Jaffrey-Rindge Middle School

Safe Routes to School Action Plan

SafeRoutes

JAFFREY-RINDGE
COOPERATIVE SCHOOL DISTRICT

HOME OF THE CARDINALS

This page left intentionally blank

Jaffrey-Rindge Middle School

SAFE ROUTES TO SCHOOL ACTION PLAN

ACKNOWLEDGEMENTS

During the 2016/2017 school year, Principal Clark and the Jaffrey-Rindge Cooperative School District (JRCSD) wellness committee worked with Southwest Region Planning Commission (SWRPC) to develop a Safe Routes to School Action Plan for Jaffrey-Rindge Middle School (JRMS). JRMS and SWRPC are grateful for the contributions provided by these individuals.

Funding for this document was made possible, in part, by the Centers for Disease Control and Prevention through the Partnership to Improve Community Health initiative. The views expressed in this document do not necessarily reflect the official policies of the Department of Health and Human Services, nor does the mention of trade names, commercial practices, or organizations imply endorsement by the United States Government.

JAFFREY-RINDGE
COOPERATIVE SCHOOL DISTRICT

Southwest Region Planning Commission

Healthy MONADNOCK

This page left intentionally blank

Jaffrey-Rindge Middle School

SAFE ROUTES TO SCHOOL ACTION PLAN

TABLE OF CONTENTS

INTRODUCTION 1
- What is Safe Routes to School? 1
- Benefits of SRTS 2

STUDY AREA 3
- JRMS Study Area and Student Location Map 4
- JRMS Walking Distance Map 5

EXISTING CONDITIONS 6
- Results of Field Observation 6
- In-Classroom Travel Tally 8
- Parent Survey 9
- Pedestrian Infrastructure 14
- Traffic Conditions 16

RECOMMENDED STRATEGIES 22

IMPLEMENTATION 25

APPENDIX A: SRTS In-Classroom Travel Tally

APPENDIX B: SRTS Parent Survey

APPENDIX C: Jaffrey Traffic Studies Report

LIST OF MAPS

JRMS STUDY AREA MAP 4

JRMS WALKING DISTANCE MAP 5

JAFFREY PEDESTRIAN INFRASTRUCTURE MAP 15

Students walking on School Street in Jaffrey. Image credit: SWRPC

INTRODUCTION

What is Safe Routes to School?

Safe Routes to School (SRTS) is a program with a simple goal: to improve the health and wellbeing of children by creating safe and convenient opportunities to walk and bike to school. Safe Routes to School programs employ a combination of evaluation, education, encouragement, enforcement and engineering strategies to address the specific needs of their school(s). This comprehensive approach, called the five (5) E's, is centered on an understanding that the barriers to safe walking and bicycling are both behavioral and physical. In 2015, the Safe Routes to School National Partnership introduced a sixth (6) E, Equity.

EDUCATION	Ensure that everyone learns how to travel safely
ENCOURAGEMENT	Promote walking and biking in the school community
ENGINEERING	Design streets for safety and predictability
ENFORCEMENT	Enforce traffic safety laws and target risky behaviors
EVALUATION	Track progress toward our shared safety goals
EQUITY	Increase access and opportunity for all residents, including disadvantaged, minority, and low income populations

EDUCATION

ENCOURAGEMENT

ENGINEERING

ENFORCEMENT

EVALUATION

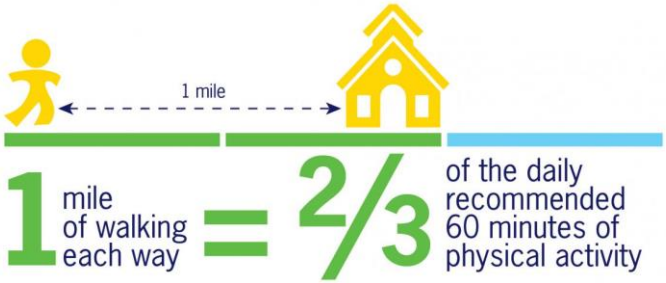
EQUITY

Benefits of Walking and Bicycling to School

Walking and bicycling to school is a fun and healthy activity that has numerous benefits for students, parents, and teachers.

- Safe Routes to School (SRTS) programs create a safer travel environment near schools by reducing motor vehicle congestion at school drop-off and pick-up zones.
- Students that choose to walk or bike to school are rewarded with the benefits of a more active lifestyle, as well as the responsibility and independence that comes from being in charge of the way they travel.
- By adopting Safe Routes to School programs, schools can improve students' health and readiness to learn without taking time away from existing school-day activities or placing additional burdens on teachers.

SRTS programs offer additional benefits to neighborhoods by helping to reduce school-related traffic and providing infrastructure improvements that facilitate walking and bicycling for everyone. In addition, by walking or bicycling, students encounter each other (and their other neighbors) on the way to school, increasing the feeling of community and social support.



One mile of walking each way is 2/3 of the CDC's recommended 60 minutes of physical activity for children.

Above: A crossing guard helps a student cross Stratton Road in front of JRMS.

STUDY AREA

JRMS is located on Stratton Road southeast of the 5-way intersection of NH Route 124, NH Route 202, Stratton Road, and Blake Street, as shown in Figure 1 below. The school is within walking distance of several neighborhoods and the downtown center. The school includes grades six through eight and enrolled 304 students at the beginning of the 2016-2017 school year. Of these, 24% lived within a mile walking distance of the school, and 40% live within a 2 mile walking distance. The JRMS Study Area map on the next page shows the extent of the study area for this Plan and where students live within the study area. The JRMS Walking Distance Map on page 5 shows students who live within a ¼-mile, ½-mile, 1-mile, and 2-mile walking distance of JRMS.

