

# Bookcliff Middle School Walking and Biking Audit



**September 21, 2016**

## **Bookcliff Middle School Audit for Walking and Biking**

September 21, 2016

### **Audit Team Members:**

Jim Butterfield, Bookcliff Middle School Principal

Jennifer Fox-Colwell, Safe Routes to School, Mesa County

Callie Fronczak, Safe Routes to School, Mesa County

Jody Kliska, Grant Administrator, Safe Routes to School, Mesa County

Sandy Mallory, Transportation Systems Analyst, City of Grand Junction

The Walk Audit was conducted before school on a typical dark morning with students arriving prior to 7:25 a.m. bell. Per principal Jim Butterfield, this was a typical start to the day especially since they implemented a new arrival routine for parents dropping off students. Personnel were stationed in the following locations for observation:

- Student drop-off/pick-up area
- Sidewalks and bike routes near school
- Bus Zone
- Along 29 1/4 Rd.

Bookcliff Middle School has approximately 580 students, 68.4% of whom qualify for Free or Reduced Lunch. There are five buses that use the area coned off in front of the school for drop off. On this day there were two different bike racks (one on the north side of the school, and one on the south side of the school), which provided a total of 60 places for students to park their bikes. On this day a bike/helmet count was not done.

Principal Jim Butterfield reported in the administration survey that the school does have a team that meets regularly to consider school safety; they work with kids to make safer choices since the school is their destination. Principal Butterfield indicated kids are encouraged to walk to school even with the lack of infrastructure. There is no annual count of how children get to and from school.

The school has teachers act as crossing guards before school. They all come out of the building before school to keep students safe and observant of the school rules. Crossing guards are only on school grounds in the parking lot; there are no crosswalks on 29 ¼ Rd.

### **Observations/comments:**

The following observations and comments regarding the school arrival and departure were made by members of the audit team and the school principal.

### Drop-off/Pick-up Area:

- Student drop-off is segregated by class level, which makes for a smooth process; 7th grade drops off on the west side of the front of the school; 8th grade drops off on the south side of the school; 6th grade drops off on the north side of the school.



*Figure 1: Cones are used to block off bus unloading/loading zone. Also, the truncated dome strips are peeling and need to be replaced in the ramp.*

- Students sometimes come down non-sidewalk side of 29 ¼ Road, then cross to school without the benefit of a crosswalk.

### Parking Lot/Bus Zone:

- Cars/buses sometimes do not abide the “Right Turn Only” sign at the front of the school on the west side.
- Cones are used to block off bus unloading zone; after cones are removed parents utilize handicap spots in front of school for last minute drop-offs (See Figures 1 and 2).



*Figure 2: Cones being removed for the arrival of buses loaded with students.*

#### Walkers/Bikers:

- No sidewalks on the west side of 29 ¼ Rd.
- Bike lane on east side of 29 ¼ Rd.
- No bike lanes on Orchard Ave. from 29 Rd to 29 ½ Rd.
- Kids utilize crosswalks on campus and abide by school rules.
- The handicap ramps need the truncated domes replaced, they present a tripping hazard (See Figure 1).
- Kids came into south side bike parking area by riding down the middle or wrong side of the entrance road.
- The south side bike parking area cannot be viewed from a building window.
- Kids ride bike on sidewalk.

#### Intersection and Traffic Control:

- No parking on west side of 29 ¼ Rd.
- Stop sign needs replaced at 29 1/4 Rd. and Orchard Ave. because it is weathered.

**Suggested remedies:**

Location of Interest	Obstacle	Proposed Solutions	Responsible Parties
General	Information sharing of available resources (Safe Routes to school maps and WebApp); promotional ideas about getting kids to walk and bike to school	Link school website with pertinent information including SRTS maps.	School administration, SRTS personnel, parent involvement groups, school safety teams.
General	Parents and kids may not grasp the benefits of healthy transportation to school	Program to encourage walking and biking for health and independence.	School Administration
General	Inadequate signs and vests for crossing guard and staff who help pedestrians and cyclists safely cross lanes of traffic	Crossing guards need Class A, Level 2 vests and bigger signs	SRO; District 51 Administration
Orchard & 29 1/4 Rd.	Bike Lanes	Add Bike Lanes on Orchard Avenue; complete 29 1/4 Rd	City of Grand Junction, Mesa County
ADA Ramps	Truncated domes are peeling, present a tripping hazard	Replace and revamp ADA ramps along with truncated domes	District 51, City of Grand Junction
29 1/4 Rd & Sandra	No crosswalks	Install crosswalks & signs	City of Grand Junction
General	Tarnished signage	Replace stop sign at 29 1/4 Rd. & Orchard Ave.	City of Grand Junction - Replaced signage January 2017.
General	Plant Overgrowth	Landscape	District 51

## 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

## Bookcliff Middle School Walk Route Map Summary

	1-Mile Radius ~ 469 street crossings		2-Mile Radius ~856 street crossings		3-Mile Radius ~All within 2 miles	
	Length	Percent	Length	Percent	Length	Percent
<b>Least Favored - 4</b>	11.7	17%	25.6	21%	-	-
<b>Not Favored - 3</b>	22.9	33%	22.0	18%	-	-
<b>Favored - 2</b>	27.3	39%	56.3	47%	-	-
<b>Most Favored - 1</b>	7.6	11%	16.9	14%	-	-
	69.5	100%	120.7	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

