

# HOUSEHOLD SURVEY RESULTS

## Summary of Findings

### **Bicycle ownership in Colorado**

- 69% of Colorado households own at least one bicycle
- The average is 2.7 bicycles per household
- There are approximately 3 million bicycles in Colorado

### **Motor vehicles owned by the respondents**

- 44% own two motor vehicles
- 23% own one motor vehicle
- 19% own three motor vehicles
- 4% own five or more motor vehicles
- 1.9% do not own a motor vehicle

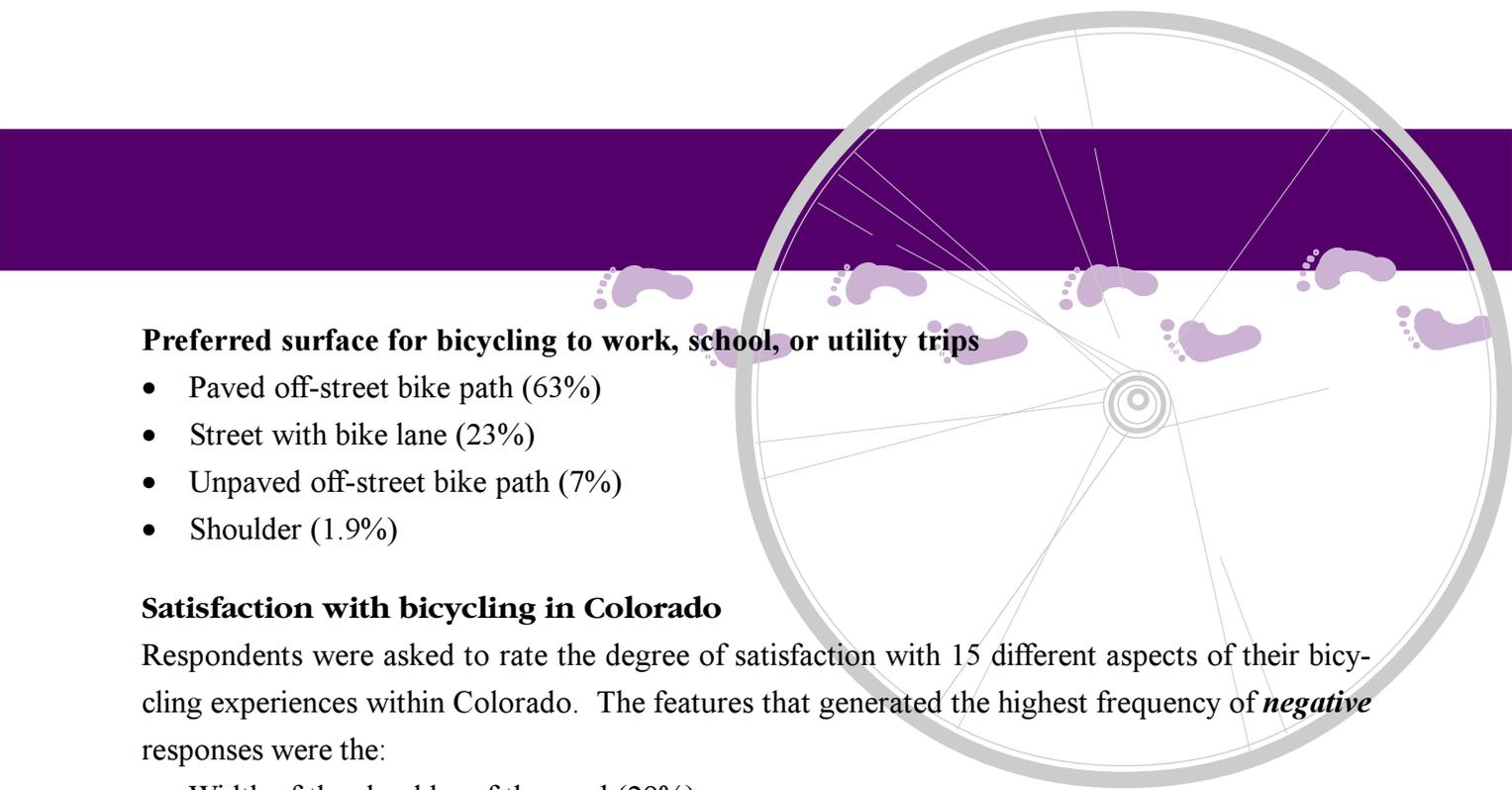
### **Commuting to work**

Primary means of transportation:

- Drive alone in car or truck (82%)
- Carpool (7%)
- Transit (3%)
- Walk (3%)
- Bicycle (2%)

Secondary means of transportation:

- None (58%)
- Drive alone in car or truck (10%)
- Carpool (15%)
- Transit (6%)
- Walk (4%)
- Bicycle (5.3%)



### **Preferred surface for bicycling to work, school, or utility trips**

- Paved off-street bike path (63%)
- Street with bike lane (23%)
- Unpaved off-street bike path (7%)
- Shoulder (1.9%)

### **Satisfaction with bicycling in Colorado**

Respondents were asked to rate the degree of satisfaction with 15 different aspects of their bicycling experiences within Colorado. The features that generated the highest frequency of *negative* responses were the:

- Width of the shoulder of the road (29%)
- Courtesy of motorists (28%)
- Debris on the road (13%)
- Crossings at road intersections (13%)
- Lack of bicycle parking facilities at destinations (13%)

### **Preferences regarding bicycle-related public expenditures**

Respondents were asked if they would like to see improvements in conditions to encourage bicycling as a means of transportation.

- 79% indicated they would like to see such expenditures.

When asked how they would spend \$100 on transportation improvements respondents indicated the following:

- Nearly 68% would build new paved off-street bike paths
- 47% would link existing paved paths to create a statewide transportation system
- 32% would improve maintenance on the existing system
- 30% would construct new road shoulders and maintain existing shoulders

When asked how they would fund the projects:

- 51% would reallocate funds from other transportation projects
- 35% would charge a bicycle license or registration fee

- 21% would charge a user fee for trails and paths
- 6% would add a new tax earmarked specifically for bicycle improvements

## Bicycle Safety

### Helmet Use

- 59% of Colorado households with bicycles own one or more helmets

Adult (over age 16) helmet use:	<u>Always wear a helmet</u>	<u>Never wear a helmet</u>
Streets	42%	40%
Paved bike paths	38%	42%
Unpaved Trails	43%	39%
Mountain Terrain	51%	37%

Children using helmets:	<u>Always wear a helmet</u>	<u>Never wear a helmet</u>
Streets	61%	14%
Paved bike paths	63%	14%
Unpaved Trails	67%	15%
Mountain Terrain	70%	16%

### Bicycle Safety Instruction

40% of the respondents reported receiving some type of bicycle safety instruction. Of those receiving instruction, the primary source of the training was at school.

#### Where should children receive bicycle safety training?

- School 45% (from police and fire professionals)
- Parents 31%
- Parks & Recreation 10%
- School Teachers 7%
- Community Organizations 5%
- Pamphlets/Brochures .96%

### *Bicycle Crashes*

The bicyclists with the most experience and who ride more frequently are the least likely to experience a crash. For example, 38% of those who bicycle more than once per week reported a crash on an unpaved trail, while almost 60% of those bicycling less than once per month reported crashing.

