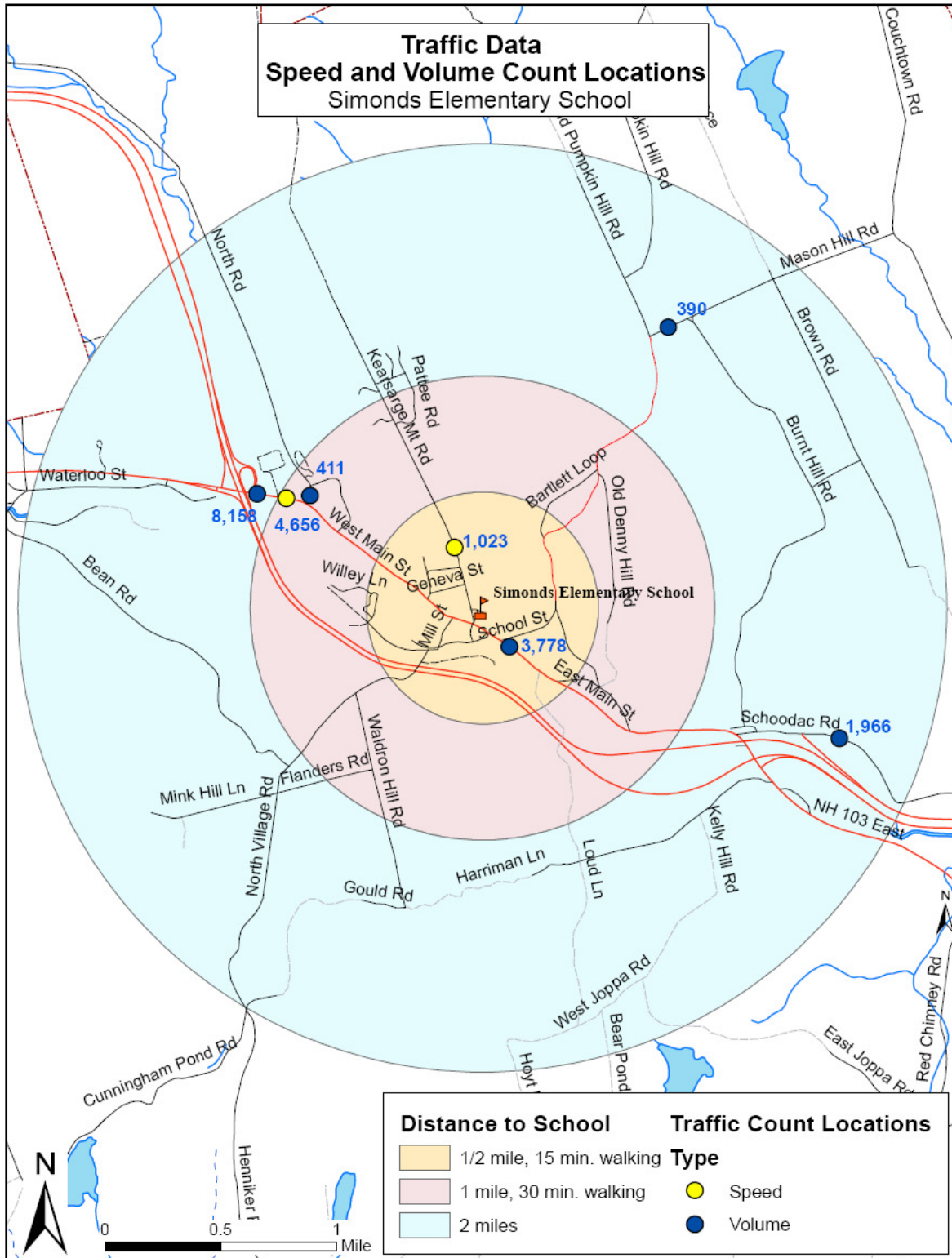
**NH 103 in Front of Park and Ride Lot**

Speed		<20 MPH	21-25 MPH	26-30 MPH	31-35 MPH	36-40 MPH	41-45 MPH	>46 MPH	
School hours (7-9am, 2-4pm)	am	495	23	95	421	590	216	62	1,902
	pm	1,080	20	89	355	450	187	54	2,235
Percentage		<20 MPH	21-25 MPH	26-30 MPH	31-35 MPH	36-40 MPH	41-45 MPH	>46 MPH	
School hours (7-9am, 2-4pm)	am	26.03%	1.21%	4.99%	22.13%	31.02%	11.36%	3.26%	100%
	pm	48.32%	0.89%	3.98%	15.88%	20.13%	8.37%	2.42%	100%

**Traffic Volumes**

Traffic volumes in the study area are represented in Map 6. Average Daily Traffic (ADT) counts in the vicinity of the school campus range from almost 3,800 in the vicinity of the school campus to just over 8,150 at the Exit 9 area, which also has the highest percentage of heavy vehicles. This is a clear safety concern given the lack of pedestrian and biking facilities connecting the Exit 9 area with the central location of the elementary school campus in Warner Village.