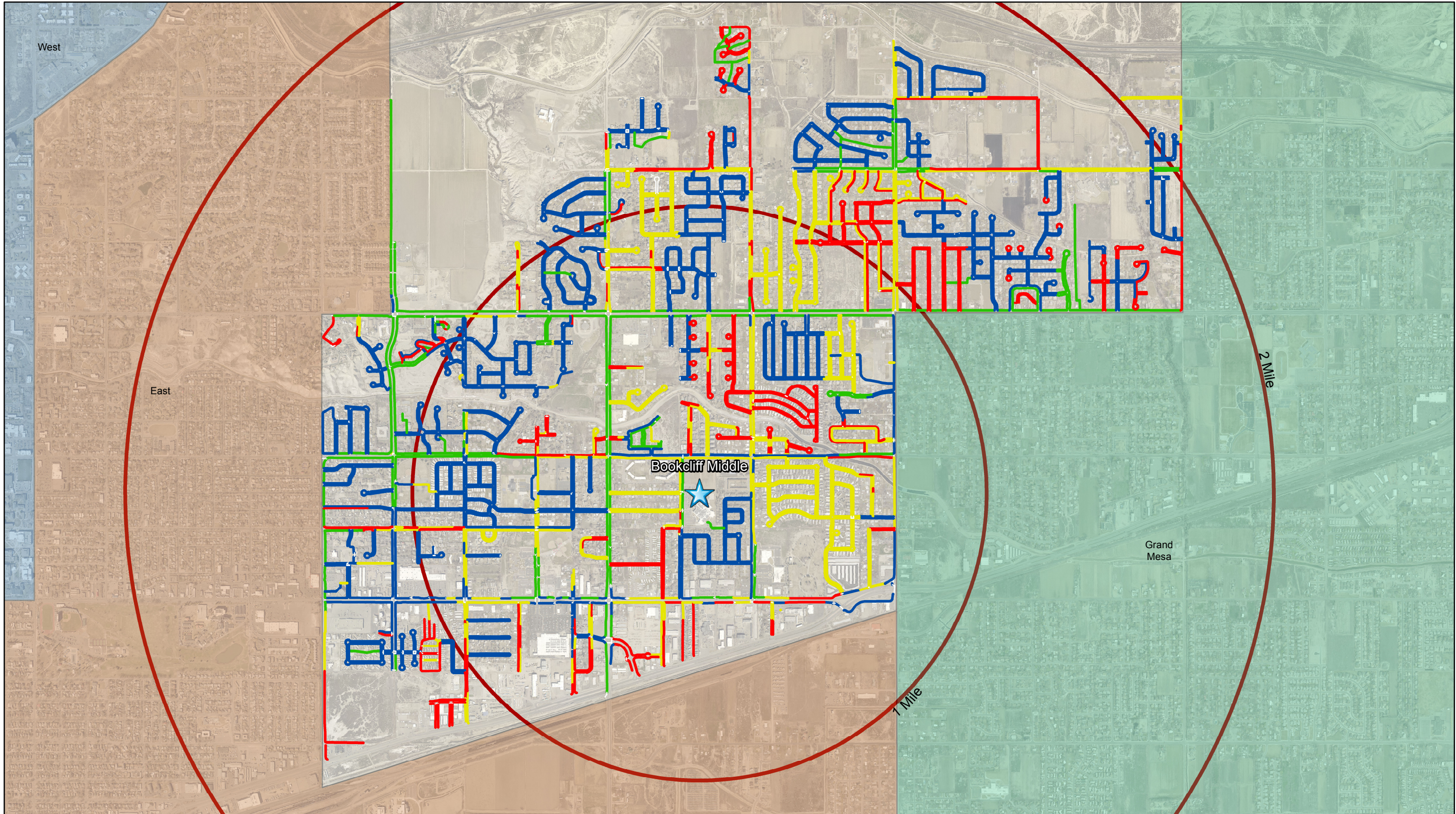
Least favored route. Pedestrians and bicyclists must use the vehicle lanes to walk or ride. (No sidewalk and little or no space beyond the white edge line on the side of the road.)



# SRTS 2016 - Bookcliff Middle Path Ratings within 1 & 2 Mile Radii

**Legend**

 Most favored	 Not favored	 Crosswalk	 1 & 2 Mile Radii
 Favored	 Least favored		



# Classroom Tallies

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

**School Name:** Bookcliff Middle

**Set ID:** 22430

**School Group:** Mesa County Valley School District 51

**Month and Year Collected:** October 2016

**School Enrollment:** 0

**Date Report Generated:** 01/03/2017

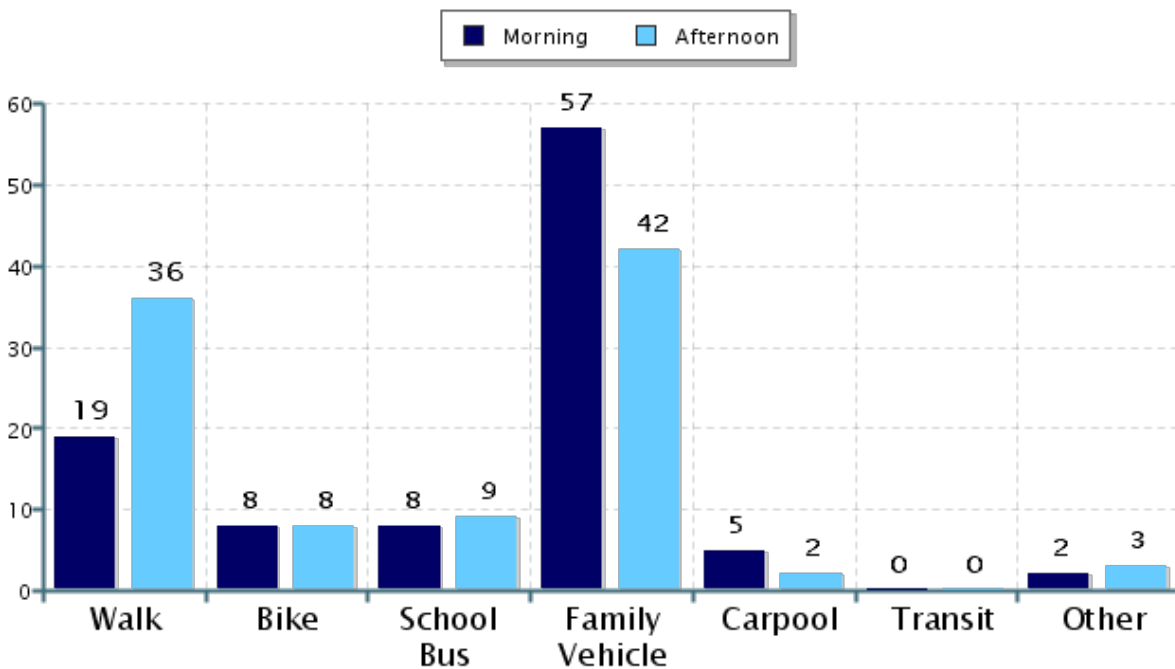
**% of Students reached by SRTS activities:**