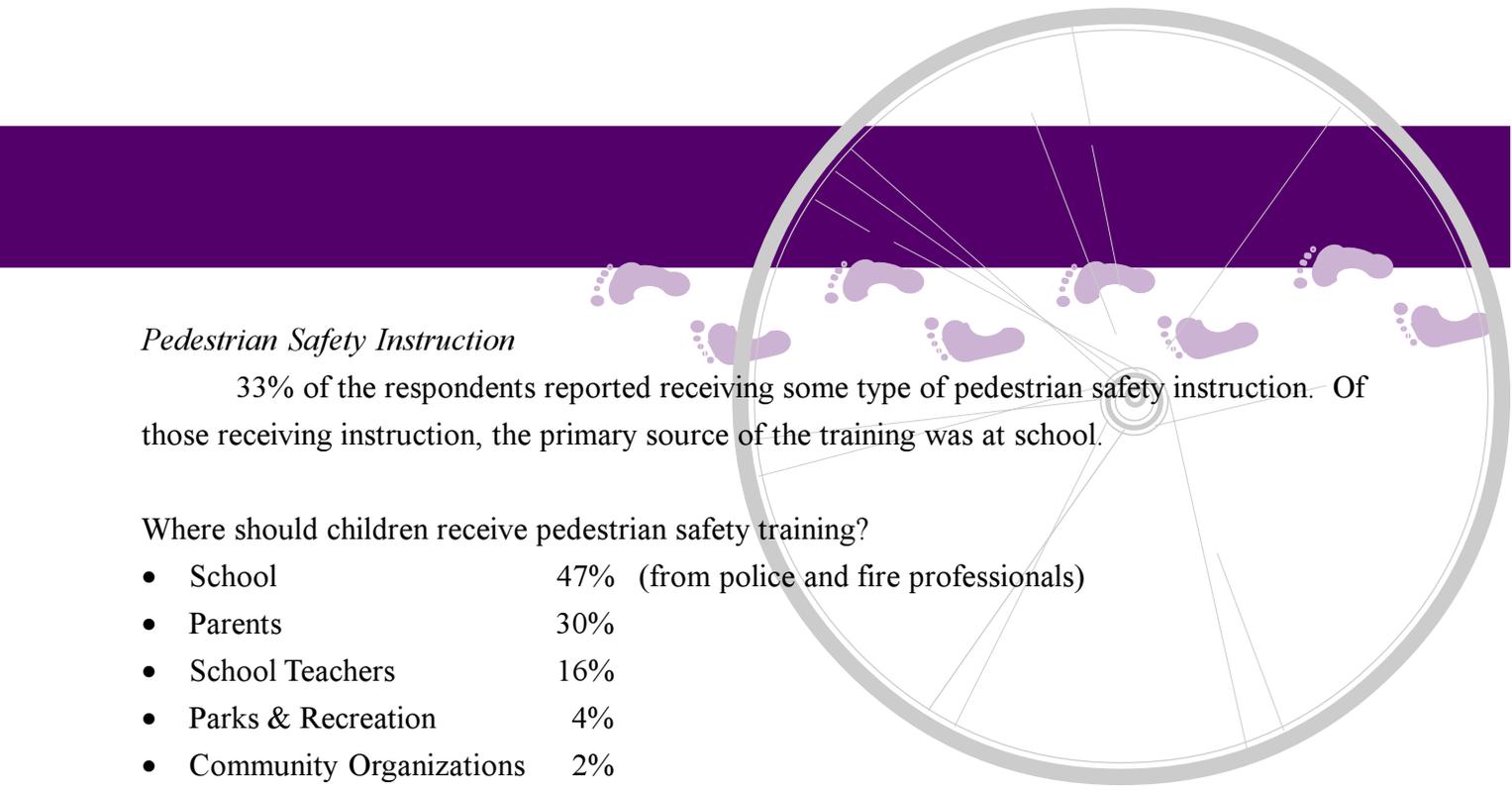
<i>Crashes in the last 12 months:</i>	<u>One</u>	<u>More than One</u>	<u>Average Cost/Crash</u>
Streets / Paved Trails	28%	10%	\$123 (68% = \$0 - 3% = \$1,000+)
Unpaved Trails	16%	26%	\$51 (75% = \$0 - 5% = \$100+)

<i>Severity of Crashes:</i>	<u>No Injuries</u>	<u>Minor</u>	<u>Severe to Critical</u>
Streets / Paved Trails	13%	61%	8%
Unpaved Trails	0%	.72%	93%

### **Pedestrian Safety**

#### Obstacles to Walking:

- Distance 67%
- Weather 63%
- Traffic Safety Concerns 42%
- Lack of Sidewalk 38%
- Hazardous Route 35%
- Fear of Crime 32%
- Need Car for Job 30%



### *Pedestrian Safety Instruction*

33% of the respondents reported receiving some type of pedestrian safety instruction. Of those receiving instruction, the primary source of the training was at school.

Where should children receive pedestrian safety training?

