

To: Cody Christianson, P.E., Bolton & Menk, Inc.

From: Colin Harris, Alta Planning + Design  
Isooda Niroomand, Alta Planning + Design

Date: November 11, 2022 (updated December 22, 2022)

Re: Bicycle & Pedestrian Element Update - SRTS Components

## Safe Routes to School Maps

As a part of Task 5 of the Bicycle & Pedestrian Element Update project, Alta has been working with MPO staff to update the existing SRTS maps for the elementary and middle schools in the MPO planning area. The project team started this task with a thorough scan of existing Safe Routes to School maps in Canada and US. Multiple examples were selected to be discussed and reviewed with the MPO staff and other stakeholders. These maps were divided into two categories as shown below:

Table 1. Safe Routes to School map types

	Type 1	Type 2
Preparation software	<ul style="list-style-type: none"> <li>• GIS</li> <li>• AutoCAD</li> </ul>	<ul style="list-style-type: none"> <li>• Microsoft Office</li> </ul>
Comparison	<ul style="list-style-type: none"> <li>• Looks professional</li> <li>• High degree of technical accuracy</li> </ul>	<ul style="list-style-type: none"> <li>• Relatively quick to make</li> <li>• Easy to update</li> <li>• Can be prepared and printed at schools</li> <li>• Development could be a collaborative exercise</li> <li>• Helps with capacity-building at schools; builds sense of ownership</li> <li>• Easier to understand and use by people of all ages without technical backgrounds—creates a simplified representation of reality</li> </ul>

After two (2) consultation meetings with the stakeholders, the group decided on replacing the existing maps with maps prepared in Microsoft Office (Type 2) considering the identified benefits of these maps. To guide the conversation and decision-making process, the project team focused on answering these key questions:

- **Who is the target audience?**
  - Families, students, and school staff
- **Conditions of use: would this resource be most valuable in print or online format?**
  - These maps should be readable if printed (both in grayscale and color)
  - Scale and quality should be good enough to go on online newsletters, school websites, etc.
- **What items need to be included on the map? Can we reduce the overall number of elements?**
  - These maps are designed to motivate families and students to bike and walk to school and are intended for pedestrians. Therefore, the group decided to only show impactful items in families' active school travel planning.
  - These items were finalized for these maps:
    - school location
    - Routes with sidewalks (on one side and both sides)

- Location of school signs on the routes
- Crossing locations
- Signalized intersections
- Railway
- Railway crossing
- Pedestrian Underpass
- 0.5-mile distance from the school radius
- **Scale: what is the appropriate area to be covered by the maps?**
  - The Main discussion was on the compromise between detail, readability, and coverage. The group decided to focus on the 0.5-mile distance radius as the threshold distance for a comfortable walk and bike to school for youth (a 10-minute walk).

After finalizing the map type, coverage area, and information to include on the maps, the Alta team prepared multiple draft maps and consulted stakeholders and a template was approved by the group.

Upon this approval, 18 draft maps for the following schools were prepared. Refer to page 3 for a sample map and **Appendix A** for the whole collection.

*Table 2 - List of Grand Forks and East Grand Forks schools*

Area	School Name
East Grand Forks	<ul style="list-style-type: none"> <li>• <a href="#">New Heights Elementary School</a></li> <li>• <a href="#">South Point Elementary and Central Heights Middle Schools</a></li> </ul>
Grand Forks	<ul style="list-style-type: none"> <li>• <a href="#">Ben Franklin Elementary School</a></li> <li>• <a href="#">Century Elementary School</a></li> <li>• <a href="#">Discovery Elementary School</a></li> <li>• <a href="#">Holy Family Catholic School</a></li> <li>• <a href="#">Lake Agassiz Elementary School</a></li> <li>• <a href="#">J Nelson Kelly Elementary School</a></li> <li>• <a href="#">Phoenix Elementary School</a></li> <li>• <a href="#">Schroeder Middle School</a></li> <li>• <a href="#">South Middle School</a></li> <li>• <a href="#">St. Michael's Catholic School</a></li> <li>• <a href="#">Valley Middle School</a></li> <li>• <a href="#">Lewis and Clark Elementary School</a></li> <li>• <a href="#">Viking Elementary School</a></li> <li>• <a href="#">Wilder Elementary School</a></li> <li>• <a href="#">Winship Elementary School</a></li> </ul>

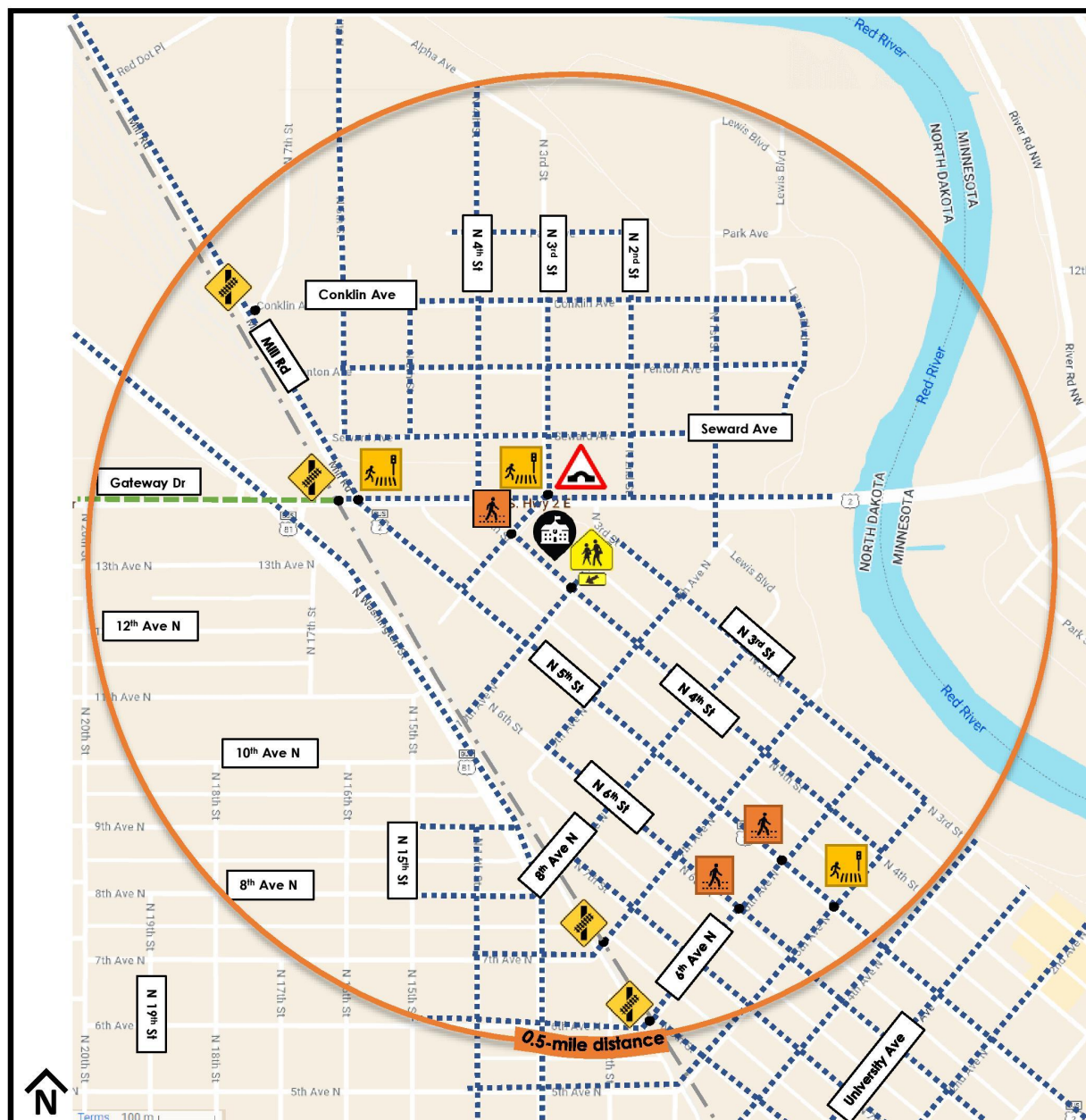
# MEMORANDUM

## Safe Routes to School Planner Wilder Elementary School

Allow your child(ren) to walk a short, safe distance to school, or walk with them and enjoy some undistracted family time!

**Note:** When no sidewalks are available it is recommended that pedestrians walk facing the flow of traffic. Always stop and check for vehicles before crossing to the correct side of the street. Whenever possible please use sidewalks.

Based on studies, the threshold distance for a comfortable walk and bike to school for youth is near 0.5 miles (10-minute walk).



### LEGEND

School Location



Intersection with crossing on at least 2 sides



School Sign or Flashing Beacons



Signalized Intersection



Pedestrian Underpass



Railway Crossing



Routes with sidewalks on both sides



Routes with sidewalks on one side



Railway



0.5-mile distance from school



alta

Sample map prepared for Wilder Elementary School

## Survey Results Analysis

As a part of task 5.4, Alta worked with data provided by the MPO staff<sup>1</sup> to analyze school walking surveys. The goal of this survey was to gather information about factors like distance, weather, crossing major roads and safety concerns and understand how they impact students' modes of transportation to and from school. This analysis was done to be used as a base for the recommendation of Non-Infrastructure Programs. In this survey participants were asked a series of questions, including:

- What school does your student attend?
- How far does your student live from the school?
- During the last week, what mode of transportation did your student primarily use to get to school and to get home from school?
- During the winter months, what mode of transportation will your student primarily use to get to school and come home from school?
- Are there any major roads your student must cross to get to school?
- What is your perception of the safety of this roadway?
- Has your student asked you for permission to walk or bike to/from school in the last calendar year?
- Are there any safety issues, other than major road crossings, that would discourage you from allowing your student to walk or bike to/from school?
- Does your school have a Safety Patrol Program?
- Are you aware of the Safe Routes to School maps for your school?

Data collected from 15 schools was reviewed to identify barriers to active school travel and to understand the factors that influence families' decision-making processes for their school travel. We used statistical analysis to examine the relationships between the variables and identify any patterns or trends in the data. We also used qualitative analysis to interpret the meaning of the data and understand why certain relationships may exist. Table 3 lists the studied schools and detailed results of this analysis can be found in **Appendix B**.

Before we move forward to data analysis and results, it is important to explain two terms that are used throughout the report. These terms include "mode share," which refers to the percentage of people in a given population who use a particular mode of transportation, such as walking, biking, driving, or taking public transportation. "Distance" refers to the length of a journey or the space between school and where students are coming from. Understanding these terms will help to provide context and make the analysis and results easier to understand.

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<sup>1</sup> Alta was not involved in the data collection process.



Table 3 - List of Grand Forks and East Grand Forks schools for data analysis

Area	School Name
East Grand Forks	<ul style="list-style-type: none"> <li><a href="#">Central Heights Middle School</a></li> </ul>
Grand Forks	<ul style="list-style-type: none"> <li><a href="#">Discovery Elementary School</a></li> <li><a href="#">Ben Franklin Elementary School</a></li> <li><a href="#">Lake Agassiz Elementary School</a></li> <li><a href="#">J. Nelson Kelly Elementary School</a></li> <li><a href="#">Schroeder Middle School</a></li> <li><a href="#">South Middle School</a></li> <li><a href="#">Red River High School</a></li> <li><a href="#">Phoenix Elementary School</a></li> <li><a href="#">Viking Elementary School</a></li> <li><a href="#">Wilder Elementary School</a></li> <li><a href="#">Valley Middle School</a></li> <li><a href="#">Winship Elementary School</a></li> </ul>

## Data analysis findings:

### Mode Share and Distance

To investigate the effect of distance on travel mode, we analyzed the responses to two survey questions: (1) "How far does your student live from the school?" and (2) "During the last week, what mode of transportation did your student primarily use to get to school and to get home from school?"

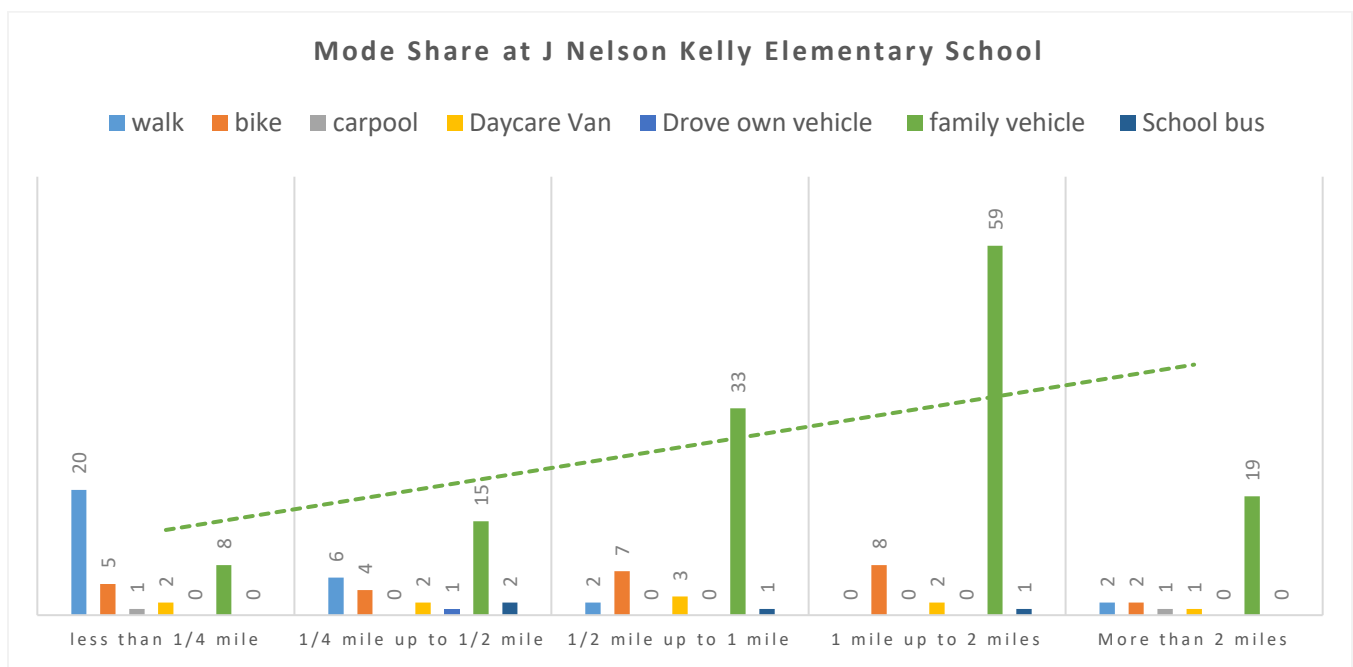
To examine the relationship between distance and travel mode, we divided the data into five distance categories:

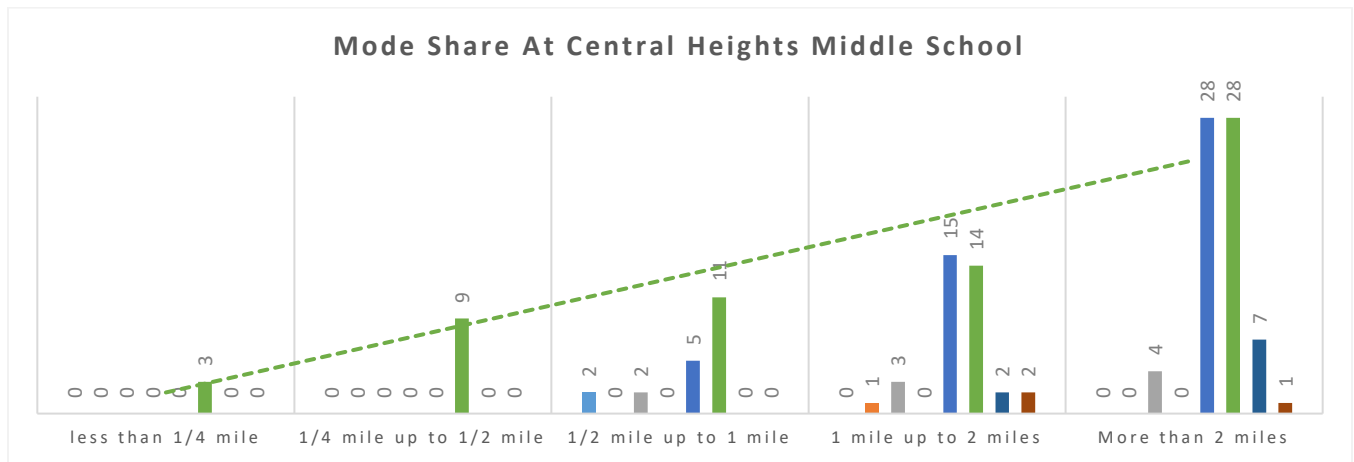
- Less than 1/4 mile
- 1/4 mile up to 1/2 mile
- 1/2 mile up to 1 mile
- 1 mile up to 2 miles
- More than 2 miles

This allows us to analyze the mode share within each of these categories and discuss the impacts of distance on travel behavior.

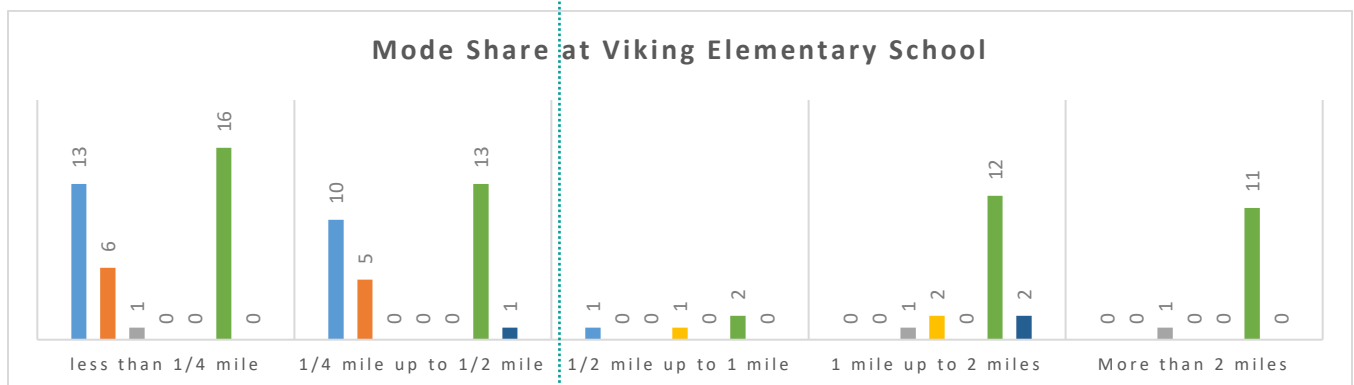
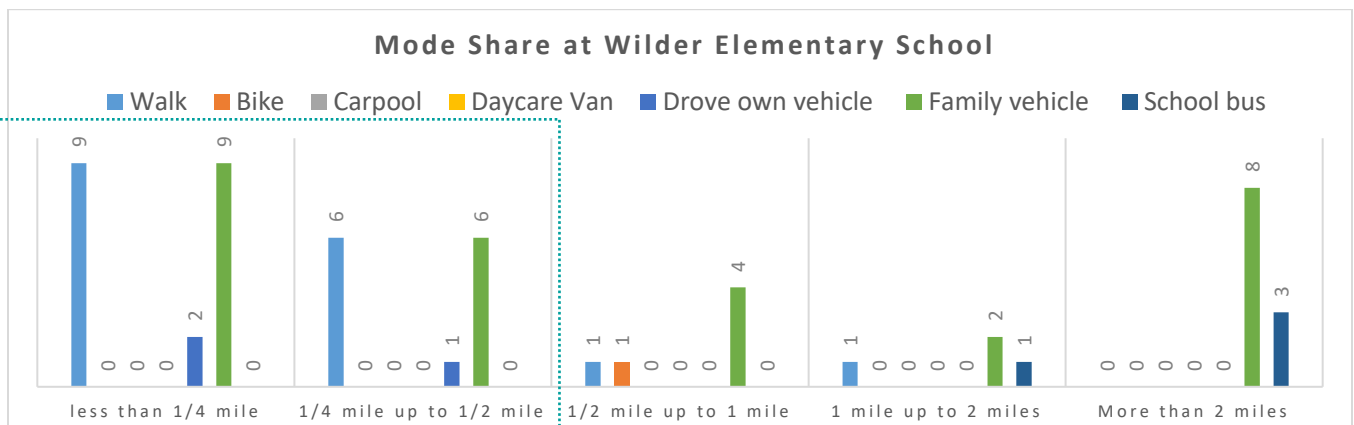
Before reviewing the findings, it is important to note that in the survey template, participants had multiple options for indicating the use of a personal vehicle (e.g., "family vehicle" and "drove own vehicle"). Given the age of the students in this study, it is unlikely that many of them would be driving their own vehicles to school. Therefore, we believe that some of the responses indicating the use of "own vehicle" may be due to confusion on the part of the participants. Despite this, we have chosen to include these responses in the results and charts, in order to maintain consistency with the original survey template.

In general, as the distance from school increased, we saw a corresponding increase in the number of students who came to school by vehicle and a decrease in the number of students who walked or biked to school. However, in some schools, we observed a consistent pattern of driving regardless of the distance, with no apparent impact on the travel patterns or mode share.





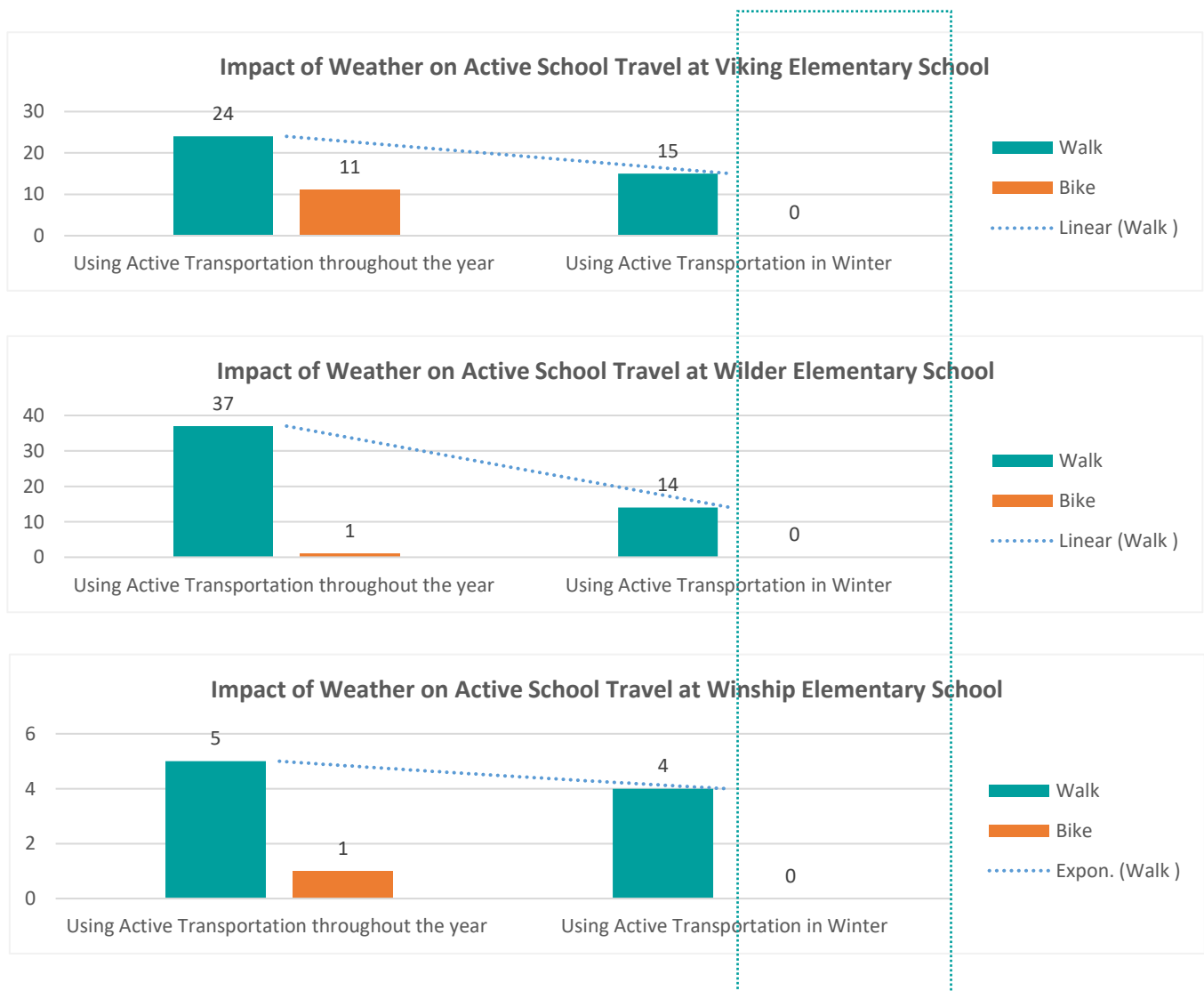
Most Safe Routes to School practitioners agree that kindergarteners to older elementary school students will happily walk up to a half mile, while high school students may be able to walk up to 1-1.5 miles. However, there are other factors that can influence the comfort level of students walking or biking to schools, such as the presence of sidewalks, traffic, and safety concerns. Therefore, we also looked at the mode split for students living within a half mile of the school, as this is generally considered to be a comfortable walking distance. The goal was to identify the number of students who are being driven to school despite living within this distance. To encourage more active transportation, families can use the updated Safe Routes to School maps to plan their school commutes with their children, and awareness campaigns can help to change perceptions about what distances are considered "too far" to walk or bike.



## Weather

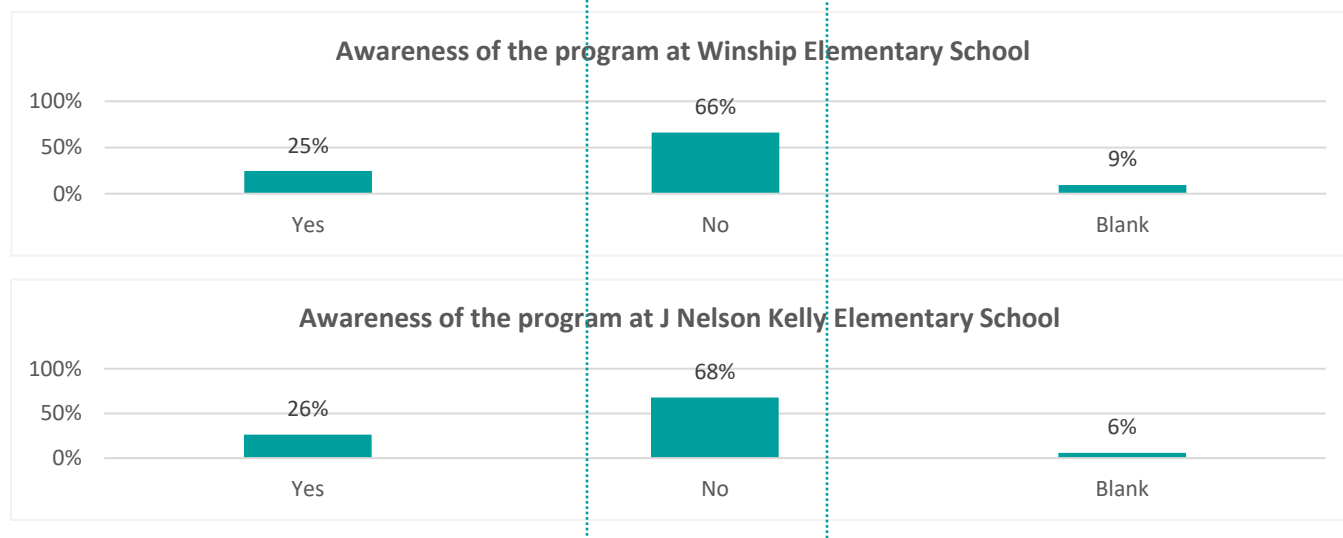
Participants were asked about their students' mode of transportation to and from school during the winter months. During the winter months, the number of students who choose active transportation (such as walking or biking) tends to decrease at all of the schools studied. Weather is a significant perceived barrier to cycling, with the number of students biking dropping to near zero at most schools. This suggests that safety concerns and winter cycling techniques may need to be addressed in order to encourage more biking, while also promoting and celebrating walking as an alternative mode of transportation.

One way to encourage more walking and biking during the winter months is to focus on promoting the enjoyability and exercise benefits of these modes of transportation. This could include extra curricular activities and events such as Winter Walk Day and Dress for the Weather Campaign, which highlight the benefits of active travel and provide opportunities for caregivers and students to participate. By highlighting the positive aspects of walking and biking during the winter, programs can help to overcome the perceived barrier to these modes of transportation.



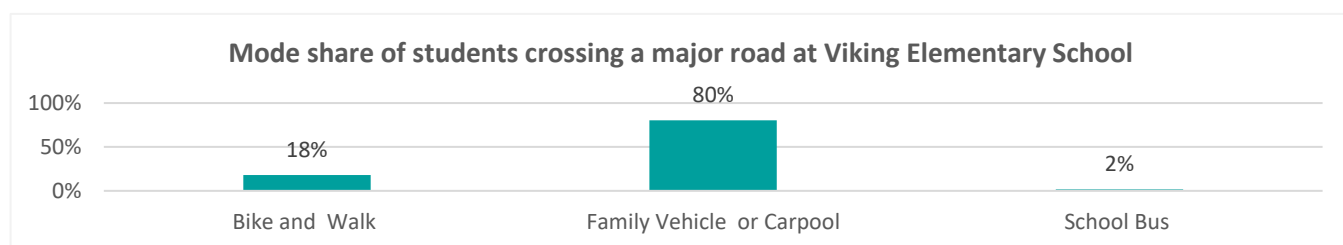
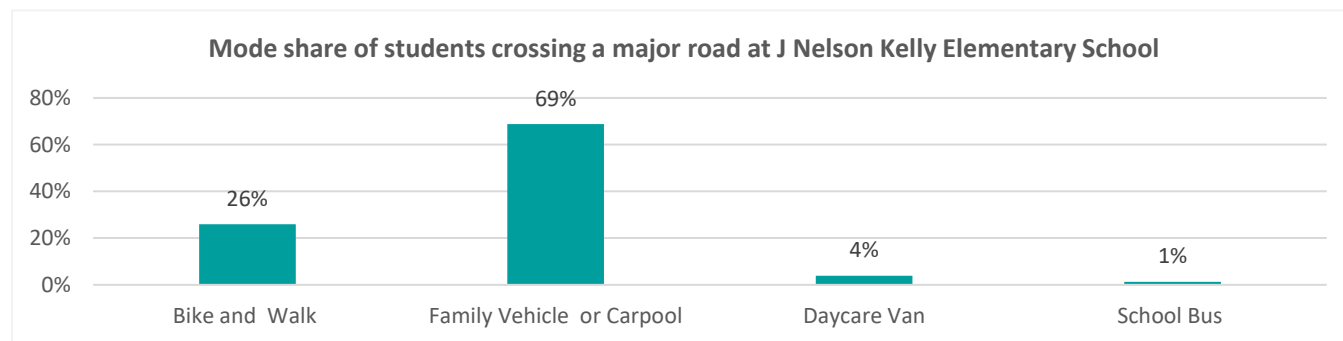
## Awareness

One finding from the survey was that at almost all schools, more than half of the participants had no or limited knowledge of the Safe Routes to School maps. This lack of awareness could be a major factor in the success of the program and future campaigns. Increasing awareness of these maps and their availability may be an important step in encouraging more active transportation among students and their caregivers.



## Crossing A Major Road:

Participants were asked whether they needed to cross a major road to get to school or not. survey found that among students who have to cross a major road to get to school, more than half are being driven to school at almost all schools. This suggests that crossing major roads is a significant barrier or safety concern for students and their caregivers when it comes to choosing active modes of transportation. To address this issue, events and campaigns focused on pedestrian and cycling safety education may be useful in helping to overcome this perceived barrier and encourage more active travel to school.



**Interest Among Students:**

Participants were asked “Has your student asked you for permission to walk or bike to/from school in the last calendar year?” on the survey. The number of participants reporting that their student is interested in walking and biking to/from school was documented and analyzed to see what percentage of these interested students were actually walking or biking to school.

At almost all schools, although around 50% of participating caregivers reported that their students are interested, only a few of them were actually walking/biking. This shows that aside from encouraging students to walk/bike to school, [future programs, and campaigns need to focus on caregivers](#) to help them overcome their concerns and encourage their kids to walk and bike to school.



Non-Infrastructure programs

Background

During the consulting sessions with MPO staff and stakeholders, existing non-infrastructure activities were identified. Based on the data analysis and interviews performed with the group, Alta completed an assessment summarized in the following table.

Program Recommendation		Purpose	Responsibility to Lead	Description	Timing	Resources
Weather						
Suggestion	Dress For the Weather Campaign	To encourage kids and families to walk and wheel in all seasons.	School/PTO/PTA/Parents and Families	<p>An education and awareness initiative focused on teaching students how to dress to be comfortable walking or cycling in different weather conditions and help them obtain the clothing and equipment they need.</p> <p>We experience a wide range of weather conditions — ice, snow, rain, sun — and often a large range in temperatures from freezing cold to sweltering hot. With the right clothing and equipment, walking and wheeling can be safe and enjoyable in all seasons. To remind students of this, and to celebrate year-round active transportation, running a Dress for the Weather campaign is very helpful. A Dress for the Weather campaign can also be a fun part of a Walking and Wheeling Day event, such as Winter Walk Day.</p>	Ongoing throughout the school year	<ul style="list-style-type: none"><li>• <a href="#">Tips for Winter Walking by Ontario School Travel</a></li><li>• <a href="#">Minnesota Winter Walking 101</a></li></ul>
	Winter Walk Day	To celebrate families who already walk or wheel to school in colder months and encourage others to give active transportation a try	School/PTO/PTA/Parents and Families	<p>Winter Walk Day (WWD) is an annual celebration of winter walking that takes place on the first Wednesday of February across Canada. A one-day celebration event during winter when all students who can are encouraged to walk or cycle all or part way to and from school.</p> <p>Use announcements and posters to promote the event, offer refreshments (hot chocolate) and prizes, and make it fun for everyone with music and activities when students arrive at school. Include bussed students by giving them the opportunity to walk on the school site.</p>	The annual event (First week of February)	<ul style="list-style-type: none"><li>• <a href="#">Minnesota Winter Walk to School Day</a></li><li>• <a href="#">Winter Walk Day Activity Ideas</a></li><li>• <a href="#">Winter Walk Day sample messages</a></li></ul>
Ride Sharing						
Existing	<ul style="list-style-type: none"><li>• Survey results show that some families are Carpooling to school instead of driving individual cars.</li><li>• There was no mention of any sort of program or arranged plan for this.</li></ul>					

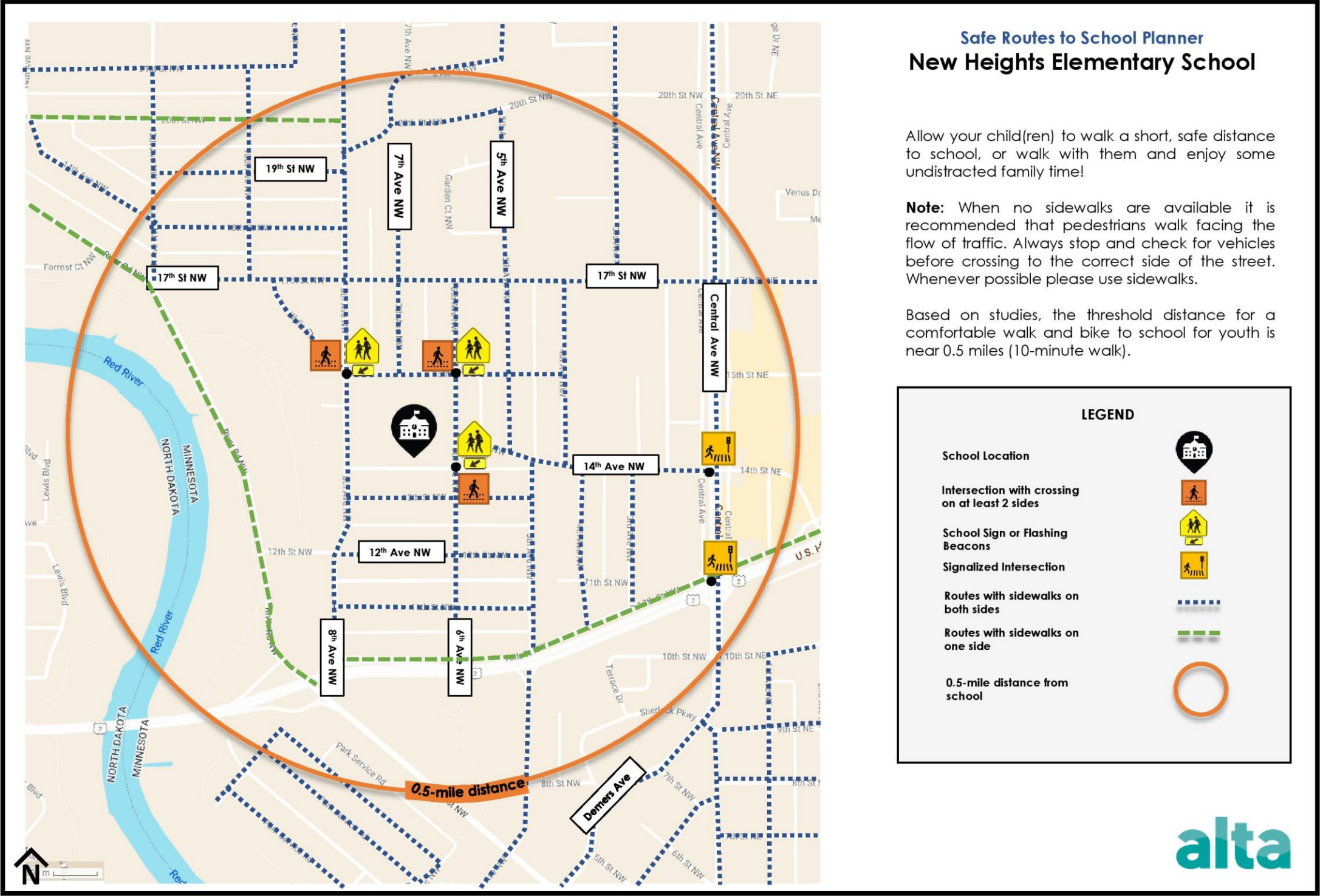
Suggestions	Cocoa for Carpools	Carpooling does not necessarily encourage walking and bicycling, but it can reduce the number of cars at and around the school during peak hours, which can reduce conflicts and improve safety and comfort overall.	School/PTO/PTA/Parents and Families	<p>An event that encourages students, parents, and other school staff members to carpool to school or work. On the event day, each carpooler receives a: “thank you” cup of hot cocoa when they arrive at school.</p> <p>Requires commitment from a dedicated group of volunteers or staff to plan, schedule and operate the carpools.</p> <ul style="list-style-type: none"><li>Planning: 4 weeks before the event</li><li>Promotion: 2 weeks before the event</li></ul>	Recurring (monthly or weekly) in the winter or spring	<ul style="list-style-type: none"><li><a href="#">King County Metro Cocoa for Carpools kit</a></li><li><a href="#">Alameda County Safe Routes to Schools Program:</a></li></ul>
Walking and Biking Events						
Existing	<ul style="list-style-type: none"><li>Fire up your Feet Friday</li><li>Wheeling Wednesday</li><li>Safety on Wheels</li><li>Taking it to the Streets</li><li>“Caught” in the crosswalk</li></ul>					
Suggestions	Walk & Roll to School Days	To celebrate families who already walk or wheel to school and encourage others to give active transportation a try.	School District/School/PTO/PTA	Walk & Roll to School Day is an annual event that involves communities from across the country (and the globe!) walking and rolling to school on the same day.	The first week of October	<ul style="list-style-type: none"><li><a href="#">Minnesota SRTS Walk &amp; Bike Events</a></li><li><a href="#">The National Center for Safe Routes to School</a></li><li><a href="#">Safe Routes to School Parent and Community Empowerment Toolkit</a></li><li><a href="#">San Mateo County Safe Routes to School Walk + Roll Guidebook</a></li><li><a href="#">Ontario Active School Travel, Canada</a></li></ul>
	Walking School Bus	To provide a safe and dependable way for children to walk to school.	School/PTO/PTA to promote/distribute and Parents and Families to lead	<p>A Walking School Bus (WSB) is a group of children walking together under the supervision of one or more adult leaders following a prescribed route and schedule. Each “bus” picks up children at designated stops along the way to school. Some WSBs operate every day while others may only run weekly or monthly.</p> <p>Commitment from a dedicated group of volunteers or staff to plan, schedule and operate the WSB program.</p> <p>While a WSB has many benefits, it can be challenging for a school community to develop and sustain one as a volunteer-based initiative. A good first step is to contact your school board/district, student transportation authority, municipality and/or public health unit to find out what help is available in your community for a WSB initiative. If there is none, you should reach out to the principal, school council, and interested parents/caregivers to determine the level of interest in, and capacity to support, a WSB.</p>	Recurring (monthly or weekly)	<ul style="list-style-type: none"><li><a href="#">Safe Routes to School National Partnership's Step-by-Step Walking School Bus Toolkit</a></li><li><a href="#">The Canadian Cancer Society's Walking School Bus</a></li><li><a href="#">Alameda County’s Walking School Bus &amp; Bike Train</a></li></ul>

	Safe Routes to School Champions	Parent support is essential for Safe Routes to School programs to be successful and sustainable at school sites. The goal is to get parents involved to encourage students to walk and bike to school.	School/PTO/PTA to promote/distribute and Parents and Families to lead	Educates parents and families on how they can get involved (data collection, school and neighbourhood improvements, policy change, and programs) in Safe Routes to School and become their community's champions to enable and encourage more walking and biking.	Ongoing throughout the school year	<ul style="list-style-type: none"> <li><a href="#">Safe Routes to School National partnership, How to be a Parent Champion for Safe Routes to School</a></li> <li><a href="#">Teaching Children to Walk Safely as They Grow and Develop: A Guide for Parents and Caregivers</a></li> <li><a href="#">Safe Routes to School Encouragement Ideas</a></li> <li><a href="#">Safe Routes to School Parent and Community Empowerment Toolkit</a></li> </ul>
	Bicycle Safety Education/Bike Rodeo	To encourage students to cycle more by giving them the knowledge and skills they need to be able to do so safely and confidently.	School/PTO/PTA	Comprehensive skills-based session(s) designed to teach bike handling skills as well as knowledge about the rules of the road and safe cycling practices.	Annual event	<ul style="list-style-type: none"> <li><a href="#">Safe Routes to School, San Mateo County</a></li> <li><a href="#">Minnesota Walk! Bike! Fun!</a></li> <li><a href="#">National Center for Safe Routes to School, education resources</a></li> </ul>
	Pedestrian Safety Education	To encourage students to walk more by giving them the knowledge and skills they need to be able to do so safely and confidently.	School/PTO/PTA	Comprehensive skills-based education session(s) designed to teach children about the benefits of walking, how to identify safety risks, and how to use common street features such as traffic signs, signals and crossings. Sessions are usually led by qualified instructors, working with a group of children to take them through several hours of teaching and coaching.	Annual event	<ul style="list-style-type: none"> <li><a href="#">Traffic Safety Training: Walking and Bicycling Programs</a></li> <li><a href="#">Minnesota Walk! Bike! Fun!</a></li> <li><a href="#">National Center for Safe Routes to School, education resources</a></li> <li><a href="#">Pedestrian safety at School</a></li> </ul>
School Bus Riding						
Suggestion	Ride Your School Bus (East Grand Forks)	To get more students who are offered school bus service to ride regularly, rather than driving by car.	School/PTO/PTA	<p>A campaign to encourage students to make full use of the offered school bus service, by identifying and addressing barriers for users, and by incentivizing ridership.</p> <p>A good starting point for developing a campaign is to assess how many students are actually riding the school bus – this can be done by conducting a Student Travel Survey and comparing the results to the number of students that are registered for bus service. Ridership levels can also be gauged by carrying out head counts as students disembark or board the bus at school.</p>	Ongoing throughout the school year	<ul style="list-style-type: none"> <li><a href="#">School bus safety</a></li> <li><a href="#">CAA Ontario Road Safety Resources, Canada</a></li> </ul>
Raising Awareness around Active School Travel						
Existing	<ul style="list-style-type: none"> <li>Back-to-school messages on the radio, mailers, and yard signs</li> <li>Quick tick Tuesday</li> </ul>					

Suggestion	Awareness Campaign	To raise awareness and build enthusiasm for walking and wheeling.	School District/School/PTO/PTA	<p>A coordinated campaign featuring activities, events and communications highlighting the many benefits of active school travel for students, families and the wider community. Planning a schedule of campaign activities to happen throughout the school year is a good way to keep the benefits top-of-mind for families, gradually shifting perceptions about safety and convenience, and ultimately building a school culture that supports walking and cycling.</p> <p>An Awareness Campaign should ideally use a variety of communications tools, including:</p> <ul style="list-style-type: none"><li>• Announcements &amp; Posters</li><li>• Newsletter articles</li><li>• School website &amp; social media</li><li>• Classroom activities</li><li>• Assembly</li><li>• Press releases to attract local media coverage</li></ul>	Ongoing throughout the school year	<ul style="list-style-type: none"><li>• <a href="#">Ped Bike Info</a></li><li>• <a href="#">Benefits of Active School Travel by Green Communities Canada</a></li><li>• <a href="#">Raising physically literate kids by Active for Life</a></li></ul>
	For drivers					
Existing	<ul style="list-style-type: none"><li>• Incentive programs for parents - e.g., don't park on the crosswalk on site</li><li>• Adult volunteers to educate parents on school drop-off and pick-up regulations</li></ul>					
Suggestion	Driver Education/Safety Campaign	To raise awareness of school safety zone among drivers	School/PTO/PTA/Local programs (organizations)/City	School safety event that aims to help educate drivers on how to be safe around stopped school buses, pedestrian crossovers, school zones and intersections.	Annual event	
	Drive to 5	To alleviate traffic congestion and improve safety around a school site by reducing the number of vehicles.	School District/PTO/PTA	<p>A campaign targeting families who drive to school, encouraging them to park their car approximately five minutes away from the school and either walk with their children or allow them to walk independently the rest of the way. This disperses traffic away from the school site, creating a safer school commute for everyone.</p> <p>A Drive to 5 program can be customized in various ways, depending on a school's needs and available resources. Components can include:</p> <ul style="list-style-type: none"><li>• Messages from the principal to families, explaining traffic concerns and asking drivers to park vehicles 5 minutes away from the school site;</li><li>• Mapping and signs to identify and promote recommended parking locations;</li><li>• Assemblies, announcements and posters, etc. to get students excited so that they will encourage their parents to participate;</li><li>• Parent volunteer greeters at each recommended location;</li></ul>	Recurring (monthly or weekly)	<ul style="list-style-type: none"><li>• <a href="#">Park and Walk program by Spare the Air Youth</a></li><li>• <a href="#">Student Transportation Services of Waterloo Region, Canada</a></li><li>• <a href="#">Capital Region District (BC), Canada</a></li></ul>

Appendix A: Maps

New Heights Elementary School





## Safe Routes to School Planner

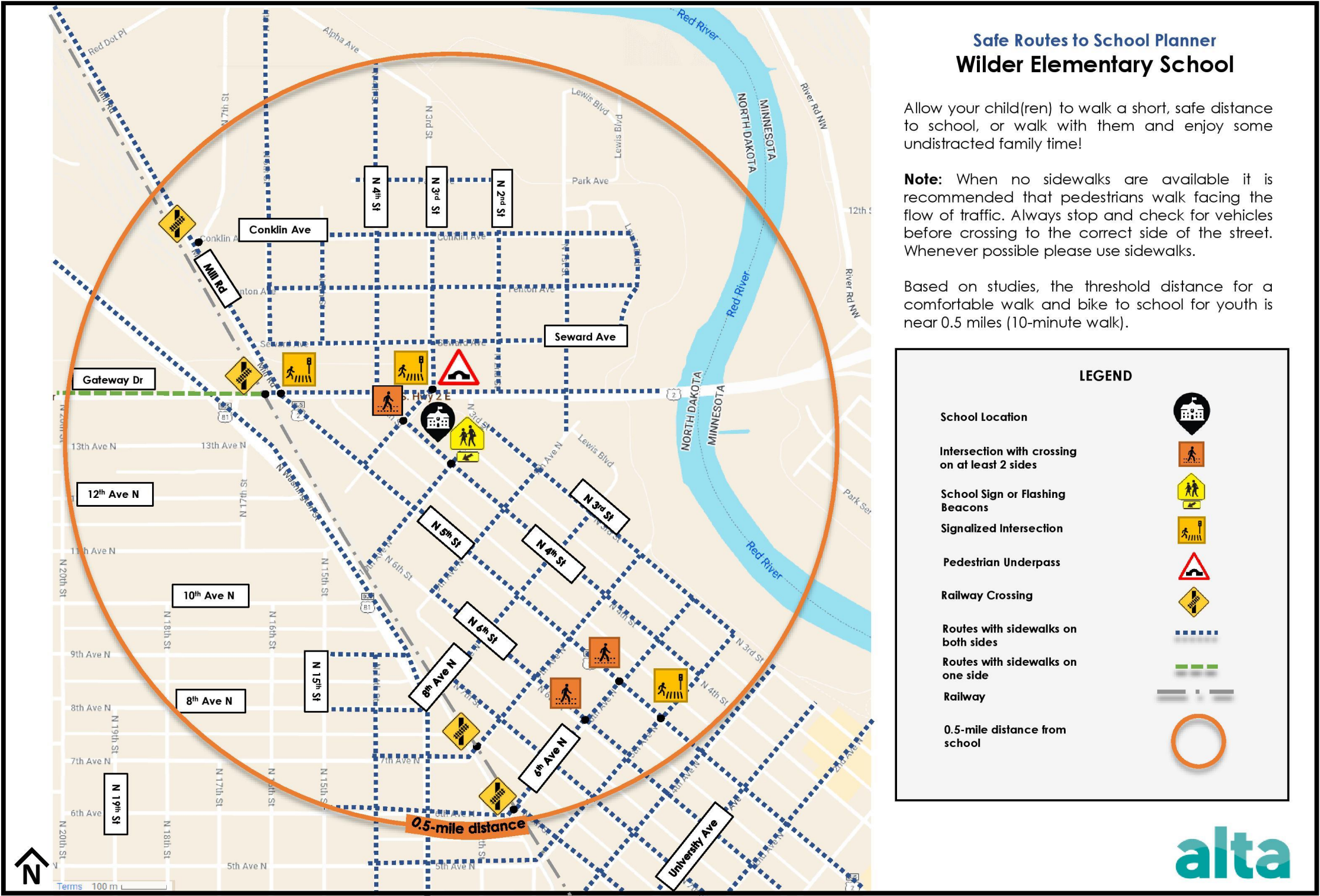
### South Point Elementary and Central Middle Schools



Based on studies, the threshold distance for a comfortable walk and bike to school for youth is near 0.5 miles (10-minute walk).

