

Clifton Elementary School Walking and Biking Audit



September 29, 2016

Clifton Elementary School Audit for Walking and Biking

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Audit Team Members:

Kristen Ashbeck, Senior Planner, City of Grand Junction

Erik Borschel, Engineering Intern, Mesa County

Dean Bressler, Senior Transportation Planner, Mesa County

Brooke, Parent Volunteer

Tammara Dickerson, Family Center Coordinator, Clifton Elementary School

Vicki Fay, Assistant Principal, Clifton Elementary School

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

Callie Fronczak, Safe Routes to School, Mesa County

Steve Tomlinson, CMU Engineering Intern, Safe Routes to School, Mesa County

Discussion:

The Clifton Elementary School walking and biking audit took place on Thursday, September 29th, at 3:15 pm, for the afternoon departure from school. This was a fairly typical day, except that there may have been a slightly smaller number of cyclists due to rain earlier in the day. Principal Yogi Cherp participated in the pre-audit preparation, but was not able to attend the audit.

Audit team members fanned out around the school to observe the flow of bus and car traffic, with an eye to the safety and convenience of walking and biking from school.

The audit team members were stationed to observe:

- The pick-up and drop-off zone
- The bus loop
- Walkers and bikers in the front and the back of the school
- The crosswalk on F Road/US 6 in front of the school



Figure 1: F Road/US 6 lacks sidewalks and bike lanes.

- The crosswalk to go from the school to the parking lot, crossing the pick-up/drop-off zone
- F Road/US 6 to the east and the west

There are no sidewalks, and pedestrians and cyclists are forced to share the same roadway space with vehicles traveling on Highway 6.

Clifton Elementary School has about 413 students, 92.3% of whom qualify for Free or Reduced Lunch. There are very few walkers or bikers. On this day, of 34 bike rack



Figure 2: The road in front of Clifton Elementary School is very busy, but does have a traffic signal.

spots, two were used by bikes, one by a Razor/scooter. Tammara Dickerson, Family Center Coordinator, reports that there are typically about 10 bikes on the school's single bike rack, but that rain probably kept that number low on this day. Despite the rain, there were 11 walkers who crossed at the crosswalk, and 16 other pedestrians who stayed on the north side of F Road/US 6 and had parents who walked them home. There are six buses and two special education buses.

While the school does not have a formal Traffic Safety Team, administrators and members of the school community have identified dangers that hinder the growth of healthy transportation to Clifton Elementary. The principal's concerns include the lack of sidewalks along F

Road/US 6 and the forced funneling of students into one crosswalk. After numerous studies and community involvement meetings, Mesa County has plans to make arrival and departure from Clifton Elementary safer. However, these public works projects are not currently funded, and it is unclear when the improvements could be made. In the debriefing meeting after the audit, Mesa County's Dean Bressler updated the Clifton Elementary administration on the proposed (but as yet-unfunded) improvements to US 6, which would significantly enhance the safety of biking and walking to Clifton Elementary School.

Without those improvements, most students arrive and leave Clifton Elementary by car. Drivers enter the school lot on F Road/US 6, at the single point of ingress and egress. They are supposed to follow the pick-up/drop-off route around the perimeter of the parking lot, stopping only to pick up their students in front of the school. Many drivers do not do this, though; they park in the lot, walk up to get their students, then walk back through the parking lot to their cars. For these parked cars to exit the lot, they must merge into a single lane from four parking lot lanes.



Figure 3: Pick-up and drop-off.

There is no walkway from the school to US 6/F Road, pedestrians and cyclists *must* walk through the parking lot to leave school from the front. Some walk along the west end of the parking lot, in front of the parking bumpers, staying mostly safe from the moving cars. Others walk in the path of the merging and exiting traffic, behind cars in parking spots that reverse to pull out and join the exiting lane of traffic.

The school uses two crossing guards. One is stationed in the parking lot just in front of the school to allow kids and adults to cross the line of pick-up traffic - cars that do not park, but drive to the pick-up spot. The other is stationed just south of the school on US 6/F Road, where there is a traffic signal and a crosswalk.