**Tags:** Safe Routes To School

**Number of Classrooms  
Included in Report:** 7

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



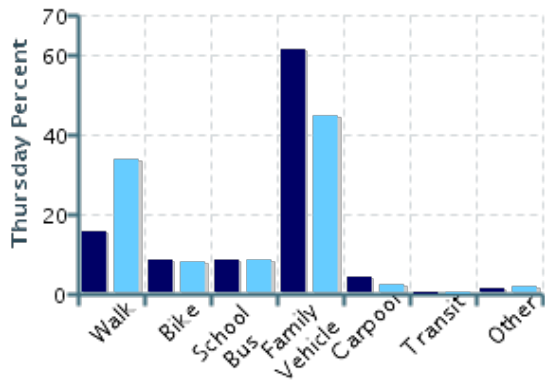
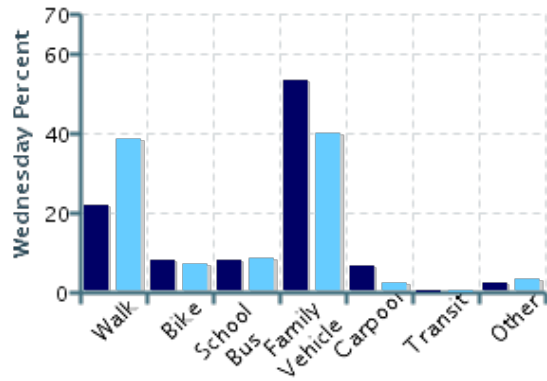
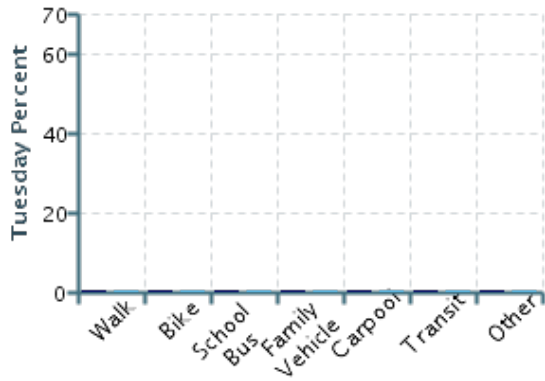
## Morning and Afternoon Travel Mode Comparison

	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Morning	367	19%	8%	8%	57%	5%	0%	2%
Afternoon	372	36%	8%	9%	42%	2%	0%	3%

Percentages may not total 100% due to rounding.

## Morning and Afternoon Travel Mode Comparison by Day

■ Morning ■ Afternoon

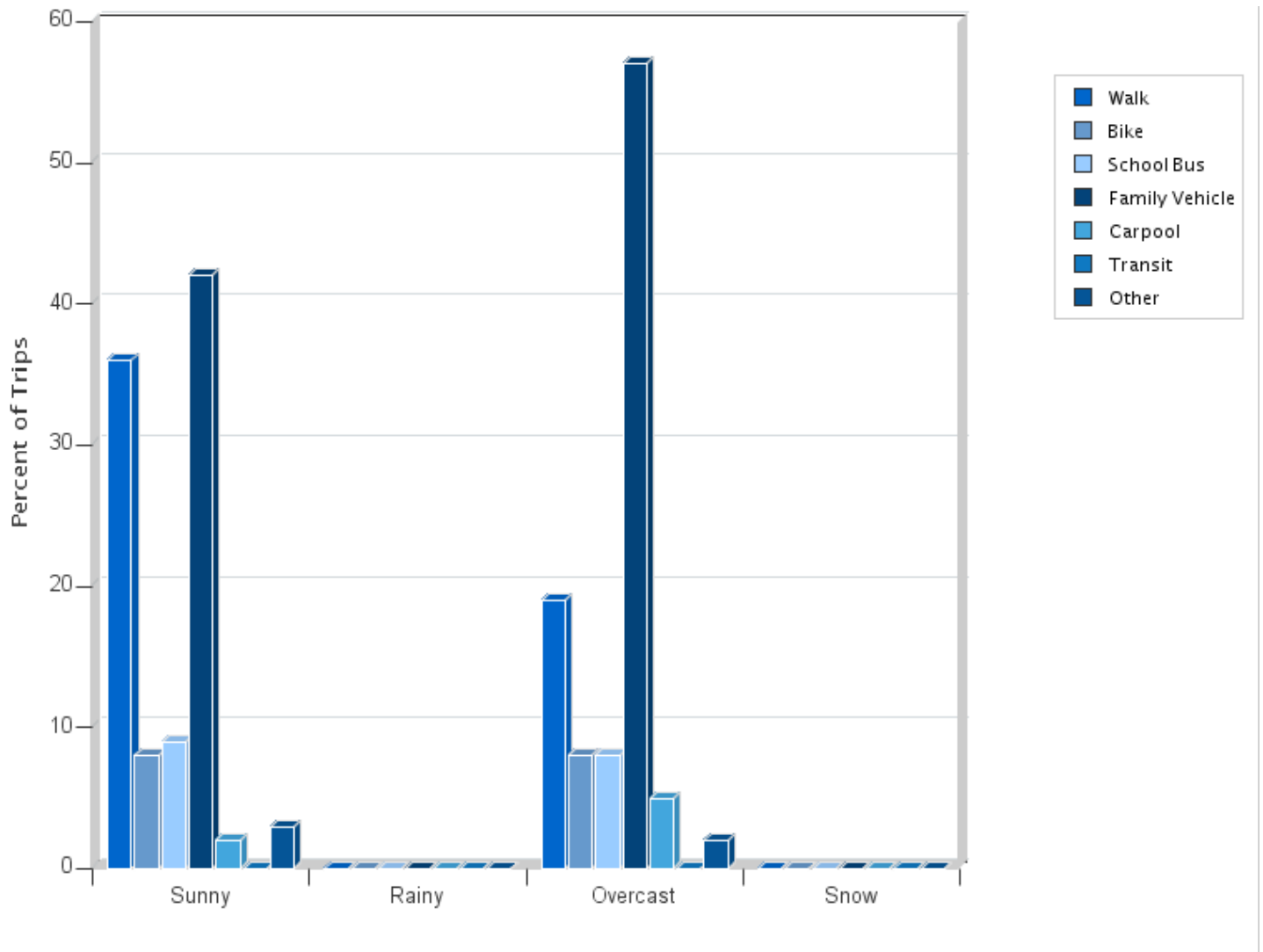


## Morning and Afternoon Travel Mode Comparison by Day

	Number of Trips	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Tuesday AM		0%	0%	0%	0%	0%	0%	0%
Tuesday PM		0%	0%	0%	0%	0%	0%	0%
Wednesday AM	177	22%	8%	8%	53%	7%	0%	2%
Wednesday PM	179	39%	7%	8%	40%	2%	0%	3%
Thursday AM	190	16%	8%	8%	62%	4%	0%	2%
Thursday PM	193	34%	8%	9%	45%	3%	0%	2%

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	372	36%	8%	9%	42%	2%	0%	3%
Rainy	0	0%	0%	0%	0%	0%	0%	0%
Overcast	367	19%	8%	8%	57%	5%	0%	2%
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:** Bookcliff Middle