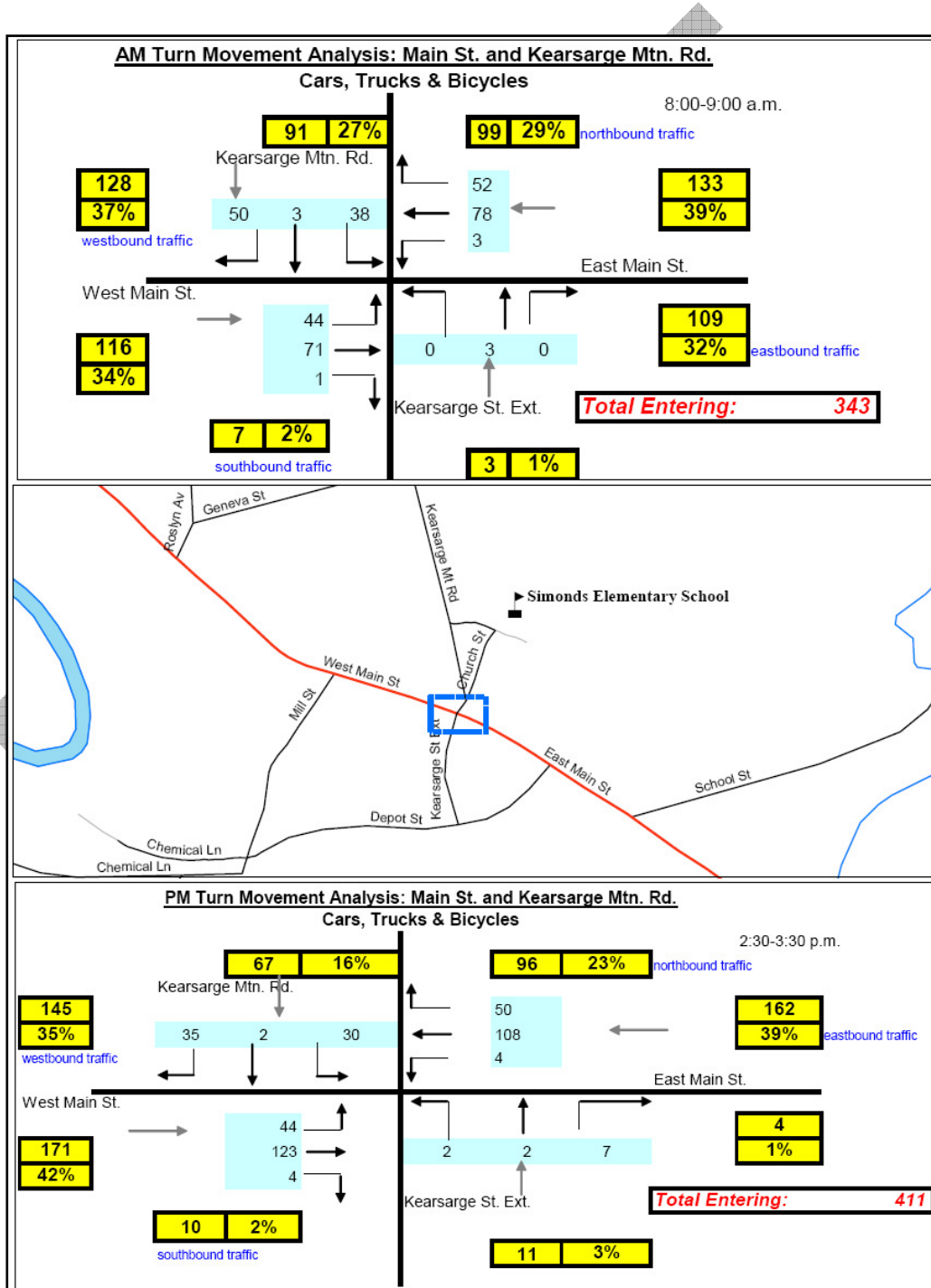
Map 7: Speed and Volume Count Locations



### Turn Count Analysis

The results of a turn count analysis within the study area undertaken by CNHRPC staff are provided below. Map 8 represents all AM and PM turn movement analysis for cars, trucks and bicycles at the busiest intersection in the vicinity of the school campus. Major turn volumes were seen in the vicinity of the school campus, with the highest AM and PM volumes recorded on Kearsarge Mountain Road and West Main Street. This highlights