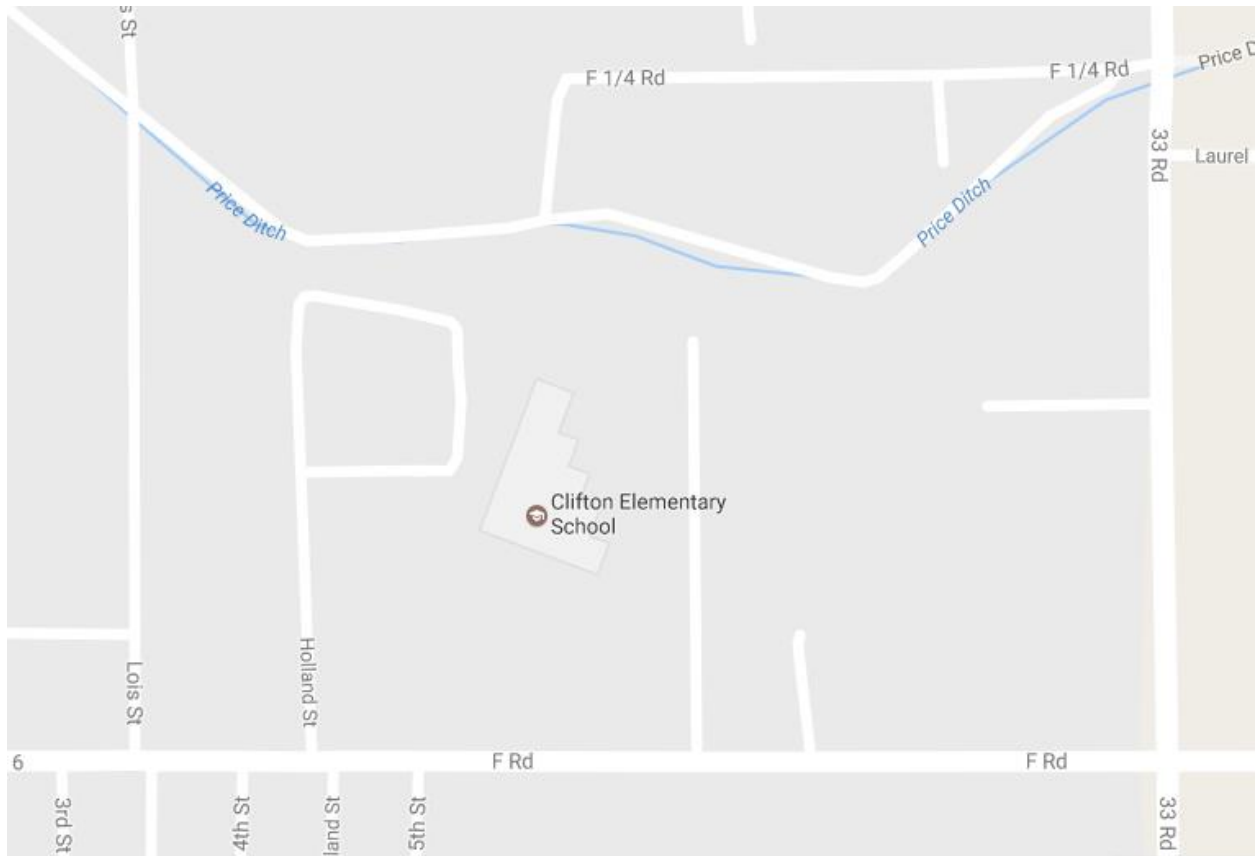


Figure 4: Street network surrounding Clifton Elementary School.

Some kids live in a neighborhood north of the school, and they are prime candidates for walking and biking to school. Driving to school means a half-mile drive around, and yet the school is very close as the crow flies. Several families who live in this neighborhood have their kids walk across private property, since the current resident allows it. To do so, they have to cross canal property as well. There was some discussion in the past of formalizing this arrangement, and setting up an easement, and this should be considered now while there is a property owner who may be open to an easement. On this day, 15-20 kids left school on foot this way. They left the northwest corner of school property, crossed the underground Price Ditch (which is a dirt path at this point), crossed private property to get onto F ¼ Rd and into their neighborhood. A mother volunteered to join the walk audit team to make sure that the team saw this current use and opportunity.

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 Biking:

- Busy road to south of school (US 6/F Road).
- No sidewalks exist on the south or the north sides of the school.
- South of the school barriers to visibility and walkability include utility poles, plant overgrowth, ditches and signs.
- Some students who live north of the school are allowed to cross private property to get to and from school. They face a difficult route including a narrow gate, dogs on private property, and mud.
- Bike parking is not visible from school window, not fenced and not in good location. Bike parking is insufficient according to the 1 spot per 5 student rule of thumb, but is currently underutilized.



Figure 5: Narrow gate at the back of school, where kids cross private property to get to their neighborhood north of the school.

Pick-up/Drop-off:

- In the parking lot, cars back into oncoming flow of traffic.
- Parking aisle is shared by cars and pedestrians.



Figure 6: Ditch road behind school that children cross once they pass through the narrow gate.

Intersection and Traffic Control:

- School Zone on Highway 6
 - School zone on US 6/F Road is posted as 25 mph.
 - School zone signs easily missed due to visual clutter. School zone traffic devices are difficult to see.
- US 6/F Road
 - High volumes of vehicle and pedestrian traffic at the crossing location.

- Traffic past the school is usually busy.
- Pedestrian Crossing of US 6/F Road
 - Pedestrian walk signals are limited to front of school, main crossing.
 - Only one marked crosswalk.
- Sidewalks
 - No sidewalks on US 6/F Road east of school, either north or south side of road.
 - Shoulder, if present, is uneven, muddy, and full of holes.
 - No curb and gutter from school entrance eastbound to 33 Road.
 - No curb ramp on school side of highway.



Figure 7: Crossing guard in parking lot in front of school.

Suggested Solutions:

Location of Interest	Obstacle/Problem	Proposed Solutions	Responsible Parties
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	Students who walk and wheel to school do not wear helmets.	Promote the acquisition and use of helmets.	School Administration, PE teacher, Health Assistant
US 6/ F Road	No sidewalks lead to the school.	Construct sidewalks.	Mesa County; CDOT
School parking lot	No good and safe way to walk or ride from the school building to US 6/F Road.	Install a walkway from school to US 6/F Road.	District 51
33 Rd and F Rd	Utility poles, plant overgrowth, ditches and signs act as barriers to visibility and safety.	Review and improve visibility as needed.	Mesa County
North of school	Kids cross private property (Price Ditch and homeowner's) so they can walk or bike to school.	Assist with easement to F ¼ Road. Develop cost estimate for fencing and surfacing of new path across private property.	Mesa County; District 51
US 6/ F Road	Traffic is fast and heavy despite the 25 mph school zone signaled with flashing beacons.	Conduct a study to determine how to improve observance of signalized school zone. Enforce posted speed limits.	CDOT; Colorado State Patrol

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

Clifton Elementary School Walk Route Map Summary

	1-Mile Radius ~ 189 street crossings		2-Mile Radius ~229 street crossings	
	Length	Percent	Length	Percent
Least Favored - 4	14.0	42%	15.6	37%
Not Favored - 3	12.6	37%	14.2	33%
Favored - 2	6.9	20%	11.8	28%
Most Favored - 1	0.1	0%	1.0	2%
	33.6	100%	42.6	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.