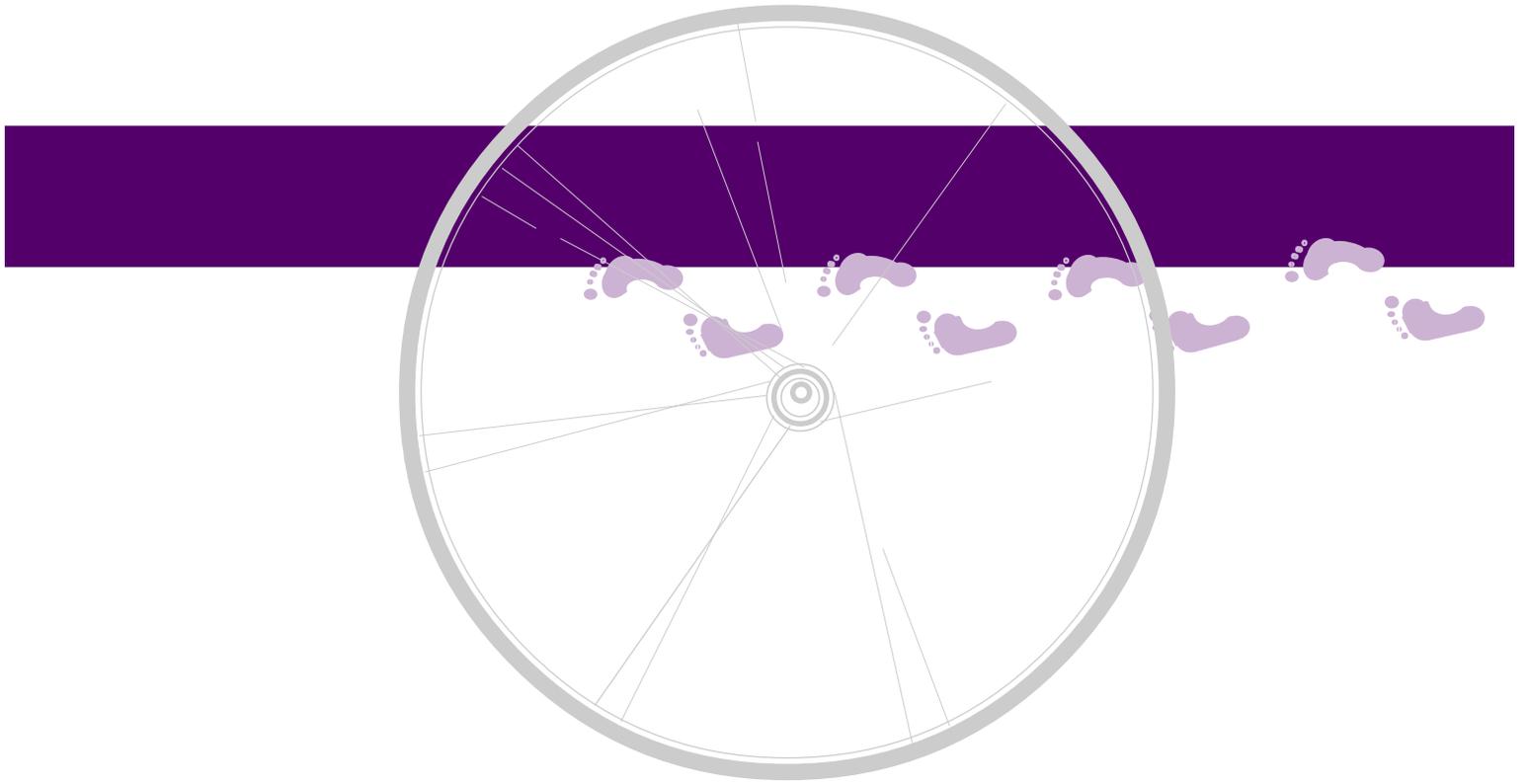
- School 47% (from police and fire professionals)
- Parents 30%
- School Teachers 16%
- Parks & Recreation 4%
- Community Organizations 2%
- Pamphlets/Brochures .82%

### *Pedestrian Crashes*

Nearly 12% of Coloradans have ever been involved in a crash as a pedestrian. Among those involved in a pedestrian crash, over 14% sustained no injuries and 58% incurred only minor injuries.

<i>Crashes in the last 12 months:</i>	<u>One</u>	<u>More than One</u>	<u>Average Cost/Crash</u>
	2%	1%	\$149
			(71% = \$0 - 7% = \$1,000+)

<i>Severity of Crashes:</i>	<u>No Injuries</u>	<u>Minor</u>	<u>Severe to Critical</u>
	14%	58%	10%