**Set ID:** 15650

**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

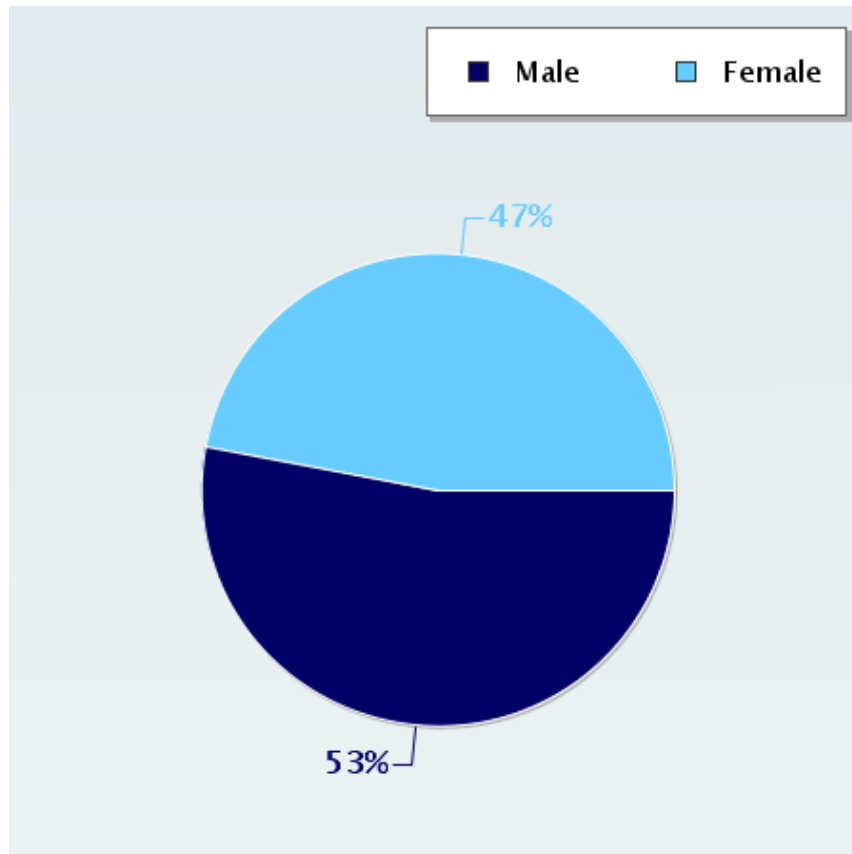
**Tags:** Safe Routes To School

**Number of Questionnaires Distributed:** 0

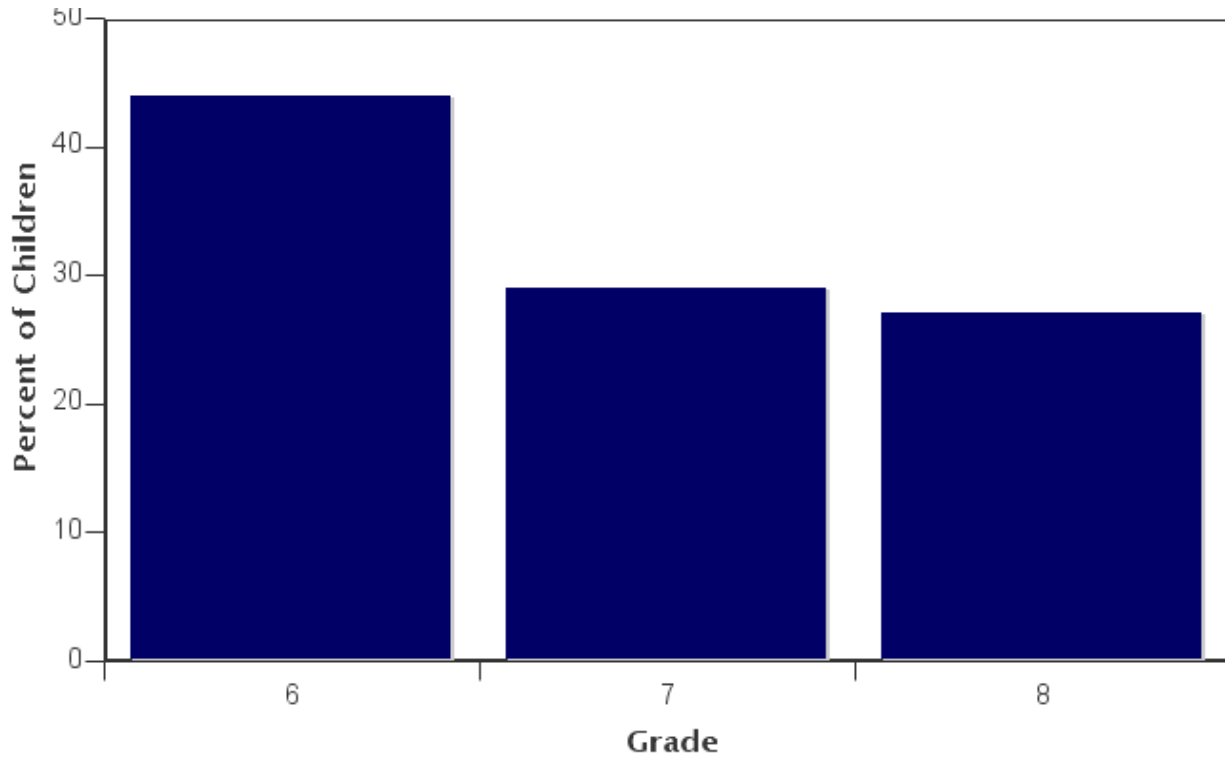
**Number of Questionnaires Analyzed for Report:** 60

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.

Sex of children for parents that provided information



Grade levels of children represented in survey



Grade levels of children represented in survey

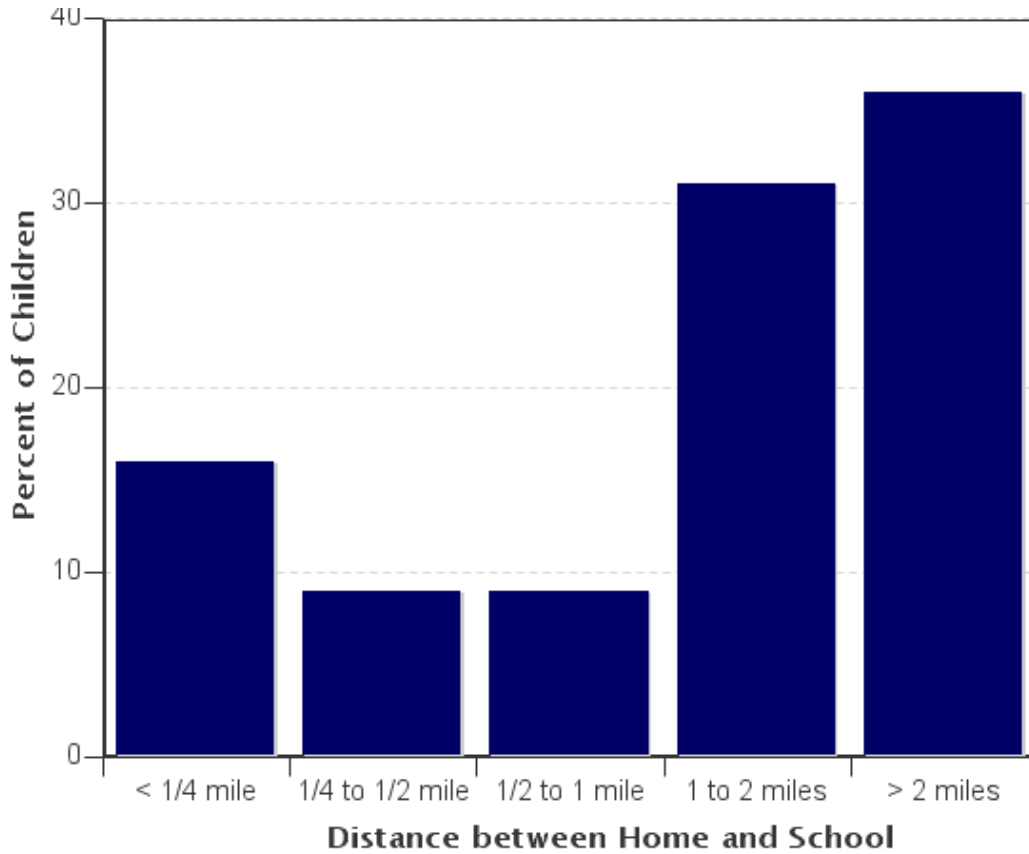
Grade in School	Responses per grade	
	Number	Percent
6	26	44%
7	17	29%
8	16	27%

