Colorado Department of Transportation
Office of Transportation Safety

FY 2002 Problem Identification Report

An Analysis of Highway Traffic Problems in the State of Colorado

March 2001

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Introduction

The Colorado Department of Transportation (CDOT) retained BBC Research & Consulting to prepare the 2002 Problem Identification report.

Purpose

Each year, CDOT examines crash records to identify areas with traffic safety problems. The resulting document, the Problem Identification, is used by CDOT staff to design projects promoting increased traffic safety in Colorado. Members of the public and other interested parties receive the report upon request.

Analyses

This report is organized around a number of different analyses of crash data and other information.

Overall trends. Trends in fatal crashes, fatalities and estimated lives saved demonstrate the significant progress in traffic safety that has occurred since the mid-1970s. Detailed statistics on different types of crashes are then examined for 1993 through 1999.

The balance of the 2002 Problem Identification examines Colorado crashes in two distinct ways:

- Location of crashes; and

- Residence of drivers involved in crashes.

Crashes by location. The 2002 Problem Identification examines the following types of crashes by location:

- Serious crashes;

- Crashes involving bicyclists; and

- Crashes involving pedestrians.

Crashes by place of residence of drivers involved in crashes. The driver residence analyses are particularly relevant for the identification of communities where residents are over-represented in high risk driving behaviors or in population cohorts that are more likely to be involved in crashes. The 2002 Problem Identification examines the following potential high-risk behaviors and age cohorts:

- Young drivers (ages 16 to 20),

- Senior drivers (those 65 and older),

- Impaired drivers, including the role of impaired drivers ages 21 to 34,

- Drivers who do not wear seat belts, and

- Motorcyclists.

Communities where residents are over-represented in crashes involving high-risk behaviors or high-risk age cohorts are candidates for the development of traffic safety programs. Specific recommendations for traffic safety program development are found in the last section of this document.

Types of Crashes Examined

Because of poorer data quality, property damage-only crashes are excluded from the community-level analyses of crash driver residence. The remaining crashes — serious crashes — are those where some type of injury was observed. In the examinations of driver occupant protection use, only the most serious crashes, (an evident, incapacitating or fatal injury was reported) are included in the analysis because these occupant protection data are more accurate. An important caveat is that data on occupant protection, driver impairment, and even driver age, are not completely accurate. Errors in reporting and missing data do occur — especially in property damage-only crashes.

In some cases, examining crash data for a single year is insufficient to draw conclusions from the data. When this occurs, data from multiple years are examined.

Colorado Crash Trends

Overview

Reducing the number of fatalities and fatal traffic crashes and the associated social and economic losses resulting from these crashes is a critical part of the mission of the safety program at the Colorado Department of Transportation. In the past 20 years, significant progress has been made. For example, crashes per 100 million VMT have been declining, despite a growing population.

Fatalities. In 1977, Colorado had 3.8 fatalities per 100 million vehicle miles traveled (VMT). Since that time, legislative measures and the activities of traffic safety advocates, as well as improved roadway engineering and vehicle safety, have resulted in nearly a 60 percent reduction in fatalities per 100 million VMT. Legislative measures contributing to improved traffic safety include:

- The Colorado Safety Belt Law required persons in the front seat of a vehicle to wear seat belts (effective July 1, 1987).

- Major changes in the laws affecting drinking and driving, including the creation of the Law Enforcement Assistance Fund (LEAF) for the prevention of impaired driving, occurred in 1982, 1984 and 1986.

- Beginning in 1985, the Child Safety Law required all children under the age of 16 to be properly restrained.

- The Graduated Licensing Law, imposing new restrictions on young drivers and requiring a minimum of 50 hours of behind the wheel training, became effective July 1999.

Since 1977, the rate of fatalities declined from a high of 3.8 per 100 million VMT to 1.55 in 1999 (Exhibit 1).

Exhibit 1.
Colorado Fatalities per 100 Million VMT, 1975 – 1999.
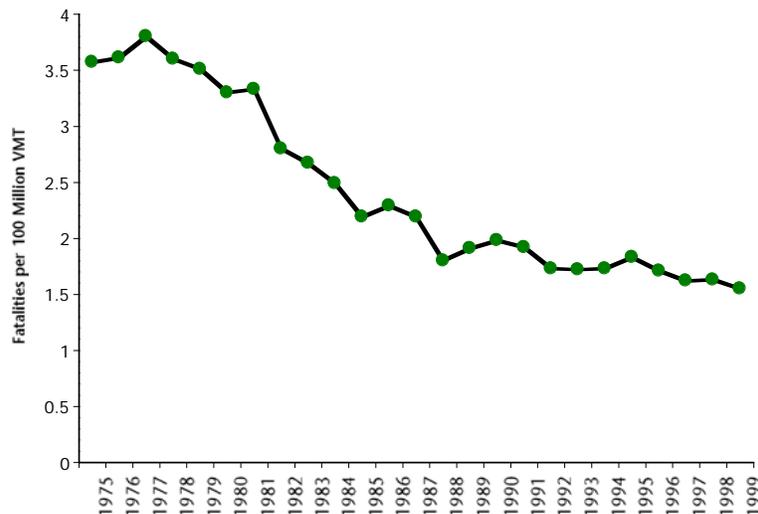
Source: Colorado Department of Revenue — Motor Vehicle Division, CDOT, U.S. Department of Transportation, National Highway Traffic Safety Administration, FARS, final reporting through 1999.

Estimated fatalities at the 1977 rate. From 1977 through 1999, more than 14,000 people lost their lives on Colorado roadways. However, the dramatic reduction in the fatality rate has saved nearly as many lives over this period. Had the fatality rate remained at 3.8 per 100 million VMT through 1999, more than 10,000 additional lives would have been lost.

Exhibit 2 presents the actual level of fatalities from 1977 to 1999 as well as the estimated number of fatalities calculated using the 1977 rate.

Exhibit 2.
Colorado Actual Annual Fatalities and Estimated Annual Fatalities, 1977 – 1999.
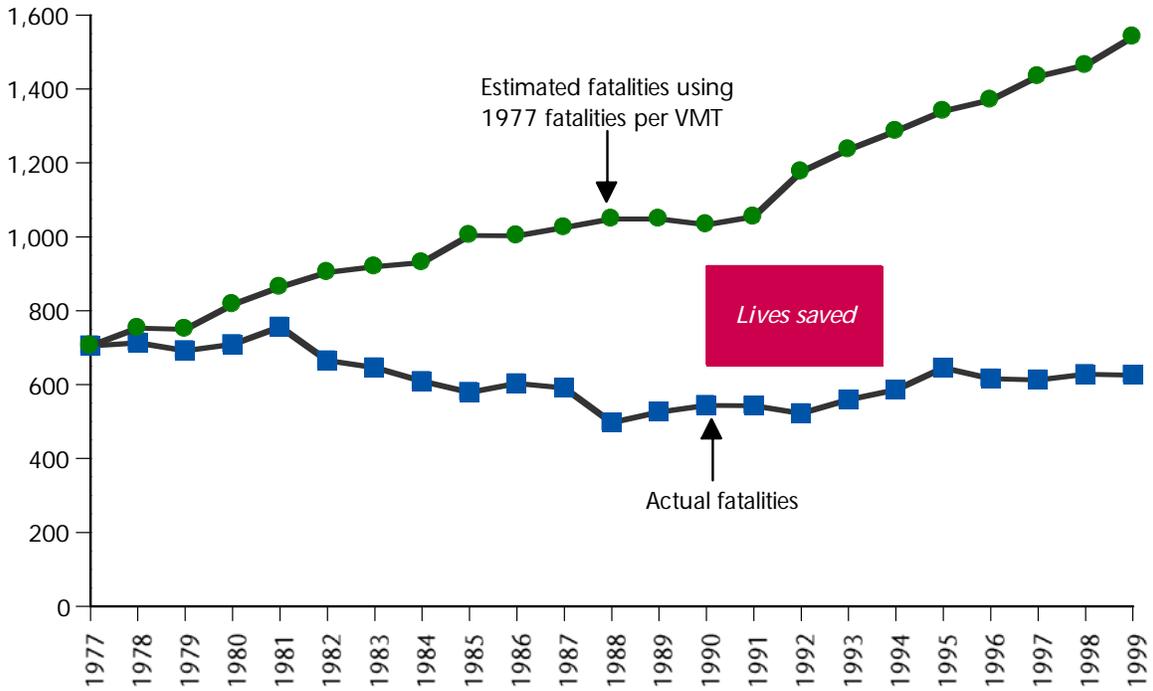
Note: Estimated fatalities are calculated using the 1977 rate of 3.8 per 100 million VMT.

Source: BBC Research & Consulting from CDOT, U.S. Department of Transportation, National Highway Traffic Safety Administration, FARS.

Lives saved. The difference between estimated fatalities and actual fatalities represents estimated lives saved. Exhibit 3 shows the projected number of lives saved in each year, beginning in 1978. In 1999, 915 lives were saved.

Exhibit 3.
Estimated Number of Lives Saved Annually through Reductions in Fatalities per 100 million VMT.
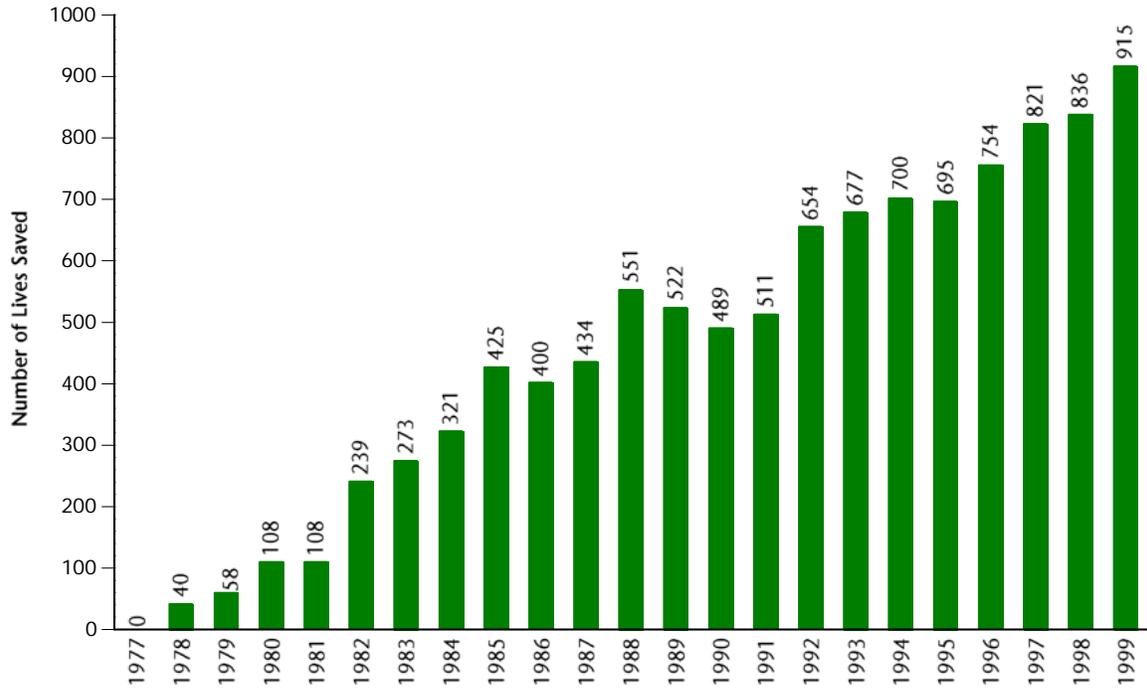
Note: Estimated lives saved are calculated as the difference between actual fatalities and those projected using 1977 rates.

Source: BBC Research & Consulting from CDOT, U.S. Department of Transportation, National Highway Traffic Safety Administration, FARS.

Colorado growth in the 1990s. The 1990s in Colorado were characterized by substantial economic and population growth. Based on the recently released 2000 Census, the Colorado Division of Local Government estimates that the state's population increased annually by nearly 2.7 percent per year from 1990 to 2000. Population grew 16 percent from 1993 to 1999. From 1993 through 1999, the vehicle miles traveled (VMT) in Colorado grew by nearly 25 percent, or an average of 3.5 percent per year (Exhibit 4). VMT is a measure of exposure to risk of vehicle crashes.

Crash trends. Total traffic crashes in Colorado increased by 27 percent from 1993 to 1999, slightly higher than the increase in VMT over the same period. The bulk of these crashes were property damage-only. In 1999, fatal and injury crashes accounted for 28 percent of total crashes, a decline from 1993 levels. While the number of fatalities and injuries have grown since 1993, increases have been below the rates of population and VMT growth. Alcohol-related fatalities are down 5 percent since 1993 (but increased between 1998 and 1999).

Exhibit 4.
Colorado Crash and Population Trends, 1993 – 1999.

	1993	1994	1995	1996	1997	1998	1999	% Change 1993-1999	% Change 1998-1999
Total Crashes	90,430	94,610	95,778	101,886	107,844	110,866	115,145	27.3%	3.9%
Fatal Crashes	511	523	572	552	534	551	558	9.2%	1.3%
Injury Crashes	28,153	30,134	30,455	30,263	28,252	31,080	31,679	12.5%	1.9%
Property Damage Crashes	61,757	63,821	67,366	71,069	79,078	79,263	83,175	34.7%	4.9%
Fatalities	559	586	645	617	613	628	626	12.0%	-0.3%
Injuries	43,007	45,862	46,099	45,448	42,878	45,488	46,804	8.8%	2.9%
Fatalities per 100 Million VMT	1.72	1.73	1.83	1.71	1.62	1.63	1.55	-9.9%	-4.9%
Injuries per 100 Million VMT	132.2	135.6	130.7	126.1	113.6	118.1	115.4	-12.7%	-2.3%
Alcohol-related Fatal Crashes	188	202	232	202	163	175	177	-5.9%	1.1%
Alcohol-related Fatalities	204	232	262	215	186	184	193	-4.5%	4.9%
Population (thousands)	3,588	3,689	3,782	3,867	3,954	4,054	4,161	16.0%	2.6%
VMT (billions)	32.52	33.83	35.27	36.04	37.74	38.52	40.55	24.7%	5.3%
Licensed Drivers (thousands)	2,592	2,733	2,815	2,849	2,996	3,014	3,040	17.3%	0.9%
Registered Vehicles (thousands)	3,450	3,619	3,556	3,841	3,961	4,053			

Source: Colorado Department of Revenue – Motor Vehicle Division, CDOT, Colorado Division of Local Governments — Colorado Economic and Demographic Information System, U.S. Department of Transportation, National Highway Traffic Safety Administration, Fatal Accident Reporting System (FARS), final reporting through 1999.

Crash locations. In 1999, more crashes occurred in Denver than in any other city. The distribution of these crashes by county and city is shown in Appendix B.

Role of non-resident drivers in local crashes. Examination of crashes by where they occur has limitations. Denver has a large number of crashes not just because of its population but also because of the large numbers of trips made to Denver by residents of other Colorado counties and cities. As shown in Exhibit 5, over half of the drivers involved in crashes in Denver in 1999 lived outside Denver. Non-residents comprise over 75 percent of the crashes in some rural counties. The difference between crash location and driver residence points to the value of analyzing drivers in crashes by their home residence. It also suggests that a local community's programs to improve driving behavior of its residents can make driving safer throughout the state.

Exhibit 5.
Percentage of Drivers in Crashes in a County Who Do Not Live in the County, 1999.

Less than 50%

50-75%

75-100%
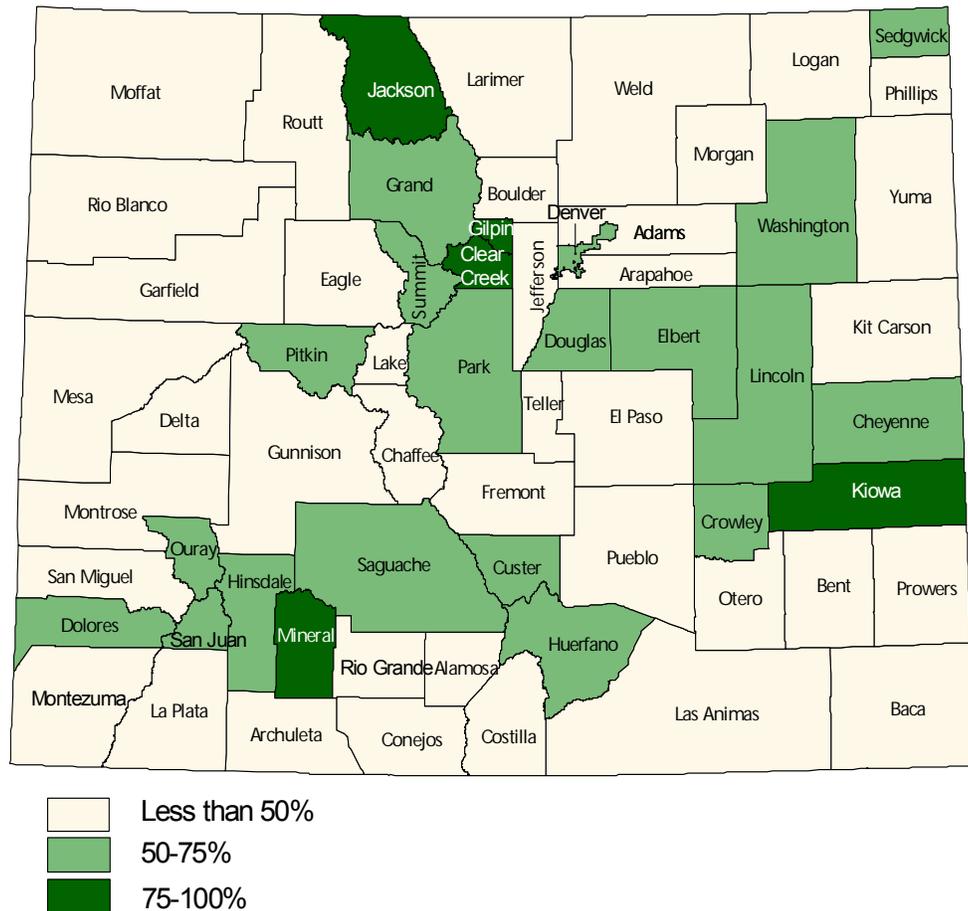
Note: Of the drivers involved in crashes in a county, this map demonstrates the percentage of drivers that lived outside the crash location county.

Source: BBC Research & Consulting using 1999 CDOT crash data.

Geographic Differences in Serious Crash Rates

The probability that a driver from a particular city or county will be involved as a driver in a serious crash differs across communities. These differences warrant further investigation and the exploration of behavioral or age-related factors that may contribute to the increased risk of crashes.

Population-adjusted crash indices. In order to compare crash rates for the citizens of different communities, BBC calculated an index that controls for the community's driving-age population. This index is the ratio of two key percentages:

- The first percentage (numerator) is the percentage of all 16+ drivers involved in crashes who are from the community.

- The second percentage (denominator) is the community's percentage of the state's 16 plus population.

The crash index is created by dividing the numerator by the denominator. The value of this index for the state as a whole is always 1.0. Any deviation from 1.0 means that drivers from a particular community are more or less likely than drivers statewide to be involved in a particular type of crash. For example, the serious crash index for Commerce City is 1.60, therefore, drivers from Commerce City are 60 percent more likely than drivers statewide to be involved in a serious motor vehicle crash.

Residence of drivers involved in serious crashes — cities. In 1999, 2 percent of the state's 16+ population were involved as drivers in serious motor vehicle crashes in Colorado. Residents of cities with populations greater than 10,000 are 6 percent more likely than drivers statewide to be involved in a serious crash. (Appendix C presents the analysis of city residents involved in serious crashes in 1999 and compares a city's 1999 ranking with previous years.) Of the cities analyzed, Commerce City residents are the most likely to be drivers in a serious crash. In 1999, Commerce City residents were 60 percent more likely than drivers statewide to be involved in a serious motor vehicle crash. Exhibit 6 maps cities whose residents are more likely to be involved in serious crashes than residents of other cities.

Exhibit 6.
Cities with Serious Crash Rates Above the City Average, 1999.

● Top 5 cities.
● Other cities with crash rates above the city average.
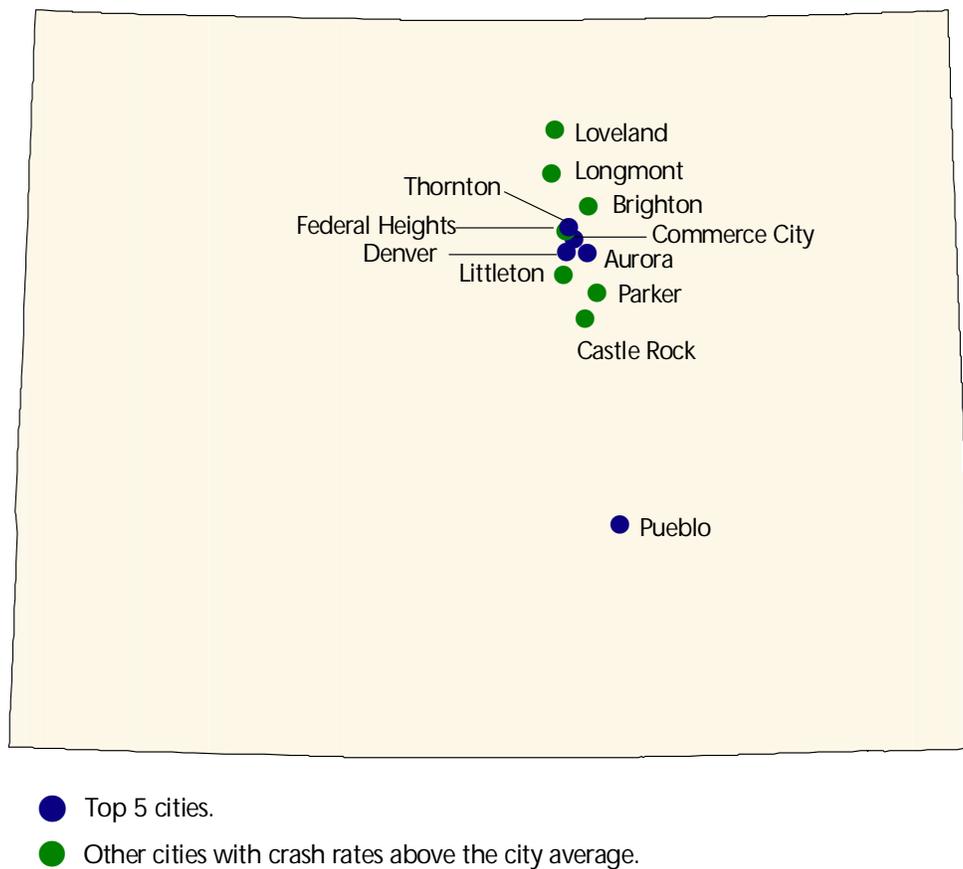
Note: Includes cities with 1999 populations greater than 10,000. The city serious crash index is 1.06. The crash rate is adjusted for the size of the driving-age population in each city.

Source: BBC Research & Consulting using 1999 crash data from CDOT and 1999 population estimates from the Colorado Division of Local Government.

Residence of drivers involved in serious crashes — counties. In 1999, residents of both Denver and Adams County were 22 percent more likely than drivers statewide to be involved in a serious motor vehicle crash. (Appendix C shows the population-adjusted serious crash indices for every county in the state.) Exhibit 7 highlights those counties whose residents are more likely than drivers statewide to be involved as a driver in a serious motor vehicle crash.

Exhibit 7.
Counties with Serious Crash Rates Above the State Average.

Above the state average.

Top 2.
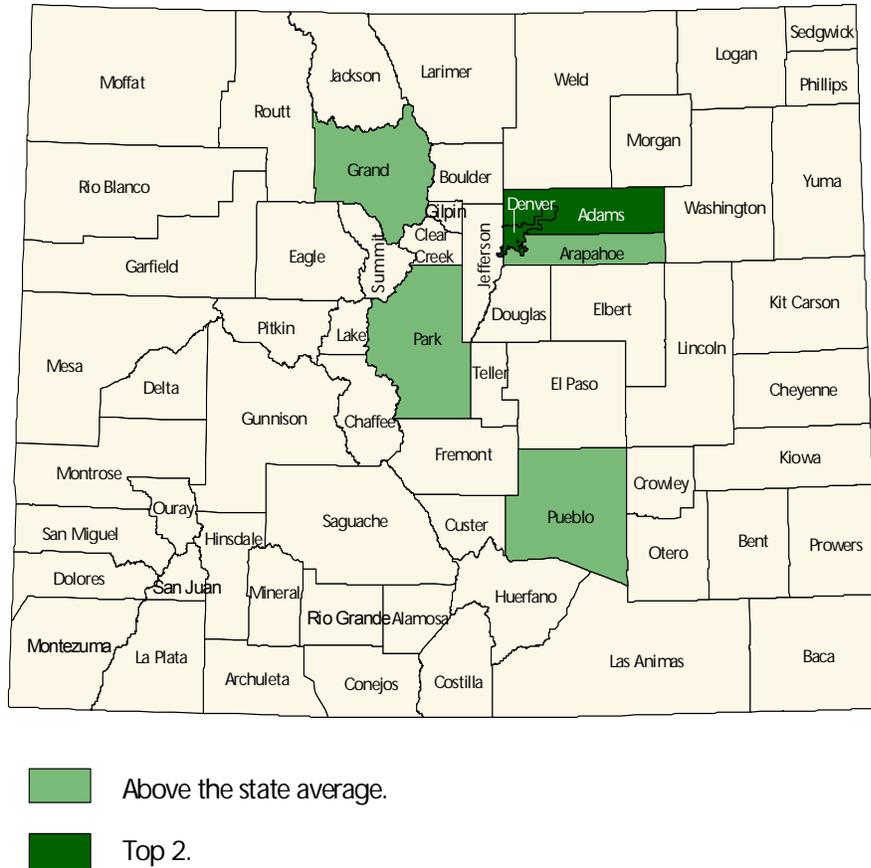
Note: The state serious crash index is 1.0. The rate is adjusted for the size of the driving-age population in each county.

Source: BBC Research & Consulting using 1999 crash data from CDOT and 1999 population estimates from the Colorado Division of Local Government.

Age & Traffic Crashes

The likelihood that a driver is involved in a crash varies by age. Understanding which age groups are most likely to be drivers in a crash can help in developing effective traffic safety programs.

Overview

Examining crash involvement by age reveals that the youngest, least experienced drivers are much more likely to be involved in crashes than the average Colorado driver. Younger drivers are also more likely to be drivers in fatal crashes. Geographic differences in serious crash rates for young drivers are explored to identify communities that may benefit from traffic safety programs. An analysis of senior drivers reveals that they are less likely to be serious crash drivers than the average driver statewide.

Crash involvement by age cohort. Younger, less experienced drivers, are more likely than older drivers to be involved in crashes. As drivers mature and gain experience on the roadways, the probability that they are involved in crashes decreases. Exhibit 8 examines the likelihood that a person in a particular age cohort was involved in a motor vehicle crash in 1999 compared to the expected crash involvement. The expected value for each age group is 1.0, meaning that drivers of a particular age are no more or less likely to be involved in a crash given their driving population.

As shown in Exhibit 8, drivers with the least experience are the most likely to be involved in a crash.

- Drivers under the age of 30 are much more likely to be involved in crashes than the average Colorado driver.

- Sixteen-year-olds are 3.5 times more likely to be involved in a crash than average.

- Drivers over the age of 70 are in 50 percent fewer crashes than expected. This decreased probability of crash involvement may reflect their decreased propensity to drive.

Exhibit 8.
Colorado Crash Involvement Index by Age Cohort, 1999.
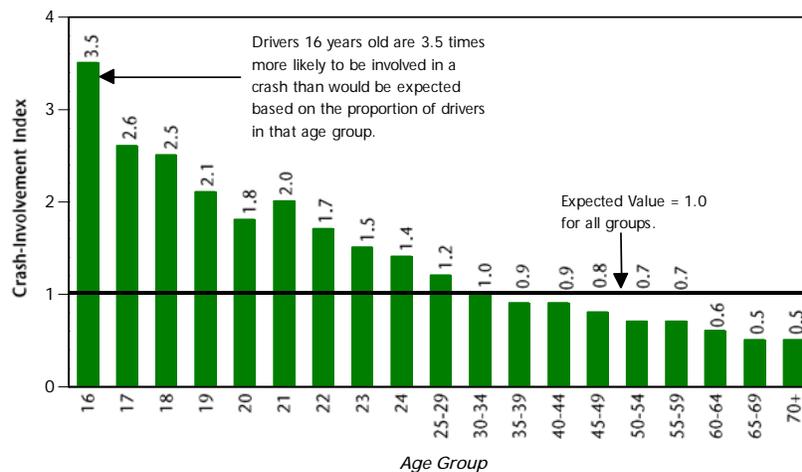
Note: The expected value for each age cohort is 1.0. The crash involvement index is equal to the ratio of two percentages. The first (the numerator) is equal to the percentage of all drivers involved in crashes who are from this age group. The second percentage (denominator) is the percentage of all licensed drivers who are from this age group.