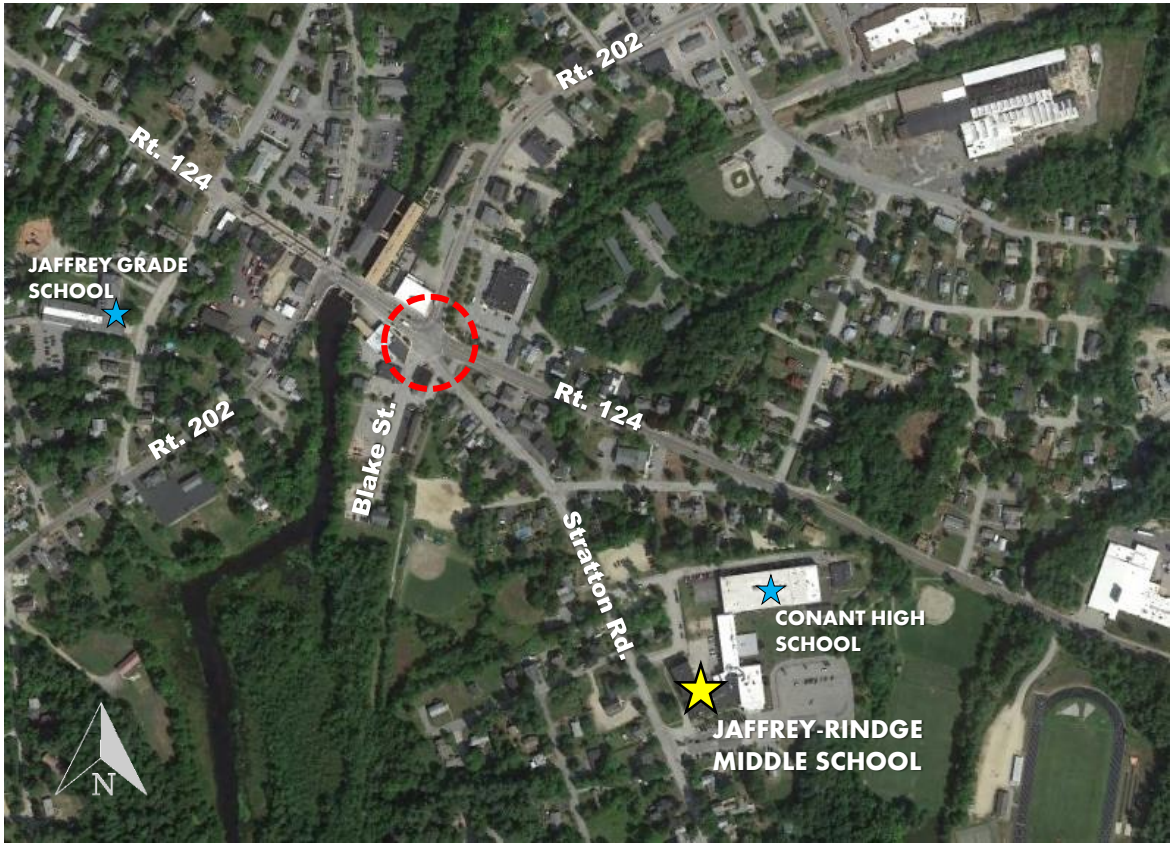
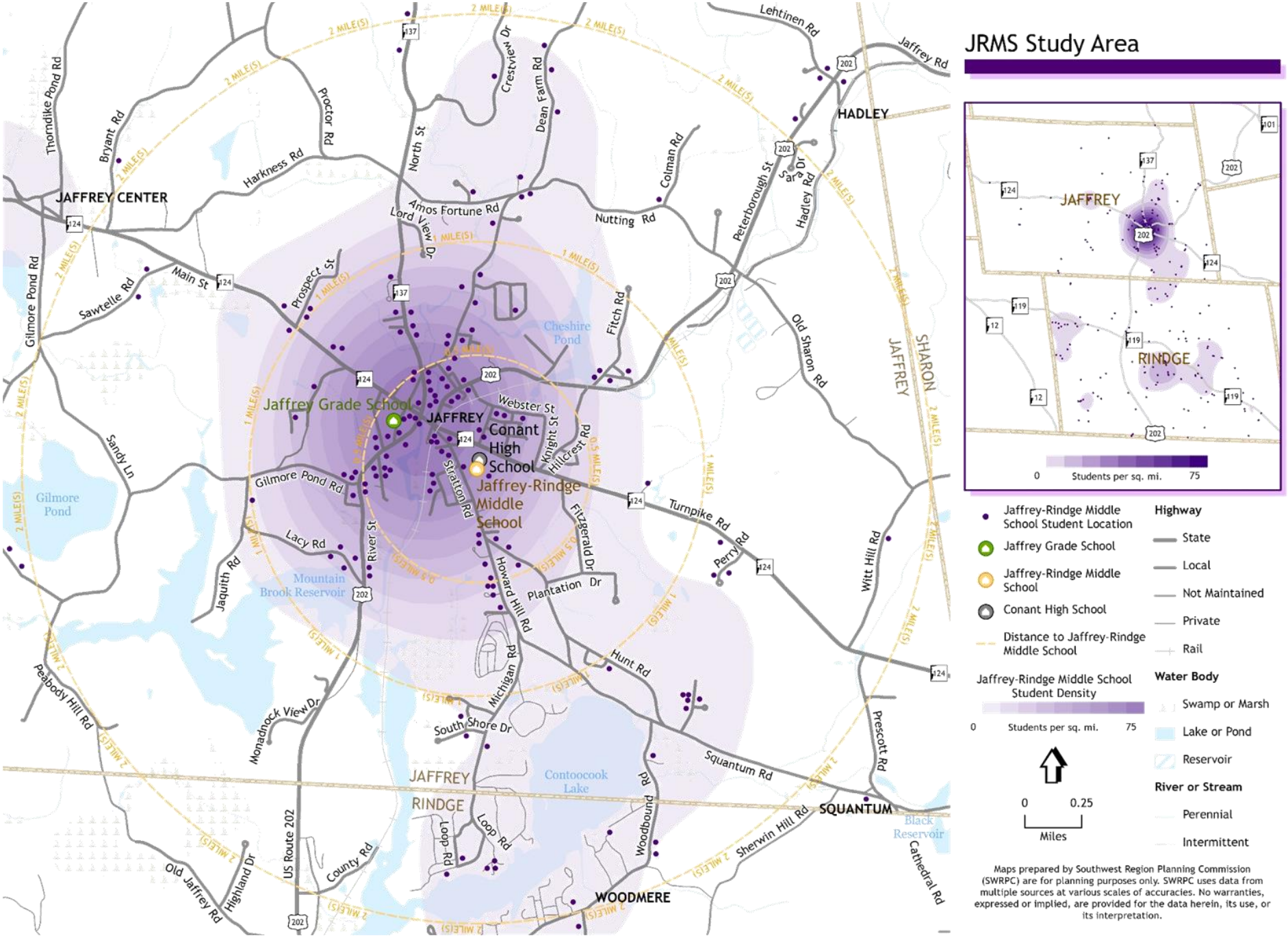


Figure 1. Aerial view of JRMS in proximity to downtown Jaffrey, Conant High School, and Jaffrey Grade School.

Legend

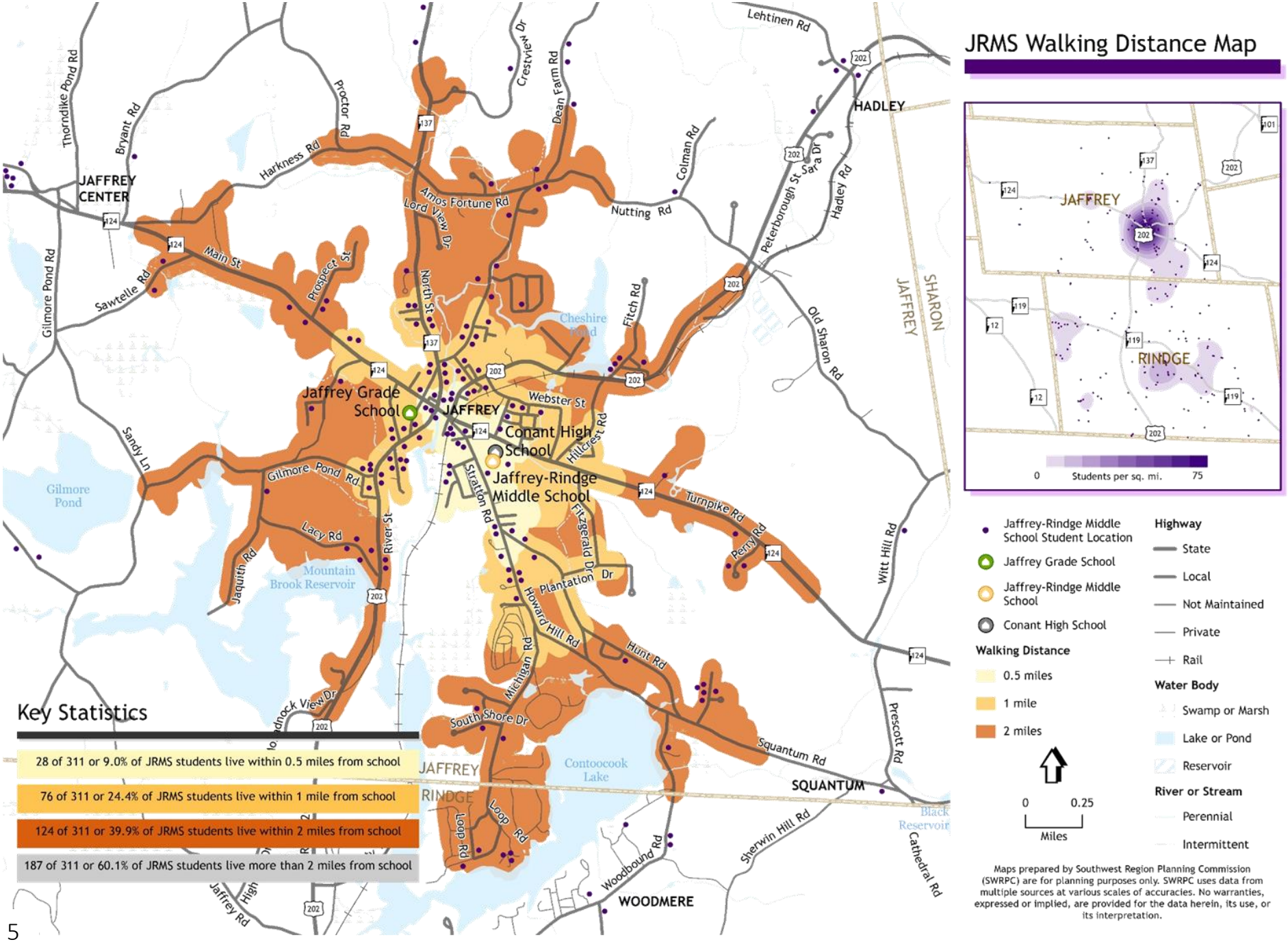
- Location of JRMS
- Locations of Conant High School and Jaffrey Grade School
- Location of 5-way intersection in downtown Jaffrey

JRMS Study Area & Student Location Map



Note: Student location data is from December 2016.

JRMS Walking Distance Map



Note: Student location data is from December 2016.

EXISTING CONDITIONS

To better understand existing travel conditions within the study area, SWRPC staff worked with JRMS to conduct a field observation to review the behaviors and travel patterns of walkers, bicyclists, buses, and motorists at JRMS during drop off and pick-up hours. In addition, SWRPC staff worked with the school to conduct the National Safe Routes to School In-Classroom Travel Tally and Parent Survey about Walking and Bicycling to School, assessed pedestrian infrastructure conditions near the school, collected traffic speed and volume data at four locations near the school, conducted a pedestrian yield compliance study at the intersection of Peterborough St./Rt. 202 and Turnpike Rd./Rt. 124, and conducted a stop sign compliance study at the intersection of Squantum Rd. and Howard Hill Rd. A review of these observations and analysis is summarized in the following sections.

Results of the Field Observation

SWRPC staff conducted a field observation at JRMS on Thursday, October 13, 2016 during morning arrivals and afternoon departures. The goal of the field observation is to better understand travel patterns on or near the school campus and identify potential safety concerns. School starts at 7:25 a.m. and lets out at 2:12 p.m.