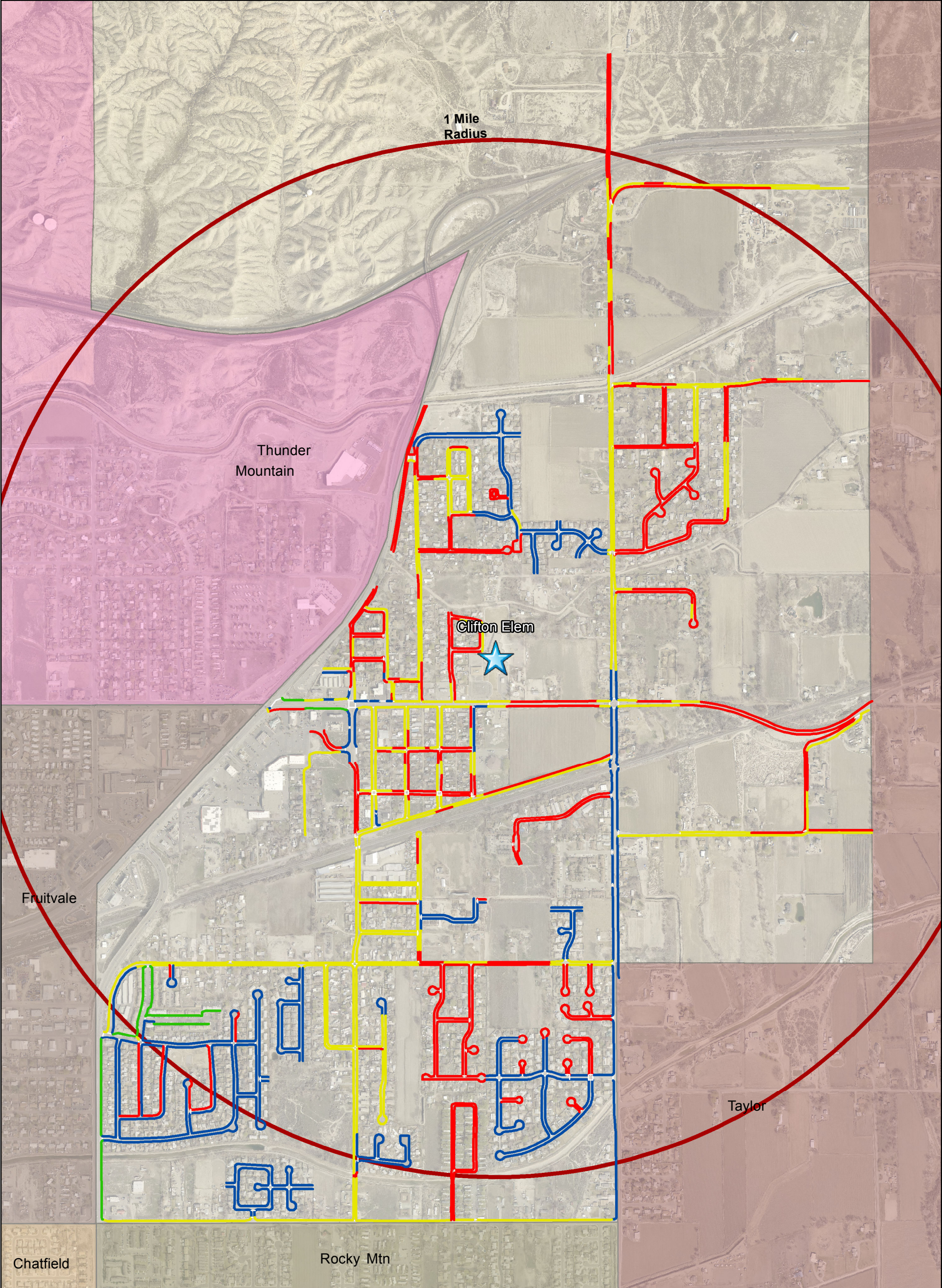
RED

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 - Clifton Elementary Path Ratings within 1 & 2 Mile Radii