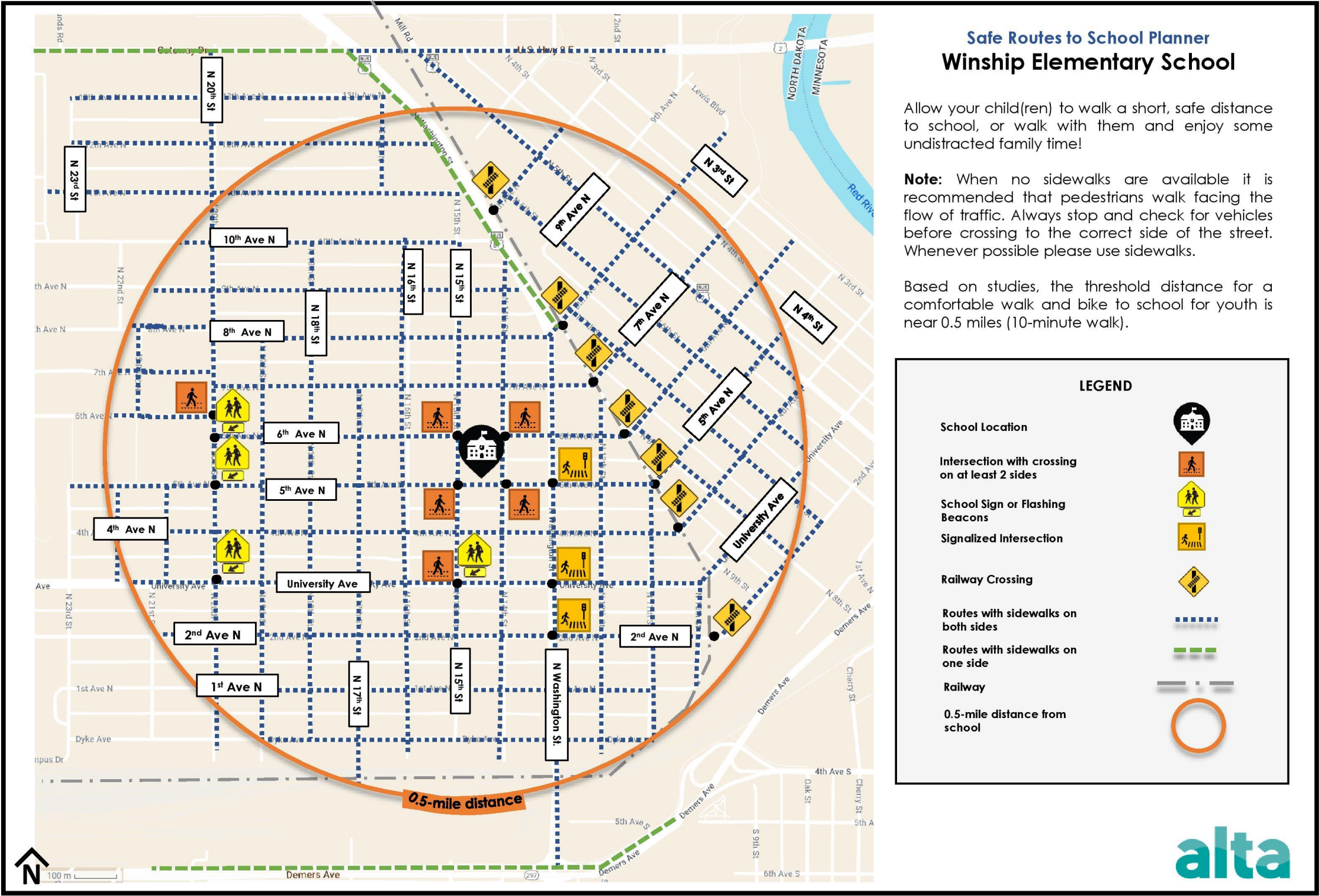


Wilder Elementary School



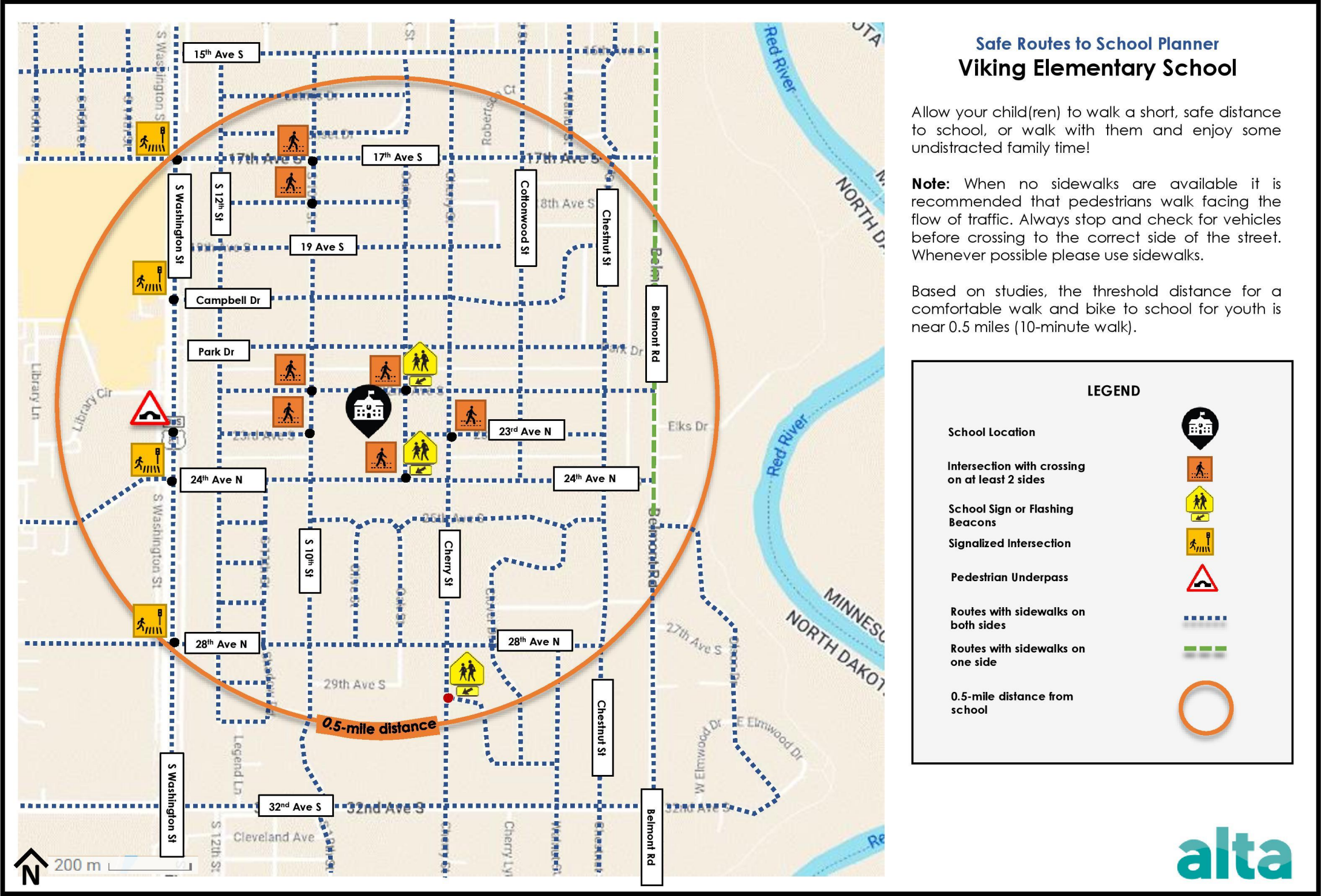


Winship Elementary School



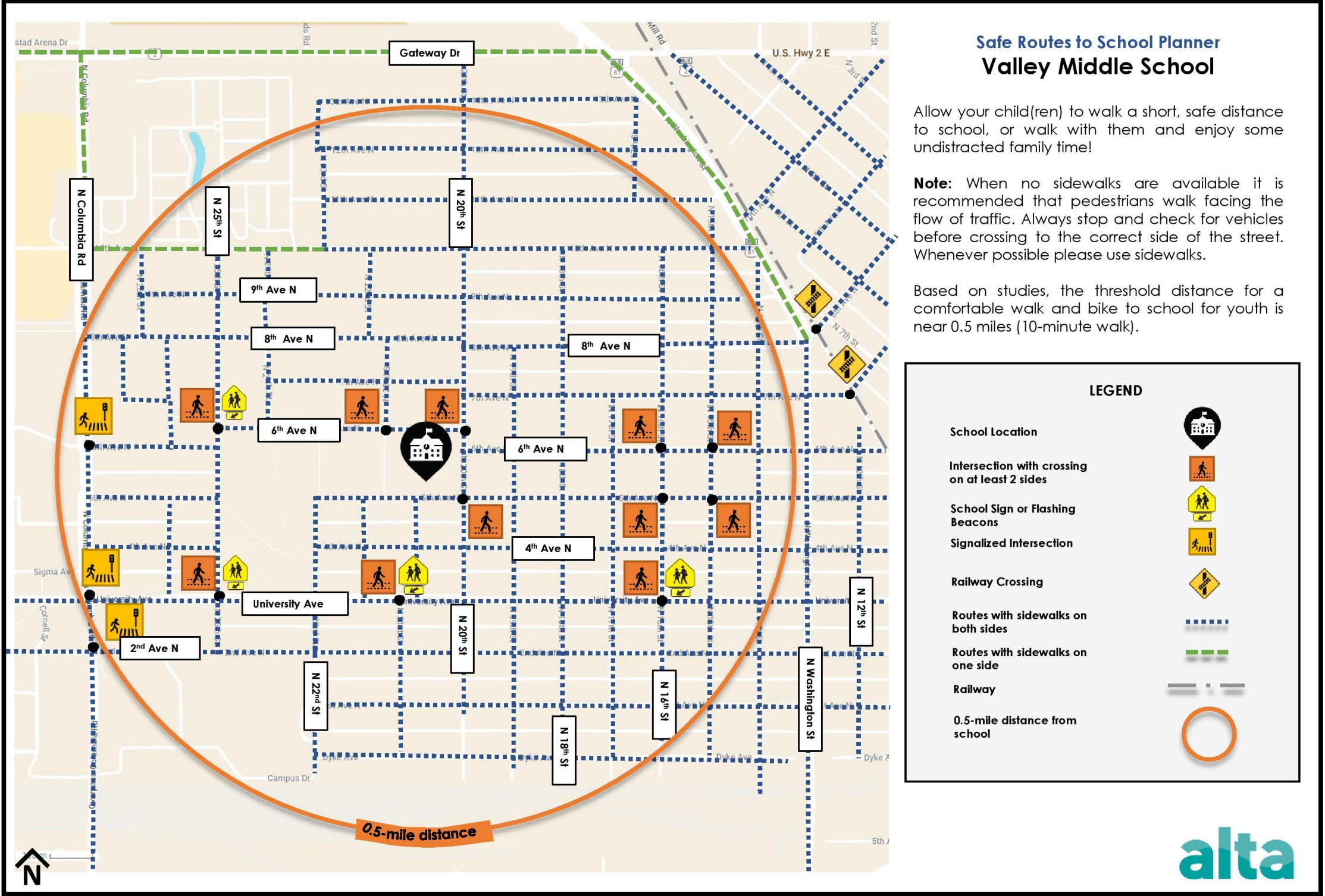


Viking Elementary School



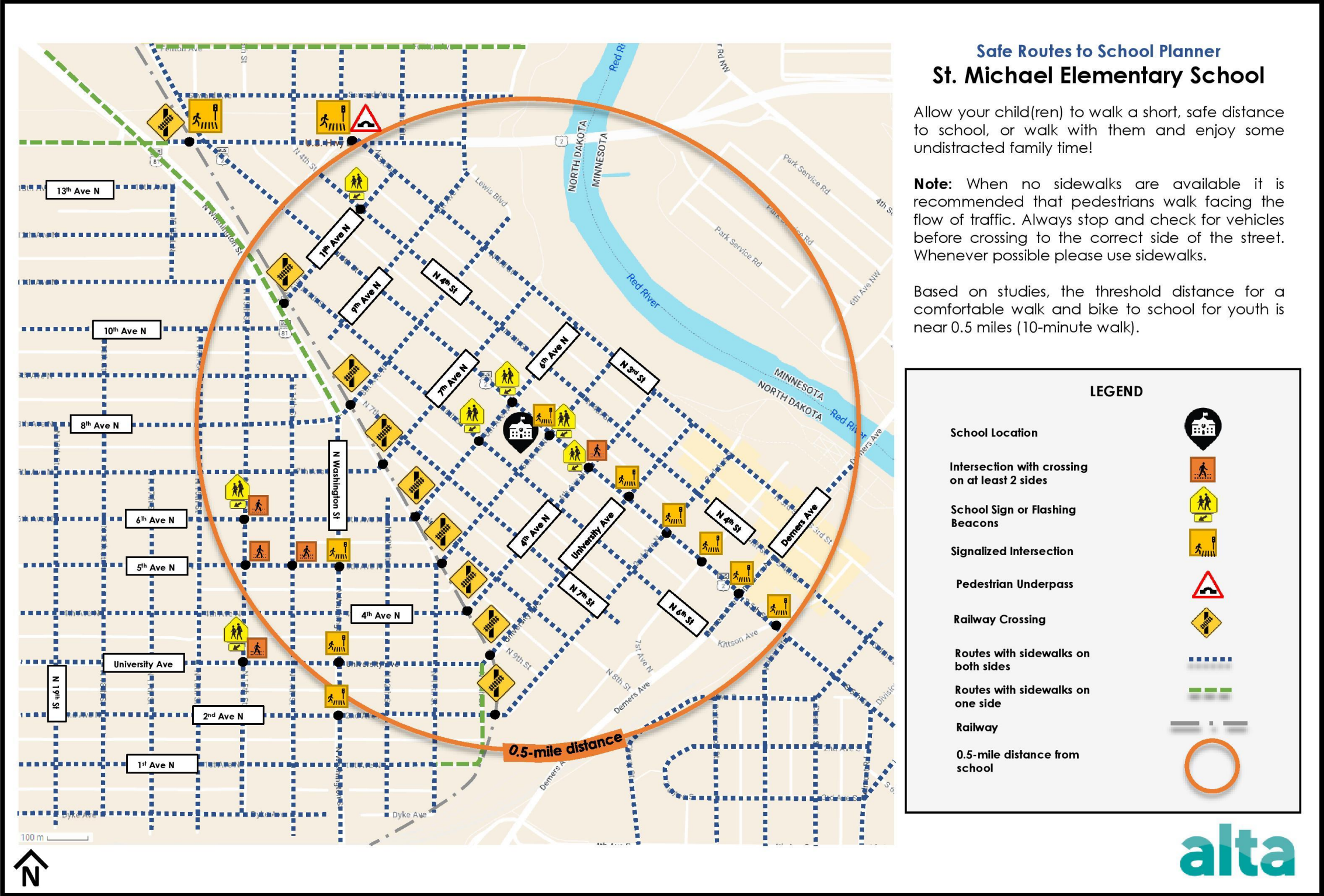


Valley Middle School



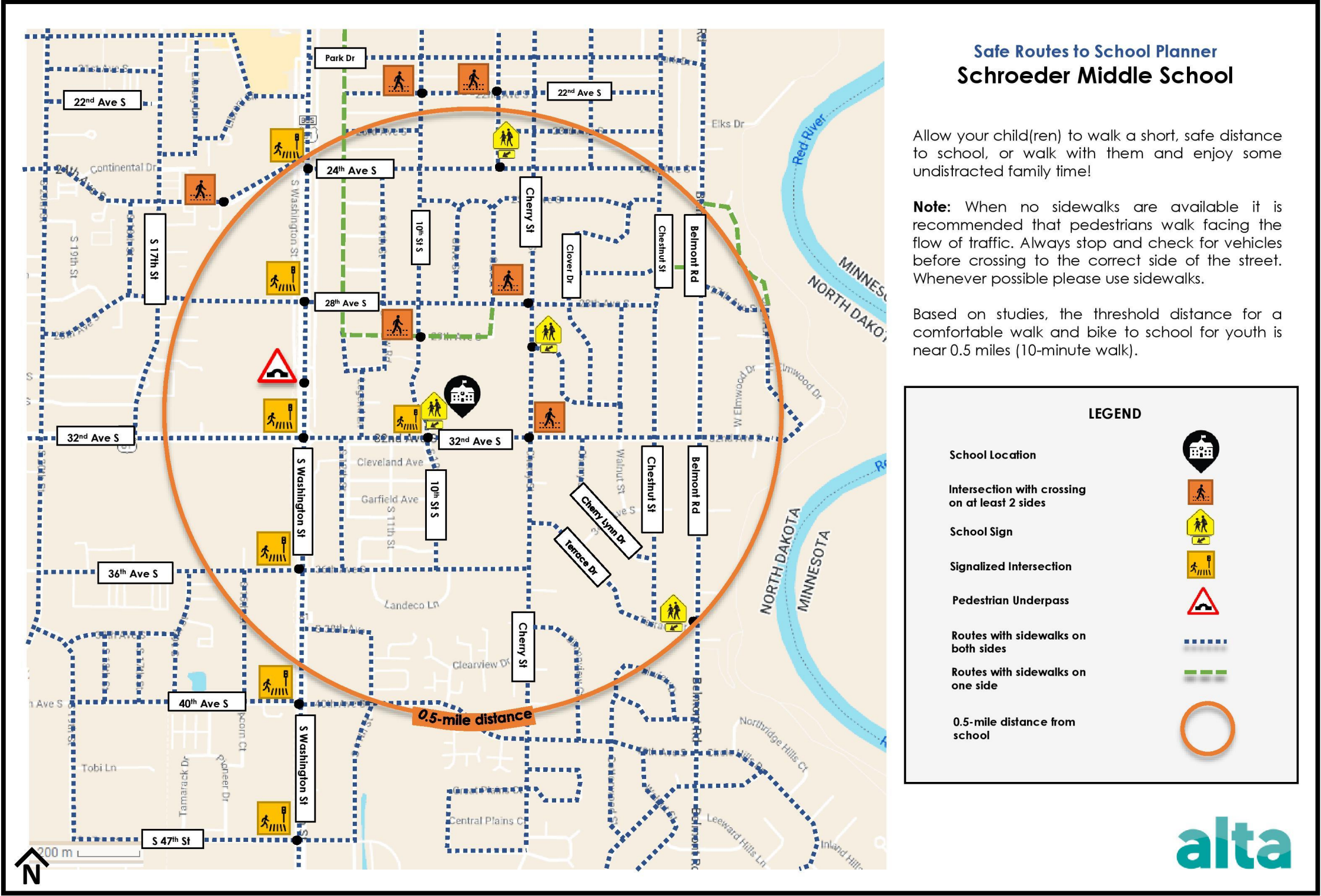


St. Michael Elementary School



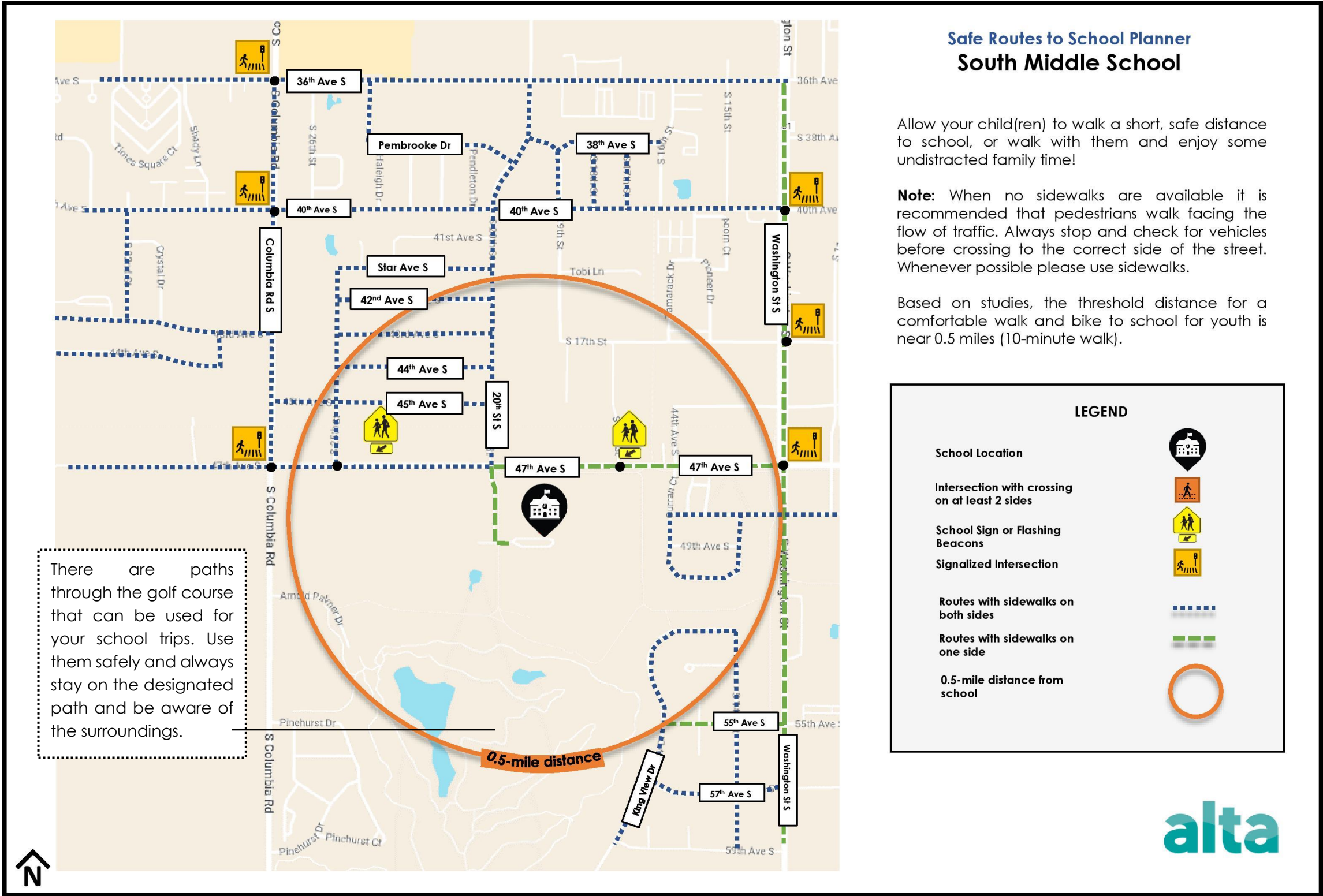


Schroeder Middle School

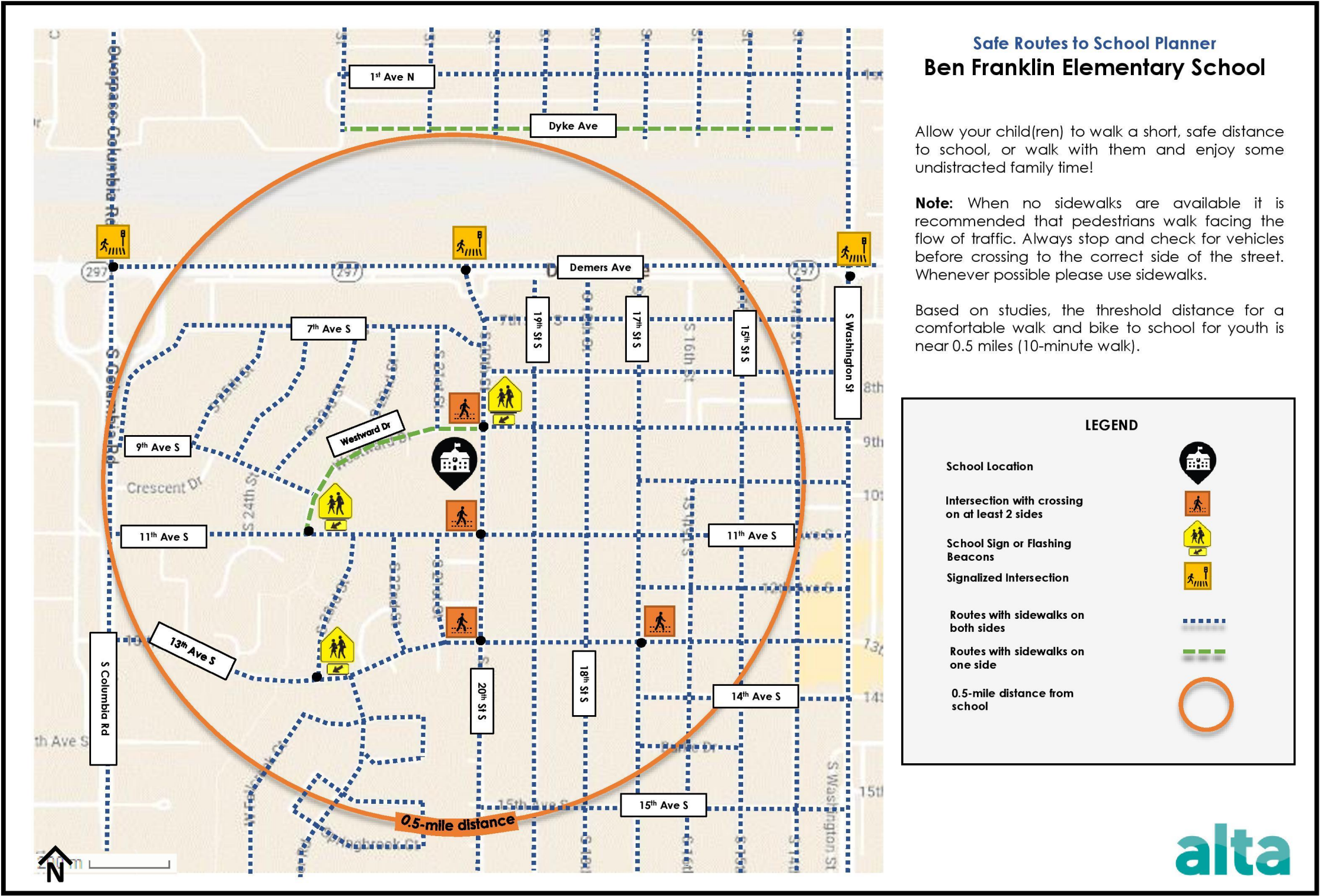




South Middle School



Ben Franklin Elementary School



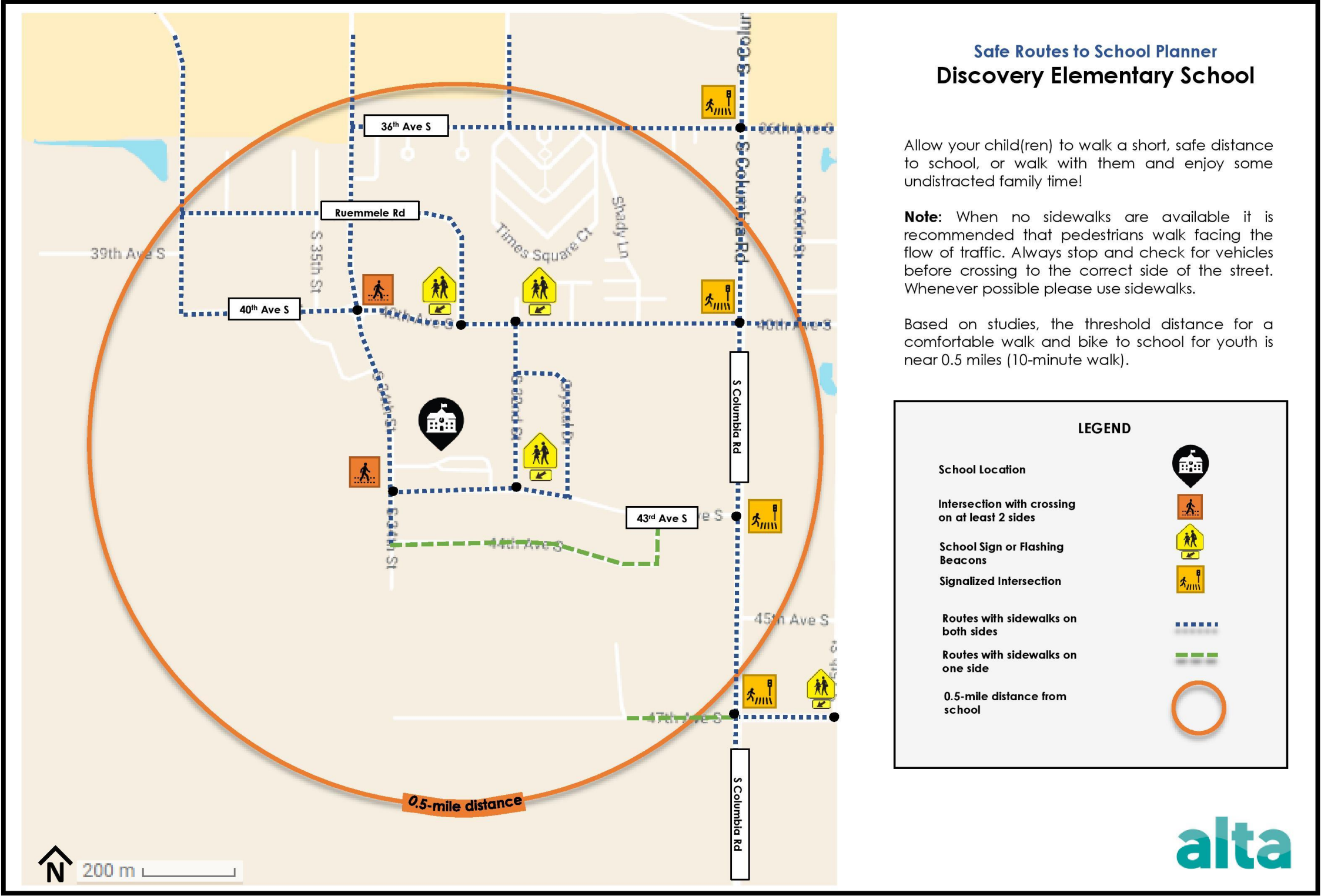


## Century Elementary School

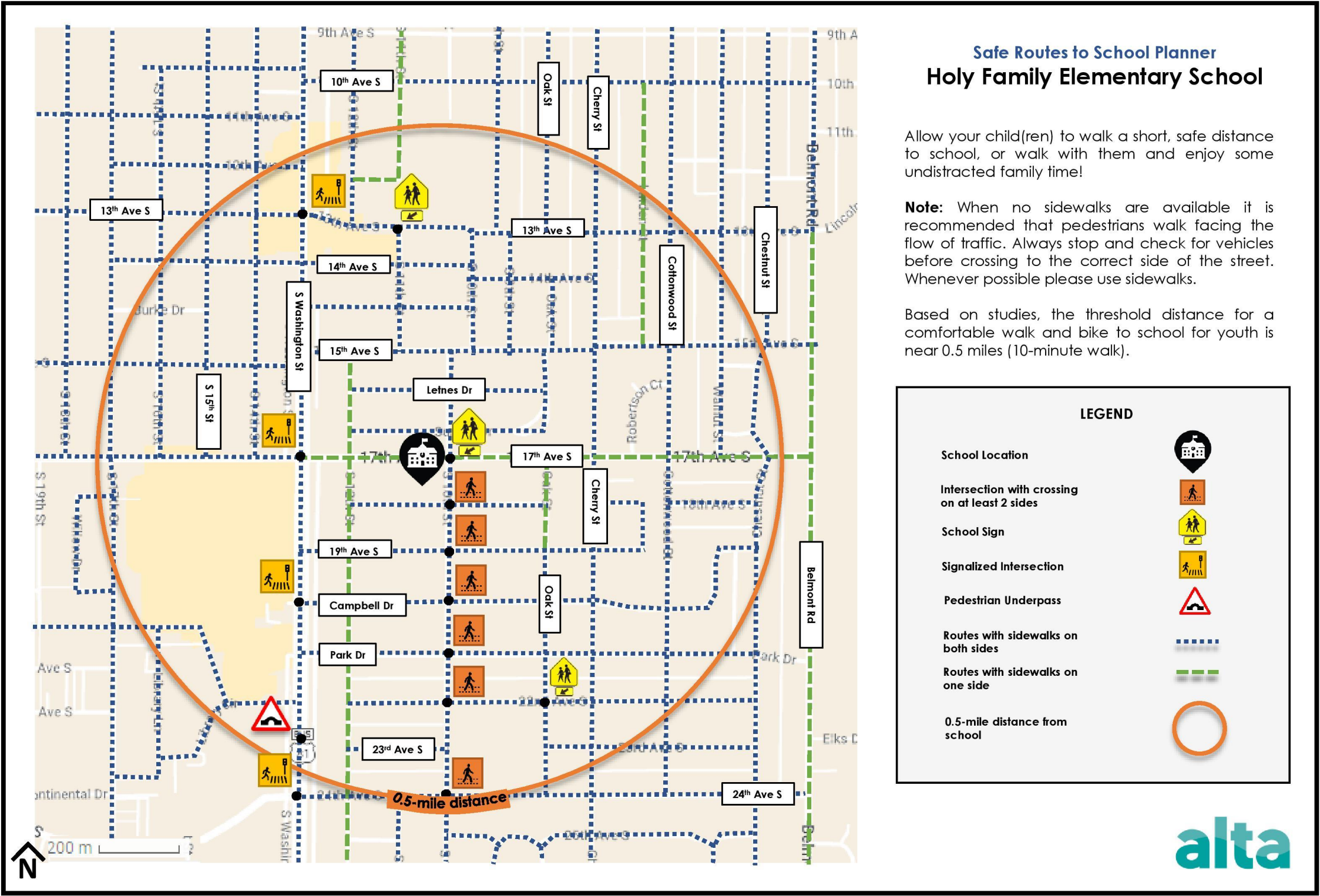




Discovery Elementary School



Holy Family Elementary School





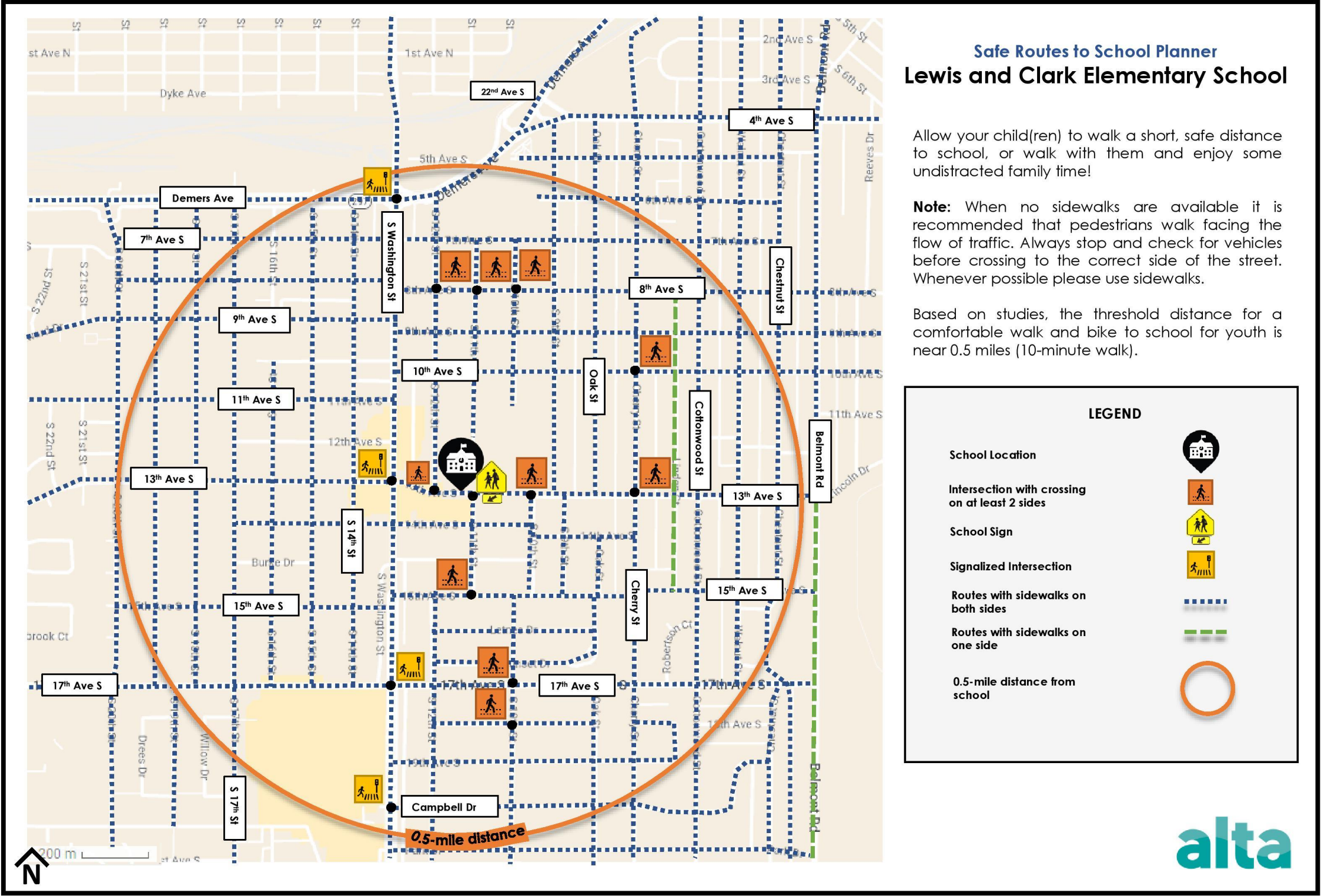
**Safe Routes to School Planner**  
**J Nelson Kelly Elementary School**

Based on studies, the threshold distance for a comfortable walk and bike to school for youth is near 0.5 miles (10-minute walk).



