

# MOUNTAIN VIEW SAFE ROUTES TO SCHOOL PROGRAM 2023-2024 Final Report



City of  
Mountain View

**N** NELSON  
NYGAARD



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# MEMORANDUM

**To:** City of Mountain View Safe Routes to School Program

**From:** Nelson\Nygaard

**Date:** December 2, 2024

**Subject:** FINAL REPORT - Safe Routes to School 2023-2024

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## 1. INTRODUCTION

### Background

In 2011, Mountain View launched a Safe Routes to School (SRTS) program to promote walking and bicycling to school for students and families in the city. The program is currently supported by a grant from the 2016 VTA Measure B Education/Encouragement Program. The program vision is: ***Students in Mountain View arrive at school safely, happily and ready to learn.*** Mountain View's program, like programs across the country, includes the "Six Es."

Figure 1: The Six E's of Safe Routes to School Program



#### 1. Education

SRTS programs teach students and families safe walking and biking skills and about the benefits of walking and biking.



#### 4. Enforcement

SRTS programs include methods that promote safer behaviors by all roadway users, such as providing for crossing guards and safety patrols.



#### 2. Encouragement

SRTS programs encourage students and families to walk and bike to school through activities and events.



#### 5. Evaluation

SRTS programs assess school travel data and program activities to track progress and improve the program.



#### 3. Engineering

SRTS programs are supplemented by improvements to the built environment that make active transportation routes to school safe, convenient, and comfortable.



#### 6. Equity

SRTS programs prioritize schools and communities with highest needs and those that have been historically underserved.

## Goals

Safe Routes to School (SRTS) efforts aim to enhance student safety, increase participation in active transportation, and foster a sense of community. The program focuses on achieving the following goals:

- **Increase student safety** and eliminate traffic-related fatalities and injuries involving school children
- **Increase participation** in active transportation and healthy lifestyles by making walking and biking to school a safer, more appealing transportation alternative
- **Enable and encourage** students and parents to walk and bike to school, resulting in reduced motor vehicle volumes and pollution in the vicinity of schools.
- **Build community** and deliver services that enhance belonging, support, and involvement, particularly among at-risk students.
- **Deliver services** in a manner that is equitable, effective, efficient, transparent, and allows for continuous improvement.

To support these goals, program activities were developed and delivered, including safety training, community events, and educational initiatives which are listed in **Error! Reference source not found..**

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**Table 1. Safe Routes to School Activities Related to Program Goals, 2023-2024**

Approach	Program Activities	Increase Student Safety	Increase Participation	Enable and Encourage	Build Community	Deliver Services
Education and Encouragement	<b>Bike Rodeos:</b> <ul style="list-style-type: none"> <li>813 K-8 students received training in bike rodeos and safe walking.</li> <li>78% of the elementary and middle schools participated in bike rodeos.</li> </ul>	✓	✓	✓		✓
Education and Encouragement	<b>Safety Assemblies:</b> <ul style="list-style-type: none"> <li>3,196 K-12 students participated in safety assemblies, including all Mountain View elementary and middle schools.</li> </ul>	✓	✓	✓		✓
Education and Encouragement	<b>Hip Hop Assemblies:</b> <ul style="list-style-type: none"> <li>1,100 Middle School students participated in four Music Notes Assemblies</li> </ul>	✓	✓	✓		✓
Encouragement	<b>Monster Bash:</b> <ul style="list-style-type: none"> <li>200 families participated in Monster Bash safety activities, including: 40 participants in the family bike ride, 80 participants in the bike rodeo, and 30 bike repairs completed.</li> </ul>	✓	✓	✓	✓	✓
Encouragement	<b>Bike to Boba:</b> <ul style="list-style-type: none"> <li>40 teenagers participated in the Bike to Boba rides organized with the Mountain View Teen Center</li> </ul>	✓	✓	✓	✓	✓
Encouragement	<b>Community Events:</b> <ul style="list-style-type: none"> <li><b>Shoreline Celebration:</b> Hosted pedestrian safety activities, attended by 50 participants.</li> <li><b>Christmas Tree Lighting:</b> Included helmet giveaway, pedestrian and bike safety information, and was attended by 20 participants.</li> <li><b>Earth Day activity:</b> Engaged 50+ student participants included pedestrian and bike safety information, an interactive safety quiz, and project details.</li> </ul>	✓		✓	✓	✓
Encouragement	<b>Back to School:</b> <ul style="list-style-type: none"> <li>Staff attended Back to School events to encourage parents to walk and bike to school, increasing the program's visibility.</li> </ul>			✓	✓	

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Approach	Program Activities	Increase Student Safety	Increase Participation	Enable and Encourage	Build Community	Deliver Services
Education	<b>Lesson Plan:</b> <ul style="list-style-type: none"> <li>Locally specific lesson plans were drafted and currently under review for grades 4, 7 and 11.</li> </ul>	✓				✓
Encouragement and Equity	<b>Key materials</b> <ul style="list-style-type: none"> <li>Resources were available in English, Spanish, Chinese and Russian.</li> </ul>	✓			✓	✓
Evaluation	<b>Parent/Caregiver Survey:</b> <ul style="list-style-type: none"> <li>153 community members completed Parent/Caregiver Surveys, 67% of respondents allowing their students to commute to school using active transportation.</li> </ul>					✓
Evaluation	<b>Student Travel Tally Survey:</b> <ul style="list-style-type: none"> <li>4,356 students participated in travel tallies, an increase compared to 2022</li> </ul>					✓
Encouragement	<b>Coordination with school districts:</b> <ul style="list-style-type: none"> <li>City staff worked closely with the school district to ensure increased participation in the program from all elementary and middle schools.</li> </ul>	✓	✓	✓	✓	✓
Encouragement	<b>SRTS Coordinating Committee:</b> <ul style="list-style-type: none"> <li>Four coordinating committee meetings were held to encourage parent's participation in Safe Routes to School.</li> <li>Resources, such as helmets and bike lights, were provided to parent volunteers as part of the walk and roll efforts.</li> </ul>	✓	✓	✓	✓	

Associated **Performance measures** were used to track progress, focusing on student participation, parent engagement, and safety outcomes.

1. Number of students participating in program activities, by school
2. Number of program activities by school
3. Rates of parents/ caregivers who allow their students to commute to and from school, by school actively
4. Rates of participation in student travel tally

These metrics help assess the effectiveness of the program and guide continuous improvement efforts. The results for these measures are detailed in section 5: "Data Collection and Program Evaluation".

## Program Partners

The Mountain View SRTS program is led by the city's Public Works Transportation Team with a half FTE Transportation Planner position dedicated to ensuring the program's success and building strong relationships with Police and the school community. Other Public Works staff provide technical support and involvement in the program.

The Mountain View SRTS Program team hosted SRTS Coordinating Committee meetings quarterly throughout the school year. Participants included school and school district staff, parents and caregivers, Mountain View City staff, and consulting staff. Topics of discussion ranged from safety education lesson plan needs to infrastructure concerns.

The SRTS program depends on the engagement of the schools and school districts in Mountain View. All districts were engaged early and were part of the development and implementation of SRTS activities. The districts took responsibility for scheduling safety training while the schools conducted hand tallies and distributed parent surveys.

The Mountain View Police Department deploys School Resource Officers (SROs) who work with schools, students, and parents/caregivers using community-oriented policing concepts. SROs participate in program activities and model safe roadway behaviors. The Police Department also manages the City's crossing guard program.

The City provides Crossing Guards through a contract with All City Management Services (ACMS). Between 2019 and spring 2023, the program expanded from nine to 15 crossing guards.

Parent and student volunteers participate in the SRTS Coordinating Committee and volunteered their time and skill to host encouragement and engagement events at Graham Middle, Landels Elementary, Mistral Elementary and Mountain View High schools. Parents have also provided valuable input via family surveys. A group of student volunteers from a local

Scouts troop also provided “bear prints” to raise awareness of suggested routes to Landels Elementary.

Many cities in Santa Clara County have their own successful SRTS programs. Los Altos is one such city, which also has schools with students from Mountain View and vice versa.

## **Program Enhancements in 2023-2024**

Based on outcomes of 2019-2023 program, the following changes were successfully incorporated into the SRTS program this year to better meet program goals.

- Continue to partner with Mountain View schools to help schools anticipate and build program offerings into the school year without disrupting instructional time.
- Send invitations for school participation in early summer to increase potential engagement with parents, students and administrators at Back-to-School events.
- Offer safety training assemblies, bike rodeos and other services to private schools.
- Conduct a peer review, informed by the SRTS Coordinating Committee, to develop locally appropriate and effective Safe Routes to School lesson plans.
- In response to input from schools, the SRTS program and its scheduling was made more flexible and expanded, resulting in successful bike rodeos and community events that effectively promoted walking and biking.
- Reduce the communications burden on school communities by reducing the frequency of parent surveys (from annual to biennial) and student commute tallies (from biannual to annual).

## 2. IN-SCHOOL ACTIVITIES

Mountain View SRTS Program staff conducted various in-school activities to increase traffic safety awareness among students in grades K-8 and help them practice their safety skills. Activities included bike rodeos and safety training covering rules of the road, hazard avoidance, helmet fitting and bike checks. Additional activities including hip-hop assemblies were also offered to middle schools. Table 2 outlines in-school activities during the 2023-24 school year.

