

Pear Park Elementary School Walking and Biking Audit



September 20, 2016

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Audit Team Members:

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Cody Martin, Transportation Engineering Assistant, City of Grand Junction
Terri Wenzlaff, Safe Routes to School, Mesa County

Discussion:

The Pear Park Elementary walk audit was conducted at the end of school on a typical day. Grant team members were stationed in the following locations for observation:

- In front of the school for parent pick-up
- At the west parking lot and at the east driveway for parent pick-up
- Sidewalks and bicycle routes near the school property



Figure 1: Parent parking at east driveway.

- Intersection of D ½ Rd. and 30 ¼ Rd
- Intersection of D ½ Rd. and east driveway (also referred to as Panda Loop)
- Intersection of 30 ¼ Rd. and school entrance/exit
- Crosswalk at east driveway loop that leads to Wedgewood Ave. and Devon Court

Pear Park has approximately 470 students, 68.4% of whom qualify for Free and Reduced Lunch. There are no buses at this school. The school was originally designed for buses but the school district changed the bus eligibility policy from one mile to two miles and there are no students who

live farther than two miles from the school. Pear Park separates their students for pick-up by grade level. The kindergarten students go to the front of the school, the first and second graders are at the west parking lot and the third through fifth graders are at the east driveway. If there are siblings in a family, the older children go to the youngest child's pick up area. In the mornings, all children enter through the front of the building.

Pear Park experiences significant congestion at drop-off and pick-up, which inhibits walking and biking, and impacts the health of the school community because cars idle their engines, polluting the surrounding air.

There are three bike racks located on the campus. On this day, there were 22 bikes in the rack on the east side of the building; two bikes were locked together because the rack was beyond capacity. The bike parking on the west side of the building had three bikes in it. This is where the younger children exit this building after school. There are 76 bike rack spaces. The standard of one space per five students requires 94 spaces for Pear Park.



Figure 2: Overflowing bike rack on the east side of school.



Figure 3: Diagram of school layout.

Observations/Comments:

The following observations and comments regarding the afternoon pick-up and departure were made by members of the audit team and members of the school community:

Walking and Bikers:

- Between 3:40 and 4:05 pm, 20 total pedestrians crossed at D ½ Rd. and 30 ¼ Rd., which does not have a marked crosswalk.
- Forty-four children used the enhanced crosswalk at D ½ Rd. and the school's east driveway.
- There is a flashing beacon and a crossing guard at the school's east driveway.
- Fifty children left the campus by the walkway at the southeast corner of the school, which leads into the subdivision. A crossing guard is stationed here. Only paint delineates this crosswalk.
- There are no sidewalks on the west side of 30 ¼ Rd., only on the east side.
- There are no designated bike routes along 30 ¼ Rd.
- Existing crosswalks need refurbishing.
- Sidewalks are not continuous or maintained surrounding the campus.
- Pedestrians/bicyclists are not visible with the amount of traffic.
- Biking and walking routes are not designated.

School Zone:

- School zone is centered on the median/beacon crosswalk at the east driveway.
- School zone doesn't extend west of 30 ¼ Rd. so drivers are close to school before the zone starts. Pedestrians are crossing D ½ Rd. at 30 ¼ Rd.
- Speed limit in school zone is 25 mph.

Drop-off/Pick-up Area:

- Vehicle traffic for pick-up for grades K-2 is via 30 ¼ Rd. Traffic backs up onto 30 ¼ Rd. when parents are waiting.
- Parents are parking along both sides of 30 ¼ Rd. (including in the "no parking" zones on the east side) congesting that area for pedestrian and vehicular traffic alike.
- Traffic backs up onto D ½ Rd. when drivers are trying to pull into the east driveway for 3rd- 5th grade pick-up.
- Queued vehicles occasionally park in the crosswalk while waiting.
- Thru traffic creeps between the queued vehicles and the median curbing.
- Cars run engines continuously while they wait to pick up students. The first car arrived at 3:00 and idled until the student arrived after 3:50.
- Some drivers park in the pick-up lane and then leave their cars unattended.

- In the parking lot pick-up (1st-2nd grades), there is poor visibility because of the queued cars and parked cars. The waiting vehicles block parked cars from leaving.
- Drivers pull out of line once they have their students and drive into oncoming traffic, instead of waiting until the entire line can pull forward.
- Drivers park in three surrounding subdivisions and either walk to the school to get their children or wait in their cars for their children to walk to them.

Suggested Solutions:

Location of Interest	Obstacle	Proposed Solutions	Responsible Parties
General	Information sharing of available resources (Safe Routes to school maps and WebApp); promotional ideas about encouraging kids to walk and bike to school.	Place a link on school website with pertinent information including SRTS maps.	School administration, SRTS personnel, parent involvement groups, school safety teams.
Crossing guards	At present, there is only funding to pay one teacher to receive district training.	Training through the City of Grand Junction is offered at no cost. They will even come to the school.	School administration; School Resource Officer; District 51; City of Grand Junction
Crossing guards	Crossing guards need Class A, Level 2 vests and bigger signs.	Multiple District 51 schools require better vests and signs. District 51 could buy these supplies in bulk to save money.	School administration; School Resource Officer; District 51; City of Grand Junction
Vehicular traffic	Parents park all along 30 ¼ Rd., congesting that route for pedestrian and vehicular traffic as well as inhibiting pedestrian visibility.	Enforce the “no parking” areas along this road. Utilize signage to post walking and biking routes.	City of Grand Junction; School Resource Officer
Vehicular traffic	Parents leave their vehicles unmanned in the parent pick-up line. Drivers pull out of line and drive into oncoming traffic, creating 3-4 lanes of traffic.	Educate drivers about pick-up policy and empower staff to enforce those policies. Additional signage to help with traffic flow and designate pick-up areas.	School administration; Parent-Teacher organizations
Crosswalk	The crosswalk at the southeast corner of school property is used by many students and parents and is not highly visible.	Temporary cones, signage and new paint could be helpful to make vehicular traffic more aware of this crossing.	Pear Park administration; District 51
Crosswalk	No marked crosswalk at the intersection of D ½ Rd. and 30 ¼ Rd., but students cross here.	Consider extending the school zone and installing a marked crosswalk.	City of Grand Junction