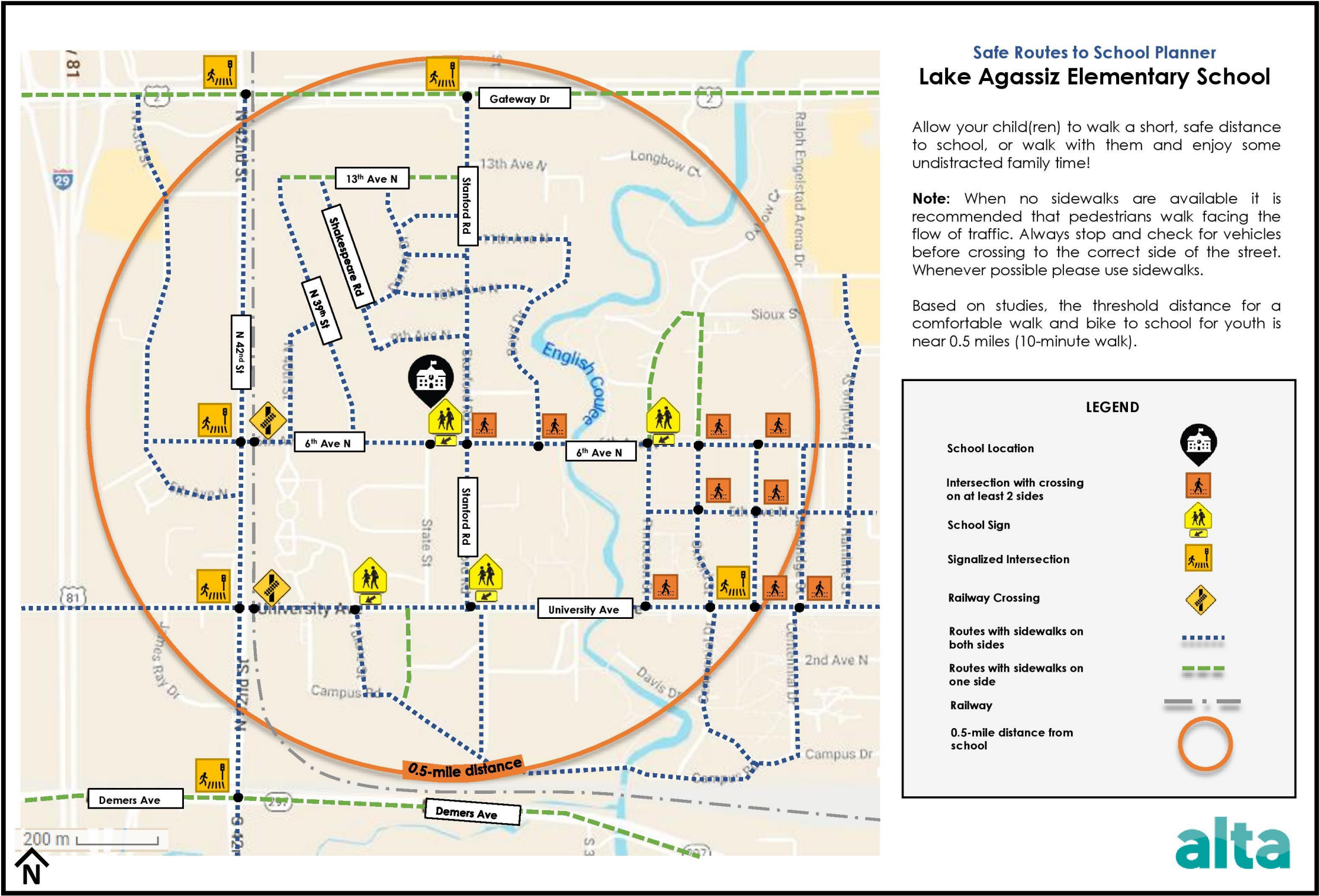


Lewis and Clark Elementary School



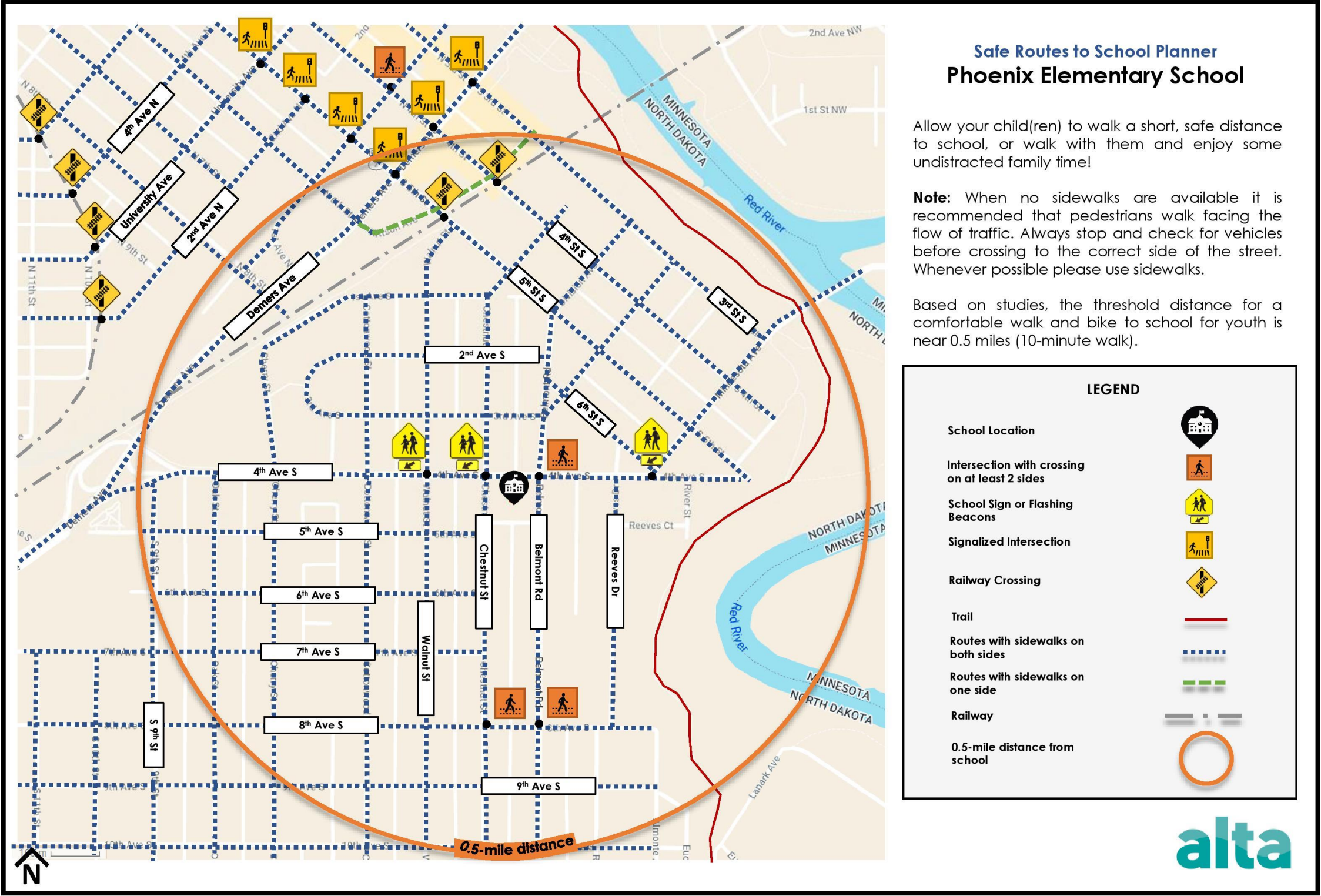


Lake Agassiz Elementary School





Phoenix Elementary School





## Appendix B:

### School Name: J. Nelson Kelly Elementary School

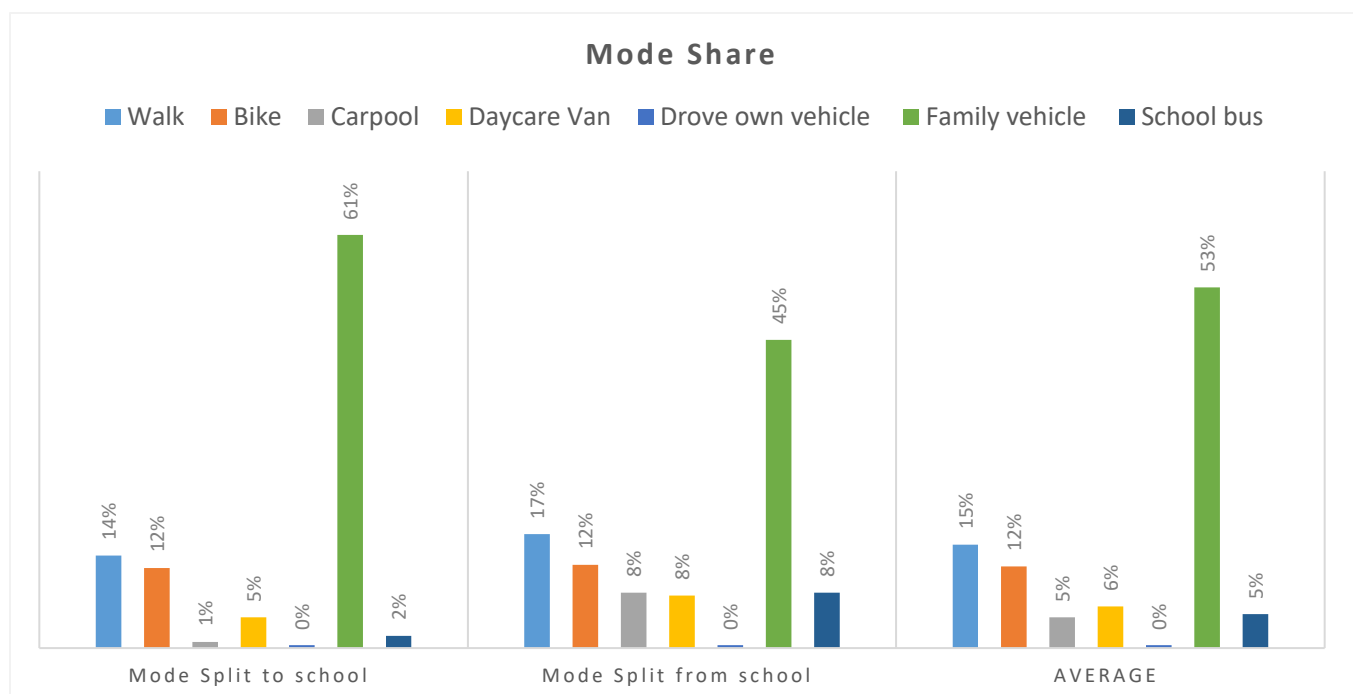
Data gathered through the Parent/caregiver survey was analyzed by the consultant team to better understand travel habits, travel mode split, influencing factors, and perceptions of barriers to active school travel.

This data does not account for families who didn't participate in the survey. The response rate for the survey was 221/467 students at J. Nelson Kelly Elementary School.

### Mode Share and Distance

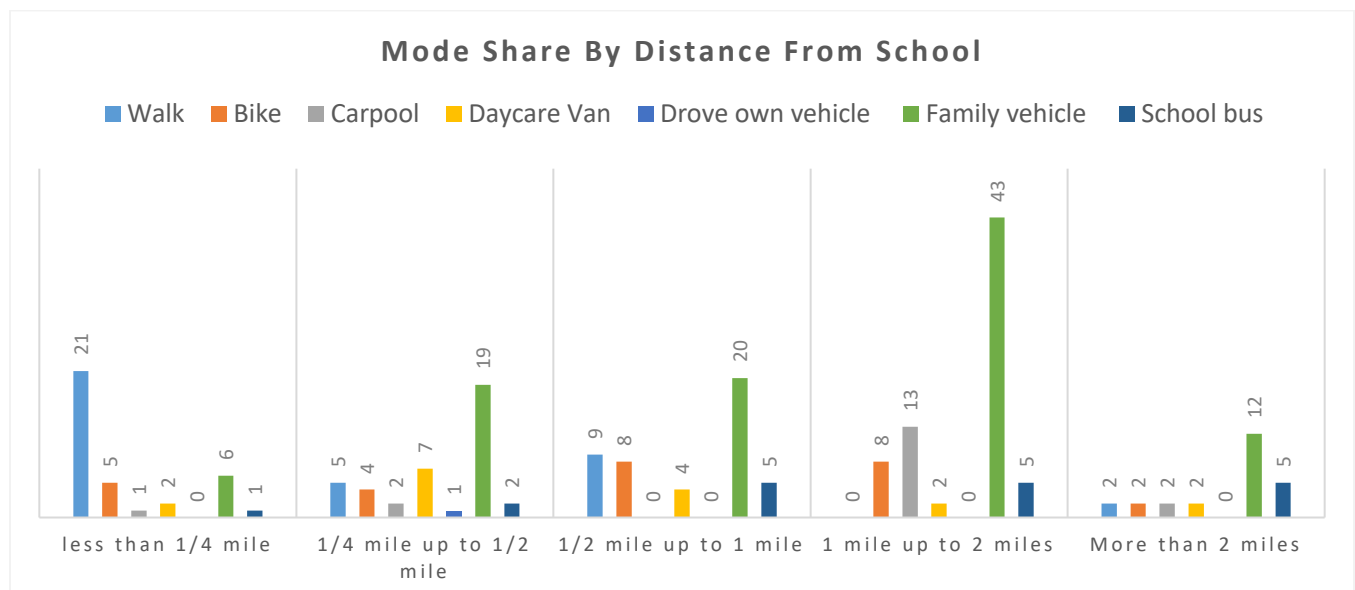
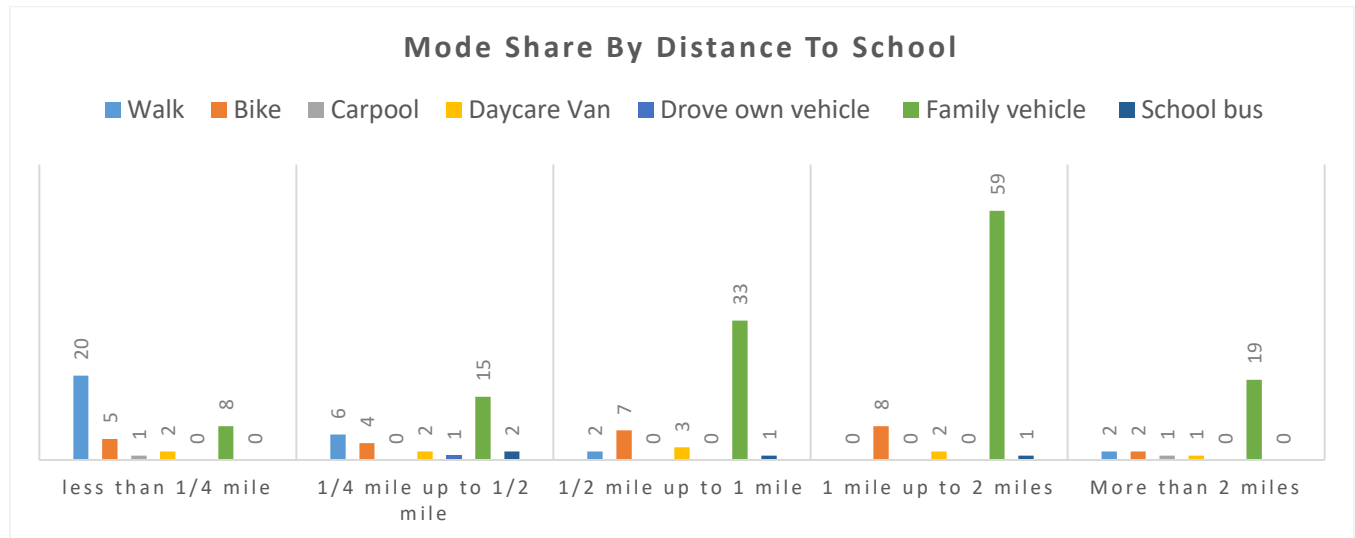
Based on the survey results, The most popular mode of transport at J. Nelson Kelly Elementary School is family vehicles at 53% of students (average of the mode split to/from school). Only 12% of participants reported biking and 15% reported walking for their school travel.

	Mode Split to school	Mode Split from school	AVERAGE
Walk	14%	17%	15%
Bike	12%	12%	12%
Carpool	1%	8%	5%
Daycare Van	5%	8%	6%
Drove own vehicle	0%	0%	0%
Family vehicle	61%	45%	53%
School bus	2%	8%	5%



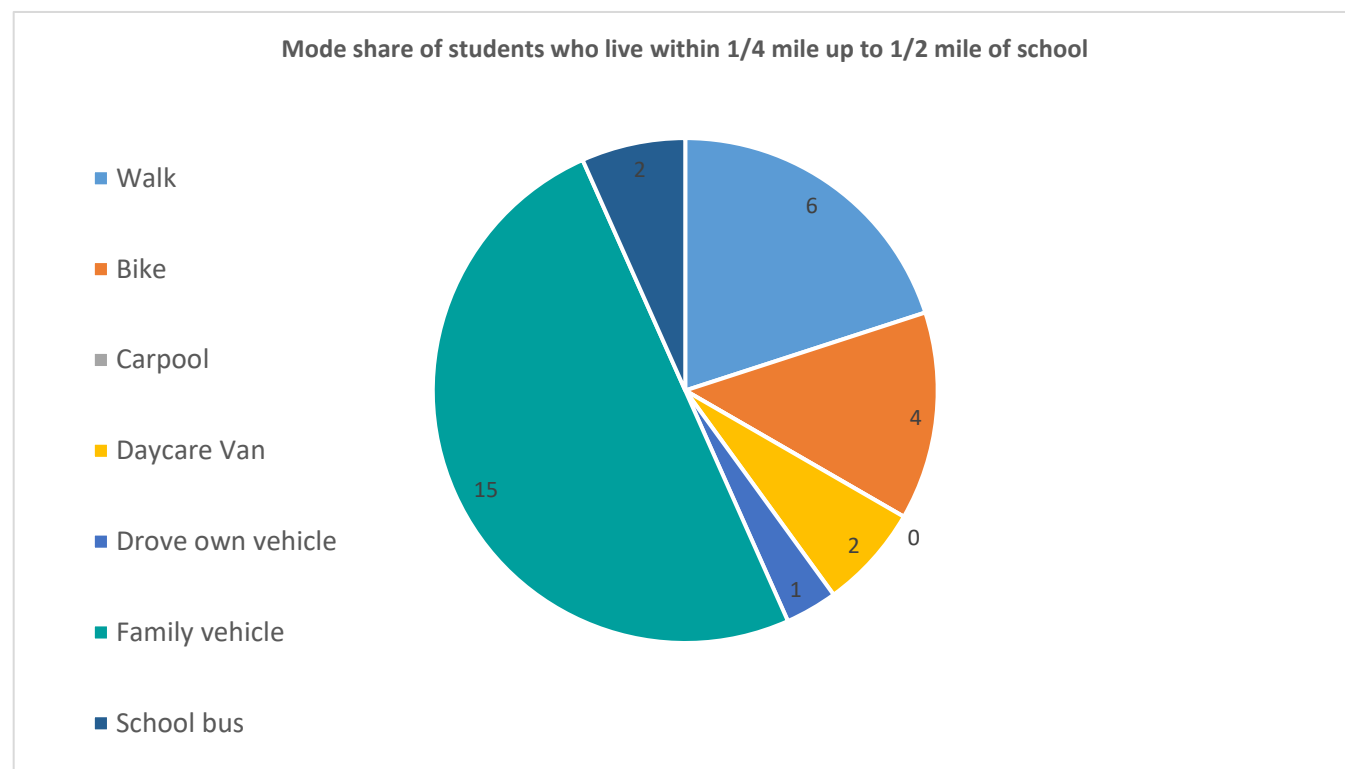
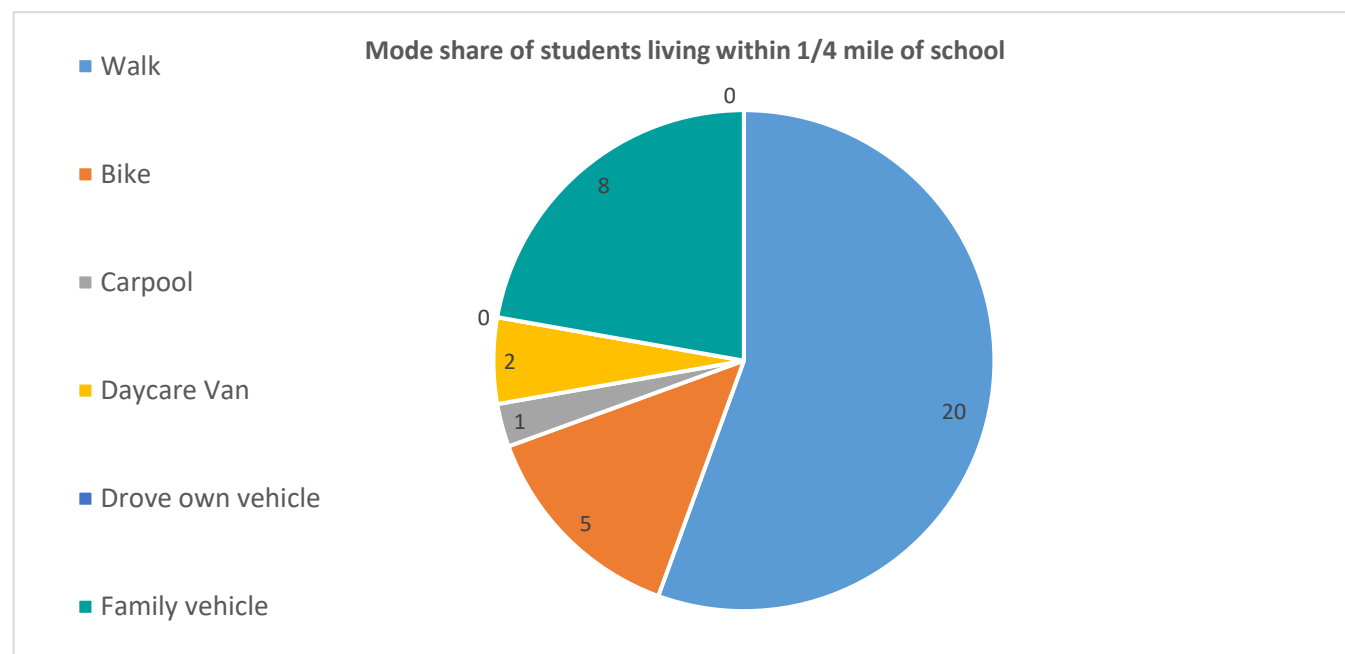
To examine distance as a driving factor for travel mode, we looked at the mode share within 5 distance categories:

- Less than 1/4 mile
- 1/4 mile up to 1/2 mile
- 1/2 mile up to 1 mile
- 1 mile up to 2 miles
- More than 2 miles



Observed pattern: As the distance from school increases, the number of students coming to school by vehicle increases so it is worth focusing on changing the perception of what distances are “too far” to walk/bike to school.

Considering that half a mile is a comfortable distance for elementary students to walk/bike to school, it is expected that all students living within this distance choose active transportation for their school travel. Here is the current mode split for students living within half a mile of the school

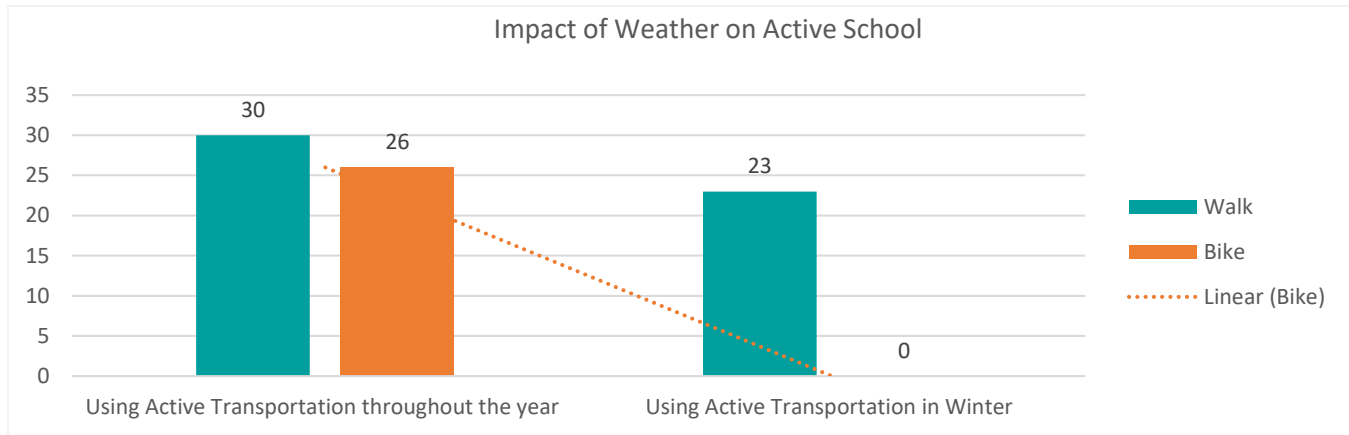




## Barriers To Active School Travel:

### Weather:

The following chart compares the status of walking and biking throughout the year with winter months.

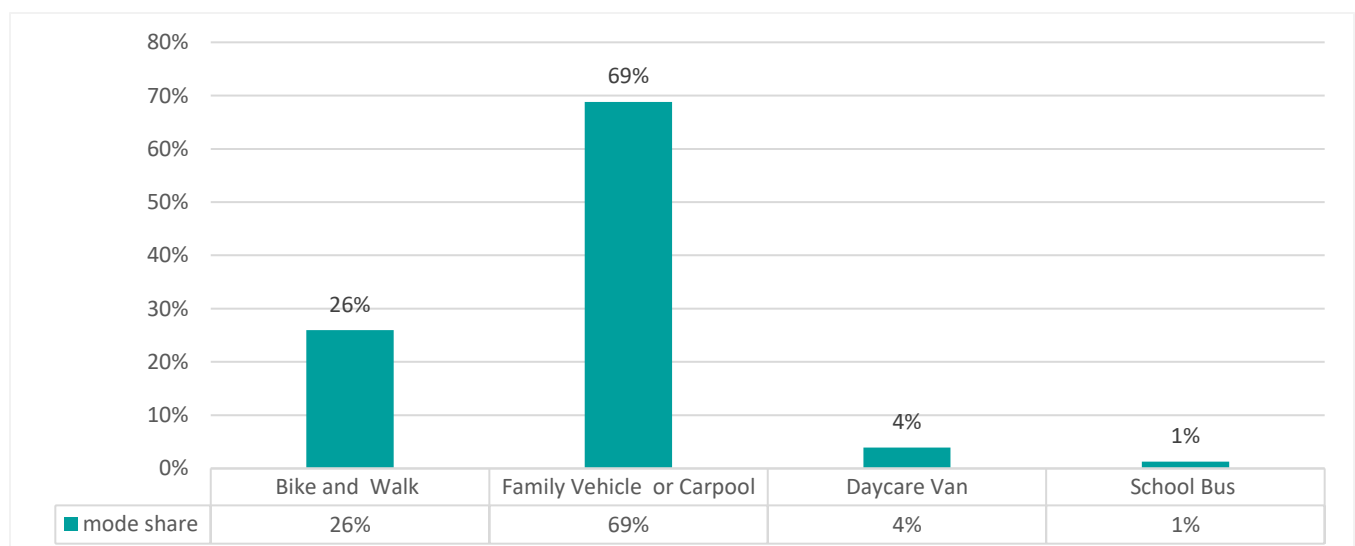


Observed pattern: During the colder months, the number of students choosing active transportation decreases. To overcome this perceived barrier to walking/biking, program can focus on promoting/celebrating enjoyability and opportunities for exercise by walking and cycling during winter (events like winter walk day) to encourage caregivers and students to choose (or continue to choose) active modes of travel.

Also, weather is a greater perceived barrier for cycling to school than for walking. This could mean that safety concerns related to biking should be addressed while walking is being promoted or celebrated.

### Crossing A Major Road:

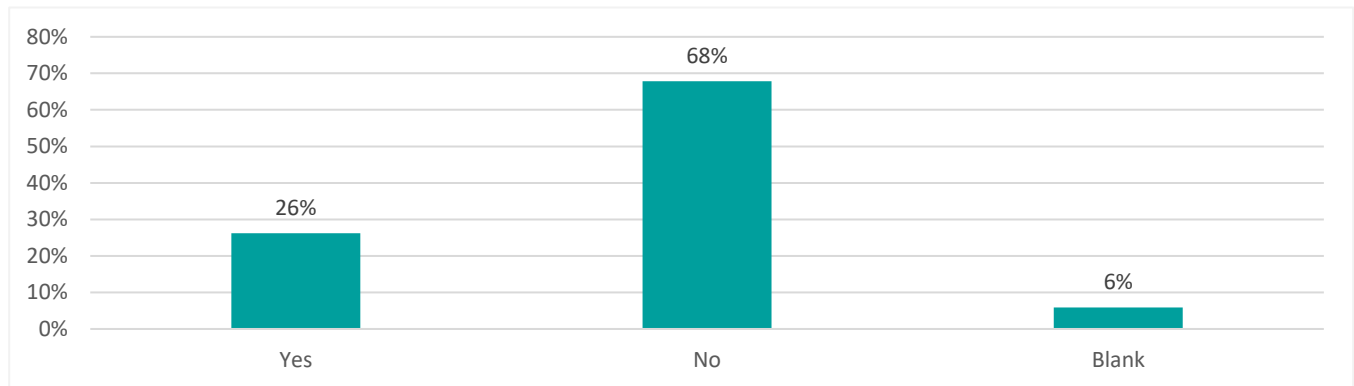
Amongst students who have to cross a major road to get to school, 73% of students are being driven to school (family vehicle and carpool + daycare van). This shows that crossing major roads is one of the main barriers for students to exercise active travel modes to school.



## Awareness:

### Awareness of the Safe Routes to School maps:

When asked about the Safe Routes to School Maps, 68% of participants had no or limited knowledge of the Safe Routes to School maps. This could be a leading factor for the future success of this program and upcoming campaigns.



## Interest Among Students:

Participants were asked “Has your student asked you for permission to walk or bike to/from school in the last calendar year?” during the parent/caregiver survey. Of the 221 responses received on the survey, 104 reported an interest from their students in walking and biking to/from this school which is around 47%. From this group, only 40 families (~38%) reported walking and biking for their school travel.

Participants shared concerns around safety of intersections and crossings, distance from school, speed of traffic along the route, personal safety or criminal activity, and poor driving behavior on the street as barriers to walking and biking to school for these students.

This shows that aside from encouraging students to walk/bike to school, future programs and campaigns need to focus on caregivers too to help them overcome their concerns and encourage their kids to walk and bike to school.

Interest amongst students		
Participants reporting an interest in walking and biking for their students	104	47% of the total participants
Students Walking and Biking from this group	40	38% of the interested group

## School Name: Winship Elementary School

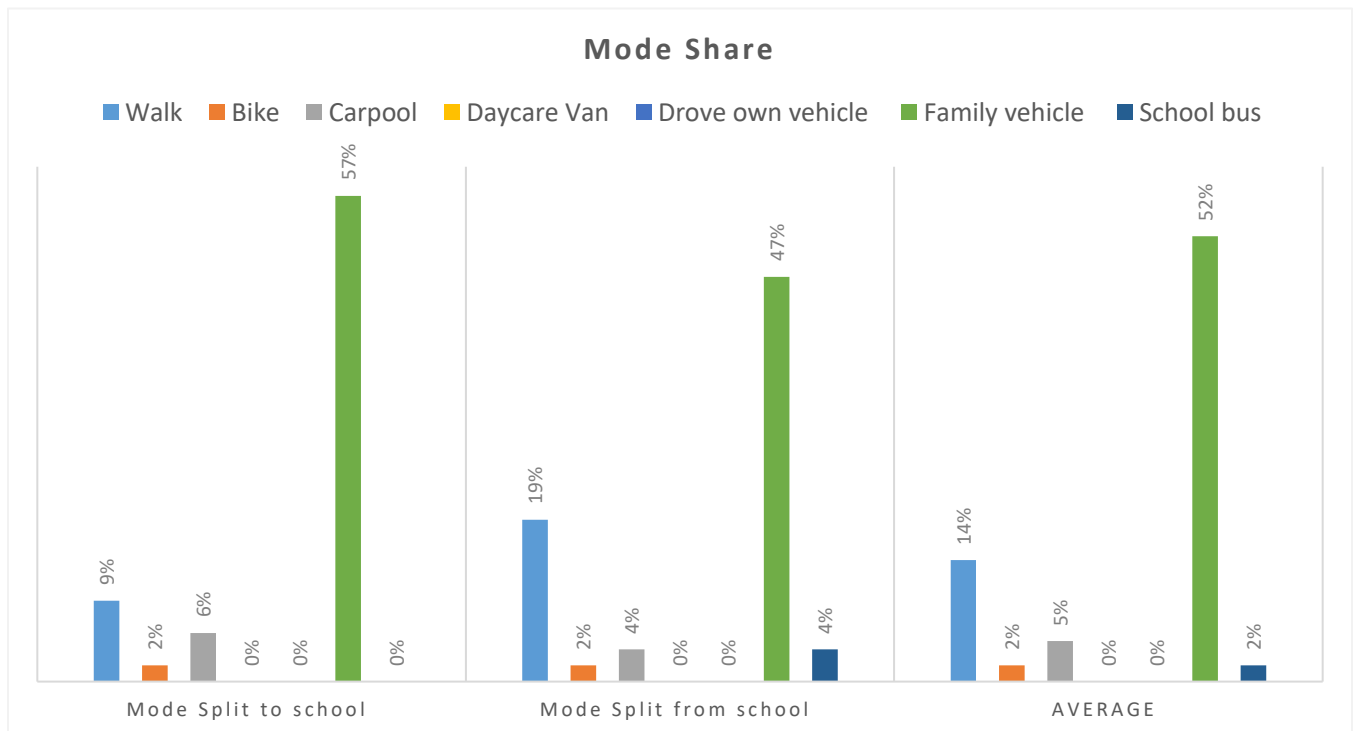
Data gathered through the Parent/caregiver survey was analyzed by the consultant team to better understand travel habits, travel mode split, influencing factors, and perceptions of barriers to active school travel.

This data does not account for families who didn't participate in the survey. The response rate for the survey was 53/213 students at Winship Elementary School.

### Mode Share and Distance

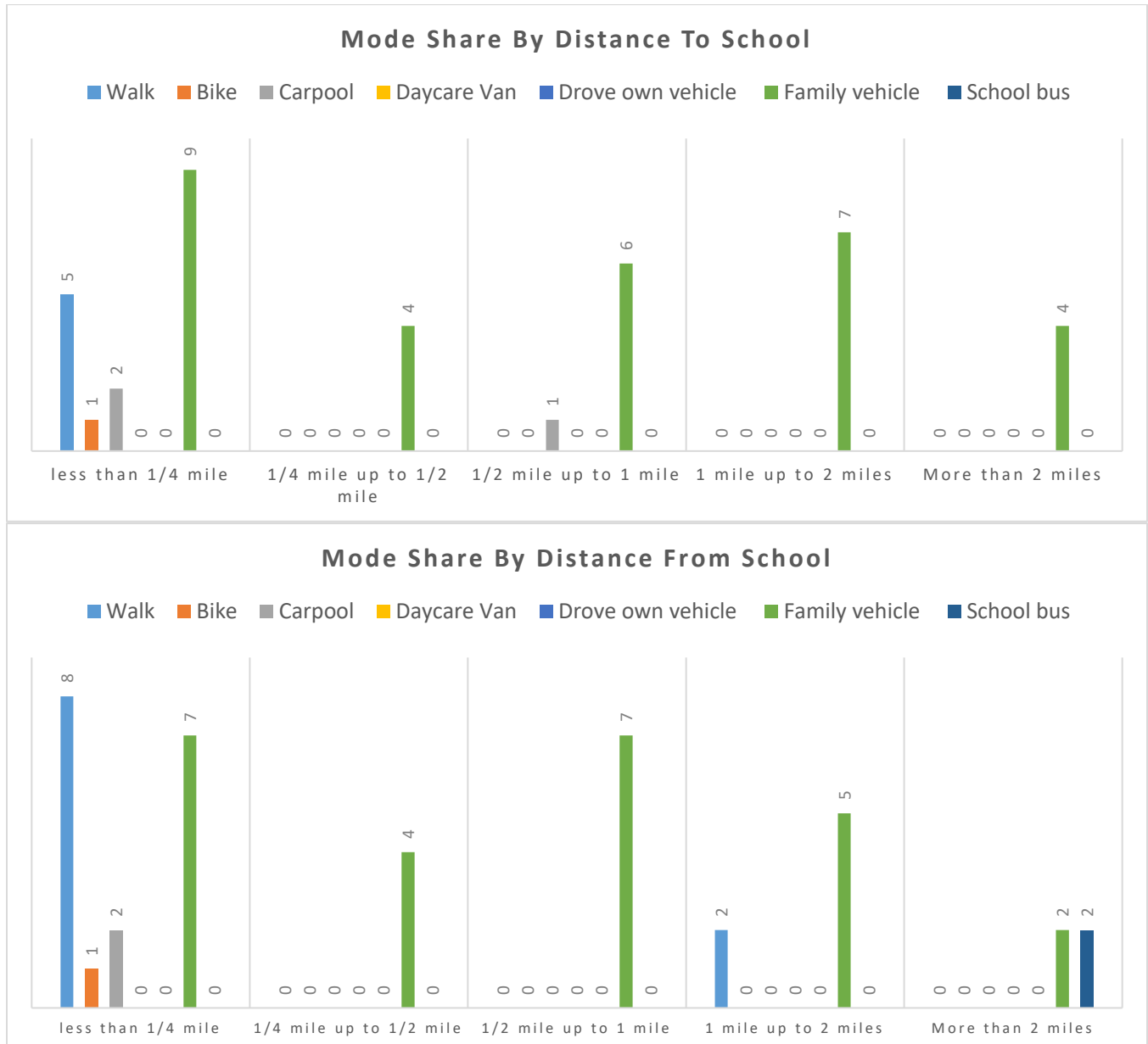
Based on the survey results, The most popular mode of transport at Winship Elementary School is family vehicles at 52% of students (average of the mode split to/from school). Only 2% of participants reported biking and 14% reported walking for their school travel.

	Mode Split to school	Mode Split from school	AVERAGE
Walk	9%	19%	14%
Bike	2%	2%	2%
Carpool	6%	4%	5%
Daycare Van	0%	0%	0%
Drove own vehicle	0%	0%	0%
Family vehicle	57%	47%	52%
School bus	0%	4%	2%



To examine distance as a driving factor for travel mode, we looked at the mode share within 5 distance categories:

- Less than 1/4 mile
- 1/4 mile up to 1/2 mile
- 1/2 mile up to 1 mile
- 1 mile up to 2 miles
- More than 2 miles



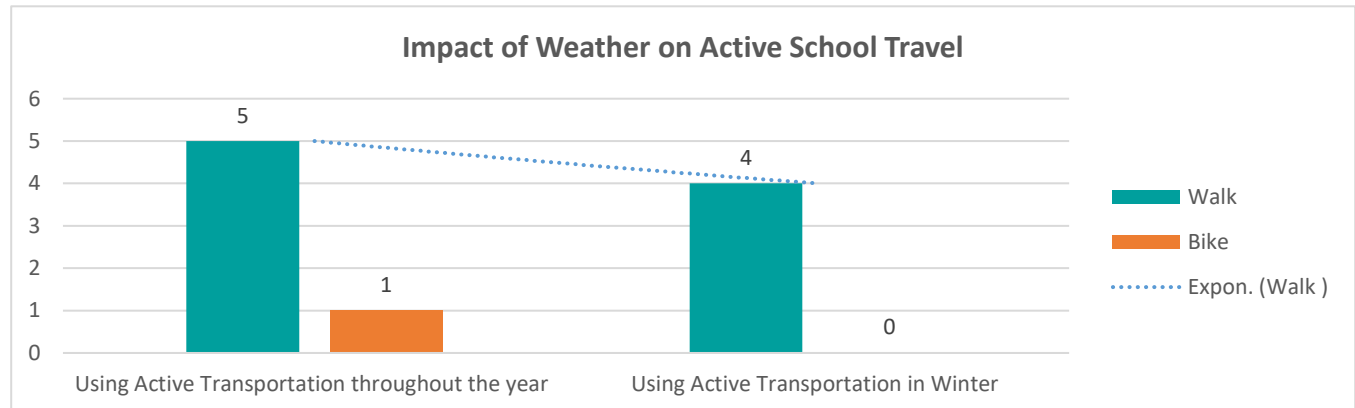
Observed pattern: As the distance from school increases, the number of students walking and biking to and from school decreases, so it is worthy to focus on changing the perception of what distances are “too far” to walk/bike to school.



## Barriers To Active School Travel:

### Weather:

The following chart compares the status of walking and biking throughout the year with winter months.

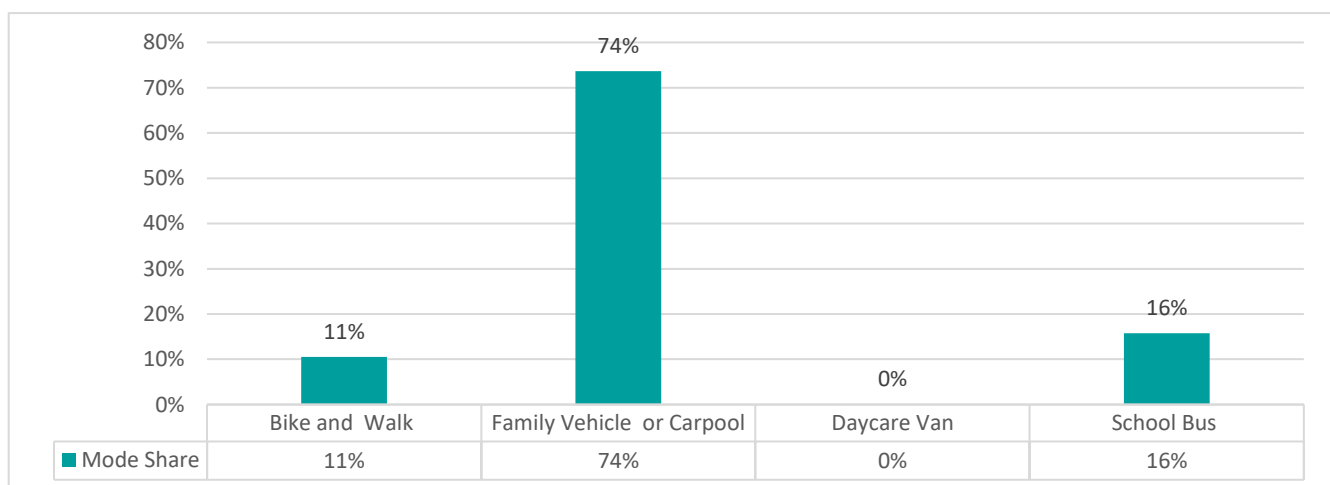


Observed pattern: During the colder months, the number of students choosing active transportation decreases. Considering the limited number of responses received in the survey and also the low number of students walking and biking to school currently, this comparison does not show any drastic change.

To overcome this perceived barrier to walking/biking, program can focus on promoting/celebrating enjoyability and opportunities for exercise by walking and cycling during winter (events like winter walk day) to encourage caregivers and students to choose (or continue to choose) active modes of travel.

### Crossing A Major Road:

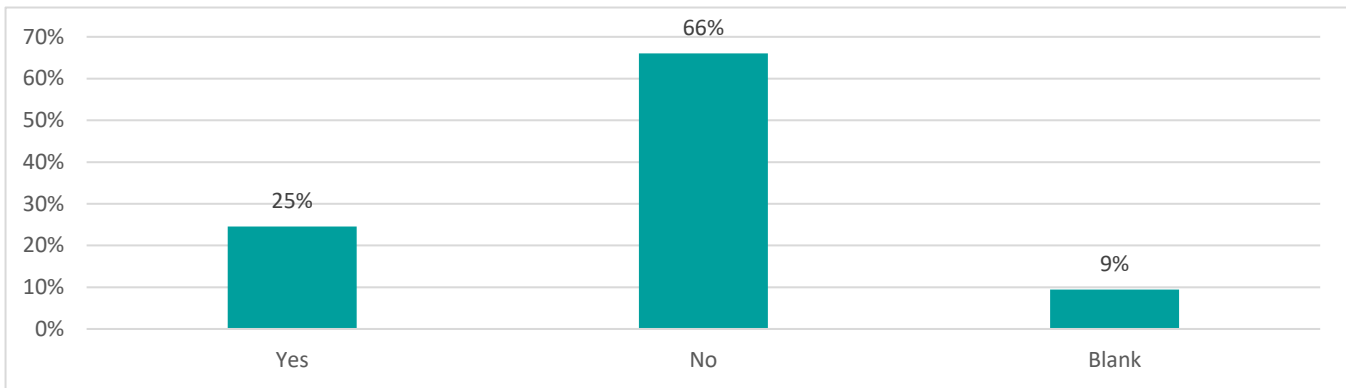
Amongst students who have to cross a major road to get to school, 74% of students are being driven to school (family vehicle, carpool or daycare van). This shows that crossing major roads is one of the main barriers for students to exercise active travel modes to school.



## Awareness:

### Awareness of the Safe Routes to School maps:

When asked about the Safe Routes to School Maps, around 66% of participants had no or limited knowledge of the Safe Routes to School maps. This could be a leading factor for the future success of this program and upcoming campaigns.



## Interest Among Students:

Participants were asked “Has your student asked you for permission to walk or bike to/from school in the last calendar year?” during the parent/caregiver survey. Of the 53 responses received on the survey, 12 reported an interest from their students in walking and biking to/from this school which is around 23%. From this group, only 2 families reported walking and biking for their school travel.

Participants shared concerns around speed of traffic along the route, personal safety or criminal activity, and poor driving behavior on the street as barriers to walking and biking to school for these students.

This shows that aside from encouraging students to walk/bike to school, future programs and campaigns need to focus on caregivers too to help them overcome their concerns and encourage their kids to walk and bike to school.

Interest amongst students		
Participants reporting an interest in walking and biking for their students	12	23% of the total participants
Students Walking and Biking from this group	2	17% of the interested group

## School Name: Wilder Elementary School

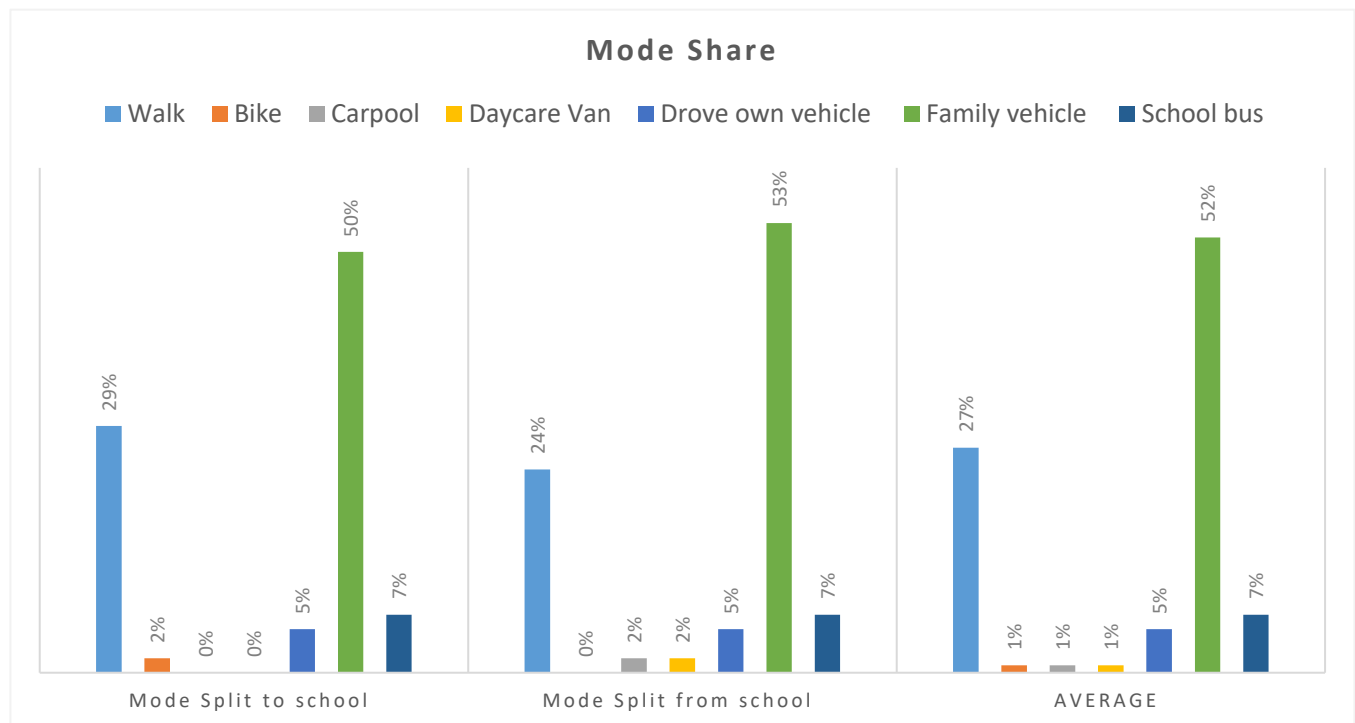
Data gathered through the Parent/caregiver survey was analyzed by the consultant team to better understand travel habits, travel mode split, influencing factors, and perceptions of barriers to active school travel.