WALKING AND BICYCLING

The majority of students who walk or bike to Jaffrey-Rindge Middle School (JRMS) arrive via Stratton Road and cross at the crosswalk located directly in front of the school with assistance from a crossing guard, as shown in Figure 2. On the day of the observation, 23 students walked to school and 55 students walked home from school. Six students road their bicycles. Bicyclists used the sidewalk and crosswalk rather than ride in the road.

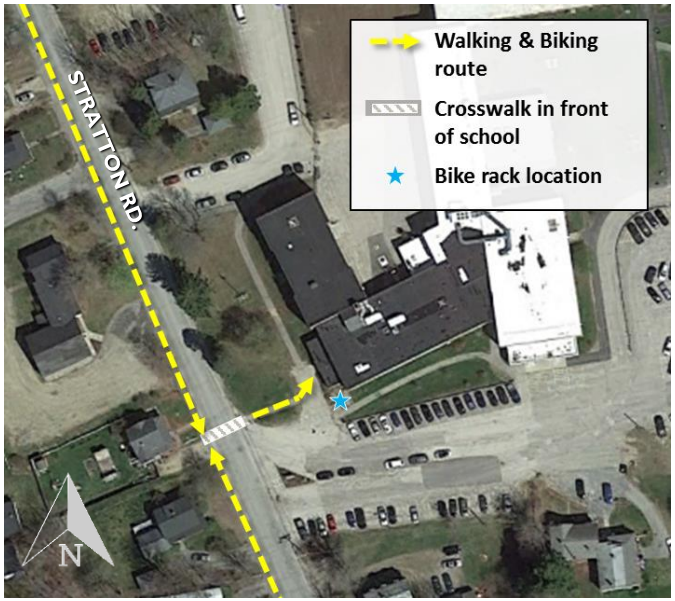


Figure 2. The student walking and bicycling routes to JRMS, shown in dashed yellow lines.

The only major safety concern noted during the field observation was the high amount of traffic on Stratton Road where students must cross to get to the school. However, the presence of a crossing guard and traffic controller at this location addressed this safety concern.

Results of Field Observation (Continued)

PARENT DROP-OFF & PICK-UP

Parents drop off and pick up their children using the one-way loop just north of the school, shown in red in Figure 3. Parents park on either side of the traffic loop to drop off their children (shown in yellow). There are two crosswalks in the parent drop-off area as well as a paved sidewalk on the school side of the road and a paved shoulder on the opposite side of the road from the school.

During parent drop-off, several students were observed crossing at unmarked locations to get to the school. This is a safety concern in an area where cars are pulling into and out of parking spaces on both sides of the road because it can be difficult to see students as they cross the driveway. Parent traffic became congested and backed up in front of the area where students cross to get to school. This area is indicated in Figure 3 with a green star. In addition, parents were observed idling their cars during pick-up, which negatively impacts the air quality near the school.

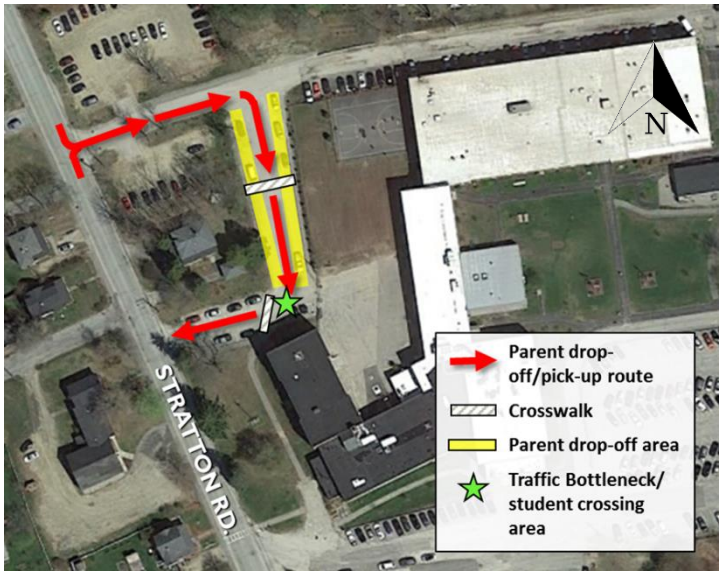


Figure 3. JRMS Parent drop-off and pick-up area.

BUS DROP-OFF & PICK-UP

Buses drop off and pick up students in the high school parking lot behind the middle school using the route shown in yellow in Figure 4. On the north and west sides of the parking lot, the bus drop-off and pick-up lane is separated from high school parent and student vehicle traffic by a railing.

In general, bus drop off and pick up proceeded smoothly, however some high school student drivers were observed speeding through the parking lot. This poses a safety concern for students who walk across the parking lot to get to their bus in the afternoon.

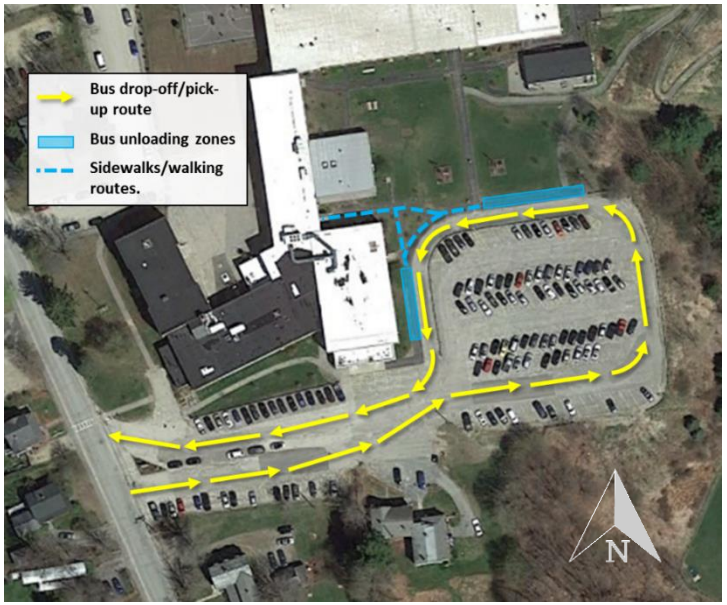


Figure 4. JRMS bus drop-off and pick-up route.

Results of the In-Classroom Tally

The National Safe Routes to School In-Classroom Student Travel Tally was administered by 24 classrooms at JRMS in mid-October 2016. Teachers surveyed students each morning and afternoon for three consecutive days (Wednesday – Friday) on their mode of travel to and from school. An average of 286 students (94%) shared their arrival modes each day and an average of 278 (91%) shared their departure modes. The results of the travel tally are shown in Figure 5 and Table 1 below. The tally form can be found in Appendix A of this document.

In the morning, an average of 28 students, or 10% of the student body, walked to school. This number increases to 51 (18%) for the afternoon. An average of eight students reported bicycling to and from school. The majority of students either took a bus or rode in a family vehicle to get to and from school; in the morning an average of 236 students (83%) arrived by bus or family vehicle, and in the afternoon an average of 212 students (76%) departed by bus or family vehicle. Approximately fourteen students (5%) carpool to school, and seven (3%) carpool home from school.

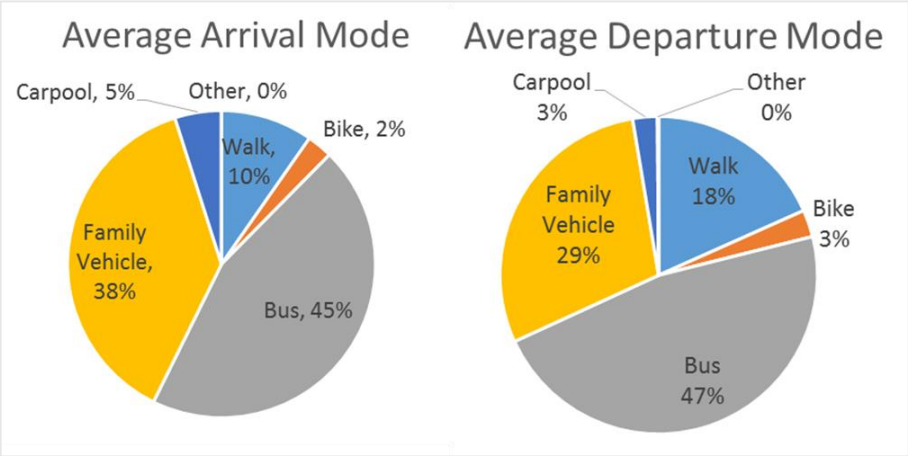


Figure 5. Average arrival and departure modes at JRMS, given in percentages.

Arrival/ Departure mode	Average # students	
	Morning	***Afternoon***
Walk	28	51
Bike	8	8
Bus	128	131
Family Vehicle	108	81
Carpool	14	7
Other	0	0

Table 1. Arrival and departure modes at JRMS, in average number of students.

Results of the Parent Survey

The parent survey collects information from parents about how their children travel to and from school and what concerns parents have about their child walking or biking to school. This information is used to help identify strategies to improve safety and increase convenience for students who already walk and bike to school, as well as address barriers for students who do not currently walk or bike to school. The National Safe Routes to School Parent Survey about Walking and Biking to School can be found in Appendix B.