## HOUSEHOLD SURVEY RESULTS

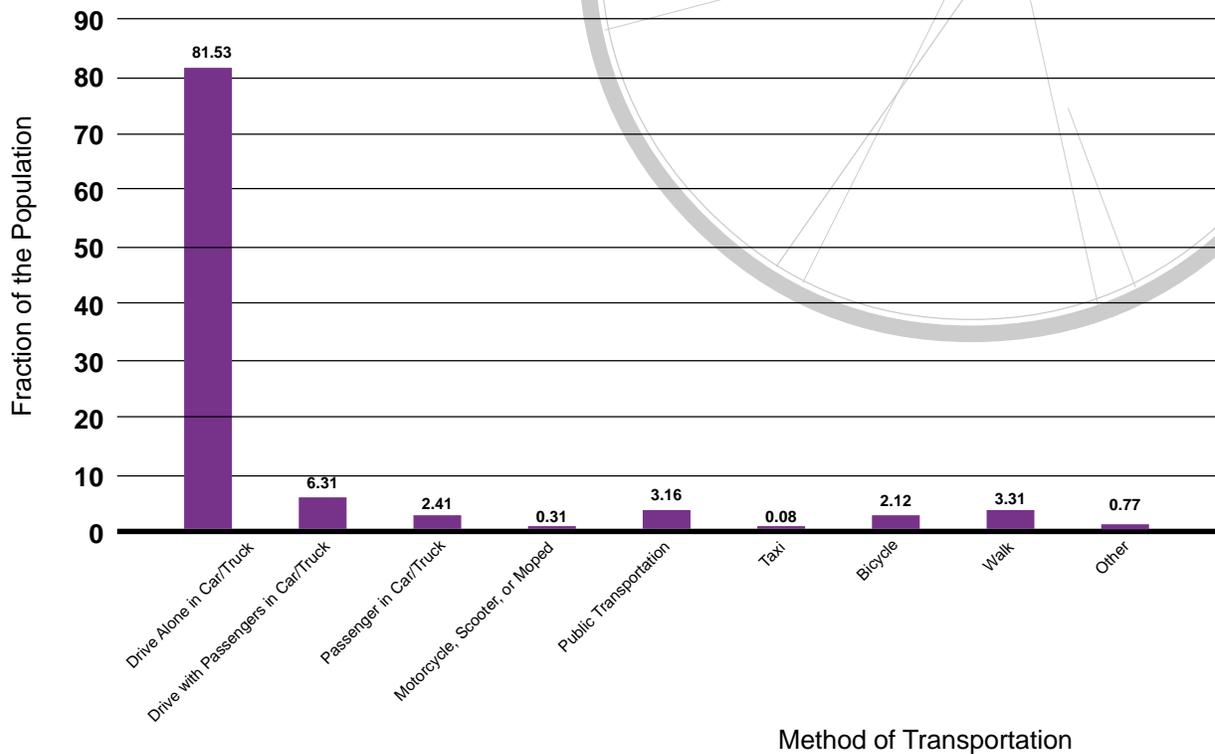
### Bicycle and Automobile Ownership in Colorado

Ninety-eight percent of the respondents indicated that there was at least one motor vehicle owned by someone in their household. Twenty-three percent reported owning one vehicle, 44 percent own two motor vehicles and the remaining 31 percent own more than three. There are approximately 3 million bicycles in the state of Colorado. 1.1 million Colorado households (69 percent) own at least one bicycle, and the average household owns 2.7 bicycles. Among those who own bicycles, 59 percent report also owning at least one bicycle helmet. 1.8 million adults (over the age of 16) reported ever having ridden a bicycle in Colorado. Some use their bicycles as a means of transportation to work, school or for errands, while other use them solely for recreation and exercise.

### Commuting to Work

2.26 million Colorado residents between the ages of 16 and 55 are employed. In a typical good-weather month, 82 percent indicate that their primary method of commuting to work is to drive alone in a car or truck. Almost nine percent use a carpool arrangement, either as a driver or passenger. Although nearly thirty-five percent live within two blocks of public transportation, only three percent use this as their primary means of commuting to work. Two percent ride a bicycle to work as their primary method. Three percent report that they primarily walk to work. Less than one percent drive a motorcycle or take a taxi. Data from the 1990 Census indicates that 73 percent of Americans drive alone to work, and 0.4 percent bicycle. As is typical in the western United States, driving alone to work is more common among Coloradoans than among all Americans, but the likelihood of bicycling is five times the national average.

Figure 4  
Primary Means of Transportation to Work



An additional 5.3 percent of workers in Colorado report that riding a bicycle to work is their secondary method of commuting to work, so over 7 percent of Colorado workers sometimes ride their bicycle to work.