the importance of providing increased facilities for pedestrians on the routes leading to this intersection.

**Map 8: Overall Turn Movements**

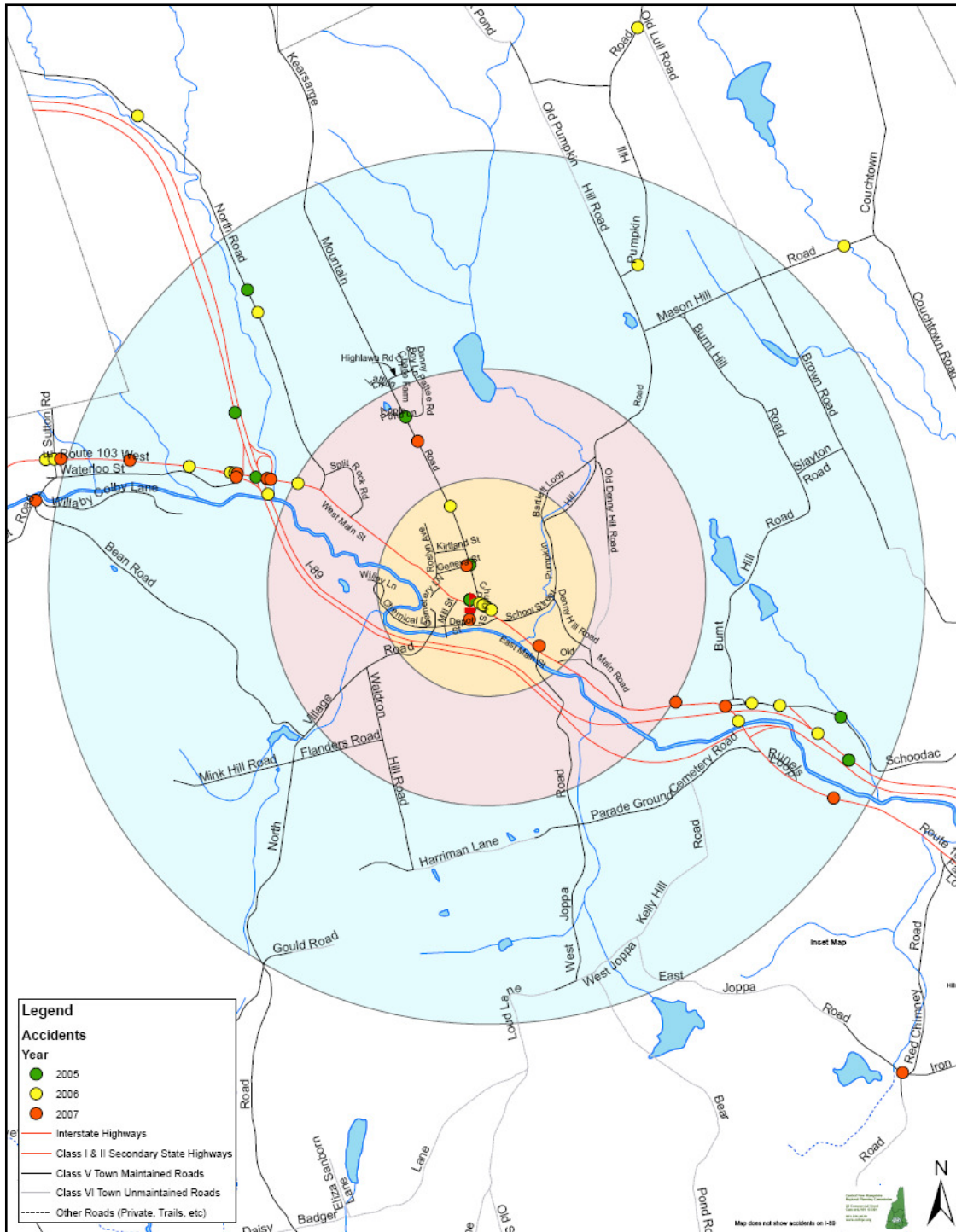




## Accident Data

Detailed accident data for the study area was collected from NHDOT and Warner Police Department reports from 2005-2007. Vehicular accidents were most common along the main routes in town, specifically Main Street, Route 103 and Kearsarge Mountain Road. More detailed accident analysis is contained in Table 4 on the following page.