Source: BBC Research & Consulting using 1999 crash data from CDOT, and 1999 licensed drivers from the Colorado Department of Revenue — Motor Vehicle Division.

Fatal crash involvement by age. The relationship between driver age and fatal crash involvement is somewhat similar to that shown in overall crash involvement. The index in Exhibit 9 measures the rates of fatal crash involvement, by age, of Colorado drivers in 1999. The expected fatal crash involvement rate for each age cohort is 1.0. Exhibit 9 demonstrates that the rate of fatal crash involvement decreases as drivers age.

- Sixteen-year-old drivers in 1999 were involved in 3 times more fatal crashes than expected, given the number of licensed sixteen-year-olds.

- Drivers over 35 are less likely to be drivers involved in fatal crashes than the average Colorado driver.

- Involvement rates remain below average for each older age group, including those over 70 years of age.

Exhibit 9.
Colorado Fatal Crash Involvement Index by Driver Age, 1999.
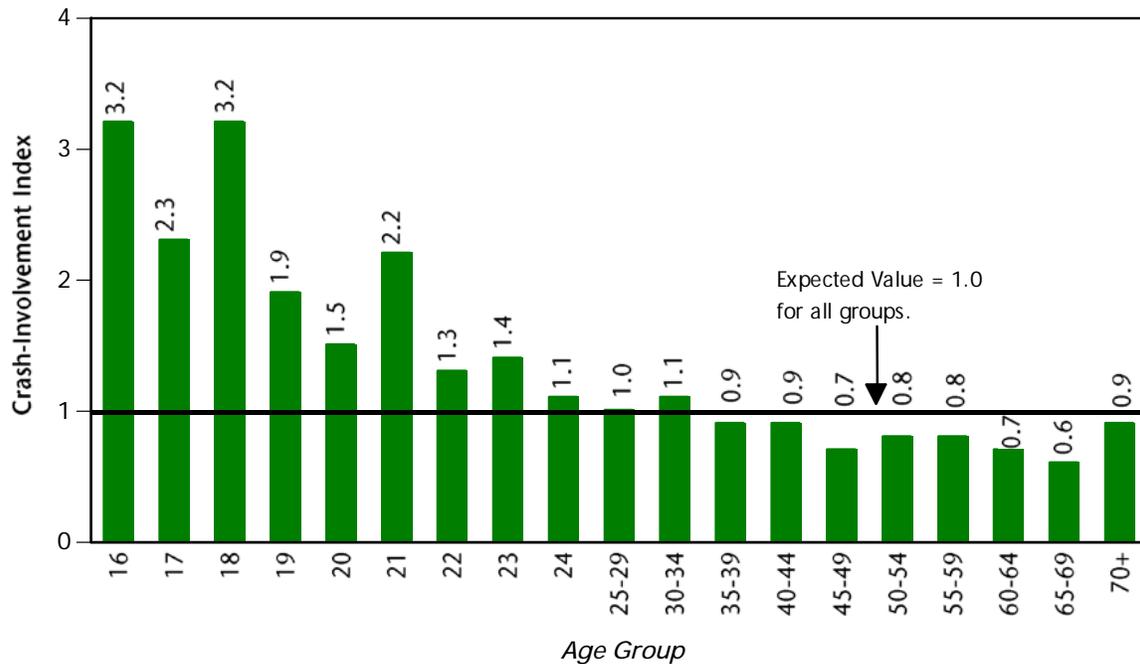
Note: The expected fatal crash involvement rate for each age cohort is 1.0. The index is equal to the ratio of two percentages. The first (the numerator) is equal to the percentage of all drivers involved in fatal crashes who are from this age group. The second percentage (denominator) is the percentage of all licensed drivers who are from this age group.

Source: BBC Research & Consulting using 1999 FARS data from the U.S. Department of Transportation, National Highway Traffic Safety Administration, and 1999 licensed driver data from the Colorado Department of Revenue — Motor Vehicle Division.

Traffic fatalities by age. In 1999, 623 Coloradoans lost their lives because of a traffic crash. Those killed include drivers, passengers, pedestrians and bicyclists. Teens and the elderly have the highest rate of fatalities per 100,000 population. Children, ages 15 and younger, have much lower fatality rates, due in part to their lower exposure. Exhibit 10 presents traffic fatality rates by age for Colorado in 1999.

Exhibit 10.
Colorado Traffic Fatality Rates by Age, 1999.
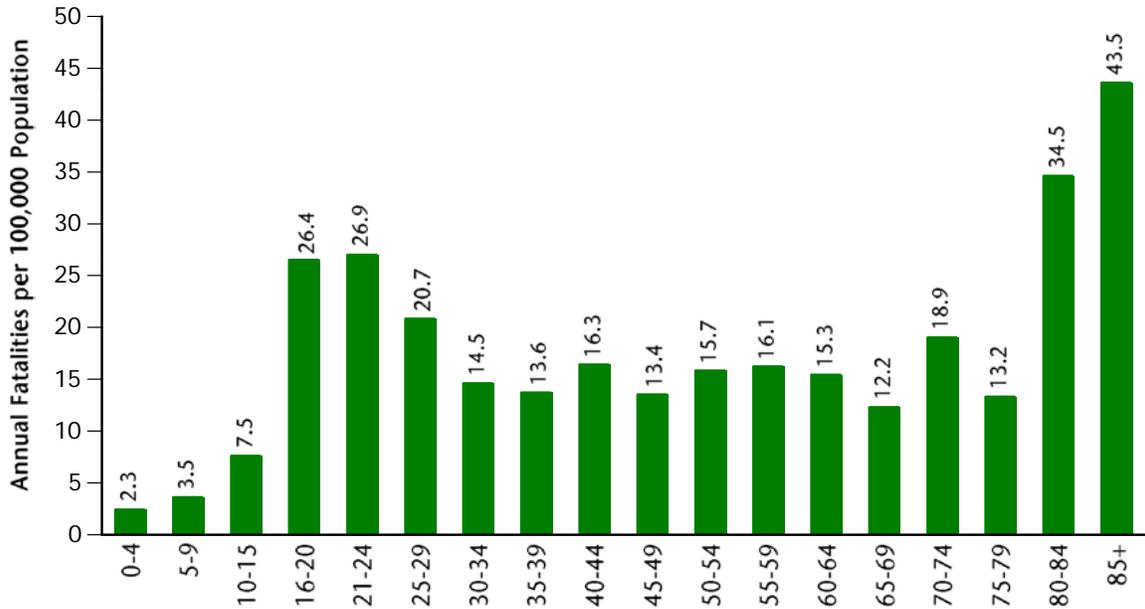
Source: BBC Research & Consulting using 1999 FARS data, U.S. Department of Transportation, National Highway Traffic Safety Administration and 1999 population data from the Colorado Division of Local Government.

Traffic fatalities by age and gender. In 1999, men were almost twice as likely as women to die in a traffic crash. Fatality rates per 100,000 population for men and women by age are shown in Exhibit 11. In every age cohort, men have higher fatality rates than women. Some of the disparity between male and female fatality rates in Colorado may be due to behavior:

- Men are less likely to wear their seat belts than women, especially in rural areas.

- Men are more likely to drive while impaired, and

- Men may be more likely to drive aggressively than women.

Men between the ages of 21 and 24 have the highest fatality rates.

Exhibit 11.
Colorado Traffic Fatality Rates by Age and Gender, 1999.
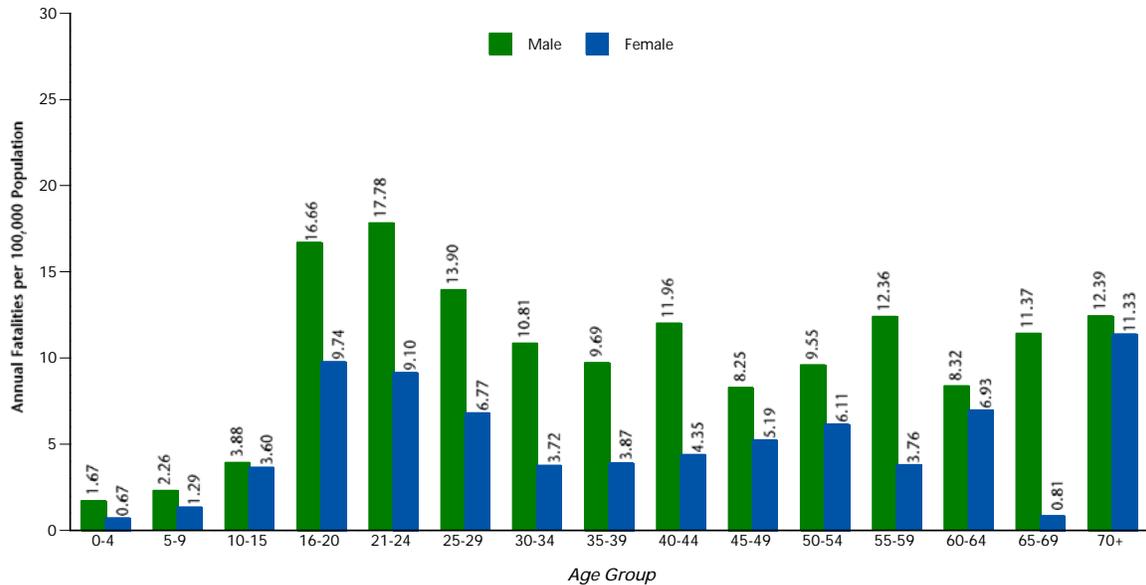
Source: BBC Research & Consulting using 1999 FARS data, U.S. Department of Transportation, National Highway Traffic Safety Administration and 1999 population data from the Colorado Division of Local Government.

Young Drivers

In 1999, nearly one in five drivers involved in serious crashes in Colorado were between the ages of 16 and 20 (Appendix D). As demonstrated previously (Exhibit 8), young drivers are more likely than other drivers to be involved in traffic crashes. Sixteen-year-old drivers have by far the highest crash rates of any group.

To reduce these rates, the Colorado Legislature passed a Graduated Licensing Law, effective July 1, 1999. The law implements changes to the licensing of first-time drivers:

- Young drivers must log a minimum of 50 hours of behind-the-wheel training with a parent, guardian or other qualified adult. Ten of these training hours must be at night.

- All passengers of young drivers must use seat belts. The number of passengers cannot exceed the vehicle's number of seat belts.

- Other rules apply, including restrictions on driving between the hours of midnight and 5, and a requirement that learner's permits must be held for a full 6 months.

Since 1996 the role of young drivers in serious crashes statewide has not changed — young drivers accounted for 18 percent of serious crashes in 1999 and 18 percent of serious crashes from 1996 through 1998.

The impact of the graduated licensing program can only be measured over several years. Crash data from 2000, not yet available, may provide the first indications of any effects of minimum training standards.

Geographic Differences in Young Driver Crash Rates

Young drivers from particular Colorado cities and counties are over-involved in serious crashes compared to other young drivers statewide. Although the geographic analyses identify areas of the state where young drivers are at increased risk of serious crash involvement, the analyses cannot explain why young driver crash rates vary by community. Exploration of the community demographics and the attitudes and behaviors of young drivers helps to explain why young drivers from a particular city or county are at increased crash-involvement risk.

Young driver crash rates — cities. In 1999, young drivers living in cities with populations greater than 10,000 were about as likely as other young drivers statewide to be involved in serious crashes. However, young driver crash rates vary considerably among these cities. (Appendix D presents population-adjusted crash rates for young drivers living in large cities and in all Colorado counties.)

As shown in Exhibit 12, young drivers from Louisville, Trinidad, Parker and Wheatridge are at least 50 percent more likely than other young drivers statewide to be involved in serious crashes.

Exhibit 12.
Cities with Young Driver Crash Rates Greater than the State Average, 1999.

- ● Rate 1.01 up to 1.5 times the state average.
- ● Rate 1.5 up to 2.0 times the state average.
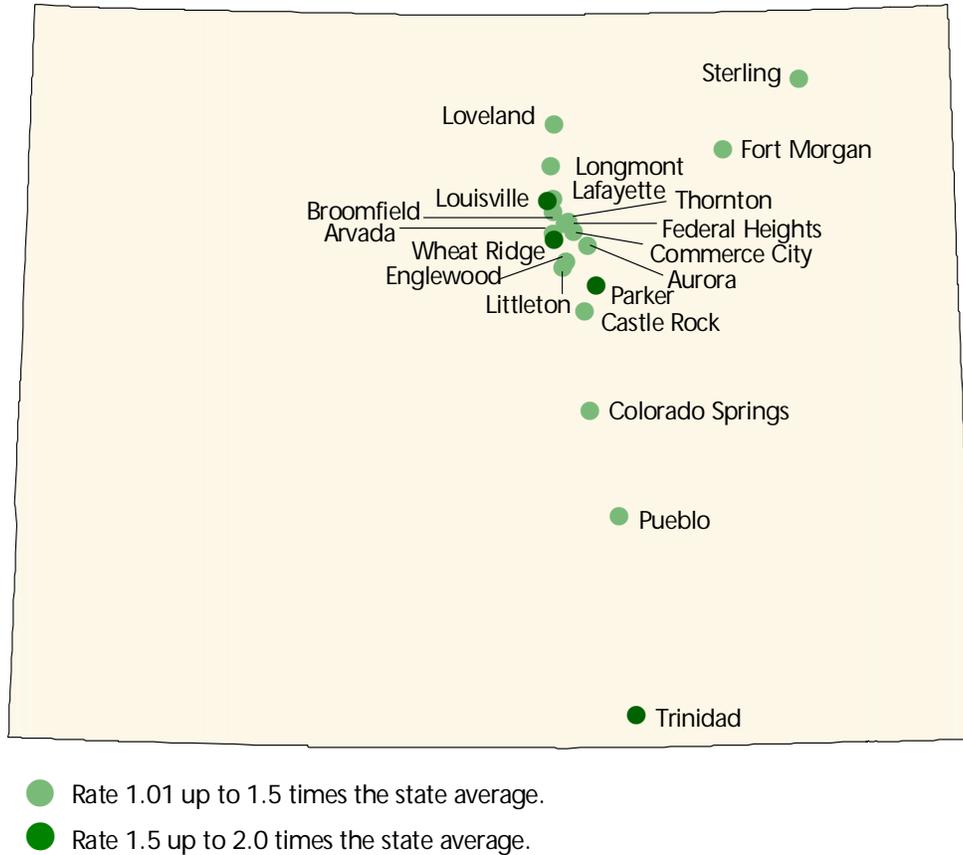
Note: Young drivers are between the ages of 16 and 20. Includes only those cities with 1999 populations greater than 10,000. These crash rates are adjusted for the size of the young driver population in the city.

Source: BBC Research & Consulting using 1998-1999 crash data from CDOT and 1999 population data from the Colorado Division of Local Government.

Young driver serious crash rates — counties. Young drivers from Park County are at least 50 percent more likely than young drivers statewide to be in a serious crash (Exhibit 13).

Exhibit 13.
Counties with Young Driver Serious Crash Rates Greater than the State Average, 1998-1999.

Rate 1.01 up to 1.5 times the state average.

Rate 1.5 up to 2.0 times the state average.
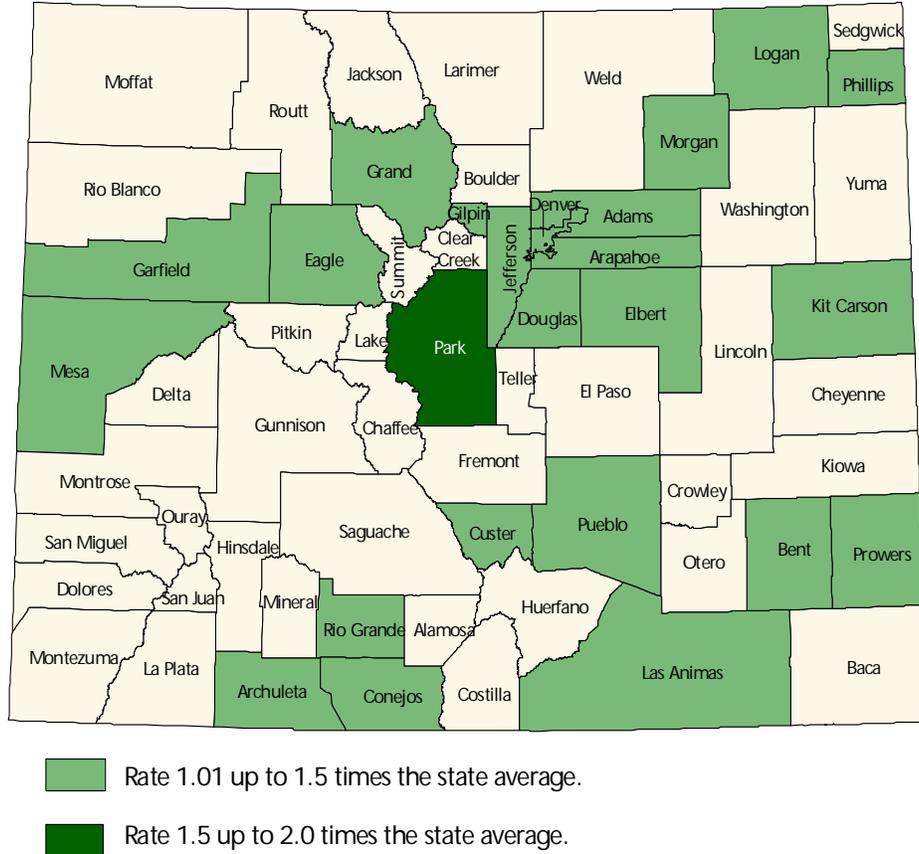
Note: Young drivers are between the ages of 16 and 20. The serious crash rates are adjusted for the size of the young driver population in each county.

Source: BBC Research & Consulting using 1998-1999 crash data CDOT and 1999 population data from the Colorado Division of Local Government.

Senior Drivers

The role of senior (age 65 plus) drivers in traffic crashes may be an emerging concern in the United States. The incidence of crashes involving senior drivers was examined to assess whether older drivers are at increased risk of traffic crash involvement.

From 1998 through 1999, slightly more than 6 percent of the drivers involved in serious crashes in Colorado were age 65 or older (Appendix E). Yet, in 1999, 12 percent (more than 300,000) of Colorado's licensed drivers were age 65 or older. Therefore, senior drivers are involved in fewer crashes than expected given the senior licensed driver population. As shown previously, drivers 65 and older are 50 percent less likely than the average Colorado driver to be involved in a crash. The same is true for drivers 70 years of age and older. At this time, senior drivers as a group, have low rates of involvement in serious crashes in the state.

Alcohol-Related Crashes

Overview

Reducing the role of alcohol in traffic crashes, particularly fatal crashes, is a priority for the state and many local communities. The combination of legislation, law enforcement, and education and outreach has successfully reduced the role of alcohol in crashes. Nevertheless, three-in-ten fatal crashes were alcohol-related in 1999.

The role of alcohol in fatal crashes. In 1980, one-half of the fatal crashes in Colorado were alcohol-related. Since that year, the role of alcohol in fatal crashes has been declining (Exhibit 14). For 1997 through 1999, about 30 percent of fatal crashes were alcohol-related.

Exhibit 14.
Alcohol-Related Fatal Crashes as a Percentage of All Fatal Crashes in Colorado, 1980 – 1999.
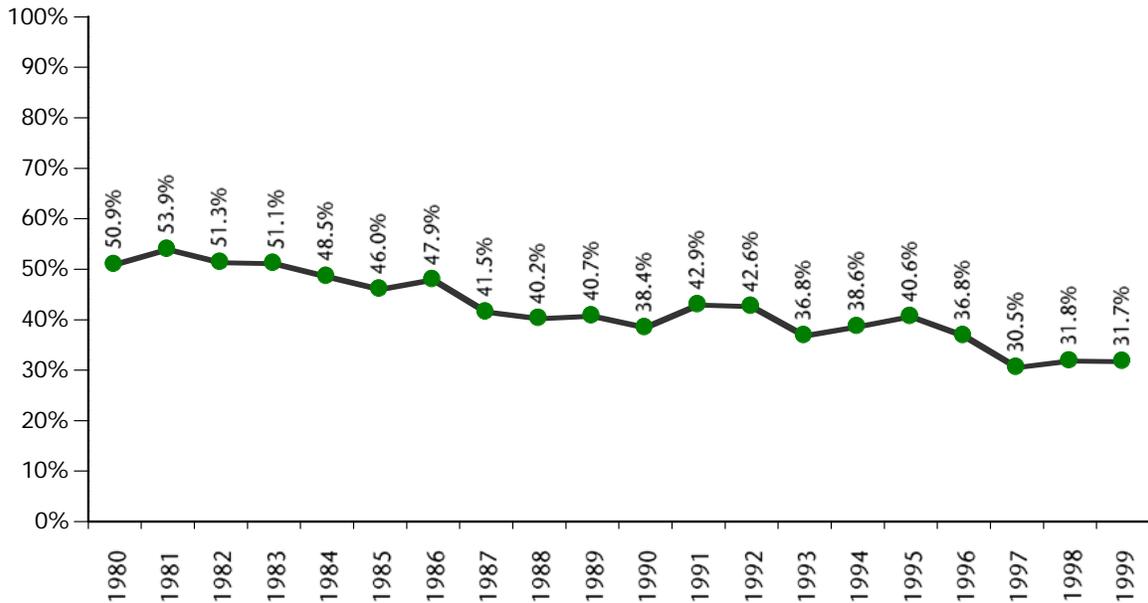
Note: Alcohol-related fatal crashes are those where at least one driver or pedestrian was found to have a BAC of 0.05 or greater.
Source: U.S. Department of Transportation, National Highway Traffic Safety Administration, FARS.

Driver age and alcohol-related fatal crashes. The link between drinking and driving is apparent for all age groups. Defining "drinking" as having a BAC greater than 0.01, one-in-three 21 year-old drivers involved in fatal crashes had been drinking (Exhibit 15). The likelihood that a driver in a fatal crash was reported as drinking increases with age until drivers reach the 30 to 34 year-old age group, when the rate begins to decline. In 1999, nearly 25 percent of male drivers involved in fatal crashes had been drinking, compared to 12 percent of women.

Exhibit 15.
Colorado Drinking Drivers Involved in Fatal Crashes by Age, 1999.
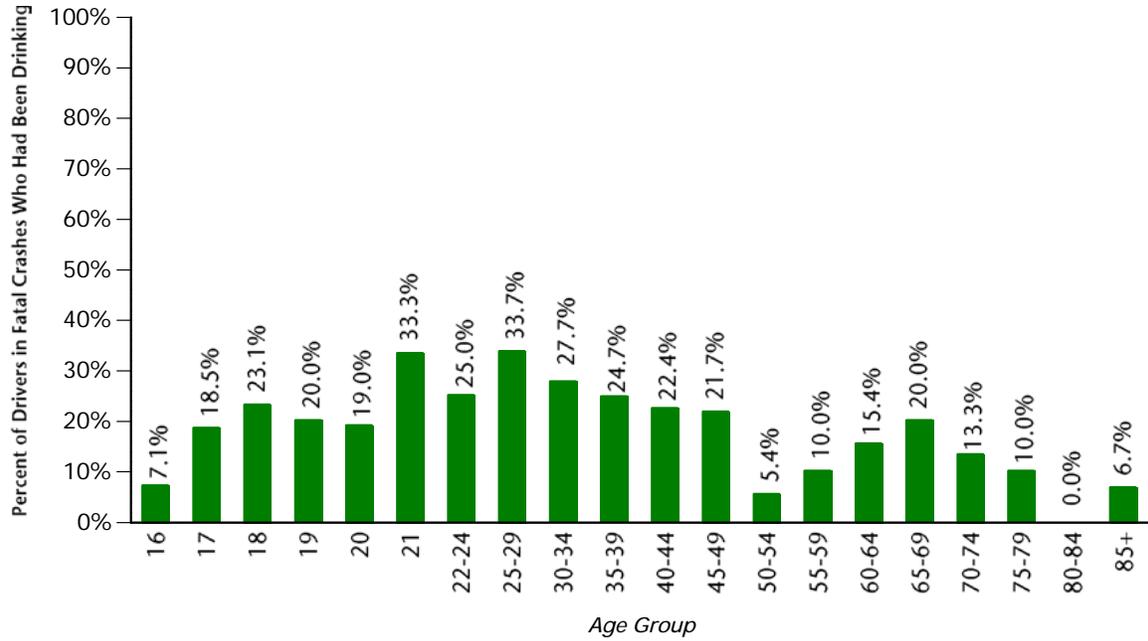
Note: Drinking drivers are those with BACs of 0.01 or greater as reported in the 1999 FARS database.

Source: BBC Research & Consulting using U. S. Department of Transportation, National Highway Traffic Safety Administration, FARS, and 1999 population data from the Colorado Division of Local Government.

The role of underage drinking drivers in fatal crashes. More than one-in-six drivers under the age of 21 involved in fatal crashes had BACs greater than 0.01 in 1999 (Exhibit 16). Underage male fatal crash drivers are more than twice as likely as underage female fatal crash drivers to have been drinking.

Since 1991, the rate of alcohol-related fatal crashes involving underage drinking drivers has been cut in half. Efforts of law enforcement, CDOT, health and safety professionals, educators, parents and other concerned citizens have had an impact on this problem.

Exhibit 16.
Colorado Underage Drinking Drivers Involved in Fatal Crashes, 1991 – 1999.
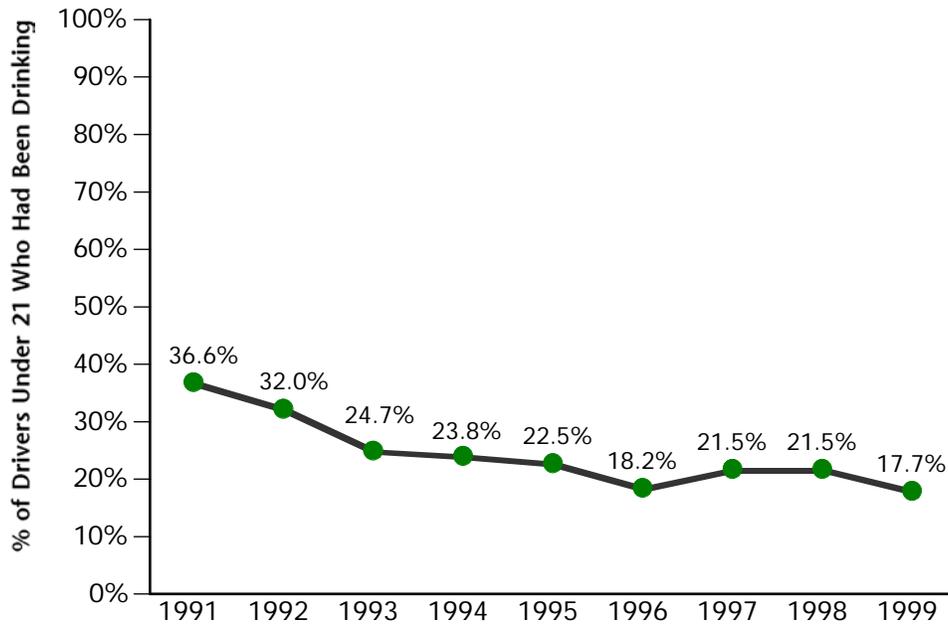
Note: Underage drinking drivers are younger than 21 and had BACs greater than 0.01.

Source: U.S. Department of Transportation, National Highway Traffic Safety Administration, FARS.

Geographic Differences in Drinking and Driving

Drivers from several Colorado communities who are involved in serious crashes are much more likely than the average driver to have been suspected of impaired driving.

Drinking driver serious crash rates — cities. In 1999, 6 percent of all Colorado drivers involved in serious crashes were suspected of alcohol or drug use. This is down slightly from the 1996 – 1998 average of 7 percent (Appendix F). As shown in Exhibit 17 below, drivers from Commerce City are more than 2.5 times more likely than other drivers statewide to be suspected of impaired driving in a serious crash.

Exhibit 17.
Cities with Drinking Driver Serious Crash Rates Above the State Average, 1998-1999.

● Rate 1.01 up to 1.5 times the state average.
● Rate 1.5 up to 2.0 times the state average.
● Rate 2.0 times the state average or greater.

Note: The state average is 1.0. Includes cities with 1999 populations greater than 10,000. This index is adjusted for the driving-age population in each city.
Source: BBC Research & Consulting using 1998-1999 crash data from CDOT and 1998-1999 Colorado Division of Local Government population data.

Drinking driver serious crash rates — counties. Drivers involved in serious crashes in 1998 and 1999 from Mineral, Conejos, San Juan, Costilla and Delores counties were more than twice as likely as drivers statewide to have been suspected of alcohol or drug use (Exhibit 18).