JRMS conducted the parent survey during the 2016-2017 school year. Thirty-five households responded to the Parent Survey, representing a total of 61 students in grades K-8. The breakdown of JRMS grades represented in the survey is shown in Figure 6.

The primary arrival mode, as indicated by parents, is family vehicle (38% of households) followed by walking and the school bus (26% of households) and carpooling (9% of households). In the afternoon, the primary departure mode is walking (47%) followed by school bus (41%) and family vehicle (12%). No households reported bicycling to or from school.

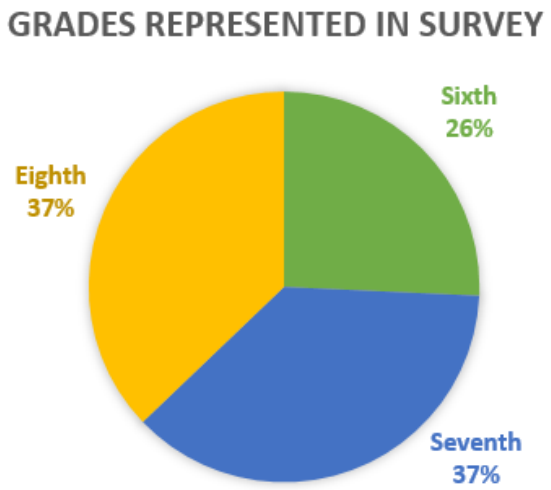


Figure 6: Breakdown of grades represented in the JRMS Parent Survey about Walking and Biking to School.

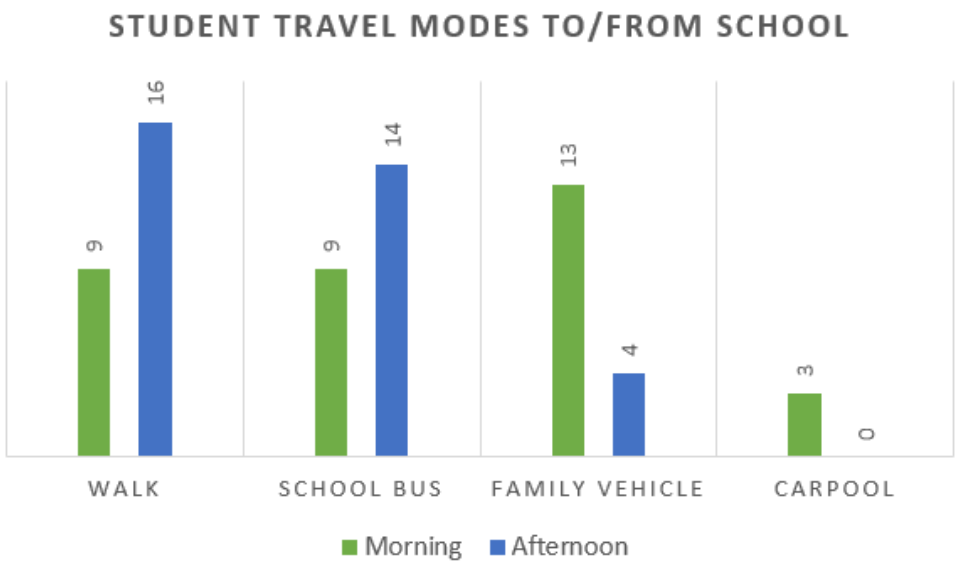


Figure 7: JRMS student arrival and departure modes, as reported by parents.

Results of the Parent Survey (Continued)

Figure 8, below, compares travel modes of students who live within a mile of school to students who live more than a mile from school. Households within a mile of school were more likely to report that their child walked to and from school, and households that live a mile or more from school were more likely to report that their child rode in a family vehicle or carpooled.

Table 2 on the right shows parent responses to the question "At what grade would you allow your child to walk or bike to/from school without an adult?" Results vary by distance from school; the majority of households that are within a mile of school reported that they would feel comfortable allowing their child to walk to school by grade six (86%). One third (33%) of households that are 1 mile or greater from school would not feel comfortable allowing their child to walk to school without an adult at any age.

Grade parent would allow child to walk to school without an adult	Less than 1 Mile from School	1 Mile or Greater from School
Four	3	0
Five	3	1
Six	6	6
Seven	1	5
Eight	1	0
Not comfortable at any age	0	6

Table 2. Grade parents would allow their child to walk or bike to/from school without an adult, by distance from school.

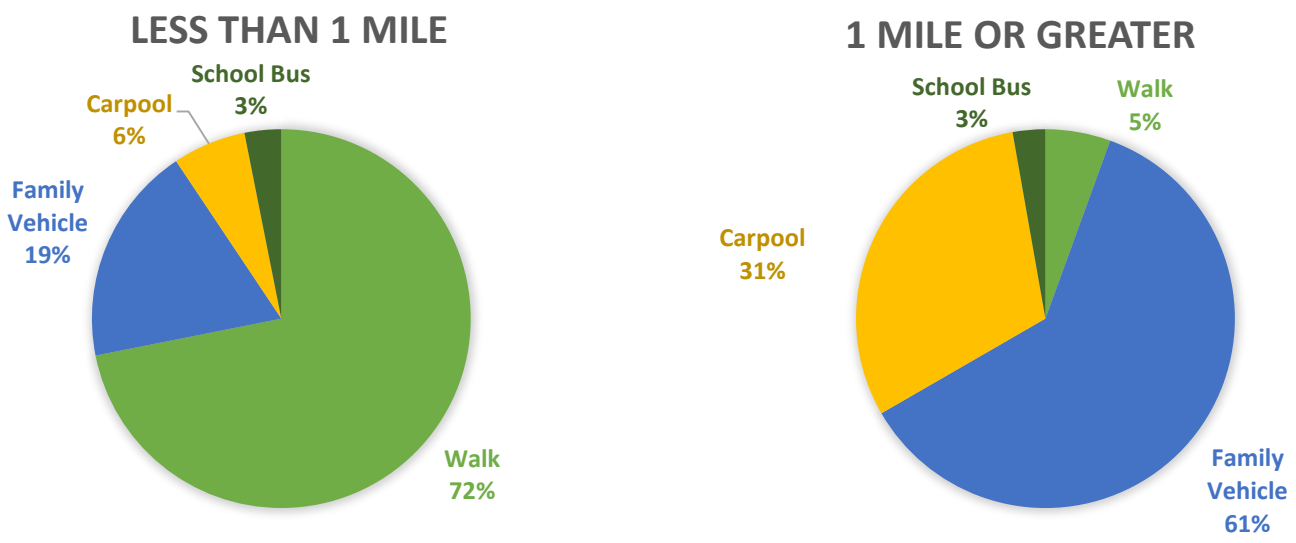


Figure 8. JRMS student travel modes (average of arrival and departure modes) by distance of family home from school, as reported by parents. Note: 2 respondents did not know how far they live from school; these responses are not included in this figure.

Results of the Parent Survey (Continued)

Figure 9 shows responses to the question, "What of the following issues affected your decision to allow, or not allow, your child to walk or bike to/from school?" The top issues reported were "Sidewalks and Pathways" and "Distance" (50% of respondents), followed by "Speed of Traffic Along Route" (44%) and "Weather or Climate" (41%).

Figure 10, below, shows parents responses to questions about how much the school encourages walking and biking to school, how fun walking to school is for their child, and how healthy walking to school is for their child.

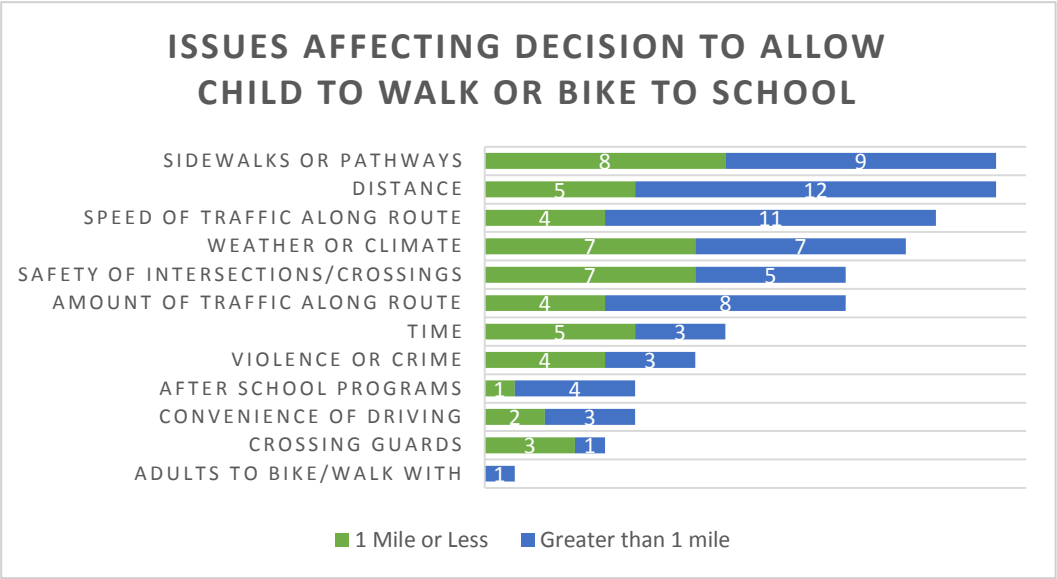


Figure 9. Issues affecting the decision to allow, or not allow, students to walk or bike to/from school by distance from school, as reported on the parent survey.