**Map 9: Accident Locations 2005-2007**



**Table 3: Accident Analysis**

Location	Accidents 2005- 2007	Observations and Common Conditions
Rt. 103 East	2	Collisions with another motor vehicle and a fixed object. Road conditions were normal or unknown. Surface conditions were dry. Both accidents occurred in daylight. No one was injured.
Rt. 103 West	13	Collisions mostly with other motor vehicles or animals. Road conditions were normal or unknown. Two accidents had wet surface condition and two had snow/slush. One accident occurred at dusk and lighting conditions are unknown for two. Two accidents had one injury and there were no pedestrian or bicyclist injuries.
Depot St.	1	Collision with another motor vehicle. Road conditions were normal or unknown. Surface conditions were dry. Accident occurred in daylight. No one was injured.
Geneva St.	1	Collision with another motor vehicle. Road conditions were normal or unknown. Surface conditions were dry. Accident occurred in daylight. No one was injured.
Kearsarge Mtn. Rd.	5	Collisions mostly with other motor vehicles or fixed objects. Road conditions were normal or unknown. One accident had snow/slush. Two accidents occurred in the dark, one with streetlights off and one with streetlights on. One of the accidents had two injuries neither of which involved pedestrians or bicyclists.
Main St.	6	All collisions with other motor vehicles. Road conditions were normal or unknown. Two accidents had snow/slush. One accident occurred in the dark with streetlights on. There was one injury and no pedestrian or bicyclist injuries.
North Rd.	2	Collisions with fixed or other objects. Loose gravel was involved in one of the accidents. Surface conditions were dry and snow/slush. Both accidents occurred in daylight. One of the accidents had two injuries neither of which involved pedestrians or bicyclists.
Pumpkin Hill Rd.	1	Collision with a fixed object. Road conditions were normal or unknown. Surface conditions were dry. Accident occurred in daylight. No one was injured.
Schoodac Rd.	1	Collision due to overturning. Road conditions were normal or unknown. Surface conditions were icy. Accident occurred in daylight. There was one injury and no pedestrian or bicyclist injuries.
Total:	32	

## Education, Encouragement & Enforcement

Education, encouragement and enforcement are key elements in the process of changing people's perception of, and behavior toward walking and biking to school. The following is a summary of these activities in Warner.

### **Education**

The educational element of this SRTS program has been based on partnerships with the community. As indicated in the parental survey, the overwhelming majority of parents are reluctant to let their children walk/bike to school given current conditions. Therefore, the committee realized that it was necessary to work with parents to show them the benefits of walking and biking to school. This was accomplished in a number of different ways. First, the committee worked with the CNHRPC to develop attractive flyers and pamphlets that explained the health benefits for children of walking and biking more. Secondly, the CNHRPC works directly with the school through their Program for Alternative Transportation and Health (PATH). PATH encourages and offers incentives for the use of healthier transportation options to single occupancy vehicles (SOVs) in the 20 community region and provides people with the tools to live healthier as individuals and as parents. These efforts, which are ongoing, include setting up bicycling, walking and carpooling groups and providing emergency rides home when parents use one of those travel options to work.

Preceding the formation of the SRTS Committee, the Warner Police Department has worked to ensure that all students are adequately trained in safe walking and biking practices by offering both general and advanced bike safety instruction to school students in Warner.

The SRTS Committee also has plans to work with the Director of the New Hampshire Bike Walk Alliance, who is a nationally certified instructor with the League of American Bicyclists to teach both students and parents safe riding techniques, how to identify safe routes and how to wear the proper equipment for safe cycling. This will reinforce the excellent work already undertaken by the Police Department. In addition, the schools have plans to work with the Center for Health Promotion and the New Hampshire Hospital Association to gather and present data on the health benefits of walking and bicycling to/from school.