**Table 2. Timeline of all the events**

Date	Program Activity	Location	Quantity	Number of Participants
8/14/23	Rodeo	Springer ES	1	211
9/14/23	Assemblies	Bubb ES	3	150
9/15/23	Assemblies	Imai ES	5	397
9/20/23	Assemblies	Landels ES	4	361
9/21/23	Assemblies	Vargas ES	4	225
10/28/23	Rodeo	Monster Bash	1	118
11/8/23	Assemblies	Stevenson ES	3	439
1/11/24	Assemblies	Theuerkauf ES	5	314
1/12/24	Assemblies	Monte Loma ES	3	290
1/26/24	Assemblies	Mistral ES	3	380
2/16/24	Assemblies	Graham MS	4	600
3/5/2024	Hip Hop Assemblies	Crittenden MS	2	450
3/5/2024	Hip Hop Assemblies	Graham MS	2	650
4/1/24	Rodeo	Landels ES	1 (5 classes)	112
4/2/24	Rodeo	Theuerkauf ES	1 (3 classes)	93
4/3/24	Rodeo	Bubb ES	1 (5 classes)	103
5/3/24	Rodeo	Imai ES	1 (3 classes)	93
5/7/24	Rodeo	Vargas ES	1 (5 classes)	121
5/17/24	Rodeo	Monte Loma ES	1 (4 classes)	80
5/23/24	Assemblies	Crittenden MS	1	40
Total			66	5,227

These in-school programs and activities were also offered to all private schools in the city of Mountain View during the 2023-2024 school year.

## Bike Rodeos

A school bike rodeo is an interactive skills event where students learn how to safely ride a bike, including helmet fitting, bike checks, rules of the road, avoiding hazards, and hands on training via the “Safe Moves City” obstacle course.

Safe Moves City allows students to experience traffic situations as pedestrians and bicyclists on a child sized course with signs, pavement markings, and traffic hazards that provide age-appropriate challenges. Safe Moves City includes intersection and corridor-based infrastructure such as sidewalks, bike lanes, pavement markings, and traffic control devices as well as a variety of land uses and street users. In addition, an obstacle course and ramp installation challenges students to practice bike handling skills such as braking, steering, and balancing.

Students with signed permission forms but no bike, were able to borrow a bike and helmet to participate in this course. Students without a signed permission slip, participated in the course on foot.

Figure 2: Bike Rodeos Lessons

### Safe Move Lessons Includes:

- Appropriate places to ride and walk
- Explanation of traffic signs and signals
- Navigation of intersections, left turns, and right turns
- Rights and responsibilities of bicyclists and pedestrians
- Helmet use (proper fit and adjustment)
- Recognition and avoidance of common bicycle and pedestrian collisions
- Explanation and demonstration of the role of crossing guards
- Explanation/simulation of traffic environment (infrastructure)
- Understanding of driver, bicyclist, and pedestrian behaviors
- School transportation/traffic policies (pick-up and drop-off procedures)
- Explanation of the school route/neighborhood maps and bike racks
- Importance of bicycling and walking for physical fitness and sustainable communities
- Rail/train safety (tracks)
- Identification and avoidance of hot spots (crime, bullies, hazards, corners and crosswalks, truck traffic)
- State, county, and city laws/ordinances
- Personal/property safety

Table 3. Bike Rodeo Participation Summary

Date	Location	Age Group	Number of Participants	Notes/Takeaways/Learning
8/14/23	Springer ES	K- 5 <sup>th</sup> Grade	211	This event was a back-to-school event for families and children. It was an opportunity to reach out to parents about active transportation choices for their children and provide parents with insight to the traffic awareness level of their children.
4/1/24	Landels ES	3 <sup>rd</sup> - 5 <sup>th</sup> Grade	112	65% of students had permission forms to ride bicycles. 38% had their own bikes and helmets.

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4/2/24	Theuerkauf ES	3 <sup>rd</sup> - 4 <sup>th</sup> Grade	93	73% of students had permission forms and 69% had their own bicycles and helmets.
4/3/24	Bubb ES	3 <sup>rd</sup> - 4 <sup>th</sup> Grade	103	100% of students had permission forms and 74% had their own bicycles and helmets.
5/3/24	Imai ES	4 <sup>th</sup> Grade	93	77% of students had permission forms to ride bicycles. 64 % had their own bikes and helmets. 9% of those with permission forms that did not bring their own bikes did not know how ride a bicycle.
5/7/24	Vargas ES	3 <sup>rd</sup> - 4 <sup>th</sup> Grade	121	76% of students had permission forms to ride bicycles. 72 % had their own bikes and helmets. 15% of those with permission forms that did not bring their own bikes did not know how ride a bicycle..
5/17/24	Monte Loma ES	3 <sup>rd</sup> - 4 <sup>th</sup> Grade	80	83% of students had permission forms to ride bicycles. 74 % had their own bikes and helmets. 11% of those with permission forms that did not bring their own bikes did not know how ride a bicycle.
Total Participating Students			813	-

## Safety Training

Safety training assemblies involve K-8 students in age-appropriate walking and biking safety instruction that combines creativity, improvisation, student participation, and humor to help students learn about bicycling and walking as a fun, safe and effective way to get to school. Ten Safety Trainings were conducted during the 2023-2024 school year. Elementary school teachers expressed interest in handouts such as coloring books and simple grade appropriate lesson plans.

**Table 4. 2023-2024 School Safety Training Participation**

Date	Location	Age Group	Number of Participants
9/14/23	Bubb ES	K- 5 <sup>th</sup> Grade	150
9/15/23	Imai ES	K- 5 <sup>th</sup> Grade	397
9/20/23	Landels ES	K - 5 <sup>th</sup> Grade	361
9/21/23	Vargas ES	K - 5 <sup>th</sup> Grade	225
11/8/23	Stevenson ES	K - 5 <sup>th</sup> Grade	439
1/11/24	Theuerkauf ES	K - 5 <sup>th</sup> Grade	314
1/12/24	Monte Loma ES	K - 5 <sup>th</sup> Grade	290
1/26/24	Mistral ES	K - 5 <sup>th</sup> Grade	380
2/16/24	Graham MS	6 <sup>th</sup> - 8 <sup>th</sup> Grade	600
5/23/24	Crittenden	6 <sup>th</sup> - 8 <sup>th</sup> Grade	40

Total:	3,196
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Safety training assemblies for Grades K–3 covered the following topics:

- Appropriate places to ride and walk
- Walking with a grown-up
- Explanation of traffic signs and signals
- Rights and responsibilities of bicyclists and pedestrians
- Helmet use
- Explanation of the role of the crossing guard
- Understanding of driver, pedestrian and bicyclist behaviors

Traffic Jeopardy assemblies for grades 4-8 covered safety and environmental consequences of traffic congestion and pollution, engaging the students at each grade level in active learning by challenging their critical thinking skills. The game included the following:

- Bicycle and pedestrian safety
- California Vehicle Code laws and regulations
- Skills necessary to make smart choices in traffic
- Use of bike racks, bike lanes, bike paths, bike trails
- Explanation of traffic environment (infrastructure)
- Recognition and avoidance of common traffic collisions
- Understanding of driver, pedestrian, and bicyclist behaviors
- Identification and avoidance of hot spots (crime, bullies, congested intersections, constructions areas)
- School transportation/traffic policies
- Explanation of school routes maps
- Effects of walking and bicycling on a cleaner environment
- Importance of bicycling and walking for physical fitness and health

## Hip Hop Assemblies

Crittenden and Graham Middle School students participated in two hip-hop assemblies offered by Music Notes. Music Notes is a group of middle and high school teachers who use hip-hop to create high-energy songs, music videos, and concert experiences that promote various aspects of traffic safety including pedestrian and bike safety.

The students described the hip-hop assemblies as a *“very fun, upbeat and enjoyable learning experience”* that helped them to learn about staying safe while walking or biking to school. The

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students also mentioned that writing rap songs about safety made the experience of learning *"energetic," "cool,"* and *"creative,"* which otherwise could have been boring. A surveyed teacher also shared that *"one of my students pointed out that his mom didn't cross the street safely because she didn't look both ways before she crossed. He is going to teach her the correct way!"* Thus, the students felt the concert's impact which ignited their interest in educating their families and those around them.

### 3. COMMUNITY BASED EVENTS

In the past five years, SRTS community-based encouragement events have focused on complementing existing Community Services Department (CSD) programming to “meeting people where they are” in order to effectively and progressively boost community-wide awareness of traffic safety issues and skills.

**Table 5. 2023-2024 Community Based Safety Training Events**

Date	Location	Age Group	Number of Participants
10/23/23	Monster Bash Bike Circus, Rengstorff Park	All Grades including Preschoolers	82 bike rodeo participants 30 free bike repair recipients ~100 ped crossing participants
4/12, 6/21, 7/19/24	Bike to Boba, The View Teen Center	Teenagers	45

#### Monster Bash

Building on the initial success of integrating the SRTS Bike Circus into Monster Bash in 2022, Mountain View SRTS staff participated in the Monster Bash at Rengstorff Park again on October 28, 2023. In addition, staff and consultants supported a family bike ride to the event from the Mountain View Public Library, as well as providing bike valet parking, and various activities.

The Monster Bash event was attended by 2,500-3,000 people, many of whom interacted with the Bike Circus safety activities including the following:

- More than 80 students participated in the Safe Moves City bike rodeo, which represents a four-fold increase from the previous year;
- More than 100 students participated in the rainbow tunnel and “Cross SAFELY” activity;
- Approximately 35 people received free bike repairs provided by BikeMobile;
- Approximately 30 people used the bike valet for the event; and
- Approximately 200 students participated in traffic safety themed craft activities or engaged with SRTS maps and other transportation materials.