Legend

 Most favored	 Not favored	 Crosswalk
 Favored	 Least favored	 1 Mile Radius



Parent Surveys

Parent Survey Report: One School in One Data Collection Period

School Name: Clifton Elementary School

Set ID: 15729

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

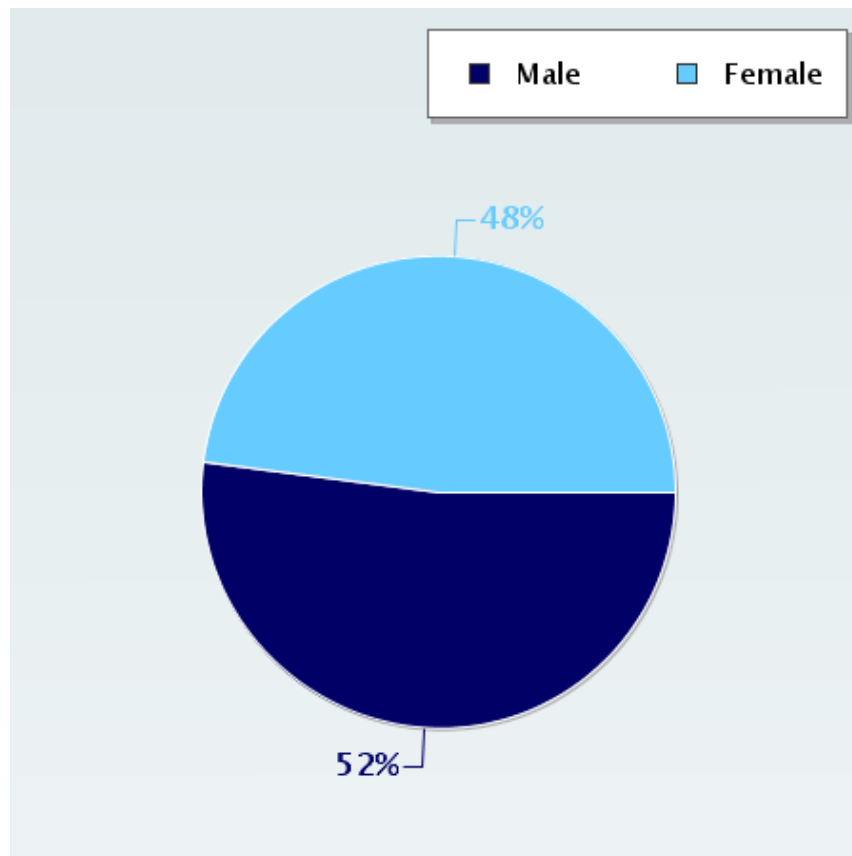
Tags: Safe Routes To School

Number of Questionnaires Distributed: 0

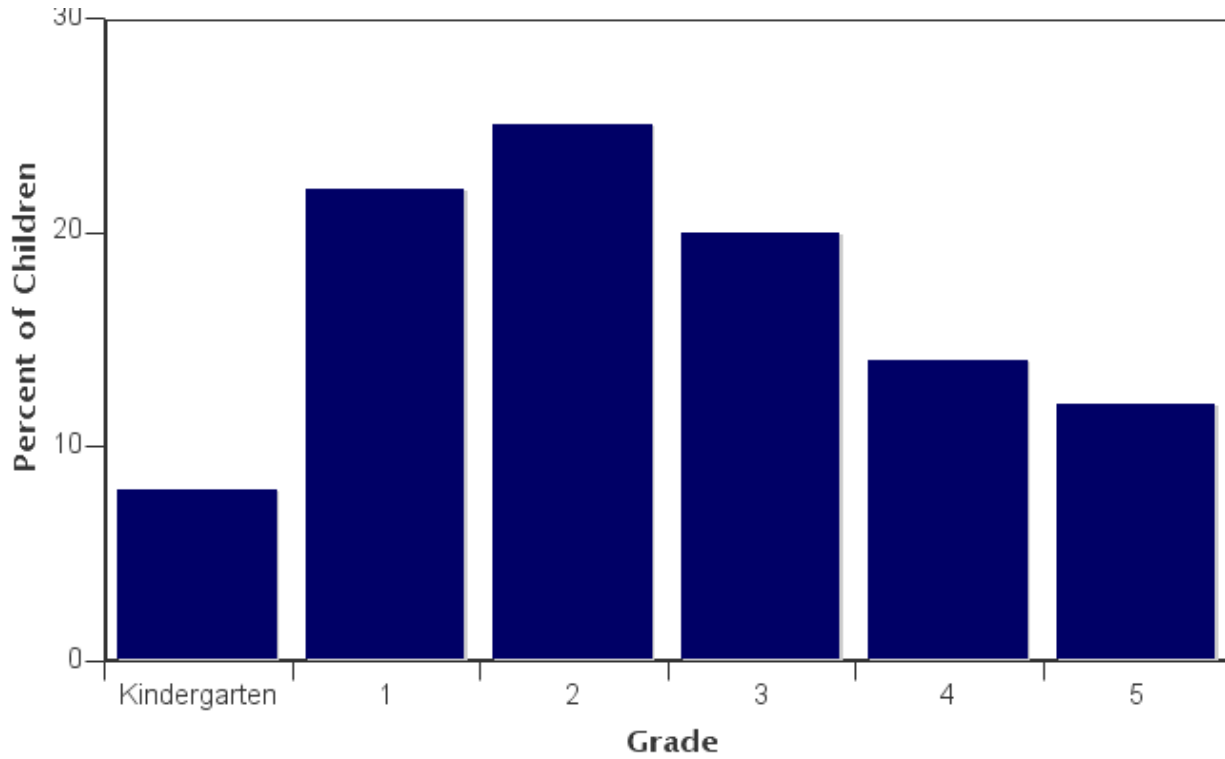
Number of Questionnaires Analyzed for Report: 65

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



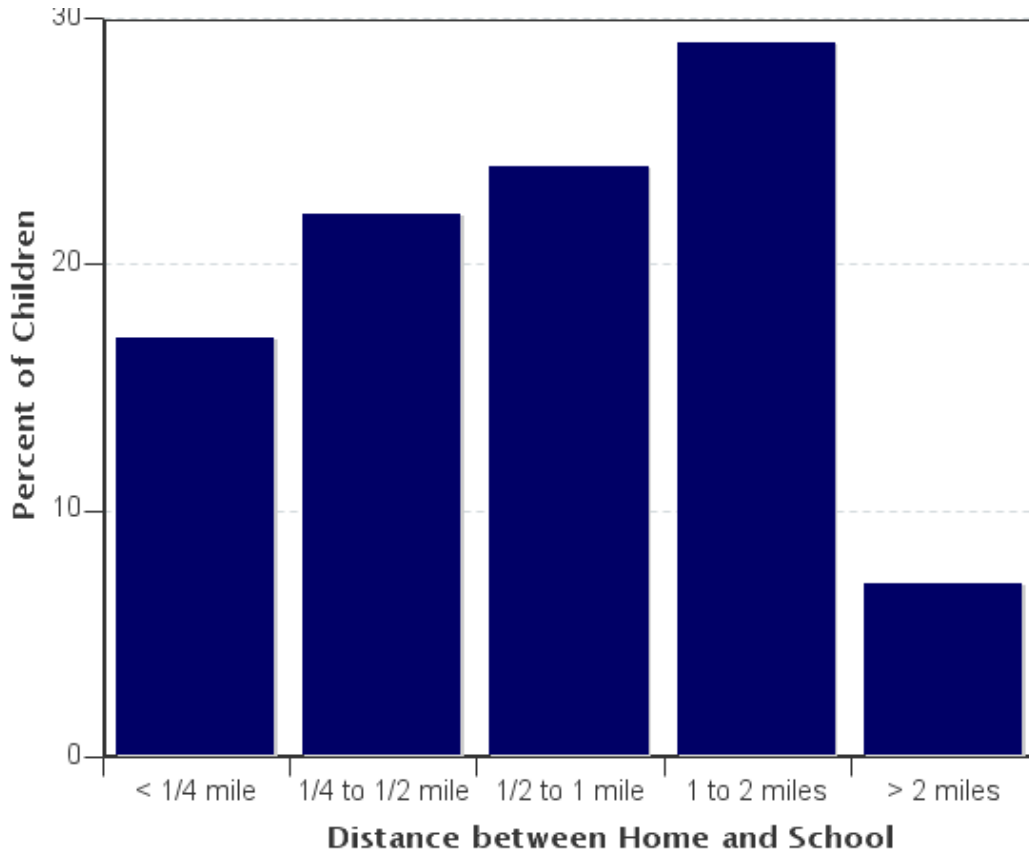
Grade levels of children represented in survey