No response: 0

Percentages may not total 100% due to rounding.



Parent estimate of distance from child's home to school

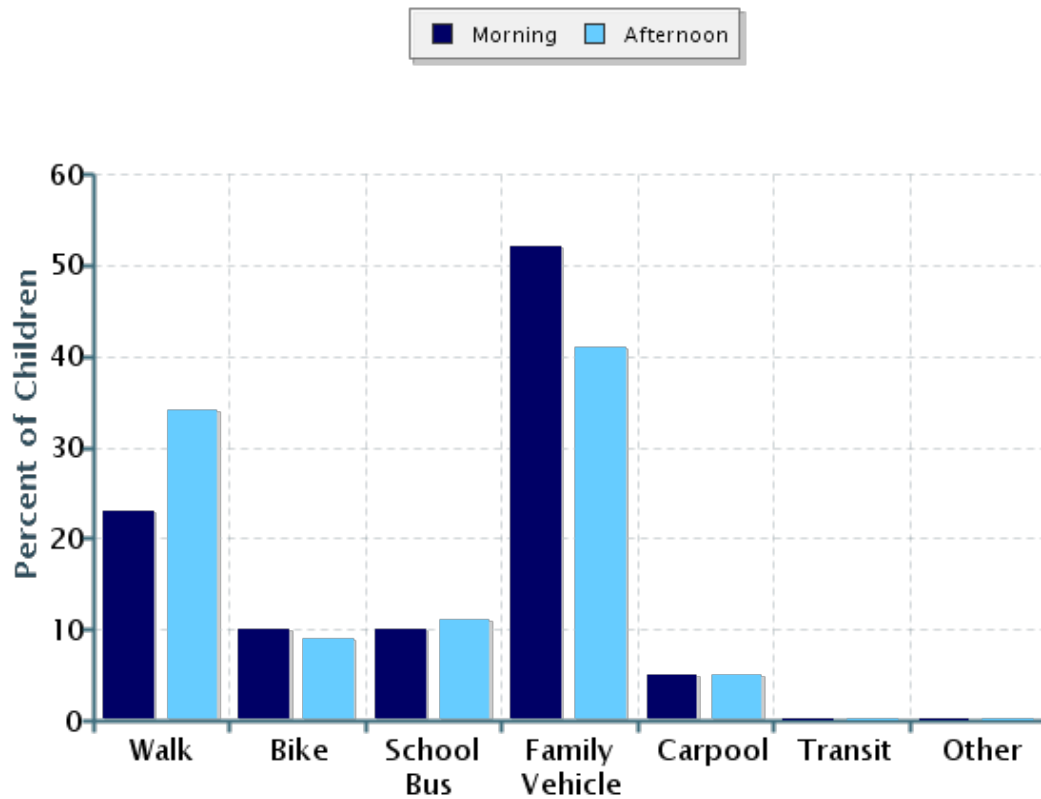


Parent estimate of distance from child's home to school

Distance between home and school	Number of children	Percent
Less than 1/4 mile	9	16%
1/4 mile up to 1/2 mile	5	9%
1/2 mile up to 1 mile	5	9%
1 mile up to 2 miles	18	31%
More than 2 miles	21	36%

Don't know or No response: 2  
 Percentages may not total 100% due to rounding.

### 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	60	23%	10%	10%	52%	5%	0%	0%
Afternoon	56	34%	9%	11%	41%	5%	0%	0%

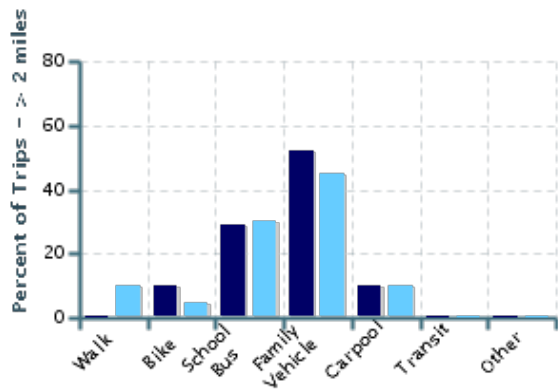
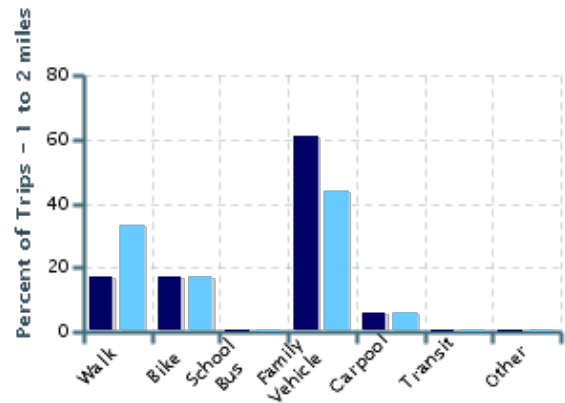
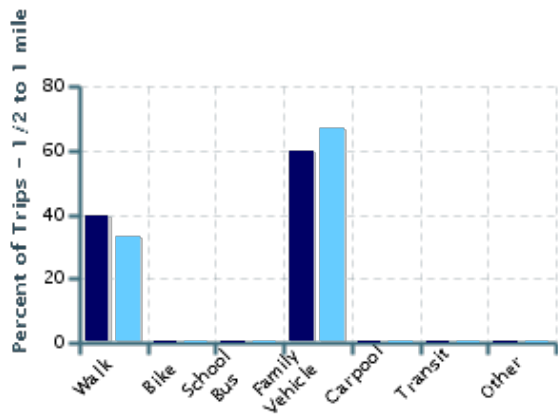
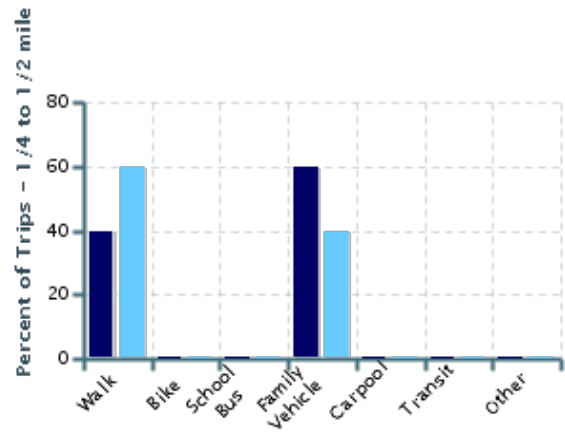
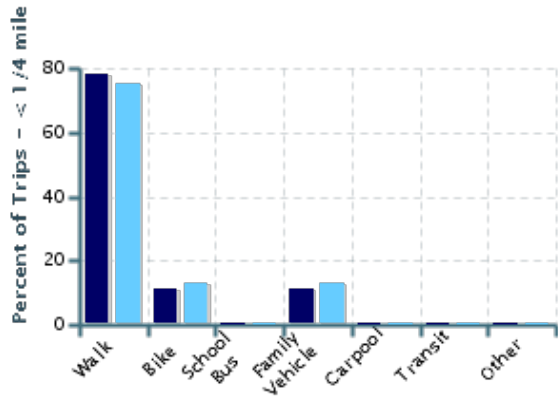
No Response Morning: 0