This data does not account for families who didn't participate in the survey. The response rate for the survey was 218/467 students at Wilder Elementary School.

### Mode Share and Distance

Based on the survey results, The most popular mode of transport at Wilder Elementary School is family vehicles at 52% of students (average of the mode split to/from school). Only 1% of participants reported biking and 27% reported walking for their school travel.

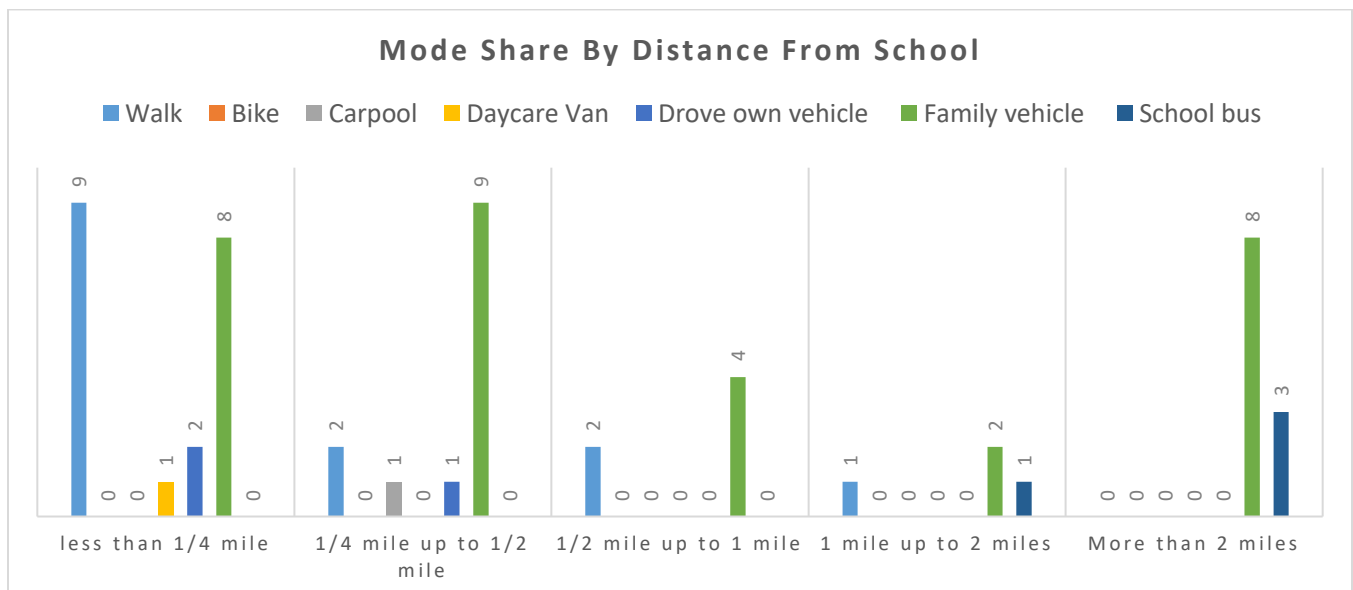
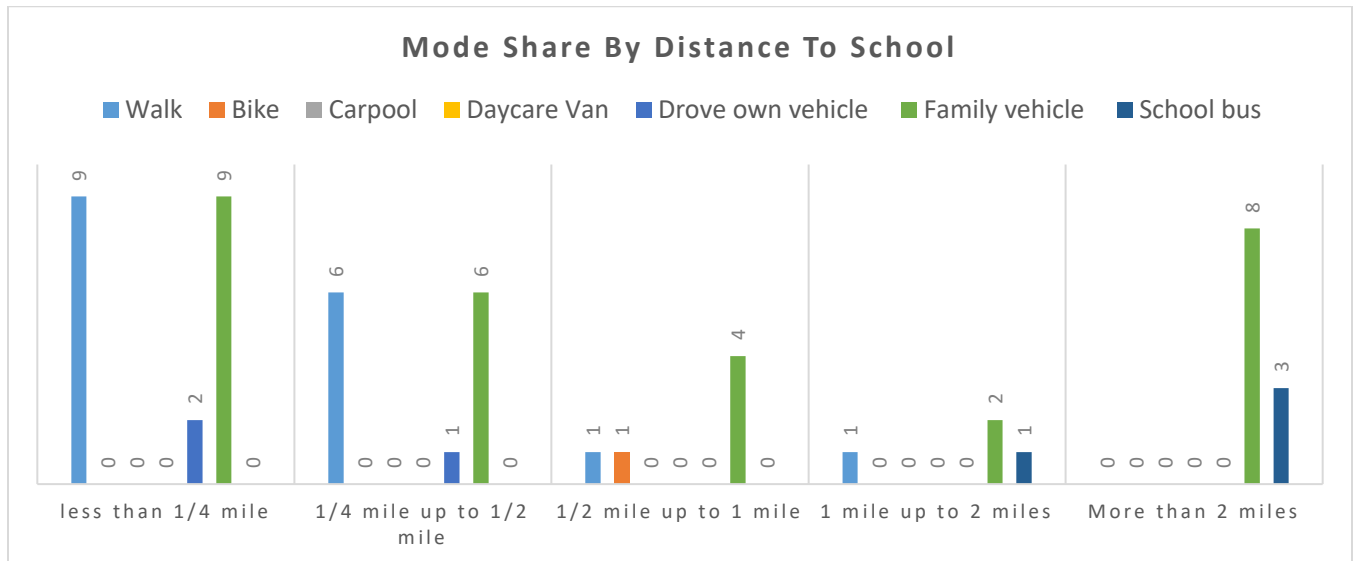
	Mode Split to school	Mode Split from school	AVERAGE
Walk	29%	24%	27%
Bike	2%	0%	1%
Carpool	0%	2%	1%
Daycare Van	0%	2%	1%
Drove own vehicle	5%	5%	5%
Family vehicle	50%	53%	52%
School bus	7%	7%	7%





To examine distance as a driving factor for travel mode, we looked at the mode share within 5 distance categories:

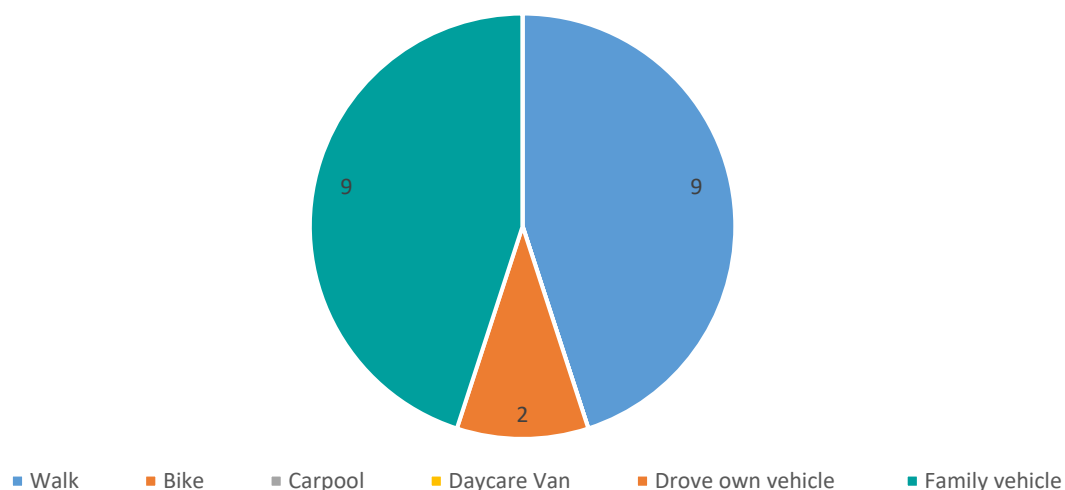
- Less than 1/4 mile
- 1/4 mile up to 1/2 mile
- 1/2 mile up to 1 mile
- 1 mile up to 2 miles
- More than 2 miles



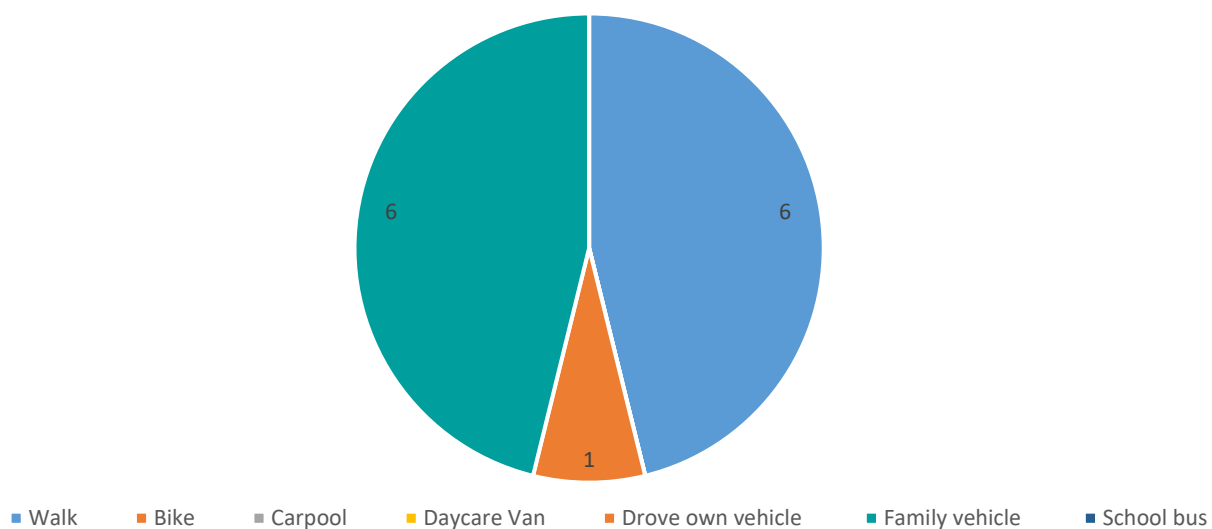
Observed pattern: As the distance from school increases, the number of students walking and biking to school by vehicle decreases so it is worthy to focus on changing the perception of what distances are “too far” to walk/bike to school.

Considering that half a mile is a comfortable distance for elementary students to walk/bike to school, it is expected that all students living within this distance choose active transportation for their school travel. Here is the current mode split for students living within half a mile from the school.

Mode share of students living within 1/4 mile of school



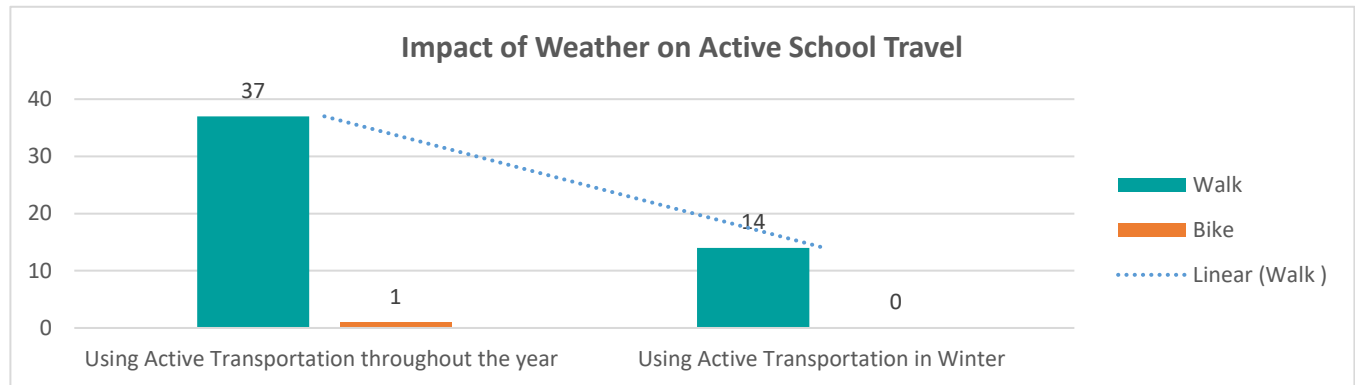
Mode share of students who live within 1/4 mile up to 1/2 mile of school



## Barriers To Active School Travel:

### Weather:

The following chart compares the status of walking and biking throughout the year with winter months.

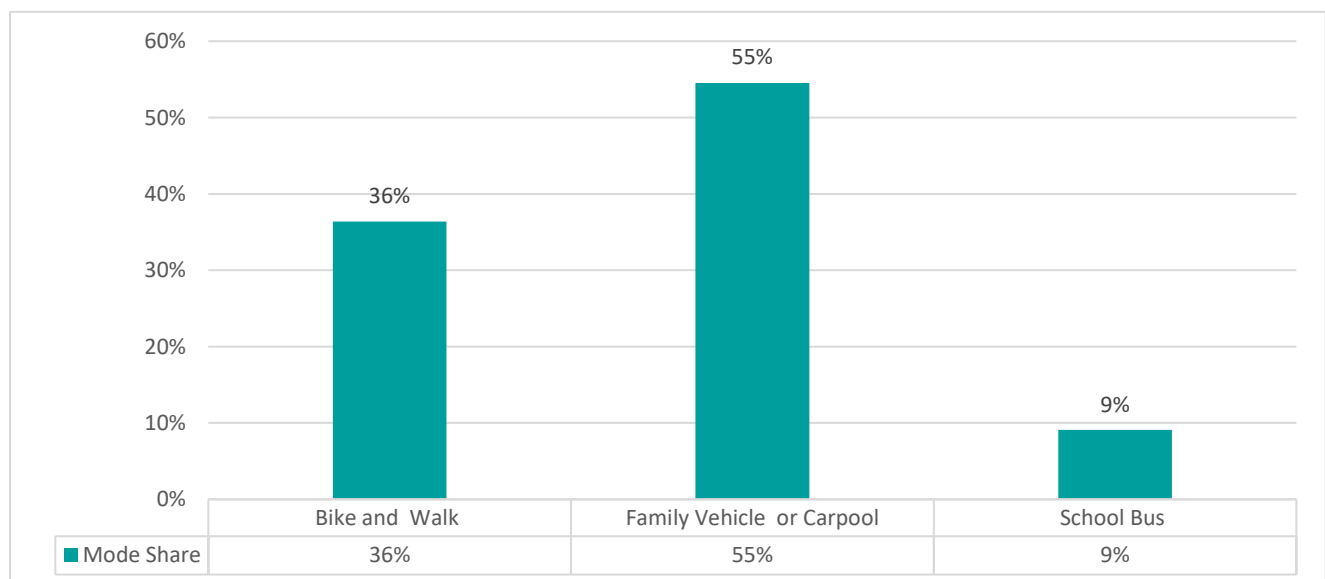


Observed pattern: During the colder months, the number of students choosing active transportation decreases. To overcome this perceived barrier to walking/biking, program can focus on promoting/celebrating enjoyability and opportunities for exercise by walking and cycling during winter (events like winter walk day) to encourage caregivers and students to choose (or continue to choose) active modes of travel.

Also, weather is a greater perceived barrier for cycling to school than for walking. This could mean that safety concerns related to biking should be addressed while walking is being promoted or celebrated.

### Crossing A Major Road:

Amongst students who have to cross a major road to get to school, 55% of students are being driven to school (family vehicle, carpool or daycare van). This shows that crossing major roads is a barrier or perceived safety issue for students to exercise active travel modes to school.

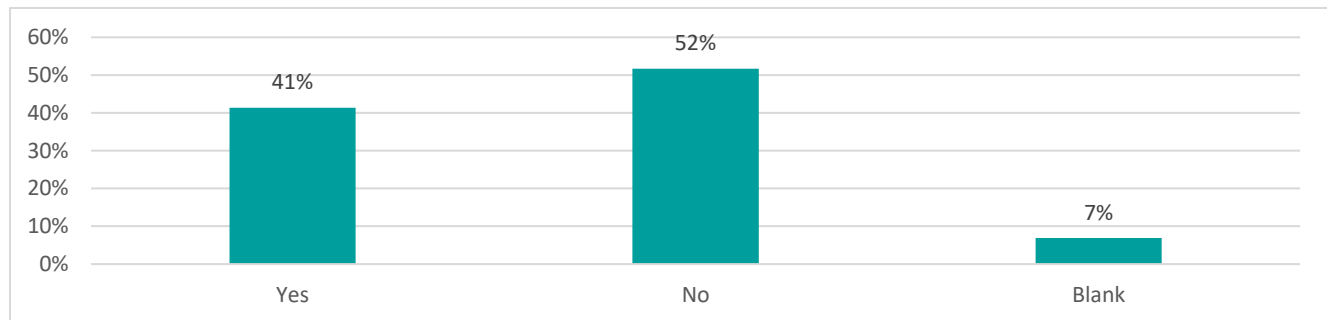




## Awareness:

### Awareness of the Safe Routes to School maps:

When asked about the Safe Routes to School Maps, 52% of participants had no or limited knowledge of the Safe Routes to School maps. This could be a leading factor for the future success of this program and upcoming campaigns.



## Interest Among Students:

Participants were asked “Has your student asked you for permission to walk or bike to/from school in the last calendar year?” during the parent/caregiver survey. Of the 58 responses received on the survey, 13 reported an interest from their students in walking and biking to/from this school which is around 22%.

Participants shared concerns around distance to school (too far to walk or bike), personal safety or criminal activity, and safety of intersections and crossings as barriers to walking and biking to school for these students.

This shows that besides focusing on caregivers to help them overcome their concerns and encourage their kids to walk and bike there is a need in encouraging campaigns for students to walk/bike to school in future programs.

Interest amongst students		
Participants reporting an interest in walking and biking for their students	13	22% of the total participants
Students Walking and Biking from this group	7	54% of the interested group

## School Name: Viking Elementary School

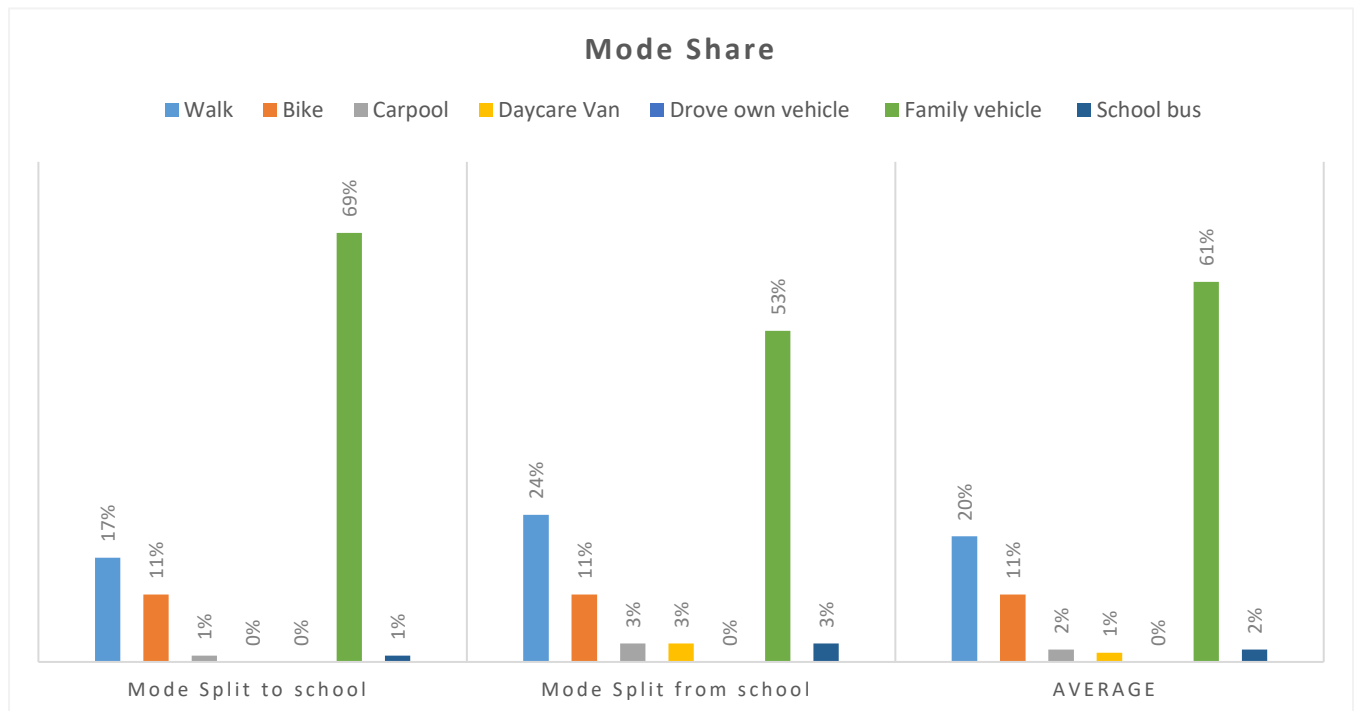
Data gathered through the Parent/caregiver survey was analyzed by the consultant team to better understand travel habits, travel mode split, influencing factors, and perceptions of barriers to active school travel.

This data does not account for families who didn't participate in the survey. The response rate for the survey was 102/326 students at Viking Elementary School.

### Mode Share and Distance

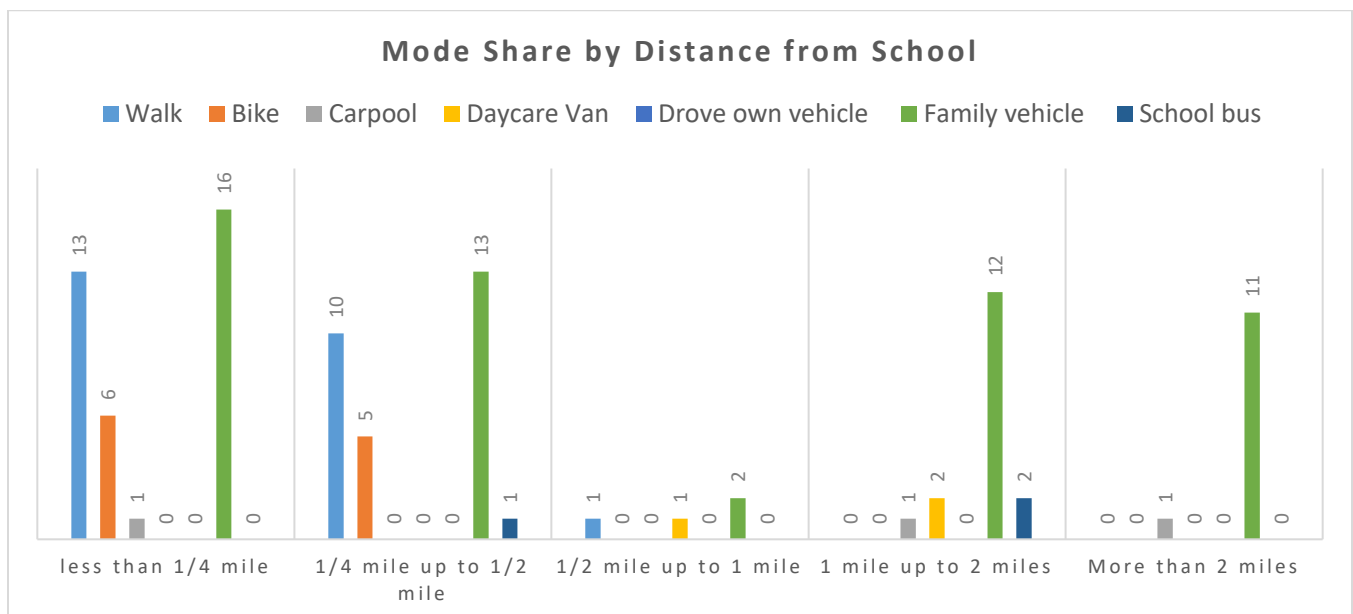
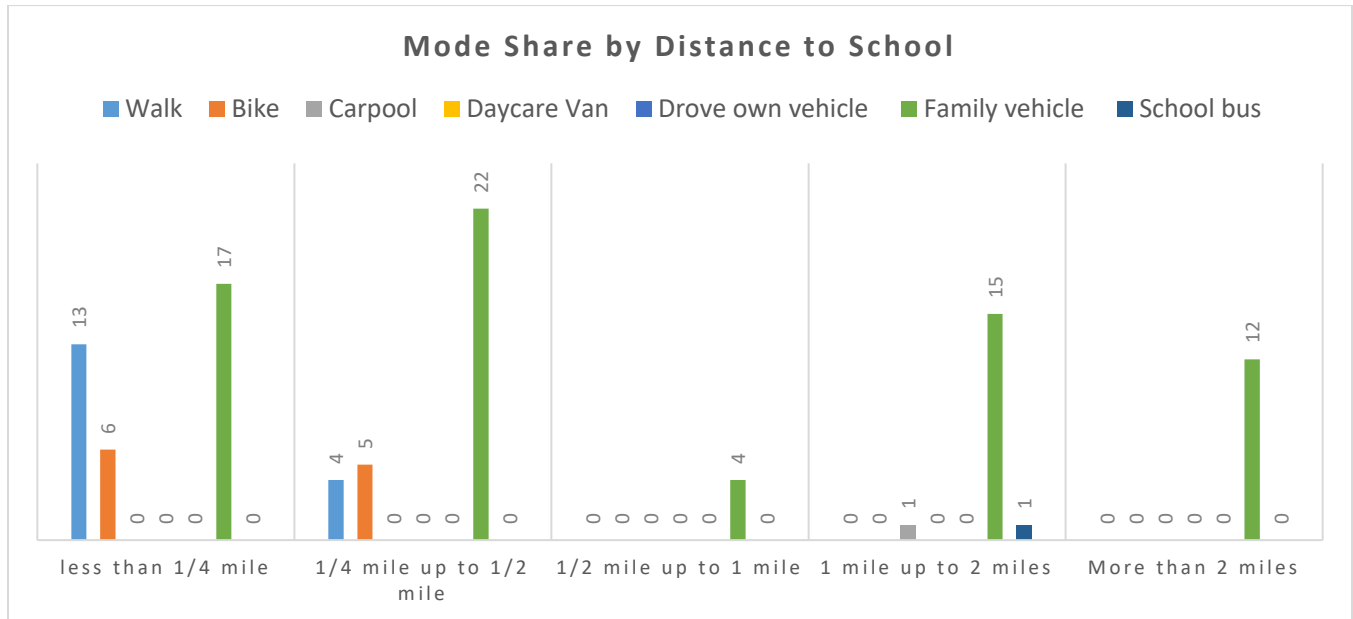
Based on the survey results, The most popular mode of transport at Viking Elementary School is family vehicles for 61% of students (average of the mode split to/from school). Only 11% of participants reported biking and 20% reported walking for their school travel.

	Mode Split to school	Mode Split from school	AVERAGE
Walk	17%	24%	20%
Bike	11%	11%	11%
Carpool	1%	3%	2%
Daycare Van	0%	3%	1%
Drove own vehicle	0%	0%	0%
Family vehicle	69%	53%	61%
School bus	1%	3%	2%



To examine distance as a driving factor for travel mode, we looked at the mode share within 5 distance categories:

- Less than 1/4 mile
- 1/4 mile up to 1/2 mile
- 1/2 mile up to 1 mile
- 1 mile up to 2 miles
- More than 2 miles

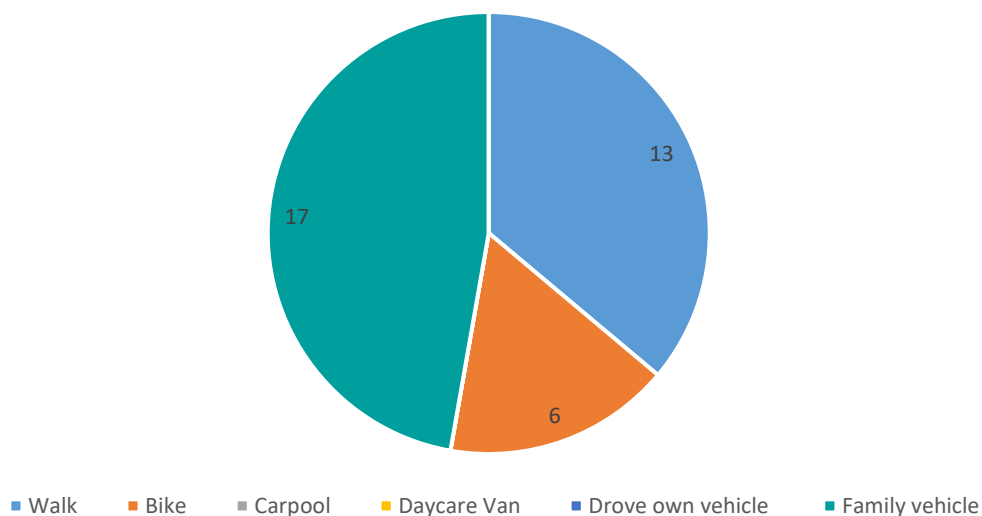


Observed pattern: As the distance from school increases, the number of students walking and biking to school decreases, so it is worth focusing on changing the perception of what distances are “too far” to walk/bike to school.

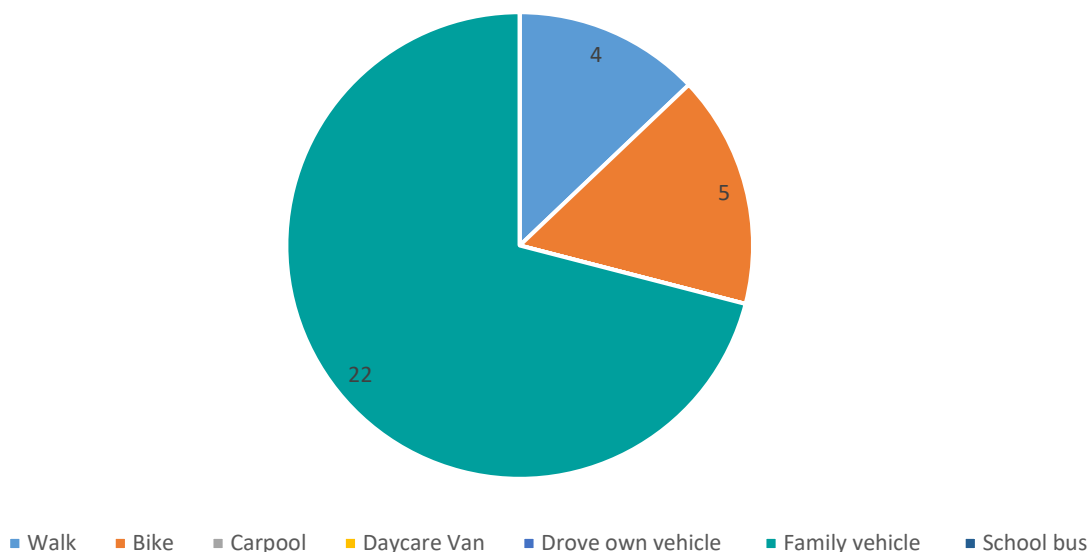


Considering that half a mile is a comfortable distance for elementary students to walk/bike to school, it is expected that all students living within this distance choose active transportation for their school travel. Here is the current mode split for students living within half a mile of the school.

Mode share of students living within 1/4 mile of school



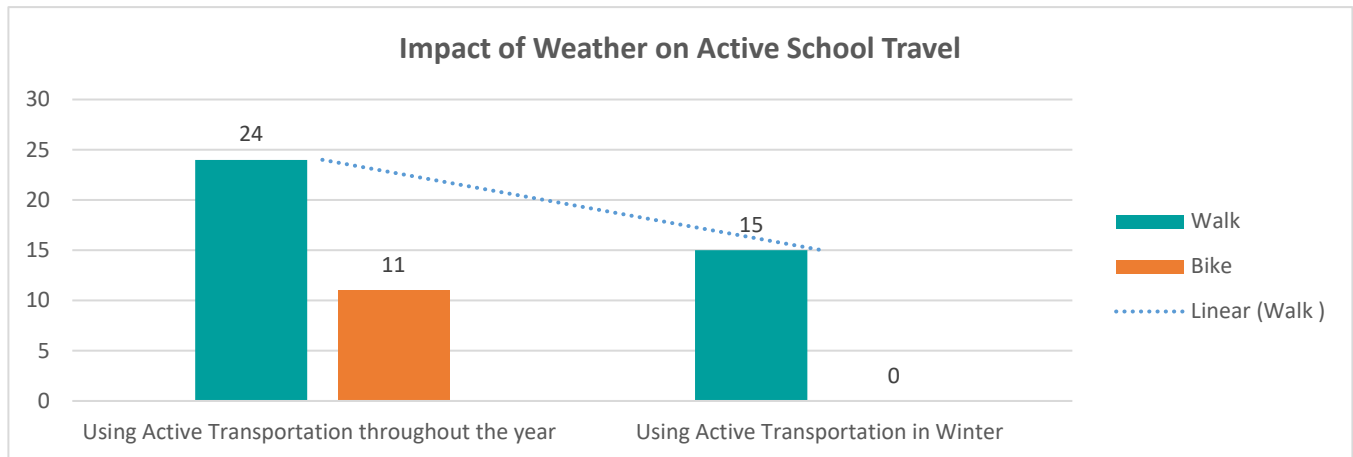
Mode share of students who live within 1/4 mile up to 1/2 mile of school



## Barriers To Active School Travel:

### Weather:

The following chart compares the status of walking and biking throughout the year with winter months.

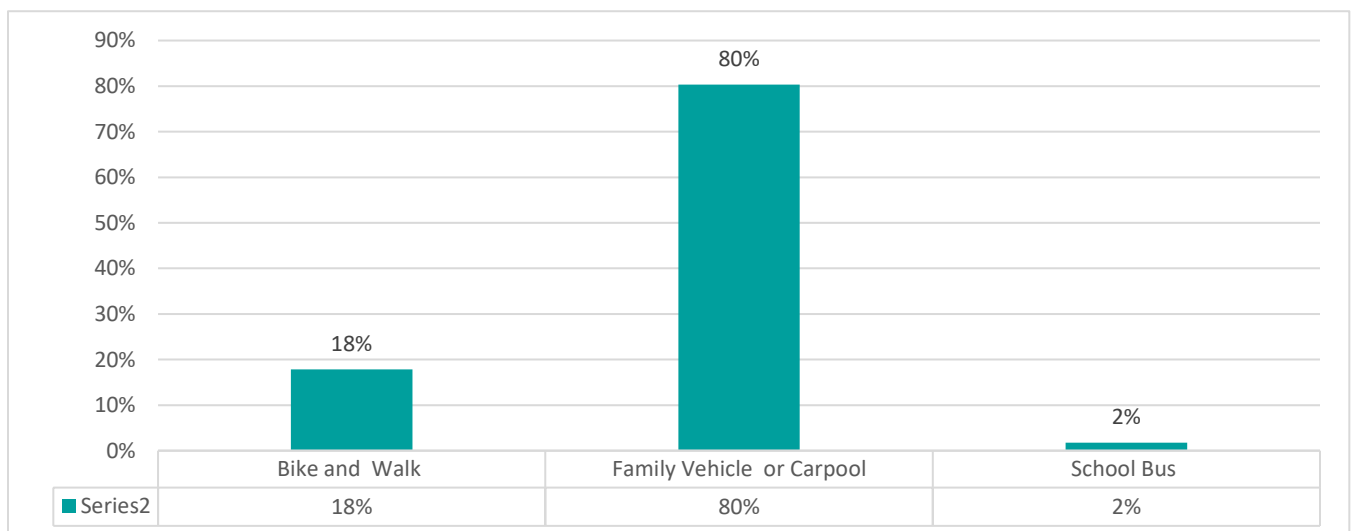


Observed pattern: During the colder months, the number of students choosing active transportation decreases. To overcome this perceived barrier to walking/biking, program can focus on promoting/celebrating enjoyability and opportunities for exercise by walking and cycling during winter (events like winter walk day) to encourage caregivers and students to choose (or continue to choose) active modes of travel.

Also, weather is a greater perceived barrier for cycling to school than for walking. This could mean that safety concerns related to biking should be addressed while walking is being promoted or celebrated.

### Crossing A Major Road:

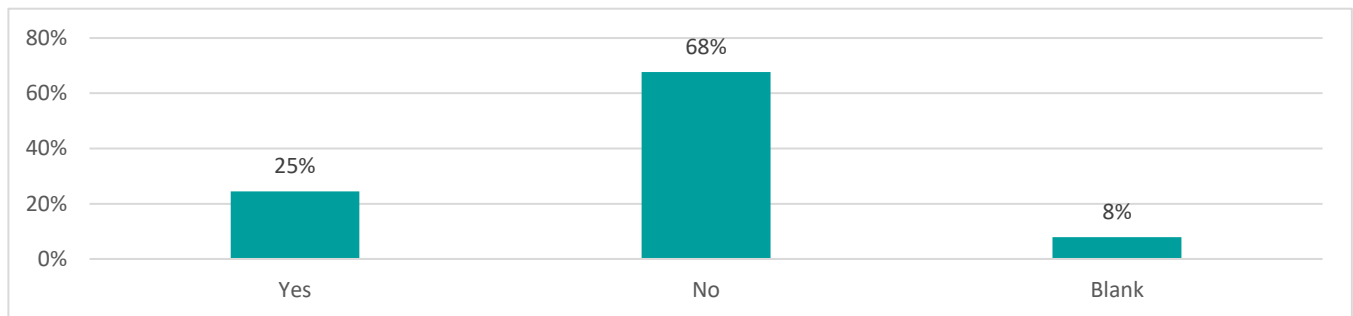
Amongst students who have to cross a major road to get to school, 80% of students are being driven to school (family vehicle, carpool or daycare van). This shows that crossing major roads is a barrier or perceived safety issue for students to exercise active travel modes to school.



## Awareness:

### Awareness of the Safe Routes to School maps:

When asked about the Safe Routes to School Maps, more than 68% of participants had no or limited knowledge of the Safe Routes to School maps. This could be a leading factor for the future success of this program and upcoming campaigns.



## Interest Among Students:

Participants were asked “Has your student asked you for permission to walk or bike to/from school in the last calendar year?” during the parent/caregiver survey. Of the 102 responses received on the survey, 56 reported an interest from their students in walking and biking to/from this school which is around 55%. From this group, only 26 families (~46%) reported walking and biking for their school travel.

Participants shared concerns around distance to school (too far to walk or bike), personal safety or criminal activity, and safety of intersections and crossings as barriers to walking and biking to school for these students.

This shows that aside from encouraging students to walk/bike to school, future programs and campaigns need to focus on caregivers too to help them overcome their concerns and encourage their kids to walk and bike to school.

Interest amongst students		
Participants reporting an interest in walking and biking for their students	56	55% of the total participants
Students Walking and Biking from this group	26	46% of the interested group



## School Name: Valley Middle School

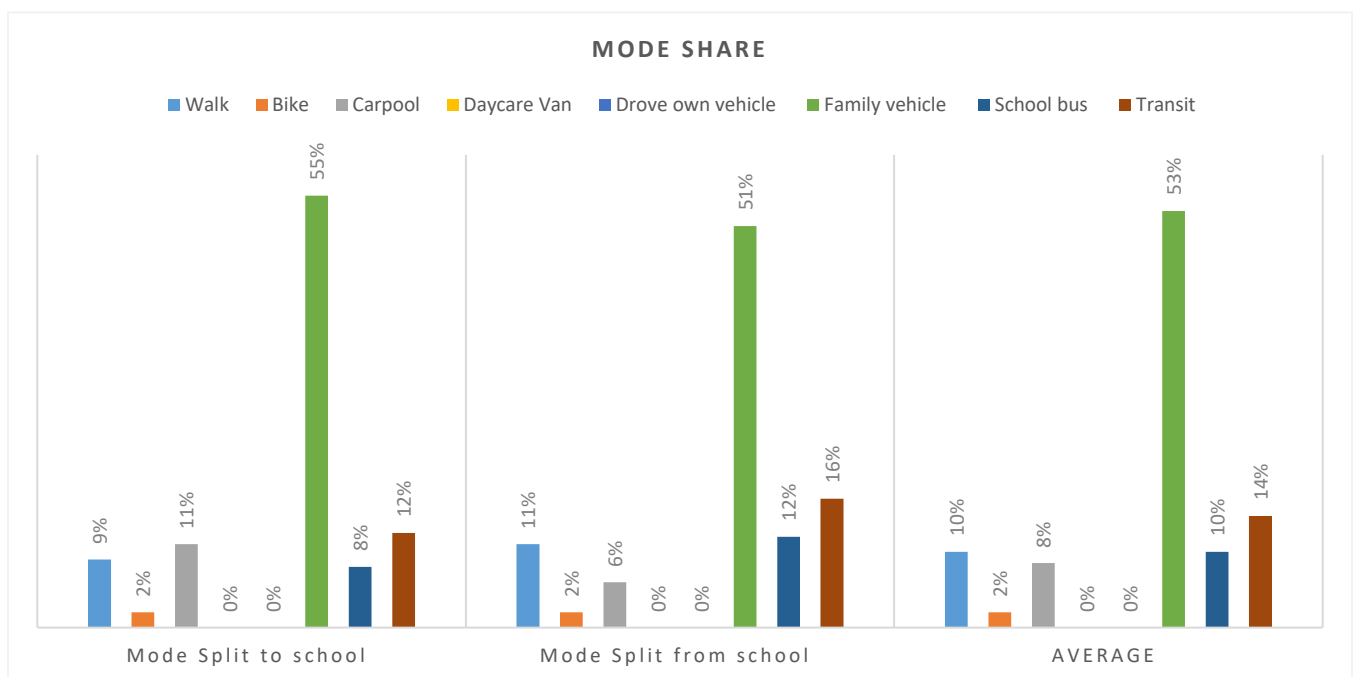
Data gathered through the Parent/caregiver survey was analyzed by the consultant team to better understand travel habits, travel mode split, influencing factors, and perceptions of barriers to active school travel.

This data does not account for families who didn't participate in the survey. The response rate for the survey was 104/538 students at Valley Middle school.

### Mode Share and Distance

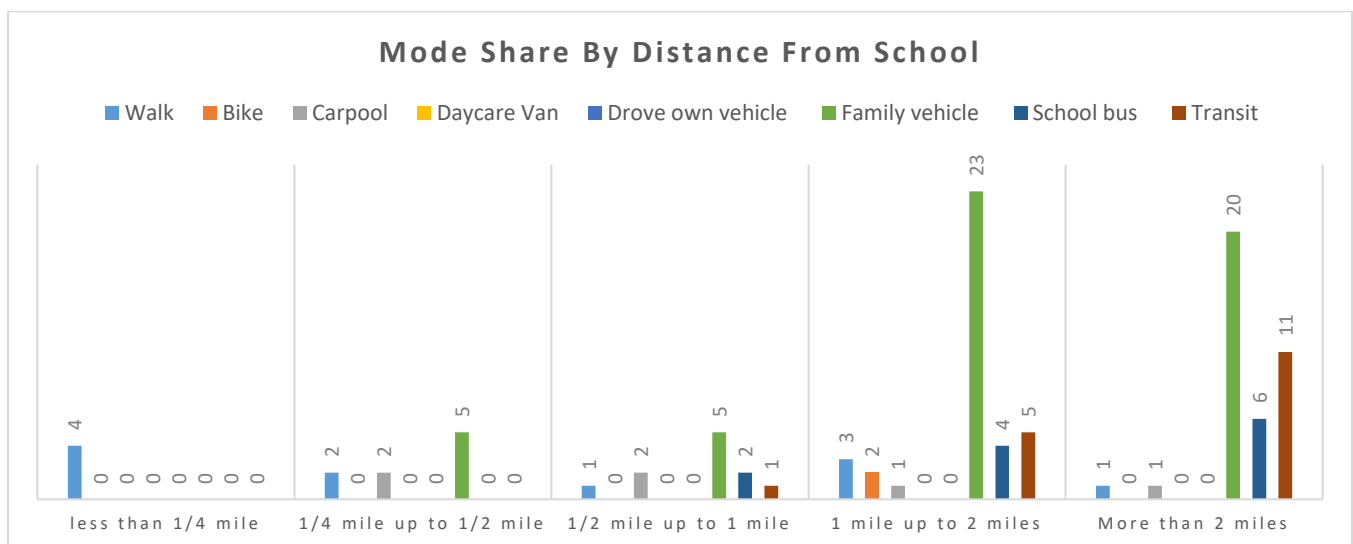
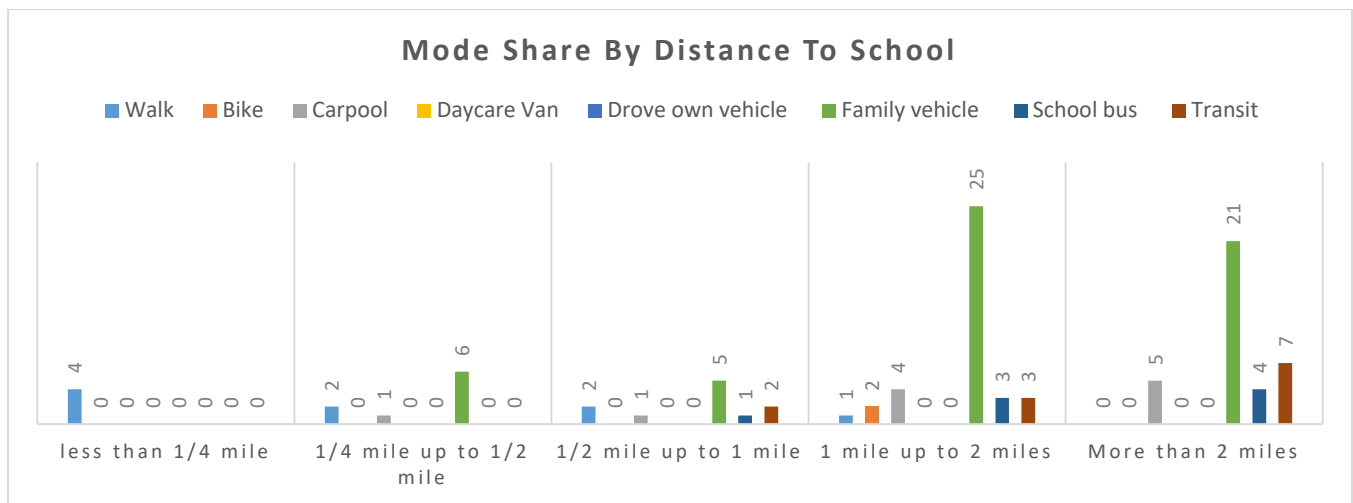
Based on the survey results, the most popular mode of transport at Valley Middle School is family vehicles for 53% of students (average of the mode split to/from school). Only 2% of participants reported biking and 10% reported walking for their school travel.