Exhibit 18.
Counties with Drinking Driver Serious Crash Rates Above the State Average, 1998-1999.

Rates 1.01 up to 1.5 times the state average.

Rates 1.5 up to 2.0 times the state average.

Rates greater than 2.0 times the state average.
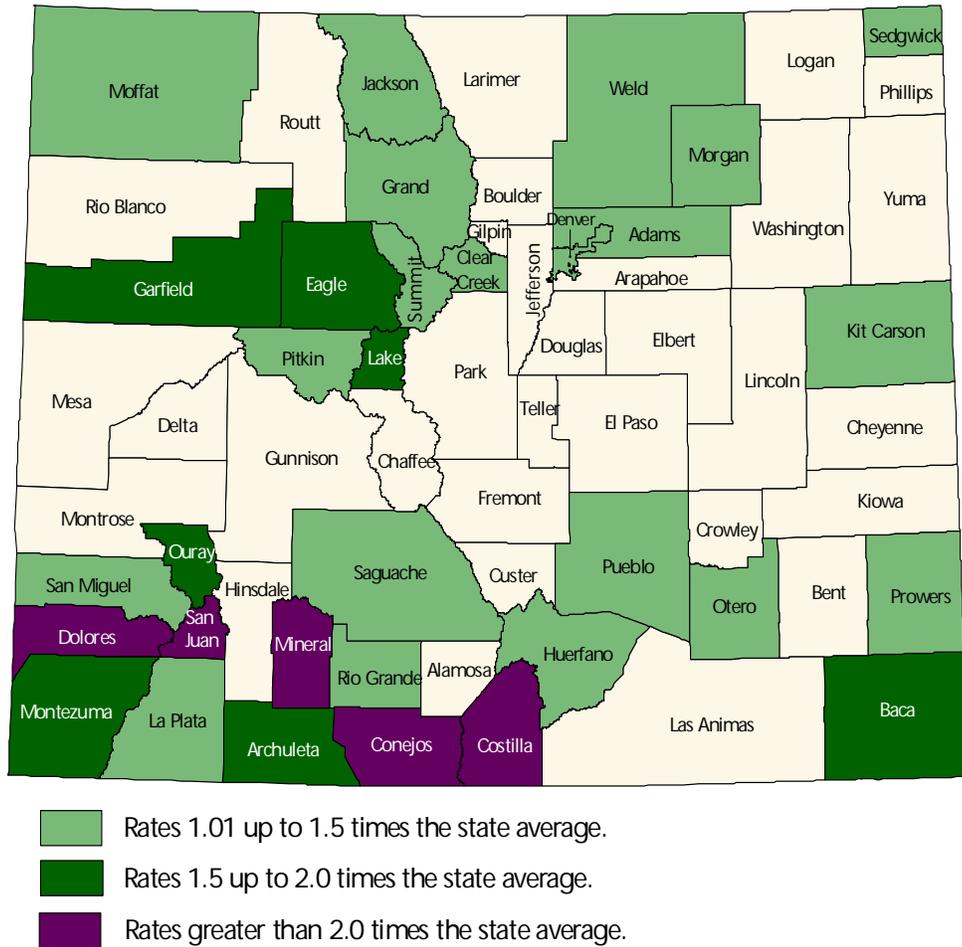
Note: The state average is 1.0. This index is adjusted for the driving population in each county.

Source: BBC Research & Consulting using 1998-1999 crash data from CDOT and 1999 Colorado Division of Local Government population data.

Age and Drinking and Driving

The probability that a driver involved in a serious crash was impaired by alcohol or drugs varies substantially by age. Coloradoans between the ages of 21 and 34 are 32 percent of the state's licensed driving population. Yet, drivers in this age group comprise nearly one-half of all drivers suspected of alcohol or drug use in a serious crash. Statewide, drivers between the ages of 21 and 34 are 40 percent more likely to be an impaired driver in a serious crash than all other drivers statewide.

The role of 21-34 year-olds. In serious crashes that occurred in 1998 and 1999, almost half of the drivers suspected of alcohol or drug use were between the ages of 21 and 34. About 80 percent of these 21 to 34 year-old drinking drivers were men (Appendix F).

Exhibit 19.
Drinking Drivers Involved in Serious Crashes by Age, 1998-1999.

All other ages
55%

Ages 21 - 34
45%
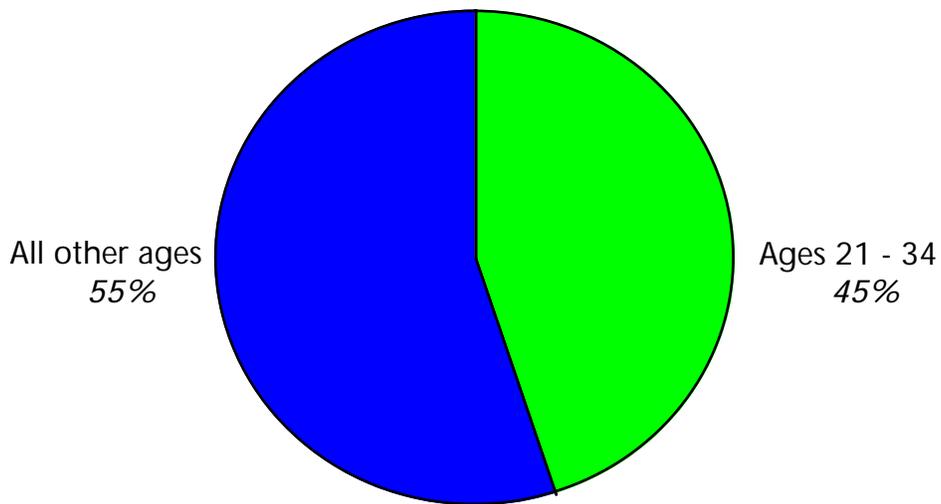
Note: Among all drivers involved in serious crashes who were suspected of impaired driving, 45 percent were between the ages of 21 and 34.

Source: BBC Research & Consulting using 1998-1999 crash data from CDOT and 1999 Colorado Division of Local Government population data.

21-34 year-old drinking drivers — cities. Drivers between the ages of 21 and 34 from Commerce City, Denver, Canon City, Golden and Pueblo who are involved in serious crashes were at least 50 percent more likely than 21 to 34 year-old drivers statewide to have been suspected of alcohol or drug use (Exhibit 20).

Exhibit 20.
Serious Crash Rates of Drinking Drivers Between the Ages of 21 and 34 — Cities Above the State Average, 1998-1999.

● Rate 1.01 up to 1.5 times the state average.
● Rate 1.5 up to 2.0 times the state average.
● Rate greater than 2.0 times the state average.

Note: The state average is 1.0. The index is adjusted for the size of each city's 21 to 34 year-old population.

Source: BBC Research & Consulting using 1998-1999 crash data from CDOT and 1999 Colorado Division of Local Government population data.

21-34 year-old drinking drivers — counties. In 1998-1999, drivers in serious crashes between 21 and 34 years of age from San Juan, Mineral, Ouray, Dolores, Conejos, Eagle and Montezuma counties were at least twice as likely as 21 to 34 year-old drivers statewide to be suspected of alcohol or drug use (Exhibit 21).

Exhibit 21.
Serious Crash Rates of Drinking Drivers Between the Ages of 21 and 34 — Counties Above the State Average, 1998-1999.

Rate 1.01 up to 1.5 times the state average.

Rate 1.5 up to 2.0 times one the state average.

Rate greater than 2.0 times the state average.
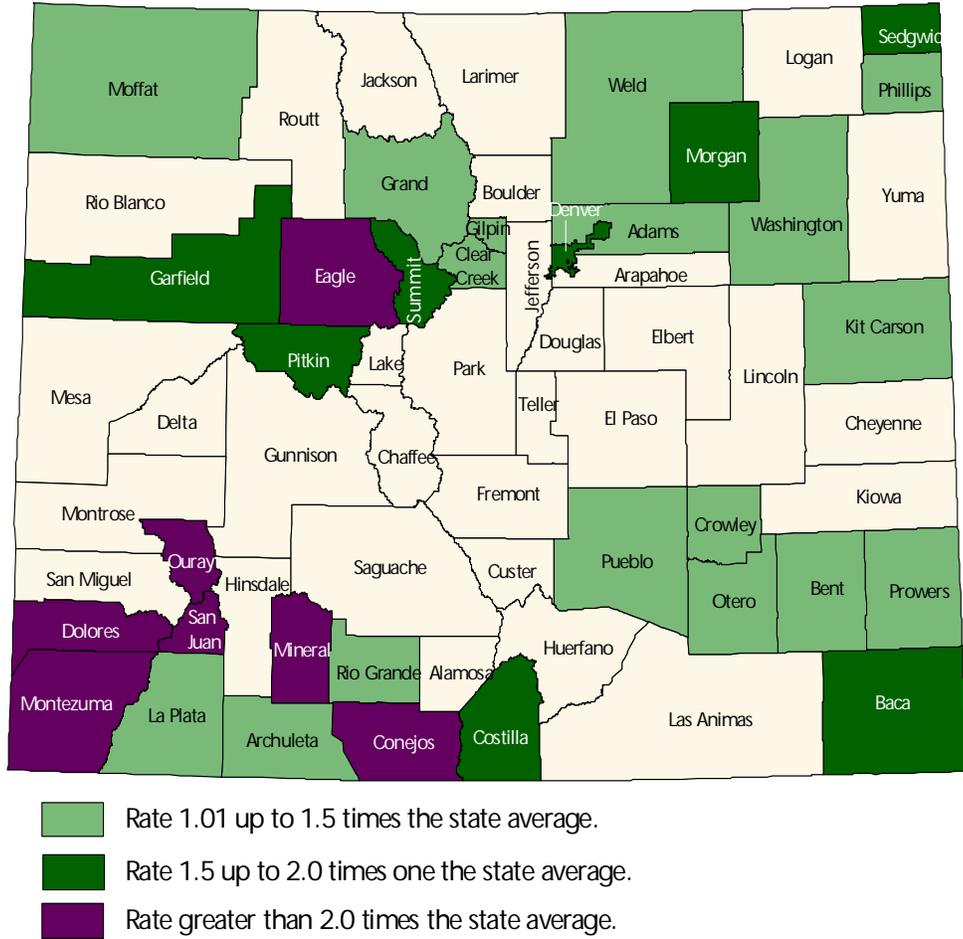
Note: The state average is 1.0. The index is adjusted for the size of each county's 21 to 34 year-old population.

Source: BBC Research & Consulting using 1998-1999 crash data from CDOT and 1999 Colorado Division of Local Government population data.

Occupant Protection

Overview

Overall, seat belt use in Colorado increased in the 1990s. Although rural drivers are less likely than urban drivers to wear seat belts, rural seat belt use also increased from 1990 to 2000. Given the overall statewide trends, it is a concern that observed seat belt and child seat use by children declined in 2000.

Statewide occupant protection trends. The State of Colorado conducted its first statistically-valid observational survey of statewide seat belt use in 1990. Since that time, annual seat belt surveys have measured increasing seat belt use in the state (Exhibit 22). In 2000, overall seat belt use was 65.1 percent, down slightly from a 1998 high of 66 percent. Historically, seat belt use in cars, vans and SUVs exceeds the use rate in pick-up trucks. From a low of 35 percent in 1994, seat belt use in pick-up trucks increased to nearly 51 percent by 2000.

Exhibit 22.
Colorado Seat Belt Use, 1990 – 2000.
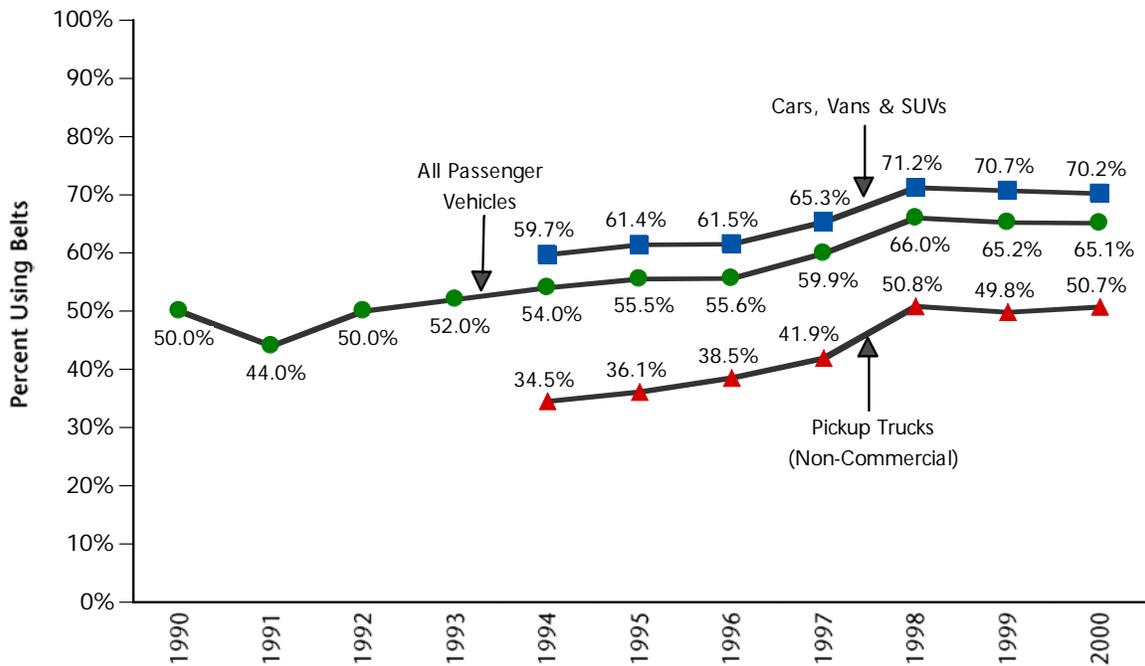
Source: Annual Seat Belt Surveys conducted by the CSU Institute of Transportation Management on behalf of CDOT.

Urban and rural occupant protection trends. Eastern Plains and Western Colorado counties historically have had lower seat belt use rates than Front Range counties. On average, rural seat belt use is 10 percentage points lower than urban seat belt use (Exhibit 23). This gap has been consistent over the past decade.

Exhibit 23.
Colorado Urban and Rural Seat Belt Use, 1990 – 2000.
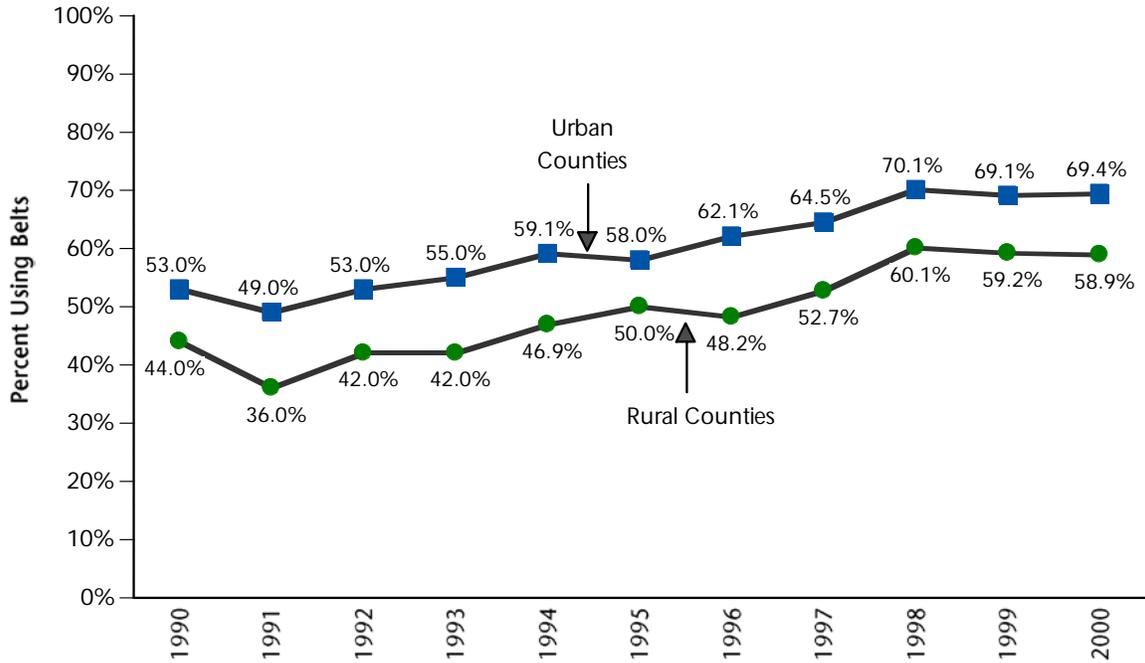
Source: Annual Seat Belt Surveys conducted by the CSU Institute of Transportation Management on behalf of CDOT.

Child Occupant Protection

Beginning in 1997, the observational survey included a Child/Juvenile seat belt use study. Rates for seat belt use as well as car seat use fell since 1997. Unless this decrease can be explained by a change in methodology, the data show that Colorado's children are much less likely than other Coloradoans to be properly restrained.

Children 5-15 years of age. Since 1997, observational surveys measuring seat belt use by children between the ages of 5 and 15 measured decreases in seat belt use (Exhibit 24).

Exhibit 24.
Colorado Seat Belt Use by Children Age 5 to 15, 1997 – 2000.
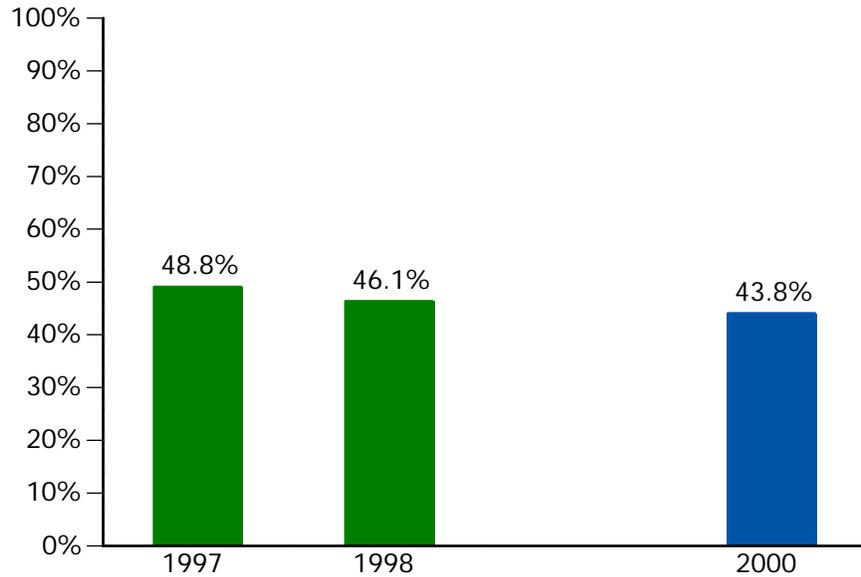
Note: A Child/Juvenile seat belt use study was not conducted in 1999.

Source: Annual Seat Belt Surveys conducted by the CSU Institute of Transportation Management on behalf of CDOT.

Car seat use. The Child/Juvenile portion of the annual seat belt survey also measures car seat use for children between the ages of 0 and 4. Nearly nine-in-ten children were in car seats in 1998. This proportion fell to slightly less than 80 percent by 2000 (Exhibit 25).

Exhibit 25.
Colorado Car Seat Use Children Age 0 to 4, 1997 – 2000.
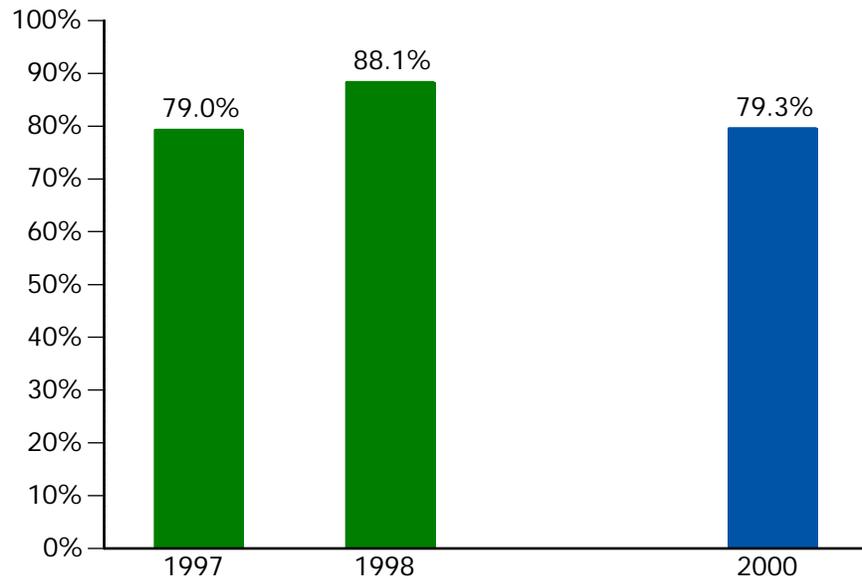
Note: A Child/Juvenile seat belt use study was not conducted in 1999.

Source: Annual Seat Belt Surveys conducted by the CSU Institute of Transportation Management on behalf of CDOT.

Geographic Differences in Driver Seat Belt Use

The likelihood that a driver involved in a very serious crash was using a seat belt varies significantly across Colorado communities, both urban and rural.

Crashes included in community-level analyses of driver occupant protection use. The previous community-level analyses in this report used crash data on serious crashes. Records for serious crashes do not have consistent, accurate occupant protection information. Because of inconsistent data reporting, analyses of driver occupant protection use must examine an even smaller group of crashes — ***very serious crashes***. Very serious crashes are those in which a driver, passenger or pedestrian was killed or suffered an evident or incapacitating injury. Driver seat belt use data collected from these very serious crashes may be more accurate.

Drivers in very serious crashes not wearing seat belts — cities. About one-third of drivers from cities involved in very serious crashes from 1998 to 1999 were not wearing seat belts, less than the state average of 40 percent. (Appendix G presents detailed statistics for each city over 10,000 population.) On average, drivers residing in large cities were more likely to use seat belts than other drivers statewide. However, drivers from Commerce City and Canon City are more than twice as likely as drivers statewide to have not worn seat belts in very serious crashes (Exhibit 26).

Exhibit 26.
*Cities with Unbelted Driver Very Serious Crash Rates Above the State Average, 1998 – 1999.*

● Rate 1.0 up to 1.5 times the state average.
● Rate 1.5 up to 2.0 times the state average.
● Rate greater than 2.0 times the state average.
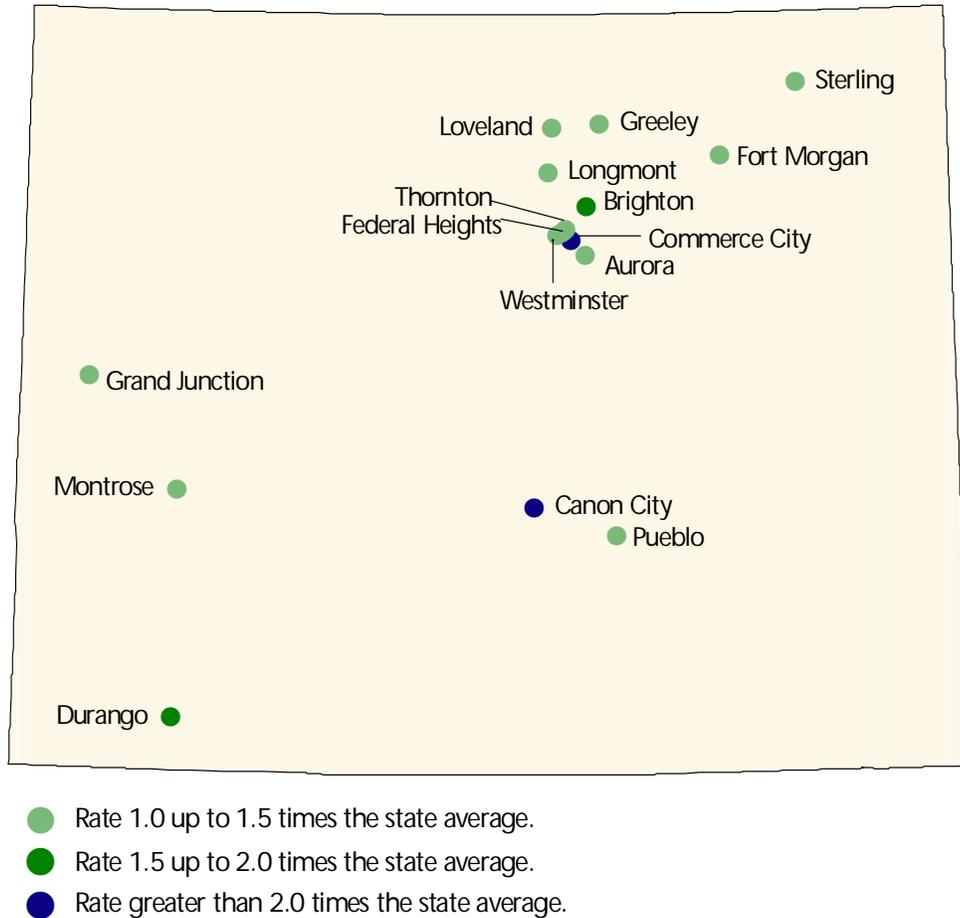
Note: Includes cities with 1999 populations greater than 10,000. Very serious crashes are those with evident, incapacitating or fatal injuries. The state average is 1.0. The city average is 0.90. These rates are adjusted for the driving-age population in each city.

Source: BBC Research & Consulting using 1998-1999 crash data from CDOT and 1999 population data from the Colorado Division of Local Government.

Drivers in very serious crashes not wearing seat belts — counties. In both 1996-1997 and 1998-1999, drivers from Saguache, Costilla, Conejos, Phillips and Yuma county had some of the highest population-adjusted rates of unbelted drivers among those involved in very serious crashes (Exhibit 27).

Exhibit 27.
Counties with Unbelted Driver Very Serious Crash Rates at Least 1.5 Times Greater than the State Average, 1998 – 1999.
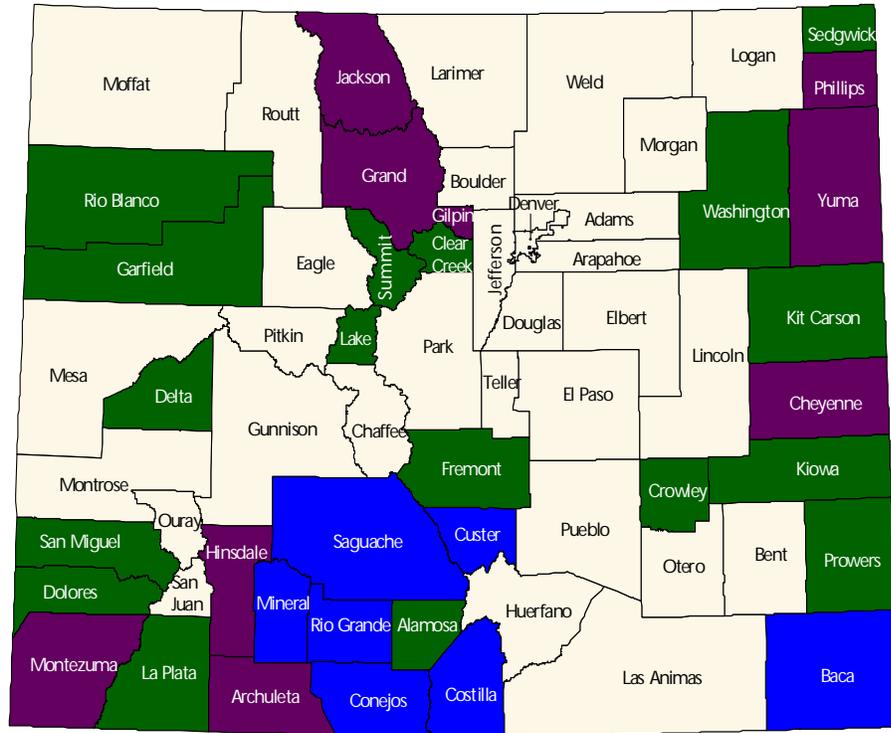
■ Rate 1.5 up to 2.0 times the state average.

■ Rate 2.0 up to 3.0 times greater than the state average.

■ Rate 3.0 times the state average or greater.

Note: Very serious crashes are those with evident, incapacitating or fatal injuries. The state average is 1.0.   These rates are adjusted for the driving-age population in each county.

Source: BBC Research & Consulting using 1998-1999 crash data from CDOT and 1999 population data from the Colorado Division of Local Government.

Motorcyclists, Bicyclists & Pedestrians

Motorcycle Crashes

Motorcyclists are another segment of drivers who may be at an increased risk of serious crash involvement. Unlike analyses of drivers, a population-adjusted index of county-by-county motorcyclist serious crash rates cannot be constructed using the county's driving-age population because motorcyclists are only a small proportion of all drivers. A different factor must be employed to adjust for the size of the motorcyclist population in a county. Because the motorcycle endorsement on the Colorado driver's license never expires, the number of registered motorcycles in a county are the best available proxy for estimating the size of the motorcycle riding population.