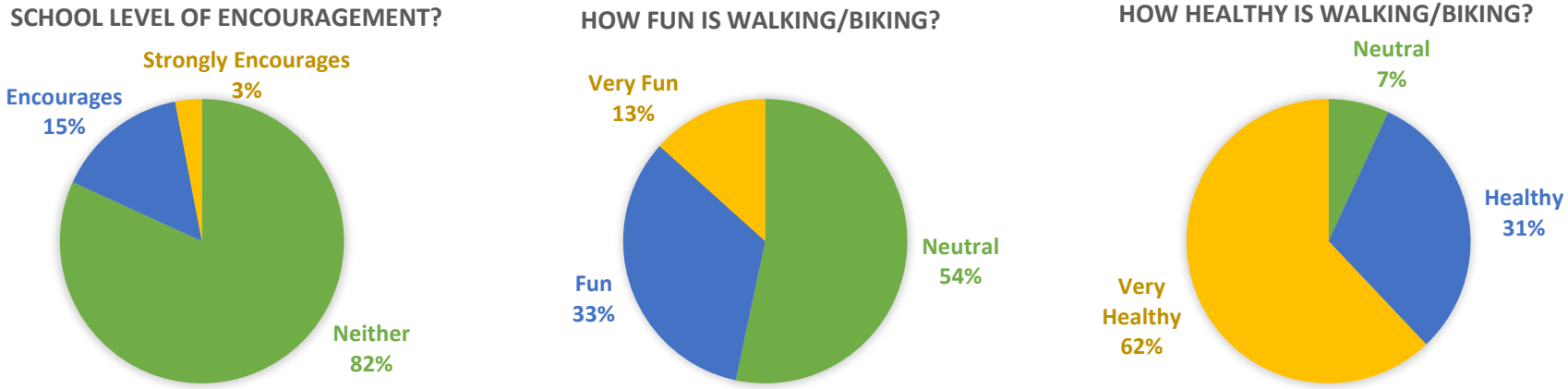


Figure 10. Parent responses to questions 12-14 on the JRMS Parent Survey about Walking and Biking to School.

Parent Survey Comments

Parent comments from the survey are included below. Many of these comments emphasize that infrastructure, maintaining infrastructure during winter, traffic speeds, safety, and distance are factors that influence a parent's decision to allow their child to walk and bike to school.

COMMENTS RELATED TO INFRASTRUCTURE & TRAFFIC CONDITIONS

- Would appreciate the town properly clearing & sanding & salting the sidewalk on Howard Hill Road on the hill (between the rec. dept. & the Carriage Hill Dr. intersection). It is often snowy and/or icy in the winter.
- Because we live so close to school my children are required to walk to school. When they were in the grade school I would have preferred that they ride the bus only because the intersection of Tyler Hill and River Street is very dangerous. We also had a problem during the last snow storm because they had not plowed the sidewalks and the kids had to walk in the streets. Even at the end of the school day they still weren't plowed. I thought it was a state law that the sidewalks needed to be cleared in order to have school? The sidewalk on the bridge in town is falling apart large chunks of it are missing. It's a hazard when two people are passing. If they are not paying attention it's very easy to fall into traffic. I have many concerns over the proposed rotary for the five-way intersection. I can't see how that will be safe for the kids getting to and from school.
- There needs to be another cross walk painted by Colls Garden Center to the opposite side of the road where the sidewalk ends and another from Nutting across North.....badly needed
- Near Route 137 and Colls Garden Center AND at the Nutting Road and Rte 137 intersections there NEEDS TO BE CROSSWALKS for children! We have been told the process to get this approved is arduous and not worth the trouble. We have been asking for years and it would help tremendously to have these 2 crosswalks as these two intersections are incredibly challenging / dangerous for kids due to low visibility and SPEED of drivers. IN ADDITION - the speed limit reduction coming from Dublin on Rte 137 into Jaffrey before Parent Street - should be pushed back. Many times while waiting for the bus at that intersection people haven't even started to reduce their speed from to 35MPH - and so waiting for the bus near Rte 137 is extremely dangerous. There should be a sign or something else further up Rte 137 to warn drivers to reduce their speed earlier. They just aren't reducing speed anytime before they reach Colls Garden Center (coming INTO Jaffrey on Rt 137) and this makes several homes who sit right on Rt 137 vulnerable if they have kids waiting for the bus. Something has to be done here. Thank you

Parent Survey Comments (Continued)

COMMENTS RELATED TO DISTANCE

- If we did not live off of 119 or lived closer to the middle school I would allow my children to walk. They have walked from the middle school to Humiston field for games and I am comfortable with that as they are always in a group and there are sidewalks to walk on.
- I wish you well with this endeavor. We live too far away to ever fully participate in this activity but I do believe it is worthwhile.
- In my opinion this is a very STUPID survey for children who live over 15 minutes away (by vehicle). And it would be very STUPID and DANGEROUS for me to encourage my children to walk/bike to school!!

COMMENTS RELATED TO SAFETY

- Because we live so close to school we do not have the option of taking a bus. My daughter gets a ride to school in the winter months and on rainy days but walks during the nicer weather. The intersection of Tyler Hill and River Street is one of the most dangerous areas in Jaffrey. There are accidents at this spot constantly. When my children were in JGS I did not feel comfortable having them cross the street alone at that spot.
- I worry about exposure to drugs.
- I only allow my daughter to walk home when our neighbor kids can too. I strongly encourage walking in groups (usually 4 kids in my daughters group)

OTHER COMMENTS

- One of my greatest concerns is the weight of the backpack they carry back and forth. The amount in it causes back and neck issues. This is a little more distinct at the high school level but still a concern even in middle school.
- I work at the school so it's more convenient to come with me than to walk or ride her bike.
- I allow my child to walk to CCD from JRMS and I have had to have him walk home on several occasions from after school sports and we live three miles away. I feel you have appropriate measures in place with the traffic cop and crossing guard. Thank you for what you do to keep them safe.

Pedestrian Infrastructure

Pedestrian infrastructure includes sidewalks, crosswalks, paved shoulders, off-road trails or paths, and amenities such as lighting and street furniture. The presence or lack of pedestrian infrastructure has a large impact on safety, both real and perceived. Studies have shown that for students living within 1 mile of school, implementation of effective pedestrian interventions can reduce the traffic dangers (real or perceived) that prevent students from walking to school.[2,3]

STATEWIDE ASSET DATA EXCHANGE SYSTEM (SADES) DATA

In order to better understand pedestrian infrastructure conditions near the school, SWRPC staff assessed the conditions of sidewalks and crosswalks in Jaffrey using the NH Statewide Asset Data Exchange System, or SADES. SADES provides a common set of collection and training standards, ensuring that data collected throughout the state is comparable and assessed uniformly.

The sidewalk assessment includes data such as the width of the sidewalk, sidewalk condition (good, fair, or poor), curb condition (good, fair, or poor), and the presence of buffer strips, curb ramps and crosswalks. The Pedestrian Infrastructure Map on the next page shows the extent of the sidewalk and crosswalk network in Jaffrey and sidewalk structural conditions. **"Good condition"** indicates little or no distress or vertical displacements on the sidewalk, **"fair condition"** indicates the presence of narrow cracks and/or sidewalk displacements less than ½ inch, and **"poor condition"** indicates sidewalk cracks and/or large vertical displacements greater than ½ inch.

Above: A sidewalk in good condition on Stratton Road.

Above: A sidewalk in fair condition on School Street.

Town of Jaffrey Pedestrian Infrastructure Map

Downtown Jaffrey

Jaffrey Center

Sidewalk Surface Condition

Good

Fair

Poor

Unknown

Crosswalk

Good condition: indicates little or no distress or vertical displacements on the sidewalk.

Fair condition: indicates the presence of narrow cracks and/or sidewalk displacements less than ½ inch.

Poor condition: indicates sidewalk cracks and/or large vertical displacements greater than ½ inch.

Traffic Conditions

To better understand traffic conditions near the school, SWRPC staff conducted traffic volume and speed counts at four locations within walking distance of JRMS, including Stratton Road north of JRMS (Site A), Squantum Road south of the intersection with Stratton Road (Site B), Turnpike Road west of Grove Street (Site C), and Peterborough Street near Sunset Lane (Site D). The automatic traffic recorder (ATR) locations are shown in Figure 11 on the right.

SWRPC staff also conducted a pedestrian phase/"No Turn on Red" Compliance study at the intersection of Peterborough Street/ Route 202 and Turnpike Road/Route 124 and a stop sign compliance study at the intersection of Stratton Road, Squantum Road, and Howard Hill. The results of these studies are summarized in this section of the document.

For the full results of the traffic studies included in this report, please see the full Jaffrey Traffic Studies report in Appendix C.