Figure 3. Bike Circus (left) and Free Bike Repair (right) were popular events at the Monster Bash



The dramatic increase in participation rates could be related to more extensive and bilingual advertising of the event using social media and yard signs across the city, as well as the provision of loaner bikes for use at the bike rodeo, and the progressive benefits of hosting the event for two years in a row. Staff received positive feedback on the event from parents and bicyclists who appreciated the safety training as well as the free bike repairs.

Figure 4. Yard Sign for Monster Bash Bike Circus and Family Bike Ride



## Lessons Learned

The Monster Bash event had a few areas that could be improved for future iterations:

- Training staff and volunteers for the event in advance.
- Streamlining contracts, expectations, and logistics between consultants and vendors (particularly including any bike valet vendor).
- Addressing any infrastructure concerns, such as poorly constructed ramps, along routes to the event.

## Bike to Boba

The View Teen Center hosts "Bike to Boba", which is a staff-led bike ride where teens visit a different boba shop each month. This free program is open to students in 6th through 12th grade. Information and a calendar for upcoming events are available on the City of Mountain View website and through The View Teen Center's list of activities. SRTS staff participated in three Bike to Boba rides in 2023-24, with approximately 15 riders joining each bike ride. These rides were held on three Fridays in 2024 including April 12th, June 21, and July 19.

The SRTS Bike to Boba sessions included an introduction to the transportation planning profession, biking basics, and a quiz-format discussion on the rules of the road and key riding skills. Students learned about the benefits of bicycling and participated in an ABC Quick Check (Air, Brakes, Cranks Chain, Cassette), helmet fittings, and signaling techniques while biking and route planning. Key questions related to California driving laws were covered during the rules of the road quiz, with giveaways (such as bike lights) provided to encourage participation and compliance with laws. For more details on the content, please refer to the deck in the appendix.

**Figure 5. Students receive helmet training (left) and participate in the 'Bike to Boba' event (right).**



## Lessons Learned

The Bike to Boba event had a few areas that could be improved for future iterations.

- Increase advertising about the event to enhance program awareness and encourage more teens to participate.
- Increase staffing during the ride to ensure all students follow the rules of the road, with staff proactively modeling safe biking behaviors, such as stopping at intersections, looking over their shoulders before changing lanes, and giving other riders space.
- Provide clear communication among SRTS and CSD staff regarding their roles and responsibilities before the bike ride.

## 4. CURRICULUM DEVELOPMENT

Locally specific lesson plans were drafted this year to meet the needs of Mountain View students that were not met by other activities in the SRTS program.

### Background

Before developing draft curriculum, the team reviewed local road safety analyses and international best practice examples, and consulted with the Coordinating Committee. Committee members provided insights into the most pressing safety challenges faced in Mountain View.

City staff and SRTS coordinating committee members identified four key gaps:

1. Skills for navigating urban streets
2. Defensive walking and bicycling and being alert
3. Comprehension of safety signage
4. Materials for use at home

In addition, a review of the Mountain View Local Road Safety Plan found these trends important to consider for student safety:

- People aged 18-24 are over-represented in pedestrian and bicycle crashes compared to their overall population in Mountain View.
- Individuals under 18 are under-represented in total crashes and pedestrian crashes but over-represented in bicycle crashes.
- Out of all crashes 23% are pedestrian involved and caused by drivers violating pedestrian right of way. The most frequent scenario involved drivers making left turns while pedestrians were crossing.

### Research

The SRTS team conducted a peer review of five sample school-based transportation safety curricula (Table 6). The team also assessed the suitability of each curriculum example to meet California Physical Education Model Content Standards (Cal-PEMCS), League of American Bicyclist Smart Cycling “need to know” content, and local instructional needs. The peer review was not limited to SRTS program-related curricula. Table 6 presents the five peer-reviewed curricula and their key takeaways and

Table 7 shows key topics from the research that were considered to meet Mountain View curriculum priorities by grade level and priority area.

Table 6 Key Takeaways from SRTS Best Practice Curricula

SRTS Example	Key takeaways
<a href="#">Australian Capital Territory – Safe Cycle Lesson Plan</a>	<ul style="list-style-type: none"> <li>Self-awareness, risk-taking, and defensive bicycling, with a focus on identifying hazards and route planning for all age groups.</li> <li>Increased bicycling participation, confidence in bicycling, and safety-related knowledge</li> </ul>
<a href="#">NCDOT “Let’s Go NC!” Safety Education Curriculum</a>	<ul style="list-style-type: none"> <li>Resources balances skills and learning areas from creative arts to mathematics, to interpersonal and independent decision-making skills</li> <li>Content for different age levels and learning abilities related to how to navigate urban environments and practice defensive bicycling with intentionality.</li> </ul>
<a href="#">PBOT Train-the-Trainer Classroom Education Program</a>	<ul style="list-style-type: none"> <li>Intersects traffic safety curriculum with other standards</li> <li>ALPACA as a defensive strategy, understanding principles of safety and personal security.</li> <li>Allows students to take their own initiatives in developing bike safety skills.</li> </ul>
<a href="#">New York State DOT Safe Routes to School</a>	<ul style="list-style-type: none"> <li>Bicycle and pedestrian lessons to navigate their community, how they are responsible for their health and environment, and how to use traffic signs.</li> <li>Lessons are tied directly to core contents for NYS education standards and bring traffic safety curricula through classes outside of PE.</li> </ul>
<a href="#">City of Ventura Middle School Bicycle Education Curriculum</a>	<ul style="list-style-type: none"> <li>California based lessons learned from an implementation standpoint, as it captures some of the coordination and facilitation to make the lesson happen.</li> <li>Identifies core assessment standards and learning outcomes</li> </ul>

Table 7. Mountain View Curriculum Priorities by Grade Level and Priority Area

Legend		✓	Introduce and/or emphasize	➔	Reinforce	
MV Priorities	Key Topics and Activities	Grades K-2	Grades 3-4	Grades 5-6	Grades 6-8	Grades 9-12
Basics of Safe Walking and Transportation	Motor vehicles, mass and momentum		✓	✓	✓	✓
	Physical activity, health and sobriety		✓	✓	✓	✓
	Crossing safely and driver awareness		✓	✓	✓	✓
Basics of Safe Bicycling	ABC Quick Check	✓	✓	✓	➔	➔
	Helmet fitting	✓	✓	✓	➔	➔
	Basic parts of a bicycle	✓	✓	➔	➔	➔
	Balancing, starting, stopping	✓	✓	➔		
	Laws and safe use of e-bikes, e-scooters and motorized devices	✓	✓	✓	✓	✓

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MV Priorities	Key Topics and Activities	Grades K-2	Grades 3-4	Grades 5-6	Grades 6-8	Grades 9-12
Understanding Signage	Rules of the road	✓	✓	✓	✓	➔
	Basic signage (stop, yield, crossing)	✓	✓	✓	➔	➔
	More signage (sharrows, bike routes)				✓	✓
	Navigating bicycle facilities				✓	✓
	ALPACA principles	✓	✓	✓	➔	➔
Defensive Biking	Hand signaling and communicating	✓	✓	✓	✓	✓
	Collaboration and cooperation, interacting with others	✓	✓	✓	✓	✓
	Scanning and situational awareness		✓	✓	✓	✓
	Visibility and equipment	✓	✓	✓	➔	➔
	Risk and self-awareness		✓	✓	✓	✓
	Group riding		✓	✓	✓	✓
Navigating Urban Streets	Walking or riding safely near traffic and parking	✓	✓	➔	➔	➔
	Crossing the road safely	✓	✓	✓	➔	➔
	Navigating intersections and driveways on a bike		✓	✓	✓	➔
	Identifying and navigating hazards		✓	✓	✓	✓
	Route planning, problems, and map reading				✓	✓
	Knowing your environment/neighborhood				✓	✓
	Community bike ride to the park			✓	✓	✓
Advocating for Access	Surveys, interviews and analyzing access patterns		✓	✓	✓	✓
	Conducting walk audits and seeing the street				✓	✓
	Understanding transportation planning processes				✓	✓
	Participating in local government (projects, plans, committees and Council)					✓
	Speeches, songwriting or videomaking workshop on traffic violence and safety messaging				✓	✓

## Lesson Plans

Teaching modules were drafted for Grades 4, 7 and 11. Table 8 illustrates the overall learning objectives for each year.

**Table 8. Learning Objectives by Grade Levels**

Grade 4	<ol style="list-style-type: none"><li>1. Be able to safely walk and bike near traffic.</li><li>2. Understand how to walk or ride safely near traffic and parked cars</li><li>3. Learn common mistakes drivers make (assuming that kids this age are with their parents)</li><li>4. Understand basic and advanced signs and traffic control devices</li></ol>
Grade 7	<ol style="list-style-type: none"><li>1. Be able to walk and bike near traffic safely.</li><li>2. Learn common mistakes that drivers make.</li><li>3. Understand basic and advanced signs and traffic control devices.</li><li>4. Learn how to use innovative bicycle facilities.</li><li>5. Learn how to plan routes and read a map.</li></ol>
Grade 11	<ol style="list-style-type: none"><li>1. Be able to safely walk, bike and drive.</li><li>2. Be able to recall the benefits of an active lifestyle and transportation habits.</li><li>3. Identify limitations of a car-centric environment.</li><li>4. Design creative solutions for improving transportation safety in their neighborhoods.</li><li>5. Demonstrate acumen in map reading, interpretation, and make informed decisions around how to navigate cities and streets.</li><li>6. Articulate and advocate for change, using reasoning and evidence to form compelling arguments.</li></ol>

Each lesson within the modules includes:

1. Learning objectives
2. Standards alignment
3. Subject matter pre-test
4. PowerPoint presentation
5. Teacher talking points
6. Student activities
7. Parent supplement to reinforce learning
8. Subject matter post-test

Draft lesson plans are currently being reviewed by the city and school district and will be part of the 2024-2025 Safe Routes to School Report. The selected lesson plans across various grade levels will be piloted to evaluate and enhance their effectiveness associated with program goals.