Grade in School	Responses per grade	
	Number	Percent
Kindergarten	5	8%
1	14	22%
2	16	25%
3	13	20%
4	9	14%
5	8	12%

No response: 0

Percentages may not total 100% due to rounding.

Parent estimate of distance from child's home to school



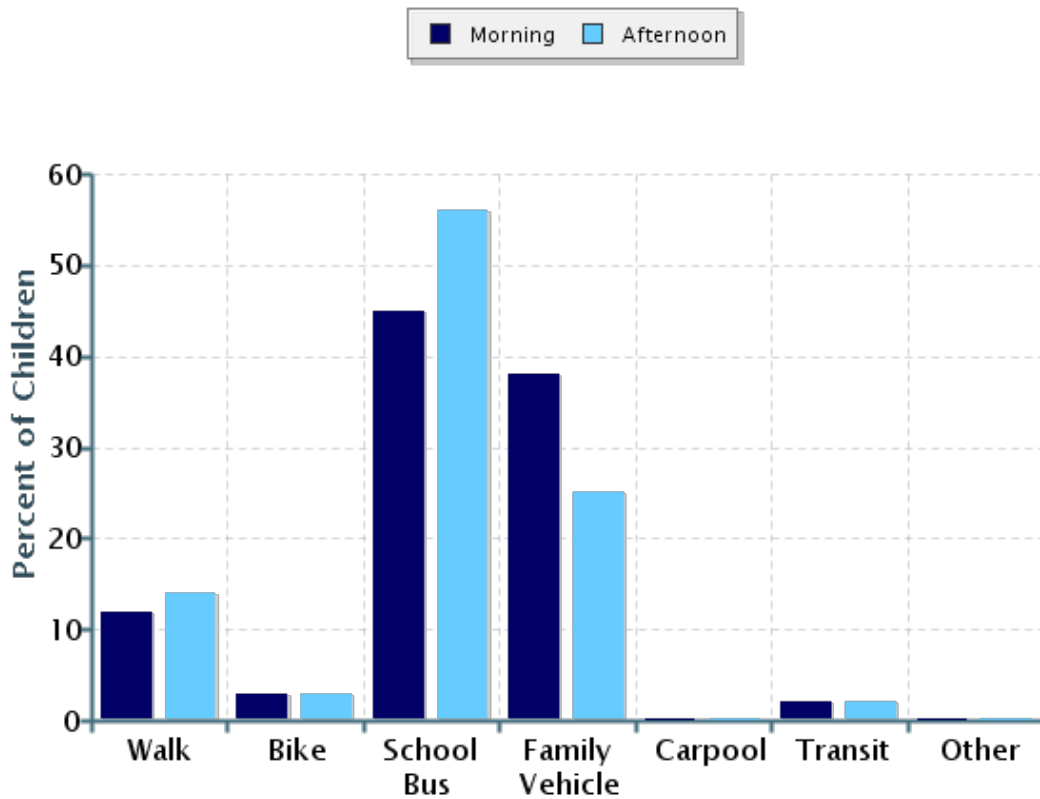
Parent estimate of distance from child's home to school

Distance between home and school	Number of children	Percent
Less than 1/4 mile	10	17%
1/4 mile up to 1/2 mile	13	22%
1/2 mile up to 1 mile	14	24%
1 mile up to 2 miles	17	29%
More than 2 miles	4	7%

Don't know or No response: 7

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	65	12%	3%	45%	38%	0%	2%	0%
Afternoon	59	14%	3%	56%	25%	0%	2%	0%