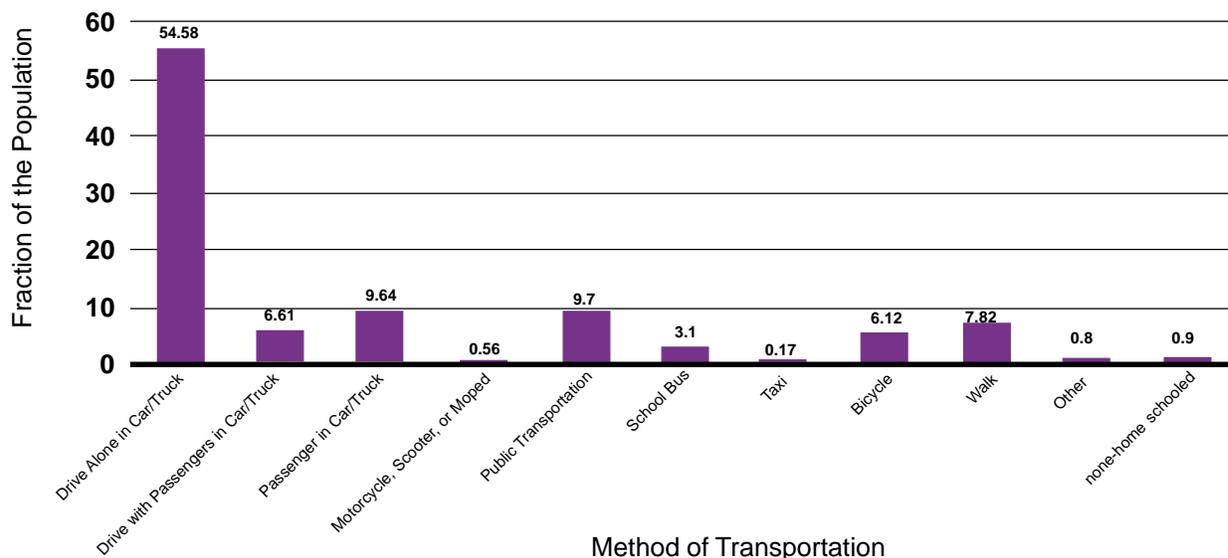
Distance and weather are the factors most frequently mentioned as obstacles to riding to work. Over 30 percent of those who have considered riding their bicycle to work indicated that distance and weather sometimes prevented them from riding. Other frequently mentioned concerns included concerns about traffic safety (mentioned by 31 percent), lack of road shoulders (27 percent) and off-road bike paths (25 percent).

## Transportation to School

There are approximately 350,000 students over the age of 16 in Colorado. A much smaller majority of students than workers ride alone in a car or truck as their primary method of commuting to school (55 percent of students). Sixteen percent carpool, and nearly 10 percent use public transportation. Just over 6 percent ride their bicycles to school as their primary method, and 8 percent walk. An additional 6 percent of students report that bicycling is their secondary method of commuting to school.

Students reveal concerns about bicycling to school similar to those expressed by bicyclists commuting to work. Weather and distance are the factors most frequently mentioned as obstacles to riding a bicycle to school (35 percent of students and 21 percent, respectively.) Other factors that appear to substantially affect the likelihood that students will ride to school include traffic safety concerns (20 percent), route hazards (16 percent), crime (14 percent) and the time of day (20 percent).