## 5. DATA COLLECTION AND PROGRAM EVALUATION

### Student Travel Tallies

Student Commute Tally forms are a standardized survey instrument provided by the National Center for Safe Routes to School (NCSRTS) to collect student journey to school data. Mountain View SRTS staff distributed electronic tally forms across participating public schools in Mountain View and Los Altos, with instructions for teachers to administer the survey and collect travel mode data. The announcement for the survey emphasized the role of teachers in supporting the City's plan to enhance safety and promote responsible travel behavior for both adults and children on city streets.

Data collection was initially scheduled as a 2-day, in-classroom process from March 26, 2024 (Tuesday) to March 28, 2024 (Thursday). However, the survey was extended throughout April 2024 due to limited initial engagement and response. Responses were received from nine elementary schools, two middle schools, and one high school as shown in Table 9. Graham Middle School, Mountain View High School, Stevenson Elementary School, and Crittenden Middle School had the highest response rates.

**Table 9: School completed Travel Tally**

School	Classrooms	Student Respondents	Average Class Size	Enrollment	Response Rate
Amy Imai ES	13	271	21	398	68%
Benjamin Bubb ES	5	87	17	335	26%
Edith Landels ES	7	159	23	363	44%
Gabriela Mistral ES	14	291	21	380	77%
Jose Antonio Vargas ES	14	280	20	348	80%
Mariano Castro ES	9	168	19	257	65%
Monta Loma ES	12	210	17	274	77%
Stevenson ES	11	270	25	450	60%
Theuerkauf ES	10	183	18	315	58%
Crittenden MS	19	450	24	582	77%
Graham MS	30	546	18	551	99%
Mountain View HS	68	1443	21	2202	66%

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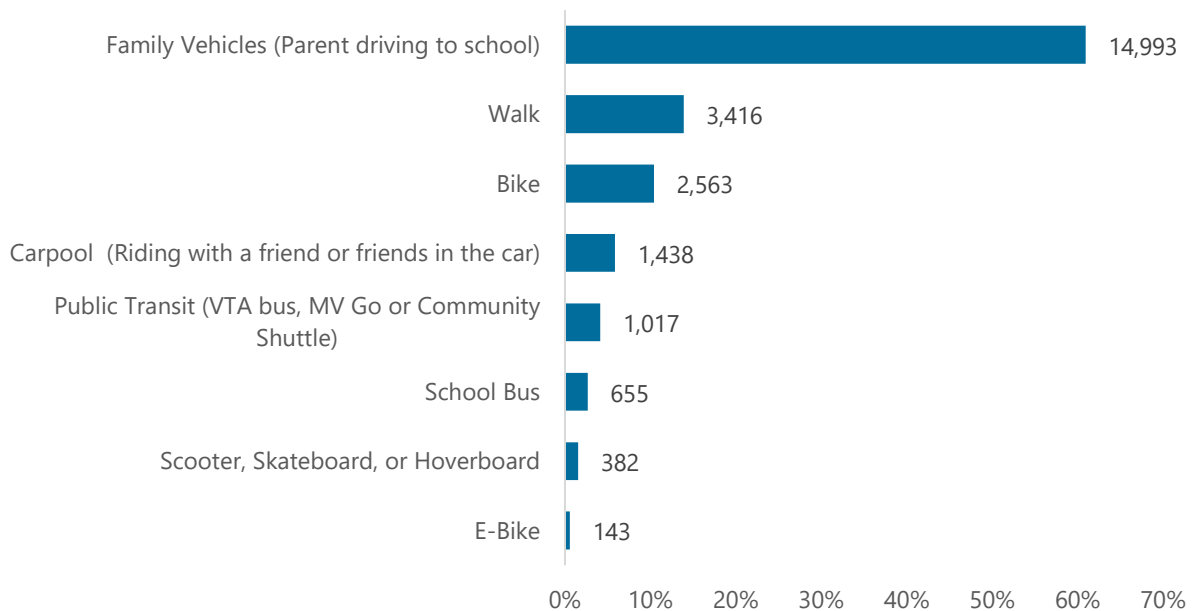
School	Classrooms	Student Respondents	Average Class Size	Enrollment	Response Rate
Total	212	4,356	-	6455	67%

Notes: Evaluation of the responses revealed that students accessed, populated, and submitted the survey, some with prankish intent. To 'clean' the survey data, all student survey responses that reported a mode-specific travel tally to/from school greater than 100 were removed.

## Mode Share

As part of the SRTS program, the travel modes students used to and from school were tracked through the student tally are illustrated in Figure 6. Overall mode share to/from school, Student Tally Survey. Overall, more than half of all students were dropped off and picked up from school in their family vehicles (61%). Other popular modes of transportation included walking (14%) and biking (10%) to school. Only 6% of students reported carpooling, while 4% reported using public transit to get to school.

**Figure 6. Overall mode share to/from school, Student Tally Survey 23-24**



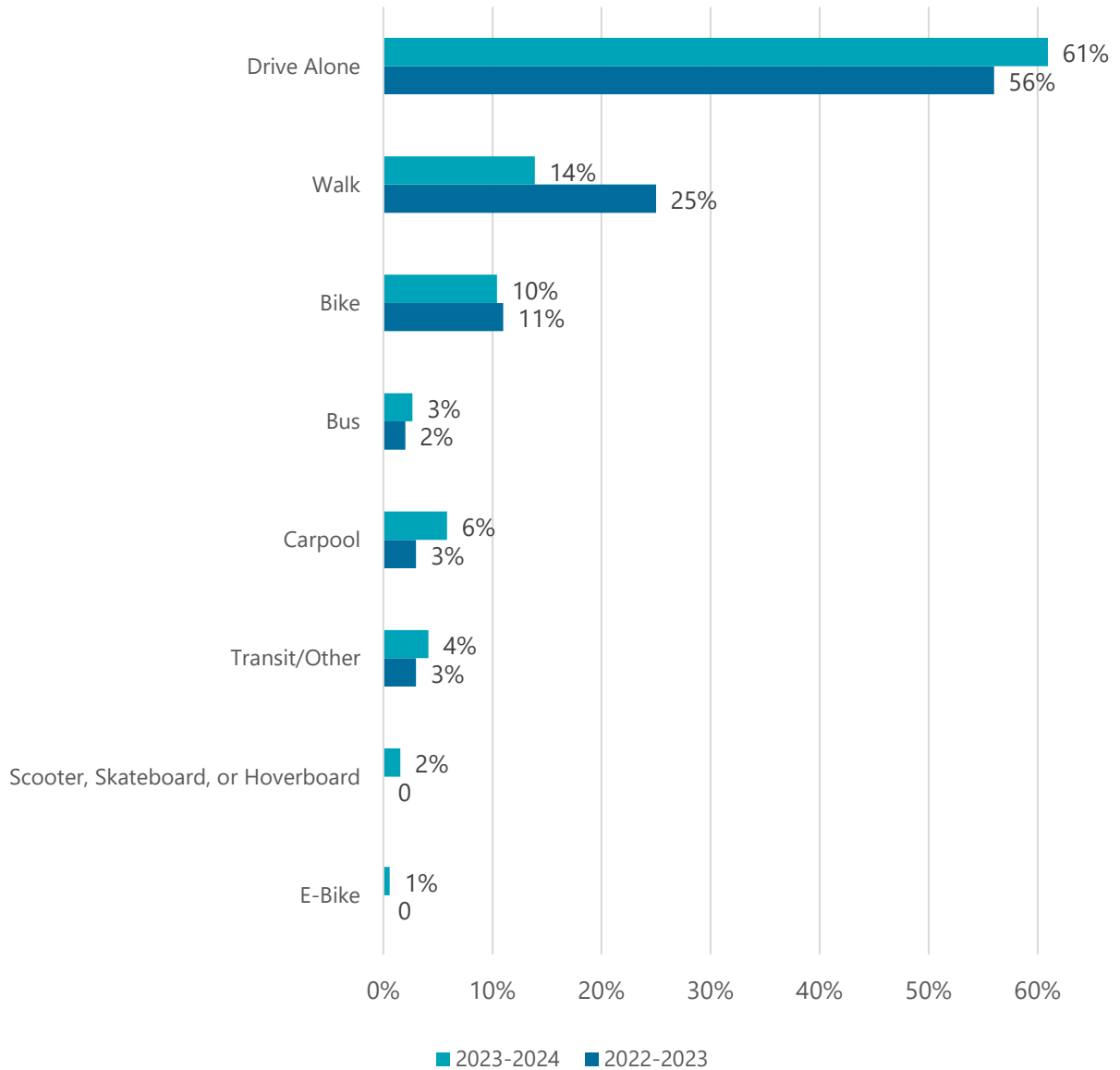
The comparative mode shared from the data reported for SY 23-24 (March 2024) with previously acquired data for SY 22-23 (October 2022) is shown in Figure 7. The data indicates an increase in motor vehicle access to school, from 56% in 2022-23 to 61% in 2023-24, and a drop in active transportation mode share from 36% in 2022-23, to 2023-24% in 2024. This change could be partially attributable to seasonal differences between March and October and the lack of data for Los Altos High School in 2024, in addition to actual changes over time. For

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upcoming years, the survey will be conducted in March to maintain consistency and monitor program progress.