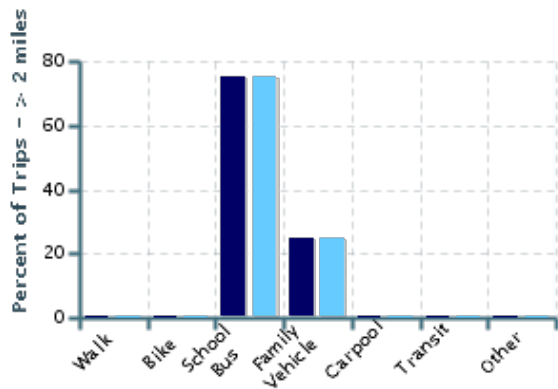
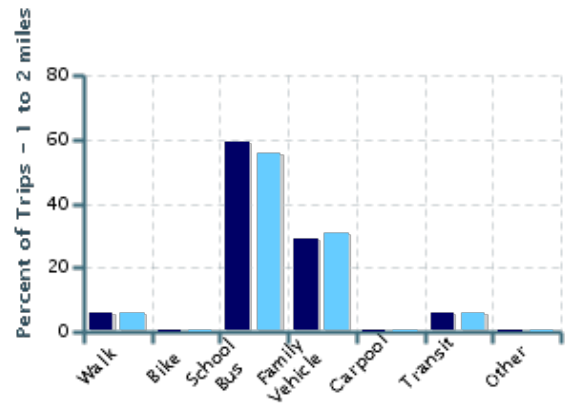
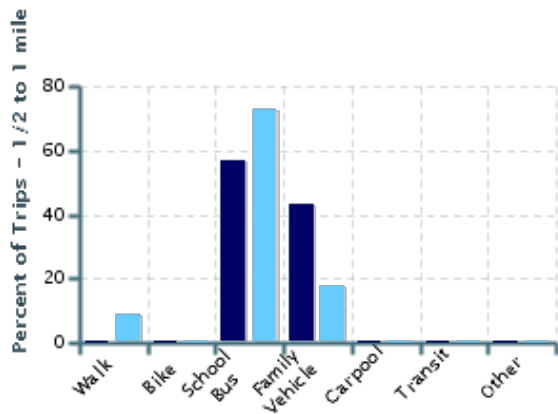
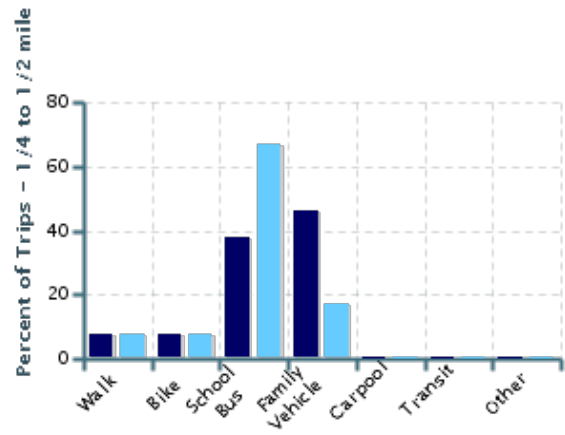
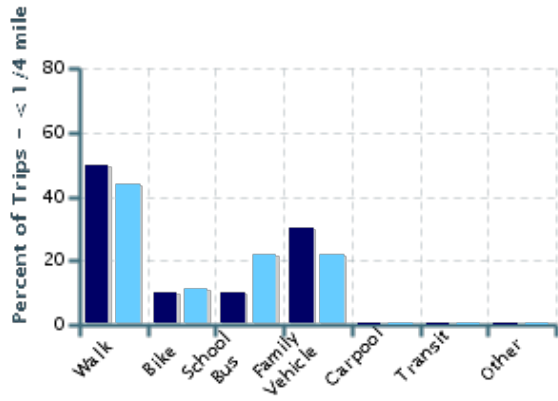
No Response Morning: 0

No Response Afternoon: 6

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	10	50%	10%	10%	30%	0%	0%	0%
1/4 mile up to 1/2 mile	13	8%	8%	38%	46%	0%	0%	0%
1/2 mile up to 1 mile	14	0%	0%	57%	43%	0%	0%	0%
1 mile up to 2 miles	17	6%	0%	59%	29%	0%	6%	0%
More than 2 miles	4	0%	0%	75%	25%	0%	0%	0%

Don't know or No response: 7

Percentages may not total 100% due to rounding.