Walking and biking routes in the school vicinity	Lack of designated walking and biking routes.	Signage, maps and education that supports using the designated pedestrian routes. This would also be used to direct vehicular traffic away from these areas.	SRTS; Pear Park Administration, District 51, City of Grand Junction; Mesa County
Bike parking	Overflowing bike rack on east side	One of the west side bike racks be moved to the east side to better utilize the spaces.	School administration

Best Practices:

- “Children Breathing - No Idle Zone” = Engines off sign (e.g. West MS photos)
- Pick-up/Drop-off areas by grade (e.g. Bookcliff MS, Pear Park ES). This may create a safer situation for walkers and bikers.
- Crossing guard gathers kids by school for crossing busy street (e.g. Mesa View ES)
- Crossing guards have standard stop signs, and Class A, Level 2 vests.
- Crossing guards are well trained -- on site training available (e.g. Chipeta report for more on this). Crossing guards need to be paid to take the training.
- Take the time to teach parents how to go through pick-up/drop-off process correctly. (e.g. Bookcliff MS)
- Teach kids to wear helmets.
- Having staff and faculty outside the building at the beginning and the end of day. (e.g. West MS, Rocky Mountain ES)
- Clear and predictable flow of traffic through parking lots. (e.g. Bookcliff MS)
- The Health Assistant and PE teachers are active in promoting healthy transportation to and from school. (e.g. Mesa View ES)
- Hosting a bike rodeo and teaching the bike safety and skills unit in PE.
- Crossing guards shouldn’t be teachers or other staff who can’t get to their stations in time. (e.g. Tope ES, where the PTO pays crossing guards, and “specials” teachers also have duty)

Walk Route Maps

Pear Park Elementary School Walk Route Map Summary

	1-Mile Radius ~219 street crossings		2-Mile Radius ~223 street crossings	
	Length	Percent	Length	Percent
Least Favored - 4	8.4	20%	8.7	19%
Not Favored - 3	10.3	24%	10.9	24%
Favored - 2	19.1	45%	19.1	42%
Most Favored - 1	4.4	10%	7.4	16%
	42.3	100%	46.0	100%

Key to Walk Route Map Ratings:



GREEN

Most favored route. May have a detached sidewalk and/or a bike lane. May be a path that has no vehicle traffic. (A detached sidewalk is separated from the roadway, often by a strip of grass, dirt or rocks.)



BLUE

Has attached sidewalks that are wide enough for 2 people to walk side by side. (An attached sidewalk is right next to the roadway).



YELLOW

Has a place to walk or ride that may be a sidewalk, but could be a path or simply sufficient unpaved space on the side of the road.



RED

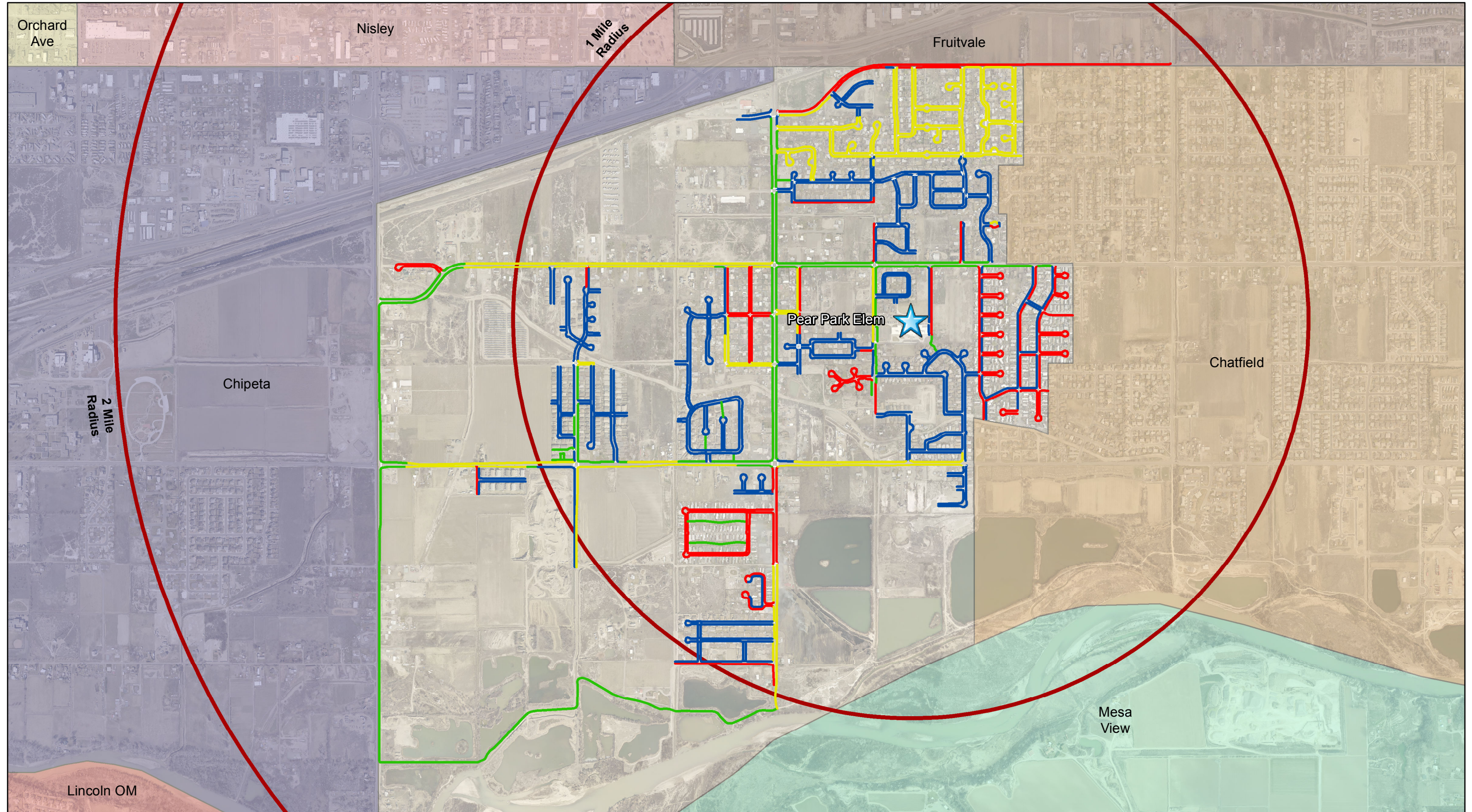
Least favored route. Pedestrians and bicyclists must use the vehicle lanes to walk or ride. (No sidewalk and little or no space beyond the white edge line on the side of the road.)