	Mode Split to school	Mode Split from school	AVERAGE
Walk	9%	11%	10%
Bike	2%	2%	2%
Carpool	11%	6%	8%
Daycare Van	0%	0%	0%
Drove own vehicle	0%	0%	0%
Family vehicle	55%	51%	53%
School bus	8%	12%	10%
Transit	12%	16%	14%



To examine distance as a driving factor for travel mode, we looked at the mode share within 5 distance categories:

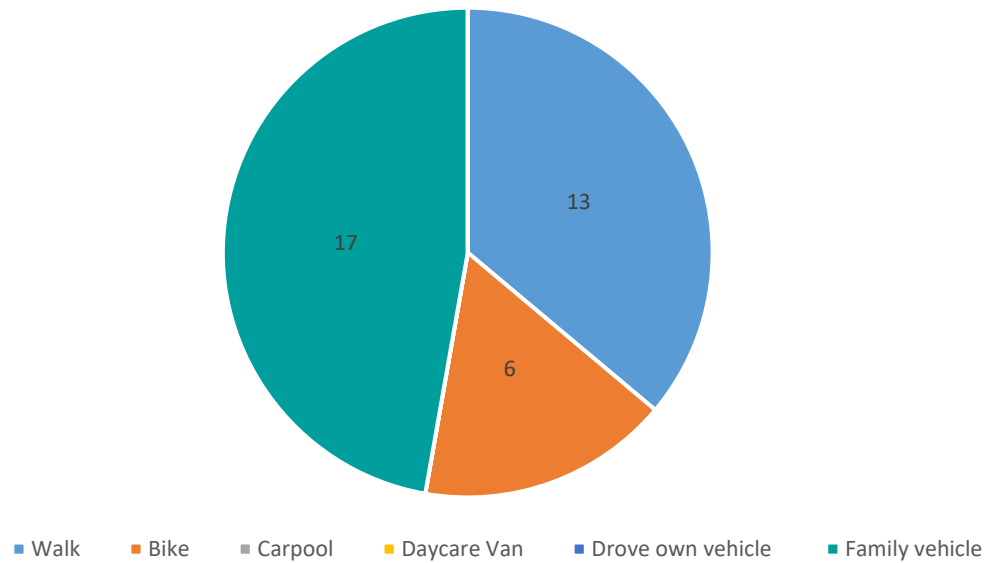
- Less than 1/4 mile
- 1/4 mile up to 1/2 mile
- 1/2 mile up to 1 mile
- 1 mile up to 2 miles
- More than 2 miles



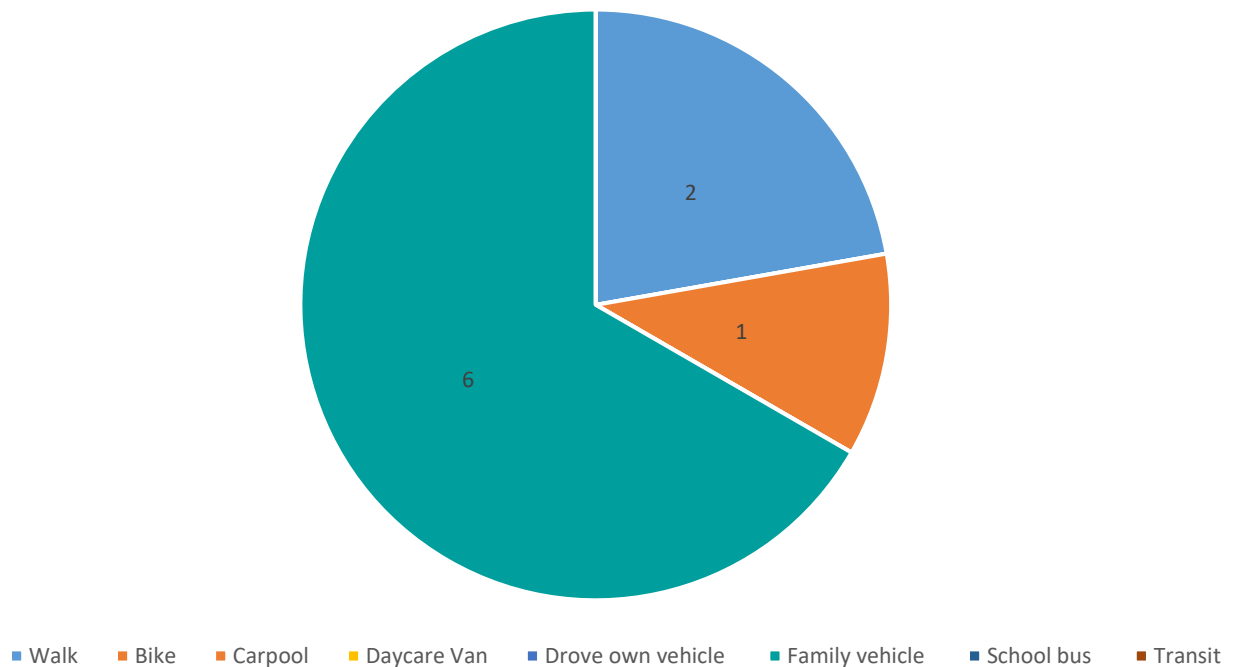
Observed pattern: As the distance from school increases, the number of students walking and biking to school decreases, so it is worth focusing on changing the perception of what distances are “too far” to walk/bike to school.

Considering that half a mile is a comfortable distance for elementary students to walk/bike to school, it is expected that all students living within this distance choose active transportation for their school travel. Here is the current mode split for students living within half a mile of school.

Mode share of students living within 1/4 mile of school



Mode share of students who live within 1/4 mile up to 1/2 mile of school

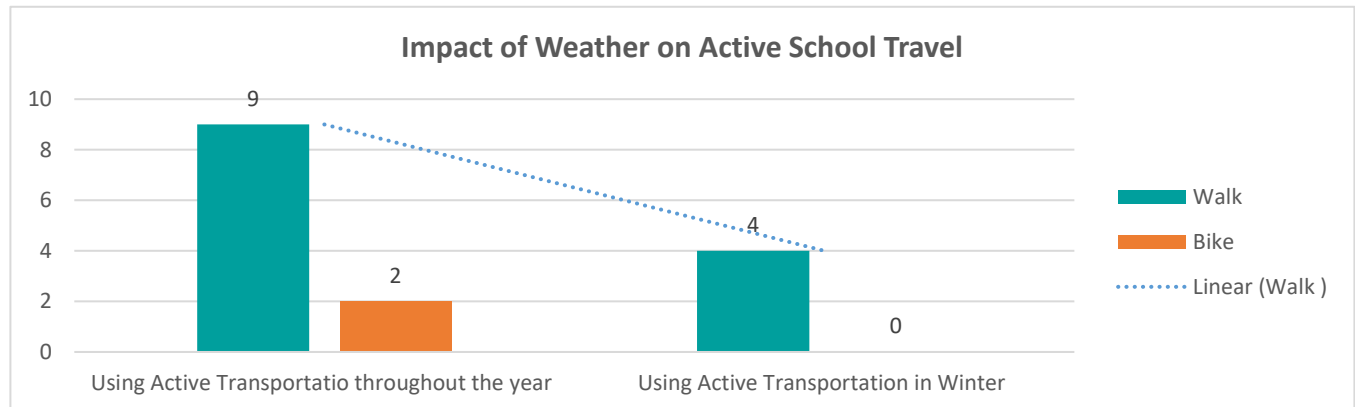




## Barriers To Active School Travel:

### Weather:

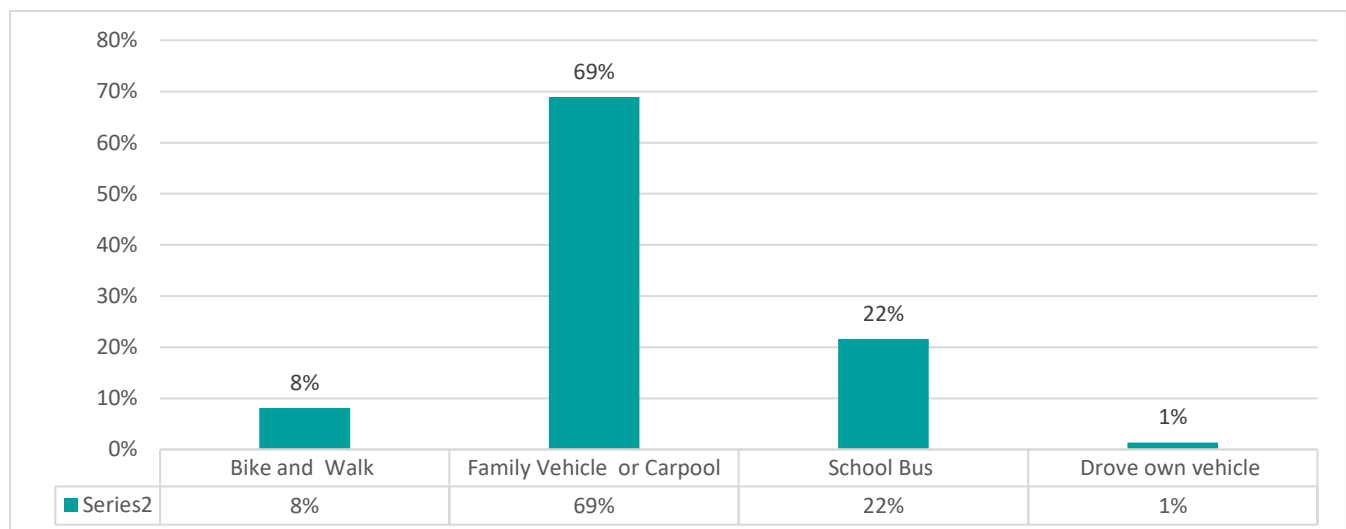
The following chart compares the status of walking and biking throughout the year with winter months.



Observed pattern: During the colder months, the number of students choosing active transportation decreases. To overcome this perceived barrier to walking/biking, program can focus on promoting/celebrating enjoyability and opportunities for exercise by walking and cycling during winter (events like winter walk day) to encourage caregivers and students to choose (or continue to choose) active modes of travel.

### Crossing A Major Road:

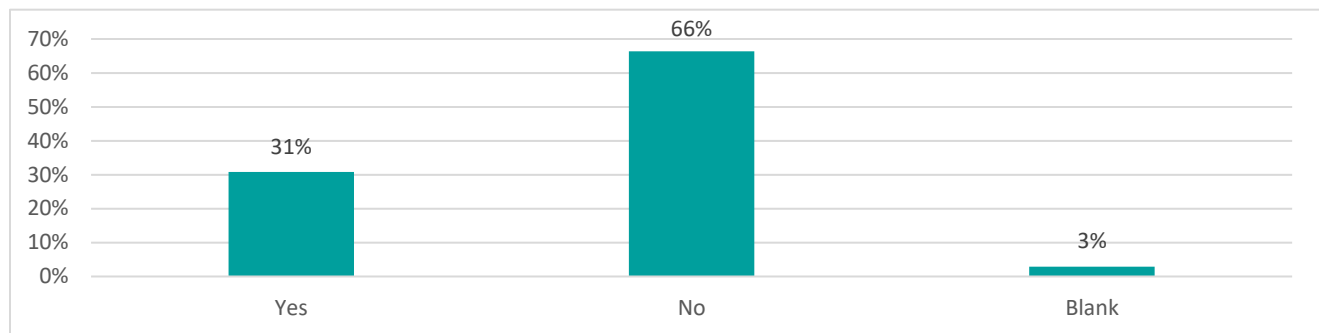
Amongst students who have to cross a major road to get to school, 70% of students are being driven to school (family vehicle, carpool, daycare van or drive their own vehicle). This shows that crossing major roads is a barrier or perceived safety issue for students to exercise active travel modes to school.



## Awareness:

### Awareness of the Safe Routes to School maps:

When asked about the Safe Routes to School Maps, more than 66% of participants had no or limited knowledge of the Safe Routes to School maps. This could be a leading factor for the future success of this program and upcoming campaigns.



## Interest Among Students:

Participants were asked “Has your student asked you for permission to walk or bike to/from school in the last calendar year?” during the parent/caregiver survey. Of the 104 responses received on the survey, 53 reported an interest from their students in walking and biking to/from this school which is around 51%. From this group, only 10 families (~19%) reported walking and biking for their school travel.

Participants shared concerns around distance from school, personal safety or criminal activity, and safety of intersections and crossings as barriers to walking and biking to school for these students.

This shows that aside from encouraging students to walk/bike to school, future programs and campaigns need to focus on caregivers too to help them overcome their concerns and encourage their kids to walk and bike to school.

Interest amongst students		
Participants reporting an interest in walking and biking for their students	53	51% of the total participants
Students Walking and Biking from this group	10	19% of the interested group

## School Name: Central Heights Middle School

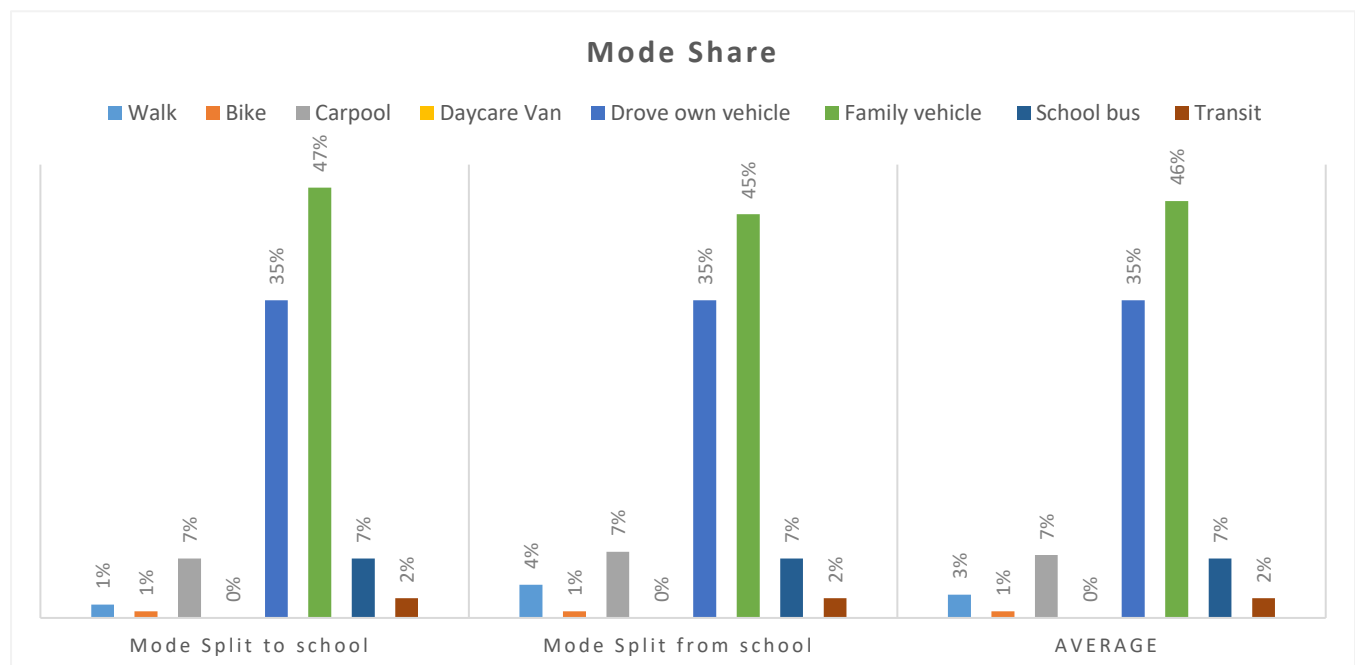
Data gathered through the Parent/caregiver survey was analyzed by the consultant team to better understand travel habits, travel mode split, influencing factors, and perceptions of barriers to active school travel.

This data does not account for families who didn't participate in the survey. The response rate for the survey was 137/1149 students at Central Heights Middle School.

### Mode Share and Distance

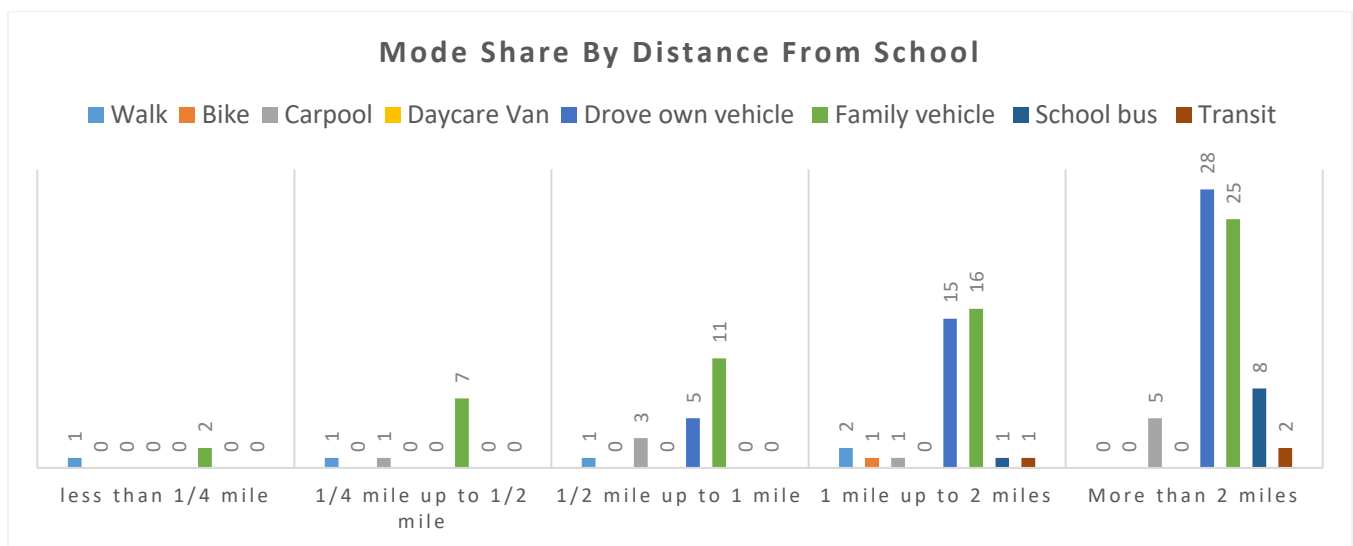
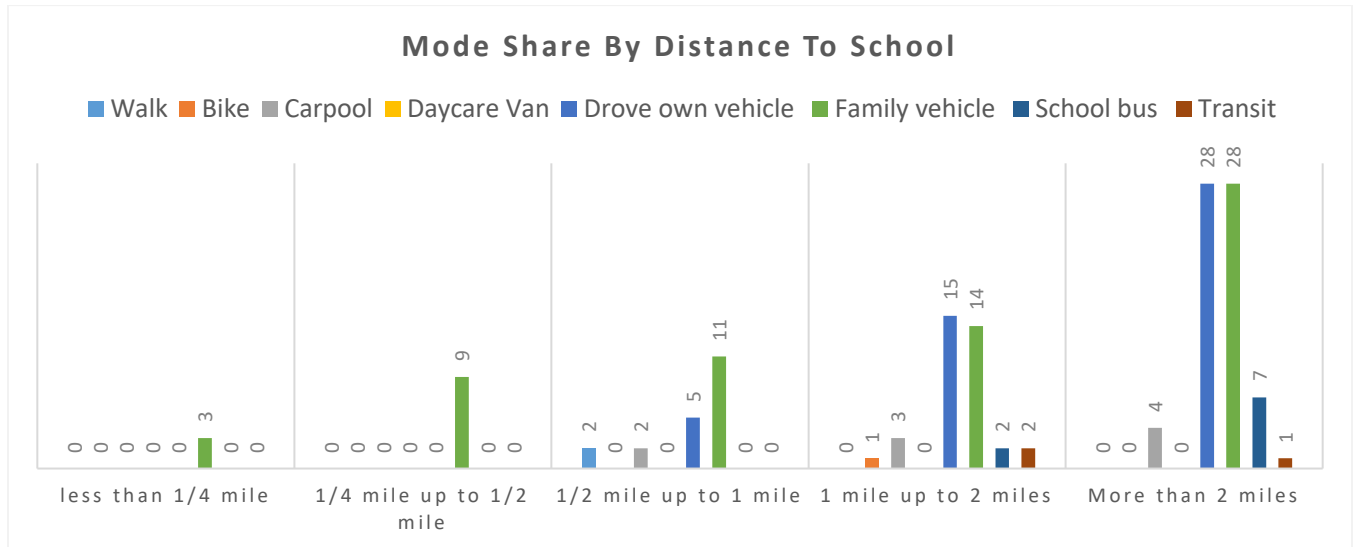
Based on the survey results, The most popular mode of transport at Central Heights Middle School is family vehicles at 46% of students (average of the mode split to/from school). Only 1% of participants reported biking and 3% reported walking for their school travel.

	Mode Split to school	Mode Split from school	AVERAGE
Walk	1%	4%	3%
Bike	1%	1%	1%
Carpool	7%	7%	7%
Daycare Van	0%	0%	0%
Drove own vehicle	35%	35%	35%
Family vehicle	47%	45%	46%
School bus	7%	7%	7%
Transit	2%	2%	2%



To examine distance as a driving factor for travel mode, we looked at the mode share within 5 distance categories:

- Less than 1/4 mile
- 1/4 mile up to 1/2 mile
- 1/2 mile up to 1 mile
- 1 mile up to 2 miles
- More than 2 miles



Observed pattern: As the distance from school increases, the number of students getting to school by car grows, so it is worthy to focus on changing the perception of what distances are “too far” to walk/bike to school.

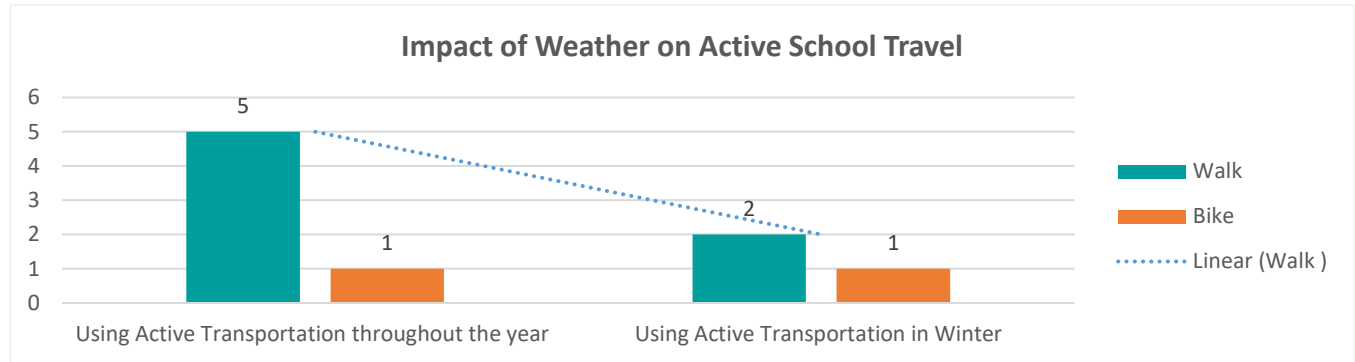
Considering that half a mile is a comfortable distance for elementary students to walk/bike to school, it is expected that all students living within this distance choose active transportation for their school travel. Therefore, there is an opportunity here to encourage students who live within this comfortable distance to choose active school travel.



## Barriers To Active School Travel:

### Weather:

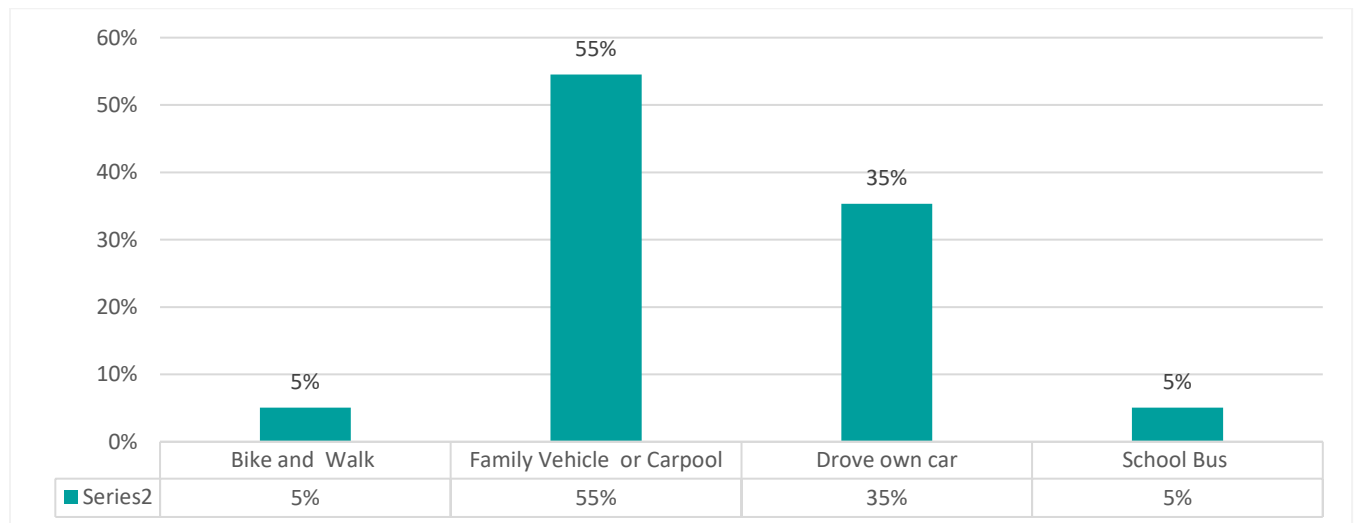
The following chart compares the status of walking and biking throughout the year with winter months.



Observed pattern: During the colder months, the number of students choosing active transportation decreases. To overcome this perceived barrier to walking/biking, program can focus on promoting/celebrating enjoyability and opportunities for exercise by walking and cycling during winter (events like winter walk day) to encourage caregivers and students to choose (or continue to choose) active modes of travel.

### Crossing A Major Road:

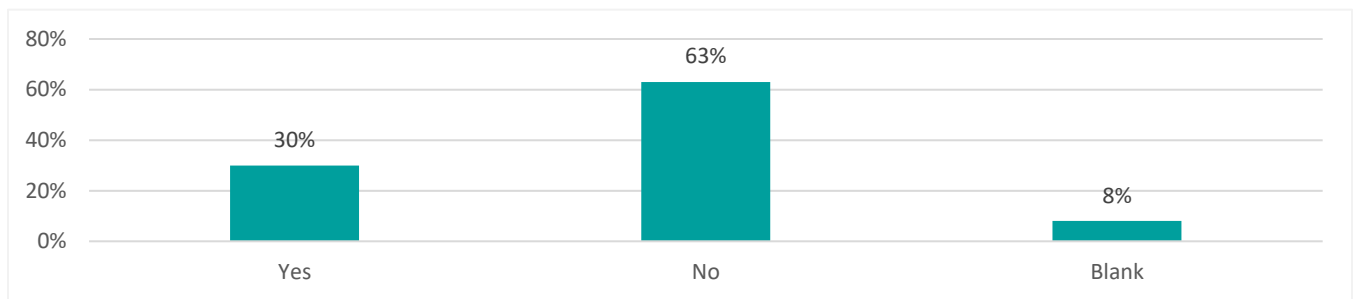
Amongst students who have to cross a major road to get to school, 90% of students are being driven to school (family vehicle, carpool, daycare van or drive their own vehicle). This shows that crossing major roads is a barrier or perceived safety issue for students to exercise active travel modes to school.



## Awareness:

### Awareness of the Safe Routes to School maps:

When asked about the Safe Routes to School Maps, more than 63% of participants had no or limited knowledge of the Safe Routes to School maps. This could be a leading factor for the future success of this program and upcoming campaigns.



## Interest Among Students:

Participants were asked “Has your student asked you for permission to walk or bike to/from school in the last calendar year?” during the parent/caregiver survey. Of the 137 responses received on the survey, only 24 reported an interest from their students in walking and biking to/from this school which is around 18%. From this group, only 2 families (~8%) reported walking and biking for their school travel.

Participants shared concerns around distance to school (too far to walk or bike), personal safety or criminal activity, and safety of intersections and crossings as barriers to walking and biking to school for these students.

This shows that besides focusing on caregivers to help them overcome their concerns and encourage their kids to walk and bike there is a need in encouraging campaigns for students to walk/bike to school in future programs.

Interest amongst students		
Participants reporting an interest in walking and biking for their students	24	18% of the total participants
Students Walking and Biking from this group	2	8% of the interested group

## School Name: South Middle School

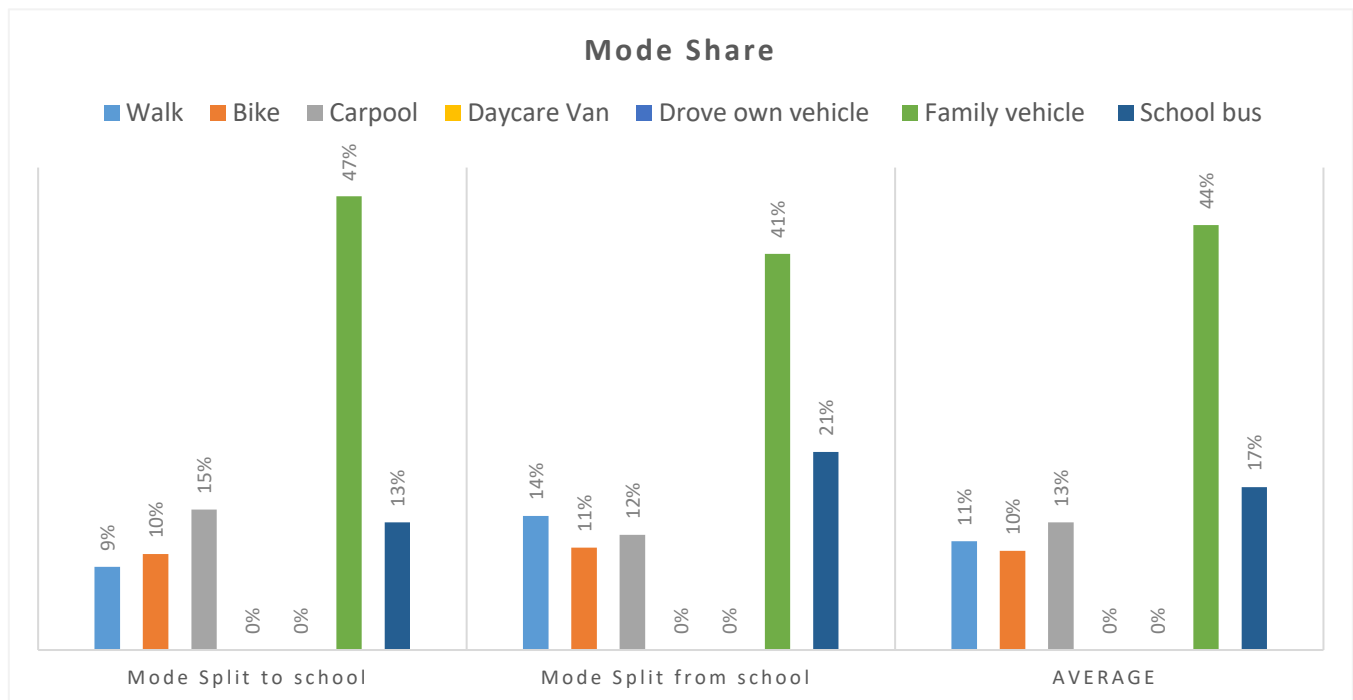
Data gathered through the Parent/caregiver survey was analyzed by the consultant team to better understand travel habits, travel mode split, influencing factors, and perceptions of barriers to active school travel.

This data does not account for families who didn't participate in the survey. The response rate for the survey was 151/593 students at South Middle School.

### Mode Share and Distance

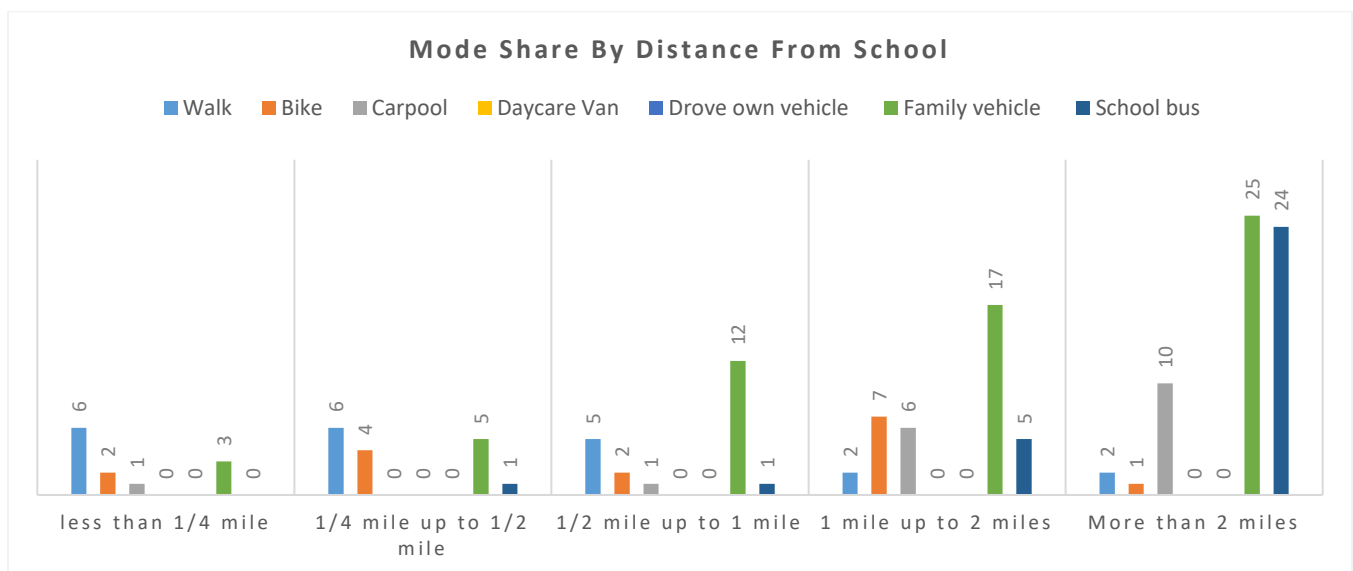
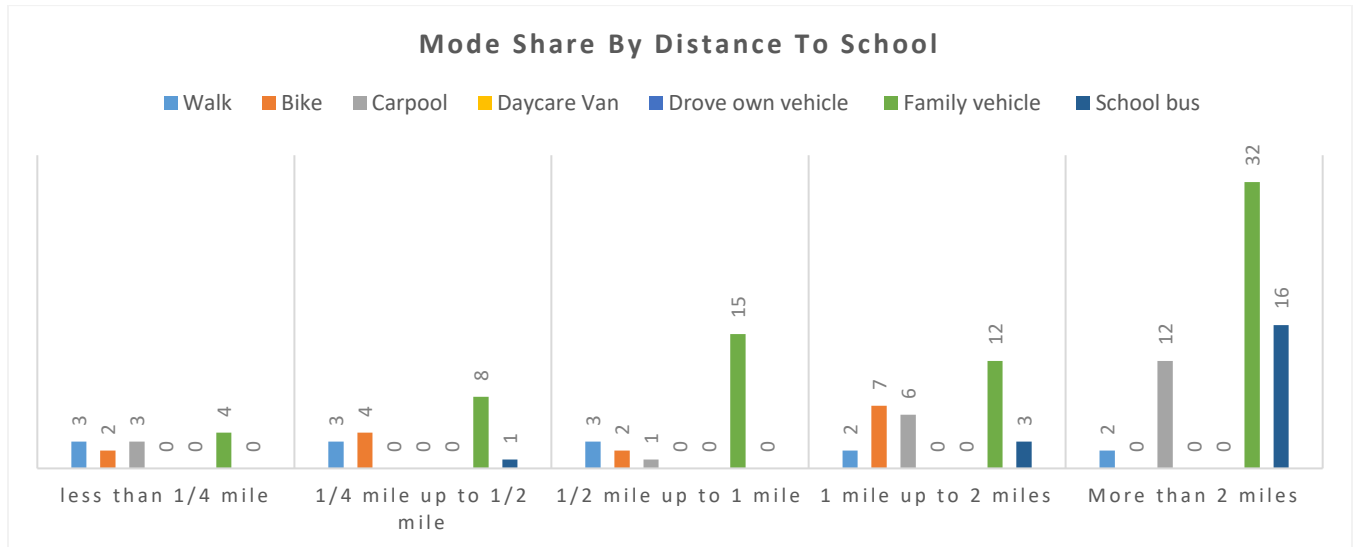
Based on the survey results, The most popular mode of transport at South Middle School is family vehicles for 44%% of students (average of the mode split to/from school). Only 10% of participants reported biking and 11% reported walking for their school travel.

	Mode Split to school	Mode Split from school	AVERAGE
<b>Walk</b>	9%	14%	11%
<b>Bike</b>	10%	11%	10%
<b>Carpool</b>	15%	12%	13%
<b>Daycare Van</b>	0%	0%	0%
<b>Drove own vehicle</b>	0%	0%	0%
<b>Family vehicle</b>	47%	41%	44%
<b>School bus</b>	13%	21%	17%



To examine distance as a driving factor for travel mode, we looked at the mode share within 5 distance categories:

- Less than 1/4 mile
- 1/4 mile up to 1/2 mile
- 1/2 mile up to 1 mile
- 1 mile up to 2 miles
- More than 2 miles



Observed pattern: As the distance from school increases, the number of students getting to school by vehicle increases, so it is worthy to focus on changing the perception of what distances are “too far” to walk/bike to school.

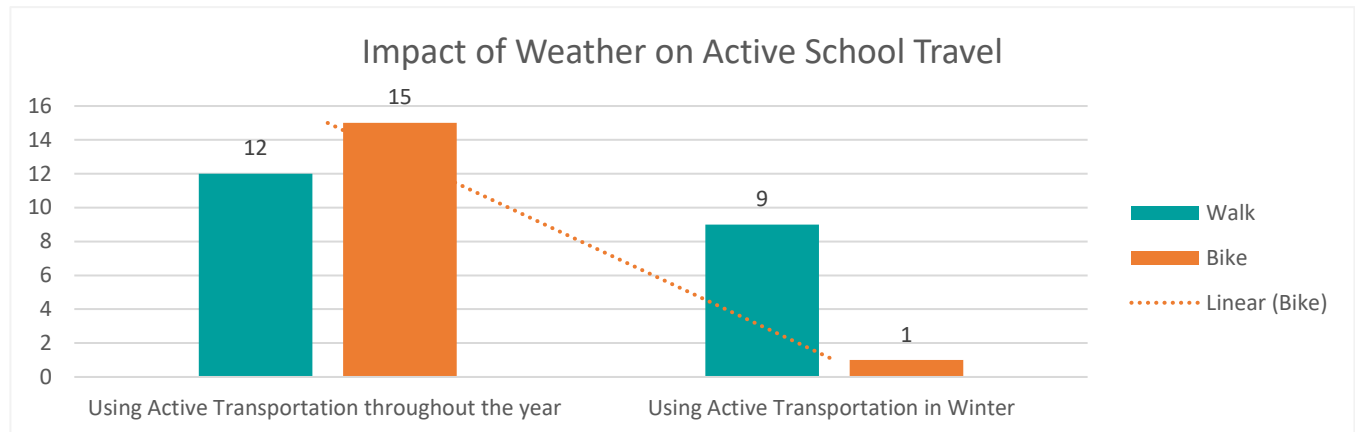
Considering that half a mile is a comfortable distance for elementary students to walk/bike to school, it is expected that all students living within this distance choose active transportation for their school travel. Therefore, there is an opportunity here to encourage students who live within this comfortable distance to choose active school travel.



## Barriers To Active School Travel:

### Weather:

The following chart compares the status of walking and biking throughout the year with winter months.

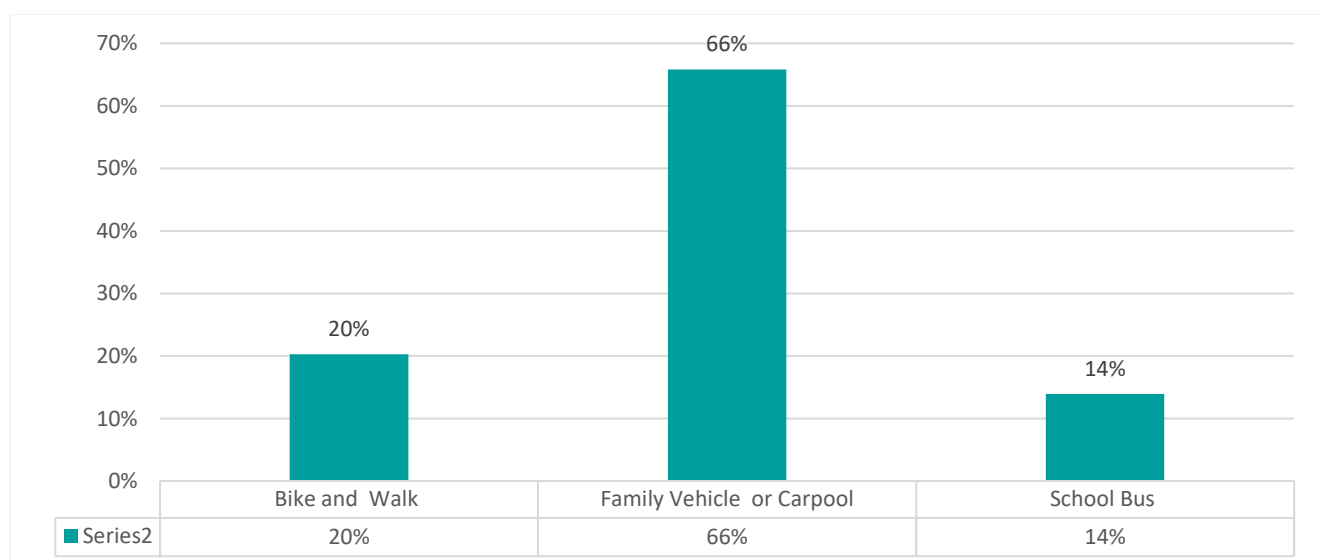


Observed pattern: During the colder months, the number of students choosing active transportation decreases. To overcome this perceived barrier to walking/biking, program can focus on promoting/celebrating enjoyability and opportunities for exercise by walking and cycling during winter (events like winter walk day) to encourage caregivers and students to choose (or continue to choose) active modes of travel.

Also, weather is a greater perceived barrier for cycling to school than for walking. This could mean that safety concerns related to biking should be addressed while walking is being promoted or celebrated.

### Crossing A Major Road:

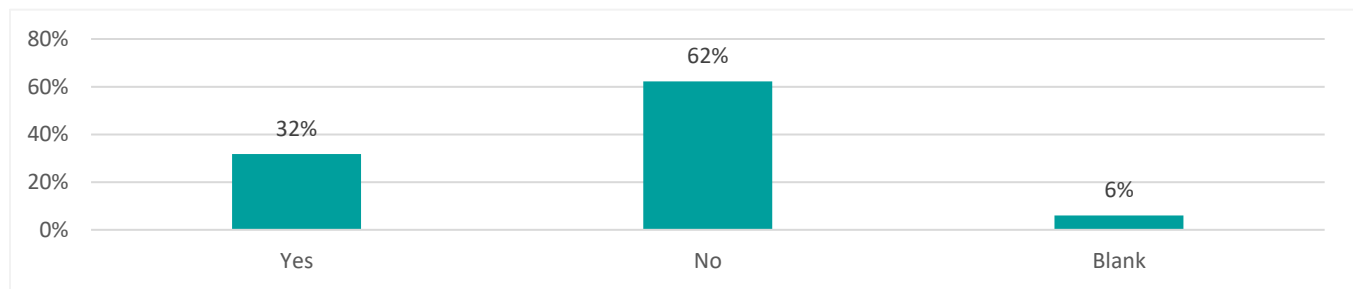
Amongst students who have to cross a major road to get to school, 66% of students are being driven to school (family vehicle, carpool, daycare van or drive their own vehicle). This shows that crossing major roads is a barrier or perceived safety issue for students to exercise active travel modes to school.