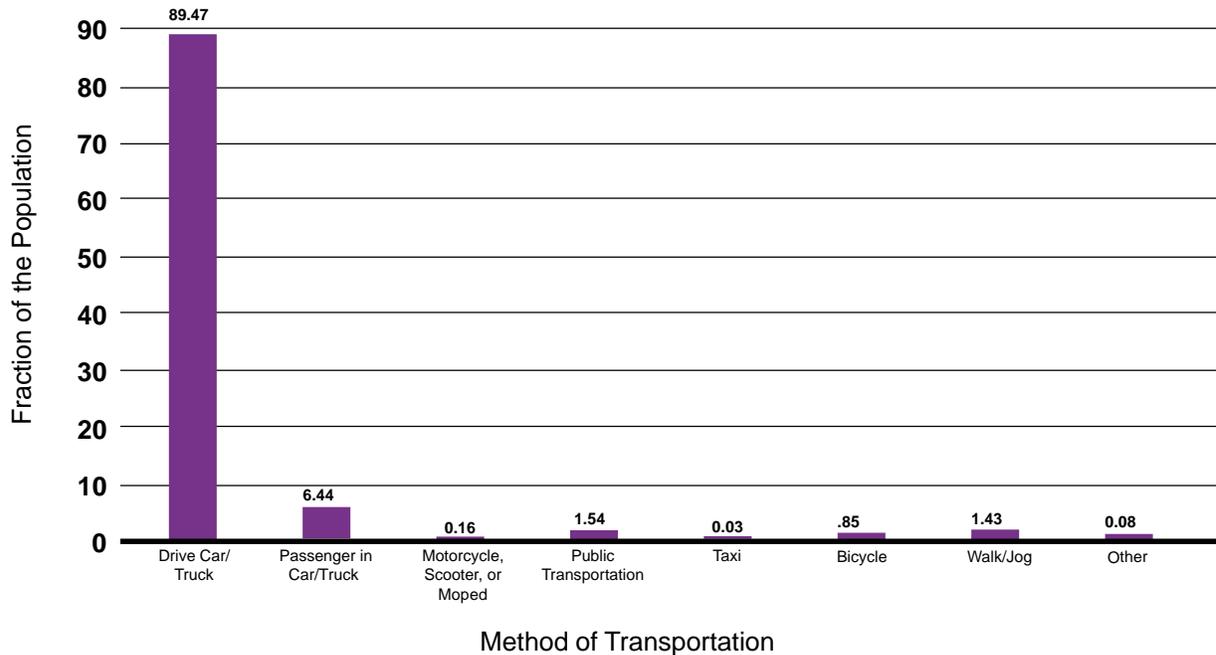
**Figure 5**  
**Primary Transportation Method for School Commute (16 years and older)**



## Transportation for Running Errands

Ninety-six percent of Coloradoans use an automobile, either alone or carpooling, when running errands. Less than one percent report riding a bicycle as their primary method of transportation for these utility trips, but another 8 percent report using a bicycle as their secondary method. Among the reasons given for not using a bicycle, about 24 percent of those surveyed indicated that they did not use a bicycle for errands because a car was needed for the purpose of the trip.

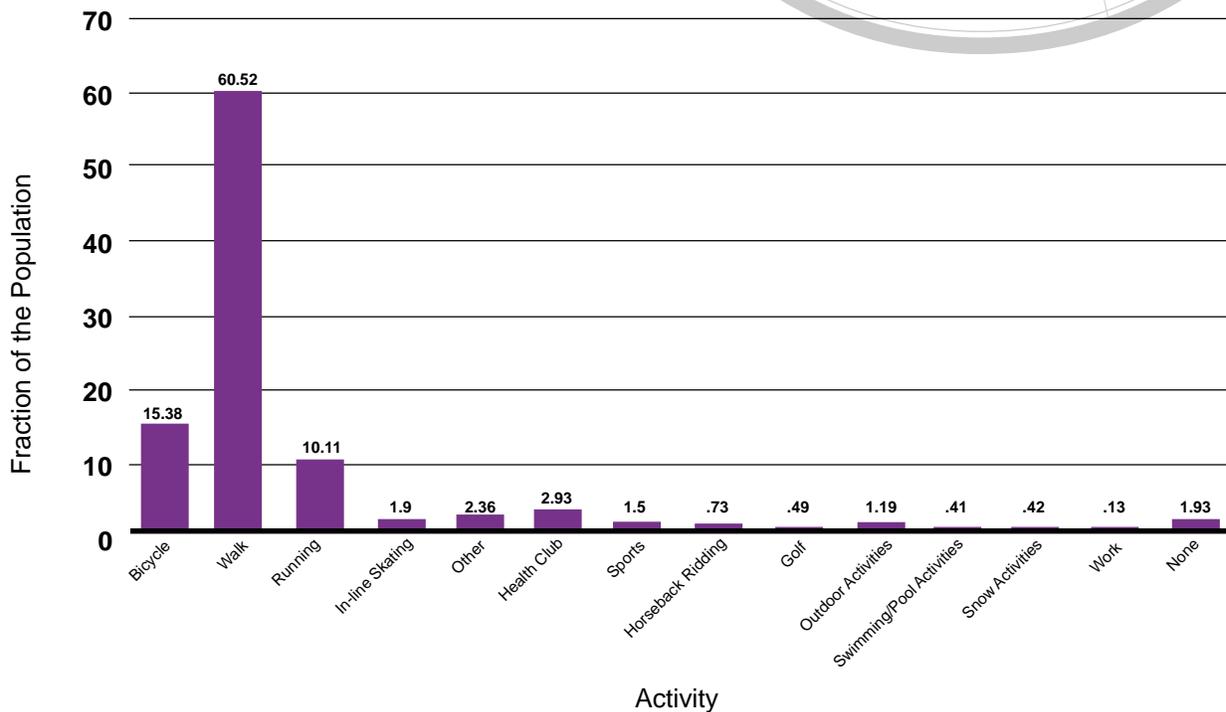
Figure 6  
Primary Method of Transportation for Most Utility Trips in Good Weather