In 1998 there were more than 97,000 registered motorcycles in the State of Colorado — about 3.2 motorcycles for every 100 people with drivers licenses. From 1998 to 1999, fewer than 3 percent of all serious crashes statewide involved motorcyclists (Appendix H). Therefore, while the rate of serious motorcycle crashes may be high per vehicle mile traveled, the total number of crashes is proportionate to the relative number of motorcycles among vehicles in the state.

Overall, motorcyclists are not over-involved in serious crashes, based on the estimated size of the riding population. However, motorcyclists from some counties are more likely to be involved in serious crashes, compared to the average motorcyclist. As shown in Exhibit 29, motorcyclists from Denver were 50 percent more likely to be involved in a serious crash than motorcyclists statewide.

Exhibit 28.
Counties with Motorcycle Rider Serious Crash Rates Above the State Average,
1998 – 1999.

Rate 1.01 up to 1.5 times the state average.

Rate 1.5 up to 2.0 times the state average.
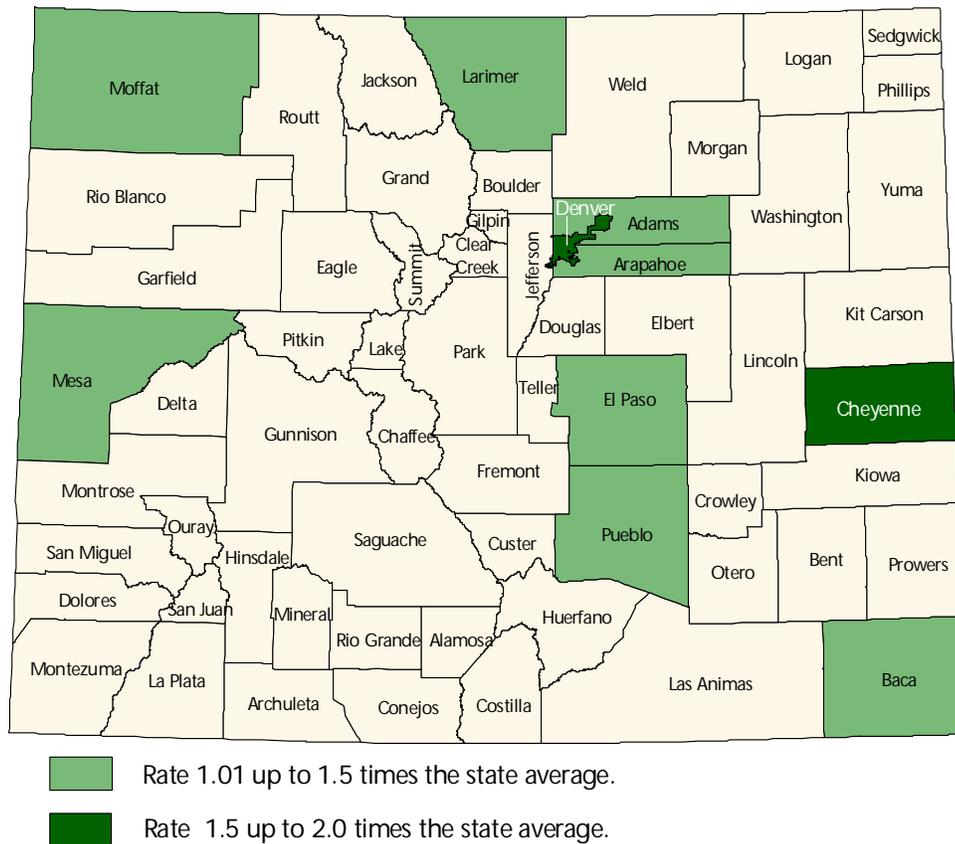
Note: This index is adjusted for the motorcyclist population in each county using motorcycle registrations as a proxy for the motorcycle riding population. 1998 was the most recent year for which county-by-county motorcycle registrations were available.

Source: BBC Research & Consulting from 1998-1999 CDOT crash data and 1998 motorcycle registrations provided by the Colorado Department of Revenue — Division of Motor Vehicles.

Crashes Involving Bicyclists

In 1999 there were approximately 1,290 bicycle-related crashes in Colorado. The greatest number of crashes involving bicycles took place in Denver, followed by Boulder and Colorado Springs. Of these cities, the highest percentage of all crashes that involved bicycles took place in Boulder — 3 percent of all crashes occurring in Boulder involved bicycles. The breakdown of these crashes across cities and counties is found in Appendix H.

Pedestrian Crashes

In 1999, the total number of crashes involving pedestrians was 1,407. Not surprisingly, over 85 percent of crashes that involved pedestrians occurred in cities. Approximately one-third of these crashes took place in Denver, yet pedestrian-related crashes account for fewer than 2 percent of all crashes occurring in Denver. As a percentage of all crashes, Sterling had the highest percentage of pedestrian-related crashes out of cities with populations of 10,000 or more. The distribution of pedestrian-related crashes across counties and all cities is shown in Appendix H.

Potential Traffic Safety Program Candidates

Analyzing high-risk driving behaviors and populations at the community level is an effective way to identify cities and counties where residents may benefit from traffic safety programs. This type of analysis takes into account the size of a community's population in order to compare its crash rate with other communities. For example, a small community may have fewer drivers involved in serious crashes than larger communities simply because its population is smaller. However, after controlling for population, this small community's crash rate may substantially exceed that of larger communities, making it a high priority site for a traffic safety program.

In this section, three driver categories are highlighted as potential traffic safety program candidates, including young drivers, drivers suspected of alcohol or drug use and drivers not wearing seat belts. The following recommendations in each category are made using crash data from the Colorado Department of Transportation and, in some cases, population estimates from the Colorado Division of Local Government. Critical local factors, including the presence of community members interested in pursuing traffic safety issues and the availability of resources to implement programs, were not considered.

Young Drivers

Young drivers from several Colorado cities continue to be over-represented in serious crashes after controlling for the size of the young driver population. Young drivers from the following cities have consistently been among the cities with the highest population-adjusted young driver crash rates since 1996 (Appendix D).

- Louisville (1.9 times the state average),

- Parker (1.7 times the state average),

- Wheatridge (1.6 times the state average),

- Castle Rock (1.4 times the state average), and

- Loveland (1.4 times the state average).

Likewise, after controlling for the young driver population in Colorado counties, five counties have consistently been over-represented in young driver serious crashes since 1996 (Appendix D).

- Park County (1.6 times the state average),

- Prowers County (1.4 times the state average),

- Morgan County (1.1 times the state average),

- Gilpin County (1.1 times the state average), and

- Arapahoe County (1.1 times the state average).

Park, Prowers and Morgan counties each have young driver populations of approximately 1,000 and Gilpin County has less than 350 young drivers. However, given these counties' persistently high proportion of young drivers who are involved in serious crashes, the development of traffic safety programs in these rural areas may be warranted.

Market research and program development. Since 1998, CDOT has supported market research and program development of a young driver traffic safety program in Douglas County, which includes the high youth crash rate cities of Parker and Castle Rock. The research consisted of a telephone survey and focus groups conducted by BBC Research & Consulting. The research examined young drivers' attitudes, self-reported behaviors regarding driving, and learning to drive. Additional focus groups with Douglas County teens and their parents explored these issues in further depth, with a particular focus on learning to drive.

Based on the research findings, a community coalition in Douglas County, supported by CDOT, is developing a program to assist parents in teaching their teens to drive. This skills-based program will be available on the Internet and CD-ROM in 2001.

Recommendations. Prior to initiating new efforts in communities whose young drivers are demographically similar to Douglas County, CDOT may want to gauge the effectiveness of the Douglas County program as well as the impacts of the graduated licensing law.

Senior Drivers

For the first time, the Problem Identification includes an analysis of senior drivers. Senior drivers 65 and older account for approximately 12 percent of the licensed drivers in the state. From 1998 to 1999, 6 percent of the drivers involved in serious crashes were age 65 or older. Drivers over age 65 are not a problem group. Even the very oldest drivers, those over age 85, are not over-involved in serious crashes in Colorado.

Improving the driving behavior of the oldest drivers may only be appropriate on a case by case basis, rather than through the development of a comprehensive traffic safety program. It may also be that the appropriate response to reduce crashes involving senior drivers is a regulatory one (e.g., more frequent license renewals with accompanying vision tests). At this time, the crash involvement rates of senior drivers in Colorado do not warrant any dramatic action.

Recommendations. The role of older drivers in serious crashes may emerge as a traffic safety problem in future. At this time, these drivers are not over-involved in serious crashes. Rather, they are less likely, given their population size, to be involved in a serious crash than drivers of other ages.

Drivers Suspected of Alcohol or Drug Use

Drivers from five large cities have consistently been over-represented in alcohol-related serious crashes since 1996 (Appendix F).

- Commerce City (2.6 times the state average),

- Brighton (1.7 times the state average),

- Pueblo (1.4 times the state average),

- Denver (1.4 times the state average), and

- Thornton (1.2 times the state average).

Similarly, drivers from three counties have been among the top ten counties with above-average impaired driving rates.

- Costilla County (2.2 times the state average),

- Dolores County (2.0 times the state average), and

- Eagle County (1.6 times the state average).

Market research and program development. Based on CDOT-supported market research conducted by BBC Research & Consulting, a pilot program to reduce impaired driving by 21 to 34 year-old men in Pueblo County was initiated in 2000. This program combines grassroots community outreach with a media campaign. If an upcoming evaluation demonstrates that the program is successful, CDOT should consider expanding it to other demographically similar communities.

CDOT is also supporting an impaired driving program in Costilla County. In addition to these two program, CDOT and other State agencies support a wide range of prevention and enforcement programs that work together to reduce impaired driving.

Recommendations. Comprehensive impaired driving prevention and enforcement programs should be considered in Commerce City and Brighton. Research that may assist in program development may include: demographic assessments, including an analysis of the age cohorts of drivers suspected of impaired driving, and focus groups with those over-involved cohorts to test messages and identify attitudes. It may be that the program developed in Pueblo, or programs developed elsewhere, could be successfully implemented in these cities if preliminary research supports the program messages and activities. In addition, the development of an impaired driving program focusing on Eagle County residents should be considered and supported by research.

Drivers Not Wearing Seat Belts

From 1998 to 1999, 38 percent of the drivers involved in serious crashes were not wearing seat belts. Drivers from five cities have consistently been less likely to wear seat belts in serious crashes than drivers statewide.

- Commerce City (2.6 times the state average),

- Canon City (2.1 times the state average),

- Brighton (1.7 times the state average),

- Fort Morgan (1.5 times the state average), and

- Thornton (1.3 times the state average).

Drivers from four counties have had unbelted serious crash driver rates in the top ten since 1996.

- Saguache (6.0 times the state average),

- Costilla (5.3 times the state average),

- Conejos (3.8 times the state average), and

- Phillips (2.9 times the state average).

Market research and program development. Based on CDOT-supported market research, an innovative program to increase seat belt use in Montezuma County was initiated in 2000. Working with members of a local community coalition, and based on focus group research, a media campaign was developed by Cactus Marketing Communications to support the coalition's grassroots efforts. The resulting campaign, which included seat belt signage, radio and newspaper ads and high visibility education and outreach by the coalition, increased seat belt use substantially.

CDOT also supports a highly successful campaign, developed by Cordy & Company, to increase seat belt use among urban African-American men.

In addition to these programs, CDOT, health and safety professionals, law enforcement and other advocates engage in a wide variety of programs to increase seat belt use statewide.

Recommendations. The preliminary success of the Montezuma County program indicates that it may be successfully implemented in communities with similar demographics. For example, expansion to Dolores and La Plata counties may be accomplished with relative ease. As the Montezuma County program builds on specific community values, this program may not easily expand into more urban settings such as Commerce City or Brighton, and may need tailoring to be effective in Eastern Plains communities. Research with residents from these communities is warranted prior to the initiation of any pilot program.

CDOT should also continue to carefully monitor the trends seen in seat belt and car seat use by children. Additional resources or re-focused resources may be needed to increase seat belt use among children. Continued expansion of the Cordy & Company-designed campaign, "Brother Keep It Together," to other communities with large African-American populations may also be warranted.

Appendix A

Appendix A. Analysis Methodology

CDOT provided detailed information on 1999 crashes that took place in Colorado and the addresses of drivers involved in these crashes. In the 1999 crash database, the 115,148 records ranged from property damage only crashes — which made up nearly three-quarters of all records — to serious crashes in which someone was killed or injured.

The geographic segmentation analysis in this report focuses on serious crashes only, as data is more complete and consistent for these records. The address database included 195,076 addresses. Out-of-state addresses were excluded from the analyses, leaving 186,137 useable, Colorado addresses. The address and crash databases were linked using corresponding serial numbers and driver vehicle numbers, resulting in a table with 53,564 records of serious crash drivers.

The address table was geocoded using GIS software to verify the city and/or county where serious crash drivers live. All Colorado counties were included in this process and only cities with 1999 populations of 10,000 or more were assigned to city addresses. Some addresses, especially those in rural areas, could not be matched because of P.O. boxes, rural route numbers and other problems.

Data were analyzed using a consistent set of criteria to define varying types of high-risk drivers. For the age analysis, two main subgroups were defined:

- Young drivers — between 16 and 20 years-old, and

- Senior drivers — age 65 and older.

Drivers were impaired drivers if their driving record included one of four criteria:

1. Alcohol was involved,

2. Prescription drugs or medication was involved,

3. Illegal drugs were involved, or

4. Alcohol and drugs were involved.

The occupant protection analysis included only the most serious crashes in which an occupant was either killed or had injuries that were evident or incapacitating. Recorded seat belt use for these very serious crashes is believed to be more reliable than that collected for less severe crashes.

Index Calculation

Two distinct approaches were used to analyze the geographic distribution of where high-risk drivers live. The first examines the proportion of high-risk drivers in a given community out of all crash drivers in that community. For instance, among large cities in 1999, Trinidad had the highest proportion of young crash drivers compared to all serious crash drivers. The equation used to determine this was:

(Trinidad Drivers 16-20 Years-old in a Serious Crash) ÷ (All Trinidad Drivers in a Serious Crash)

The second approach calculates an index that controls for each community's population. This index was created by dividing the percentage of high-risk drivers that live in a particular community by the percentage of people who are residents in that community. So for example, Trinidad's young driver serious crash rate index was created using the following equation:

(Trinidad 16-20 Year-old Serious Crash Drivers ÷ State 16-20 Year-old Serious Crash Drivers) ÷ (Trinidad 16-20 Population ÷ State 16-20 Population)

After controlling for population, Trinidad was no longer ranked first among large cities with young crash drivers; the size of Trinidad's young population offset its crash rate among young drivers.

Data Sources

- **Crash data**. Crash data comes from crash reports completed by officers investigating crashes. By Colorado law, all crashes resulting in a fatality, injury or property damage in excess of $1,000 must be investigated. The resulting reports are submitted to the Colorado Department of Revenue, Motor Vehicle Division (MVD), which is the legal custodian of records for crash reports. The Safety & Engineering Branch of CDOT then acquires the data from the Motor Vehicle Division.

- **Fatal Analysis Reporting System (FARS)**. Crashes that result in a fatality are investigated in greater detail in accordance with this federally-funded program. Information includes more detailed information about drivers, as well as information about other occupants. This is the best source of reliable data about a driver's alcohol use. The database also gives information about the make and model of vehicles involved. (This level of detail is not available in the MVD crash data.)

- **Population data.** Population data come from the Colorado Division of Local Government.

- **Vehicle miles traveled.** The OTS provided the number of vehicle miles traveled (VMT) statewide for the years 1975 through 1999, with the exception of 1985 and 1986. These two years, 1985 and 1986, were obtained from the Federal Highway Administration, Office of Highway Information Management, ***Highway Statistics Summary to 1995***. CDOT documents referred to for the remaining years include Colorado Division of Highway Safety, ***Highway Safety Plans*** (1984, 1985 and 1996) and CDOT ***Problem Identification Reports*** (FY 1996 through FY 1999). The 1998 and 1999 VMT values were obtained from OTS directly.

- **Licensed drivers**. The MVD provided the number of licensed drivers statewide by gender and by age. Because of the nature of its database, MVD cannot report the number by county or by city.

Appendix B

Appendix B. Crashes Occuring in Colorado Cities, 1998-1999

| City Name | County Name | 1999 | | | | 1998 | | | | 1998-1999 |
		PDO Crashes	Injury Crashes	Fatal Crashes	Total Crashes	PDO Crashes	Injury Crashes	Fatal Crashes	Total Crashes	Percentage Change in Total Crashes
Aguilar	Las Animas	2			2				0	**
Akron	Washington	2			2	10	3		13	-84.6%
Alamosa	Alamosa	212	43		255	204	41		245	4.1%
Alma	Park	1			1	1			1	0.0%
Antonito	Conejos	1			1					**
Arvada	Adams	33	14	5	47					**
Arvada	Jefferson	1,596	431		2,028	1,525	441	1	1,967	3.1%
Aspen	Pitkin	324	29		353	289	37		326	8.3%
Ault	Weld	1			1	4			4	-75.0%
Aurora	Adams	712	370	6	1,086					**
Aurora	Arapahoe	3,731	1,709	17	5,449	4,592	2,095	21	6,708	-18.8%
Avon	Eagle	72	10		82				0	**
Basalt	Eagle		1		1		1		1	0.0%
Bayfield	La Plata	2			2	11	1		12	-83.3%
Bennett	Adams	11	1		12	2	4		6	100.0%
Berthoud	Larimer	58	15	1	73	72	24		96	-24.0%
Bethune	Kit Carson	1	1		2	1			1	100.0%
Black Hawk	Gilpin	36	9		45	33	10		43	4.7%
Blanca	Costilla	6	2		8	1			1	700.0%
Blue River	Summit	16	5		21	12	6		18	16.7%
Boone	Pueblo	1			1	1			1	0.0%
Boulder	Boulder	1,732	819	5	2,555	1,484	684	4	2,172	17.6%
Bow Mar	Arapahoe	1	2		3	1	2		3	0.0%
Breckenridge	Summit	117	14		131	166	14		180	-27.2%
Brighton	Adams	402	93	1	495	369	100	1	470	5.3%
Broomfield	Adams	94	36		130					**
Broomfield	Boulder	408	127	1	535	491	189	1	681	-21.4%
Bromfield	Jefferson	51	13		64					**
Brush	Morgan	24	5	1	30	27	6		33	-9.1%
Buena Vista	Chaffee	20	1		21	19	6		25	-16.0%
Burlington	Kit Carson	25	11		36	37	11		48	-25.0%
Calhan	El Paso	1	1		2	2	2		4	-50.0%
Canon City	Fremont	278	61		339	333	92	1	426	-20.4%
Carbondale	Garfield	33	7		40	38	8		46	-13.0%
Castle Rock	Douglas	203	78		281	187	37		224	25.4%
Cedaredge	Delta					8	4		12	-100.0%
Center	Rio Grande	13	1		14	12	2		14	0.0%
Central City	Gilpin	32	4		36	6	5		11	227.3%
Cheraw	Otero	1			1					**
Cherry Hills Village	Arapahoe	175	56		231	194	39		233	-0.9%
Cheyenne Wells	Cheyenne	10	2		12	9	3		12	0.0%

City Name	County Name	1999 PDO Crashes	1999 Injury Crashes	1999 Fatal Crashes	1999 Total Crashes	1998 PDO Crashes	1998 Injury Crashes	1998 Fatal Crashes	1998 Total Crashes	1998-1999 Percentage Change in Total Crashes
Collbran	Mesa		1		1					**
Colorado Springs	El Paso	7,702	2,863	17	10,572	7,301	2,714	13	10,028	5.4%
Columbine Valley	Arapahoe	8	7		15	10	3		13	15.4%
Commerce City	Adams	530	214	6	748	416	188	3	607	23.2%
Cortez	Montezuma	133	40		173	134	43		177	-2.3%
Craig	Moffat	109	27		136	104	23		127	7.1%
Crawford	Delta					1			1	-100.0%
Creede	Mineral	19	3		22	21	1		22	0.0%
Crested Butte	Gunnison					2			2	-100.0%
Cripple Creek	Teller	27	7		34	25	5		30	13.3%
Dacono	Weld	10	2	1	13	1			1	1200.0%
De Beque	Mesa					1	2		3	-100.0%
Deer Trail	Arapahoe	2	1		3	1			1	200.0%
Del Norte	Rio Grande	12	6		18	8	1		9	100.0%
Delta	Delta	3	2		5	11	7		18	-72.2%
Denver	Denver	20,314	5,653	44	25,994	19,630	5,842	32	25,504	1.9%
Dillon	Summit	34	11		45	21	2		23	95.7%
Dolores	Montezuma	2			2	5	2		7	-71.4%
Dove Creek	Dolores			1	1	4			4	-75.0%
Durango	La Plata	366	113	1	479	293	100	1	394	21.6%
Eads	Kiowa					2	1		3	-100.0%
Eagle	Eagle	47	6		53	37	5		42	26.2%
Eaton	Weld	25	2		27	10	5		15	80.0%
Edgewater	Jefferson	55	24		79	37	11		48	64.6%
Elizabeth	Elbert	33	12		45	17	5		22	104.5%
Empire	Clear Creek	2			2	1	2		3	-33.3%
Englewood	Arapahoe	679	244	4	925	656	249	3	908	1.9%
Erie	Weld	25	5		30		2		2	1400.0%
Estes Park	Larimer	132	41		173	140	33		173	0.0%
Evans	Weld	130	50	1	181	128	34		162	11.7%
Fairplay	Park	5			5				0	**
Federal Heights	Adams	159	47	1	207	151	43		194	6.7%
Firestone	Weld	4	2		6	7	1		8	-25.0%
Flagler	Kit Carson	4			4	4	1		5	-20.0%
Fleming	Logan					1			1	-100.0%
Florence	Fremont	39	11		50	33	10		43	16.3%
Fort Collins	Larimer	2,165	759	6	2,929	2,195	629	1	2,825	3.7%
Fort Lupton	Weld	27	5		32				0	**
Fort Morgan	Morgan	76	65	1	141	106	66		172	-18.0%
Fountain	El Paso	42	36		78	51	35		86	-9.3%
Fowler	Otero	1			1		1		1	0.0%
Fraser	Grand	6	2	1	8	1	1		2	300.0%
Frederick	Weld	2			2	2	2		4	-50.0%
Frisco	Summit	42	15		57	35	16		51	11.8%

| City Name | County Name | 1999 | | | | 1998 | | | | 1998-1999 |
		PDO Crashes	Injury Crashes	Fatal Crashes	Total Crashes	PDO Crashes	Injury Crashes	Fatal Crashes	Total Crashes	Percentage Change in Total Crashes
Fruita	Mesa	43	16		59	50	15		65	-9.2%
Garden City	Weld	28	5		33	21	9	1	31	6.5%
Genoa	Lincoln								0	**
Georgetown	Clear Creek	1	1		2	6	1		7	-71.4%
Gilcrest	Weld	4	3		7	9	1		10	-30.0%
Glendale	Arapahoe	184	51		235	132	58		190	23.7%
Glenwood Springs	Garfield	341	68		409	315	51	1	367	11.4%
Golden	Jefferson	370	77	2	448	318	81	1	400	12.0%
Granada	Prowers	3	1		4	2	1		3	33.3%
Granby	Grand	2			2	4	1		5	-60.0%
Grand Junction	Mesa	1,228	405	2	1,634	1,233	384	2	1,619	0.9%
Grand Lake	Grand	1			1				0	**
Greeley	Weld	678	395	4	1,076	650	385	2	1,037	3.8%
Green Mtn Fall	El Paso	2			2				0	**
Greenwood Village	Arapahoe	1,011	292		1,303	863	264		1,127	15.6%
Gunnison	Gunnison	82	17		99	77	20		97	2.1%
Gypsum	Eagle	1	1		2	3			3	-33.3%
Hartman	Prowers	1			1					**
Haxtun	Phillips	2	1		3				0	**
Hayden	Routt	1	3		4				0	**
Holly	Prowers	1			1				0	**
Holyoke	Phillips	4	4		8	10	3		13	-38.5%
Hot Sulphur Springs	Grand	1	1		2		1		1	100.0%
Hotchkiss	Delta						1		1	-100.0%
Hudson	Weld	4			4	3	3		6	-33.3%
Hugo	Lincoln	3	1		4	2	1		3	33.3%
Idaho Springs	Clear Creek	16	7		23	1			1	2200.0%
Ignacio	La Plata	2	1		3	5	4		9	-66.7%
Iliff	Logan		1	2	3					**
Johnstown	Weld	24	5	1	30			1	1	2900.0%
Julesburg	Sedgwick	5			5	8	4		12	-58.3%
Keenesburg	Weld	2	1		3	1			1	200.0%
Kersey	Weld	5			5	2			2	150.0%
Kiowa	Elbert	4	2		6	11	1		12	-50.0%
Kit Carson	Cheyenne					4			4	-100.0%
Kremmling	Grand	7	3		10	8	1		9	11.1%
La Jara	Conejos	3	1		4				0	**
La Junta	Otero	67	43	1	110	63	18		81	35.8%
La Salle	Weld	13	4		17	13	3		16	6.3%
La Veta	Huerfano	1		1	2	6			6	-66.7%
Lafayette	Boulder	252	84	3	337	261	94	1	356	-5.3%
Lake City	Hinsdale	2			2	1	1		2	0.0%
Lakeside	Jefferson	13	8		21	9	5		14	50.0%
Lakewood	Jefferson	2,114	854	6	2,972	2,116	887	8	3,011	-1.3%

| City Name | County Name | 1999 | | | | 1998 | | | | 1998-1999 |
		PDO Crashes	Injury Crashes	Fatal Crashes	Total Crashes	PDO Crashes	Injury Crashes	Fatal Crashes	Total Crashes	Percentage Change in Total Crashes
Lamar	Prowers	111	36	1	148	121	56	1	178	-16.9%
Larkspur	Douglas		2		2	2	1		3	-33.3%
Las Animas	Bent	38	10		48	46	14		60	-20.0%
Leadville	Lake	25	13		38	18	4		22	72.7%
Limon	Lincoln	35	1		36	35	7		42	-14.3%
Littleton	Arapahoe	705	194	2	899	630	199	2	831	8.2%
Littleton	Douglas	11	3		14					**
Lochbuie	Weld	4	1		5				0	**
Log Lane Village	Morgan	1			1	2			2	-50.0%
Lonetree	Douglas	25	9		34					**
Longmont	Boulder	1,271	431	3	1,705	1,172	377		1,549	10.1%
Louisville	Boulder	214	69		283	223	81		304	-6.9%
Loveland	Larimer	449	288	2	739	492	286	2	780	-5.3%
Lyons	Boulder	14	2		16	15	5		20	-20.0%
Manassa	Conejos	2	2		4	2			2	100.0%
Mancos	Montezuma	5	3	1	8	8	2		10	-20.0%
Manitou Springs	El Paso	107	12		119	110	20	1	131	-9.2%
Manzanola	Otero	2			2					**
Mead	Weld	7	2		9	1	1		2	350.0%
Meeker	Rio Blanco	32	5		37	29	5		34	8.8%
Milliken	Weld	9	2		11	4	3	1	8	37.5%
Minturn	Eagle	7			7	15	4		19	-63.2%
Monte Vista	Rio Grande	2	5		7	4	2		6	16.7%
Montrose	Montrose	309	79		388	265	88	1	354	9.6%
Monument	El Paso	27	5		32	4	3		7	357.1%
Morrison	Jefferson	11	3		14	17	4		21	-33.3%
Mount Crested Butte	Gunnison	5	2		7	12	1		13	-46.2%
Mountain View	Jefferson	11	5		16	25	7		32	-50.0%
Naturita	Montrose					2	1		3	-100.0%
Nederland	Boulder	1	1		2	3	1		4	-50.0%
New Castle	Garfield	13	5		18	7	3	1	11	63.6%
Northglenn	Adams	640	148	1	789	611	179	1	791	-0.3%
Norwood	San Miguel	2	1		3					**
Nucla	Montrose								0	**
Nunn	Weld								0	**
Oak Creek	Routt	8			8				0	**
Olathe	Montrose					2	1		3	-100.0%
Orchard City	Delta								0	**
Ordway	Crowley	9			9	6			6	50.0%
Otis	Washington	2			2	1	1		2	0.0%
Ouray	Ouray	4	2		6	6	2		8	-25.0%
Ovid	Sedgwick					1			1	-100.0%
Pagosa Springs	Archuleta	49	21		70	44	9		53	32.1%
Palisade	Mesa	16	3		19	16	3		19	0.0%