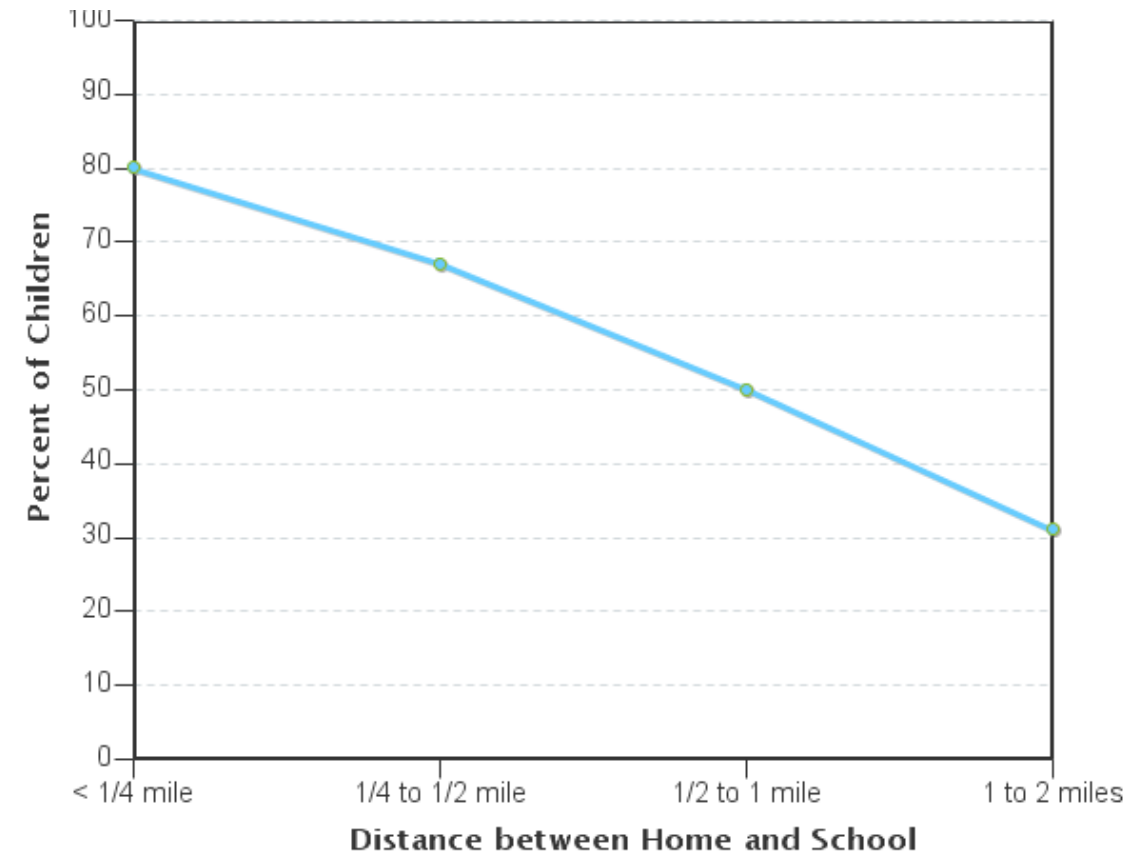
School Departure

Distance	Number within Distance	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Less than 1/4 mile	9	44%	11%	22%	22%	0%	0%	0%
1/4 mile up to 1/2 mile	12	8%	8%	67%	17%	0%	0%	0%
1/2 mile up to 1 mile	11	9%	0%	73%	18%	0%	0%	0%
1 mile up to 2 miles	16	6%	0%	56%	31%	0%	6%	0%
More than 2 miles	4	0%	0%	75%	25%	0%	0%	0%

Don't know or No response: 13

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



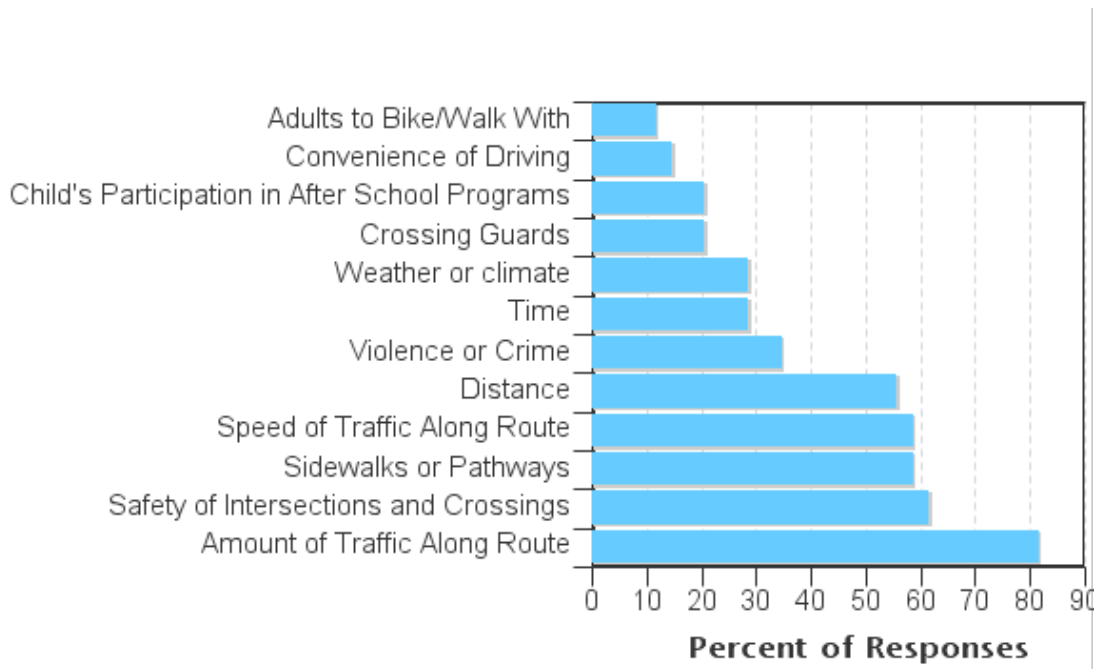
Percent of children who have asked for permission to walk or bike to/from school by distance they live from school

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	28	80%	67%	50%	31%	0%
No	28	20%	33%	50%	69%	100%

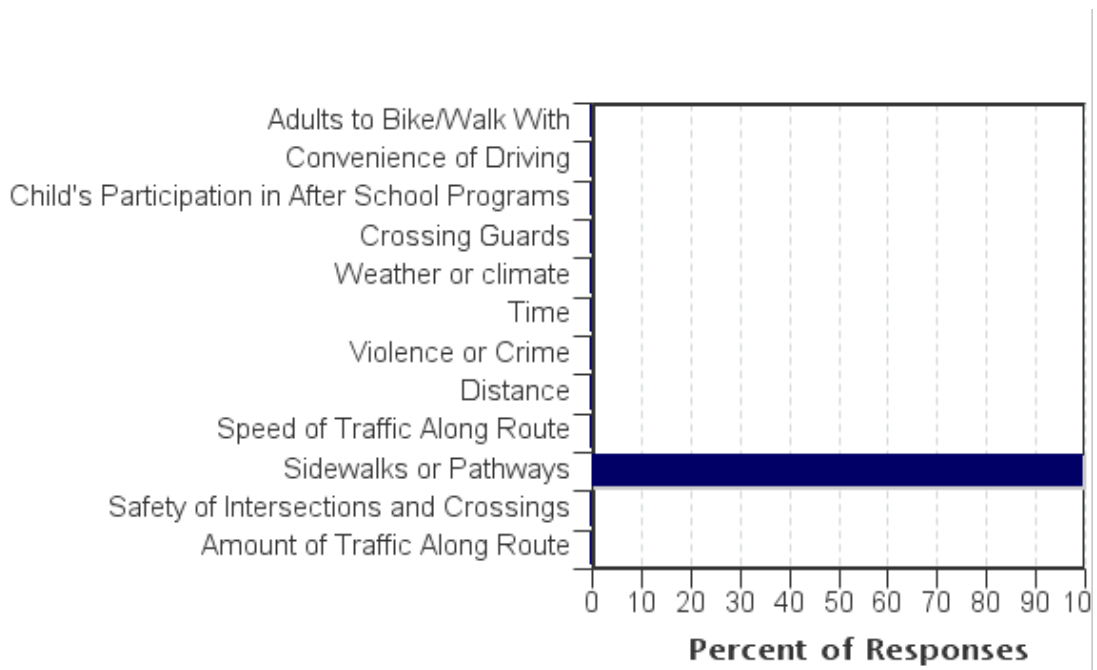
Don't know or No response: 9

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
Amount of Traffic Along Route	82%	0%
Safety of Intersections and Crossings	62%	0%
Sidewalks or Pathways	59%	100%
Speed of Traffic Along Route	59%	0%
Distance	56%	0%
Violence or Crime	35%	0%
Time	29%	0%
Weather or climate	29%	0%
Crossing Guards	21%	0%
Child's Participation in After School Programs	21%	0%
Convenience of Driving	15%	0%
Adults to Bike/Walk With	12%	0%
Number of Respondents per Category	34	1