SRTS 2016 - Pear Park Elementary Path Ratings within 1 & 2 Mile Radii

Legend

- Most favored
- Favored
- Not favored
- Least favored

- Crosswalk
- 2 Mile Radius
- 1 Mile Radius



Classroom Tallies

Student Travel Tally Report: One School in One Data Collection Period

School Name: Pear Park Elementary

Set ID: 22433

School Group: Mesa County Valley School District 51

Month and Year Collected: October 2016

School Enrollment: 0

Date Report Generated: 01/03/2017

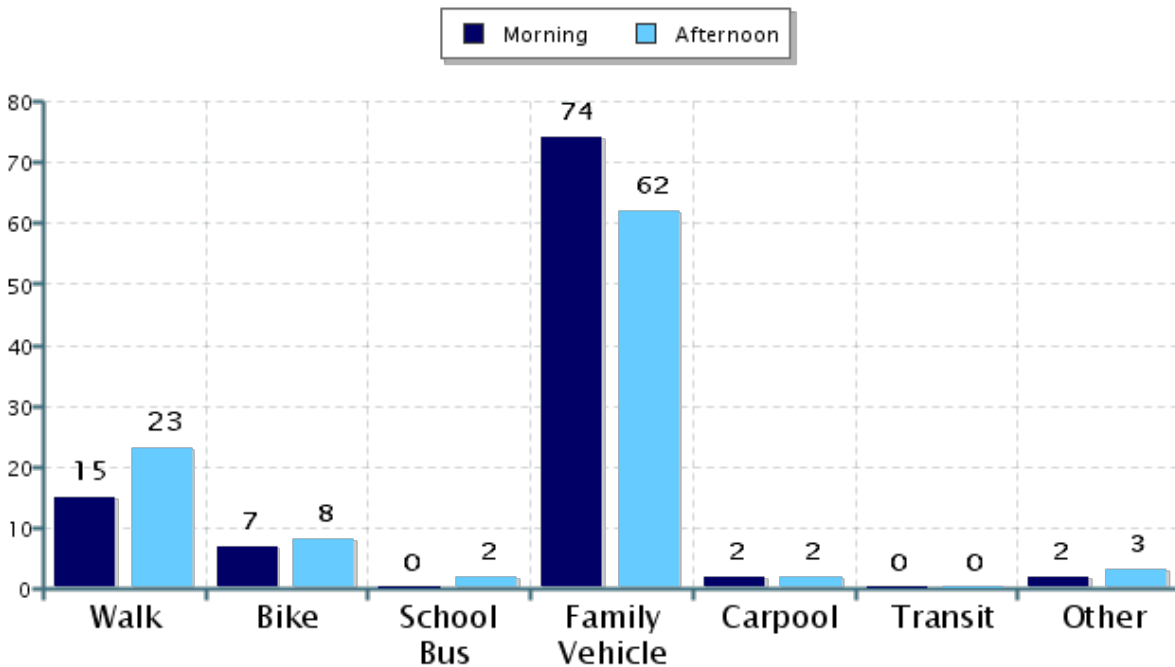
% of Students reached by SRTS activities:

Tags: Pre Program Parent Surveys

**Number of Classrooms
Included in Report:** 9

This report contains information from your school's classrooms about students' trip to and from school. The data used in this report were collected using the in-class Student Travel Tally questionnaire from the National Center for Safe Routes to School.

Morning and Afternoon Travel Mode Comparison



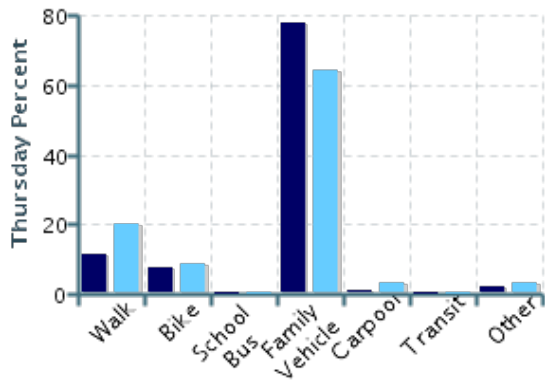
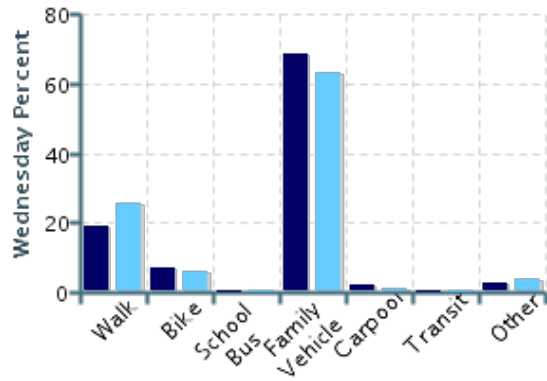
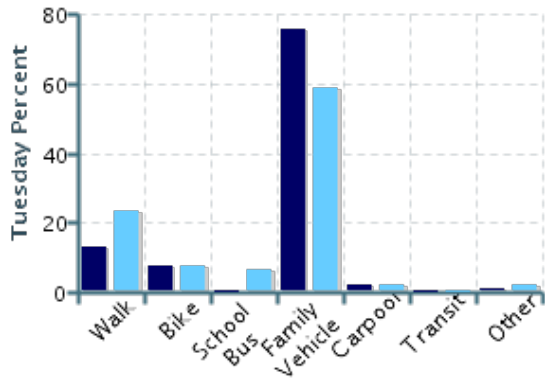
Morning and Afternoon Travel Mode Comparison