City Name	County Name	1999				1998				1998-1999
		PDO Crashes	Injury Crashes	Fatal Crashes	Total Crashes	PDO Crashes	Injury Crashes	Fatal Crashes	Total Crashes	Percentage Change in Total Crashes
Palmer Lake	El Paso	9	2		11	2	2		4	175.0%
Paonia	Delta					11			11	-100.0%
Parachute	Garfield	14	1		15	12			12	25.0%
Parker	Douglas	380	60	1	440	264	65		329	33.7%
Peetz	Logan		1		1	1			1	0.0%
Pierce	Weld		1		1		1		1	0.0%
Platteville	Weld	24	9		33	23	9	1	33	0.0%
Poncha Springs	Chaffee					3	23		3	-100.0%
Pritchett	Baca								0	**
Pueblo	Pueblo	2,222	956	16	3,189	2,102	883	14	2,999	6.3%
Rangely	Rio Blanco	16	3		19	12	1		13	46.2%
Red Cliff	Eagle								0	**
Rico	Dolores								0	**
Ridgway	Ouray	3			3	1	2		3	0.0%
Rifle	Garfield	110	23		133	98	30		128	3.9%
Rockvale	Fremont								0	**
Rocky Ford	Otero	44	12		56	55	14		69	-18.8%
Rye	Pueblo	1			1	1	1		2	-50.0%
Saguache	Saguache	5	2		7	2	1		3	133.3%
Salida	Chaffee	120	22		142	71			94	51.1%
San Luis	Costilla	3	3		6					**
Sanford	Conejos	1			1		2		2	-50.0%
Seibert	Kit Carson					1			1	-100.0%
Severance	Weld	2	1		3					**
Sheridan	Arapahoe	258	105	1	364	259	79	1	339	7.4%
Silt	Garfield	21	4		25	12	5	1	18	38.9%
Silver Cliff	Custer	4	2		6		2		2	200.0%
Silver Plume	Clear Creek	1			1	1			1	0.0%
Silverthorne	Summit	83	23	1	107	66	21		87	23.0%
Silverton	San Juan	4			4	2	1		3	33.3%
Simla	Elbert	2	3		5	7			7	-28.6%
Snowmass Village	Pitkin	83	10		93	68	8		76	22.4%
South Fork	Rio Grande					6	1		7	-100.0%
Springfield	Baca	7	2		9	8	4		12	-25.0%
Steamboat Springs	Routt	335	43		378	310	32		342	10.5%
Sterling	Logan	81	47	2	130	63	42		105	23.8%
Stratton	Kit Carson	8			8	7	1		8	0.0%
Sugar City	Crowley	1			1	1	1		2	-50.0%
Superior	Boulder	68	22		90	39	6		45	100.0%
Swink	Otero								0	**
Telluride	San Miguel	64	8		72	54	9	1	64	12.5%
Thornton	Adams	1,194	384	5	1,581	1,008	326	6	1,340	18.0%
Trinidad	Las Animas	142	52	1	194	150	44		194	0.0%
Vail	Eagle	100	26		126	141	47	1	189	-33.3%

| City Name | County Name | 1999 | | | | 1998 | | | | 1998-1999 |
		PDO Crashes	Injury Crashes	Fatal Crashes	Total Crashes	PDO Crashes	Injury Crashes	Fatal Crashes	Total Crashes	Percentage Change in Total Crashes
Victor	Teller	1			1	2			2	-50.0%
Vona	Kit Carson					1			1	-100.0%
Walden	Jackson	11			11	3			3	266.7%
Walsenburg	Huerfano	63	9		72	33	6		39	84.6%
Walsh	Baca								0	**
Wellington	Larimer	8			8	7	1		8	0.0%
Westcliffe	Custer	22	10		32	11	3		14	128.6%
Westminster	Adams	1,071	319	2	1,392	1,531	454	5	1,990	-30.1%
Westminster	Jefferson	744	213	2	958					**
Wheat Ridge	Jefferson	1,133	428		1,561	951	414	2	1,367	14.2%
Wiggins	Morgan	3			3	5			5	-40.0%
Wiley	Prowers								0	**
Windsor	Weld	71	17		88	52	18		70	25.7%
Winter Park	Grand	9	1		10	2	2		4	150.0%
Woodland Park	Teller	137	38	1	176	110	33		143	23.1%
Wray	Yuma	25	6		31	28	1		29	6.9%
Yampa	Routt					1			1	-100.0%
Yuma	Yuma	1			1				0	**
Total		62,827	20,836	185	83,774	59,500	20,215	141	79,856	4.9%

Appendix B. Crashes in Colorado Counties, 1998-1999

| County Name | 1999 | | | | | 1998 | | | | | 1998 - 1999 |
	PDO Crashes	Injury Crashes	Fatal Crashes	Total Crashes	Percent Non-Resident Crash Drivers	1998 Population	1998 PDO Crashes	1998 Injury Crashes	1998 Fatal Crashes	1998 Total Crashes	Percent Change in Total Crashes
Adams	6,333	2,707	36	9,063	48.5%	321,243	5,730	2,564	39	8,333	8.8%
Alamosa	332	118	3	452	39.8%	14,474	334	118	2	454	-0.4%
Arapahoe	8,539	3,536	33	12,093	43.9%	468,287	8,118	3,404	35	11,557	4.6%
Archuleta	156	91	3	249	26.7%	8,876	148	74	1	223	11.7%
Baca	60	24	5	88	33.3%	4,493	67	38	2	107	-17.8%
Bent	97	46	1	143	39.2%	5,484	86	43	1	130	10.0%
Boulder	4,886	2,083	21	6,983	29.3%	265,693	4,489	1,927	20	6,436	8.5%
Chaffee	321	102	3	424	44.1%	15,309	269	118	4	391	8.4%
Cheyenne	39	19	1	59	64.3%	2,291	50	23	0	73	-19.2%
Clear Creek	532	252	9	788	88.0%	8,589	496	210	8	714	10.4%
Conejos	107	62	6	172	31.0%	7,979	97	58	1	156	10.3%
Costilla	57	39	1	97	42.6%	3,705	72	50	3	125	-22.4%
Crowley	55	25	0	80	51.7%	4,300	40	21	3	64	25.0%
Custer	55	40	2	97	51.2%	3,455	41	39	5	85	14.1%
Delta	133	91	7	228	23.4%	26,717	221	125	5	351	-35.0%
Denver	20,340	5,661	44	26,028	50.5%	501,279	19,690	5,874	33	25,597	1.7%
Dolores	21	28	2	51	52.4%	1,792	25	28	1	54	-5.6%
Douglas	2,567	945	18	3,521	54.8%	127,856	2,249	851	23	3,123	12.7%
Eagle	837	288	9	1,132	37.3%	32,816	869	324	8	1,201	-5.7%
El Paso	8,260	3,095	41	11,370	9.6%	491,952	8,511	3,362	36	11,909	-4.5%
Elbert	205	96	3	302	52.8%	18,461	165	92	7	264	14.4%
Fremont	580	283	9	867	27.8%	43,629	583	282	6	871	-0.5%
Garfield	1,026	338	15	1,372	34.4%	38,159	934	341	12	1,287	6.6%
Gilpin	150	66	0	216	82.2%	3,919	128	75	1	204	5.9%
Grand	265	99	7	367	55.5%	10,002	259	106	3	368	-0.3%
Gunnison	271	102	3	374	45.7%	12,633	295	87	2	384	-2.6%
Hinsdale	13	8	0	21	50.0%	731	9	6	0	15	40.0%
Huerfano	214	98	7	316	53.8%	6,813	193	88	6	287	10.1%
Jackson	64	23	4	90	77.8%	1,457	65	27	2	94	-4.3%
Jefferson	8,540	3,216	38	11,769	38.6%	505,125	7,535	3,073	29	10,637	10.6%
Kiowa	34	17	1	52	93.3%	1,629	33	11	1	45	15.6%
Kit Carson	177	94	1	272	31.4%	7,203	179	85	3	267	1.9%
La Plata	737	363	15	1,107	15.2%	41,276	667	335	10	1,012	9.4%
Lake	77	50	2	127	41.8%	6,235	62	41	4	107	18.7%
Larimer	4,000	1,732	26	5,747	20.2%	230,469	4,052	1,589	19	5,660	1.5%
Las Animas	303	148	5	452	20.8%	14,733	334	146	9	489	-7.6%
Lincoln	123	42	1	166	65.8%	5,626	135	57	2	194	-14.4%
Logan	225	139	13	371	29.8%	18,206	237	143	6	386	-3.9%
Mesa	1,944	766	22	2,724	11.4%	112,057	2,024	768	15	2,807	-3.0%
Mineral	47	22	0	69	87.5%	724	60	20	2	82	-15.9%
Moffat	247	86	4	335	23.0%	12,228	237	74	1	312	7.4%

| County Name | 1999 | | | | | 1998 | | | | | 1998 - 1999 |
	PDO Crashes	Injury Crashes	Fatal Crashes	Total Crashes	Percent Non-Resident Crash Drivers	1998 Population	1998 PDO Crashes	1998 Injury Crashes	1998 Fatal Crashes	1998 Total Crashes	Percent Change in Total Crashes
Montezuma	308	184	3	493	21.6%	22,842	290	206	6	502	-1.8%
Montrose	489	175	3	666	24.6%	31,033	503	184	7	694	-4.0%
Morgan	308	200	10	513	27.1%	25,489	332	201	5	538	-4.6%
Otero	257	150	3	408	28.9%	21,045	244	103	4	351	16.2%
Ouray	56	35	2	93	74.4%	3,366	78	35	0	113	-17.7%
Park	362	137	3	500	65.0%	13,099	250	134	9	393	27.2%
Phillips	31	22	2	53	26.7%	4,376	30	15	1	46	15.2%
Pitkin	705	146	4	852	52.9%	13,645	592	153	3	748	13.9%
Prowers	231	83	3	317	18.3%	13,757	227	102	5	334	-5.1%
Pueblo	2,703	1,312	31	4,030	13.5%	133,345	2,555	1,208	27	3,790	6.3%
Rio Blanco	126	59	2	187	47.2%	6,403	118	49	5	172	8.7%
Rio Grande	137	77	4	214	40.0%	11,470	144	62	2	208	2.9%
Routt	606	151	6	761	29.5%	17,692	532	135	4	671	13.4%
Saguache	71	47	7	120	64.3%	6,182	79	40	5	124	-3.2%
San Juan	16	19	1	35	70.0%	572	19	20	1	40	-12.5%
San Miguel	154	44	0	198	45.7%	5,594	170	50	2	222	-10.8%
Sedgwick	63	34	0	97	57.7%	2,640	73	26	0	99	-2.0%
Summit	797	267	7	1,069	57.7%	19,224	695	222	6	923	15.8%
Teller	270	111	5	382	48.2%	20,653	365	143	8	516	-26.0%
Washington	89	50	1	139	65.2%	4,625	55	51	4	110	26.4%
Weld	2,320	1,292	43	3,631	33.9%	157,873	2,025	1,202	42	3,269	11.1%
Yuma	107	44	3	153	22.6%	9,351	99	42	7	148	3.4%
Total	83,175	31,679	564	115,145	36.4%	3,952,181	79,263	31,080	523	110,866	3.9%

Appendix C

Appendix C. Drivers Involved in Serious Crashes, 1999, by City of Residence

Rank 1999	Rank 1996-1998	City of Residence	Drivers in Serious Crashes	1999 16+ Population	Percentage of the 16+ Population Involved in Serious Crashes 1999	Index of Drivers in Serious Crashes
1	1	Commerce City	340	12,624	3%	1.60
2	4	Aurora	4,697	197,945	2%	1.41
3	12	Pueblo	1,631	80,666	2%	1.20
4	9	Denver	7,955	398,700	2%	1.19
5	6	Thornton	1,094	55,130	2%	1.18
6	17	Longmont	966	49,358	2%	1.17
7	10	Littleton	640	33,267	2%	1.15
8	7	Brighton	253	13,230	2%	1.14
9	8	Parker	283	14,815	2%	1.14
10	24	Federal Heights	154	8,236	2%	1.11
11	11	Loveland	675	36,475	2%	1.10
12	5	Castle Rock	256	14,298	2%	1.07
13	15	Wheat Ridge	462	26,339	2%	1.04
14	13	Englewood	463	26,608	2%	1.04
15	33	Durango	208	12,482	2%	0.99
16	21	Colorado Springs	4,448	267,862	2%	0.99
17	19	Fort Morgan	129	7,784	2%	0.99
18	16	Westminster	1,185	73,823	2%	0.96
19	25	Northglenn	410	25,548	2%	0.96
20	23	Arvada	1,263	79,934	2%	0.94
21	18	Golden	213	13,631	2%	0.93
22	28	Broomfield	435	28,396	2%	0.91
23	29	Louisville	196	13,224	1%	0.88
24	14	Lafayette	231	15,603	1%	0.88
25	20	Lakewood	1,702	117,908	1%	0.86
26	32	Boulder	1,139	79,638	1%	0.85
27	26	Greeley	828	58,070	1%	0.85
28	30	Fort Collins	1,305	92,052	1%	0.84
29		Trinidad	113	7,981	1%	0.84
30	31	Grand Junction	435	32,164	1%	0.81
31	3	Fountain	127	9,711	1%	0.78
32	34	Sterling	118	9,060	1%	0.78
33	27	Canon City	154	13,216	1%	0.69
34	2	Greenwood Village	112	10,633	1%	0.63
35	22	Montrose	101	10,357	1%	0.58
		Total Large City	*34,721*	*1,946,768*	*2%*	*1.06*
		Total State	*53,560*	*3,190,619*	*2%*	*1.00*

Appendix C. Drivers Involved in Serious Crashes by County of Residence, 1998-1999

Rank 1999	Rank 1998	County of Residence	Drivers in Serious Crashes		Percent Change	16+ Population		Percentage of the 16+ Population Involved in Serious Crashes		Index of Drivers in Serious Crashes (State Average = 1.00)	
			1998	1999		1998	1999	1998	1999	1998	1999
1	1	Denver	9,098	8,174	-10.2%	392,393	397,867	2.3%	2.1%	1.37	1.22
2	2	Adams	5,057	5,027	-0.6%	239,089	245,551	2.1%	2.0%	1.25	1.22
3	4	Pueblo	2,030	2,186	7.7%	106,255	108,117	1.9%	2.0%	1.13	1.20
4	7	Arapahoe	6,537	6,965	6.5%	368,414	377,063	1.8%	1.8%	1.05	1.10
5	3	Park	201	197	-2.0%	10,297	10,994	2.0%	1.8%	1.15	1.07
6	6	Grand	143	140	-2.1%	7,993	8,294	1.8%	1.7%	1.05	1.01
7	16	Weld	1,912	2,160	13.0%	126,973	130,402	1.5%	1.7%	0.89	0.99
8	61	San Juan	3	7	133.3%	422	426	0.7%	1.6%	0.42	0.98
9	15	Boulder	3,292	3,661	11.2%	215,932	223,742	1.5%	1.6%	0.90	0.97
10	5	Gilpin	64	59	-7.8%	3,375	3,618	1.9%	1.6%	1.12	0.97
11	17	Larimer	2,728	3,016	10.6%	181,401	186,445	1.5%	1.6%	0.89	0.96
12	10	Jefferson	6,560	6,553	-0.1%	399,894	407,733	1.6%	1.6%	0.97	0.96
13	48	Custer	28	45	60.7%	2,638	2,821	1.1%	1.6%	0.63	0.95
14	18	Garfield	453	497	9.7%	30,308	31,347	1.5%	1.6%	0.88	0.94
15	8	Clear Creek	122	112	-8.2%	6,948	7,120	1.8%	1.6%	1.04	0.94
16	22	Douglas	1,530	1,871	22.3%	106,749	120,289	1.4%	1.6%	0.84	0.93
17	9	El Paso	6,120	5,907	-3.5%	371,830	379,858	1.6%	1.6%	0.97	0.93
18	12	Costilla	43	41	-4.7%	2,689	2,670	1.6%	1.5%	0.94	0.91
19	20	Mesa	1,300	1,391	7.0%	88,545	90,644	1.5%	1.5%	0.87	0.91
20	31	Summit	189	242	28.0%	15,164	15,897	1.2%	1.5%	0.73	0.91
21	21	Morgan	282	287	1.8%	19,345	19,523	1.5%	1.5%	0.86	0.88
22	33	Lake	77	92	19.5%	6,219	6,268	1.2%	1.5%	0.73	0.87
23	25	La Plata	426	500	17.4%	32,638	34,150	1.3%	1.5%	0.77	0.87
24	40	Archuleta	82	107	30.5%	7,023	7,400	1.2%	1.4%	0.69	0.86
25	28	Alamosa	152	175	15.1%	11,987	12,380	1.3%	1.4%	0.75	0.84
26	23	Conejos	82	82	0.0%	5,750	5,830	1.4%	1.4%	0.84	0.84
27	27	Pitkin	151	165	9.3%	11,803	11,776	1.3%	1.4%	0.75	0.83
28	37	Otero	192	220	14.6%	16,033	16,043	1.2%	1.4%	0.71	0.82
29	19	Eagle	371	355	-4.3%	24,973	26,120	1.5%	1.4%	0.88	0.81
30	13	Teller	250	224	-10.4%	15,906	16,512	1.6%	1.4%	0.93	0.81
31	14	Elbert	221	198	-10.4%	14,192	15,158	1.6%	1.3%	0.92	0.78
32	24	Dolores	20	19	-5.0%	1,434	1,479	1.4%	1.3%	0.82	0.77
33	54	Huerfano	55	77	40.0%	6,074	6,112	0.9%	1.3%	0.53	0.75
34	43	Logan	163	184	12.9%	14,303	14,678	1.1%	1.3%	0.67	0.75
35	11	Prowers	166	129	-22.3%	10,199	10,317	1.6%	1.3%	0.96	0.74
36	36	Moffat	115	122	6.1%	9,573	9,789	1.2%	1.2%	0.71	0.74
37	39	Kit Carson	68	76	11.8%	5,815	6,103	1.2%	1.2%	0.69	0.74
38	51	Routt	143	177	23.8%	13,848	14,270	1.0%	1.2%	0.61	0.74
39	42	Phillips	41	44	7.3%	3,591	3,567	1.1%	1.2%	0.67	0.73

Rank 1999	Rank 1998	County of Residence	Drivers in Serious Crashes		Percent Change	16+ Population		Percentage of the 16+ Population Involved in Serious Crashes		Index of Drivers in Serious Crashes (State Average = 1.00)	
			1998	*1999*		*1998*	*1999*	*1998*	*1999*	*1998*	*1999*
40	26	Montezuma	221	213	-3.6%	17,083	17,414	1.3%	1.2%	0.76	0.73
41	41	Las Animas	144	154	6.9%	12,474	12,667	1.2%	1.2%	0.68	0.72
42	30	Fremont	439	436	-0.7%	35,137	36,189	1.2%	1.2%	0.74	0.72
43	49	Saguache	46	55	19.6%	4,406	4,644	1.0%	1.2%	0.62	0.71
44	32	Rio Grande	114	108	-5.3%	9,153	9,301	1.2%	1.2%	0.73	0.69
45	50	Bent	51	56	9.8%	4,889	4,919	1.0%	1.1%	0.62	0.68
46	34	Montrose	300	272	-9.3%	24,291	25,016	1.2%	1.1%	0.73	0.65
47	38	San Miguel	55	49	-10.9%	4,695	4,728	1.2%	1.0%	0.69	0.62
48	29	Chaffee	162	130	-19.8%	12,956	13,368	1.3%	1.0%	0.74	0.58
49	53	Sedgwick	20	21	5.0%	2,162	2,184	0.9%	1.0%	0.55	0.57
50	62	Gunnison	74	101	36.5%	10,544	10,793	0.7%	0.9%	0.41	0.56
51	35	Cheyenne	22	16	-27.3%	1,814	1,792	1.2%	0.9%	0.72	0.53
52	63	Mineral	3	5	66.7%	551	569	0.5%	0.9%	0.32	0.52
53	58	Yuma	58	65	12.1%	7,532	7,574	0.8%	0.9%	0.45	0.51
54	45	Delta	236	185	-21.6%	21,121	21,574	1.1%	0.9%	0.66	0.51
55	57	Hinsdale	5	5	0.0%	613	612	0.8%	0.8%	0.48	0.49
56	47	Ouray	29	23	-20.7%	2,709	2,832	1.1%	0.8%	0.63	0.48
57	52	Washington	42	33	-21.4%	4,161	4,096	1.0%	0.8%	0.60	0.48
58	56	Rio Blanco	47	43	-8.5%	5,578	5,594	0.8%	0.8%	0.50	0.46
59	55	Crowley	33	33	0.0%	3,805	4,506	0.9%	0.7%	0.51	0.44
60	59	Lincoln	40	36	-10.0%	5,333	5,400	0.8%	0.7%	0.44	0.40
61	46	Baca	40	24	-40.0%	3,604	3,617	1.1%	0.7%	0.65	0.40
62	44	Jackson	16	9	-43.8%	1,412	1,438	1.1%	0.6%	0.67	0.37
63	60	Kiowa	10	4	-60.0%	1,402	1,419	0.7%	0.3%	0.42	0.17
		Total State	*52,674*	*53,560*	*1.7%*	*3,105,440*	*3,190,619*	*1.7%*	*1.7%*	*1.00*	*1.00*

Appendix D

Appendix D. Young Drivers as a Percentage of All Drivers in Serious Crashes — Large Cities, 1996-1999

Rank 1999	Rank 1996-1998	City of Residence	Drivers in Serious Crashes Living In City		Young Drivers as a Percentage of All Drivers in Serious Crashes		
			Drivers 16-20 1999	All Drivers 1999	1999	1996-1998	% Change
1		Trinidad	36	113	32%		
2	7	Greeley	212	828	26%	20%	28%
3	1	Sterling	28	118	24%	28%	-15%
4	8	Durango	49	208	24%	20%	18%
5	13	Greenwood Village	25	112	22%	19%	17%
6	3	Castle Rock	57	256	22%	22%	1%
7	2	Parker	63	283	22%	22%	1%
8	12	Fort Collins	275	1,305	21%	19%	11%
9	17	Arvada	265	1,263	21%	17%	23%
10	18	Broomfield	91	435	21%	17%	23%
11	22	Louisville	41	196	21%	16%	31%
12	5	Fountain	26	127	20%	20%	2%
13	11	Longmont	196	966	20%	19%	7%
14	14	Pueblo	321	1,631	20%	18%	9%
15	15	Thornton	215	1,094	20%	18%	9%
16	21	Colorado Springs	865	4,448	19%	16%	22%
17	9	Fort Morgan	25	129	19%	20%	-3%
18	6	Loveland	129	675	19%	20%	-4%
19	10	Grand Junction	82	435	19%	20%	-6%
20	16	Canon City	29	154	19%	18%	5%
21	29	Northglenn	77	410	19%	15%	25%
22	30	Wheat Ridge	83	462	18%	15%	20%
23	20	Westminster	211	1,185	18%	16%	11%
24	19	Brighton	44	253	17%	16%	9%
25	25	Littleton	110	640	17%	16%	7%
26	31	Boulder	194	1,139	17%	14%	22%
27	4	Montrose	17	101	17%	22%	-23%
28	23	Lafayette	38	231	16%	16%	3%
29	28	Lakewood	274	1,702	16%	15%	7%
30	32	Englewood	74	463	16%	13%	23%
31	27	Aurora	721	4,697	15%	15%	2%
32	26	Commerce City	52	340	15%	15%	2%
33	33	Federal Heights	22	154	14%	13%	10%
34	24	Golden	30	213	14%	16%	-12%
35	34	Denver	990	7,955	12%	12%	4%
		Total Large Cities	5,967	34,721	17%	15%	15%
		Total State	9,834	53,560	18%	18%	2%

Appendix D. Young Drivers as a Percentage of All Drivers in Serious Crashes — Counties, 1996-1999

Rank 1998-1999	Rank 1996-1997	County of Residence	Drivers in Serious Crashes Living in County, 1998-1999		Young Drivers as a Percentage of All Drivers in Serious Crashes		
			Drivers 16-20	All Drivers	1998-1999	1996-1997	% Change
1	10	Kiowa	5	14	36%	25%	43%
2	15	Rio Blanco	26	90	29%	22%	31%
3	5	Prowers	83	295	28%	28%	0%
4	58	Bent	30	107	28%	13%	116%
5	1	Kit Carson	39	144	27%	37%	-27%
6	25	Rio Grande	57	222	26%	21%	22%
7	57	Phillips	21	85	25%	14%	76%
8	13	Custer	18	73	25%	23%	7%
9	7	Conejos	40	164	24%	27%	-10%
10	45	Cheyenne	9	38	24%	17%	39%
11	2	Lincoln	18	76	24%	30%	-21%
12	6	Baca	15	64	23%	28%	-16%
13	50	Park	92	398	23%	17%	36%
14	11	Montezuma	100	434	23%	24%	-4%
15	27	Washington	17	75	23%	21%	8%
16	37	Archuleta	42	189	22%	18%	23%
17	53	Sedgwick	9	41	22%	16%	37%
18	3	Logan	76	347	22%	29%	-24%
19	14	La Plata	202	926	22%	22%	-1%
20	9	Moffat	51	237	22%	26%	-17%
21	21	Mesa	576	2,691	21%	22%	-3%
22	18	Montrose	122	572	21%	22%	-3%
23	12	Alamosa	68	327	21%	23%	-10%
24	23	Weld	846	4,072	21%	22%	-6%
25	55	Routt	66	320	21%	16%	29%
26	26	Morgan	115	569	20%	21%	-4%
27	22	Las Animas	60	298	20%	22%	-8%
28	63	Hinsdale	2	10	20%	8%	150%
29	33	Douglas	661	3,401	19%	20%	-3%
30	31	Ouray	10	52	19%	20%	-4%
31	24	Larimer	1,094	5,744	19%	21%	-9%
32	8	Otero	78	412	19%	27%	-30%
33	20	Fremont	165	875	19%	22%	-14%
34	29	Garfield	179	950	19%	21%	-10%
35	36	Pueblo	778	4,216	18%	19%	-3%
36	32	Crowley	12	66	18%	20%	-9%
37	19	Elbert	76	419	18%	22%	-18%
38	16	Saguache	18	101	18%	22%	-19%

Rank 1998-1999	Rank 1996-1997	County of Residence	Drivers in Serious Crashes Living in County, 1998-1999		Young Drivers as a Percentage of All Drivers in Serious Crashes		
			Drivers 16-20	All Drivers	1998-1999	1996-1997	% Change
39	39	Chaffee	52	292	18%	18%	-1%
40	28	Gunnison	31	175	18%	21%	-16%
41	42	Jefferson	2,301	13,113	18%	18%	-3%
42	41	Teller	82	474	17%	18%	-4%
43	43	El Paso	2,066	12,027	17%	17%	1%
44	46	Eagle	122	726	17%	17%	-1%
45	51	Costilla	14	84	17%	16%	4%
46	17	Delta	70	421	17%	22%	-24%
47	4	Yuma	20	123	16%	29%	-44%
48	40	Boulder	1,116	6,953	16%	18%	-11%
49	47	Adams	1,615	10,084	16%	17%	-6%
50	30	Huerfano	21	132	16%	21%	-24%
51	44	Arapahoe	2,113	13,502	16%	17%	-8%
52	54	Gilpin	19	123	15%	16%	-3%
53	35	Dolores	6	39	15%	19%	-19%
54	6	San Miguel	16	104	15%	12%	28%
55	52	Clear Creek	35	234	15%	16%	-7%
56	49	Grand	41	283	14%	17%	-15%
57	38	Lake	21	169	12%	18%	-31%
58	34	jackson	3	25	12%	19%	-37%
59	60	Denver	1,935	17,272	11%	12%	-7%
60	59	Summit	48	431	11%	12%	-7%
61	62	Pitkin	35	316	11%	10%	11%
62	56	San Juan	1	10	10%	14%	-29%
		Total State	17,659	106,226	17%	18%	-8%

Appendix D. Population-Adjusted Index of Young Drivers in Serious Crashes — Large Cities, 1996-1999