Due to the central location of the school campus, Simonds Elementary School has incorporated safe walking practices into its school curriculum. Students regularly walk to the town hall, Pine Rock Nursing Home, Sugar River Savings Bank, Pilsbury Free Library and the Indian Museum for school activities. These include:

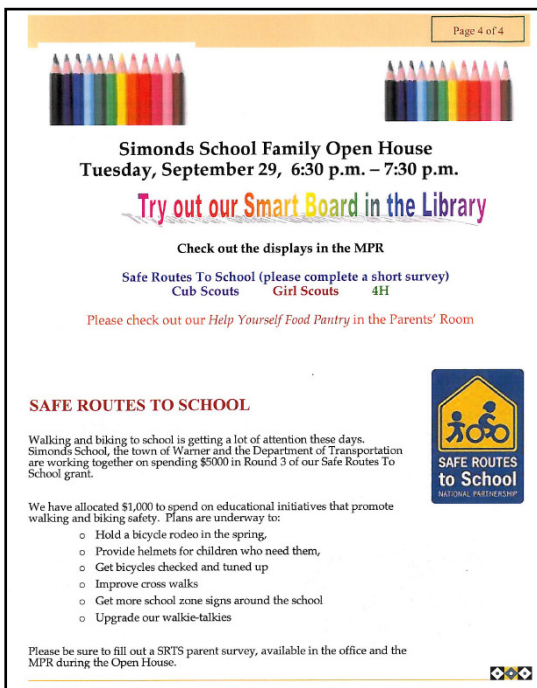
- First Grade: Sugar River Savings Bank as part of the Economics Unit in Social Studies. Pine Rock Nursing Home for St. Lucia's Day.
- Second Grade: All downtown businesses when mapping the town for Social Studies.
- Third Grade: The Warner Indian Museum.
- Fourth Grade: The Warner Historical Society for various exhibits. Warner Cemetery for Memorial Day flag placement.
- Fifth Grade: Pine Rock Nursing Home for a Halloween parade.

All grades visit the public library and participate in the annual Halloween Parade on Main Street. Weather permitting, physical education classes take place at the Warner Ball Fields at Riverside Park. Approximately 20 students walk to and from the Kearsarge Children's Center for before and after school day care. The school also has two off-site evacuation centers, both within walking distance.

With this high emphasis on walking, the school recognized the need to educate children on safe walking techniques. Annual walking drills are conducted to the off site evacuation centers, while students are instructed how to cross streets, board and disembark from buses and use the sidewalks and crosswalks in the vicinity of the school. The school's full time registered nurse works alongside the school counselor and physical education teacher to stress the importance of safety and exercise.

In addition to this class instruction, Simonds Elementary School hosts a Health and Safety Fair on a biannual basis. This fair is coordinated in conjunction with the local police, firefighters and town officials. It includes topics such as bicycle safety, nutrition and accident prevention. The Safety Fair was last held on 06/05/2009.

**Excerpt from "Simonds Says" Newsletter**



Simonds Elementary School has taken a very proactive approach to advertising its SRTS program. The school newsletter "Simonds Says" regularly notifies parents and community members about upcoming events and activities related to the SRTS program. In addition, a staff member from the CNHRPC attends all Simonds School Family Open House meetings to inform parents and community members of the ongoing SRTS program. A standard SRTS presentation is used to alert parents to the health benefits of walking and biking to school, while pamphlets, flyers and stickers advertising the program are distributed. This has been a key aspect of the educational element of this SRTS program.

The school will also host assemblies for students and parents as the infrastructure improvements are being made to help them to understand how to use the enhanced and new sidewalks and crosswalks in the study area.

**Encouragement**

Particularly given that parents perceive traffic speeds and the lack of sidewalks to be among the greatest impediments to safe pedestrian and bicycle access to Simonds Elementary School, the development of infrastructure will go a long way toward encouraging walking and biking to the school campus.

The SRTS Committee will work with the Warner Police Department and a local bicycle shop in Concord to provide bike helmets, locks and pedometers at low or no cost to students and parents. Pedometers can create a friendly competition among the students and faculty to see who can walk or bike the most in a given time. At the discretion of the elementary school principal, students will be sent home with bicycling and walking logs and offered prizes depending on the levels to which they participate. For students who live outside of the school's two mile radius, other incentives could include how much a family walks/bikes on weekends, etc.

Walking is a routine part of the school curriculum. Each April, the school holds an Intergenerational Walk as part of its physical education program. This event is organized in conjunction with New Hampshire Health Kids and takes place on the school field. Students participate in this walking event alongside parents, staff and community members.