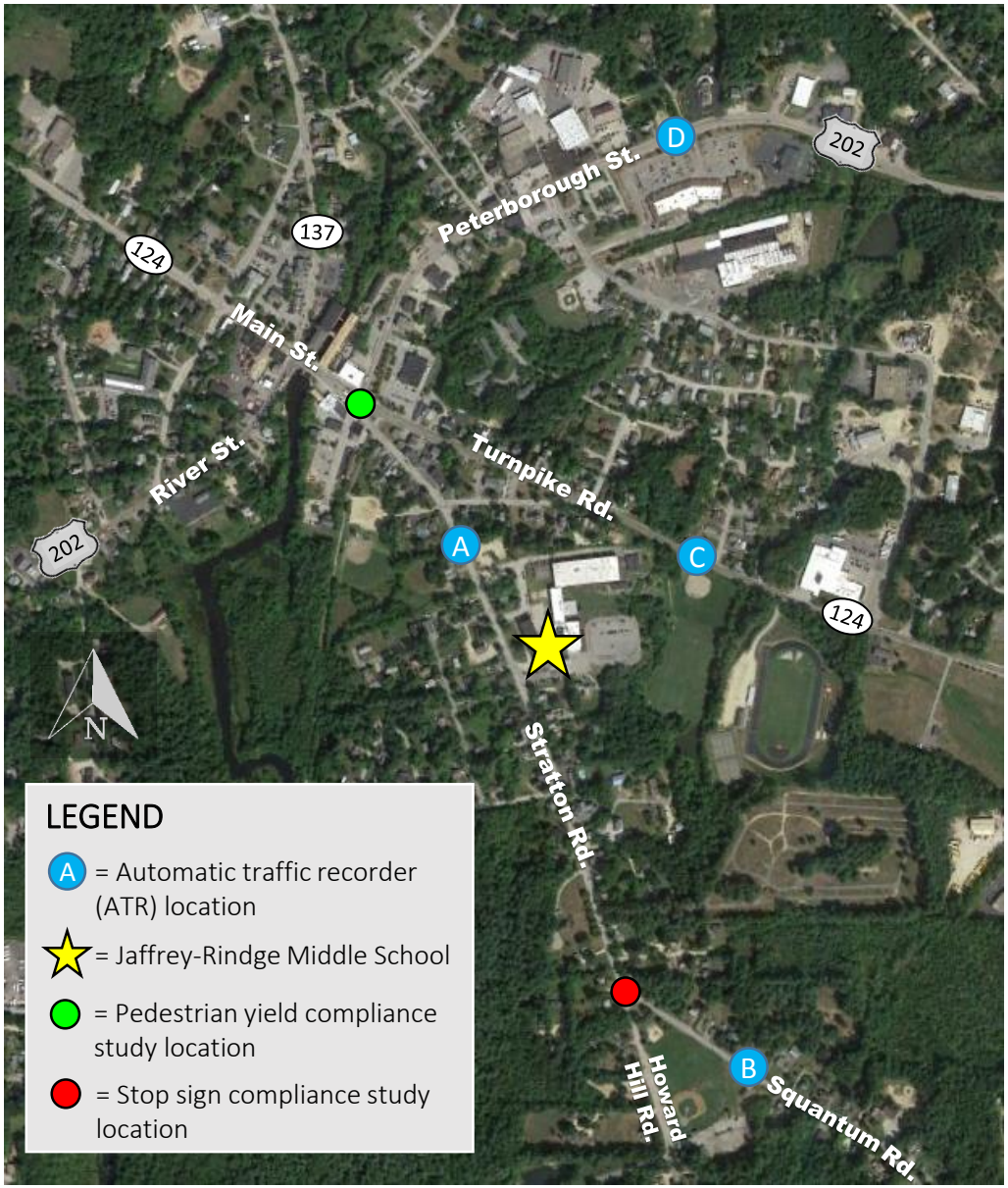


Figure 11: *Automatic Traffic Recorder (ATR) locations in Jaffrey, NH.*

Traffic Conditions (Continued)

Traffic Volumes

Traffic volumes for Sites A through D are shown in Table 3. Values are shown for the average number of vehicles on weekday mornings from 7:00-8:00 a.m., the average number of vehicles on weekday afternoons from 2:00-3:00 p.m., and the average number of vehicles per day. The highest traffic volumes were observed at Site D on Peterborough Road, which is a major route through town. The second-highest volumes were observed on Turnpike Road/Rt. 124 (Site C), followed by Stratton Road (Site A). Squantum Road (Site B) had the lowest traffic volumes.

Weekday Vehicle Counts	Site A	Site B	Site C	Site D
Morning average	523.7	115.0	334.7	661.7
Afternoon average	377.7	108.2	360	745.7
Daily average	4,298.70	1,251.60	4,585.3	10,600.7

Table 3: *Average weekday vehicle counts at Sites A – D for the morning (7:00-8:00 a.m.), the afternoon (2:00-3:00 p.m.), and the total daily average.*

Traffic Speeds

The average, 85th percentile, and maximum traffic speeds during school arrival and departure times at Sites A – D are shown in Table 4. The 85th percentile speed is the speed at which no more than 15% of traffic is exceeding. Figure 12 on the next page show the breakdown of speeds at each site.

	Traffic Speeds (mph)	Site A	Site B	Site C	Site D
Morning (7:00-8:00 a.m.)	Average speed	23.9	34.3	35.0	31.3
	85th Percentile speed	30.4	38.4	40.7	35.5
	Maximum speed	39.8	53.5	51.7	52.1
Afternoon (2:00-3:00 p.m.)	Average speed	24.7	33.3	34.9	31.3
	85th Percentile speed	30.1	38.3	40.7	35.4
	Maximum speed	40.8	52.0	50.5	49.3

Table 4: *Average, 85th percentile, and maximum speeds at Sites A-D during morning (7:00-8:00 a.m.) and afternoon (2:00-3:00 p.m.) times on weekdays.*

Traffic Conditions (Continued)

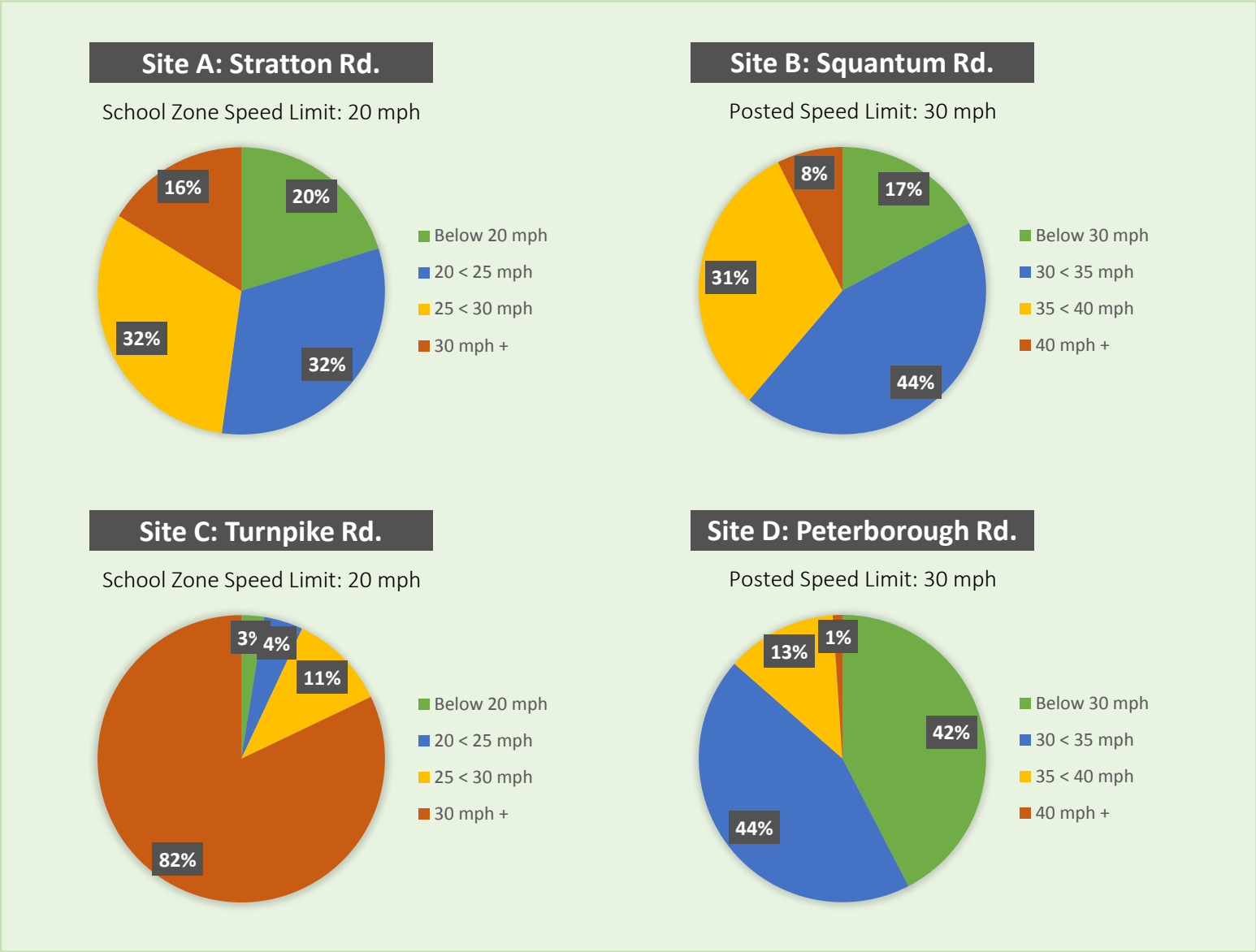


Figure 12: *Breakdown of speeds at sites A-D during morning (7:00-8:00 a.m.) and afternoon (2:00-3:00 p.m.) hours. Values shown are the average of the morning and afternoon weekday speed statistics.*

Traffic Conditions (Continued)

Traffic Speeds (Continued)

The highest traffic speeds were detected at Site C (Turnpike Rd./Rt. 124), which is in a school zone area. The maximum speed at this site during school arrivals and departures (7:00-8:00 a.m. and 2:00-3:00 p.m.) was 52 mph. The majority of traffic – 93% (1,470 vehicles) – were going more than 5 mph above the 20 mph school zone speed limit despite the presence of flashing school zone signs. About 83% (1,297 vehicles) of traffic was going more than 10 mph above the school zone speed limit.