	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	524	15%	7%	0%	74%	2%	0%	2%
Afternoon	463	23%	8%	2%	62%	2%	0%	3%

Percentages may not total 100% due to rounding.

Morning and Afternoon Travel Mode Comparison by Day

■ Morning ■ Afternoon

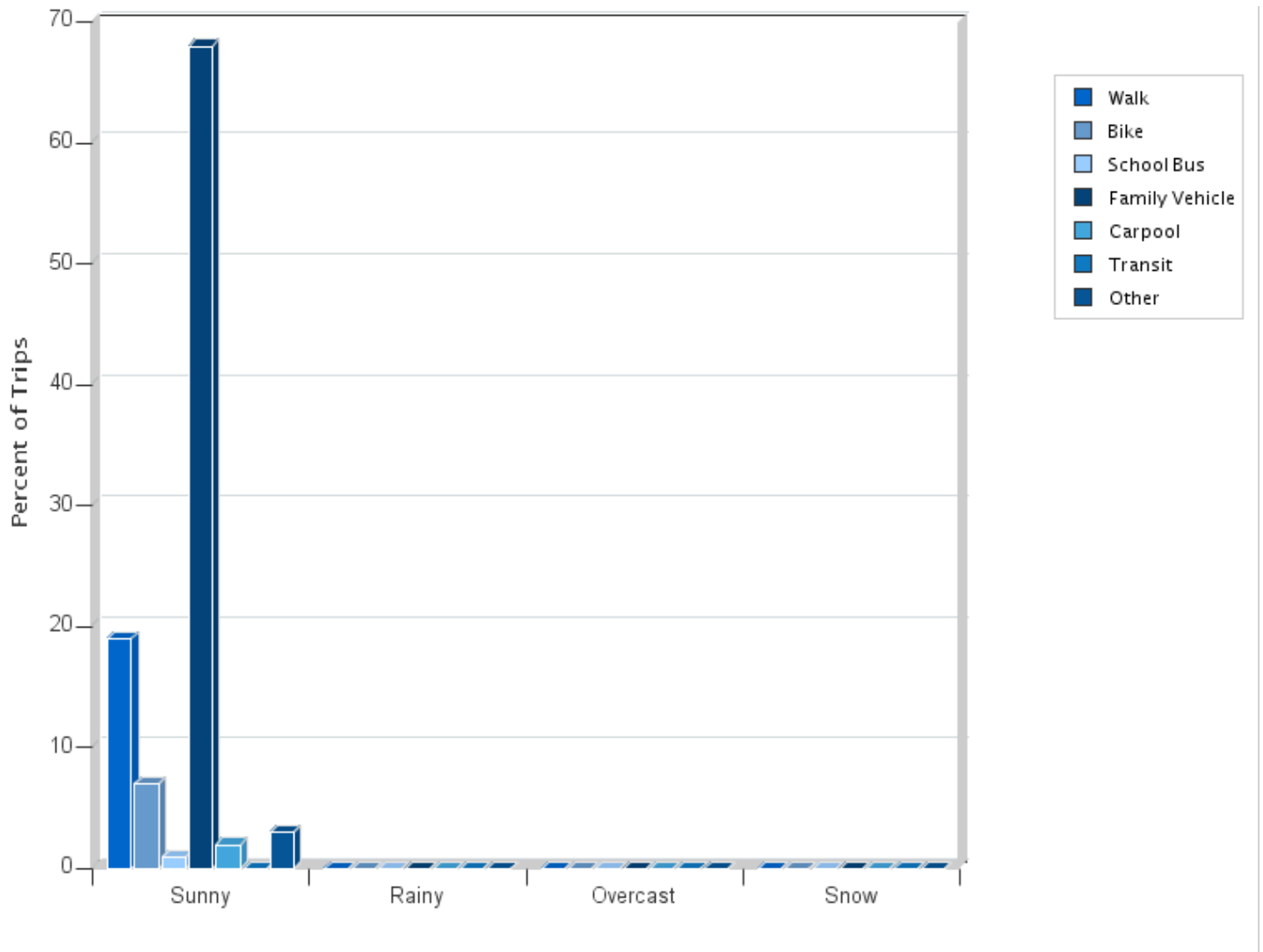


Morning and Afternoon Travel Mode Comparison by Day

	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Tuesday AM	178	13%	8%	0%	76%	2%	0%	1%
Tuesday PM	155	23%	8%	6%	59%	2%	0%	2%
Wednesday AM	176	19%	7%	0%	69%	2%	0%	3%
Wednesday PM	160	26%	6%	0%	63%	1%	0%	4%
Thursday AM	170	11%	8%	0%	78%	1%	0%	2%
Thursday PM	148	20%	9%	0%	64%	3%	0%	3%

Percentages may not total 100% due to rounding.