**Figure 7: Mode Share Comparison of Student Travel Tally for 2022-2023 and 2023-2024**



## Mode Share by School

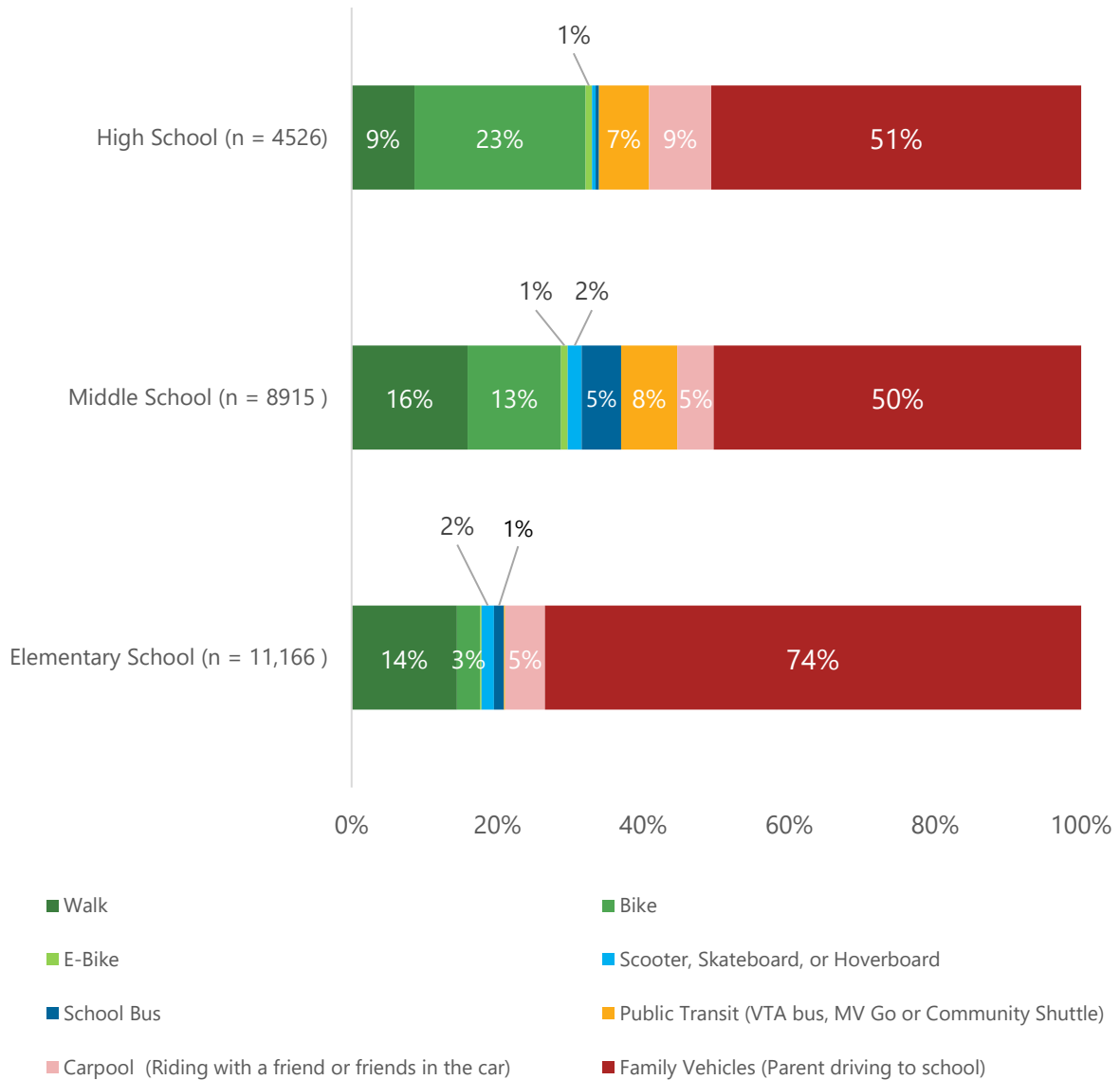
The distribution of transport choices by school is shown in Figure 8 and Figure 9. Elementary School Mode Share. The data indicates walking mode share is highest at Mariano Castro Elementary School (42%) and Benjamin Bubb Elementary School (34%), bike mode share is highest at Mountain View High School (23%) and Graham Middle School (18%), and motor

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vehicle access is highest at Stevenson Elementary School (82%). Public Transit usage is generally low, reaching 10% at Graham Middle School.

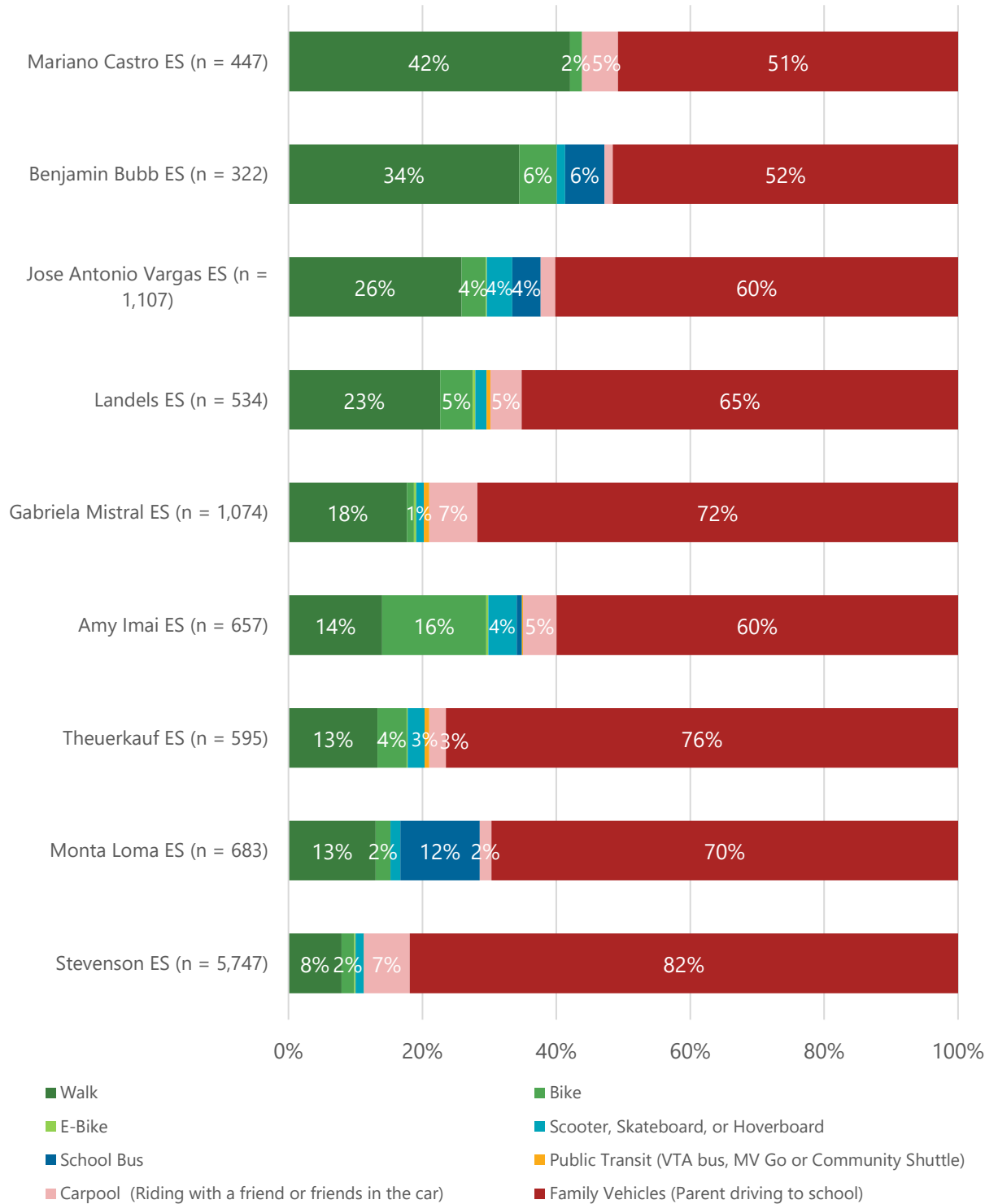
**Figure 8: Middle and High School Mode Share, 2023-2024**



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**Figure 9. Elementary School Mode Share, 2023-2024**



## Parent/Caregiver Surveys

Parent surveys are a standardized survey tool provided by the National Center for Safe Routes to School (NCSRTS) to collect information about parent/caregiver attitudes toward walking and bicycling and on how students travel to and from school. The parent survey was distributed electronically across participating schools in English and Spanish and was open for participation between March 26, 2024, and April 26, 2024. Responses were received from 153 parents and caregivers, representing 245 students across all grades. Graham Middle School, Benjamin Bubb Elementary School and Mountain View High School had the highest response rates as shown in Table 10.