Site A (Stratton Rd.) also had a high percentage of traffic going more than 5 mph above the school zone speed limit. About 32% (573 vehicles) were going between 25 and 30 mph, and 16% (295 vehicles) were going 30 mph or faster. The maximum speed at this site was 41 mph.

At Site B (Squantum Rd.), 39% of traffic (456 vehicles) was going more than 5 mph above the 30 mph posted speed limit. Of these, 87 vehicles (8% of all traffic) were going more than 40 mph. The maximum speed detected at this site during school arrivals and departures was 54 mph.

Site C (Peterborough Rd.) had the lowest percentage of traffic going more than 5 mph above the speed limit; 13% (443 vehicles) were going between 35 and 40 mph, and 1% (38 vehicles) were going above 40 mph. The maximum speed detected at this site was 52 mph.

Above: An automatic traffic recorder (ATR) on Turnpike Road east of Grove Street (Site C).

Traffic Conditions (Continued)

Pedestrian Phase/"No Turn on Red" Compliance Study

In order to better understand driver compliance with NH state law (NH RSA 262-A:10) which prohibits right turns while the pedestrian walk signal is active, SWRPC staff observed the intersection of Peterborough St./Route 202 and Turnpike Rd./Route 124 for two hours during the morning (7:00-9:00 a.m.) and the afternoon (2:00-4:00 p.m.) and recorded driver turning behavior at the Peterborough Street and Turnpike Road approaches to the intersection. This intersection has an exclusive pedestrian phase, i.e. there are no green lights while the pedestrian signal is active.

In total, there were 66 vehicles that approached the intersection from Peterborough Street and Turnpike Road while the pedestrian walk phase was active. Of these, 9 (14%) made a right turn while the pedestrian signal was active. Two vehicles (3%) turned while the pedestrian signal was active and there was a pedestrian in the crosswalk. These vehicles proceeded through the intersection on a red light while the pedestrian signal was active without stopping. Table 5 summarizes the data by each approach (i.e. Peterborough St. and Turnpike Rd.) to the intersection. Overall, driver compliance with the law was higher at the Peterborough Street approach, which has a sign that says "No Turn on Red" that lights up when the pedestrian signal is active. Six percent of vehicles that approached the intersection from Peterborough Street turned during the pedestrian walk signal, whereas about 23% of vehicles on Turnpike Road turned during the pedestrian walk phase. This suggests that the light-up sign at the Peterborough St. approach is effective at increasing driver compliance with the law that prohibits turning on red during a pedestrian walk phase.

	Peterborough St./Rt. 202		**Turnpike Rd./Rt. 124**	
	# Vehicles	Percent	# Vehicles	Percent
No Turn (full stop)	34	94%	23	76.7%
Turned after full stop	0	0%	3	10%
Turned after practically stopping (< 3 mph)	1	3%	2	6.7%
Turned without stopping	1*	3%	2**	6.7%
Total	**36**	**100%**	**30**	**100.1%**

Table 5: *Summary of data for the pedestrian yield compliance study at the Peterborough Street/Turnpike Road intersection in Jaffrey, NH. This study observed driver compliance with NH RSA 262-A:10 which prohibits right turns on red while the pedestrian signal is active.*

** This vehicle turned while a pedestrian was in the crosswalk* *** One of these vehicles turned while a pedestrian was in the crosswalk*

Traffic Conditions (Continued)

Stop Sign Compliance Study at Squantum Rd. & Stratton Rd. Intersection

SWRPC staff observed the intersection of Squantum Rd. and Stratton Rd. for one hour in the morning (6:30-7:30 a.m.) and the afternoon (2:00-3:00 p.m.) to determine driver compliance rates with the stop sign on Squantum Rd. This approach to the intersection also has a pedestrian crosswalk that some students use to get to school or to the ball fields located on Squantum Rd. Figure 13 provides an aerial view of the intersection with the approximate stop sign location shown in red.

The vast majority (99.2%) of traffic turned right from Squantum Rd. onto Stratton Rd. during the morning and afternoon observation periods. About 58% (69 vehicles) came to a full stop before turning, 29% (35 vehicles) slowed down to less than 3 mph before turning (i.e. "practically stopped), and 13% (15 vehicles) did not stop before turning. Figure 14 shows the driver compliance rates for both the morning and afternoon combined, and Table 6 shows the driver compliance data broken out by the morning and afternoon observation periods.

	Morning (6:30-7:30 a.m.)		Afternoon (2:00-3:00 p.m.)	
	# vehicles	Percent	# vehicles	Percent
Full Stop	48	59.3	21	55.3
Practically Stopped	23	28.4	12	31.6
Non-stopping	10	12.3	5	13.2
TOTAL	**81**	**100**	**38**	**100**

Table 6: *Driver stop sign compliance data for the morning (6:30-7:30 a.m.) and afternoon (2:00-3:00 p.m.) observation periods.*

Figure 13: *Aerial view of the Squantum Rd./Howard Hill Rd. intersection with the stop sign location shown in red.*

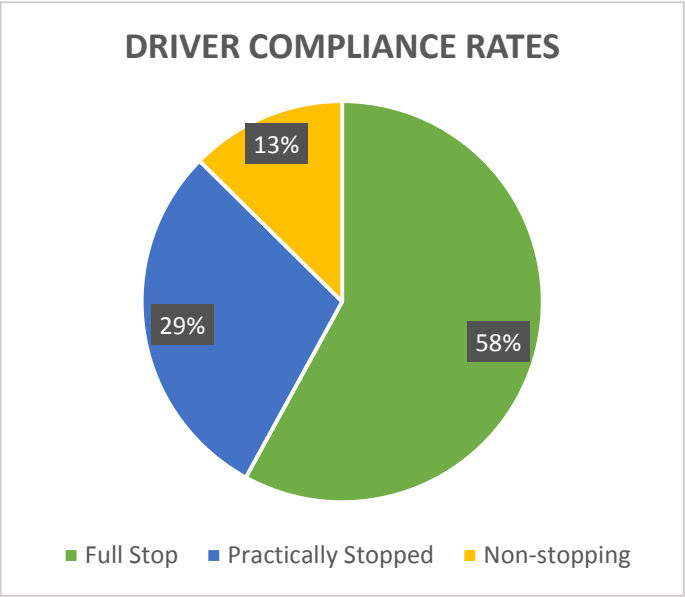


Figure 14: *Driver compliance rates with the stop sign at the Squantum Road/Howard Hill Road intersection.*

RECOMMENDED STRATEGIES

The following section includes a list of recommendations for JRMS organized by the 5 "Es": Evaluation, Education, Encouragement, Enforcement, and Engineering. Priority strategies are listed in the following section, and resources for implementing the strategies are included on page 28.

EVALUATION STRATEGIES

1. **Administer the "Safe Routes to School Arrival and Departure Tally Sheet" on an annual basis to track trends over time.** Work with school staff and faculty to administer the 3-day tally each year to track travel trends over time.
2. **Administer the "Parent Survey about Walking and Biking to School" on a bi-annual basis (every two years).** Work with wellness committee or safety committee and parents to conduct parent survey every two years.
3. **Update the Safe Routes to School Action Plan every 5-10 years.** Convene a committee or task force to review and update this Safe Routes to School Action Plan every 5-10 years.