Rank 1999	Rank 1996-1998	City of Residence	Drivers 16-20 in Serious Crashes	Population 16-20	Index of Young Drivers In Serious Crashes per 1,000 Population 16-20 (State Average = 1.00)		% Change
			_1999_	_1999_	_1999_	_1996-1998_	
1	9	Louisville	41	708	1.88	1.56	20%
2		Trinidad	36	638	1.83		
3	2	Parker	63	1,238	1.65	2.12	-22%
4	10	Wheat Ridge	83	1,712	1.57	1.50	5%
5	15	Longmont	196	4,469	1.42	1.40	1%
6	4	Castle Rock	57	1,319	1.40	1.96	-29%
7	5	Loveland	129	3,033	1.38	1.68	-18%
8	14	Littleton	110	2,739	1.30	1.43	-9%
9	13	Aurora	721	17,995	1.30	1.43	-9%
10	16	Englewood	74	1,848	1.30	1.32	-2%
11	7	Fort Morgan	25	637	1.27	1.63	-22%
12	12	Thornton	215	5,658	1.23	1.45	-15%
13	6	Commerce City	52	1,370	1.23	1.63	-25%
14	21	Pueblo	321	8,520	1.22	1.17	4%
15	20	Colorado Springs	865	23,354	1.20	1.18	2%
16	8	Lafayette	38	1,076	1.14	1.59	-28%
17	22	Sterling	28	810	1.12	1.17	-4%
18	26	Broomfield	91	2,660	1.11	1.05	5%
19	27	Federal Heights	22	662	1.08	0.99	9%
20	25	Arvada	265	8,147	1.05	1.06	-1%
21	17	Brighton	44	1,438	0.99	1.26	-21%
22	19	Denver	990	32,483	0.99	1.20	-18%
23	23	Westminster	211	6,945	0.98	1.16	-15%
24	28	Northglenn	77	2,656	0.94	0.88	7%
25	24	Lakewood	274	9,891	0.90	1.16	-23%
26	18	Canon City	29	1,090	0.86	1.21	-29%
27	3	Fountain	26	1,015	0.83	1.97	-58%
28	1	Greenwood Village	25	1,022	0.79	2.15	-63%
29	30	Greeley	212	8,679	0.79	0.79	0%
30	29	Grand Junction	82	3,843	0.69	0.83	-17%
31	33	Durango	49	2,316	0.68	0.54	27%
32	32	Fort Collins	275	14,928	0.60	0.60	-1%
33	11	Montrose	17	949	0.58	1.50	-61%
34	34	Boulder	194	13,422	0.47	0.43	9%
35	31	Golden	30	2,092	0.46	0.67	-31%
		Total Large Cities	_5,967_	_191,360_	_1.01_	_1.11_	_-9%_
		Total State	_9,834_	_318,210_	_1.00_	_1.00_	_0%_

Appendix D. Population-Adjusted Index of Young Drivers in Serious Crashes — Counties, 1996-1999

Rank 1998-1999	Rank 1996-1997	County of Residence	Drivers 16-20 in Serious Crashes	Population 16-20	Index of Young Drivers In Serious Crashes per 1,000 Population 16-20 (State Average = 1.00)		% Change
			1998-1999	1998-1999	1998-1999	1996-1997	
1	5	Park	92	1,021	1.60	1.21	32%
2	1	Prowers	83	1,060	1.39	1.43	-3%
3	57	Bent	30	400	1.33	0.55	142%
4	59	Phillips	21	290	1.29	0.49	162%
5	21	Custer	18	249	1.28	1.07	20%
6	11	Pueblo	778	11,416	1.21	1.13	7%
7	13	Adams	1,615	24,361	1.18	1.12	5%
8	7	Morgan	115	1,810	1.13	1.19	-5%
9	6	Gilpin	19	301	1.12	1.20	-7%
10	8	Arapahoe	2,113	33,739	1.11	1.18	-6%
11	4	Kit Carson	39	624	1.11	1.26	-12%
12	25	Jefferson	2,301	36,897	1.11	1.04	6%
13	44	Rio Grande	57	914	1.11	0.74	49%
14	12	Logan	76	1,220	1.10	1.13	-2%
15	27	Douglas	661	10,864	1.08	1.02	6%
16	48	Archuleta	42	694	1.07	0.70	53%
17	19	Las Animas	60	1,014	1.05	1.08	-3%
18	26	Garfield	179	3,030	1.05	1.02	3%
19	31	Mesa	576	9,765	1.05	0.94	11%
20	10	Denver	1,935	33,061	1.04	1.16	-11%
21	9	Eagle	122	2,098	1.03	1.16	-11%
22	15	Conejos	40	694	1.02	1.10	-7%
23	16	Grand	41	717	1.01	1.10	-8%
24	2	Elbert	76	1,329	1.01	1.40	-28%
25	30	Pitkin	35	623	1.00	0.94	6%
26	17	Fremont	165	2,949	0.99	1.09	-9%
27	38	Clear Creek	35	636	0.98	0.87	12%
28	20	Montezuma	100	1,835	0.97	1.08	-11%
29	28	El Paso	2,066	38,157	0.96	0.99	-3%
30	23	Costilla	14	260	0.95	1.05	-9%
31	62	Otero	78	1,472	0.94	0.41	129%
32	35	Weld	846	15,985	0.94	0.88	7%
33	18	Teller	82	1,553	0.94	1.09	-14%
34	32	Baca	15	284	0.94	0.92	2%
35	58	Sedgwick	9	174	0.92	0.54	70%
36	46	Cheyenne	9	179	0.89	0.73	22%
37	22	Montrose	122	2,428	0.89	1.06	-16%
38	51	Routt	66	1,351	0.87	0.67	29%

Rank 1998-1999	Rank 1996-1997	County of Residence	Drivers 16-20 in Serious Crashes	Population 16-20	Index of Young Drivers In Serious Crashes per 1,000 Population 16-20 (State Average = 1.00)		% Change
			1998-1999	1998-1999	1998-1999	1996-1997	
39	40	La Plata	202	4,174	0.86	0.82	5%
40	36	Larimer	1,094	22,920	0.85	0.87	-3%
41	14	Summit	48	1,031	0.83	1.11	-26%
42	49	Chaffee	52	1,119	0.82	0.69	19%
43	34	Washington	17	372	0.81	0.88	-8%
44	3	Lincoln	18	394	0.81	1.32	-39%
45	41	Moffat	51	1,149	0.79	0.81	-3%
46	56	Rio Blanco	26	605	0.76	0.60	27%
47	47	Huerfano	21	492	0.76	0.71	7%
48	43	Boulder	1,116	26,292	0.75	0.77	-2%
49	60	Hinsdale	2	48	0.75	0.44	70%
50	54	San Miguel	16	384	0.74	0.63	17%
51	42	Saguache	18	448	0.71	0.80	-11%
52	50	Dolores	6	151	0.71	0.68	4%
53	63	Ouray	10	255	0.70	0.34	104%
54	39	Delta	70	1,868	0.66	0.84	-21%
55	45	Crowley	12	329	0.65	0.74	-13%
56	52	Alamosa	68	1,930	0.62	0.64	-2%
57	37	Kiowa	5	142	0.62	0.87	-28%
58	29	Lake	21	684	0.54	0.95	-43%
59	24	Yuma	20	717	0.49	1.05	-53%
60	33	Jackson	3	124	0.43	0.92	-53%
61	53	San Juan	1	58	0.31	0.63	-51%
62	61	Gunnison	31	1,885	0.29	0.43	-32%
63	55	Mineral	0	34	0.00	0.61	-100%
		Total State	17,659	313,044	1.00	1.00	0%

Appendix E

Appendix E. Resident Senior (65+) Drivers as a Percentage of All Serious Crash Drivers — Large Cities, 1998-1999.

		Drivers in Serious Crashes Living In City		
1998-1999 Rank	City of Residence	Drivers 65+	All Drivers in Serious Crashes	Senior Drivers as a Percentage of All Drivers in Serious Crashes
1	Canon City	51	385	13.2%
2	Grand Junction	125	999	12.5%
3	Sterling	28	226	12.4%
4	Montrose	33	295	11.2%
5	Pueblo	357	3,255	11.0%
6	Loveland	115	1,332	8.6%
7	Fort Morgan	23	283	8.1%
8	Lakewood	312	4,007	7.8%
9	Littleton	103	1,359	7.6%
10	Greenwood Village	35	480	7.3%
11	Westminster	118	1,644	7.2%
12	Wheat Ridge	122	1,705	7.2%
13	Federal Heights	21	303	6.9%
14	Denver	1155	17,053	6.8%
15	Englewood	64	979	6.5%
16	Greeley	118	1,812	6.5%
17	Brighton	34	538	6.3%
18	Arvada	173	2,749	6.3%
19	Northglenn	55	880	6.3%
20	Colorado Springs	571	9,142	6.2%
21	Golden	31	499	6.2%
22	Commerce City	49	832	5.9%
23	Longmont	100	1,768	5.7%
24	Fort Collins	145	2,664	5.4%
25	Boulder	117	2,347	5.0%
26	Aurora	463	9,565	4.8%
27	Broomfield	39	852	4.6%
28	Durango	14	360	3.9%
29	Fountain	14	373	3.8%
30	Castle Rock	17	551	3.1%
31	Louisville	12	396	3.0%
32	Thornton	70	2,368	3.0%
33	Lafayette	12	492	2.4%
34	Parker	5	503	1.0%
35	Trinidad	n/a		
	Total Large City	4713	72,996	6.5%
	Total State	6673	106,234	6.3%

Appendix E. Resident Senior (85+) Drivers As a Percentage of All Serious Crash Drivers — Large Cities, 1998-1999

Rank 1998-1999	City of Residence	Drivers in Serious Crashes Living In City		Senior Drivers as a Percentage of All Drivers in Serious Crashes
		Drivers 85+	All Drivers in Serious Crashes	
1	Sterling	5	226	2.2%
2	Canon City	8	385	2.1%
3	Montrose	6	295	2.0%
4	Loveland	15	1,332	1.1%
5	Grand Junction	8	999	0.8%
6	Brighton	4	538	0.7%
7	Lakewood	29	4,007	0.7%
8	Fort Morgan	2	283	0.7%
9	Longmont	12	1,768	0.7%
10	Greeley	11	1,812	0.6%
11	Pueblo	19	3,255	0.6%
12	Denver	92	17,053	0.5%
13	Littleton	7	1,359	0.5%
14	Englewood	5	979	0.5%
15	Wheat Ridge	8	1,705	0.5%
16	Boulder	10	2,347	0.4%
17	Fort Collins	11	2,664	0.4%
18	Colorado Springs	37	9,142	0.4%
19	Golden	2	499	0.4%
20	Westminster	6	1,644	0.4%
21	Arvada	10	2,749	0.4%
22	Commerce City	3	832	0.4%
23	Aurora	28	9,565	0.3%
24	Durango	1	360	0.3%
25	Louisville	1	396	0.3%
26	Northglenn	2	880	0.2%
27	Parker	1	503	0.2%
28	Castle Rock	1	551	0.2%
29	Thornton	4	2,368	0.2%
30	Broomfield	1	852	0.1%
31	Federal Heights		303	0.0%
32	Fountain		373	0.0%
33	Greenwood Village		480	0.0%
34	Lafayette		492	0.0%
35	Trinidad	n/a	n/a	n/a
	Total Large Cities	352	72,996	0.5%
	Total State	484	106,234	0.5%

Appendix E. Resident Senior (65+) Drivers as a Percentage of All Serious Crash Drivers — Counties, 1998-1999.

Rank 1998-1999	County of Residence	Drivers in Serious Crashes Living in the County, 1998-1999		Senior Drivers as a Percentage of All Drivers in Serious Crashes
		Drivers 65+	All Drivers	
1	Jackson	5	25	20.0%
2	Cheyenne	6	38	15.8%
3	Crowley	9	66	13.6%
4	Huerfano	17	132	12.9%
5	Prowers	37	295	12.5%
6	Baca	8	64	12.5%
7	Mineral	1	8	12.5%
8	Sedgwick	5	41	12.2%
9	Las Animas	36	298	12.1%
10	Fremont	104	875	11.9%
11	Chaffee	34	292	11.6%
12	Delta	49	421	11.6%
13	Yuma	14	123	11.4%
14	Otero	46	412	11.2%
15	Logan	38	347	11.0%
16	Mesa	292	2,691	10.9%
17	Phillips	9	85	10.6%
18	Pueblo	442	4,216	10.5%
19	Conejos	17	164	10.4%
20	Bent	11	107	10.3%
21	San Juan	1	10	10.0%
22	Saguache	10	101	9.9%
23	Gunnison	17	175	9.7%
24	Montezuma	42	434	9.7%
25	Montrose	51	572	8.9%
26	Kit Carson	12	144	8.3%
27	Morgan	44	569	7.7%
28	Dolores	3	39	7.7%
29	Alamosa	25	327	7.6%
30	Costilla	6	84	7.1%
31	Kiowa	1	14	7.1%
32	Archuleta	13	189	6.9%
33	Clear Creek	16	234	6.8%

Drivers in Serious Crashes Living in the County, 1998-1999

Rank 1998-1999	County of Residence	Drivers 65+	All Drivers	Senior Drivers as a Percentage of All Drivers in Serious Crashes
34	Rio Grande	15	222	6.8%
35	Denver	1159	17,272	6.7%
36	Rio Blanco	6	90	6.7%
37	Larimer	381	5,744	6.6%
38	Jefferson	850	13,113	6.5%
39	Pitkin	19	316	6.0%
40	El Paso	701	12,027	5.8%
41	Ouray	3	52	5.8%
42	Weld	233	4,072	5.7%
43	Arapahoe	742	13,502	5.5%
44	Washington	4	75	5.3%
45	Lake	9	169	5.3%
46	Lincoln	4	76	5.3%
47	Routt	16	320	5.0%
48	Garfield	47	950	4.9%
49	Grand	14	283	4.9%
50	Boulder	329	6,953	4.7%
51	Adams	474	10,084	4.7%
52	Moffat	11	237	4.6%
53	Teller	22	474	4.6%
54	La Plata	42	926	4.5%
55	PARK	18	398	4.5%
56	Custer	3	73	4.1%
57	Summit	17	431	3.9%
58	San Miguel	4	104	3.8%
59	Elbert	15	419	3.6%
60	Douglas	95	3,401	2.8%
61	Eagle	17	726	2.3%
62	Gilpin	2	123	1.6%
63	Hinsdale		10	0.0%
	Total State	6673	106,234	6.3%

Appendix E. Resident Senior (85+) Drivers as a Percentage of All Serious Crash Drivers — Counties, 1998-1999

Rank 1998-1999	County of Residence	Drivers in Serious Crashes Living in County, 1998-1999		Senior Drivers as a Percentage of All Drivers in Serious Crashes
		Drivers 85+	All Drivers	
1	Costilla	2	84	2.4%
2	Phillips	2	85	2.4%
3	Logan	6	347	1.7%
4	Las Animas	5	298	1.7%
5	Baca	1	64	1.6%
6	Crowley	1	66	1.5%
7	Huerfano	2	132	1.5%
8	Fremont	11	875	1.3%
9	Montrose	7	572	1.2%
10	Conejos	2	164	1.2%
11	Morgan	6	569	1.1%
12	Saguache	1	101	1.0%
13	Otero	4	412	1.0%
14	Pitkin	3	316	0.9%
15	Routt	3	320	0.9%
16	Bent	1	107	0.9%
17	Moffat	2	237	0.8%
18	Mesa	21	2,691	0.8%
19	Delta	3	421	0.7%
20	Kit Carson	1	144	0.7%
21	Chaffee	2	292	0.7%
22	Prowers	2	295	0.7%
23	Garfield	6	950	0.6%
24	Denver	96	17,272	0.6%
25	Pueblo	23	4,216	0.5%
26	Jefferson	71	13,113	0.5%
27	Larimer	30	5,744	0.5%
28	Weld	18	4,072	0.4%
29	Clear Creek	1	234	0.4%
30	Teller	2	474	0.4%
31	Boulder	28	6,953	0.4%
32	El Paso	43	12,027	0.4%
33	Grand	1	283	0.4%
34	La Plata	3	926	0.3%
35	Alamosa	1	327	0.3%
36	Arapahoe	39	13,502	0.3%
37	Adams	26	10,084	0.3%
38	Park	1	398	0.3%
39	Summit	1	431	0.2%

| | | Drivers in Serious Crashes Living in County, 1998-1999 | | |
Rank 1998-1999	County of Residence	Drivers 85+	All Drivers	Senior Drivers as a Percentage of All Drivers in Serious Crashes
40	Montezuma	1	434	0.2%
41	Eagle	1	726	0.1%
42	Douglas	4	3,401	0.1%
43	Archuleta		189	0.0%
44	Cheyenne		38	0.0%
45	Custer		73	0.0%
46	Dolores		39	0.0%
47	Elbert		419	0.0%
48	Gilpin		123	0.0%
49	Gunnison		175	0.0%
50	Hinsdale		10	0.0%
51	Jackson		25	0.0%
52	Kiowa		14	0.0%
53	Lake		169	0.0%
54	Lincoln		76	0.0%
55	Mineral		8	0.0%
56	Ouray		52	0.0%
57	Rio Blanco		90	0.0%
58	Rio Grande		222	0.0%
59	San Juan		10	0.0%
60	San Miguel		104	0.0%
61	Sedgwick		41	0.0%
62	Washington		75	0.0%
63	Yuma		123	0.0%
	Total State	484	106,234	0.5%

Appendix E. Population-Adjusted Index of Senior Drivers in Serious Crashes — Large Cities, 1998-1999.

Rank 1998-1999	City of Residence	Drivers 65+ in Serious Crashes	Population 65+	Index of Senior Drivers In Serious Crashes per 1,000 Population 65+ (State Average = 1.00)
1	Greenwood Village	35	962	2.19
2	Commerce City	49	1,754	1.68
3	Northglenn	55	2,199	1.51
4	Westminster	118	5,003	1.42
5	Aurora	463	20,189	1.38
6	Fountain	14	626	1.35
7	Pueblo	357	16,337	1.32
8	Castle Rock	17	852	1.20
9	Broomfield	39	2,016	1.17
10	Denver	1155	60,322	1.15
11	Loveland	115	6,344	1.09
12	Arvada	173	9,849	1.06
13	Littleton	103	5,919	1.05
14	Thornton	70	4,137	1.02
15	Canon City	51	3,054	1.01
16	Colorado Springs	571	34,537	1.00
17	Fort Collins	145	8,836	0.99
18	Brighton	34	2,075	0.99
19	Greeley	118	7,233	0.98
20	Lakewood	312	19,159	0.98
21	Fort Morgan	23	1,440	0.96
22	Wheat Ridge	122	7,700	0.95
23	Golden	31	1,995	0.94
24	Boulder	117	7,718	0.91
25	Grand Junction	125	8,382	0.90
26	Sterling	28	1,903	0.89
27	Longmont	100	6,854	0.88
28	Parker	5	353	0.85
29	Louisville	12	901	0.80
30	Montrose	33	2,481	0.80
31	Federal Heights	21	1,634	0.77
32	Englewood	64	6,082	0.63
33	Lafayette	12	1,291	0.56
34	Durango	14	1,589	0.53
35	Trinidad			
	Total Large City	*4,713*	*261,725*	*1.08*
	Total State	*6,673*	*402,018*	*1.00*

Appendix E. Population-Adjusted Index of Senior (85+) Drivers in Serious Crashes — Large Cities, 1998-1999

Rank 1998-1999	City of Residence	Drivers 85+ in Serious Crashes	Population 85+	Index of Senior Drivers In Serious Crashes per 1,000 Population 85+ (State Average = 1.00)
1	Parker	1	17	5.03
2	Commerce City	3	99	2.54
3	Westminster	6	302	1.68
4	Loveland	15	807	1.57
5	Aurora	28	1,551	1.52
6	Castle Rock	1	56	1.51
7	Montrose	6	346	1.46
8	Sterling	5	302	1.40
9	Brighton	4	255	1.33
10	Longmont	12	809	1.25
11	Lakewood	29	1,959	1.25
12	Canon City	8	550	1.23
13	Arvada	10	697	1.21
14	Golden	2	160	1.05
15	Denver	92	7,587	1.02
16	Broomfield	1	89	0.95
17	Colorado Springs	37	3,318	0.94
18	Louisville	1	90	0.94
19	Greeley	11	1,024	0.91
20	Littleton	7	664	0.89
21	Fort Morgan	2	190	0.89
22	Northglenn	2	190	0.89
23	Fort Collins	11	1,136	0.82
24	Pueblo	19	1,990	0.81
25	Wheat Ridge	8	843	0.80
26	Boulder	10	1,087	0.78
27	Thornton	4	513	0.66
28	Englewood	5	675	0.63
29	Grand Junction	8	1,250	0.54
30	Durango	1	173	0.49
31	Federal Heights		79	0.00
32	Fountain		30	0.00
33	Greenwood Village		30	0.00
34	Lafayette		82	0.00
35	Trinidad			
	Total Large Cities	*352*	*27,803*	*1.07*
	Total State	*484*	*40,837*	*1.00*

Appendix E. Population-Adjusted Index of Senior Drivers in Serious Crashes — Counties, 1998-1999.

Rank 1998-1999	County of Residence	Drivers 65+ in Serious Crashes	Population 65+	Index of Senior Drivers In Serious Crashes per 1,000 Population 65+ (State Average = 1.00)
1	Clear Creek	16	621	1.55
2	San Juan	1	39	1.54
3	Jackson	5	205	1.47
4	Summit	17	707	1.45
5	Pitkin	19	880	1.30
6	Pueblo	442	20,728	1.28
7	Prowers	37	1,765	1.26
8	Gunnison	17	811	1.26
9	Park	18	863	1.26
10	San Miguel	4	199	1.21
11	Denver	1,159	60,317	1.16
12	Alamosa	25	1,322	1.14
13	Adams	474	25,397	1.12
14	Lake	9	490	1.11
15	Douglas	95	5,226	1.10
16	Arapahoe	742	42,736	1.05
17	Mesa	292	16,953	1.04
18	Routt	16	931	1.04
19	Larimer	381	22,986	1.00
20	Saguache	10	612	0.99
21	El Paso	701	43,017	0.98
22	Fremont	104	6,441	0.97
23	Cheyenne	6	372	0.97
24	Jefferson	850	52,942	0.97
25	Grand	14	872	0.97
26	Crowley	9	573	0.95
27	Teller	22	1,431	0.93
28	Conejos	17	1,121	0.91
29	Weld	233	15,390	0.91
30	Eagle	17	1,151	0.89
31	Boulder	329	22,593	0.88
32	Otero	46	3,286	0.84
33	Logan	38	2,759	0.83
34	Las Animas	36	2,628	0.83
35	Montezuma	42	3,066	0.83
36	Elbert	15	1,098	0.82
37	Huerfano	17	1,282	0.80
38	Chaffee	34	2,615	0.78
39	Morgan	44	3,394	0.78

Rank 1998-1999	County of Residence	Drivers 65+ in Serious Crashes	Population 65+	Index of Senior Drivers In Serious Crashes per 1,000 Population 65+ (State Average = 1.00)
40	Garfield	47	3,710	0.76
41	Archuleta	13	1,039	0.75
42	Bent	11	941	0.70
43	Dolores	3	261	0.69
44	La Plata	42	3,888	0.65
45	Kit Carson	12	1,112	0.65
46	Phillips	9	842	0.64
47	Costilla	6	563	0.64
48	Montrose	51	4,818	0.64
49	Delta	49	5,076	0.58
50	Gilpin	2	213	0.57
51	Rio Grande	15	1,648	0.55
52	Moffat	11	1,219	0.54
53	Yuma	14	1,562	0.54
54	Rio Blanco	6	671	0.54
55	Sedgwick	5	582	0.52
56	Baca	8	978	0.49
57	Ouray	3	401	0.45
58	Custer	3	427	0.42
59	Mineral	1	150	0.40
60	Washington	4	846	0.28
61	Lincoln	4	869	0.28
62	Kiowa	1	284	0.21
63	Hinsdale	0	112	0.00
	Total State	6,673	402,018	1.00

Appendix E. Population-Adjusted Index of Senior (85+) Drivers in Serious Crashes — Counties, 1998-1999

Rank 1998-1999	County of Residence	Drivers 85+ in Serious Crashes	Population 85+	Index of Senior Drivers In Serious Crashes per 1,000 Population 85+ (State Average = 1.00)
1	Pitkin	3	60	4.25
2	Summit	1	24	3.52
3	Routt	3	86	2.96
4	Costilla	2	61	2.77
5	Park	1	46	1.83
6	Teller	2	93	1.82
7	Grand	1	54	1.56
8	Clear Creek	1	55	1.55
9	Logan	6	350	1.45
10	Conejos	2	123	1.38
11	Eagle	1	62	1.36
12	Garfield	6	387	1.31
13	Jefferson	71	4,598	1.30
14	Saguache	1	65	1.30
15	Douglas	4	266	1.27
16	Phillips	2	139	1.21
17	Adams	26	1,830	1.20
18	Moffat	2	143	1.18
19	Crowley	1	72	1.17
20	Las Animas	5	374	1.13
21	Morgan	6	465	1.09
22	Denver	96	7,576	1.07
23	Montrose	7	555	1.07
24	Fremont	11	882	1.05
25	Larimer	30	2,557	0.99
26	El Paso	43	3,692	0.98
27	Huerfano	2	172	0.98
28	Boulder	28	2,426	0.97
29	Arapahoe	39	3,497	0.94
30	Mesa	21	1,893	0.94
31	Weld	18	1,695	0.90
32	Pueblo	23	2,338	0.83
33	Prowers	2	208	0.81
34	Bent	1	111	0.76
35	La Plata	3	352	0.72
36	Otero	4	478	0.71
37	Baca	1	131	0.65
38	Chaffee	2	280	0.60
39	Alamosa	1	157	0.54

Rank 1998-1999	County of Residence	Drivers 85+ in Serious Crashes	Population 85+	Index of Senior Drivers In Serious Crashes per 1,000 Population 85+ (State Average = 1.00)
40	Kit Carson	1	157	0.54
41	Delta	3	689	0.37
42	Montezuma	1	297	0.28
	Archuleta	0	62	0.00
	Cheyenne	0	63	0.00
	Custer	0	34	0.00
	Dolores	0	28	0.00
	Elbert	0	96	0.00
	Gilpin	0	16	0.00
	Gunnison	0	72	0.00
	Hinsdale	0	5	0.00
	Jackson	0	27	0.00
	Kiowa	0	39	0.00
	Lake	0	48	0.00
	Lincoln	0	119	0.00
	Mineral	0	17	0.00
	Ouray	0	37	0.00
	Rio Blanco	0	78	0.00
	Rio Grande	0	194	0.00
	San Juan	0	1	0.00
	San Miguel	0	14	0.00
	Sedgwick	0	91	0.00
	Washington	0	94	0.00
	Yuma	0	223	0.00
	Total State	484	40,837	1.00

Appendix F

Appendix F. Resident Drivers Suspected of Impaired Driving as a Percentage of All Serious Crash Drivers — Large Cities, 1996-1999

Rank 1998-1999	Rank 1996-1997	City of Residence	Drivers Suspected of Alcohol or Drug Use	All Drivers in Serious Crashes	Drivers Suspected of Alcohol or Drug Use as a Percentage of All Drivers in Serious Crashes		% Change
			1998-1999	1998-1999	1998-1999	1996-1997	
1	22	Westminster	161	1,644	9.8%	5.2%	88.3%
2	8	Durango	35	360	9.7%	7.7%	26.4%
3	12	Canon City	36	385	9.4%	6.9%	36.1%
4	5	Brighton	45	538	8.4%	8.6%	-2.4%
5	14	Golden	41	499	8.2%	6.6%	24.3%
6	4	Commerce City	68	832	8.2%	8.6%	-4.8%
7	21	Englewood	72	979	7.4%	5.7%	29.0%
8	6	Pueblo	237	3,255	7.3%	8.4%	-13.2%
9	9	Greeley	124	1,812	6.8%	7.6%	-9.9%
10	15	Denver	1,143	17,053	6.7%	6.5%	2.8%
11	31	Fountain	25	373	6.7%	3.9%	71.2%
12	13	Fort Collins	175	2,664	6.6%	6.6%	-0.7%
13	2	Montrose	19	295	6.4%	10.1%	-36.4%
14	1	Fort Morgan	17	283	6.0%	11.2%	-46.5%
15	17	Loveland	80	1,332	6.0%	6.2%	-3.6%
16	11	Federal Heights	17	303	5.6%	6.9%	-18.5%
17	28	Lakewood	219	4,007	5.5%	4.6%	20.0%
18	18	Thornton	129	2,368	5.4%	6.2%	-11.9%
19	25	Northglenn	47	880	5.3%	5.0%	7.5%
20	16	Longmont	94	1,768	5.3%	6.4%	-17.5%
21	7	Grand Junction	51	999	5.1%	8.1%	-37.0%
22	19	Colorado Springs	465	9,142	5.1%	5.8%	-12.8%
23	10	Lafayette	25	492	5.1%	7.1%	-28.7%
24	27	Aurora	470	9,565	4.9%	4.7%	5.2%
25	24	Boulder	111	2,347	4.7%	5.2%	-8.3%
26	26	Arvada	128	2,749	4.7%	4.9%	-5.9%
27	34	Parker	21	503	4.2%	3.1%	34.9%
28	30	Broomfield	35	852	4.1%	3.9%	4.1%
29	23	Littleton	53	1,359	3.9%	5.2%	-24.8%
30	3	Sterling	8	226	3.5%	8.7%	-59.4%
31	29	Castle Rock	19	551	3.4%	4.3%	-19.4%
32	20	Wheat Ridge	52	1,705	3.0%	5.8%	-47.7%
33	32	Louisville	11	396	2.8%	3.5%	-19.9%
34	33	Greenwood Village	11	480	2.3%	3.3%	-30.6%
35	35	Trinidad	n/a	n/a	n/a	n/a	n/a
		Total Large City	4,244	72,996	5.8%	6.0%	-2.4%
		Total State	6,469	106,234	6.1%	6.3%	-2.6%