**Table 10: Share of Parent/Caregiver Surveys by School, 2023-2024**

School	Total students represented by the surveys	School	Total students represented by survey
<b>Elementary Schools</b>		<b>Middle Schools</b>	
Benjamin Bubb ES	27	Graham MS	91
Landels ES	24	Crittenden MS	13
Stevenson ES	15	The Girls' MS	1
Amy Imai ES	10	<b>High Schools</b>	
Gabriela Mistral ES	10	Mountain View HS	27
Monta Loma ES	7	Los Altos HS	3
Jose Antonio Vargas ES	6	St Francis HS	1
Mariano Castro ES	3	<b>K-12</b>	
Theuerkauf ES	3	German International School of Silicon Valley	1
Loyola ES	1		
Oak Avenue ES	1		
Springer ES	1		

## Mode Share

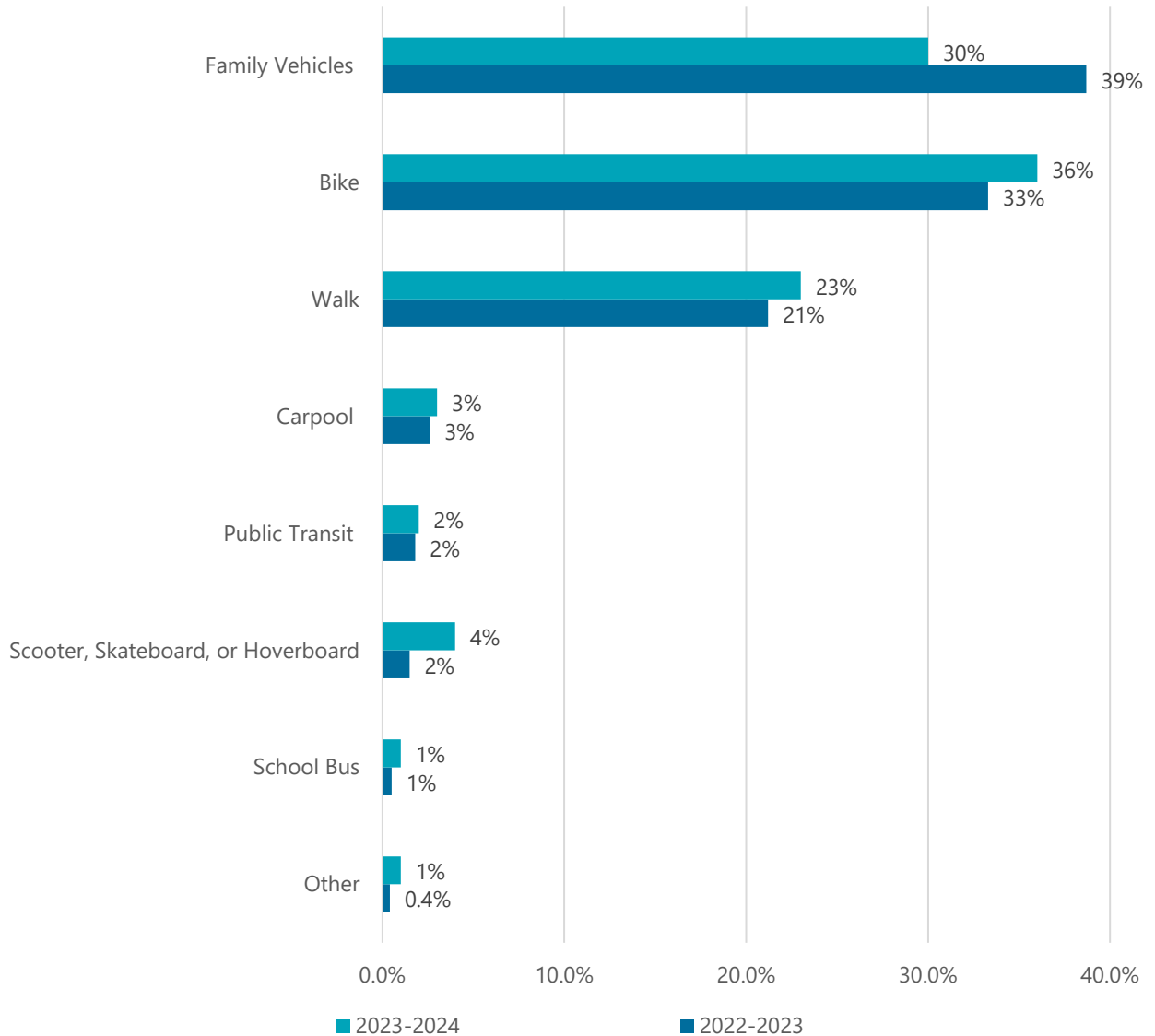
The different travel modes students took to and from school, as parents and caregivers reported in 2022-2023 and 2023-2024, are shown in Figure 10. In contrast to the student hand tallies, parent surveys were associated with a lower sample of motor vehicle access from 39% in 2022-2023 to 30% in 2023-2024 and an increase in the bike mode share from 33% to 36%. Marginal increases in the sample of walking and other alternative transportation usage were

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also seen, with the sample mode share of walking rising from 21% to 23% and the sample share of scooters/skateboards and hoverboards growing from 2% to 4% between 2022-2023 and 2023-2024.

**Figure 10. Mode Share Comparison of Parent/Caregiver Survey, 2022-23 and 2023-24**

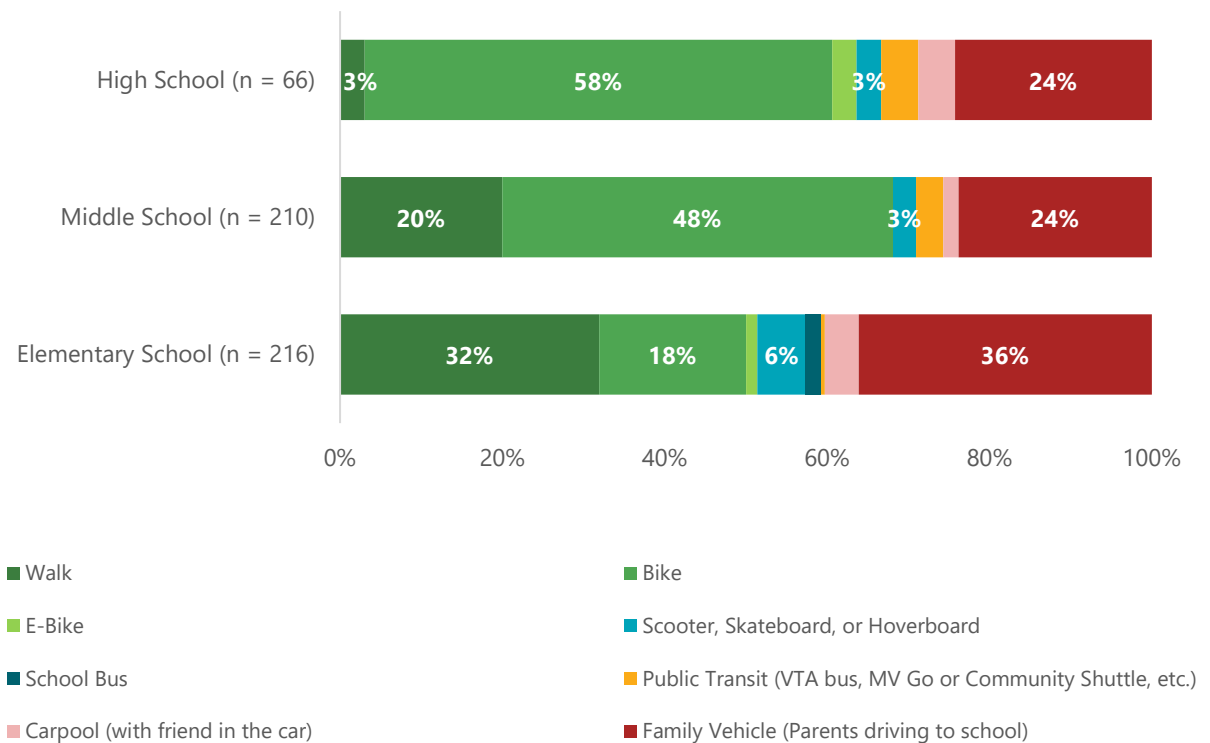


## Mode Share by Grade

The data shows that the share of walking decreases as school level increases, so elementary school students tend to walk more (32%) than high school students (3%), while biking increases from 18% among elementary school students to 58% among high schoolers.

While low overall, the use of public transit increases with grade level, with less than 1% of elementary school students, 3% of middle schoolers, 5% of high schoolers taking transit to school. The share of students being driven to school in family vehicles also decreases with an increase in school level.