No Response Afternoon: 4

Percentages may not total 100% due to rounding.

# 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	9	78%	11%	0%	11%	0%	0%	0%
1/4 mile up to 1/2 mile	5	40%	0%	0%	60%	0%	0%	0%
1/2 mile up to 1 mile	5	40%	0%	0%	60%	0%	0%	0%
1 mile up to 2 miles	18	17%	17%	0%	61%	6%	0%	0%
More than 2 miles	21	0%	10%	29%	52%	10%	0%	0%

Don't know or No response: 2

Percentages may not total 100% due to rounding.

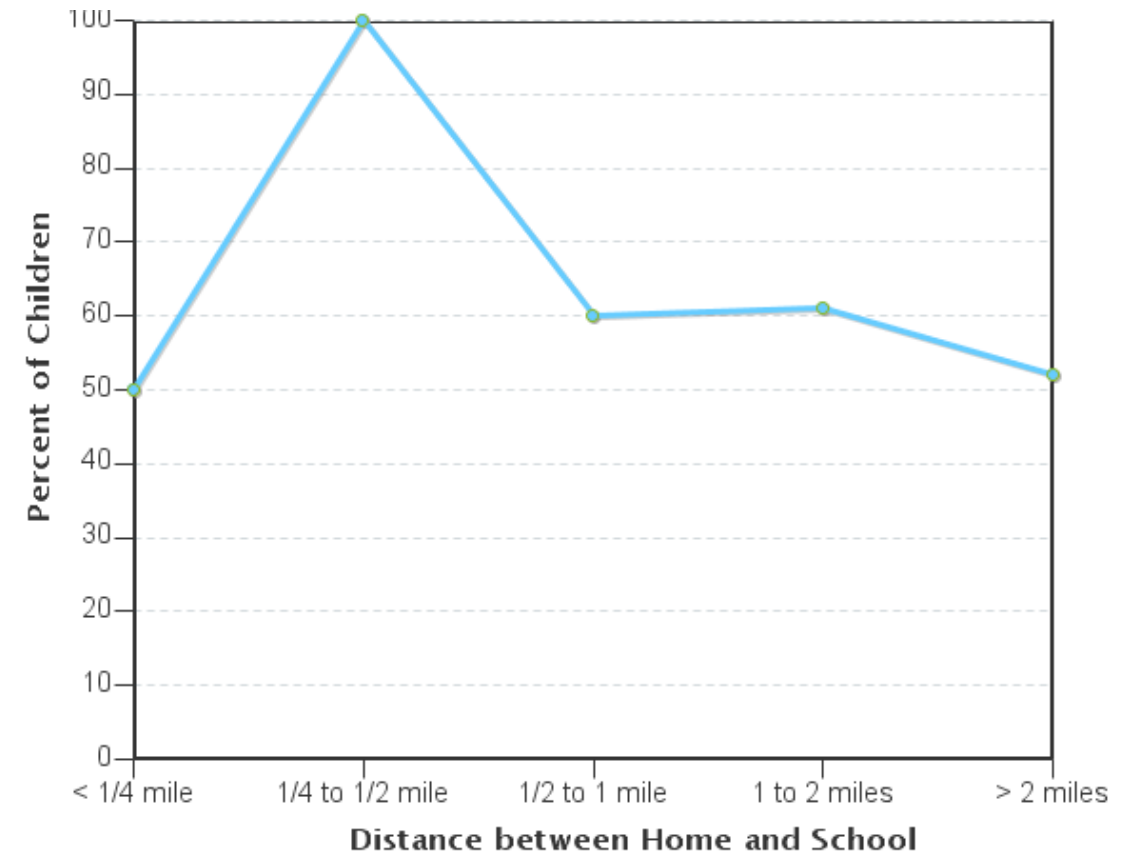
### School Departure

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	8	75%	13%	0%	13%	0%	0%	0%
1/4 mile up to 1/2 mile	5	60%	0%	0%	40%	0%	0%	0%
1/2 mile up to 1 mile	3	33%	0%	0%	67%	0%	0%	0%
1 mile up to 2 miles	18	33%	17%	0%	44%	6%	0%	0%
More than 2 miles	20	10%	5%	30%	45%	10%	0%	0%

Don't know or No response: 6

Percentages may not total 100% due to rounding.