Travel Mode by Weather Conditions



Travel Mode by Weather Condition

Weather Condition	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Sunny	987	19%	7%	1%	68%	2%	0%	3%
Rainy	0	0%	0%	0%	0%	0%	0%	0%
Overcast	0	0%	0%	0%	0%	0%	0%	0%
Snow	0	0%	0%	0%	0%	0%	0%	0%

Percentages may not total 100% due to rounding.

Parent Surveys

Parent Survey Report: One School in One Data Collection Period

School Name: Pear Park Elementary

Set ID: 15757

School Group: Mesa County Valley School District 51

Month and Year Collected: October 2016

School Enrollment: 0

Date Report Generated: 12/12/2016

% Range of Students Involved in SRTS: Don't Know

Tags: Pre Program Parent Surveys

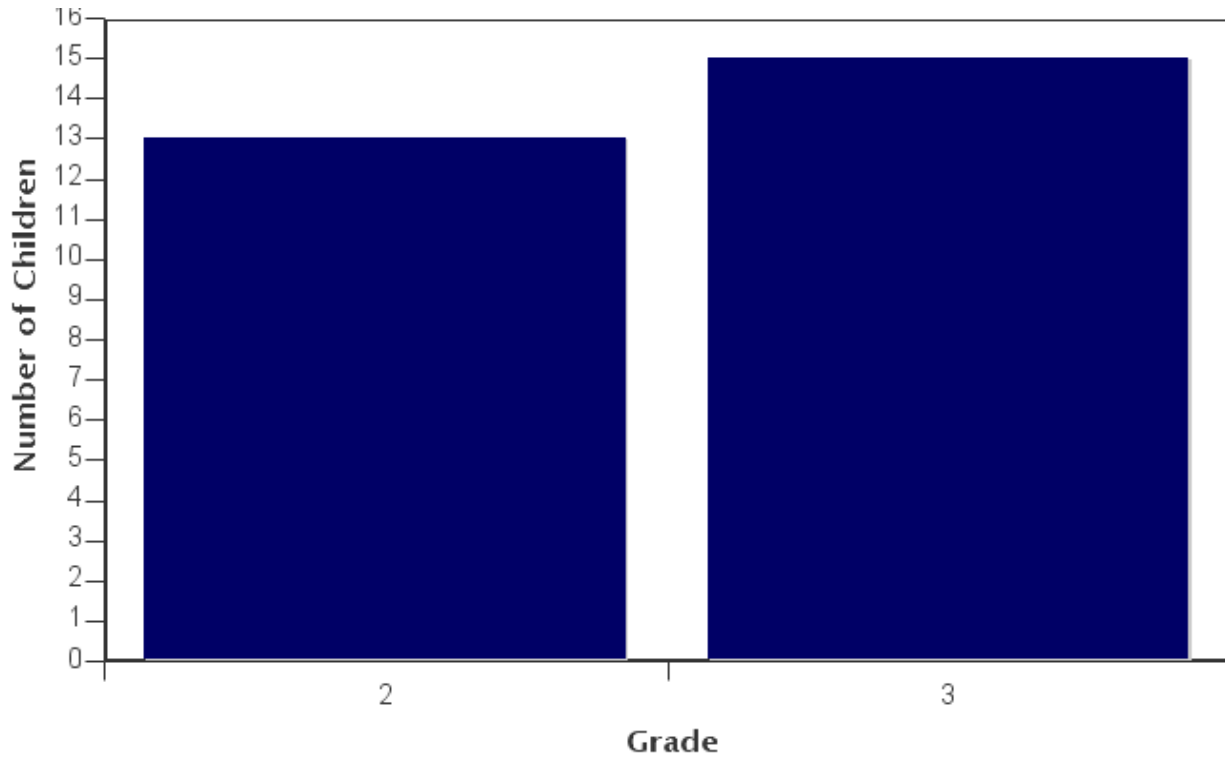
Number of Questionnaires Distributed: 0

**Number of Questionnaires
Analyzed for Report:** 28

This report contains information from parents about their children's trip to and from school. The report also reflects parents' perceptions regarding whether walking and bicycling to school is appropriate for their child. The data used in this report were collected using the Survey about Walking and Biking to School for Parents form from the National Center for Safe Routes to School.

**Because less than 30 questionnaires are included in this report, each graph and table display counts rather than percentage information.

Grade levels of children represented in survey



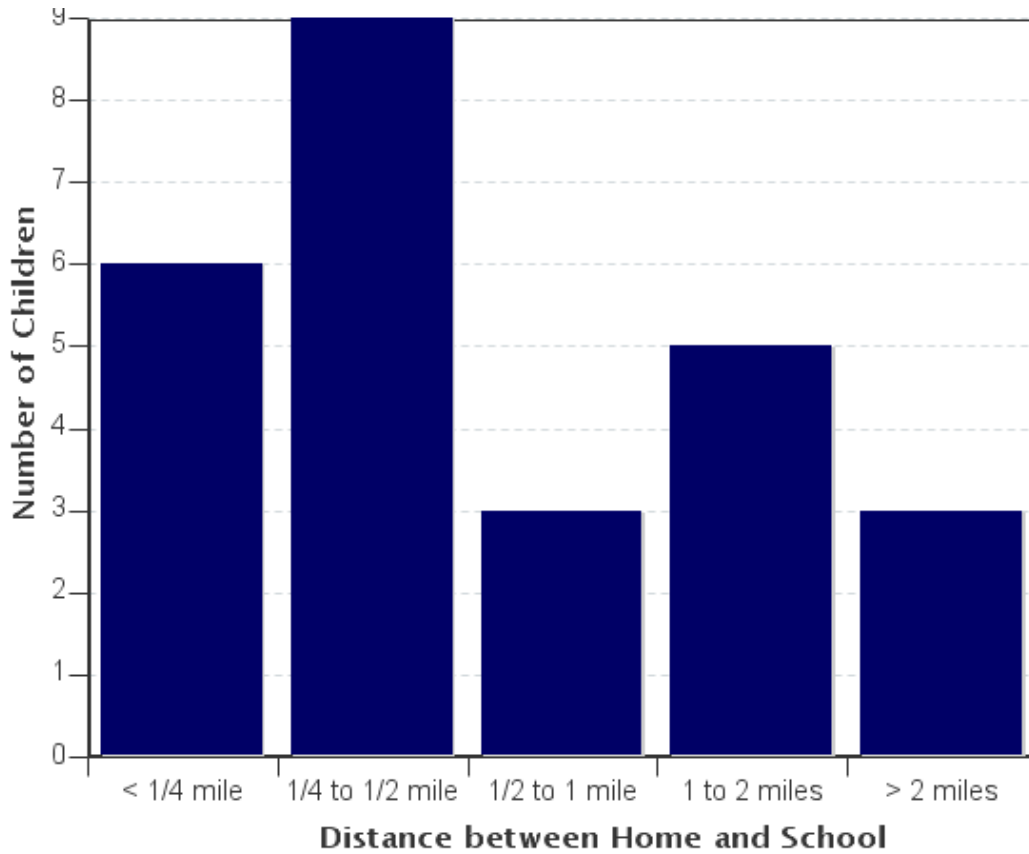
Grade levels of children represented in survey