Appendix F. Resident Drivers Suspected of Impaired Driving as a Percentage of All Serious Crash Drivers — Counties, 1996-1999

Rank 1998-1999	Rank 1996-1997	County of Residence	Drivers Suspected of Alcohol or Drug Use	All Drivers in Serious Crashes	Drivers Suspected of Alcohol or Drug Use as a % of All Drivers in Serious Crashes		
			1998-1999	1998-1999	1998-1999	1996-1997	% Change
1	63	Mineral	3	8	38%	0%	
2	42	San Juan	2	10	20%	7%	186%
3	30	Ouray	10	52	19%	8%	140%
4	58	Baca	12	64	19%	4%	369%
5	21	Conejos	28	164	17%	10%	71%
6	2	Dolores	6	39	15%	16%	-4%
7	1	Costilla	12	84	14%	18%	-21%
8	59	Kiowa	2	14	14%	4%	257%
9	15	Montezuma	61	434	14%	10%	41%
10	9	Archuleta	25	189	13%	12%	10%
11	5	San Miguel	13	104	13%	13%	-4%
12	13	Sedgwick	5	41	12%	11%	11%
13	7	Rio Grande	27	222	12%	12%	1%
14	47	Crowley	8	66	12%	7%	73%
15	32	Jackson	3	25	12%	8%	50%
16	6	Lake	20	169	12%	12%	-1%
17	8	Eagle	83	726	11%	12%	-5%
18	36	Huerfano	15	132	11%	8%	42%
19	3	Saguache	11	101	11%	16%	-32%
20	28	Washington	8	75	11%	9%	19%
21	20	Moffat	25	237	11%	10%	5%
22	62	Lincoln	8	76	11%	2%	426%
23	17	Garfield	95	950	10%	10%	0%
24	10	Pitkin	31	316	10%	11%	-11%
25	23	La Plata	88	926	10%	10%	-5%
26	11	Summit	40	431	9%	11%	-16%
27	40	Routt	29	320	9%	7%	29%
28	51	Kit Carson	13	144	9%	6%	50%
29	45	Grand	25	283	9%	7%	26%
30	12	Gunnison	15	175	9%	11%	-22%
31	16	Delta	36	421	9%	10%	-14%
32	24	Clear Creek	20	234	9%	9%	-5%
33	19	Otero	35	412	8%	10%	-15%
34	29	Phillips	7	85	8%	9%	-8%
35	18	Prowers	24	295	8%	10%	-19%
36	27	Montrose	46	572	8%	9%	-11%
37	14	Rio Blanco	7	90	8%	11%	-29%
38	37	Las Animas	23	298	8%	8%	-4%

Rank 1998-1999	Rank 1996-1997	County of Residence	Drivers Suspected of Alcohol or Drug Use	All Drivers in Serious Crashes	Drivers Suspected of Alcohol or Drug Use as a % of All Drivers in Serious Crashes		
			_1998-1999_	_1998-1999_	_1998-1999_	_1996-1997_	_% Change_
39	33	Weld	310	4,072	8%	8%	-5%
40	22	Chaffee	22	292	8%	10%	-25%
41	25	Bent	8	107	7%	9%	-17%
42	35	Pueblo	312	4,216	7%	8%	-7%
43	26	Morgan	42	569	7%	9%	-18%
44	34	Alamosa	24	327	7%	8%	-8%
45	61	Gilpin	9	123	7%	3%	144%
46	38	Yuma	9	123	7%	7%	5%
47	43	Fremont	64	875	7%	7%	4%
48	54	Teller	33	474	7%	5%	39%
49	49	Denver	1,158	17,272	7%	7%	-4%
50	50	Larimer	364	5,744	6%	6%	6%
51	48	Adams	633	10,084	6%	7%	-10%
52	56	Elbert	25	419	6%	5%	19%
53	46	Logan	20	347	6%	7%	-18%
54	4	Custer	4	73	5%	15%	-63%
55	44	Park	21	398	5%	7%	-25%
56	55	Jefferson	688	13,113	5%	5%	5%
57	41	Mesa	141	2,691	5%	7%	-25%
58	52	El Paso	601	12,027	5%	6%	-17%
59	53	Boulder	341	6,953	5%	6%	-18%
60	57	Arapahoe	591	13,502	4%	4%	9%
61	60	Douglas	127	3,401	4%	3%	24%
62	39	Cheyenne	1	38	3%	7%	-62%
63	31	Hinsdale	0	10	0%	8%	-100%
		Total State	_6,469_	_106,234_	_6%_	_6%_	_1%_

Appendix F. Population-Adjusted Index of Suspected Impaired Drivers in Serious Crashes — Large Cities, 1996-1999

Rank 1998-1999	Rank 1996-1997	City of Residence	Drivers in Serious Crashes Suspected of Alcohol or Drug Use	16+ Population	Index of Drivers in Serious Crashes Suspected of Alcohol or Drug Use (State Average = 1.00)		% Change
			1998-1999	*1998-1999*	*1998-1999*	*1996-1997*	
1	1	Commerce City	68	12,563	2.63	2.39	10.1%
2	3	Brighton	45	12,965	1.69	1.92	-12.2%
3	14	Golden	41	13,544	1.47	1.08	36.4%
4	5	Pueblo	237	80,514	1.43	1.57	-8.9%
5	7	Denver	1,143	395,957	1.40	1.37	2.7%
6	13	Durango	35	12,270	1.39	1.10	26.2%
7	21	Canon City	36	13,090	1.34	1.02	31.7%
8	16	Englewood	72	26,582	1.32	1.06	24.6%
9	12	Fountain	25	9,623	1.26	1.13	11.8%
10	8	Thornton	129	53,779	1.17	1.31	-11.1%
11	15	Aurora	470	196,460	1.16	1.07	9.2%
12	9	Loveland	80	35,949	1.08	1.21	-10.4%
13	26	Westminster	161	73,066	1.07	0.87	22.6%
14	2	Fort Morgan	17	7,807	1.06	1.94	-45.5%
15	11	Greeley	124	57,327	1.05	1.16	-9.4%
16	17	Federal Heights	17	8,224	1.01	1.06	-4.8%
17	19	Wheat Ridge	52	26,294	0.96	1.03	-6.4%
18	10	Longmont	94	48,304	0.95	1.18	-19.9%
19	25	Fort Collins	175	90,639	0.94	0.90	4.2%
20	31	Northglenn	47	24,850	0.92	0.75	22.9%
21	4	Montrose	19	10,173	0.91	1.69	-46.3%
22	29	Lakewood	219	117,469	0.91	0.77	18.5%
23	20	Colorado Springs	465	265,596	0.85	1.03	-17.1%
24	6	Lafayette	25	15,125	0.80	1.39	-42.1%
25	28	Arvada	128	79,253	0.79	0.80	-1.3%
26	22	Littleton	53	32,895	0.78	1.01	-22.6%
27	30	Parker	21	13,451	0.76	0.76	0.5%
28	18	Grand Junction	51	32,941	0.75	1.04	-27.8%
29	24	Castle Rock	19	13,050	0.71	0.93	-23.8%
30	32	Boulder	111	79,969	0.68	0.69	-2.2%
31	33	Broomfield	35	27,118	0.63	0.59	5.9%
32	23	Greenwood Village	11	10,496	0.51	0.94	-45.7%
33	27	Sterling	8	8,925	0.44	0.81	-46.1%
34	34	Louisville	11	13,298	0.40	0.48	-17.0%
		Trinidad	n/a	n/a	n/a	n/a	n/a
		Total Large City	*4,244*	*1,923,555*	*1.07*	*1.10*	*-2.7%*
		Total State	*6,469*	*3,148,029*	*1.00*	*1.00*	*0.0%*

Appendix F. Population-Adjusted Index of Suspected Impaired Drivers in Serious Crashes — Counties, 1996-1999

Rank 1998-1999	Rank 1996-1997	County of Residence	Drivers Suspected of Alcohol or Drug Use	16+ Population	Index of Drivers in Serious Crashes Suspected of Alcohol or Drug Use per 1,000 Driving Age Population (State Average = 1.00)		% Change
			_1998-1999_	_1998-1999_	_1998-1999_	_1996-1997_	
1	63	Mineral	3	560	2.61	0.00	
2	16	Conejos	28	5,790	2.35	1.35	74%
3	28	San Juan	2	424	2.30	1.11	107%
4	1	Costilla	12	2,680	2.18	3.09	-29%
5	4	Dolores	6	1,457	2.00	1.79	12%
6	35	Ouray	10	2,771	1.76	0.92	91%
7	12	Montezuma	61	17,249	1.72	1.42	21%
8	21	Archuleta	25	7,212	1.69	1.22	38%
9	60	Baca	12	3,611	1.62	0.27	499%
10	7	Eagle	83	25,547	1.58	1.73	-9%
11	53	Lake	20	6,244	1.56	0.61	156%
12	17	Garfield	95	30,828	1.50	1.33	13%
13	27	Grand	25	8,144	1.49	1.12	33%
14	15	Denver	1,158	395,130	1.43	1.35	6%
15	26	Rio Grande	27	9,227	1.42	1.12	27%
16	10	Pueblo	312	107,186	1.42	1.44	-2%
17	19	Clear Creek	20	7,034	1.38	1.27	9%
18	11	San Miguel	13	4,712	1.34	1.43	-6%
19	2	La Plata	88	33,394	1.28	2.00	-36%
20	13	Pitkin	31	11,790	1.28	1.41	-9%
21	20	Adams	633	242,320	1.27	1.23	3%
22	29	Moffat	25	9,681	1.26	1.04	21%
23	6	Summit	40	15,531	1.25	1.75	-28%
24	58	Gilpin	9	3,497	1.25	0.46	172%
25	52	Huerfano	15	6,093	1.20	0.65	84%
26	8	Saguache	11	4,525	1.18	1.57	-25%
27	23	Weld	310	128,688	1.17	1.14	3%
28	9	Prowers	24	10,258	1.14	1.47	-23%
29	42	Sedgwick	5	2,173	1.12	0.87	29%
30	25	Otero	35	16,038	1.06	1.13	-6%
31	55	Kit Carson	13	5,959	1.06	0.59	80%
32	18	Morgan	42	19,434	1.05	1.32	-20%
33	30	Jackson	3	1,425	1.02	1.03	-1%
34	46	Routt	29	14,059	1.00	0.82	22%
35	38	Teller	33	16,209	0.99	0.90	10%

Rank 1998-1999	Rank 1996-1997	County of Residence	Drivers Suspected of Alcohol or Drug Use 1998-1999	16+ Population 1998-1999	Index of Drivers in Serious Crashes Suspected of Alcohol or Drug Use per 1,000 Driving Age Population (State Average = 1.00)		% Change
					1998-1999	1996-1997	
36	39	Larimer	364	183,923	0.96	0.90	7%
37	14	Park	21	10,646	0.96	1.38	-30%
38	31	Alamosa	24	12,184	0.96	0.99	-3%
39	51	Phillips	7	3,579	0.95	0.67	42%
40	36	Washington	8	4,129	0.94	0.92	2%
41	56	Crowley	8	4,156	0.94	0.51	84%
42	22	Montrose	46	24,654	0.91	1.22	-26%
43	40	Las Animas	23	12,571	0.89	0.89	0%
44	43	Fremont	64	35,663	0.87	0.84	4%
45	48	Jefferson	688	403,814	0.83	0.76	9%
46	62	Elbert	25	14,675	0.83	0.05	1558%
47	33	Delta	36	21,348	0.82	0.96	-15%
48	37	Chaffee	22	13,162	0.81	0.90	-10%
49	34	Bent	8	4,904	0.79	0.94	-16%
50	5	El Paso	601	375,844	0.78	1.75	-56%
51	49	Arapahoe	591	372,739	0.77	0.76	2%
52	32	Mesa	141	89,595	0.77	0.97	-21%
53	47	Boulder	341	219,837	0.75	0.81	-7%
54	61	Lincoln	8	5,367	0.73	0.18	303%
55	3	Custer	4	2,730	0.71	1.97	-64%
56	59	Kiowa	2	1,411	0.69	0.34	103%
57	24	Gunnison	15	10,669	0.68	1.13	-39%
58	54	Logan	20	14,491	0.67	0.60	12%
59	41	Rio Blanco	7	5,586	0.61	0.87	-30%
60	50	Yuma	9	7,553	0.58	0.71	-18%
61	57	Douglas	127	113,519	0.54	0.46	18%
62	45	Cheyenne	1	1,803	0.27	0.82	-67%
63	44	Hinsdale	0	613	0.00	0.84	-100%
		Total State	6,469	2,989,005	1.05	1.00	5%

Appendix F. Resident 21-34 Year-Olds Suspected of Impaired Driving as a Percentage of All Suspected Serious Crash Impaired Drivers — Large Cities, 1998-1999

Rank 1998-1999	City of Residence	Impaired Drivers 21-34	All Suspected Impaired Drivers	Drivers 21-34 as a Percentage of All Drivers Suspected of Alcohol or Drug Use
1	Louisville	8	11	72.7%
2	Greeley	71	124	57.3%
3	Commerce City	37	68	54.4%
4	Littleton	28	53	52.8%
5	Canon City	19	36	52.8%
6	Boulder	58	111	52.3%
7	Denver	577	1,143	50.5%
8	Arvada	64	128	50.0%
9	Golden	20	41	48.8%
10	Englewood	35	72	48.6%
11	Federal Heights	8	17	47.1%
12	Fort Morgan	8	17	47.1%
13	Pueblo	111	237	46.8%
14	Thornton	60	129	46.5%
15	Westminster	74	161	46.0%
16	Longmont	43	94	45.7%
17	Greenwood Village	5	11	45.5%
18	Colorado Springs	210	465	45.2%
19	Fountain	11	25	44.0%
20	Aurora	204	470	43.4%
21	Castle Rock	8	19	42.1%
22	Fort Collins	71	175	40.6%
23	Broomfield	14	35	40.0%
24	Durango	14	35	40.0%
25	Lafayette	10	25	40.0%
26	Lakewood	87	219	39.7%
27	Loveland	30	80	37.5%
28	Montrose	7	19	36.8%
29	Northglenn	17	47	36.2%
30	Brighton	15	45	33.3%
31	Grand Junction	17	51	33.3%
32	Parker	7	21	33.3%
33	Wheat Ridge	17	52	32.7%
34	Sterling	2	8	25.0%
	Trinidad			
	Total Large City	1,967	4,244	46.3%
	Total State	2,912	6,469	45.0%

Appendix F. Resident 21-34 Year-Olds Suspected of Impaired Driving as a Percentage of All Suspected Serious Crash Impaired Drivers — Counties, 1998-1999

Rank 1998-1999	County of Residence	Impaired 21-34 Drivers	All Suspected Impaired Drivers	% of Drivers Suspected of Alcohol or Drug Use 21-34 Years Old
1	Eagle	52	83	62.7%
2	Crowley	5	8	62.5%
3	Summit	25	40	62.5%
4	Ouray	6	10	60.0%
5	Morgan	25	42	59.5%
6	Gunnison	8	15	53.3%
7	Weld	162	310	52.3%
8	Pitkin	16	31	51.6%
9	Denver	585	1,158	50.5%
10	Bent	4	8	50.0%
11	Dolores	3	6	50.0%
12	Lincoln	4	8	50.0%
13	San Juan	1	2	50.0%
14	Elbert	12	25	48.0%
15	Montezuma	29	61	47.5%
16	Boulder	161	341	47.2%
17	Kit Carson	6	13	46.2%
18	La Plata	40	88	45.5%
19	El Paso	273	601	45.4%
20	Fremont	29	64	45.3%
21	Adams	282	633	44.5%
22	Garfield	42	95	44.2%
23	Arapahoe	259	591	43.8%
24	Pueblo	136	312	43.6%
25	Jefferson	296	688	43.0%
26	Phillips	3	7	42.9%
27	Rio Blanco	3	7	42.9%
28	Delta	15	36	41.7%
29	Prowers	10	24	41.7%
30	Chaffee	9	22	40.9%
31	Larimer	147	364	40.4%
32	Grand	10	25	40.0%
33	Otero	14	35	40.0%
34	Sedgwick	2	5	40.0%
35	Teller	13	33	39.4%
36	Conejos	11	28	39.3%
37	Douglas	49	127	38.6%
38	Washington	3	8	37.5%
39	Mesa	52	141	36.9%
40	Archuleta	9	25	36.0%

Rank 1998-1999	County of Residence	Impaired 21-34 Drivers	All Suspected Impaired Drivers	% of Drivers Suspected of Alcohol or Drug Use 21-34 Years Old
41	Montrose	16	46	34.8%
42	Baca	4	12	33.3%
43	Costilla	4	12	33.3%
44	Gilpin	3	9	33.3%
45	Jackson	1	3	33.3%
46	Mineral	1	3	33.3%
47	Yuma	3	9	33.3%
48	Moffat	8	25	32.0%
49	Routt	9	29	31.0%
50	Clear Creek	6	20	30.0%
51	Lake	6	20	30.0%
52	Logan	6	20	30.0%
53	Rio Grande	8	27	29.6%
54	Alamosa	7	24	29.2%
55	Park	6	21	28.6%
56	Saguache	3	11	27.3%
57	Custer	1	4	25.0%
58	Huerfano	3	15	20.0%
59	Las Animas	4	23	17.4%
60	San Miguel	2	13	15.4%
	Cheyenne		1	0.0%
	Kiowa		2	0.0%
	Hinsdale		0	
	Total State	2912	6,469	45.0%

Appendix F. Population-Adjusted Index of 21-34 Year-Old Suspected Impaired Drivers — Large Cities, 1998-1999

Rank 1998-1999	City of Residence	Drivers 21-34 in Serious Crashes	Population 21-34	Index of 21-34 Year Old Drivers Suspected of Alcohol or Drug Use per 1,000 Population 21-34 (State Average = 1.00)
1	Commerce City	37	3,189	3.24
2	Denver	577	95,931	1.68
3	Canon City	19	3,318	1.60
4	Golden	20	3,510	1.59
5	Pueblo	111	20,513	1.51
6	Englewood	35	7,076	1.38
7	Brighton	15	3,169	1.32
8	Durango	14	3,006	1.30
9	Fort Morgan	8	1,777	1.26
10	Greeley	71	17,047	1.16
11	Littleton	28	7,256	1.08
12	Greenwood Village	5	1,309	1.07
13	Longmont	43	11,581	1.04
14	Aurora	204	55,756	1.02
15	Arvada	64	17,546	1.02
16	Thornton	60	16,476	1.02
17	Loveland	30	8,284	1.01
18	Fountain	11	3,130	0.98
19	Westminster	74	22,238	0.93
20	Federal Heights	8	2,424	0.92
21	Montrose	7	2,149	0.91
22	Lakewood	87	28,294	0.86
23	Wheat Ridge	17	5,658	0.84
24	Northglenn	17	5,945	0.80
25	Colorado Springs	210	80,260	0.73
26	Fort Collins	71	28,310	0.70
27	Boulder	58	23,675	0.68
28	Lafayette	10	4,613	0.60
29	Louisville	8	3,773	0.59
30	Grand Junction	17	8,295	0.57
31	Broomfield	14	7,039	0.56
32	Castle Rock	8	4,865	0.46
33	Parker	7	6,452	0.30
34	Sterling	2	2,088	0.27
	Trinidad	n/a	n/a	n/a
	Total Large City	*1,967*	*515,950*	*1.06*
	Total State	*2,912*	*812,629*	*1.00*

Appendix F. Population-Adjusted Index of 21-34 Year-Old Suspected Impaired Drivers — Counties, 1998-1999

Rank 1998-1999	County of Residence	Drivers 21-34 in Serious Crashes	Population 21-34	Index of 21-34 Year Old Drivers Suspected of Alcohol or Drug Use per 1,000 Population 21-34 (State Average = 1.00)
1	San Juan	1	54	5.22
2	Mineral	1	100	2.80
3	Ouray	6	656	2.55
4	Dolores	3	330	2.54
5	Conejos	11	1,239	2.48
6	Eagle	52	6,691	2.17
7	Montezuma	29	3,897	2.08
8	Costilla	4	566	1.97
9	Pitkin	16	2,282	1.96
10	Baca	4	610	1.83
11	Denver	585	96,078	1.70
12	Garfield	42	7,225	1.62
13	Morgan	25	4,304	1.62
14	Summit	25	4,478	1.56
15	Sedgwick	2	369	1.51
16	Grand	10	1,929	1.45
17	Pueblo	136	26,813	1.42
18	La Plata	40	7,940	1.41
19	Archuleta	9	1,922	1.31
20	Prowers	10	2,136	1.31
21	Kit Carson	6	1,299	1.29
22	Phillips	3	668	1.25
23	Weld	162	36,095	1.25
24	Clear Creek	6	1,339	1.25
25	Adams	282	67,570	1.16
26	Gilpin	3	721	1.16
27	Otero	14	3,389	1.15
28	Moffat	8	1,961	1.14
29	Rio Grande	8	1,967	1.13
30	Crowley	5	1,290	1.08
31	Washington	3	794	1.06
32	Bent	4	1,092	1.02
33	Jackson	1	307	0.91
34	Lake	6	1,855	0.90
35	Delta	15	4,733	0.88
36	Jefferson	296	94,345	0.88
37	Teller	13	4,164	0.87
38	Gunnison	8	2,626	0.85
39	Larimer	147	48,550	0.84

Rank 1998-1999	County of Residence	Drivers 21-34 in Serious Crashes	Population 21-34	Index of 21-34 Year Old Drivers Suspected of Alcohol or Drug Use per 1,000 Population 21-34 (State Average = 1.00)
40	Montrose	16	5,343	0.84
41	Fremont	29	10,034	0.81
42	Elbert	12	4,208	0.80
43	Boulder	161	56,801	0.79
44	Arapahoe	259	92,542	0.78
45	Lincoln	4	1,445	0.77
46	Chaffee	9	3,254	0.77
47	Saguache	3	1,121	0.75
48	Routt	9	3,433	0.73
49	Mesa	52	20,776	0.70
50	El Paso	273	114,527	0.67
51	Rio Blanco	3	1,339	0.63
52	Park	6	2,699	0.62
53	Huerfano	3	1,378	0.61
54	Yuma	3	1,445	0.58
55	Alamosa	7	3,505	0.56
56	Logan	6	3,231	0.52
57	San Miguel	2	1,213	0.46
58	Custer	1	716	0.39
59	Las Animas	4	2,892	0.39
60	Douglas	49	35,660	0.38
	Cheyenne		319	0.00
	Hinsdale		133	0.00
	Kiowa		246	0.00
	Total State	2912	812,626	1.00

Appendix F. Proportion of Suspected 21-34 Year-Old Impaired Drivers Who are Male — Large Cities, 1998-1999

Rank 1998-1999	City of Residence	Drivers 21-34 Suspected of Alcohol or Drug Use		% Male of Drivers Suspected of Alcohol or Drug Use, 21-34
		Male Drivers	All Drivers*	
1	Sterling	2	2	100.0%
2	Broomfield	13	14	92.9%
3	Brighton	12	13	92.3%
4	Durango	12	13	92.3%
5	Loveland	26	29	89.7%
6	Boulder	50	56	89.3%
7	Lafayette	8	9	88.9%
8	Littleton	24	27	88.9%
9	Montrose	6	7	85.7%
10	Parker	6	7	85.7%
11	Denver	442	533	82.9%
12	Northglenn	14	17	82.4%
13	Arvada	51	62	82.3%
14	Greeley	56	70	80.0%
15	Longmont	32	40	80.0%
16	Commerce City	27	34	79.4%
17	Thornton	46	58	79.3%
18	Aurora	142	185	76.8%
19	Grand Junction	13	17	76.5%
20	Westminster	53	70	75.7%
21	Colorado Springs	153	203	75.4%
22	Castle Rock	6	8	75.0%
23	Federal Heights	6	8	75.0%
24	Fort Morgan	6	8	75.0%
25	Golden	14	19	73.7%
26	Lakewood	58	80	72.5%
27	Englewood	24	34	70.6%
28	Fort Collins	48	68	70.6%
29	Pueblo	74	106	69.8%
30	Canon City	12	19	63.2%
31	Louisville	5	8	62.5%

Rank 1998-1999	City of Residence	Drivers 21-34 Suspected of Alcohol or Drug Use		% Male of Drivers Suspected of Alcohol or Drug Use, 21-34
		Male Drivers	All Drivers*	
32	Greenwood Village	3	5	60.0%
33	Wheat Ridge	9	15	60.0%
34	Fountain	6	11	54.5%
	Trinidad			
	Total Large City	1,460	1,857	78.6%
	Total State	2,177	2,754	79.0%

* Only includes drivers where gender is known.

Appendix F. Proportion of Suspected 21-34 Year-Old Impaired Drivers Who are Male — Counties, 1998-1999

Rank 1998-1999	County of Resdence	Drivers 21-34 Suspected of Alcohol or Drug Use		% of Drivers Suspected of Alcohol or Drug Use, 21-34, Who are Male
		Male Drivers	All Drivers*	
1	Alamosa	6	6	100.0%
2	Baca	4	4	100.0%
3	Custer	1	1	100.0%
4	Dolores	3	3	100.0%
5	Gilpin	2	2	100.0%
6	Gunnison	8	8	100.0%
7	Huerfano	3	3	100.0%
8	Jackson	1	1	100.0%
9	Mineral	1	1	100.0%
10	San Juan	1	1	100.0%
11	San Miguel	2	2	100.0%
12	Sedgwick	2	2	100.0%
13	Washington	3	3	100.0%
14	Yuma	3	3	100.0%
15	Summit	24	25	96.0%
16	Elbert	11	12	91.7%
17	Archuleta	8	9	88.9%
18	Pitkin	14	16	87.5%
19	Prowers	7	8	87.5%
20	Chaffee	6	7	85.7%
21	Moffat	6	7	85.7%
22	Rio Grande	6	7	85.7%
23	Eagle	41	48	85.4%
24	Clear Creek	5	6	83.3%
25	Lake	5	6	83.3%
26	Logan	5	6	83.3%
27	Denver	447	541	82.6%
28	Weld	132	160	82.5%
29	Adams	214	261	82.0%
30	Boulder	123	151	81.5%
31	Mesa	39	49	79.6%
32	Montezuma	23	29	79.3%
33	Montrose	11	14	78.6%
34	La Plata	29	37	78.4%
35	Garfield	32	41	78.0%
36	Arapahoe	190	244	77.9%
37	Larimer	109	140	77.9%

Rank 1998-1999	County of Resdence	Drivers 21-34 Suspected of Alcohol or Drug Use		% of Drivers Suspected of Alcohol or Drug Use, 21-34, Who are Male
		Male Drivers	All Drivers*	
38	Conejos	7	9	77.8%
39	Jefferson	217	280	77.5%
40	El Paso	201	266	75.6%
41	Bent	3	4	75.0%
42	Costilla	3	4	75.0%
43	Las Animas	3	4	75.0%
44	Lincoln	3	4	75.0%
45	Teller	9	12	75.0%
46	Douglas	34	46	73.9%
47	Morgan	18	25	72.0%
48	Delta	10	14	71.4%
49	Pueblo	91	131	69.5%
50	Phillips	2	3	66.7%
51	Rio Blanco	2	3	66.7%
52	Saguache	2	3	66.7%
53	Otero	9	14	64.3%
54	Fremont	17	28	60.7%
55	Crowley	3	5	60.0%
56	Grand	6	10	60.0%
57	Park	3	6	50.0%
58	Ouray	2	5	40.0%
59	Routt	3	8	37.5%
60	Kit Carson	2	6	33.3%
	Total State	2,177	2754	79.0%

* Only includes drivers where gender is known.