**Figure 11. Mode share by school type, 2023-2024**



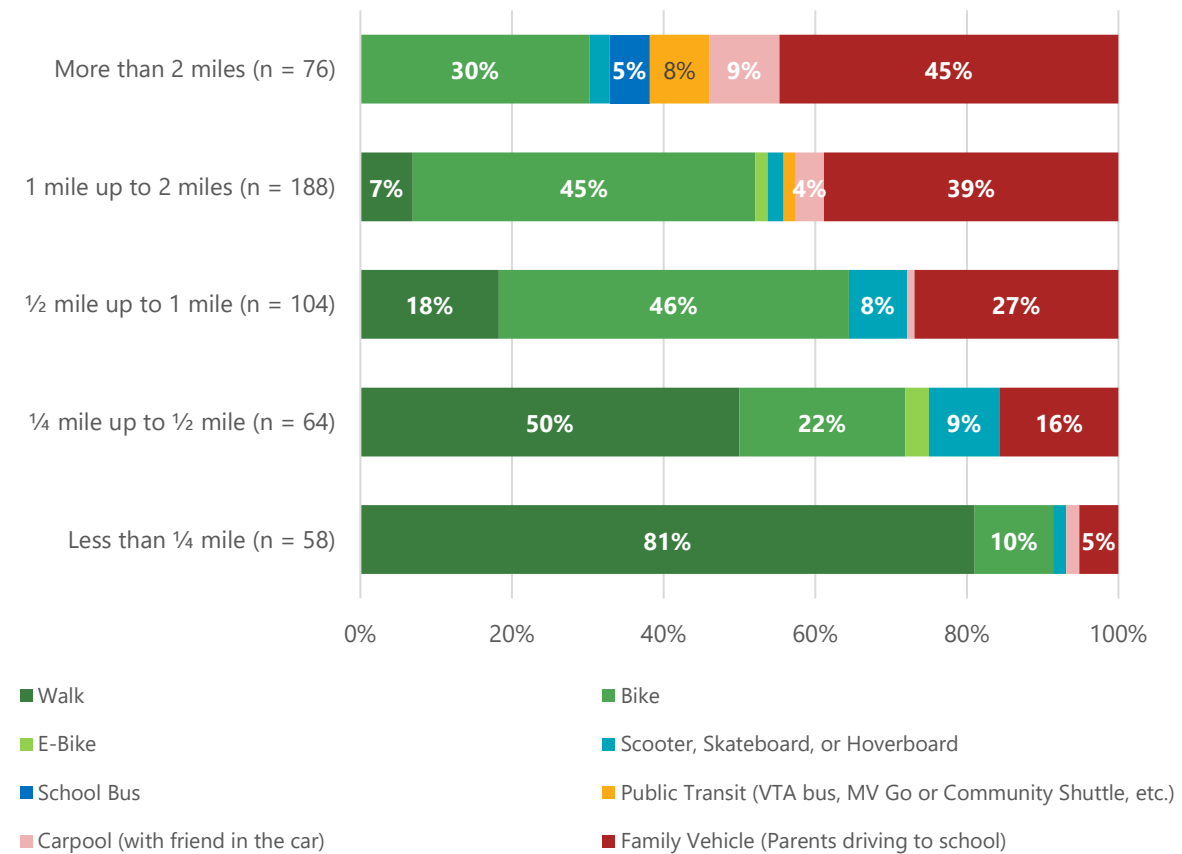
Note: Since the survey doesn't have an option for "Student Drives Self," it is possible that high school students are driving themselves to school and may have indicated it either under 'carpooling' or 'family vehicles'.

## Mode Share by Distance

Students' proximity to school significantly influences their travel mode, with over 80% of those living less than ¼ mile choosing to walk and 50% of those within ½ mile doing the same, as shown in Figure 12. Biking is popular amongst students who live at a moderate distance from school, i.e., between a ½ mile to 2 miles. The rate of students being dropped in family vehicles increases proportionately with an increase in distance.

Other shared modes of transportation increase at distances over 2 miles, including carpooling (9%), public transit (8%), and school buses (5%). Other modes like e-bikes, scooters, skateboards, or hoverboards have relatively low usage across all distances but are mostly used by students living ¼ to 1 mile away.

**Figure 12: Travel mode share by distance, 2023-2024**

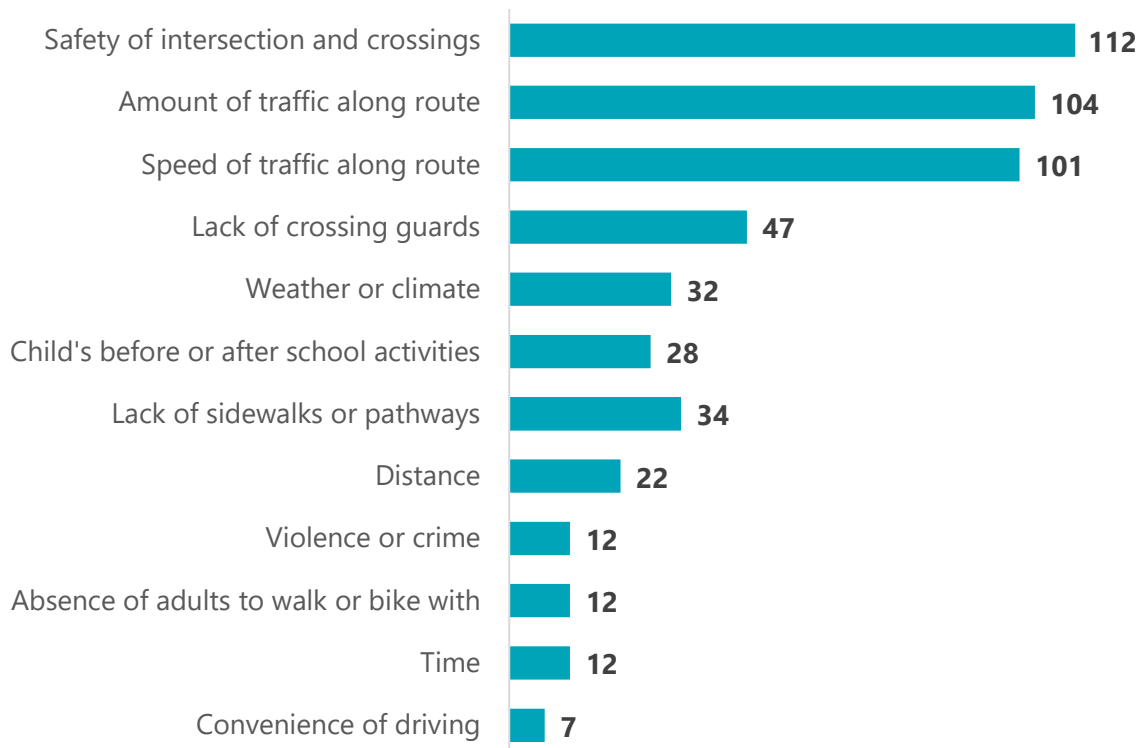


## Top Safety Concerns

According to survey response, majority of the parents and caregivers share the same top safety concerns: intersection safety, traffic volumes, and traffic speed, regardless of whether they allow their students to walk or bike to school.

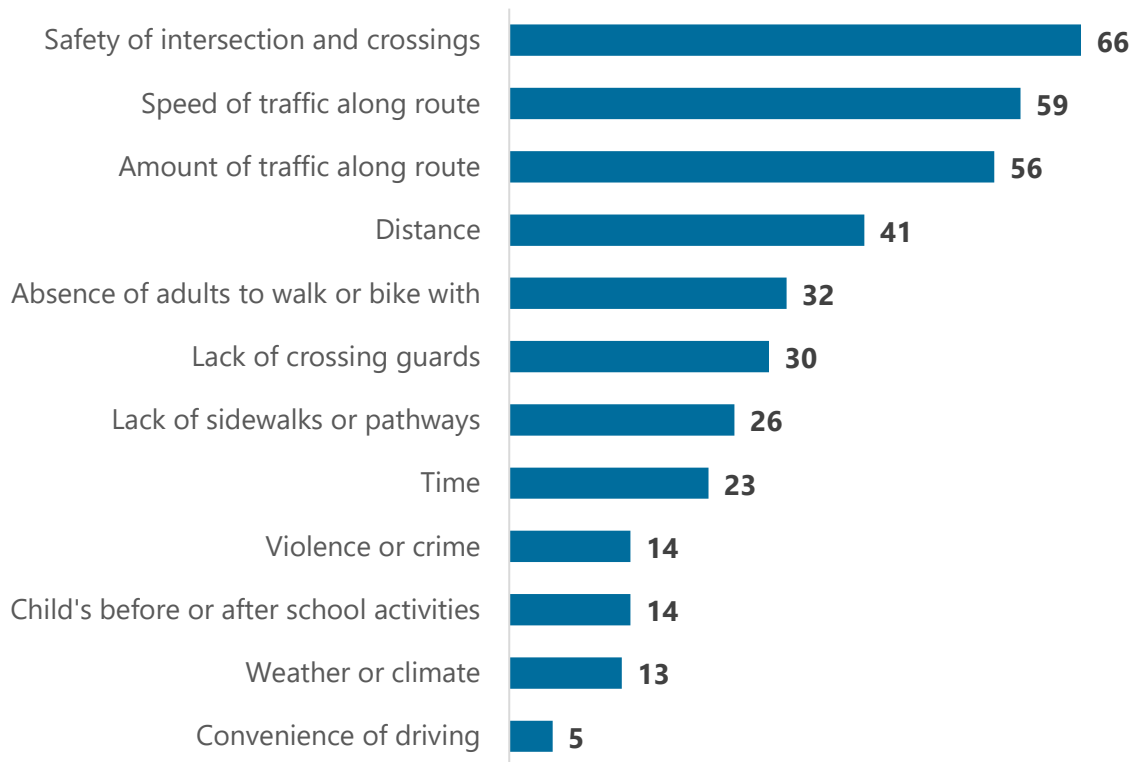
For parents who do allow their children to walk/bike to/from school, the lack of crossing guards and adequate sidewalks/pathways are also important safety concerns as shown in Figure 13.