Grade in School	Responses per grade
	Number
2	13
3	15

No response: 0

Numbers rather than percents are displayed because the number of respondents for this question was less than 30.

Parent estimate of distance from child's home to school



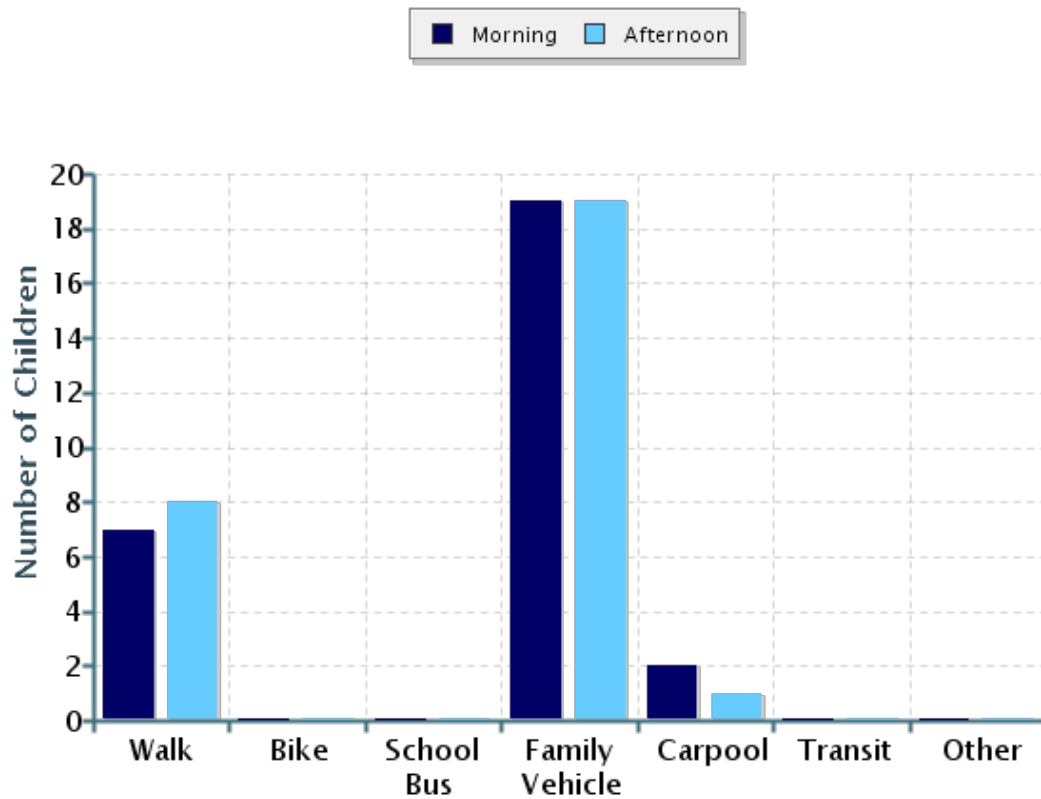
Parent estimate of distance from child's home to school

Distance between home and school	Number of children
Less than 1/4 mile	6
1/4 mile up to 1/2 mile	9
1/2 mile up to 1 mile	3
1 mile up to 2 miles	5
More than 2 miles	3

Don't know or No response: 2

Numbers rather than percents are displayed because the number of respondents for this question was less than 30.

Typical mode of arrival at and departure from school



Typical mode of arrival at and departure from school

Time of Trip	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	28	7	0	0	19	2	0	0
Afternoon	28	8	0	0	19	1	0	0