## Awareness:

### Awareness of the Safe Routes to School maps:

When asked about the Safe Routes to School Maps, more than 62% of participants had no or limited knowledge of the Safe Routes to School maps. This could be a leading factor for the future success of this program and upcoming campaigns.



## Interest Among Students:

Participants were asked “Has your student asked you for permission to walk or bike to/from school in the last calendar year?” during the parent/caregiver survey. Of the 151 responses received on the survey, 51 reported an interest from their students in walking and biking to/from this school which is around 34%. From this group, only 14 families (~27%) reported walking and biking for their school travel.

Participants shared concerns around distance to school (too far to walk or bike) and personal safety or criminal activity as barriers to walking and biking to school for these students.

This shows that aside from encouraging students to walk/bike to school, future programs and campaigns need to focus on caregivers too to help them overcome their concerns and encourage their kids to walk and bike to school.

Interest amongst students		
Participants reporting an interest in walking and biking for their students	51	34% of the total participants
Students Walking and Biking from this group	14	27% of the interested group

## School Name: Schroeder Middle School

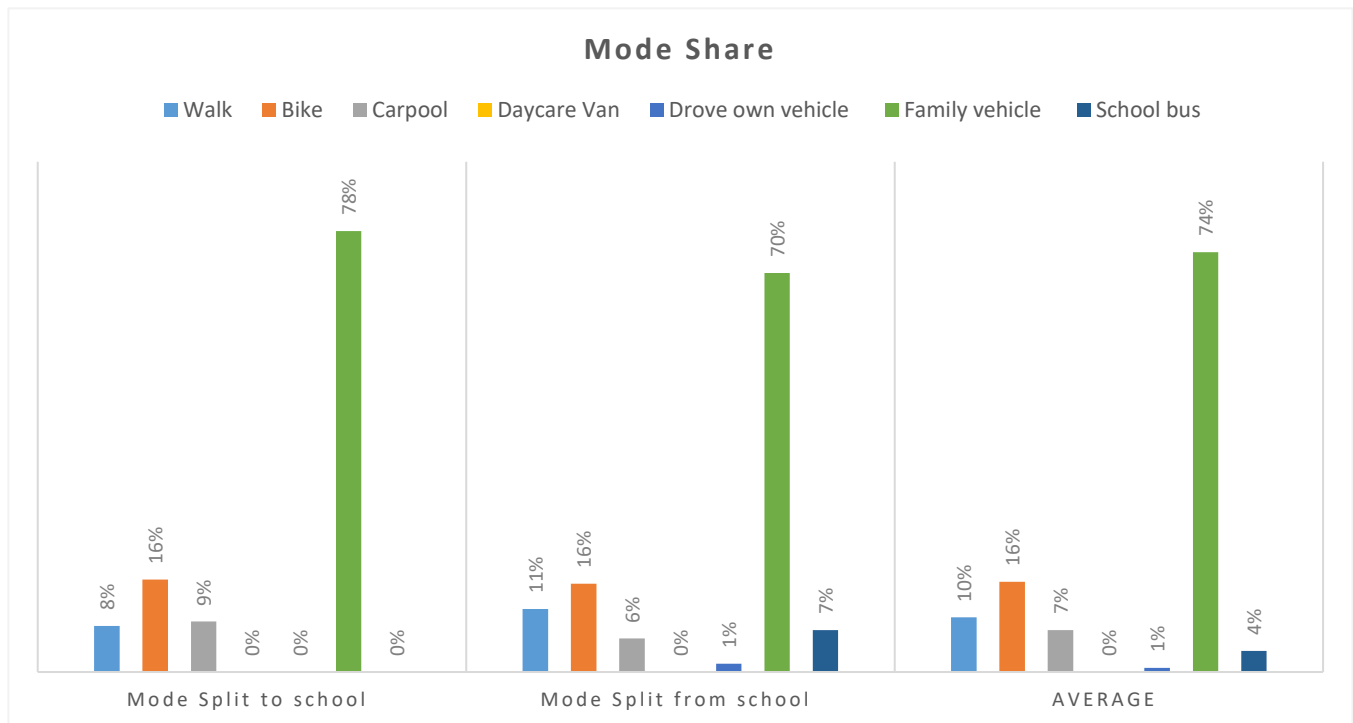
Data gathered through the Parent/caregiver survey was analyzed by the consultant team to better understand travel habits, travel mode split, influencing factors, and perceptions of barriers to active school travel.

This data does not account for families who didn't participate in the survey. The response rate for the survey was 135/547 students at Schroeder Middle School.

### Mode Share and Distance

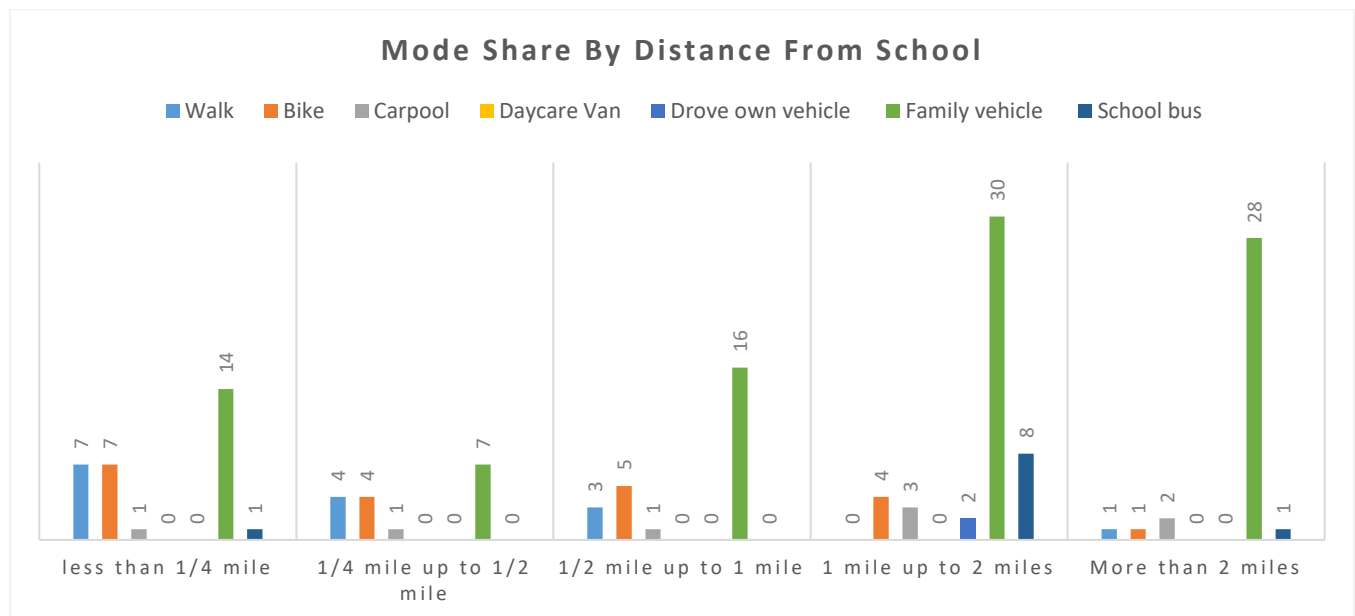
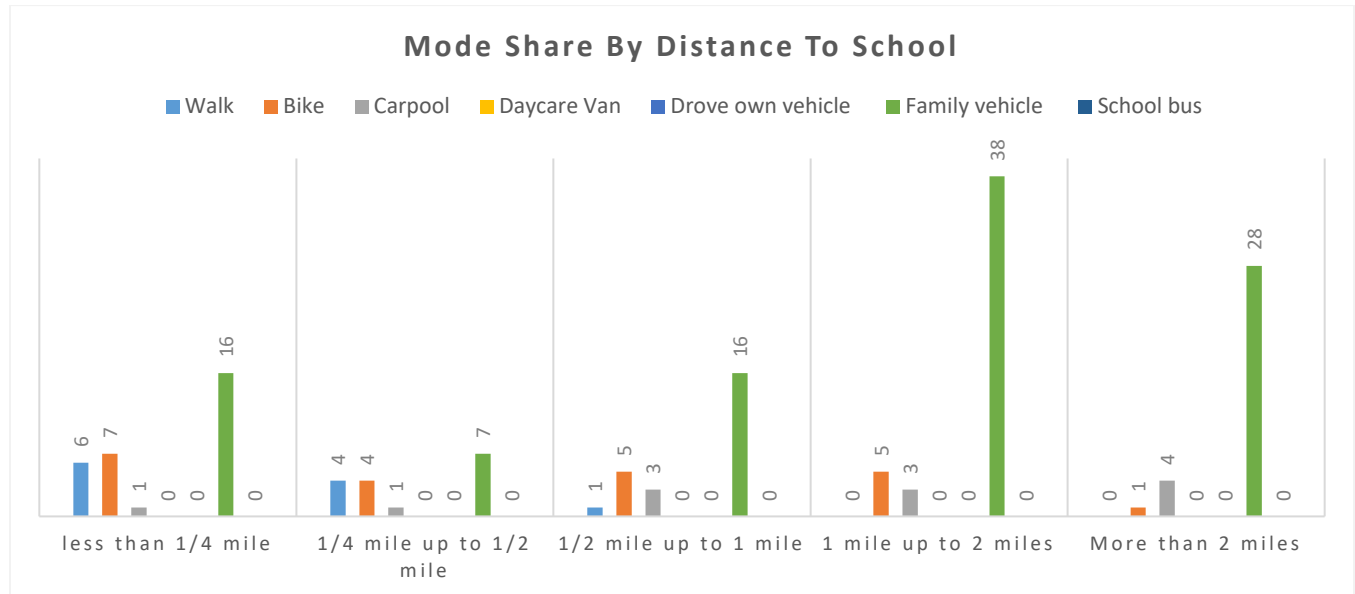
Based on the survey results, The most popular mode of transport at Schroeder Middle School is the family vehicle at 74% of students (average of the mode split to/from school). Only 10% of participants reported walking and 16% reported biking for their school travel.

	Mode Split to school	Mode Split from school	AVERAGE
Walk	8%	11%	10%
Bike	16%	16%	16%
Carpool	9%	6%	7%
Daycare Van	0%	0%	0%
Drove own vehicle	0%	1%	1%
Family vehicle	78%	70%	74%
School bus	0%	7%	4%



To examine distance as a driving factor for travel mode, we looked at the mode share within 5 distance categories:

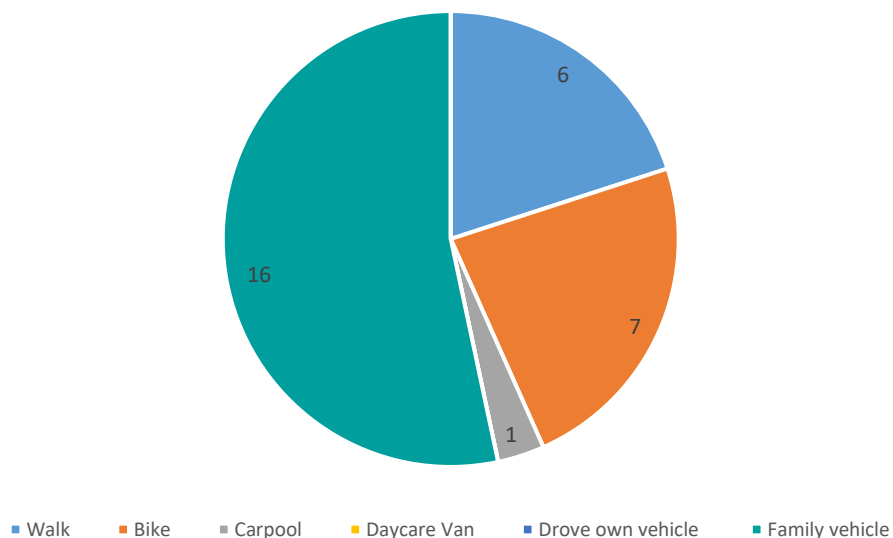
- Less than 1/4 mile
- 1/4 mile up to 1/2 mile
- 1/2 mile up to 1 mile
- 1 mile up to 2 miles
- More than 2 miles



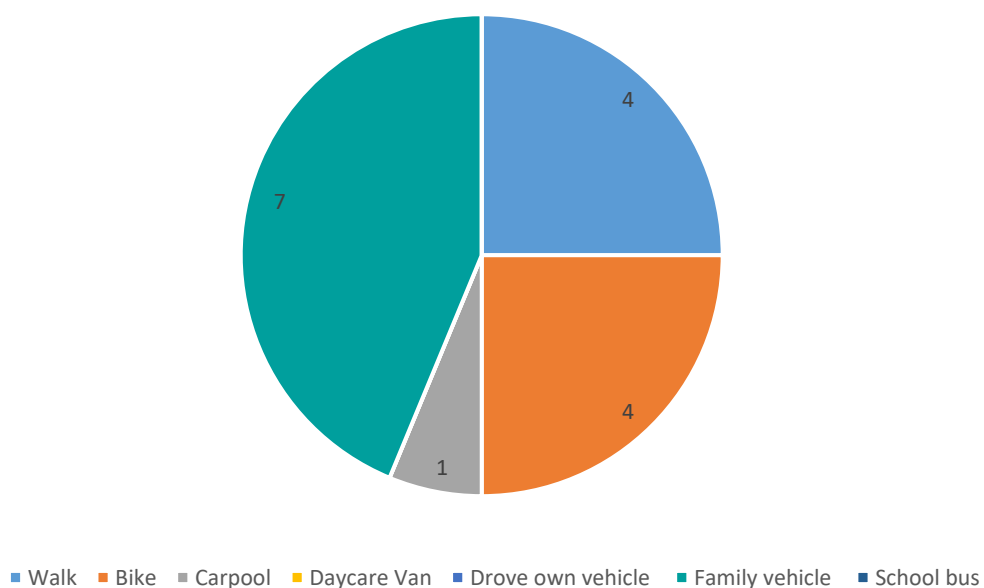
Observed pattern: As the distance from school increases, the number of students getting to school by cars increases, and number of students walking and biking decreases, so it is worthy to focus on changing the perception of what distances are “too far” to walk/bike to school.

Considering that half a mile is a comfortable distance for elementary students to walk/bike to school, it is expected that all students living within this distance choose active transportation for their school travel. Therefore, there is an opportunity here to encourage students who live within this comfortable distance to choose active school travel. Here is the current mode split for students living within half a mile of school.

Mode share of students living within 1/4 mile of school



Mode share of students who live within 1/4 mile up to 1/2 mile of school

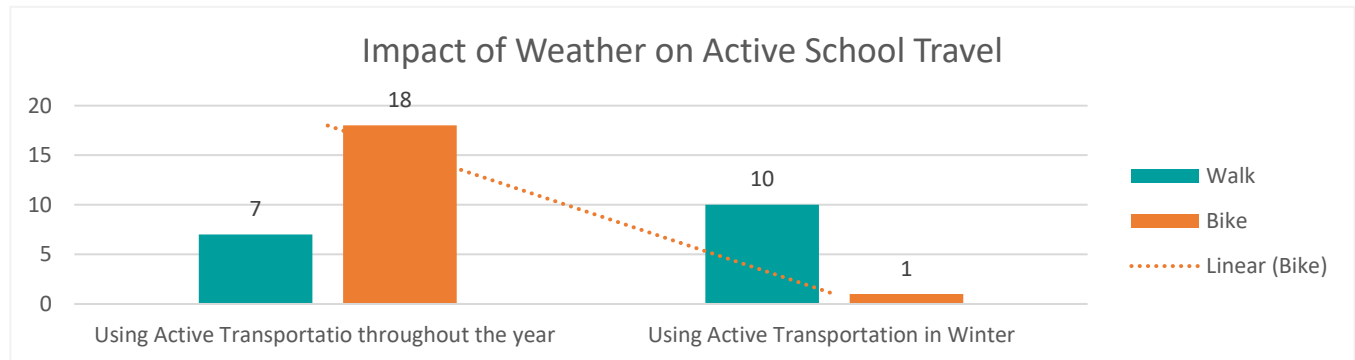




## Barriers To Active School Travel:

### Weather:

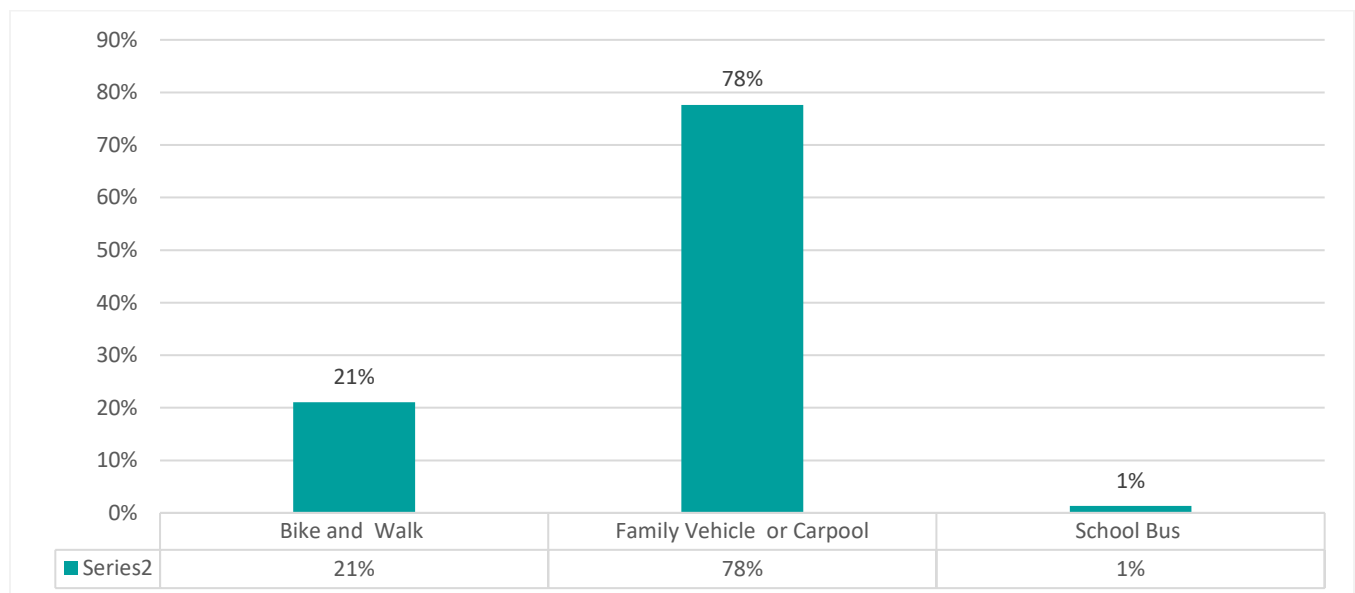
The following chart compares the status of walking and biking throughout the year with winter months.



Observed pattern: During the colder months, the number of students biking decreases. This means that weather is a greater perceived barrier for cycling to school than for walking. This could suggest that safety concerns related to biking should be addressed while walking is being promoted or celebrated. To overcome this perceived barrier to walking/biking, program can focus on promoting/celebrating enjoyability and opportunities for exercise by walking and cycling during winter (events like winter walk day) to encourage caregivers and students to choose (or continue to choose) active modes of travel.

### Crossing A Major Road:

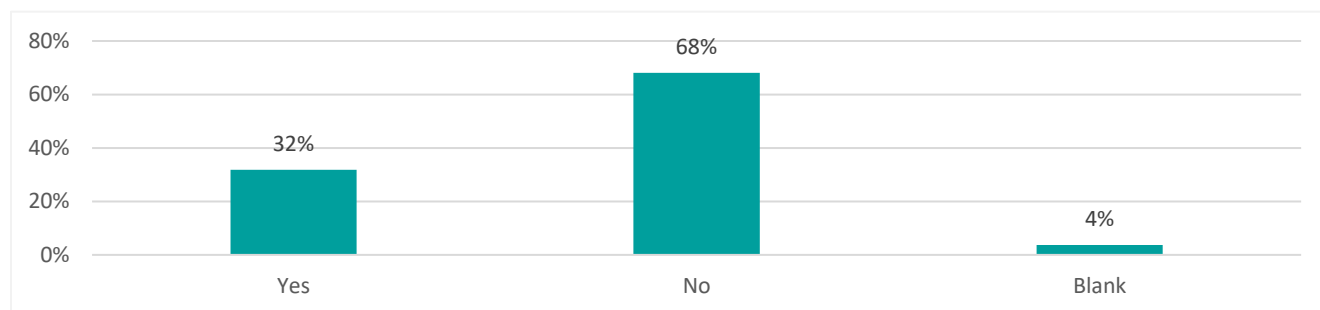
Amongst students who have to cross a major road to get to school, 78% of students are being driven to school (family vehicle, carpool, daycare van or drive their own vehicle). This shows that crossing major roads is a barrier or perceived safety issue for students to exercise active travel modes to school.



## Awareness:

### Awareness of the Safe Routes to School maps:

When asked about the Safe Routes to School Maps, more than 68% of participants had no or limited knowledge of the Safe Routes to School maps. This could be a leading factor for the future success of this program and upcoming campaigns.



## Interest Among Students:

Participants were asked “Has your student asked you for permission to walk or bike to/from school in the last calendar year?” during the parent/caregiver survey. Of the 135 responses received on the survey, 44 reported an interest from their students in walking and biking to/from this school which is around 33%. From this group, only 13 families (~30%) reported walking and biking for their school travel.

Participants shared concerns around personal safety or criminal activity as main barriers to walking and biking to school for these students.

This shows that aside from encouraging students to walk/bike to school, future programs and campaigns need to focus on caregivers too to help them overcome their concerns and encourage their kids to walk and bike to school.

Interest amongst students		
Participants reporting an interest in walking and biking for their students	44	33% of the total participants
Students Walking and Biking from this group	13	30% of the interested group

## School Name: Red River High School

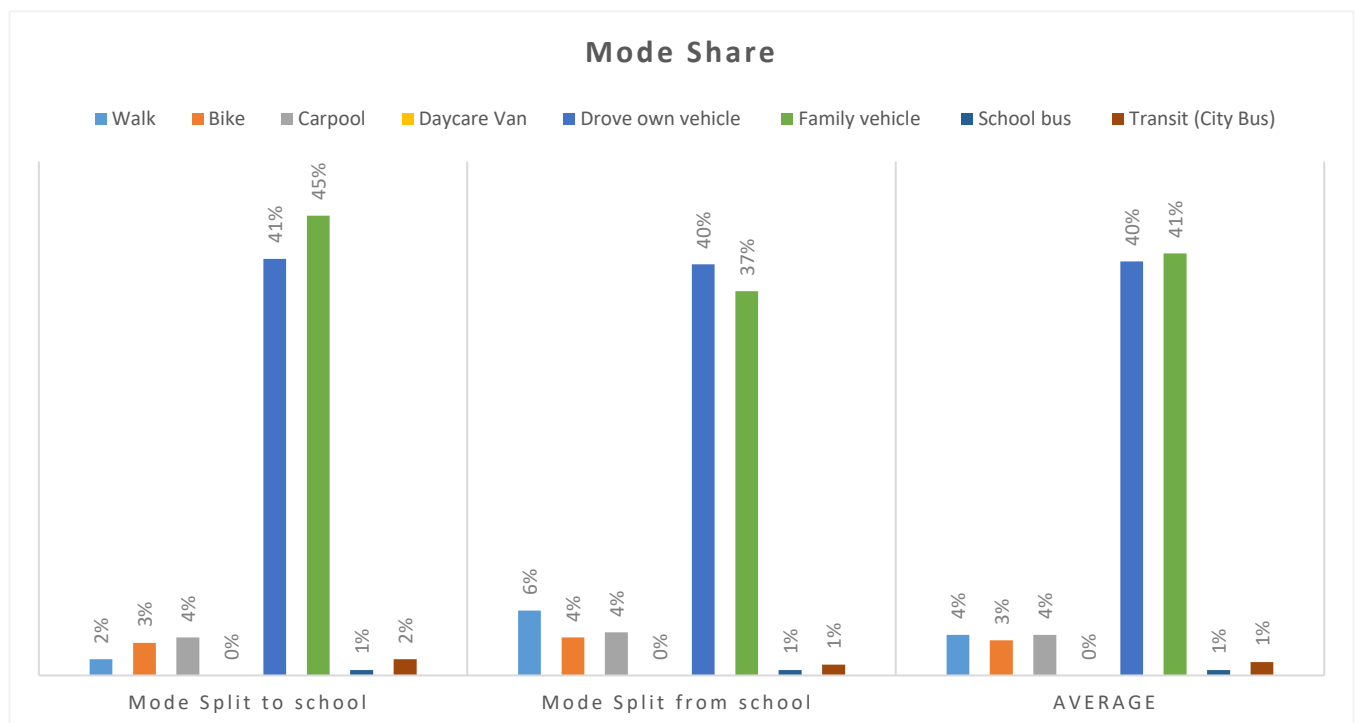
Data gathered through the Parent/caregiver survey was analyzed by the consultant team to better understand travel habits, travel mode split, influencing factors, and perceptions of barriers to active school travel.

This data does not account for families who didn't participate in the survey. The response rate for the survey was 190/1028 students at Red River High School.

### Mode Share and Distance

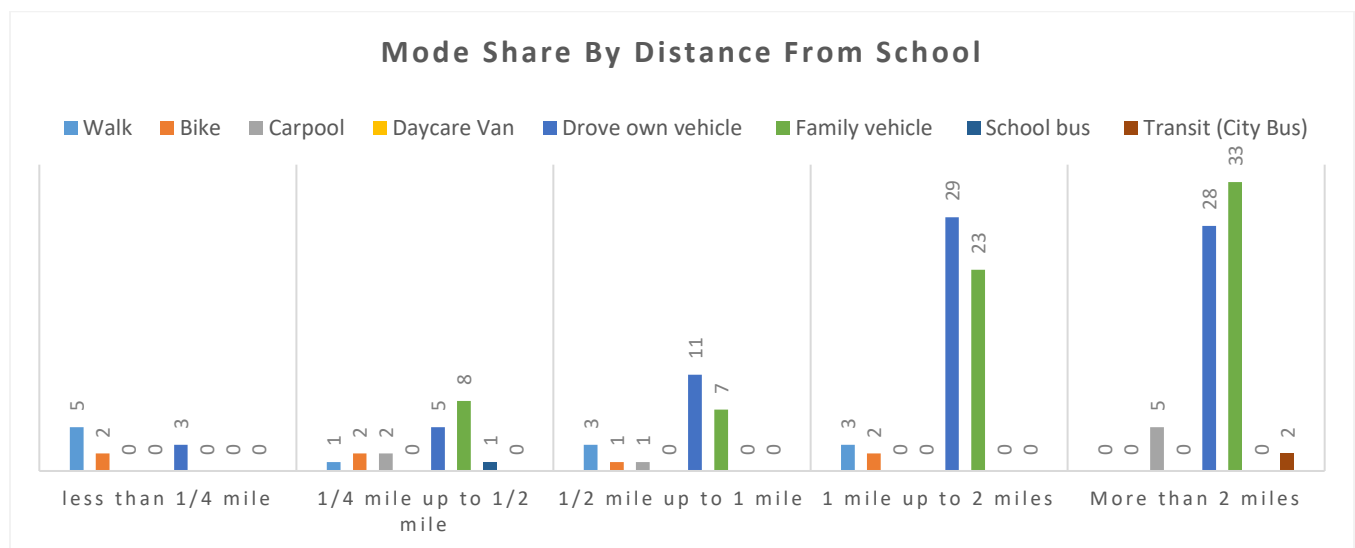
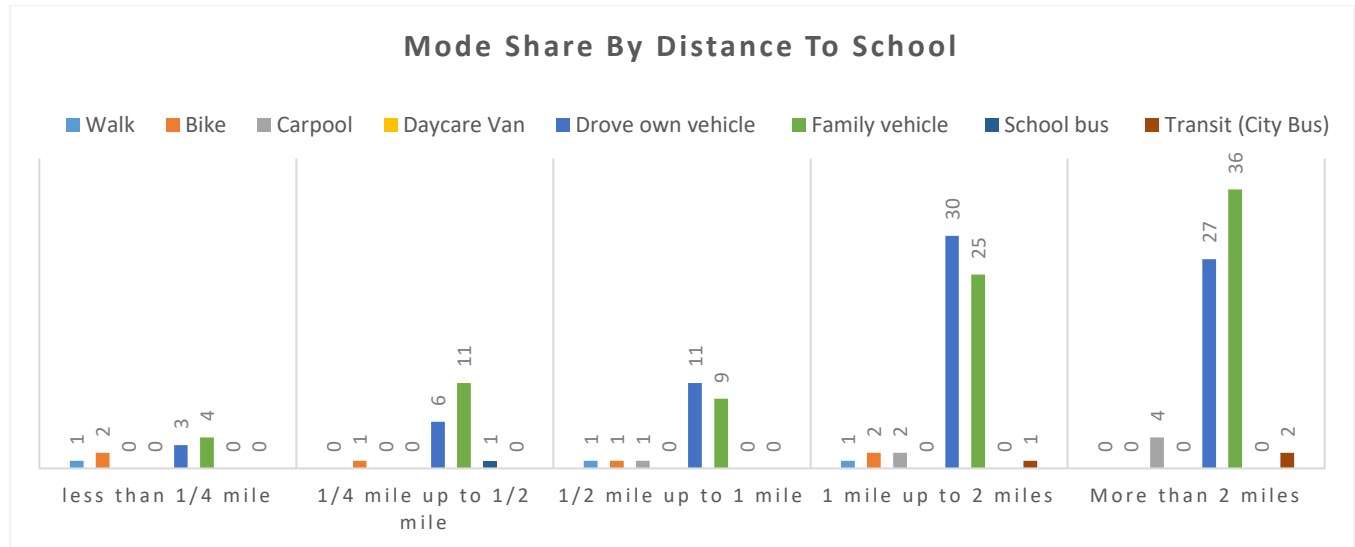
Based on the survey results, The most popular mode of transport at Red River High School is private cars with 41% of participants reporting family vehicles and 40% reporting students driving their cars to school (average of the mode split to/from school). Only 4% of participants reported walking and 3% reported biking for their school travel.

	Mode Split to school	Mode Split from school	AVERAGE
Walk	2%	6%	4%
Bike	3%	4%	3%
Carpool	4%	4%	4%
Daycare Van	0%	0%	0%
Drove own vehicle	41%	40%	40%
Family vehicle	45%	37%	41%
School bus	1%	1%	1%
Transit	2%	1%	1%



To examine distance as a driving factor for travel mode, we looked at the mode share within 5 distance categories:

- Less than 1/4 mile
- 1/4 mile up to 1/2 mile
- 1/2 mile up to 1 mile
- 1 mile up to 2 miles
- More than 2 miles



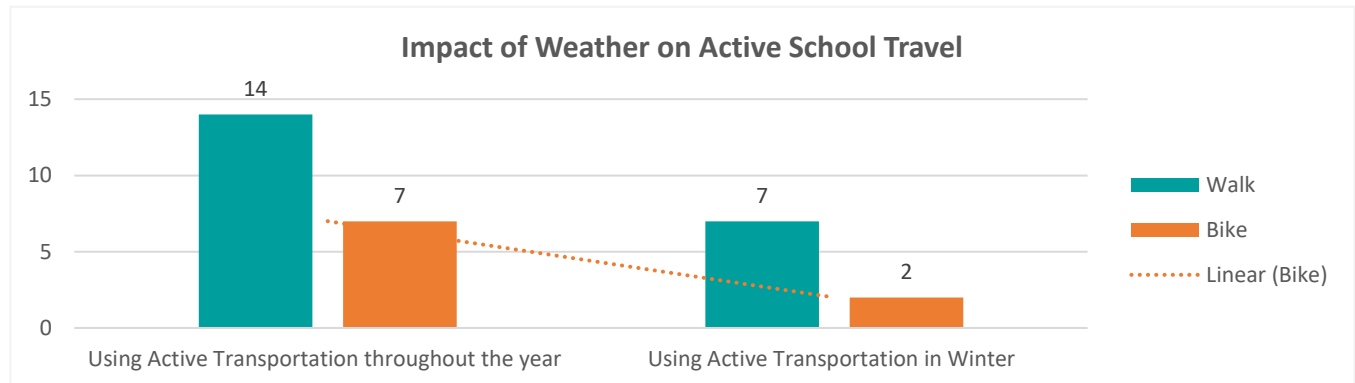
Observed pattern: As the distance from school increases, the number of students getting to school by car increases, so it is worthy to focus on changing the perception of what distances are “too far” to walk/bike to school.

Considering that half a mile is a comfortable distance for elementary students to walk/bike to school, it is expected that all students living within this distance choose active transportation for their school travel. Therefore, there is an opportunity here to encourage students who live within this comfortable distance to choose active school travel.

## Barriers To Active School Travel:

### Weather:

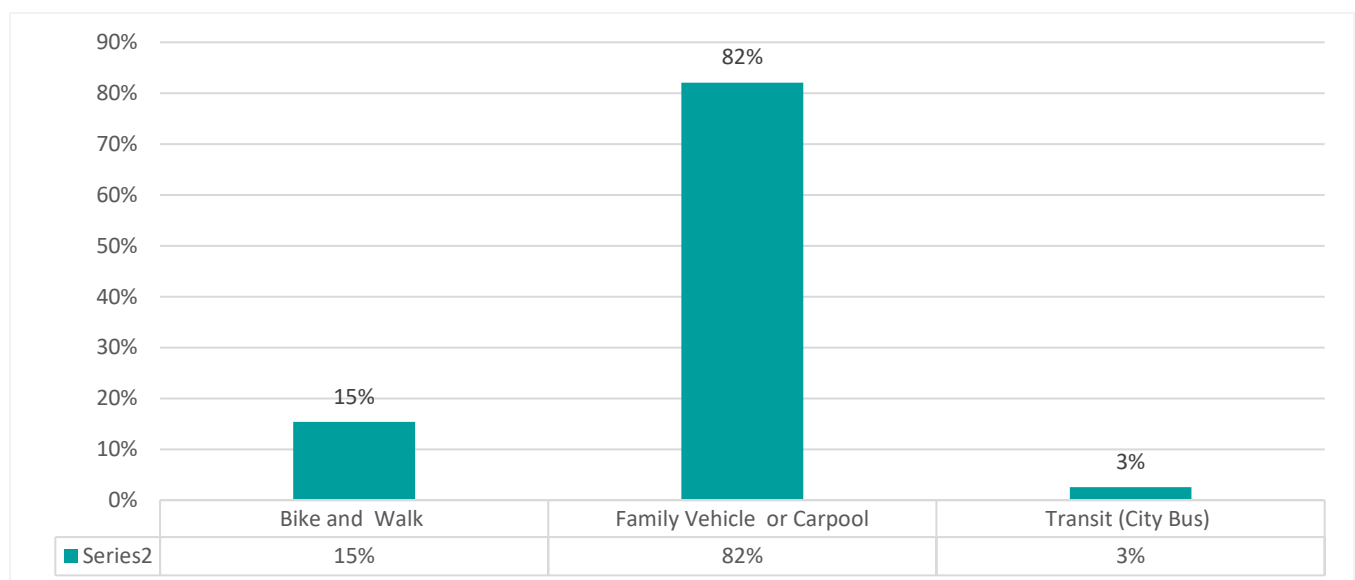
The following chart compares the status of walking and biking throughout the year with winter months.



Observed pattern: During the colder months, the number of students choosing active transportation decreases. To overcome this perceived barrier to walking/biking, program can focus on promoting/celebrating enjoyability and opportunities for exercise by walking and cycling during winter (events like winter walk day) to encourage caregivers and students to choose (or continue to choose) active modes of travel.

### Crossing A Major Road:

Amongst students who have to cross a major road to get to school, 82% of students are being driven to school (family vehicle, carpool, daycare van or drive their own vehicle). This shows that crossing major roads is a barrier or perceived safety issue for students to exercise active travel modes to school.





## Interest Among Students:

Participants were asked “Has your student asked you for permission to walk or bike to/from school in the last calendar year?” during the parent/caregiver survey. Of the 190 responses received on the survey, 39 reported an interest from their students in walking and biking to/from this school which is around 21%. From this group, only 17 families (~44%) reported walking and biking for their school travel.

Participants shared concerns around unsafe driving behavior and personal safety or criminal activity as barriers to walking and biking to school for these students.

This shows that besides focusing on caregivers to help them overcome their concerns and encourage their kids to walk and bike there is a need in encouraging campaigns for students to walk/bike to school in future programs.

Interest amongst students		
Participants reporting an interest in walking and biking for their students	39	21% of the total participants
Students Walking and Biking from this group	17	44% of the interested group

## School Name: Phoenix Elementary School

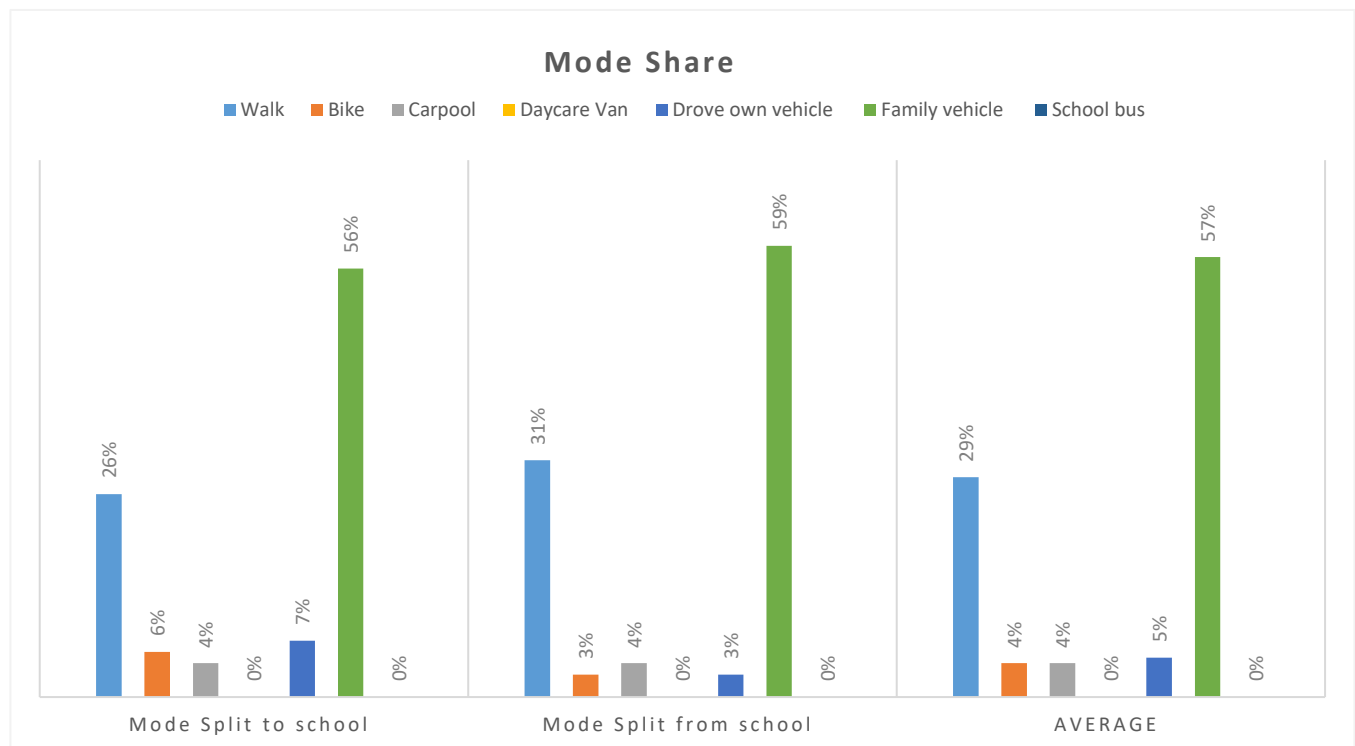
Data gathered through the Parent/caregiver survey was analyzed by the consultant team to better understand travel habits, travel mode split, influencing factors, and perceptions of barriers to active school travel.

This data does not account for families who didn't participate in the survey. The response rate for the survey was 68/251 students at Phoenix Elementary School.

### Mode Share and Distance

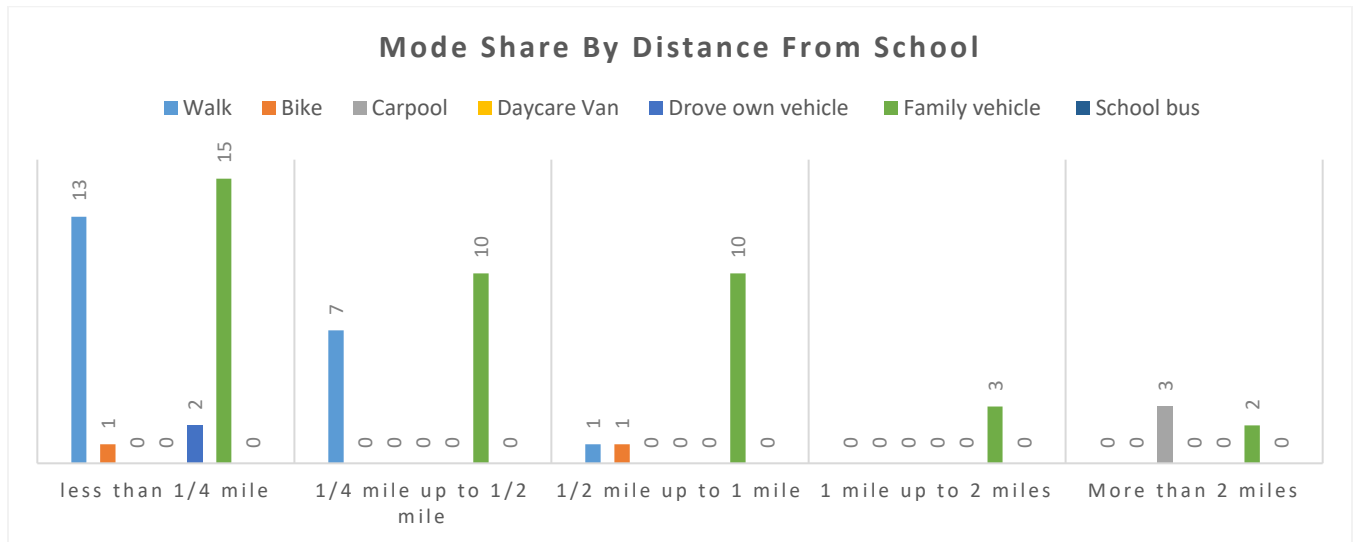
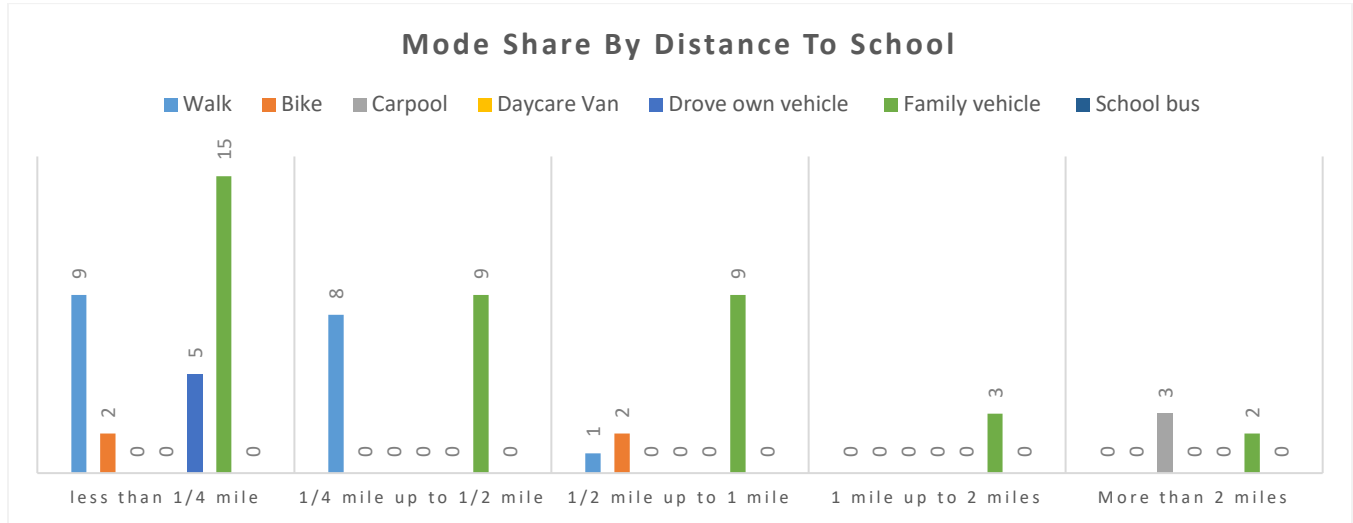
Based on the survey results, the most popular mode of transport at Valley Middle School is family vehicles for 57% of students (average of the mode split to/from school). Only 4% of participants reported biking and 29% reported walking for their school travel.