**Figure 13: Top safety concerns amongst parents who allow children to walk/bike to school, 2023-2024**



In addition to traffic-related concerns, parents who don't allow their children to bike are impacted by factors like distance, the absence of other adults to accompany the student, and the lack of adequate sidewalks and crossing guards, as shown in Figure 14. Other concerns reflect diverse personal, environmental, and situational factors specific to individual families/children, including safety fears, child abilities, local conditions, and practical constraints.

**Figure 14: Top safety concerns amongst parents who don't allow their children to walk/bike to school, 2023-2024**



Parents and caregivers also highlighted other concerns beyond the survey categories, including:

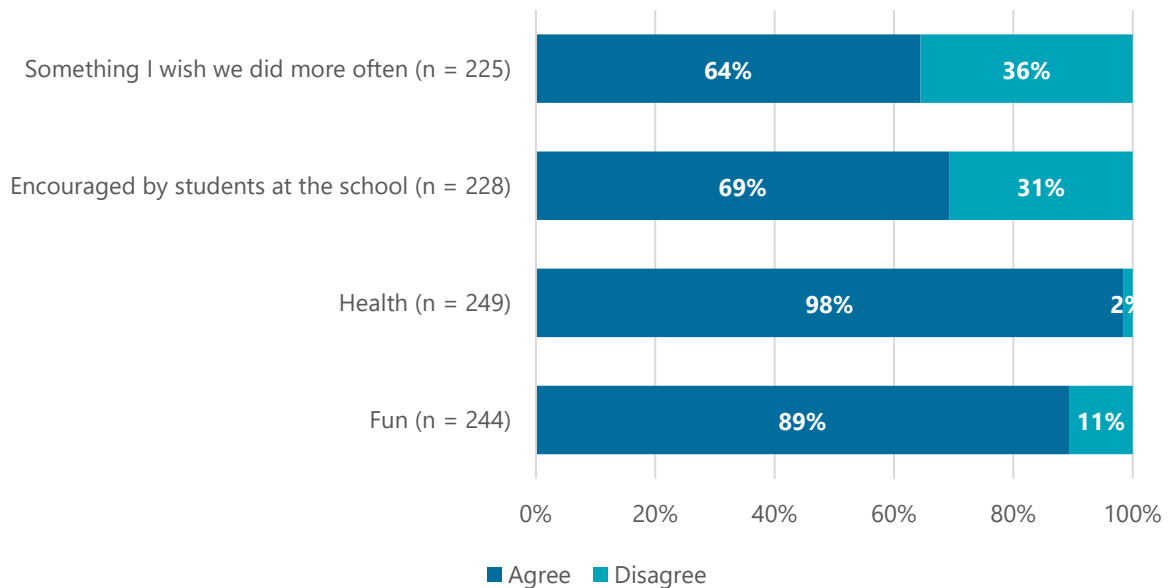
- **School Zone Safety Concerns:** Chaotic and unsafe drop-off/pick-up zones at schools and the lack of designated bike entrances, bike parking, lockers or storage for students' belongings.
- **Cultural and Social Factors:** Biking not seen as "cool" or socially acceptable for some students, Lack of a "walking/biking culture" in the community and peer pressure and safety concerns leading parents to drive instead.
- **Specific Intersection and Route Concerns:** Specific intersections and routes that are perceived as unsafe, such as Miramonte/Barbara, Grant/Sleeper, El Camino crossings, and access points from the east to Graham Middle School.
- **Public Transportation Limitations:** Lack of reliable and frequent public transportation options, particularly for after-school activities and inclement weather, leaving families with few alternatives to driving.
- **Driver Behavior:** Respondents highlighted the need for better education for drivers, cyclists, and pedestrians on road safety, more enforcement of traffic laws, especially during

school commute times and encouraging safe behaviors like wearing helmets and following traffic rules.

## Perception about walking and biking

Overall, there is a positive perception of walking and biking to school among parents and caregivers, especially when it comes to health benefits and fun as illustrated in Figure 15. 98% of respondents agreed that walking and cycling benefited the students' health, while 89% agreed that it is a fun and enjoyable activity. 69% of parents felt encouraged by students at the school to allow for more walking and biking, and 64% agreed that they would like to do it more.

**Figure 15. Perception of Walking and Biking among Parents and Caregivers, FY 2023-2024**



## 6. LESSONS LEARNED

The Safe Routes to School program has made significant strides in promoting safer and more sustainable transportation options for students. By focusing on program coordination, expanding outreach, refining data collection and evaluation methods, and enhancing community engagement, the program continues to evolve and adapt to the needs of students, parents, and schools. The following lessons learned highlight key areas of improvement and outline potential next steps to further strengthen the program's impact.

### Program Coordination Improvements

- Implementing a shared calendar and establishing a single point of contact have proven beneficial for program management and communication. These improvements are likely to enhance coordination between different stakeholders and streamline program operations.
- Sending notifications earlier in the summer has helped better engage with parents, students, and administrators at Back-to-School events. This change allows schools to anticipate and build program offerings into their school year without disrupting instructional time.
- Expanding program offerings to private schools has increased the potential reach of program offerings. However, no private school accepted SRTS services in 2023-24.

### Safety Training and Community events

- Bike Rodeo: A notable percentage of students (9% to 17%) with permission forms did not know how to ride a bicycle, which highlights the need for more basic cycling education.
- The Monster Bash event was highly successful, with 2500-3000 attendees and over 40 bicycles parked at the Bike Valet. The Bike Circus quadrupled its participation rates from previous years, with over 80 people participating.
- Riding behavior observed during the Bike to Boba event suggest a need for clearer communication of rules before and after the ride.
- There is a need for targeted driver education in Mountain View. For example, tailored workshops with high schools could be explored as venues for this, potentially as a condition of securing parking permits.
- As schools make strides in reducing the driving mode share, the City could consider an annual event to reward the schools with the lowest car mode share and/ or the greatest improvement.

## Program Evaluation Process and Insights

- Selecting a better medium for data collection within a specific timeframe can help minimize redundant data entries from certain schools.
- To capture a broader range of transportation patterns, surveys should include questions such as "Does your student drive to school?" This would help in tracking driving patterns among students.
- Establishing a consistent and accessible mode share dashboard with a benchmark goal for each school on the program website would provide clearer insights into transportation trends, assist in comparing data across schools, and measure the impacts of interventions.
- Student tally surveys showed an increase in dependency on family vehicles (56% to 61%) and a decrease in active transportation (36% to 24%) from 2022 to 2023. Parent surveys, however, indicated a reduction in family vehicle use (39% to 30%) and an increase in biking (33% to 36%). Due to this difference, the program should consider whether to continue both data collection strategies.
- Parent surveys revealed important safety concerns and perceptions related to walking and biking to school. These insights should be used to inform targeted interventions and enhance overall student safety.
- Connect SRTS performance metrics with other ongoing work by conducting analysis of crash data annually to inform program progress, reporting on crashes involving school-aged victims by severity.

## Curriculum Development

- Input from instructors is crucial for developing an effective and practical curriculum.

## Equitable Program Delivery

- The unequal or disproportionate representation of respondents per school, particularly through parent/caregiver surveys, can lead to incomplete insights and should be addressed by incentivizing participation from diverse groups.
- Resources must be proportionately allocated to encourage participation from schools located in equity-focused neighborhoods.
- Look for opportunities to ensure that students from the most vulnerable communities have access to and awareness about safer and more sustainable transportation options and that they inform future programs.

- Incentives to increase participation from students and parents in all schools should include developing training and advocacy materials in multiple languages and using messaging that appeals to diverse cultural backgrounds.
- Focused interventions that address the traffic safety concerns of vulnerable students, such as those with visual impairments and ambulatory or developmental disabilities, should be incorporated into the program.
- Based on broader knowledge and best practices in mobility safety, focused interventions that acknowledge the diversity in mobility experiences for different students should also be prioritized. For example, incorporating solutions for overcoming personal safety concerns for girls from gender-based violence in addition to traffic safety concerns. This may also apply to infrastructural recommendations, including improved lighting and implementation of Crime Prevention through Environment Design (CPTED) strategies.
- Collaborative initiatives can help overcome the top-down implementation of the SRTS program. For example, collaborating with local non-profit organizations could raise awareness around the transportation needs of unhoused students or students with disabilities in the area, or appointing Student Champions from diverse backgrounds could help overcome language or cultural barriers in the program curriculum.

# APPENDIX 1: SUMMARY OF SRTS DELIVERABLES, 2023-2024

## In-School Activities

- Safety Education
  - Transportation Safety Training Plan
  - Training workshops material
  - Bike Rodeo and Safe Walk Training Implementation Plan
  - Bike Rodeo and Safe Walk Training material

## Engagement and Encouragement Events

- Engagement and encouragement event plan
- Engagement activities
  - Monster Bash
    - Flyers, [Monster Bash Kiddical Mass Flyer.pdf](#)
    - Lawn Signs, [Monster Bash Kiddical Mass Yard Sign.pdf](#)
  - Bike to Boba
    - Presentation, [MVSRTS Bike to Boba 3.20.2024.pptx](#)

## Curriculum Development

- Peer Review: [Peer Review Profiles Final.pdf](#)

## Data Collection and Program Evaluation

- Data collection plan and travel tally: [Survey questions and distribution details.pdf](#)
- Parent Survey:
  - [In Spanish](#)
  - [In English](#)
- Summary findings: [Evaluation Analysis Draft 08.22.2024.pptx](#)