EDUCATION STRATEGIES

1. **Incorporate walking and bicycling safety into school curriculum.** Work with teachers to identify ways to incorporate walking and bicycling safety into the school curriculum.
2. **Start a bicycling club for students to learn and practice safe bicycling skills.** Work with interested staff and parent volunteers to organize a bicycle club for JRMS students.
3. **Give presentations about Safe Routes to School at School Board meetings, Parent Group meetings, and other meetings as appropriate. Work with the wellness committee, safety committee, students, and/or parent volunteers** to share information about the school's efforts to promote walking and bicycling to school and improve safety.
4. **Share information about how students can walk, bike, carpool, and take the bus.** Work with school district to add information about the best routes to walk or bike to school, how parents can organize carpools, and bus route information to the parent handbook, school website, newsletters, emails, etc.
5. **Post the JRMS Safe Routes to School Plan on the JRMS website and share with JRMS students, parents, faculty, and staff.**

RECOMMENDED STRATEGIES (Continued)

ENCOURAGEMENT STRATEGIES

1. **Engage students in creating tools that will help make walking and biking to school more convenient and fun for their peers.** Enlist middle school students in planning events, creating outreach materials (e.g. videos or posters), and helping younger students walk or bike to school.
2. **Create a school-wide mileage club or contest to offer incentives to students who bike or walk to school.** Create an incentive program that tracks number of trips and rewards students, classes, and/or grades with highest number of trips made by walking or bicycling.
3. **Organize walk/bike to school day events to promote walking and bicycling to school.** Work with parent volunteers and students to organize school-wide walk and bike to school days throughout the year.
4. **Establish a remote drop-off location to encourage students who live further away to participate in walking or bicycling to school.** Identify locations ½-1 mile from school where parents can drop off students, then work with property owners to establish remote drop-off location(s).

ENFORCEMENT STRATEGIES

1. **Clearly mark and enforce parent drop-off area.** Work with school district and local law enforcement to clearly mark/place signs and enforce parent pick up process and communicate the proper drop-off/pick-up process to JRMS families on a regular basis.
2. **Place active speed monitors or radar speed trailers to enforce speed limit on key roads near the school.** Work with the Town to place speed feedback signs on roads near the school where speeding is a concern, such as Turnpike Rd./Rt. 124.
3. **Continue and expand crossing guard program.** Work with local law enforcement to continue presence of crossing guard on Stratton Rd. and add new crossing guards at other key intersections, such as at the Main St./Peterborough St. intersection.
4. **Work with local law enforcement to enforce school zone speed limit on key routes near the school.** Work with the Jaffrey Police Department to educate drivers, pedestrians, and bicyclists about rules of the road and enforce the school zone speed limit on key routes near the school. Example strategies could include spot patrolling, progressing ticketing, and parking police cars in school zone areas.

RECOMMENDED STRATEGIES (Continued)

ENGINEERING STRATEGIES

1. **Move parent drop-off/pick-up location to the driveway loop northwest of the school.** Several concerns were raised by the JRCSD Wellness Committee about the safety of the parent drop-off area, which often gets congested and where students exit vehicles on both sides of the street and cross in unmarked areas. Consider working with school district to switch current parent drop-off location with the existing bus drop-off location, which would provide more space for parents to drop off and pick up students.
2. **Fix sidewalk gap on the east side of Stratton Road.** Work with the Town of Jaffrey and other partners to fill in the sidewalk gap on the east side of Stratton Road between Ellison Street and Lawrence Street.
3. **Improve existing sidewalk on Stratton Road.** Work with the Town of Jaffrey and other partners to improve the existing sidewalk on Stratton Road near the school.
4. **Improve safety of Stratton Rd./Squantum Rd. intersection.** Work with the Town of Jaffrey and other partners to identify and implement strategies to increase safety at the Howard St./ Squantum Rd. intersection and improve driver compliance with the stop sign. For example, consider creating a "T"-shaped intersection to create a smaller turning radius for drivers making a right turn from Squantum Rd. onto Stratton Rd.
5. **Extend sidewalk on Route 124 to the entrance of the school athletic fields.** Work with the Town of Jaffrey and other partners to fill in the sidewalk gap on Route 124 between Grove Street and the entrance to the school athletic fields.
6. **Implement traffic calming measures on Route 124/Turnpike Road between the downtown and Knight Street.** Work with the Town of Jaffrey and the NHDOT to implement measures to slow traffic on Route 124, especially during school arrival and departure times when students are using the crosswalk at Grove Street to cross Route 124 to get to and from school.
7. **Work with the Town of Jaffrey and NHDOT to install crosswalks on North St./Rt. 137.** Consider working with the NHDOT and the Town of Jaffrey to install a crosswalk at the intersection of Nutting Rd. and North St. and a crosswalk near the Coll's Garden Center where the sidewalk switches from one side of North St. to the other side.
8. **Work with the Town of Jaffrey to develop a winter sidewalk maintenance plan on major routes to school.** Several parents mentioned that sidewalks are not adequately maintained in the winter, causing students to walk in the road when snow is on the ground. Consider working with the Town to develop a maintenance plan that prioritizes clearing sidewalks that are along primary routes used by students walking to and from school.

IMPLEMENTATION

The following pages describe short-term (1-2 years) and long term (3-5 years) priority strategies for JRMS to focus on as the school launches its Safe Routes to School program. These strategies were prioritized based on discussions with the Jaffrey-Rindge Cooperative School District (JRCSD) Wellness Committee and a SRTS Strategy Prioritization exercise. JRMS should form a SRTS committee, or assign an existing school committee, to work on implementing these strategies.

Key Players for Implementing the JRMS SRTS Action Plan

- SCHOOL ADMINISTRATION: Many of the strategies outlines in this plan require leadership and support from school administration. School administrative staff should consult the Action Plan when setting goals for the year and ensure the plan is clearly communicated to school faculty, staff, parents, students, and the school board.
- WELLNESS COMMITTEE OR OTHER SCHOOL COMMITTEE: The school wellness committee (or other committee) can use this Action Plan as a framework for developing a JRMS SRTS program. The committee should revisit the plan on an annual basis to choose priority strategies for the upcoming academic year.
- PARENTS: Parents can use the action plan to become familiar with the SRTS program and its goals. Parents should also be engaged to provide feedback to the school, volunteer to help out with the SRTS program, and share data with the school to assist with evaluation of the program.
- STUDENTS: Students can use this plan to learn about the SRTS program and its goals as well as learn about opportunities to get involved. Students should be invited to become active participants in the development of the JRMS SRTS program.
- TOWN OFFICIALS: Town officials can use this action plan to identify priority areas in town to improve safety for students who walk and bike to school. Coordination with the NH Department of Transportation may be necessary to address some of the strategies identified in this Action Plan.
- FACULTY & STAFF: School faculty and staff can use this Action Plan to learn about the program and its goals and understand the benefits for students. Faculty and staff should be invited to become active participants in the development of the JRMS SRTS Action Plan.

Short-Term Priority Strategies (1-2 years)

STRATEGY	POTENTIAL LEAD	POTENTIAL PARTNERS	RESOURCES
Administer the SRTS In-Classroom Travel Tally once per year	JRMS Principal or JRCSD Wellness Committee	JRMS Faculty	SRTS In-Classroom Tally Sheet (see Appendix A); http://saferoutesdata.org
Start a bicycling club for students to learn bicycle safety skills	School PE teacher or other faculty/staff interested in leading a club	Students; Parent-Teacher Association; JRCSD Wellness Committee	Middle School Bike Club Guide; SRTS Encouragement Guide
Engage students and their families in walkability/bikeability audits	Students (through the school community service program)	School bicycle and/or walking club; JRCSD Wellness Committee	Walkability Checklist; Bikeability Checklist
Engage students in creating tools to make walking and biking to school more convenient and fun	Students (through the school community service program)	STEM teachers; parent volunteers; JRCSD Wellness Committee	Guide to Engaging Middle School Youth; Tips for Engaging Middle School Students
Switch the parent and bus drop-off locations	School Administration	School Board; School faculty and staff	Student Drop-off and Pick-up Guide
Clearly mark and enforce parent drop-off area	School Administration	School faculty and staff	Student Drop-off and Pick-up Guide

Left: The Humboldt County Department of Public Health in California organized a "bike smoothie" demonstration to get kids excited about healthy activities and snacks. Smoothie bikes can be made by students as part of a community service project, hands-on learning experience, or as a fundraiser for a local cause.

Long-Term Priority Strategies (3-5 years)

STRATEGY	POTENTIAL LEAD	POTENTIAL PARTNERS	RESOURCES
Administer the Parent Survey About Walking and Biking to School every 2-3 years	JRMS Principal or JRCSD Wellness Committee	JRMS Students; Parent-Teacher Association	Parent Survey (see Appendix B); National SRTS online Data Collection System
Incorporate walking/bicycling into the school curriculum	JRMS Faculty	JRCSD Wellness Committee; Students	Safe Routes to School's Bicycle and Pedestrian Curricula Guide
Create a school-wide mileage club or contest	JRCSD Wellness Committee; JRMS Students; Interested faculty	JRMS Students; JRMS Faculty	SRTS Encouragement Guide
Place active speed monitors to enforce speed limit near school	Jaffrey Police Department; Town of Jaffrey	JRCSD Administration	SRTS Enforcement Guide
Fix the sidewalk gap on the east side of Stratton Road	Town of Jaffrey	JRCSD Administration; JRMS Principal; School Board	SRTS Engineering Guide; NHDOT Transportation Alternatives Program
Improve the existing sidewalk on Stratton Road	Town of Jaffrey	JRCSD Administration; JRMS Principal; School Board	SRTS Engineering Guide; NHDOT Transportation Alternatives Program

Left: A view of Stratton Road near JRMS facing north. The section of Stratton Road that connects the school with the downtown does not have a sidewalk on the east side of the road.