### **Enforcement**

The town's commitment to enforcement has been evidenced by the close relationship the school district and the SRTS Committee maintain with the Warner Police Department. The Warner Police Department is truly a partner agency to Simonds Elementary School. Children have become accustomed to seeing police in the school through a variety of curriculum based presentations. The Police Department is extremely proactive with traffic enforcement, covering existing conditions in the school area during morning and evening arrival and dismissal, and being particularly keen to assist students traveling along the proposed new infrastructural enhancements to ensure maximum use. Parents are cooperative and understanding of the police presence to help arrival and dismissal run smoothly.

The Police Department diligently enforces the school speed zone. The addition of two radar speed signs planned for late 2009/early 2010 on Kearsarge Mountain Road will further aid the Police Department with enforcement. The radar signs will have a traffic calming effect by reminding drivers when they are exceeding the speed limit in the school zone. The radar signs will also have data collection capabilities compatible with Street-Smart software. This will allow the department to analyze the data to determine the most appropriate times for enforcement activities.

The Committee also has plans to have crossing guards at strategically located crosswalks. It is hoped that these crossing guards can be equipped with high quality handheld transceivers (walkie-talkies) to ensure that school arrival and dismissal runs smoothly. Crossing guards would be community volunteers or school staff, trained in the proper procedures to ensure maximum safety and reassure parents that young children are not alone on their walk to school.

## **Engineering**

The following are engineering recommendations to improve walkability and biking opportunities to and from the Simonds Elementary School Campus. While a number of recommendations relate directly to area adjacent to the school campus, several relate to Warner Village and surrounding neighborhoods. The walking and biking audit carried out in October 2009, along with concerns noted in the surveys and discussions with students influenced the recommendations. Each of these projects have been discussed in detail with the Town of Warner's Board of Selectmen, Planning Board and Department of Public Works to ensure that the recommendations contained in this SRTS Travel Plan are in line with the overall vision for the future development of the Town of Warner. The projects are listed in order of priority.

### **Priority Projects**

#### **Linking Exit 9 with Warner Village**

The segment of roadway, beginning at North Road and terminating just west of the I-89 SB ramps at Waterloo Road, carries approximately 8,000 vehicles per day and provides access to the town of Warner's main commercial district, several neighborhoods, an NH Park and Ride Lot, and Interstate I-89. There are a number of students living on West Main Street and its

approach roads who have the potential to walk or bike to school. Present conditions in the existing corridor between Exit 9 and Warner Village are less than ideal, with very few accommodations for pedestrians and bicycles. There is an existing sidewalk located on the east side of the plaza drive from the Park and Ride up to McDonalds as well as sidewalks on the North and South side of Stevens Brook Bridge (NHDOT No. 165/106. There are no crosswalks provided across Route 103. Route 103 does have a minimum 4' shoulder on each side that could facilitate bicycle traffic but it is not specifically marked. The results of the Warner Master Plan Community Survey carried out in early 2009 indicate that almost 80% of town residents are in favor of improving pedestrian and bicycle links between Warner Village and the Exit 9 area. Similar results were recorded in the SRTS Survey. Due to the complex layout of the Exit 9 area, and as West Main Street (NH Route 103) is a state highway it would be premature to recommend specific engineering recommendations along the corridor.

*Recommendations*

It is recommended that the Committee/Town of Warner investigate possible engineering projects to provide increased linkages and facilities for pedestrians and biking between the Exit 9 area and Warner Village. It is recommended that this task take the form of a comprehensive engineering study covering sidewalk design, right of way issues, drainage, lighting, construction and cost. This study shall consider all existing plans for improvements to the Exit 9 Intervale area.

Extend Existing Sidewalk on Kearsarge Mountain Road.

The existing sidewalk on the eastern side of Kearsarge Mountain Road is in good condition and is an important piece of infrastructure in the vicinity of the school campus. However, the existing sidewalk does not adequately extend to a number of residential areas on Kearsarge Mountain Road. There is a large amount of school students living in this neighborhood who have the potential to walk to school. The current lack of a sidewalk serving these areas means that those who wish to walk to school have to step out onto the road. This is a clear safety concern. The provision of a sidewalk with adequate crosswalks and roadway markings would greatly enhance the safety of pedestrians along this route.