## Bicycling and Walking for Exercise and Recreation

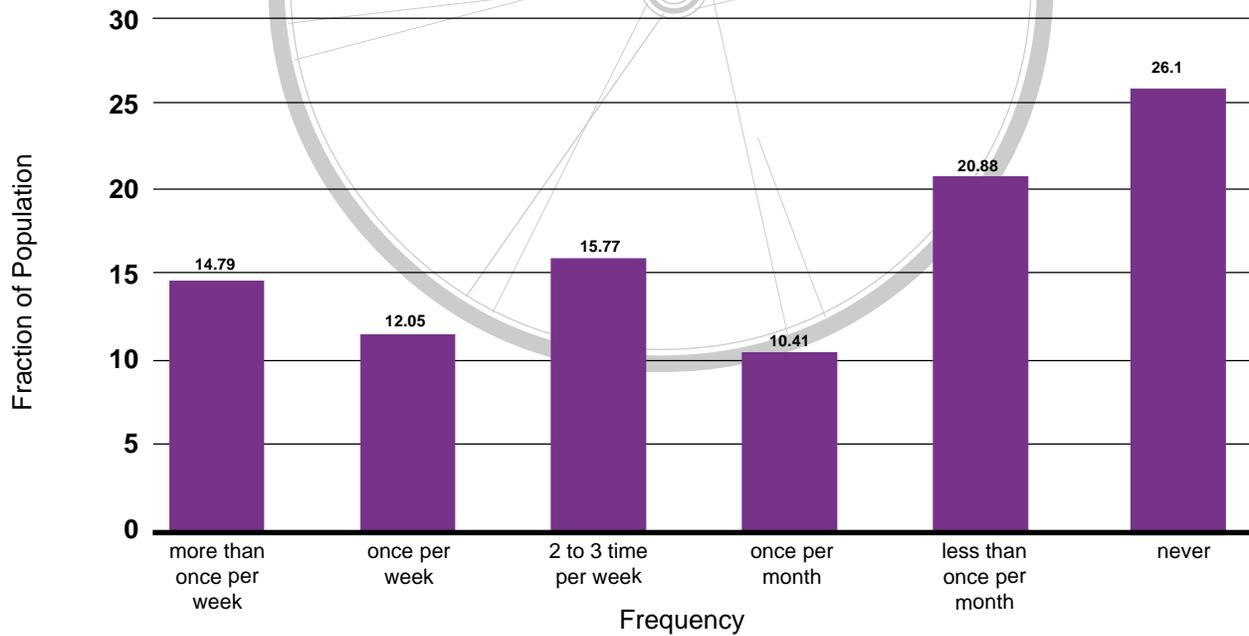
Sixty-one percent of Coloradans over the age of sixteen, indicated that walking was their primary recreation or exercise activity. Bicycling was the primary recreation or exercise activity of 15 percent of Colorado residents.

**Figure 7**  
Primary Recreation/Exercise Activity



Though bicycling is not the primary recreation choice of many Coloradans, 74 percent report that they sometimes bicycle for exercise or recreation. Fifteen percent of these make recreation or exercise trips by bicycle more than once a week, 12 percent do so once a week. Twenty-one percent make this type of trip less than once per month.

**Figure 8**  
**Frequency of Bicycle Use for Recreation/Exercise Trip**



Paved off-street bike paths are most commonly used for recreation and exercise related bicycle trips, followed by city streets with no bicycle shoulders. Streets with bicycle lanes are the third-most used surface for recreation bicycle and general use trails are fourth.

**Figure 9**  
**Average Amount of Recreation/Exercise Ride on Specific Surfaces**