	Mode Split to school	Mode Split from school	AVERAGE
Walk	26%	31%	29%
Bike	6%	3%	4%
Carpool	4%	4%	4%
Daycare Van	0%	0%	0%
Drove own vehicle	7%	3%	5%
Family vehicle	56%	59%	57%
School bus	0%	0%	0%



To examine distance as a driving factor for travel mode, we looked at the mode share within 5 distance categories:

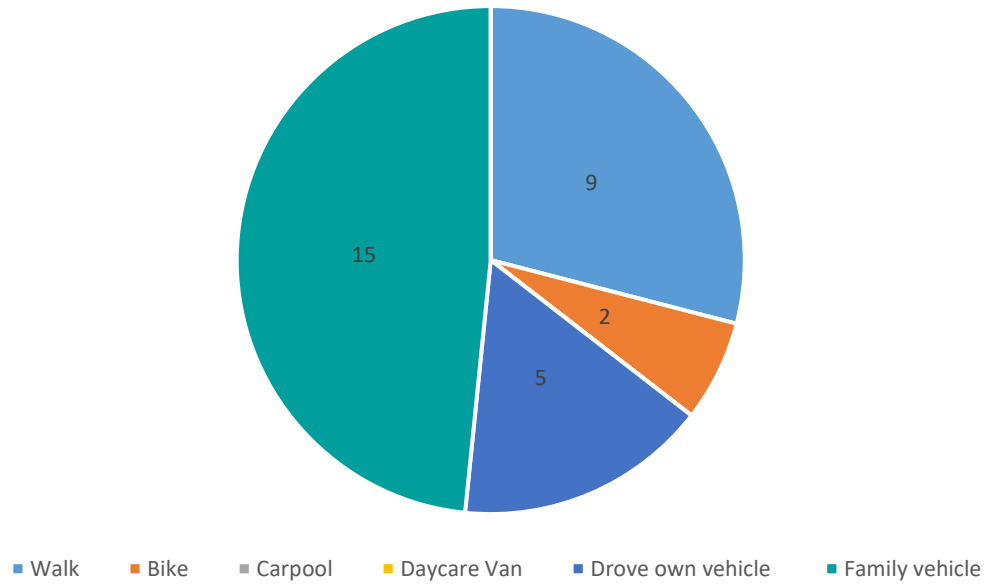
- Less than 1/4 mile
- 1/4 mile up to 1/2 mile
- 1/2 mile up to 1 mile
- 1 mile up to 2 miles
- More than 2 miles



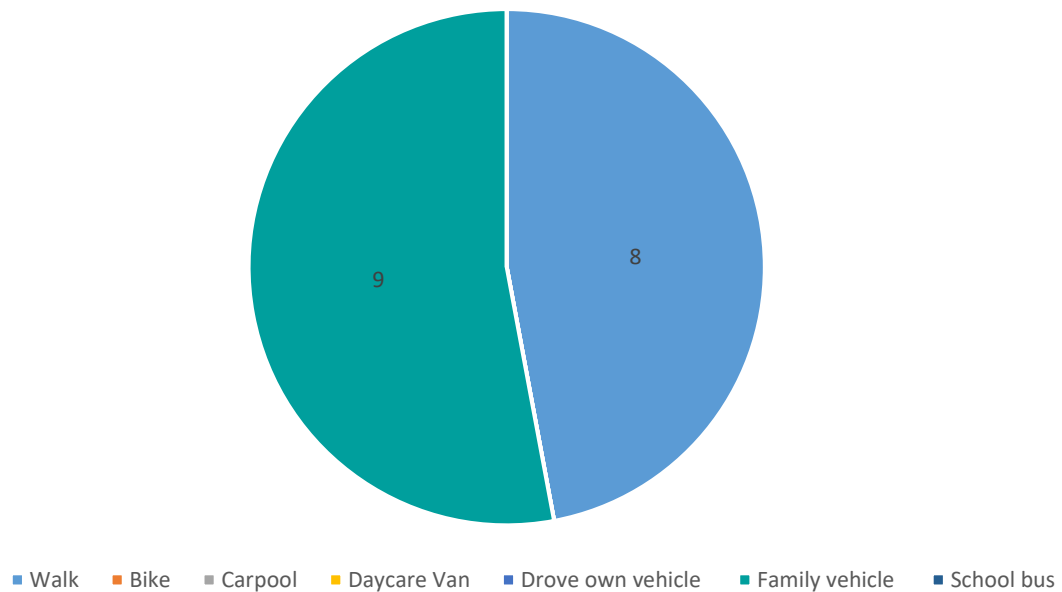
Observed pattern: As the distance from school increases, the number of students walking to school decreases, so it is worthy to focus on changing the perception of what distances are “too far” to walk/bike to school.

Considering that half a mile is a comfortable distance for elementary students to walk/bike to school, it is expected that all students living within this distance choose active transportation for their school travel. Therefore, there is an opportunity here to encourage students who live within this comfortable distance to choose active school travel. Here is the current mode split for students living within half a mile of school.

Mode share of students living within 1/4 mile of school



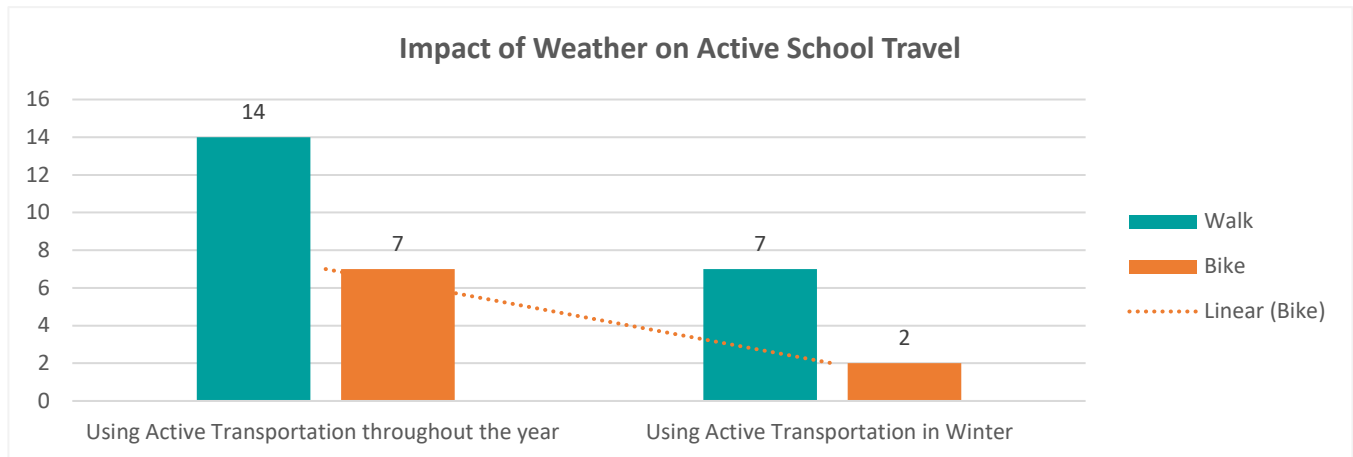
Mode share of students who live within 1/4 mile up to 1/2 mile of school



## Barriers To Active School Travel:

### Weather:

The following chart compares the status of walking and biking throughout the year with winter months.



Observed pattern: During the colder months, the number of students choosing active transportation decreases. To overcome this perceived barrier to walking/biking, program can focus on promoting/celebrating enjoyability and opportunities for exercise by walking and cycling during winter (events like winter walk day) to encourage caregivers and students to choose (or continue to choose) active modes of travel.

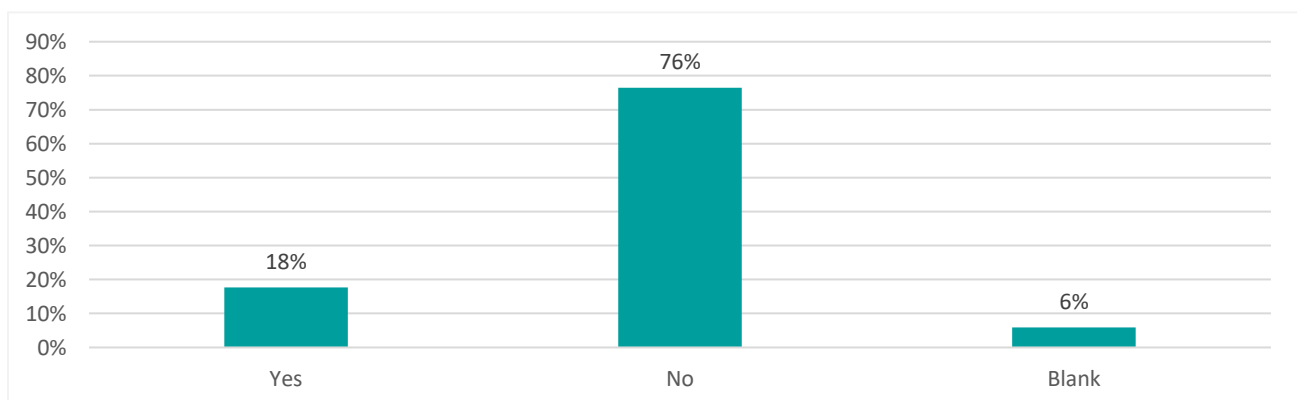
### Crossing A Major Road:

Amongst students who have to cross a major road to get to school, 50% of students are being driven to school (family vehicle, carpool, daycare van or drive their own vehicle). This shows that crossing major roads is a barrier or perceived safety issue for students to exercise active travel modes to school.

### Awareness:

#### Awareness of the Safe Routes to School maps:

When asked about the Safe Routes to School Maps, more than 76% of participants had no or limited knowledge of the Safe Routes to School maps. This could be a leading factor for the future success of this program and upcoming campaigns.





## Interest Among Students:

Participants were asked “Has your student asked you for permission to walk or bike to/from school in the last calendar year?” during the parent/caregiver survey. Of the 68 responses received on the survey, 37 reported an interest from their students in walking and biking to/from this school which is around 54%. From this group, only 13 families (~35%) reported walking and biking for their school travel.

Participants shared concerns around unsafe driving behavior (speeding on main roads), congestion during pick-up and drop-off period and personal safety or criminal activity as barriers to walking and biking to school for these students.

This shows that aside from encouraging students to walk/bike to school, future programs and campaigns need to focus on caregivers too to help them overcome their concerns and encourage their kids to walk and bike to school.

Interest amongst students		
Participants reporting an interest in walking and biking for their students	37	54% of the total participants
Students Walking and Biking from this group	13	35% of the interested group

## School Name: Lewis and Clark Elementary School

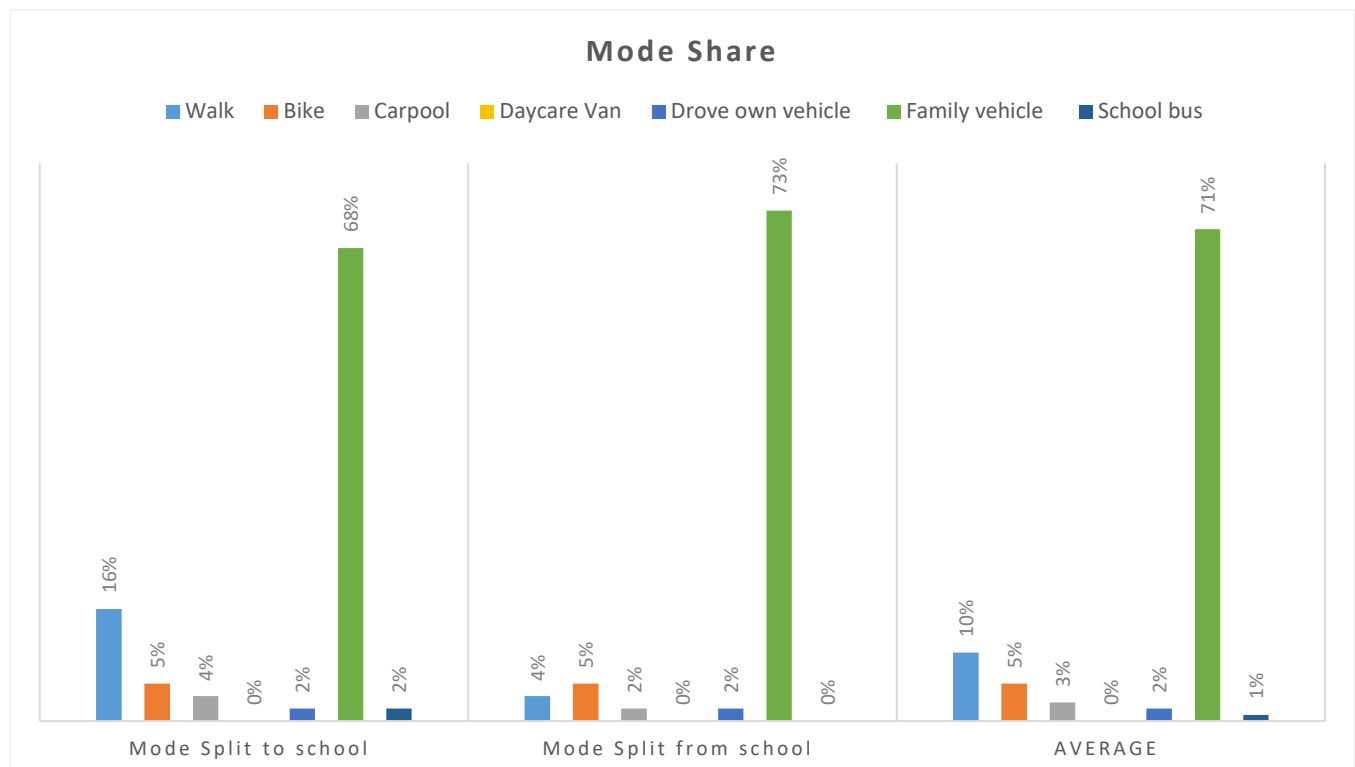
Data gathered through the Parent/caregiver survey was analyzed by the consultant team to better understand travel habits, travel mode split, influencing factors, and perceptions of barriers to active school travel.

This data does not account for families who didn't participate in the survey. The response rate for the survey was 56/183 students at Lewis and Clark Elementary School.

### Mode Share and Distance

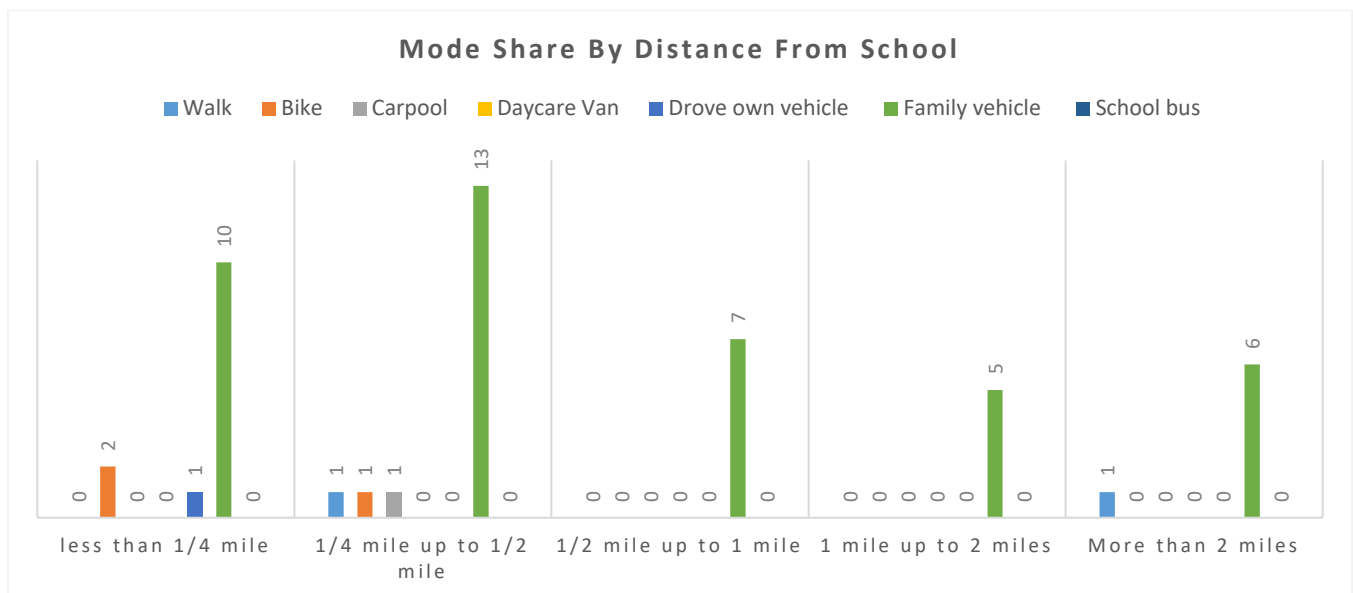
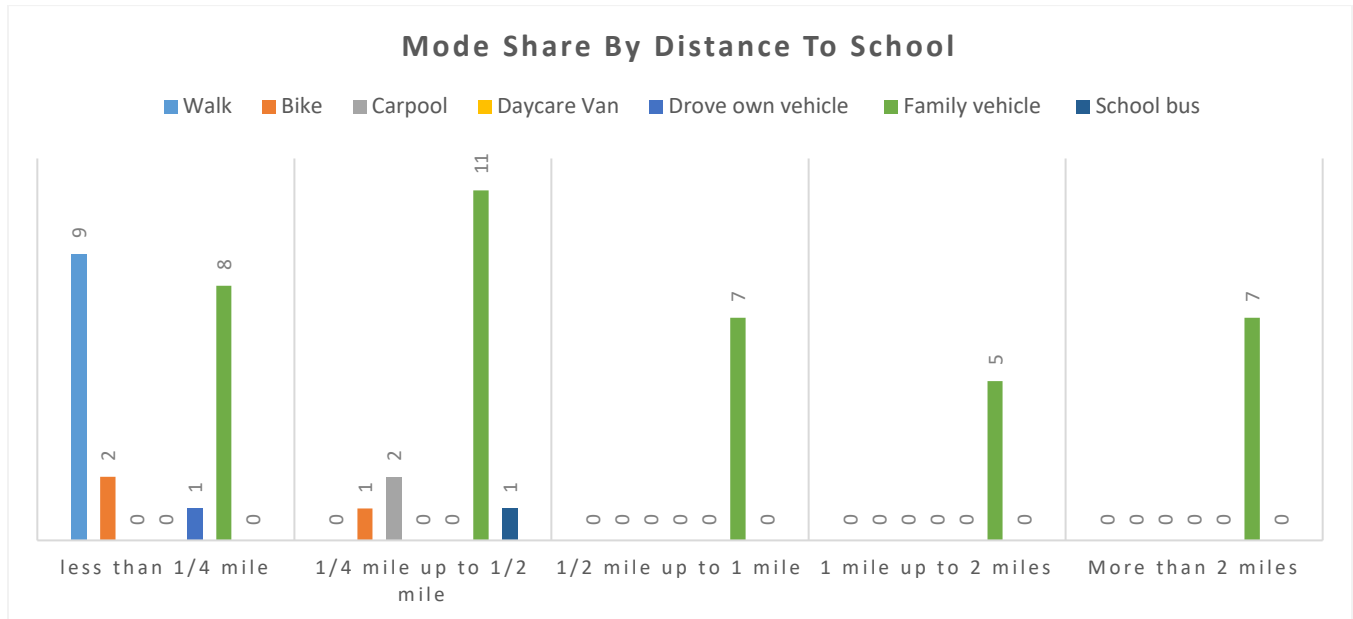
Based on the survey results, the most popular mode of transport at Lewis and Clark Elementary School is family vehicles for 71% of students (average of the mode split to/from school). Only 5% of participants reported biking and 10% reported walking for their school travel.

	Mode Split to school	Mode Split from school	AVERAGE
Walk	16%	4%	10%
Bike	5%	5%	5%
Carpool	4%	2%	3%
Daycare Van	0%	0%	0%
Drove own vehicle	2%	2%	2%
Family vehicle	68%	73%	71%
School bus	2%	0%	1%



To examine distance as a driving factor for travel mode, we looked at the mode share within 5 distance categories:

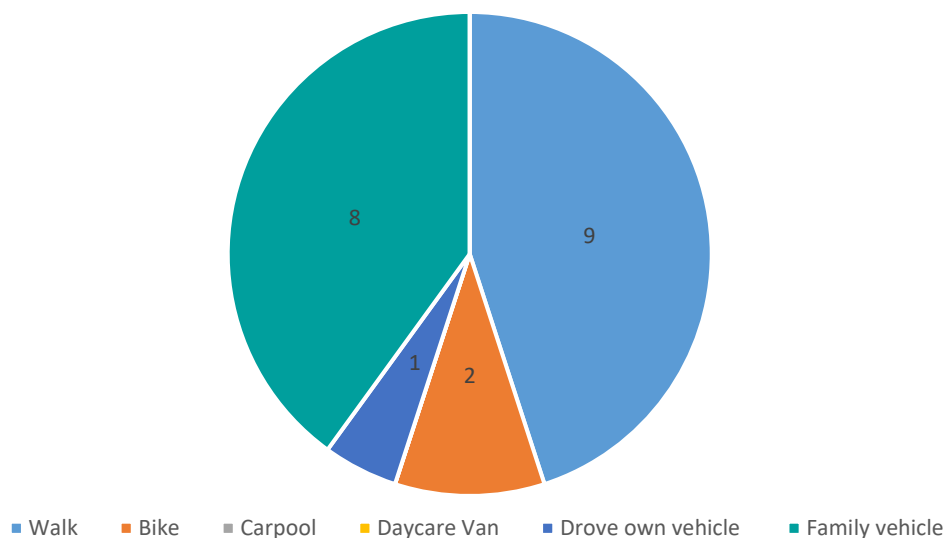
- Less than 1/4 mile
- 1/4 mile up to 1/2 mile
- 1/2 mile up to 1 mile
- 1 mile up to 2 miles
- More than 2 miles



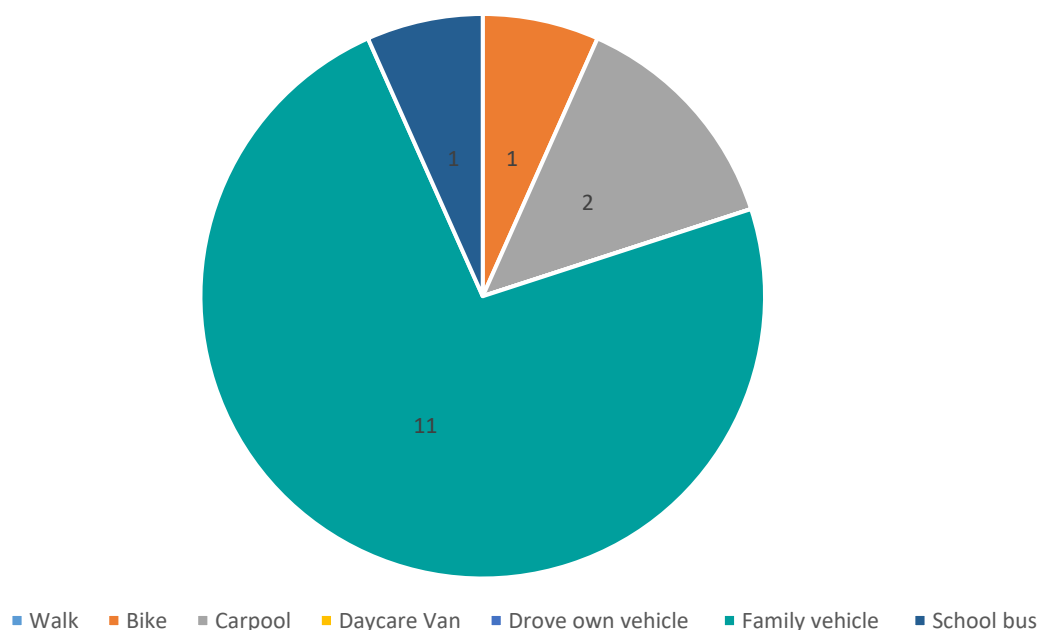
Observed pattern: As the distance from school increases, the number of students walking and biking to school decreases, so it is worthy to focus on changing the perception of what distances are “too far” to walk/bike to school.

Considering that half a mile is a comfortable distance for elementary students to walk/bike to school, it is expected that all students living within this distance choose active transportation for their school travel. Therefore, there is an opportunity here to encourage students who live within this comfortable distance to choose active school travel. Here is the current mode split for students living within half a mile of school.

Mode share of students living within 1/4 mile of school



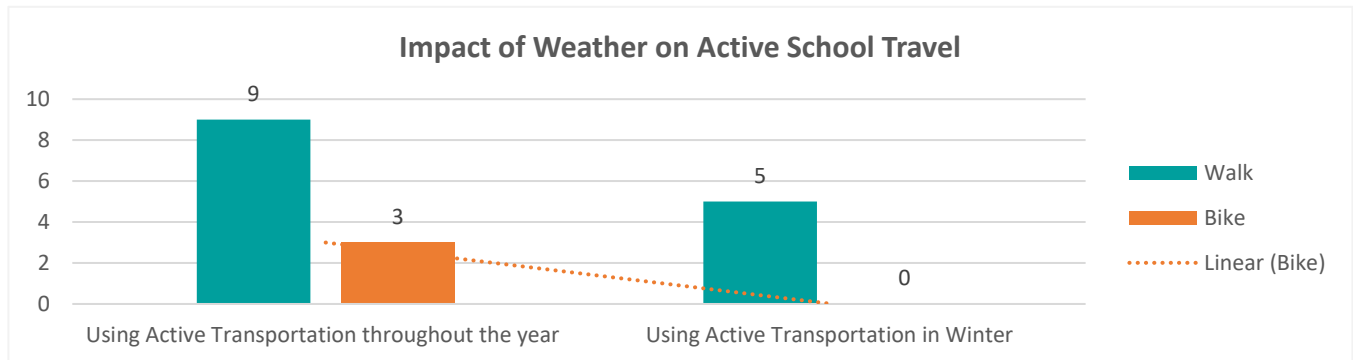
Mode share of students who live within 1/4 mile up to 1/2 mile of school



## Barriers To Active School Travel:

### Weather:

The following chart compares the status of walking and biking throughout the year with winter months.

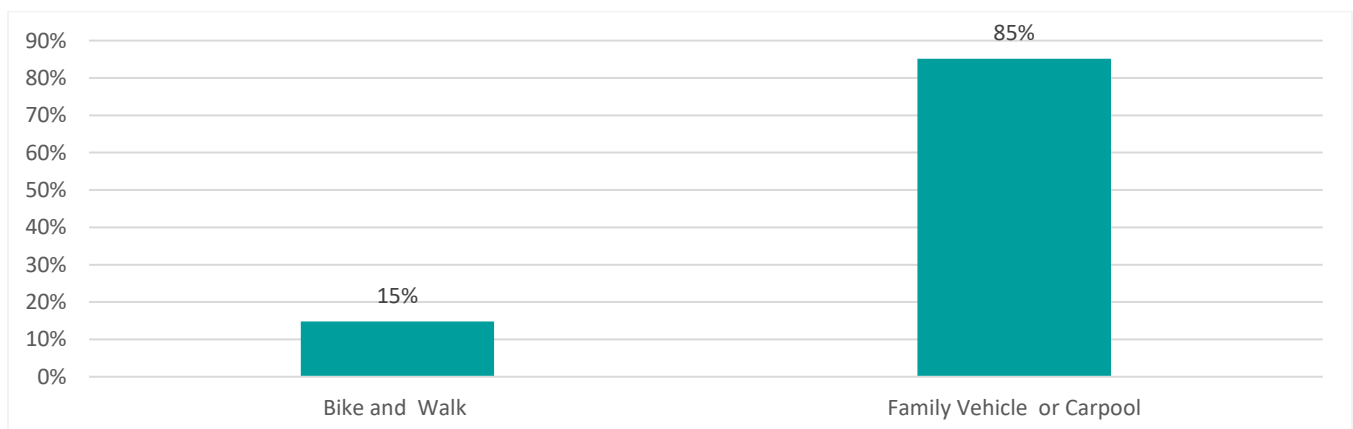


Observed pattern: During the colder months, the number of students choosing active transportation decreases. To overcome this perceived barrier to walking/biking, program can focus on promoting/celebrating enjoyability and opportunities for exercise by walking and cycling during winter (events like winter walk day) to encourage caregivers and students to choose (or continue to choose) active modes of travel.

Also, weather is a greater perceived barrier for cycling to school than for walking as no one is biking in colder months. This could mean that safety concerns and skill training related to biking should be addressed while walking is being promoted or celebrated.

### Crossing A Major Road:

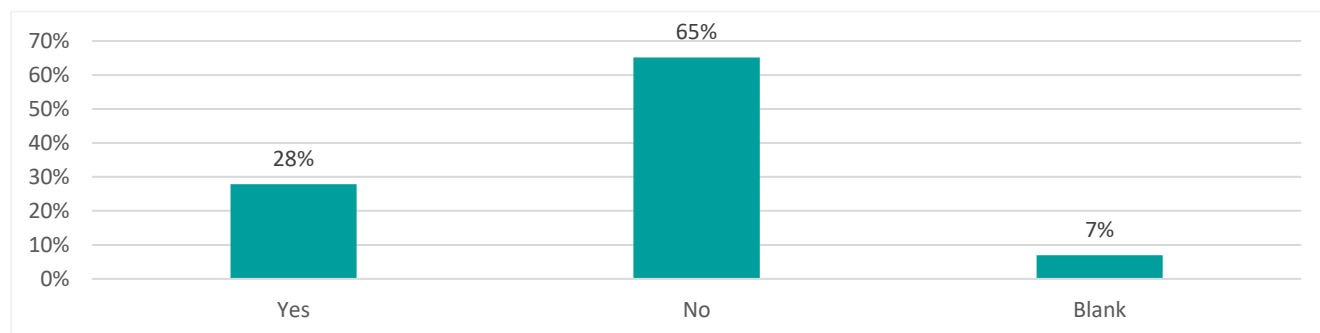
Amongst students who have to cross a major road to get to school, 85% of students are being driven to school (family vehicle, carpool, daycare van or drive their own vehicle). This shows that crossing major roads is a barrier or perceived safety issue for students to exercise active travel modes to school.



## Awareness:

### Awareness of the Safe Routes to School maps:

When asked about the Safe Routes to School Maps, more than 65% of participants had no or limited knowledge of the Safe Routes to School maps. This could be a leading factor for the future success of this program and upcoming campaigns.



## Interest Among Students:

Participants were asked “Has your student asked you for permission to walk or bike to/from school in the last calendar year?” during the parent/caregiver survey. Of the 56 responses received on the survey, 25 reported an interest from their students in walking and biking to/from this school which is around 45%. From this group, only 11 families (~44%) reported walking and biking for their school travel.

Participants shared concerns around distance from school and personal safety or criminal activity as barriers to walking and biking to school for these students.

This shows that aside from encouraging students to walk/bike to school, future programs and campaigns need to focus on caregivers too to help them overcome their concerns and encourage their kids to walk and bike to school.

Interest amongst students		
Participants reporting an interest in walking and biking for their students	25	45% of the total participants
Students Walking and Biking from this group	11	44% of the interested group



## School Name: Lake Agassiz Elementary School

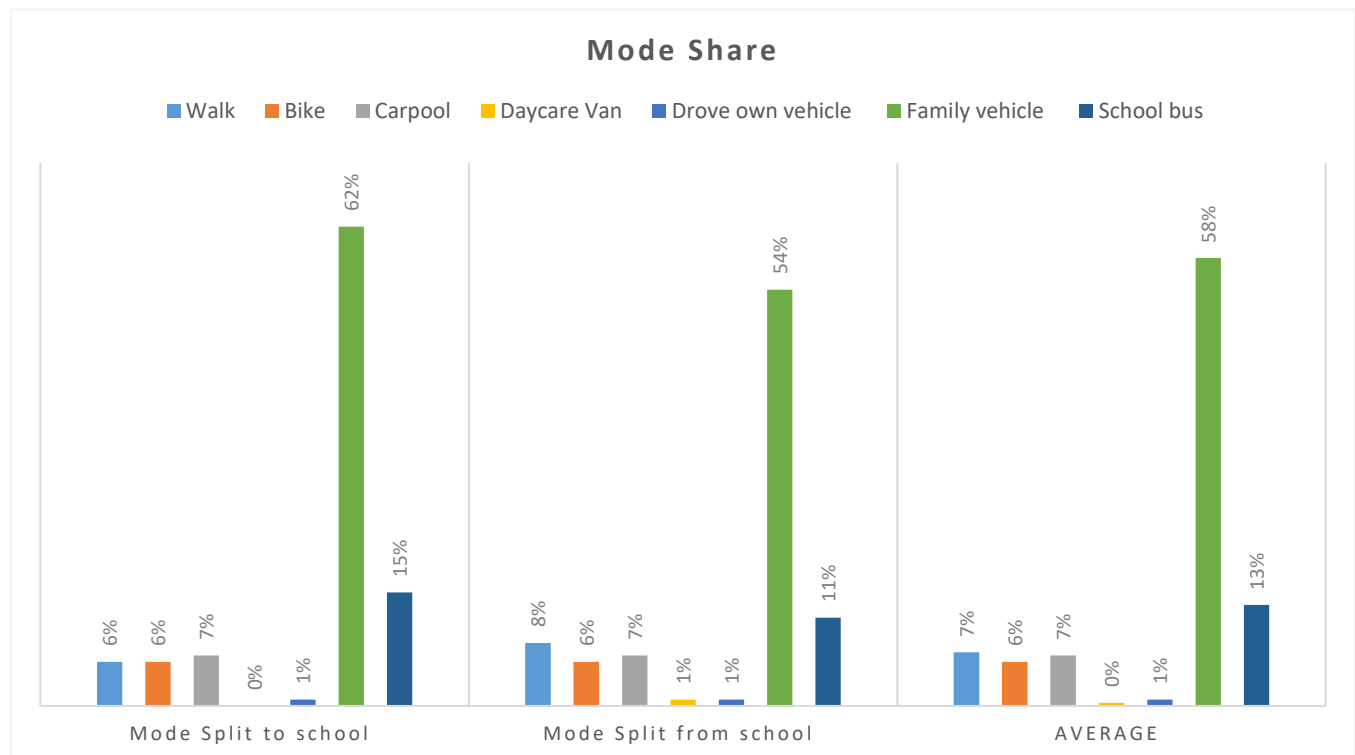
Data gathered through the Parent/caregiver survey was analyzed by the consultant team to better understand travel habits, travel mode split, influencing factors, and perceptions of barriers to active school travel.

This data does not account for families who didn't participate in the survey. The response rate for the survey was 123/425 students at Lake Agassiz Elementary School.

### Mode Share and Distance

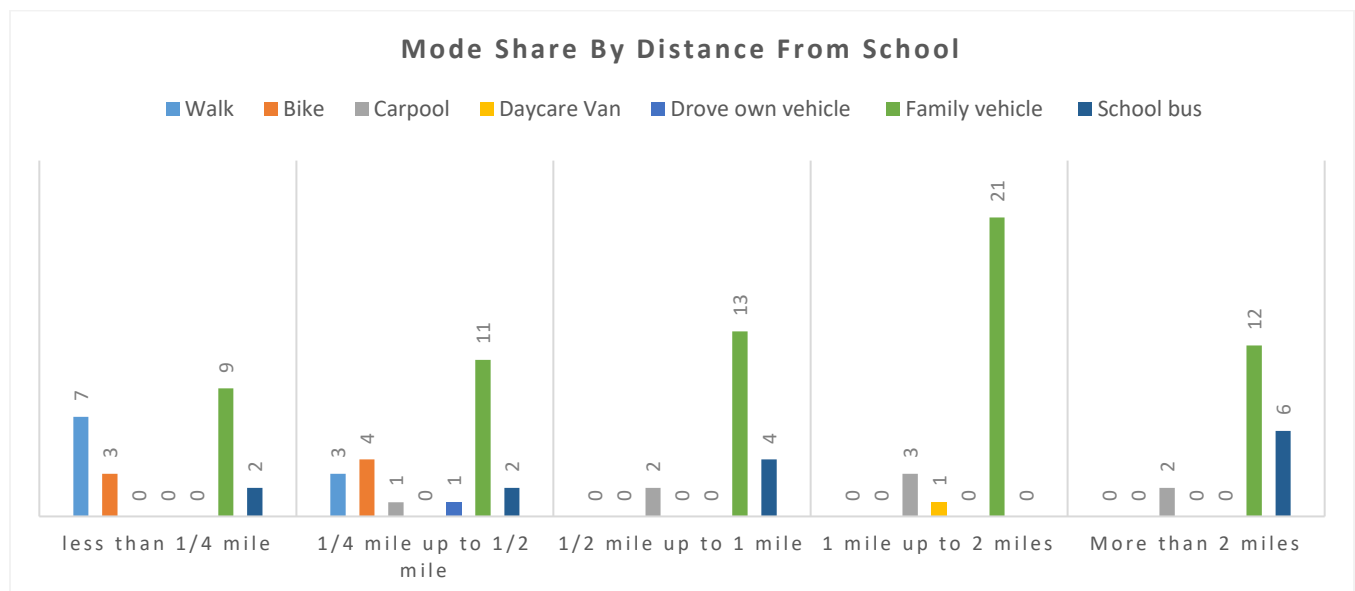
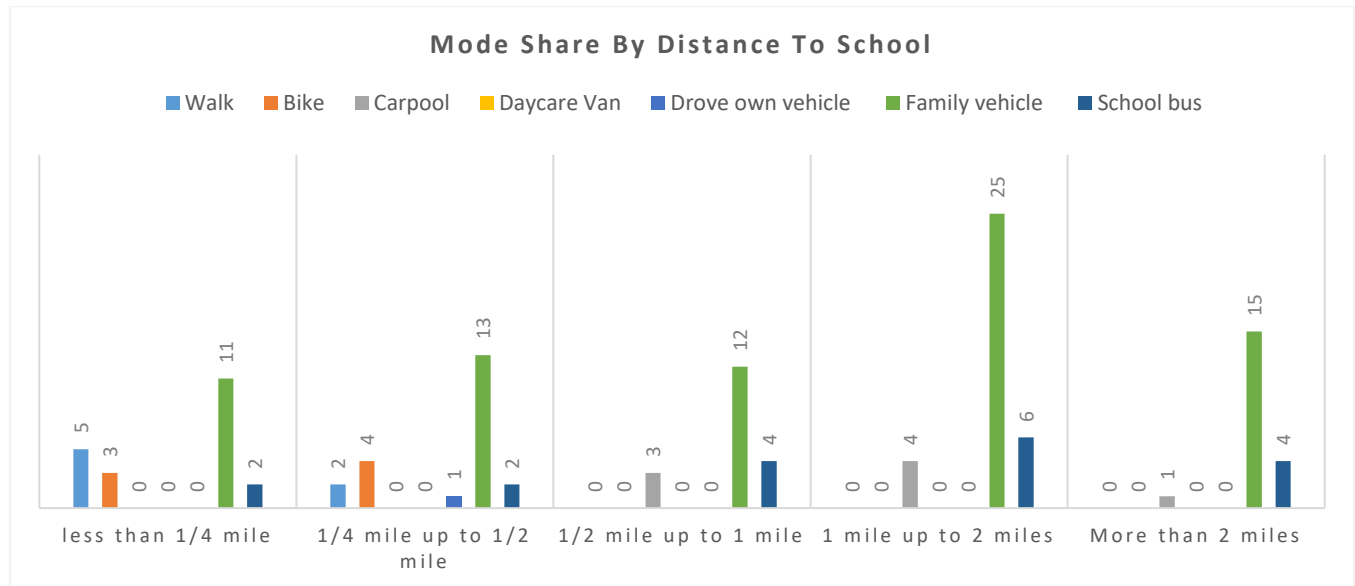
Based on the survey results, the most popular mode of transport at Lake Agassiz Elementary School is family vehicles for 58% of students (average of the mode split to/from school). Only 6% of participants reported biking and 7% reported walking for their school travel.

	Mode Split to school	Mode Split from school	AVERAGE
Walk	6%	8%	7%
Bike	6%	6%	6%
Carpool	7%	7%	7%
Daycare Van	0%	1%	0%
Drove own vehicle	1%	1%	1%
Family vehicle	62%	54%	58%
School bus	15%	11%	13%



To examine distance as a driving factor for travel mode, we looked at the mode share within 5 distance categories:

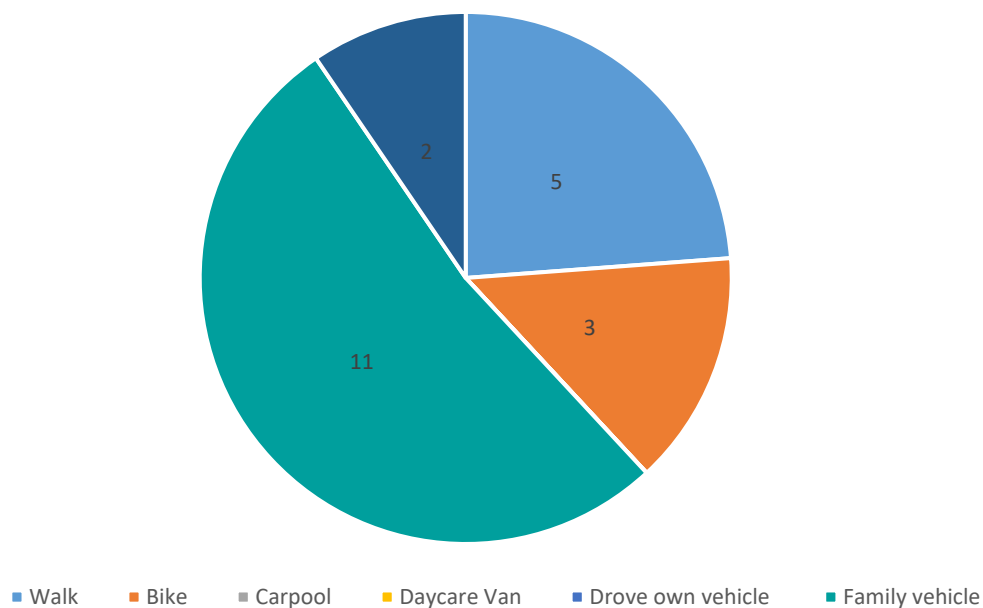
- Less than 1/4 mile
- 1/4 mile up to 1/2 mile
- 1/2 mile up to 1 mile
- 1 mile up to 2 miles
- More than 2 miles



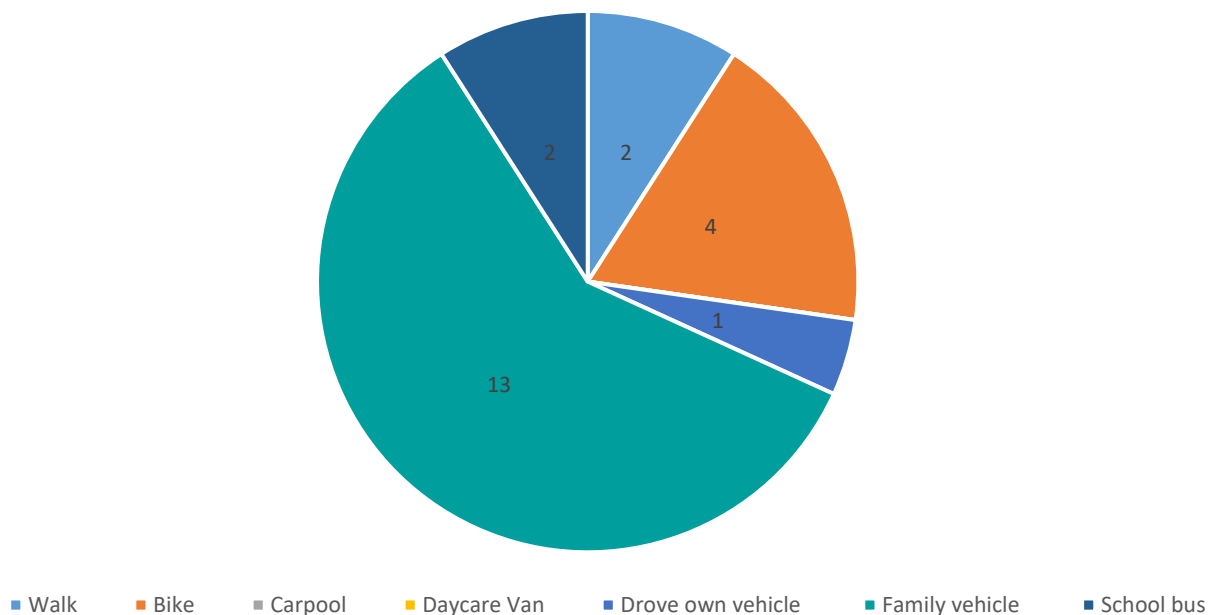
Observed pattern: As the distance from school increases, the number of students walking and biking to school decreases, and number of cars showing up at the school site during drop-off and pick-up grows, so it is worthy to focus on changing the perception of what distances are “too far” to walk/bike to school.

Considering that half a mile is a comfortable distance for elementary students to walk/bike to school, it is expected that all students living within this distance choose active transportation for their school travel. Therefore, there is an opportunity here to encourage students who live within this comfortable distance to choose active school travel. Here is the current mode split for students living within half a mile of school.