No response: 30

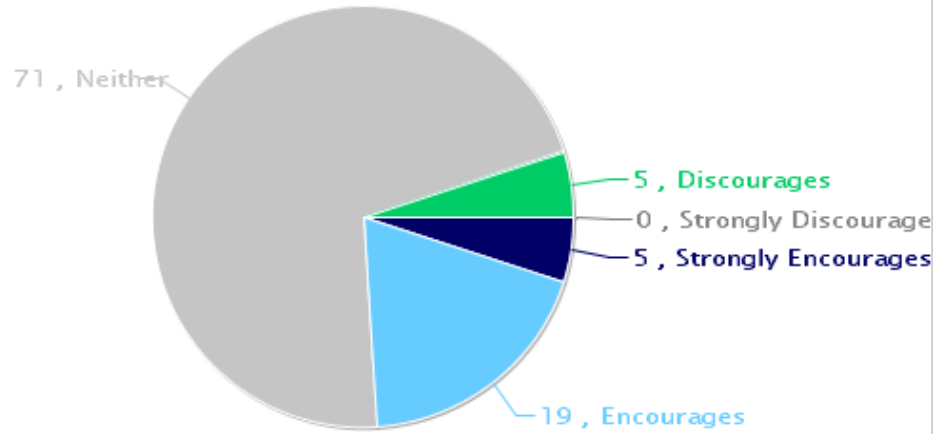
Note:

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

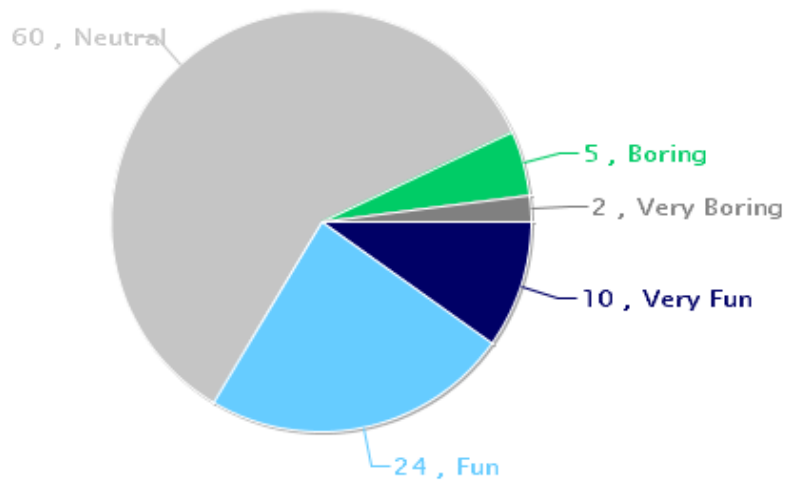
--Each column may sum to > 100% because respondent could select more than issue

--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.

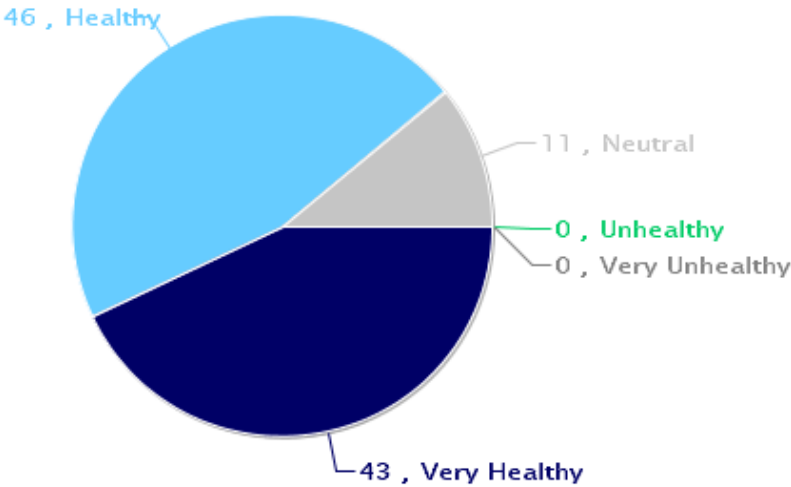
Parents' opinions about how much their child's school encourages or discourages walking and biking to/from school



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
1488867	Coming out of school parking lot should be "turn right only".
1488838	My answers are based more because my son is still young (too young to go alone).
1488880	My children want to bike but the route is not safe, so it's not an option.
1488972	Sidewalks - for it to be safer for the children.
1488864	I would probably never allow my child to walk or bike because she would have to cross railroad tracks.
1488889	We need to keep our kids safe.
1488973	These kids are too little to walk to school w/o adults & it would take too long to walk from our house.
1488795	We live close to the school, but my mother is the one who takes and picks up my son from school. She lives farther away.
1488798	The speed of the traffic that pass through the speed zone. Some speed right from the light.
1489385	One problem is crossing railroad tracks and no sidewalk or actual space to ride besides the road.
1488876	I think sidewalks would be a very beneficial improvement to our school for students who do walk.