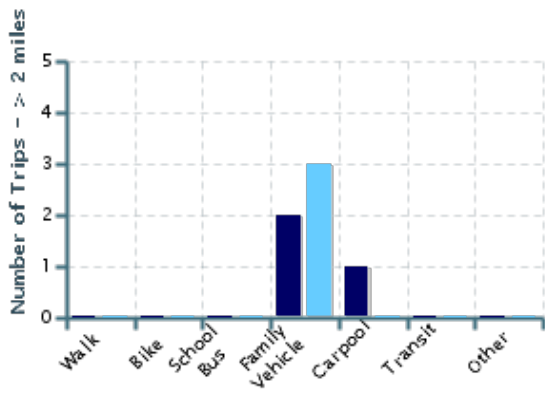
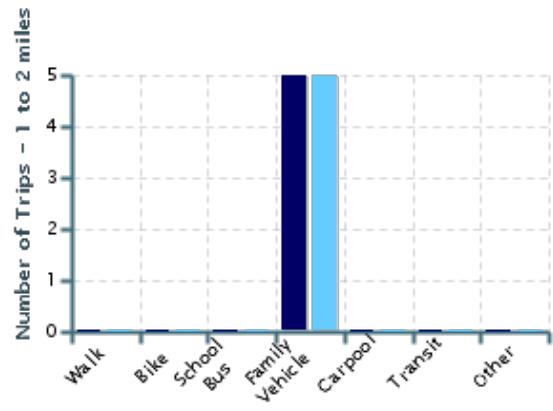
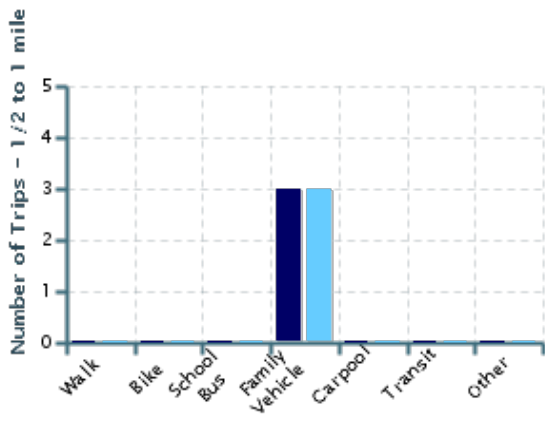
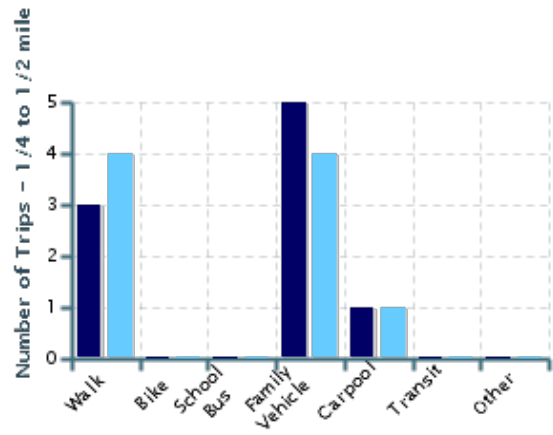
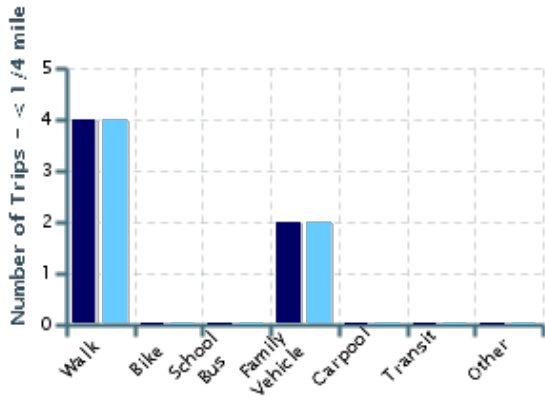
No Response Morning: 0

No Response Afternoon: 0

Numbers rather than percents are displayed because the number of respondents for this question was less than 30.

Typical mode of school arrival and departure by distance child lives from school

■ Morning ■ Afternoon



Typical mode of school arrival and departure by distance child lives from school

School Arrival

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	6	4	0	0	2	0	0	0
1/4 mile up to 1/2 mile	9	3	0	0	5	1	0	0
1/2 mile up to 1 mile	3	0	0	0	3	0	0	0
1 mile up to 2 miles	5	0	0	0	5	0	0	0
More than 2 miles	3	0	0	0	2	1	0	0

Don't know or No response: 2

Numbers rather than percents are displayed because the number of respondents for this question was less than 30.

School Departure

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	6	4	0	0	2	0	0	0
1/4 mile up to 1/2 mile	9	4	0	0	4	1	0	0
1/2 mile up to 1 mile	3	0	0	0	3	0	0	0
1 mile up to 2 miles	5	0	0	0	5	0	0	0
More than 2 miles	3	0	0	0	3	0	0	0

Don't know or No response: 2

Numbers rather than percents are displayed because the number of respondents for this question was less than 30.

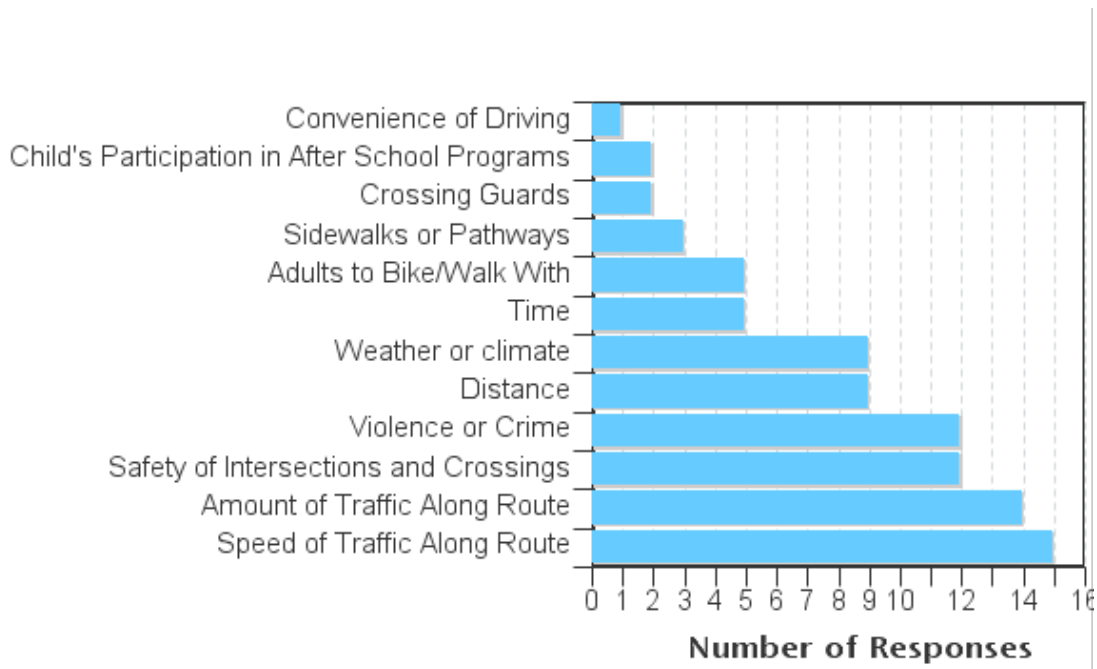
Number of children who have asked for permission to walk or bike to/from school by distance they live from school