*Recommendations*

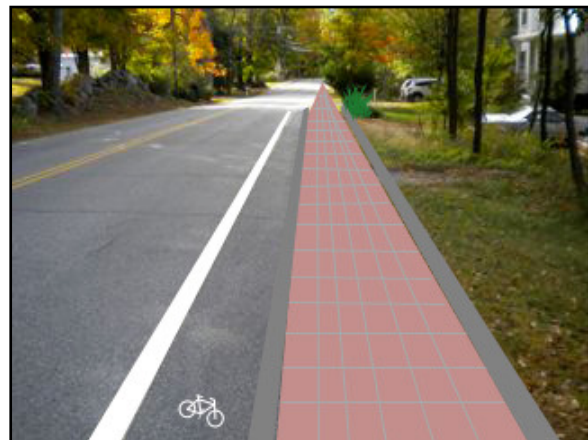
Extend the existing sidewalk on Kearsarge Mountain Road to the residential developments, both single and multi-unit, on both sides of Kearsarge Mountain Road. Compliment this sidewalk with adequate crosswalks and appropriate roadway markings to increase pedestrian and bicyclist accommodations and safety.

***Kearsarge Mountain Road***

**Existing Conditions**



**Potential Improvements**



### Radar Speed Signs on Kearsarge Mountain Road

The SRTS Committee was fortunate to receive funding for the installation of four radar speed signs on Kearsarge Mountain Road in Round 3 of the SRTS program. To ensure maximum benefit from these signs, the Committee is anxious to complement the signs with roadway striping and markings to further alert motorists to the potential for pedestrian and bicycle traffic.

#### *Recommendations*

Work with NHDOT and the Warner Police Department to determine the best location for the radar signs on Kearsarge Mountain Road. Subject to agreement with the NHDOT, investigate the possibility of providing brightly colored roadway striping and markings to further alert motorists that they are entering a school zone.

### School Bus Drop Off & Collection Point

The existing school bus drop off and collection point to the west of the elementary school building is in extremely poor condition. The existing gravel road has a very poor surface, and there is no delineation between the school bus waiting area and the recreation spaces on either side of the roadway. When the weather is bad, kids who arrive by school bus often have to step down into mud, rain puddles and grass. As well as not being healthy, this is also a clear safety concern.

#### *Recommendations*

Resurface the existing gravel drop-off collection point for the school buses. Construct a sidewalk to ensure kids have a safe route from the school bus drop-off/collection point to the school entrance. The existing conditions in this area indicate that there may be drainage issues. It is recommended that the Committee/Town of Warner investigate the possibility of using pervious concrete/paving to resurface this area. Some simple landscaping improvements are also recommended in order to further delineate the school bus route with the student's recreation space. This will increase safety as well as improving the aesthetics of the space.

### ***School Bus Drop-Off/ Collection Point***

#### **Existing Conditions**



#### **Potential Improvements**



### Sidewalk Addition on Geneva Street

The current sidewalk on Geneva Street ends as it nears West Main Street (NH Route 103). Children and pedestrians must step down into the road on Geneva Street to approach the busy intersection crosswalk. Without the benefit of a sidewalk on which to wait to cross, the safety of school students and the residents of the Town of Warner is compromised. This project, funded through Round 3 will have an immediate impact on the safety of students on their way to and from school, while also improving the pedestrian route from the school campus to the Town of Warner ball fields.

#### *Recommendation*

Extend the existing sidewalk on Geneva Street to the intersection with Route 103 to provide a safer walking environment for school students and pedestrians.

### Install and Design Sidewalk on North Village Road

The Town of Warner ball fields are used by school students for gym classes, as well as town residents for general recreational purposes. At present, access to the ball fields is not safe for pedestrians and it is felt that sidewalk improvements in this area along with the delineation of walkways would greatly increase safety in Warner, as well as providing a safer route from the ball fields to the school campus for the large number of students who use this route on a daily basis.

#### *Recommendations*

Construct sidewalk along North Village Road from the Mill Street/Depot Street area to the intersection of Chemical Lane. Compliment this sidewalk with appropriate crosswalk and delineated walking paths across the bridge.

### Village-wide Sidewalk & Crosswalk Improvements

The town of Warner has a solid inventory of sidewalks and crosswalks currently in place in the village center which greatly add to the pedestrian environment. The sidewalks are also of major aesthetic importance to the town. As with all sidewalks and crosswalks, certain sections need repair over time to maintain safety.