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

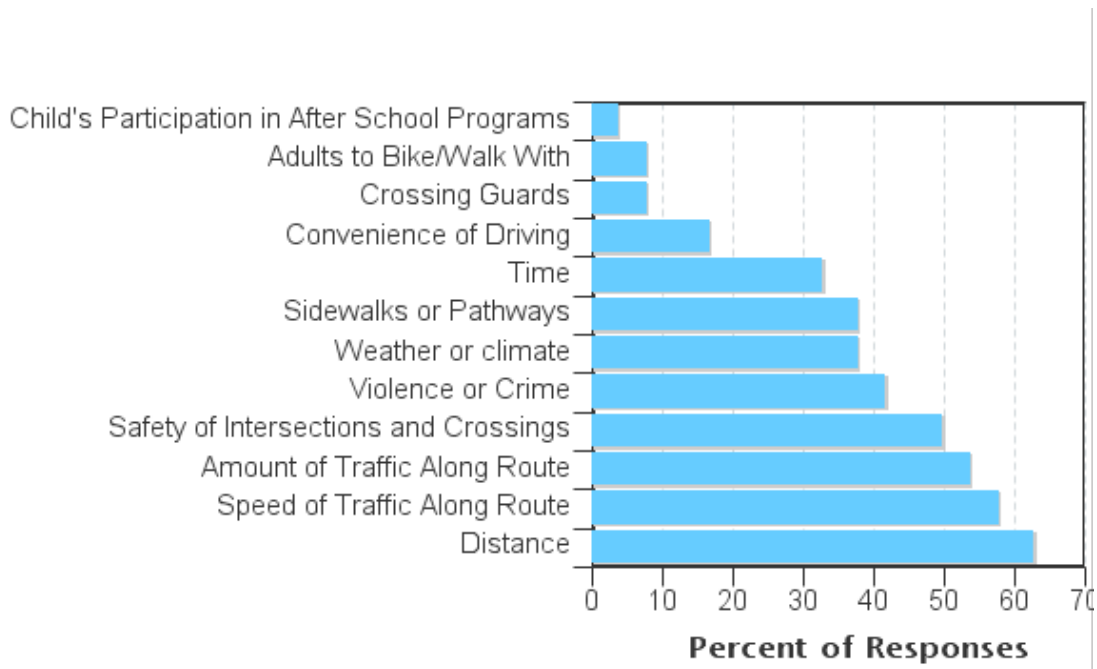


Percent of children who have asked for permission to walk or bike to/from school by distance they live from school

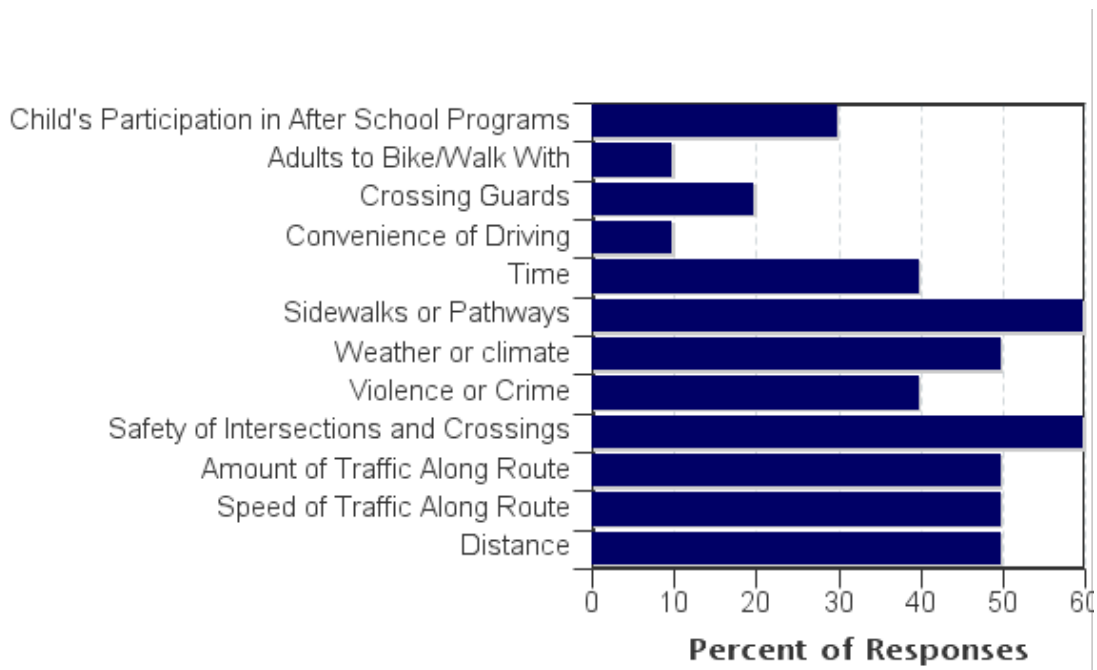
Asked Permission?	Number of Children	Less than 1/4 mile	1/4 mile up to 1/2 mile	1/2 mile up to 1 mile	1 mile up to 2 miles	More than 2 miles
Yes	34	50%	100%	60%	61%	52%
No	23	50%	0%	40%	39%	48%

Don't know or No response: 3  
 Percentages may not total 100% due to rounding.

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
Distance	63%	50%
Speed of Traffic Along Route	58%	50%
Amount of Traffic Along Route	54%	50%
Safety of Intersections and Crossings	50%	60%
Violence or Crime	42%	40%
Weather or climate	38%	50%
Sidewalks or Pathways	38%	60%
Time	33%	40%
Convenience of Driving	17%	10%
Crossing Guards	8%	20%
Adults to Bike/Walk With	8%	10%
Child's Participation in After School Programs	4%	30%
<b>Number of Respondents per Category</b>	<b>24</b>	<b>10</b>

No response: 26

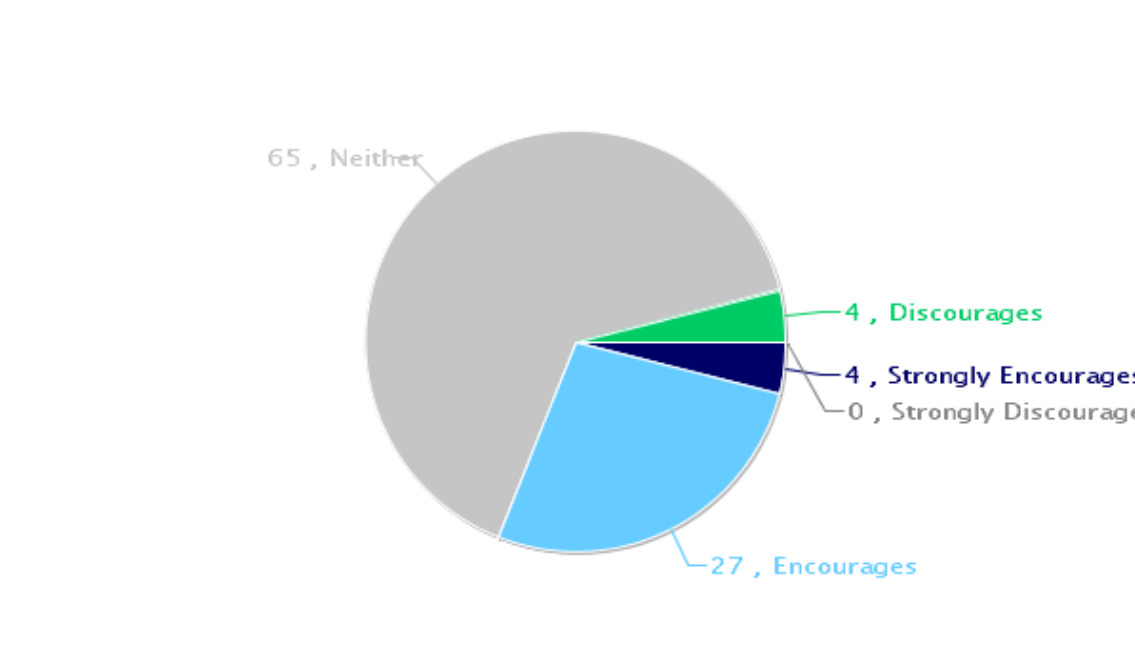
Note:

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

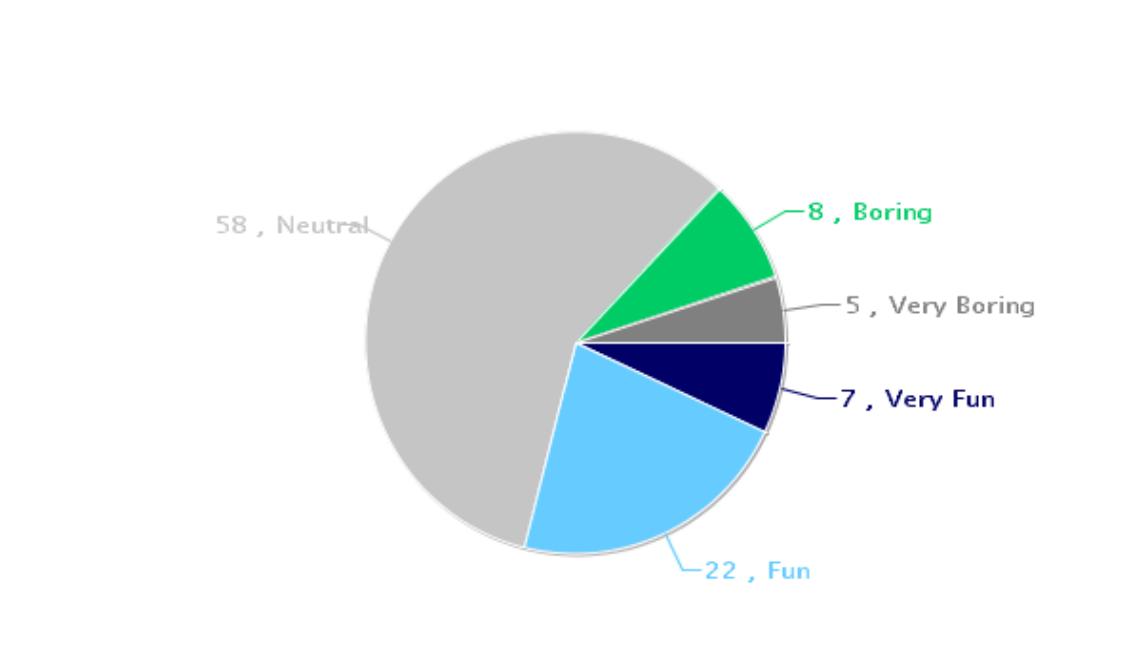
--Each column may sum to > 100% because respondent could select more than issue

--The calculation used to determine the percentage for each issue is based on the 'Number of Respondents per Category' within the respective columns (Child does not walk/bike to school and Child walks/bikes to school.) If comparing percentages between the two columns, please pay particular attention to each column's number of respondents because the two numbers can differ dramatically.

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

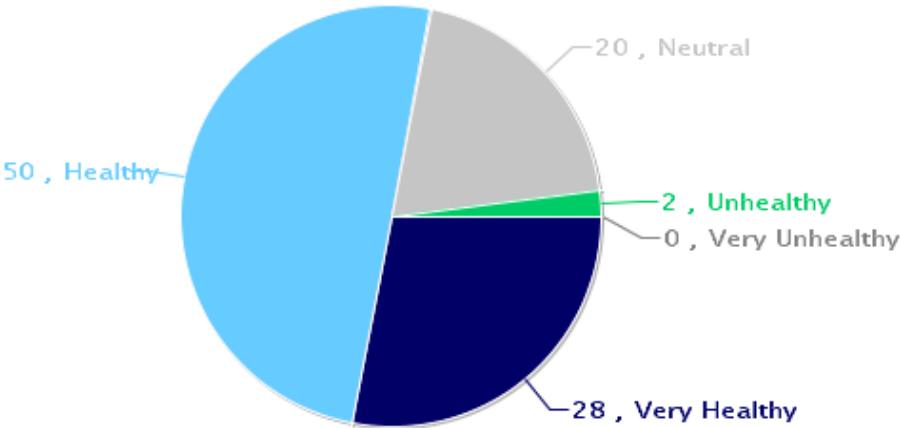


Parents' opinions about how much fun walking and biking to/from school is for their child





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



## Comments Section

SurveyID	Comment
1488007	We live in Fruita and attend Bookcliff so this is not feasible.
1488021	We live 10 miles from school so he sometimes walks home with a friend. It would be nice to have other options. We have tried public transportation, but it takes 90 min to get home.
1488041	We live across the street from the school.
1488764	We are using school of choice. We don't really have the option of walking or biking due to distance from our home.
1487980	We live more than 6 miles away. My child does not walk/bike to school because of distance.
1488037	Due to my child's safety crossing two busy streets in the dark we made the tough decision to be a one income family. The bus would have prevented that!
1488052	The fact that there are not any sidewalks on Orchard from 28 3/4 rd to 29 Rd scares me to death. Knowing that a distracted driver could hit kids by veering right just a small amount. Because that section of Orchard has no room on sides. Very little room.
1488057	I only allow child to walk/ride when able to do it in a group with others.
1488107	Middle school starts so early my child would be walking to school in the dark.
1488118	Need safer crosswalks for students before and after school.
1488761	I do not like the fact that there are sex offenders that live in route to the school. If I drive my kids the more likely they are to stay safe
1488768	The crosswalk on 29 Road needs flashers. A lot of vehicles do not stop.
1488101	We are close to D/A. But far from Bookcliff. Too far to bike.
1488117	No comments.
1488128	I'm worried about the winter months as the roads are not very bike friendly and to cross Patterson anytime is a little scary.
1487993	My concern is the stretch of Orchard between 28 3/4 Rd and 29 Rd. There are no sidewalks, no safe place to walk on that stretch. I drive her to school in the morning b/c I can, she has to meet me at Nisley, b/c I work there until 3:45.
1488774	Si la escuela estuviera cerca de mi casa a mi me gustaria que mis hijos caminaran cuando el clima y circunstancias fueran adecuadas.
1488043	I think students should be able to ride a bus and have bus transportation if their school is 1 1/2 miles away especially when its winter months.
1488115	There is only sidewalks for about 1/8 of a mile that my kid has to walk. School buses drive by our house that he cannot ride.