Mode share of students living within 1/4 mile of school



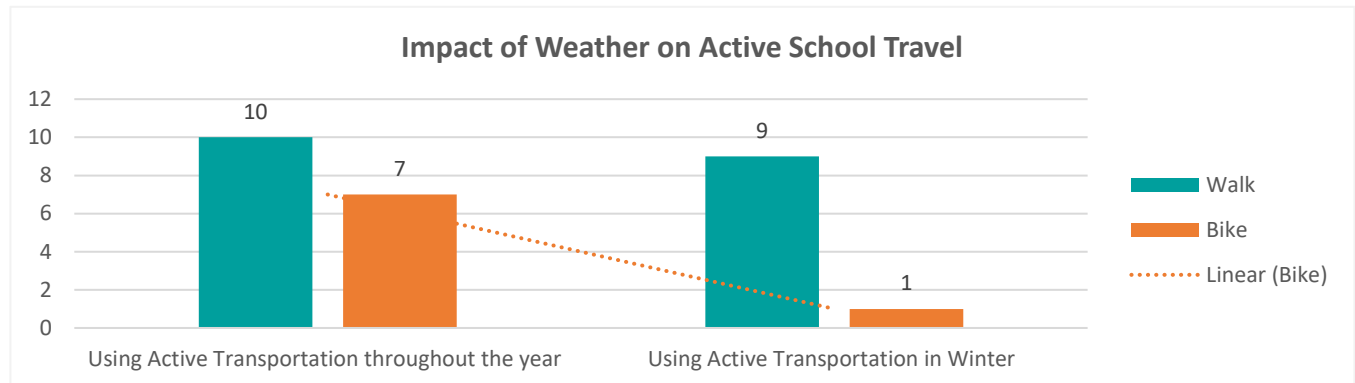
Mode share of students who live within 1/4 mile up to 1/2 mile of school



## Barriers To Active School Travel:

### Weather:

The following chart compares the status of walking and biking throughout the year with winter months.

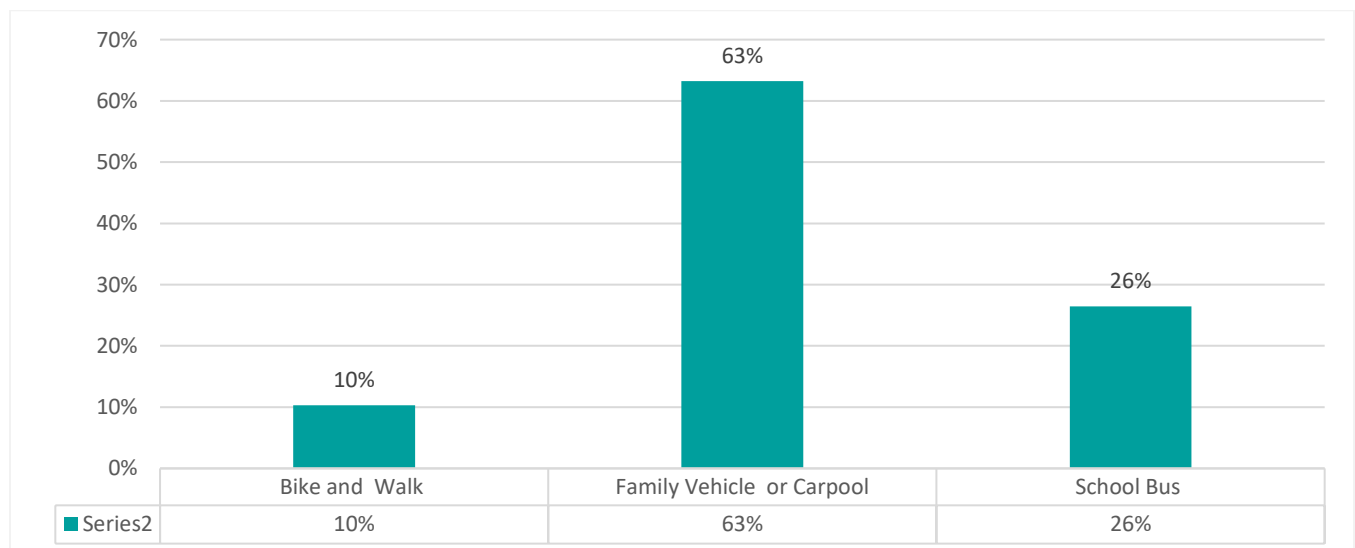


Observed pattern: During the colder months, the number of students choosing active transportation decreases. To overcome this perceived barrier to walking/biking, program can focus on promoting/celebrating enjoyability and opportunities for exercise by walking and cycling during winter (events like winter walk day) to encourage caregivers and students to choose (or continue to choose) active modes of travel.

Also, weather is a greater perceived barrier for cycling to school than for walking as no one is biking in colder months. This could mean that safety concerns and skill training related to biking should be addressed while walking is being promoted or celebrated.

### Crossing A Major Road:

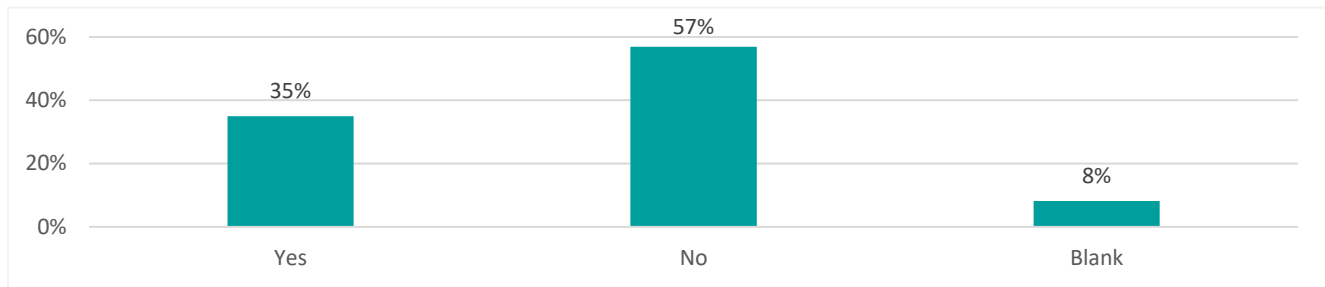
Amongst students who have to cross a major road to get to school, 63% of students are being driven to school (family vehicle, carpool, daycare van or drive their own vehicle). This shows that crossing major roads is a barrier or perceived safety issue for students to exercise active travel modes to school.



## Awareness:

### Awareness of the Safe Routes to School maps:

When asked about the Safe Routes to School Maps, more than 57% of participants had no or limited knowledge of the Safe Routes to School maps. This could be a leading factor for the future success of this program and upcoming campaigns.



## Interest Among Students:

Participants were asked “Has your student asked you for permission to walk or bike to/from school in the last calendar year?” during the parent/caregiver survey. Of the 123 responses received on the survey, 48 reported an interest from their students in walking and biking to/from this school which is around 39%. From this group, only 14 families (~29%) reported walking and biking for their school travel.

Participants shared concerns around distance from school (too far to walk or bike, drivers speeding on major roads and personal safety or criminal activity as barriers to walking and biking to school for these students.

This shows that aside from a need in encouraging students to walk/bike to school, future programs and campaigns need to focus on caregivers too to help them overcome their concerns and encourage their kids to walk and bike to school.

Interest amongst students		
Participants reporting an interest in walking and biking for their students	48	39% of the total participants
Students Walking and Biking from this group	14	29% of the interested group

## School Name: Discovery Elementary School

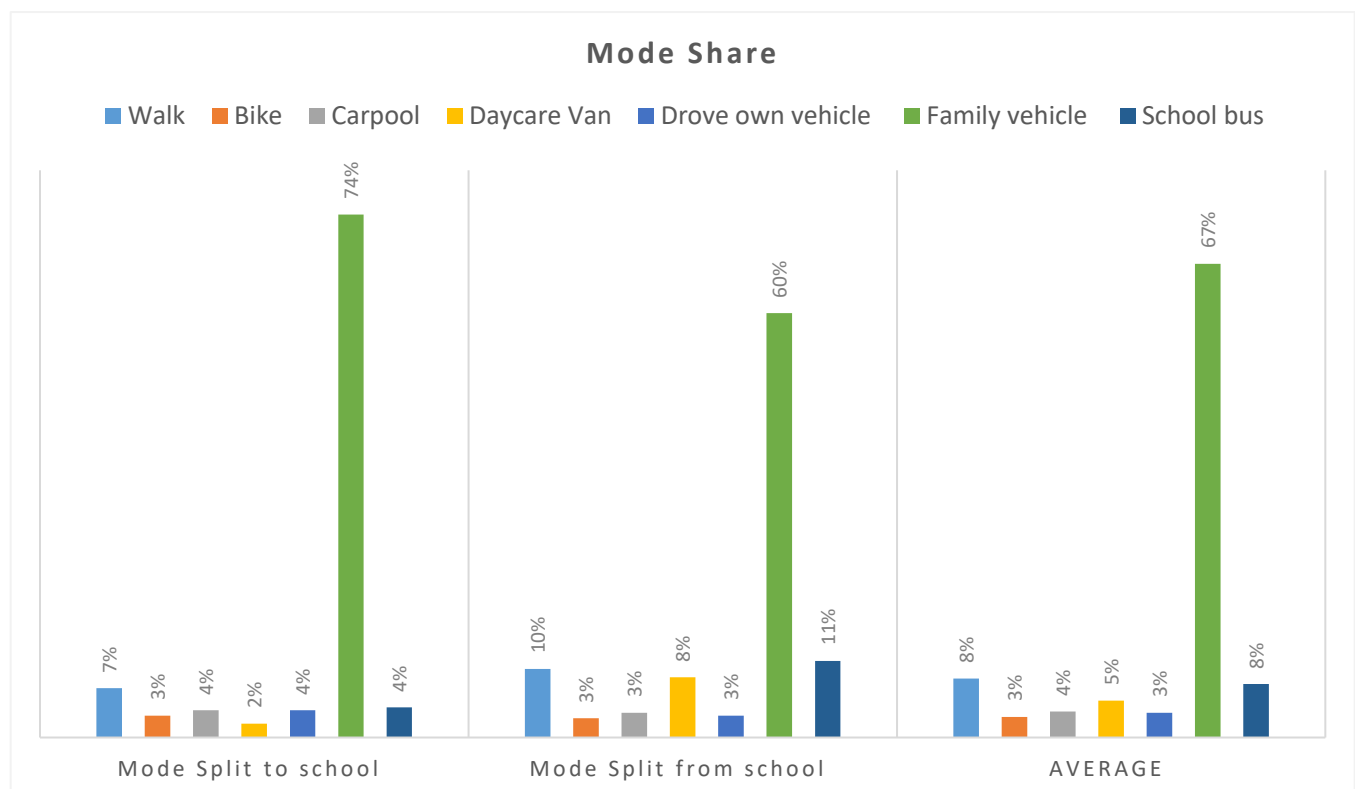
Data gathered through the Parent/caregiver survey was analyzed by the consultant team to better understand travel habits, travel mode split, influencing factors, and perceptions of barriers to active school travel.

This data does not account for families who didn't participate in the survey. The response rate for the survey was 259/503 students at Discovery Elementary School.

### Mode Share and Distance

Based on the survey results, the most popular mode of transport at Discovery Elementary School is family vehicles for 67% of students (average of the mode split to/from school). Only 3% of participants reported biking and 8% reported walking for their school travel.

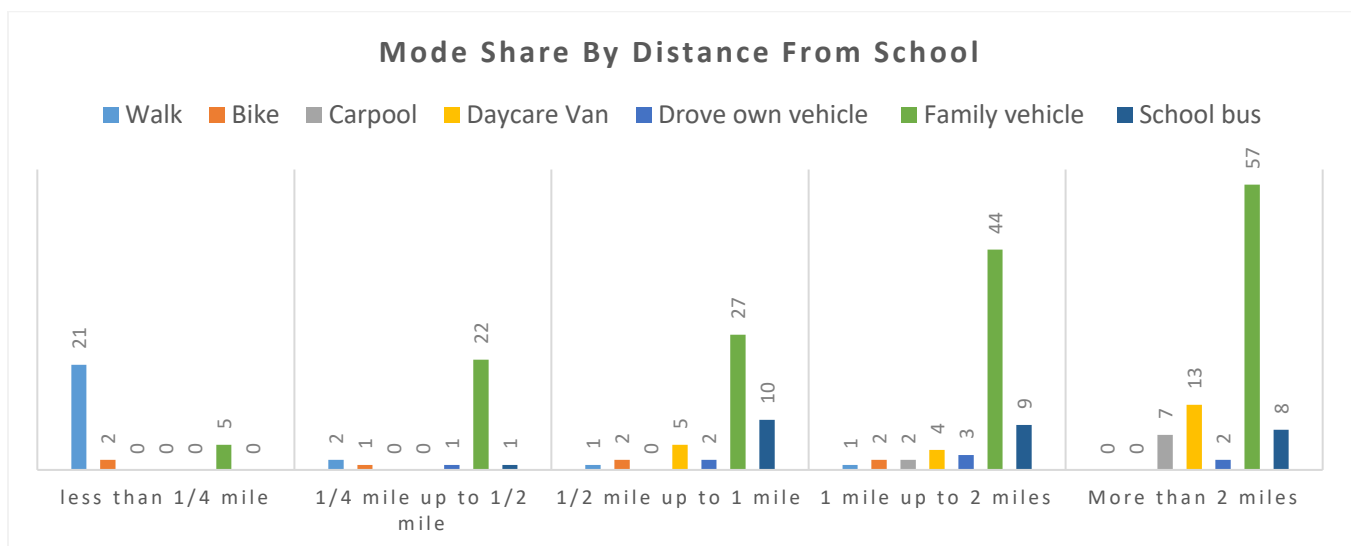
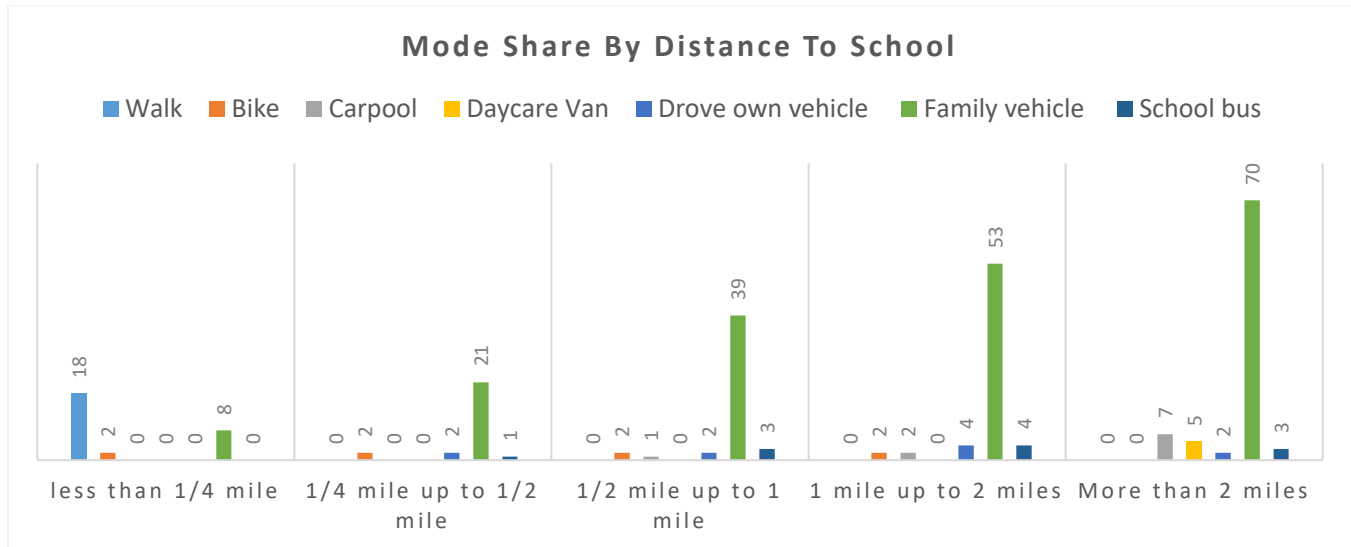
	Mode Split to school	Mode Split from school	AVERAGE
Walk	7%	10%	8%
Bike	3%	3%	3%
Carpool	4%	3%	4%
Daycare Van	2%	8%	5%
Drove own vehicle	4%	3%	3%
Family vehicle	74%	60%	67%
School bus	4%	11%	8%





To examine distance as a driving factor for travel mode, we looked at the mode share within 5 distance categories:

- Less than 1/4 mile
- 1/4 mile up to 1/2 mile
- 1/2 mile up to 1 mile
- 1 mile up to 2 miles
- More than 2 miles



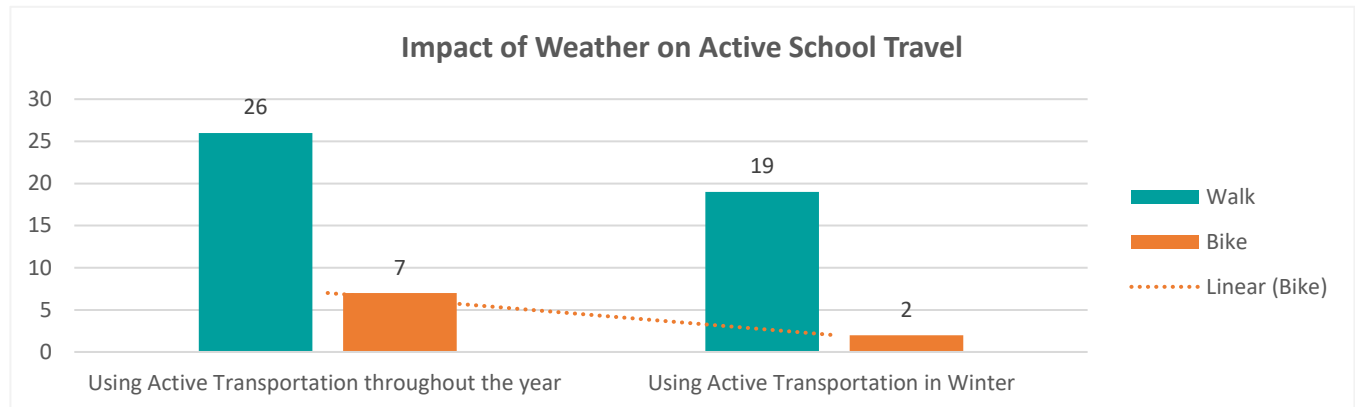
Observed pattern: As the distance from school increases, the number of students walking and biking to school decreases, and number of cars showing up at the school site during drop-off and pick-up grows, so it is worthy to focus on changing the perception of what distances are “too far” to walk/bike to school.

Considering that half a mile is a comfortable distance for elementary students to walk/bike to school, it is expected that all students living within this distance choose active transportation for their school travel. Therefore, there is an opportunity here to encourage students who live within this comfortable distance to choose active school travel.

## Barriers To Active School Travel:

### Weather:

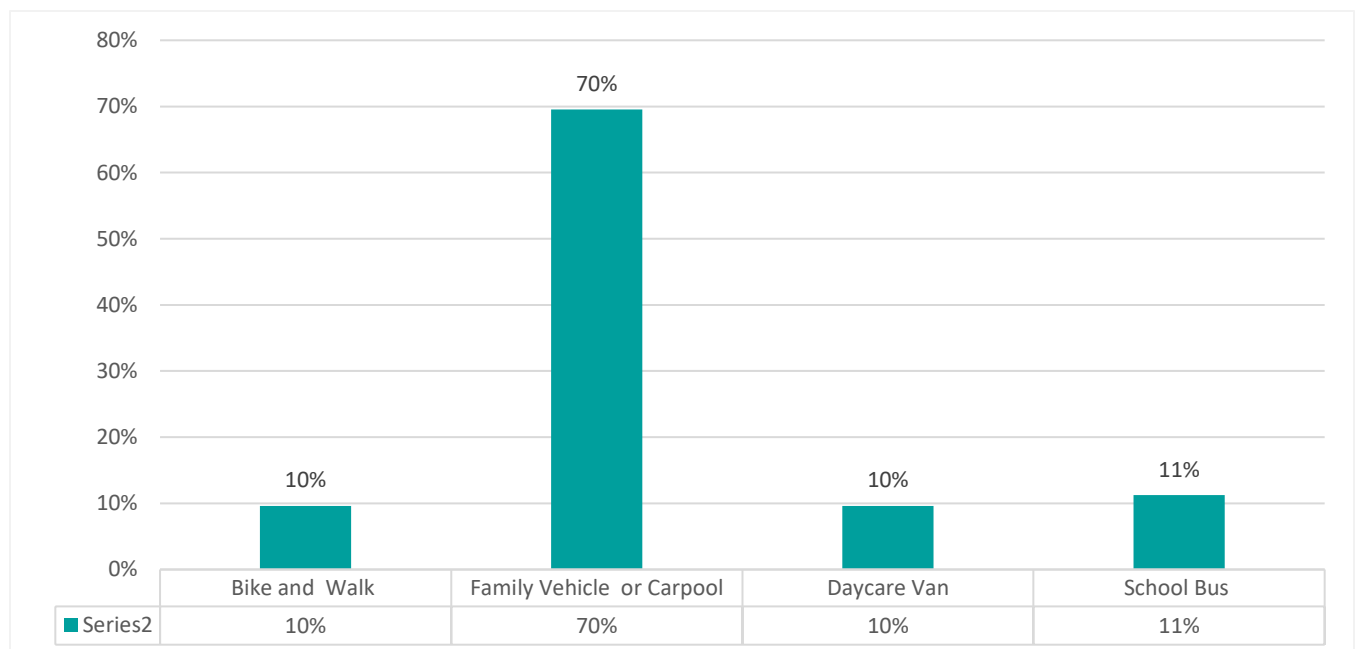
The following chart compares the status of walking and biking throughout the year with winter months.



Observed pattern: During the colder months, the number of students choosing active transportation decreases. To overcome this perceived barrier to walking/biking, program can focus on promoting/celebrating enjoyability and opportunities for exercise by walking and cycling during winter (events like winter walk day) to encourage caregivers and students to choose (or continue to choose) active modes of travel.

### Crossing A Major Road:

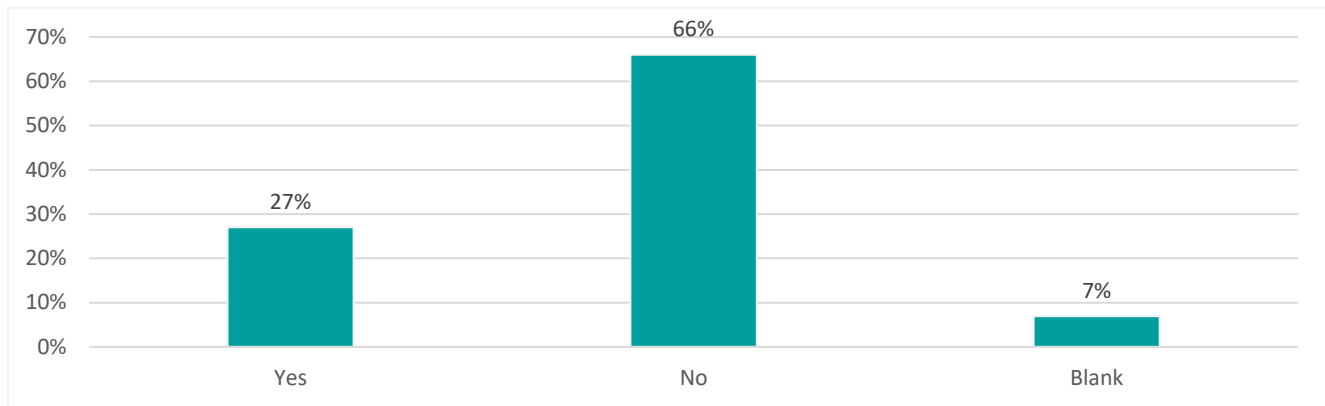
Amongst students who have to cross a major road to get to school, 80% of students are being driven to school (family vehicle or carpool + daycare van). This shows that crossing major roads is a barrier or perceived safety issue for students to exercise active travel modes to school.



## Awareness:

### Awareness of the Safe Routes to School map:

When asked about the Safe Routes to School Maps, more than 66% of participants had no or limited knowledge of the Safe Routes to School maps. This could be a leading factor for the future success of this program and upcoming campaigns.



## Interest Among Students:

Participants were asked “Has your student asked you for permission to walk or bike to/from school in the last calendar year?” during the parent/caregiver survey. Of the 259 responses received on the survey, 98 reported an interest from their students in walking and biking to/from this school which is around 38%. From this group, only 25 families (~26%) reported walking and biking for their school travel.

Participants shared concerns around unsafe intersections and crossing and personal safety as barriers to walking and biking to school for these students.

This shows that aside from a need in encouraging students to walk/bike to school, future programs and campaigns need to focus on caregivers too to help them overcome their concerns and encourage their kids to walk and bike to school.

Interest amongst students		
Participants reporting an interest in walking and biking for their students	98	38% of the total participants
Students Walking and Biking from this group	25	26% of the interested group

## School Name: Ben Franklin Elementary School

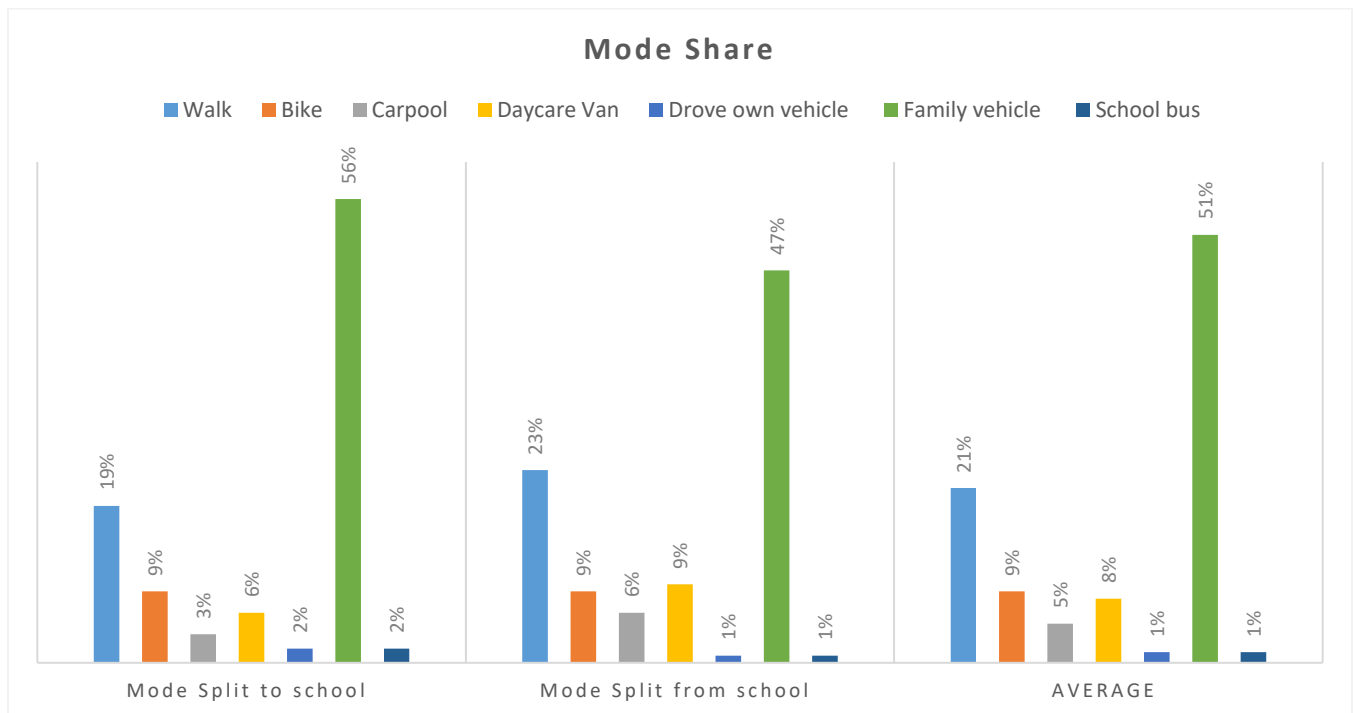
Data gathered through the Parent/caregiver survey was analyzed by the consultant team to better understand travel habits, travel mode split, influencing factors, and perceptions of barriers to active school travel.

This data does not account for families who didn't participate in the survey. The response rate for the survey was 117/309 students at Ben Franklin Elementary School.

### Mode Share and Distance

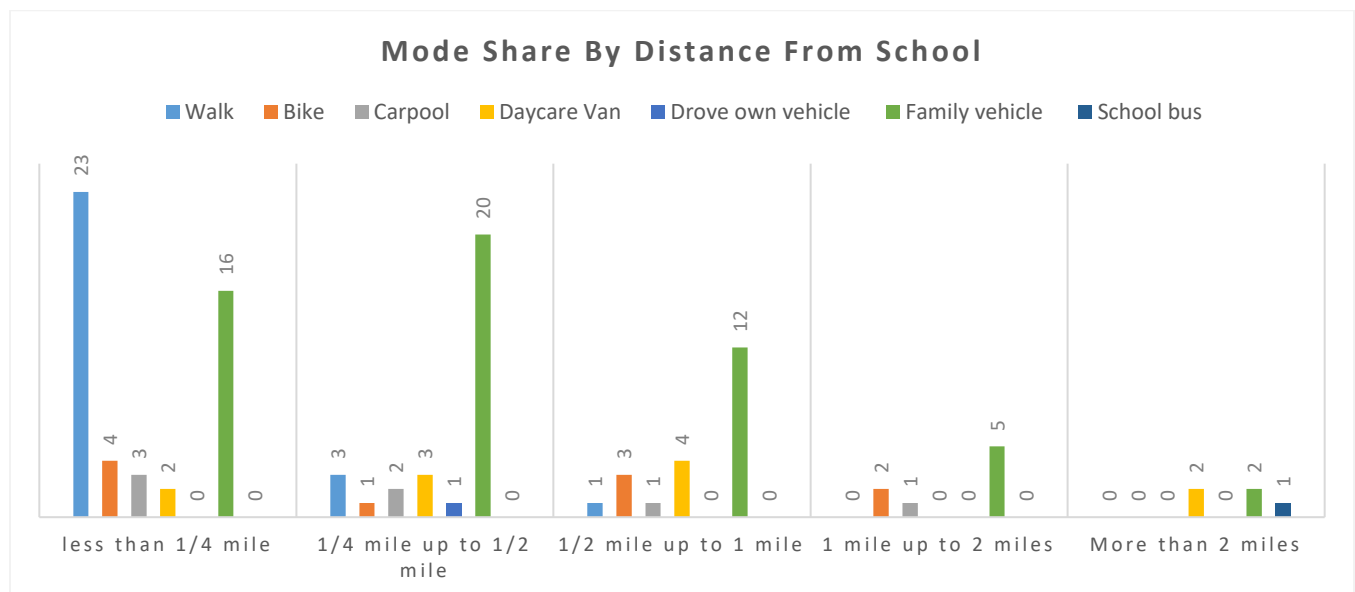
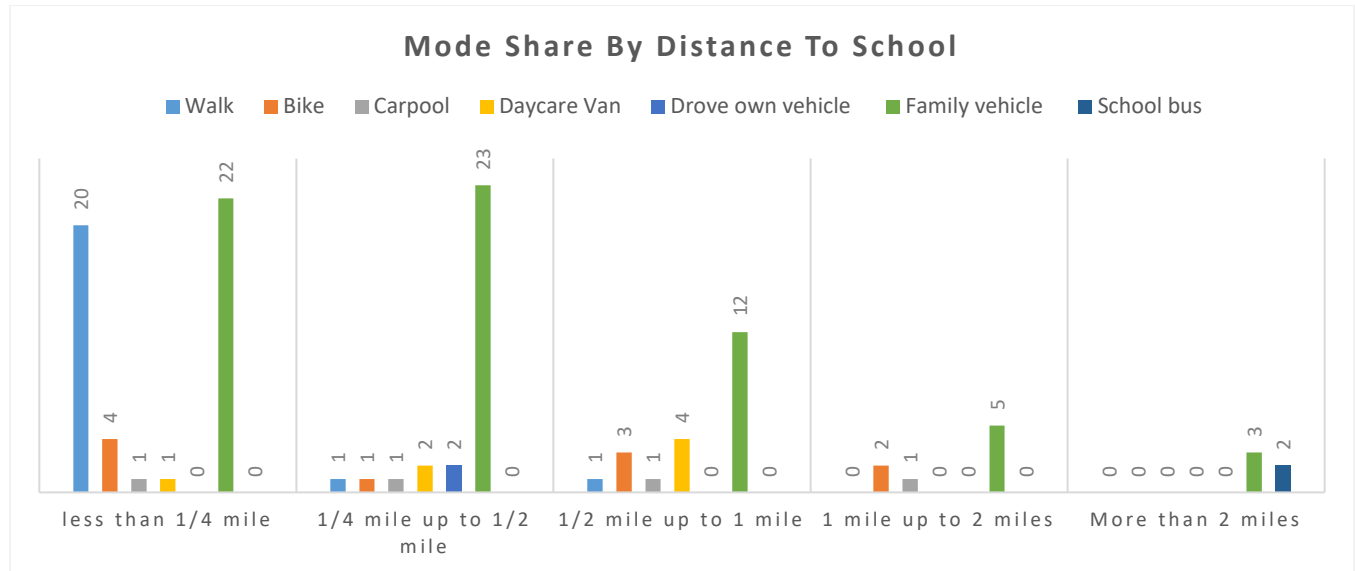
Based on the survey results, the most popular mode of transport at Ben Franklin Elementary School is family vehicles at 51% of students (average of the mode split to/from school). Only 9% of participants reported biking and 21% reported walking for their school travel.

	Mode Split to school	Mode Split from school	AVERAGE
Walk	19%	23%	21%
Bike	9%	9%	9%
Carpool	3%	6%	5%
Daycare Van	6%	9%	8%
Drove own vehicle	2%	1%	1%
Family vehicle	56%	47%	51%
School bus	2%	1%	1%



To examine distance as a driving factor for travel mode, we looked at the mode share within 5 distance categories:

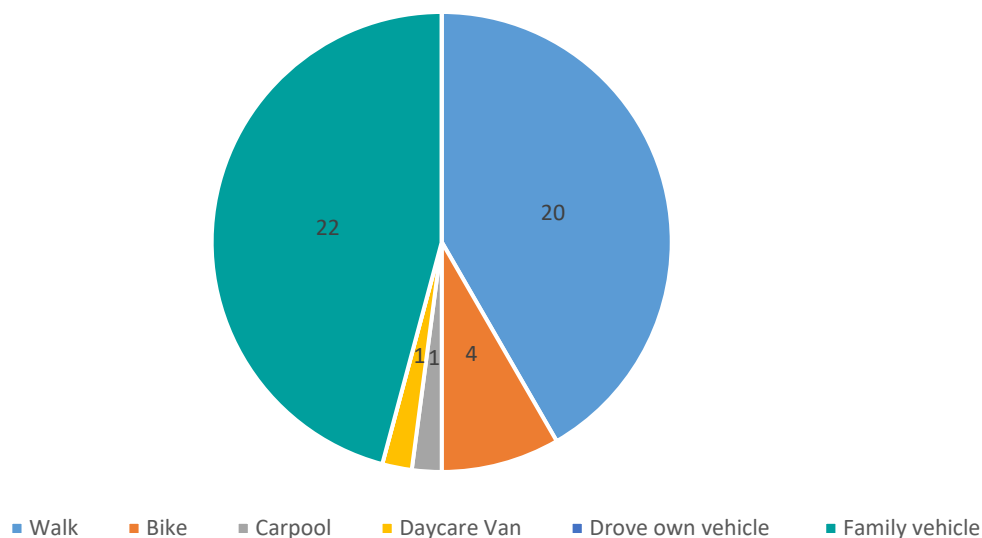
- Less than 1/4 mile
- 1/4 mile up to 1/2 mile
- 1/2 mile up to 1 mile
- 1 mile up to 2 miles
- More than 2 miles



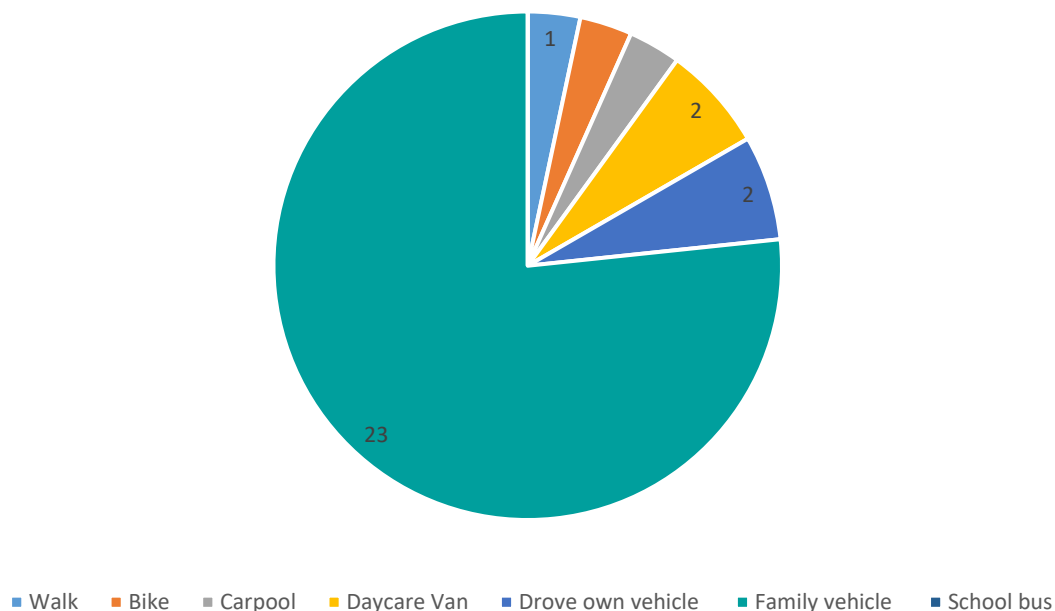
Observed pattern: As the distance from school increases, the number of students walking and biking to school decreases, so it is worthy focusing on changing the perception of what distances are “too far” to walk/bike to school.

Considering that half a mile is a comfortable distance for elementary students to walk/bike to school, it is expected that all students living within this distance choose active transportation for their school travel. Therefore, there is an opportunity here to encourage students who live within this comfortable distance to choose active school travel. Here is the current mode split for students living within half a mile of school.

Mode share of students living within 1/4 mile of school



Mode share of students who live within 1/4 mile up to 1/2 mile of school

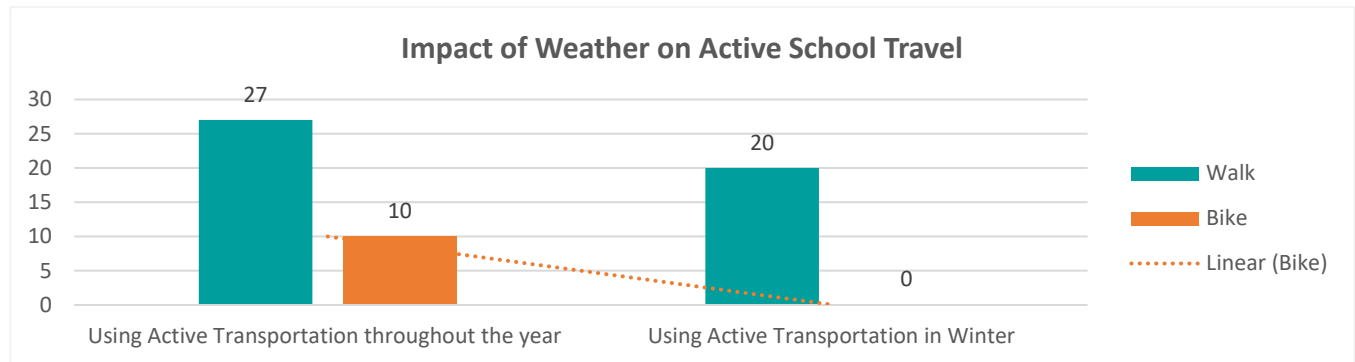




## Barriers To Active School Travel:

### Weather:

The following chart compares the status of walking and biking throughout the year with winter months.

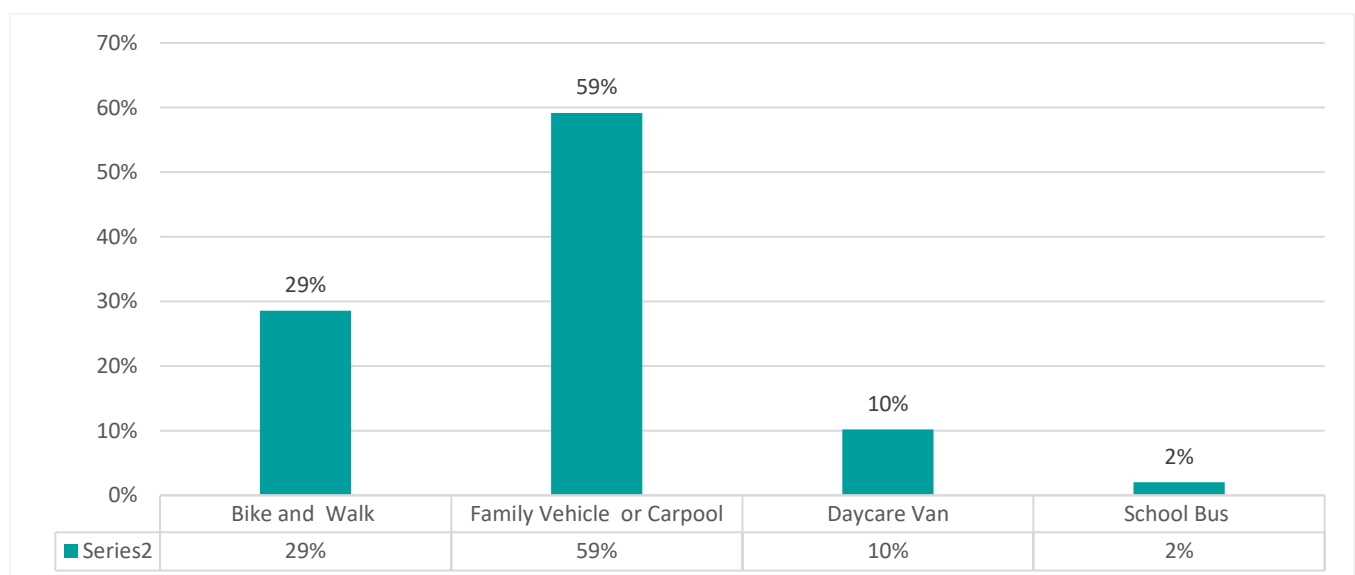


Observed pattern: During the colder months, the number of students choosing active transportation decreases. To overcome this perceived barrier to walking/biking, program can focus on promoting/celebrating enjoyability and opportunities for exercise by walking and cycling during winter (events like winter walk day) to encourage caregivers and students to choose (or continue to choose) active modes of travel.

Also, weather is a greater perceived barrier for cycling to school than for walking as no one is biking in colder months. This could mean that safety concerns and skill training related to biking should be addressed while walking is being promoted or celebrated.

### Crossing A Major Road:

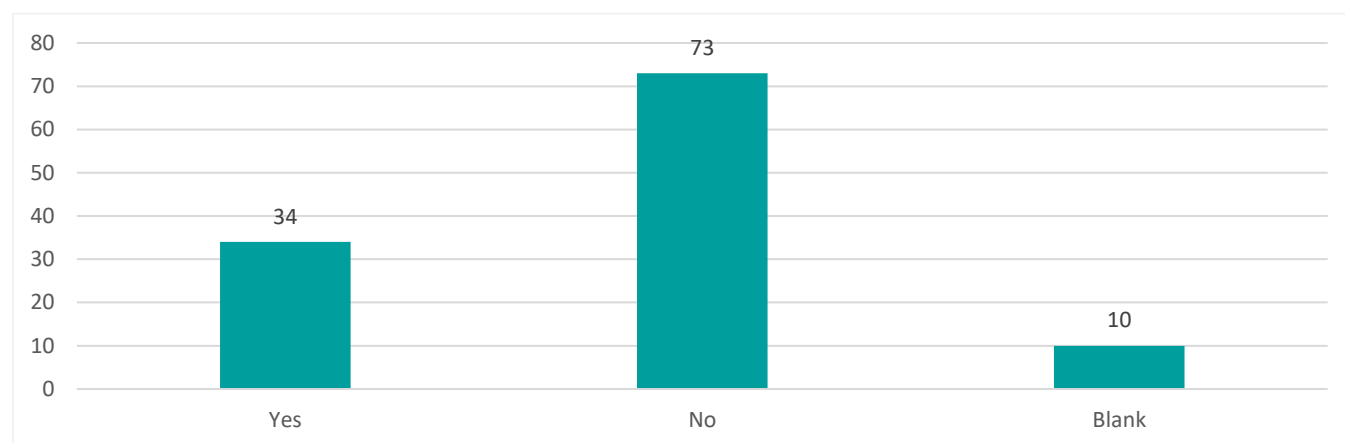
Amongst students who have to cross a major road to get to school, 69% of students are being driven to school (family vehicle or Carpool + daycare van). This shows that crossing major roads is a barrier or perceived safety issue for students to exercise active travel modes to school.



## Awareness:

### Awareness of the Safe Routes to School maps

When asked about the Safe Routes to School Maps, more than 73% of participants had no or limited knowledge of the Safe Routes to School maps. This could be a leading factor for the future success of this program and upcoming campaigns.



## Interest Among Students:

Participants were asked “Has your student asked you for permission to walk or bike to/from school in the last calendar year?” during the parent/caregiver survey. Of the 117 responses received on the survey, 73 reported an interest from their students in walking and biking to/from this school which is around 62%. From this group, only 30 families (~41%) reported walking and biking for their school travel.

Participants shared concerns around Distance from school (too far to walk or bike) and personal safety or criminal activity as barriers to walking and biking to school for these students.

This shows that aside from a need in encouraging students to walk/bike to school, future programs and campaigns need to focus on caregivers too to help them overcome their concerns and encourage their kids to walk and bike to school.

Interest amongst students		
Participants reporting an interest in walking and biking for their students	73	62% of the total participants
Students Walking and Biking from this group	30	41% of the interested group