Asked Permission?	Number of Children	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
Yes	16	6	5	1	3	1
No	10	0	4	2	2	2

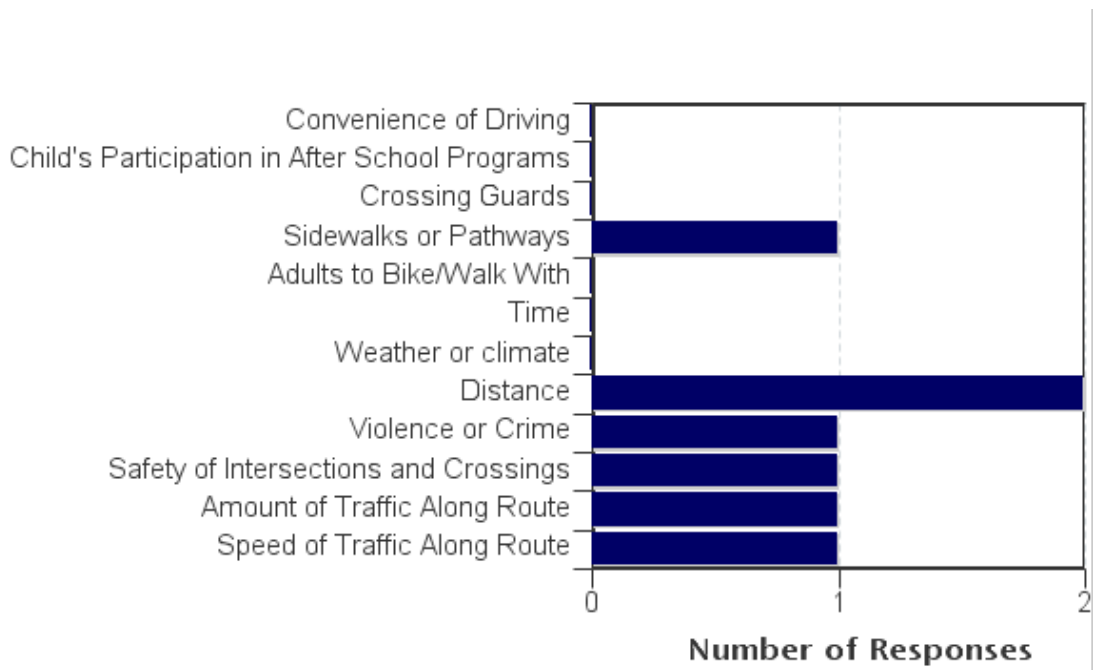
Don't know or No response: 2

Numbers rather than percents are displayed because the number of respondents for this question was less than 30.

Issues reported to affect the decision to not allow a child to walk or bike to/from school by parents of children who do not walk or bike to/from school



Issues reported to affect the decision to allow a child to walk or bike to/from school by parents of children who already walk or bike to/from school



Issues reported to affect the decision to allow a child to walk or bike to/from school by
parents of children who already walk or bike to/from school

Issue	Child does not walk/bike to school	Child walks/bikes to school
Speed of Traffic Along Route	15	1
Amount of Traffic Along Route	14	1
Safety of Intersections and Crossings	12	1
Violence or Crime	12	1
Distance	9	2
Weather or climate	9	0
Time	5	0
Adults to Bike/Walk With	5	0
Sidewalks or Pathways	3	1
Crossing Guards	2	0
Child's Participation in After School Programs	2	0
Convenience of Driving	1	0
Number of Respondents per Category	19	2

No response: 7

Note:

--Factors are listed from most to least influential for the 'Child does not walk/bike to school' group.

Parents' opinions about how much their child's school encourages or discourages walking and biking to/from school

Level of support	Number of children
Strongly Encourages	0
Encourages	7
Neither	19
Discourages	1
Strongly Discourages	0

Parents' opinions about how much fun walking and biking to/from school is for their child

Level of fun	Number of children
Very Fun	4
Fun	10
Neutral	10
Boring	0
Very Boring	0

Parents' opinions about how healthy walking and biking to/from school is for their child

How healthy	Number of children
Very Healthy	12
Healthy	10
Neutral	2
Unhealthy	0
Very Unhealthy	3

Comments Section

SurveyID	Comment
1490732	My kids walk to school but there is so much traffic that do not slow down or pay attention that it's scary.
1490767	Leaving school is a nightmare. People are constantly speeding & not coming to a complete stop in the neighborhood my kids walk through. Rarely do they see kids when crossing.
1490779	Having a school bus would be a big help. I am not comfortable for my child to walk/bike to school. As parents, we work a lot and get exhausted going to and from school.
1490815	I have witnessed several occasions where kids run across the intersection of D 1/2 & 30 1/4 and have almost been hit, cars don't stop, or they drive too fast after the other crosswalk. It's dangerous. I didn't let my kids walk solo because of this !!
1490737	We live on the corner that the proposed sidewalk (crosswalk) should be placed. Several students and parents cross at this intersection unsafely, approximately 30 - 50 students/parents cross here.
1490739	This survey is not for me. I don't feel like kids should walk to school, it is dangerous and it is a pedophile's paradise. I feel like buses should always be an option!