Appendix G

Appendix G. Resident Very Serious Crash Drivers Not Wearing Seat Belts — Large Cities, 1996-1999

Rank 1998-1999	Rank 1996-1997	City of Residence	Drivers in Very Serious Crashes Living in City		Unbelted Drivers as a Percentage of All Drivers in Very Serious Crashes		
			Unbelted Drivers 1998-1999	All Drivers 1998-1999	1998-1999	1996-1997	% Change
1	6	Fort Morgan	9	15	60%	54%	11%
2	5	Canon City	21	38	55%	56%	-1%
3	4	Grand Junction	34	64	53%	56%	-5%
4	11	Louisville	10	19	53%	48%	10%
5	7	Durango	16	32	50%	52%	-4%
6	12	Federal Heights	8	16	50%	45%	11%
7	20	Fort Collins	58	116	50%	41%	22%
8	9	Commerce City	25	55	45%	51%	-11%
9	17	Greeley	48	109	44%	42%	5%
10	21	Westminster	63	144	44%	40%	9%
11	2	Brighton	17	39	44%	61%	-29%
12	18	Littleton	24	56	43%	42%	2%
13	13	Sterling	9	21	43%	45%	-5%
14	28	Golden	10	24	42%	33%	26%
15	24	Fountain	6	15	40%	38%	5%
16	1	Montrose	9	23	39%	64%	-39%
17	14	Pueblo	70	180	39%	44%	-12%
18	15	Thornton	55	142	39%	44%	-12%
19	3	Loveland	29	77	38%	60%	-37%
20	31	Broomfield	17	48	35%	30%	18%
21	10	Longmont	45	131	34%	49%	-30%
22	16	Colorado Springs	125	369	34%	42%	-19%
23	22	Arvada	47	141	33%	38%	-12%
24	33	Greenwood Village	6	18	33%	28%	19%
25	30	Wheat Ridge	12	36	33%	31%	8%
26	29	Northglenn	15	46	33%	33%	-1%
27	19	Lakewood	60	186	32%	41%	-21%
28	27	Aurora	174	555	31%	35%	-10%
29	26	Boulder	28	95	29%	37%	-20%
30	25	Denver	270	925	29%	37%	-21%
31	8	Lafayette	7	24	29%	51%	-43%
32	23	Englewood	14	53	26%	38%	-30%
33	34	Castle Rock	7	29	24%	28%	-14%
34	32	Parker	4	26	15%	28%	-45%
		Trinidad	n/a	n/a	n/a	n/a	n/a
		Total Large City	1,352	3,867	35%	40%	-13%
		Total State	2,438	6,355	38%	42%	-8%

Appendix G. Percentage of Drivers in Very Serious Crashes Not Wearing Seat Belts, 1998-1999, by County of Residence

Rank 1998-1999	County of Residence	Drivers in Very Serious Crashes Living in County		Unbelted Drivers as a Percentage of All Drivers in Very Serious Crashes
		Unbelted Drivers	All Drivers	
1	Hinsdale	1	1	100%
2	Cheyenne	4	5	80%
3	Phillips	8	10	80%
4	Baca	11	14	79%
5	Costilla	11	15	73%
6	Saguache	21	29	72%
7	Conejos	17	25	68%
8	Lincoln	4	6	67%
9	Mineral	2	3	67%
10	Delta	27	41	66%
11	Yuma	16	25	64%
12	Jackson	3	5	60%
13	San Miguel	6	10	60%
14	Custer	7	12	58%
15	Garfield	36	64	56%
16	Morgan	19	34	56%
17	Montezuma	29	52	56%
18	Gilpin	6	11	55%
19	Rio Grande	25	46	54%
20	Montrose	26	48	54%
21	Prowers	15	28	54%
22	Kit Carson	9	17	53%
23	Las Animas	11	21	52%
24	Pitkin	13	25	52%
25	Mesa	80	154	52%
26	Fremont	48	94	51%
27	Kiowa	2	4	50%
28	Sedgwick	3	6	50%
29	Gunnison	10	21	48%
30	Crowley	6	13	46%
31	La Plata	47	102	46%
32	Eagle	23	50	46%
33	Otero	17	37	46%
34	Larimer	137	301	46%
35	Moffat	9	20	45%
36	Weld	137	309	44%
37	Teller	15	34	44%

		Drivers in Very Serious Crashes Living in County		
Rank 1998-1999	County of Residence	Unbelted Drivers	All Drivers	Unbelted Drivers as a Percentage of All Drivers in Very Serious Crashes
38	Alamosa	15	35	43%
39	Bent	5	12	42%
40	Logan	15	36	42%
41	Pueblo	99	241	41%
42	Chaffee	13	32	41%
43	Dolores	2	5	40%
44	Huerfano	6	15	40%
45	Rio Blanco	8	20	40%
46	Summit	18	45	40%
47	Archuleta	15	38	39%
48	Lake	9	23	39%
49	Adams	231	592	39%
50	Grand	17	45	38%
51	Park	12	32	38%
52	Jefferson	230	647	36%
53	Washington	6	17	35%
54	El Paso	178	513	35%
55	Clear Creek	9	26	35%
56	Boulder	134	395	34%
57	Ouray	2	6	33%
58	Elbert	11	35	31%
59	Arapahoe	221	719	31%
60	Denver	270	931	29%
61	Routt	7	26	27%
62	Douglas	44	177	25%
	Total State	2,438	6,355	38%

Appendix G. Population-Adjusted Index of Unbelted Drivers in Very Serious Crashes, 1996-1997 and 1998-1999, by City of Residence

Rank 1998-1999	Rank 1996-1997	City of Residence	Unbelted Drivers in Very Serious Crashes	16+ Population	Index of Unbelted Drivers in Very Serious Crashes per 1,000 16+ Population (State Average = 1.00)		% Change
			1998-1999	*1998-1999*	*1998-1999*	*1996-1997*	*% Change*
1	2	Commerce City	25	12,624	2.56	3.06	-16%
2	6	Canon City	21	13,216	2.05	1.52	35%
3	1	Brighton	17	13,230	1.66	3.16	-47%
4	17	Durango	16	12,482	1.66	1.15	44%
5	5	Fort Morgan	9	7,784	1.49	1.59	-6%
6	15	Grand Junction	34	32,164	1.36	1.18	16%
8	4	Thornton	55	55,130	1.29	1.64	-21%
9	18	Sterling	9	9,060	1.28	1.09	18%
10	11	Federal Heights	8	8,236	1.25	1.25	0%
11	7	Longmont	45	49,358	1.18	1.32	-11%
12	9	Aurora	174	197,945	1.14	1.27	-11%
13	3	Montrose	9	10,357	1.12	2.11	-47%
14	14	Pueblo	70	80,666	1.12	1.22	-8%
15	20	Westminster	63	73,823	1.10	1.01	9%
16	24	Greeley	48	58,070	1.07	0.85	26%
17	8	Loveland	29	36,475	1.03	1.30	-21%
18	23	Louisville	10	13,224	0.98	0.90	8%
19	29	Golden	10	13,631	0.95	0.73	30%
20	22	Littleton	24	33,267	0.93	0.97	-4%
21	16	Denver	270	398,700	0.87	1.17	-25%
22	30	Fort Collins	58	92,052	0.81	0.72	13%
23	12	Fountain	6	9,711	0.80	1.24	-36%
24	33	Broomfield	17	28,396	0.77	0.52	49%
25	25	Arvada	47	79,934	0.76	0.83	-9%
26	26	Northglenn	15	25,548	0.76	0.82	-8%
27	21	Greenwood Village	6	10,633	0.73	1.00	-27%
28	19	Englewood	14	26,608	0.68	1.08	-37%
29	27	Lakewood	60	117,908	0.66	0.79	-17%
30	31	Castle Rock	7	14,298	0.63	0.71	-11%
31	32	Colorado Springs	125	267,862	0.60	0.65	-7%
32	28	Wheat Ridge	12	26,339	0.59	0.74	-21%
33	10	Lafayette	7	15,603	0.58	1.26	-54%
34	34	Boulder	28	79,638	0.45	0.46	-1%
35	13	Parker	4	14,815	0.35	1.24	-72%
		Trinidad					
		Total Large City	*1,356*	*1,942,777*	*0.90*	*1.03*	*-13%*
		Total State	*2,438*	*3,148,030*	*1.00*	*1.00*	*0%*

Appendix G. Population-Adjusted Index of Unbelted Drivers in Very Serious Crashes, 1998-1999, by County of Residence

Rank 1998-1999	Rank 1996-1997	County of Residence	Unbelted Drivers in Very Serious Crashes	16+ Population	Adjusted Index of Unbelted Drivers in Very Serious Crashes per 1,000 16+ Population (State Average = 1.00)		% Change
			1998-1999	1998-1999	1998-1999	1996-1997	% Change
1	1	Saguache	21	4,525	5.99	3.62	66%
2	4	Costilla	11	2,680	5.30	2.56	107%
3	62	Mineral	2	560	4.61	0.00	
4	28	Baca	11	3,611	3.93	1.34	194%
5	5	Conejos	17	5,790	3.79	2.55	49%
6	15	Rio Grande	25	9,227	3.50	1.83	91%
7	52	Custer	7	2,730	3.31	0.79	319%
8	10	Phillips	8	3,579	2.89	2.15	34%
9	60	Cheyenne	4	1,803	2.86	0.55	421%
10	6	Yuma	16	7,553	2.74	2.48	10%
11	12	Jackson	3	1,425	2.72	2.07	31%
12	8	Grand	17	8,144	2.70	2.26	19%
13	19	Archuleta	15	7,212	2.69	1.68	60%
14	58	Gilpin	6	3,497	2.22	0.62	257%
15	18	Montezuma	29	17,249	2.17	1.72	26%
16	2	Hinsdale	1	613	2.11	3.37	-37%
17	26	Kit Carson	9	5,959	1.95	1.36	43%
18	7	Prowers	15	10,258	1.89	2.29	-18%
19	11	Washington	6	4,129	1.88	2.08	-10%
20	45	Crowley	6	4,156	1.86	1.03	81%
21	32	Lake	9	6,244	1.86	1.27	47%
22	44	Rio Blanco	8	5,586	1.85	1.06	74%
23	57	Kiowa	2	1,411	1.83	0.69	165%
24	39	La Plata	47	33,394	1.82	1.13	61%
25	3	Sedgwick	3	2,173	1.78	3.08	-42%
26	25	Dolores	2	1,457	1.77	1.44	23%
27	35	Fremont	48	35,663	1.74	1.24	40%
28	14	Clear Creek	9	7,034	1.65	1.84	-10%
29	9	San Miguel	6	4,712	1.64	2.22	-26%
30	33	Delta	27	21,348	1.63	1.27	29%
31	46	Alamosa	15	12,184	1.59	0.91	75%
32	21	Garfield	36	30,828	1.51	1.60	-6%
33	34	Summit	18	15,531	1.50	1.26	19%
34	17	Park	12	10,646	1.46	1.76	-17%
35	13	Pitkin	13	11,790	1.42	1.87	-24%
36	42	Weld	137	128,688	1.37	1.07	28%
37	23	Otero	17	16,038	1.37	1.49	-8%

Rank 1998-1999	Rank 1996-1997	County of Residence	Unbelted Drivers in Very Serious Crashes	16+ Population	Adjusted Index of Unbelted Drivers in Very Serious Crashes per 1,000 16+ Population (State Average = 1.00)		% Change
			1998-1999	1998-1999	1998-1999	1996-1997	
38	16	Montrose	26	24,654	1.36	1.80	-24%
39	41	Logan	15	14,491	1.34	1.07	25%
40	49	Bent	5	4,904	1.32	0.84	57%
41	38	Chaffee	13	13,162	1.28	1.14	12%
42	50	Huerfano	6	6,093	1.27	0.82	55%
43	20	Morgan	19	19,434	1.26	1.61	-22%
44	22	Adams	231	242,320	1.23	1.52	-19%
45	30	Gunnison	10	10,669	1.21	1.29	-6%
46	27	Moffat	9	9,681	1.20	1.36	-12%
47	29	Teller	15	16,209	1.19	1.30	-8%
48	36	Pueblo	99	107,186	1.19	1.23	-3%
49	31	Eagle	23	25,547	1.16	1.29	-10%
50	43	Mesa	80	89,595	1.15	1.06	9%
51	53	Las Animas	11	12,571	1.13	0.78	45%
52	40	Elbert	11	14,675	0.97	1.13	-14%
53	24	Lincoln	4	5,367	0.96	1.47	-35%
54	47	Larimer	137	183,923	0.96	0.87	11%
55	54	Ouray	2	2,771	0.93	0.75	24%
56	37	Denver	270	395,130	0.88	1.16	-24%
57	56	Boulder	134	219,837	0.79	0.72	9%
58	51	Arapahoe	221	372,739	0.77	0.81	-5%
59	55	Jefferson	230	403,814	0.74	0.74	-1%
60	48	Routt	7	14,059	0.64	0.86	-25%
61	59	El Paso	178	375,844	0.61	0.62	-1%
62	61	Douglas	44	113,519	0.50	0.44	14%
63	63	San Juan	0	424	0.00	0.00	
		Total State	2,438	3,148,030	1.00	1.00	0%

Appendix H

Appendix H. Number of Crashes Involving Bicyclists — By City of Crash, 1999

Rank 1999	City of Crash	Bicycle Crashes	All Crashes	Percent of All Crashes Involving Bicyclists
1	Collbran	1	1	100.0%
2	Columbine Valley	1	15	6.7%
3	Lyons	1	16	6.3%
4	Rocky Ford	3	56	5.4%
5	Boulder	127	2,555	5.0%
6	Fort Morgan	7	141	5.0%
7	Craig	6	136	4.4%
8	Loveland	30	739	4.1%
9	Rangely	2	56	3.6%
10	Wray	1	31	3.2%
11	Fort Collins	91	2,929	3.1%
12	Breckenridge	4	131	3.1%
13	Garden City	1	33	3.0%
14	Gunnison	3	99	3.0%
15	Platteville	1	33	3.0%
16	Lafayette	10	337	3.0%
17	Lonetree	1	34	2.9%
18	Estes Park	5	173	2.9%
19	Berthoud	2	73	2.7%
20	Meeker	1	37	2.7%
21	Edgewater	2	79	2.5%
22	Greeley	27	1,076	2.5%
23	Longmont	42	1,705	2.5%
24	Avon	2	82	2.4%
25	Windsor	2	88	2.3%
26	Rifle	3	133	2.3%
27	Elizabeth	1	45	2.2%
28	Louisville	6	283	2.1%
29	Canon City	7	339	2.1%
30	Florence	1	50	2.0%
31	Englewood	18	925	1.9%
32	Eagle	1	53	1.9%
33	Montrose	7	388	1.8%
34	Arvada	37	2,075	1.8%
35	Cherry Hills Village	4	231	1.7%
36	Grand Junction	28	1,634	1.7%
37	Durango	8	479	1.7%
38	Sheridan	6	364	1.6%
39	Alamosa	4	255	1.6%
40	Littleton	14	913	1.5%

Rank 1999	City of Crash	Bicycle Crashes	All Crashes	Percent of All Crashes Involving Bicyclists
41	Federal Heights	3	207	1.4%
42	Salida	2	142	1.4%
43	Lakewood	41	2,972	1.4%
44	Lamar	2	148	1.4%
45	Steamboat Springs	5	378	1.3%
46	Glendale	3	235	1.3%
47	Northglenn	10	789	1.3%
48	Pueblo	38	3,189	1.2%
49	Aurora	76	6,535	1.2%
50	Superior	1	90	1.1%
51	Evans	2	181	1.1%
52	Broomfield	8	729	1.1%
53	Snowmass Village	1	93	1.1%
54	Castle Rock	3	281	1.1%
55	Wheat Ridge	16	1,561	1.0%
56	Colorado Springs	107	10,572	1.0%
57	Denver	259	25,994	1.0%
58	Westminster	23	2,350	1.0%
59	Glenwood Springs	4	409	1.0%
60	Silverthorne	1	107	0.9%
61	La Junta	1	110	0.9%
62	Manitou Springs	1	119	0.8%
63	Thornton	13	1,581	0.8%
64	Brighton	4	495	0.8%
65	Commerce City	6	748	0.8%
66	Vail	1	126	0.8%
67	Golden	3	448	0.7%
68	Cortez	1	173	0.6%
69	Woodland Park	1	176	0.6%
70	Aspen	2	353	0.6%
71	Trinidad	1	194	0.5%
72	Parker	2	440	0.5%
73	Greenwood Village	4	1,303	0.3%
	Bennett		12	0.0%
	Black Hawk		45	0.0%
	Brush		30	0.0%
	Carbondale		40	0.0%
	Cripple Creek		34	0.0%
	Del Norte		18	0.0%
	Eaton		27	0.0%
	Fountain		78	0.0%
	Frisco		57	0.0%
	Fruita		59	0.0%
	Idaho Springs		23	0.0%
	Iliff		3	0.0%
	Johnstown		30	0.0%

Rank 1999	City of Crash	Bicycle Crashes	All Crashes	Percent of All Crashes Involving Bicyclists
	Lakeside		21	0.0%
	Las Animas		48	0.0%
	Morrison		14	0.0%
	New Castle		18	0.0%
	Pagosa Springs		70	0.0%
	Palisade		19	0.0%
	Sterling		130	0.0%
	Telluride		72	0.0%
	Walsenburg		72	0.0%
	Total City	*1,163*	*82,970*	*1.4%*
	Total State	*1,290*	*115,145*	*1.1%*

Appendix H. Number of Crashes Involving Bicylists — By County of Crash, 1999

Rank 1999	County of Crash	Crashes Involving Bicyclists	All Crashes	Percent of All Crashes Involving Bicyclists
1	Boulder	211	6,983	3.0%
2	Larimer	140	5,747	2.4%
3	Moffat	6	335	1.8%
4	Rio Blanco	3	187	1.6%
5	Mesa	39	2,724	1.4%
6	Fremont	12	867	1.4%
7	Morgan	7	513	1.4%
8	Otero	5	408	1.2%
9	Arapahoe	139	12,093	1.1%
10	Montrose	7	666	1.1%
11	Jefferson	120	11,769	1.0%
12	Denver	259	26,028	1.0%
13	Pueblo	40	4,030	1.0%
14	Weld	36	3,631	1.0%
15	El Paso	109	11,370	1.0%
16	Chaffee	4	424	0.9%
17	Alamosa	4	452	0.9%
18	Adams	75	9,063	0.8%
19	Pitkin	7	852	0.8%
20	La Plata	9	1,107	0.8%
21	Logan	3	371	0.8%
22	Gunnison	3	374	0.8%
23	Summit	8	1,069	0.7%
24	Garfield	10	1,372	0.7%
25	Routt	5	761	0.7%
26	Yuma	1	153	0.7%
27	Prowers	2	317	0.6%
28	Eagle	6	1,132	0.5%
29	Archuleta	1	249	0.4%
30	Douglas	14	3,521	0.4%
31	Elbert	1	302	0.3%
32	Teller	1	382	0.3%
33	Las Animas	1	452	0.2%
34	Montezuma	1	493	0.2%
35	Clear Creek	1	788	0.1%
	Baca		88	0.0%
	Bent		143	0.0%
	Cheyenne		59	0.0%
	Conejos		172	0.0%
	Costilla		97	0.0%

Rank 1999	County of Crash	Crashes Involving Bicyclists	All Crashes	Percent of All Crashes Involving Bicyclists
	Crowley		80	0.0%
	Custer		97	0.0%
	Delta		228	0.0%
	Dolores		51	0.0%
	Gilpin		216	0.0%
	Grand		367	0.0%
	Hinsdale		21	0.0%
	Huerfano		316	0.0%
	Jackson		90	0.0%
	Kiowa		52	0.0%
	Kit Carson		272	0.0%
	Lake		127	0.0%
	Lincoln		166	0.0%
	Mineral		69	0.0%
	Ouray		93	0.0%
	Park		500	0.0%
	Phillips		53	0.0%
	Rio Grande		214	0.0%
	Saguache		120	0.0%
	San Juan		35	0.0%
	San Miguel		198	0.0%
	Sedgwick		97	0.0%
	Washington		139	0.0%
	Total State	1,290	115,145	1.1%

Appendix H. Crashes Involving Pedestrians — By City of Crash, 1999

Rank 1999	City of Crash	Crashes Involving Pedestrians	All Crashes	% Pedestrian Crashes of All Crashes
1	Iliff	2	3	66.7%
2	New Castle	2	18	11.1%
3	Lakeside	2	21	9.5%
4	Black Hawk	4	45	8.9%
5	Bennett	1	12	8.3%
6	Sterling	10	130	7.7%
7	Morrison	1	14	7.1%
8	Cripple Creek	2	34	5.9%
9	Del Norte	1	18	5.6%
10	Palisade	1	19	5.3%
11	Idaho Springs	1	23	4.3%
12	Edgewater	3	79	3.8%
13	Rifle	5	133	3.8%
14	Eaton	1	27	3.7%
15	Salida	5	142	3.5%
16	Frisco	2	57	3.5%
17	Brush	1	30	3.3%
18	Johnstown	1	30	3.3%
19	Wray	1	31	3.2%
20	Federal Heights	6	207	2.9%
21	Cortez	5	173	2.9%
22	Fort Morgan	4	141	2.8%
23	Telluride	2	72	2.8%
24	Walsenburg	2	72	2.8%
25	Fountain	2	78	2.6%
26	Greeley	27	1,076	2.5%
27	Carbondale	1	40	2.5%
28	Englewood	22	925	2.4%
29	Alamosa	6	255	2.4%
30	Estes Park	4	173	2.3%
31	Evans	4	181	2.2%
32	Craig	3	136	2.2%
33	Glendale	5	235	2.1%
34	Las Animas	1	48	2.1%
35	Trinidad	4	194	2.1%
36	Silverthorne	2	107	1.9%
37	Lakewood	54	2,972	1.8%
38	Boulder	46	2,555	1.8%
39	Denver	462	25,994	1.8%
40	Woodland Park	3	176	1.7%

Rank 1999	City of Crash	Crashes Involving Pedestrians	All Crashes	% Pedestrian Crashes of All Crashes
41	Aspen	6	353	1.7%
42	Fruita	1	59	1.7%
43	Aurora	110	6,535	1.7%
44	Commerce City	12	748	1.6%
45	Steamboat Springs	6	378	1.6%
46	Loveland	11	739	1.5%
47	Durango	7	479	1.5%
48	Pagosa Springs	1	70	1.4%
49	Arvada	28	2,075	1.3%
50	Pueblo	42	3,189	1.3%
51	Littleton	12	913	1.3%
52	Fort Collins	38	2,929	1.3%
53	Thornton	19	1,581	1.2%
54	Golden	5	448	1.1%
55	Superior	1	90	1.1%
56	Snowmass Village	1	93	1.1%
57	Longmont	18	1,705	1.1%
58	Grand Junction	17	1,634	1.0%
59	Colorado Springs	108	10,572	1.0%
60	Gunnison	1	99	1.0%
61	Westminster	23	2,350	1.0%
62	Glenwood Springs	4	409	1.0%
63	Wheat Ridge	15	1,561	1.0%
64	Northglenn	7	789	0.9%
65	Canon City	3	339	0.9%
66	Manitou Springs	1	119	0.8%
67	Montrose	3	388	0.8%
68	Breckenridge	1	131	0.8%
69	Lamar	1	148	0.7%
70	Greenwood Village	8	1,303	0.6%
71	Lafayette	2	337	0.6%
72	Sheridan	2	364	0.5%
73	Broomfield	4	729	0.5%
74	Parker	2	440	0.5%
75	Brighton	2	495	0.4%
76	Castle Rock	1	281	0.4%
77	Louisville	1	283	0.4%
	Total City	1,235	83,774	1.5%

Appendix H. Crashes Involving Pedestrians — By County of Crash, 1999

Rank 1999	County of Crash	Crashes Involving Pedestrians	All Crashes	% Pedestrian Crashes of All Crashes
1	Logan	13	371	3.5%
2	San Juan	1	35	2.9%
3	Rio Grande	5	214	2.3%
4	Gilpin	5	216	2.3%
5	Denver	463	26,028	1.8%
6	Teller	6	382	1.6%
7	Alamosa	7	452	1.5%
8	Adams	127	9,063	1.4%
9	Arapahoe	157	12,093	1.3%
10	Montezuma	6	493	1.2%
11	Weld	43	3,631	1.2%
12	Chaffee	5	424	1.2%
13	Pitkin	10	852	1.2%
14	Pueblo	47	4,030	1.2%
15	Garfield	16	1,372	1.2%
16	Larimer	66	5,747	1.1%
17	Jefferson	130	11,769	1.1%
18	Boulder	74	6,983	1.1%
19	El Paso	115	11,370	1.0%
20	San Miguel	2	198	1.0%
21	La Plata	11	1,107	1.0%
22	Morgan	5	513	1.0%
23	Mesa	26	2,724	1.0%
24	Routt	7	761	0.9%
25	Moffat	3	335	0.9%
26	Las Animas	4	452	0.9%
27	Archuleta	2	249	0.8%
28	Lake	1	127	0.8%
29	Montrose	5	666	0.8%
30	Summit	8	1,069	0.7%
31	Bent	1	143	0.7%
32	Yuma	1	153	0.7%
33	Huerfano	2	316	0.6%

Rank 1999	County of Crash	Crashes Involving Pedestrians	All Crashes	% Pedestrian Crashes of All Crashes
34	Prowers	2	317	0.6%
35	Fremont	5	867	0.6%
36	Gunnison	2	374	0.5%
37	Clear Creek	4	788	0.5%
38	Douglas	15	3,521	0.4%
39	Eagle	3	1,132	0.3%
40	Otero	1	408	0.2%
41	Park	1	500	0.2%
	Total State	1,407	115,145	1.2%

Appendix H. Motorcyclists Involved in Serious Motorcycle Crashes —   Counties, 1998-1999

Rank 1998-1999	County of Residence	Drivers in Serious Crashes	1998 Registered Motorcycles	% of1998 Registered Motorcyclists Involved in Serious Crashes	Index of Drivers in Serious Crashes (State Average = 1.00)
1	Cheyenne	2	52	3.8%	1.59
2	Denver	311	8,200	3.8%	1.57
3	Moffat	12	343	3.5%	1.45
4	Pueblo	102	3,046	3.3%	1.38
5	Adams	226	7,283	3.1%	1.28
6	Arapahoe	247	8,502	2.9%	1.20
7	El Paso	305	11,299	2.7%	1.12
8	Mesa	77	2,915	2.6%	1.09
9	Baca	2	76	2.6%	1.09
10	Larimer	174	6,840	2.5%	1.05
11	Sedgwick	1	42	2.4%	0.98
12	Custer	3	127	2.4%	0.98
13	Alamosa	7	308	2.3%	0.94
14	Lake	5	220	2.3%	0.94
15	Logan	9	399	2.3%	0.93
16	Kit Carson	4	178	2.2%	0.93
17	Archuleta	6	269	2.2%	0.92
18	Weld	92	4,132	2.2%	0.92
19	Fremont	28	1,277	2.2%	0.91
20	Jefferson	295	13,727	2.1%	0.89
21	Boulder	166	7,765	2.1%	0.88
22	Hinsdale	1	48	2.1%	0.86
23	Jackson	1	49	2.0%	0.84
24	Morgan	11	556	2.0%	0.82
25	Las Animas	6	312	1.9%	0.80
26	Crowley	1	53	1.9%	0.78
27	Prowers	5	272	1.8%	0.76
28	Montrose	13	723	1.8%	0.74
29	La Plata	27	1,502	1.8%	0.74
30	Huerfano	3	173	1.7%	0.72
31	Douglas	58	3,348	1.7%	0.72
32	Gunnison	8	462	1.7%	0.72
33	Lincoln	2	116	1.7%	0.71
34	Teller	15	872	1.7%	0.71
35	Clear Creek	9	531	1.7%	0.70
36	Gilpin	5	328	1.5%	0.63
37	Otero	6	399	1.5%	0.62
38	Routt	12	799	1.5%	0.62

Rank 1998-1999	County of Residence	Drivers in Serious Crashes	1998 Registered Motorcycles	% of 1998 Registered Motorcyclists Involved in Serious Crashes	Index of Drivers in Serious Crashes (State Average = 1.00)
39	Elbert	8	546	1.5%	0.61
40	Chaffee	9	618	1.5%	0.60
41	Phillips	2	145	1.4%	0.57
42	Park	10	752	1.3%	0.55
43	Rio Grande	4	304	1.3%	0.54
44	Saguache	2	152	1.3%	0.54
45	Bent	1	83	1.2%	0.50
46	Costilla	1	84	1.2%	0.49
47	Eagle	15	1,267	1.2%	0.49
48	Montezuma	6	511	1.2%	0.49
49	San Miguel	5	443	1.1%	0.47
50	Garfield	12	1,146	1.0%	0.43
51	Pitkin	9	865	1.0%	0.43
52	Delta	8	787	1.0%	0.42
53	Washington	1	116	0.9%	0.36
54	Summit	7	879	0.8%	0.33
55	Rio Blanco	1	132	0.8%	0.31
56	Grand	3	498	0.6%	0.25
57	Conejos	1	168	0.6%	0.25
	Dolores	0	54	0.0%	0.00
	Kiowa	0	27	0.0%	0.00
	Mineral	0	36	0.0%	0.00
	Ouray	0	220	0.0%	0.00
	San Juan	0	50	0.0%	0.00
	Yuma	0	243	0.0%	0.00
	Total State	2,362	97,669	2.4%	1.00