#### *Recommendations*

It is recommended to improve the existing sidewalks throughout the two mile study area in line with the Town of Warner's sidewalk maintenance program. Specific areas highlighted for improvement include:

- West Main Street
- Mill Street
- Depot Street
- Kearsarge Mountain Road

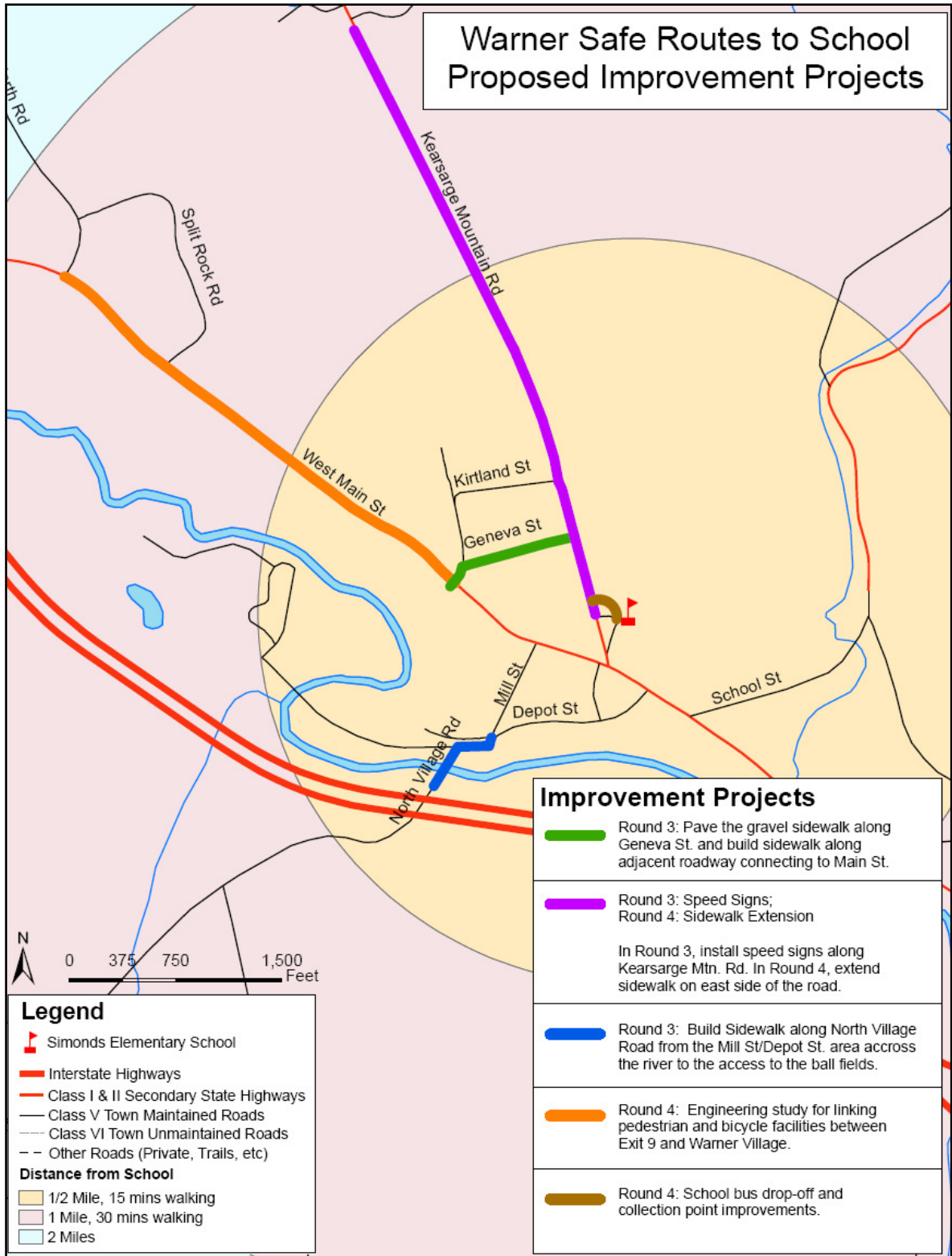
It is also recommended to increase the visibility of all crosswalks in the area and install pedestrian signage and weebles at major crossings in the vicinity of the school campus



**Warner SRTS Project Map**

Map 10 displays potential infrastructural improvements in the study area.

**Map 10: Warner SRTS Potential Projects**



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