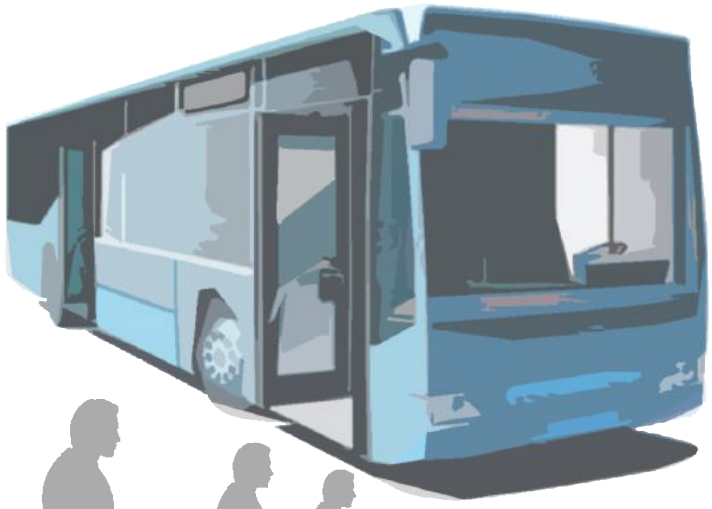
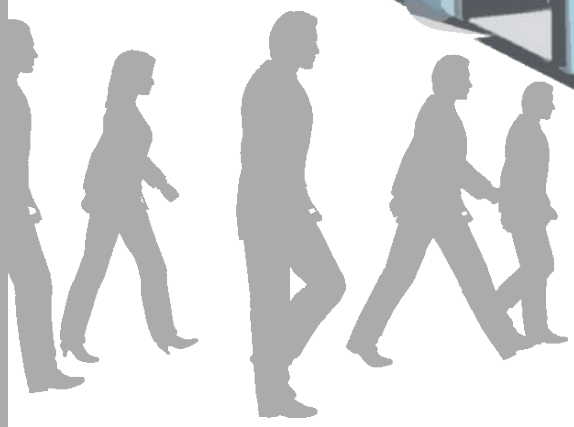
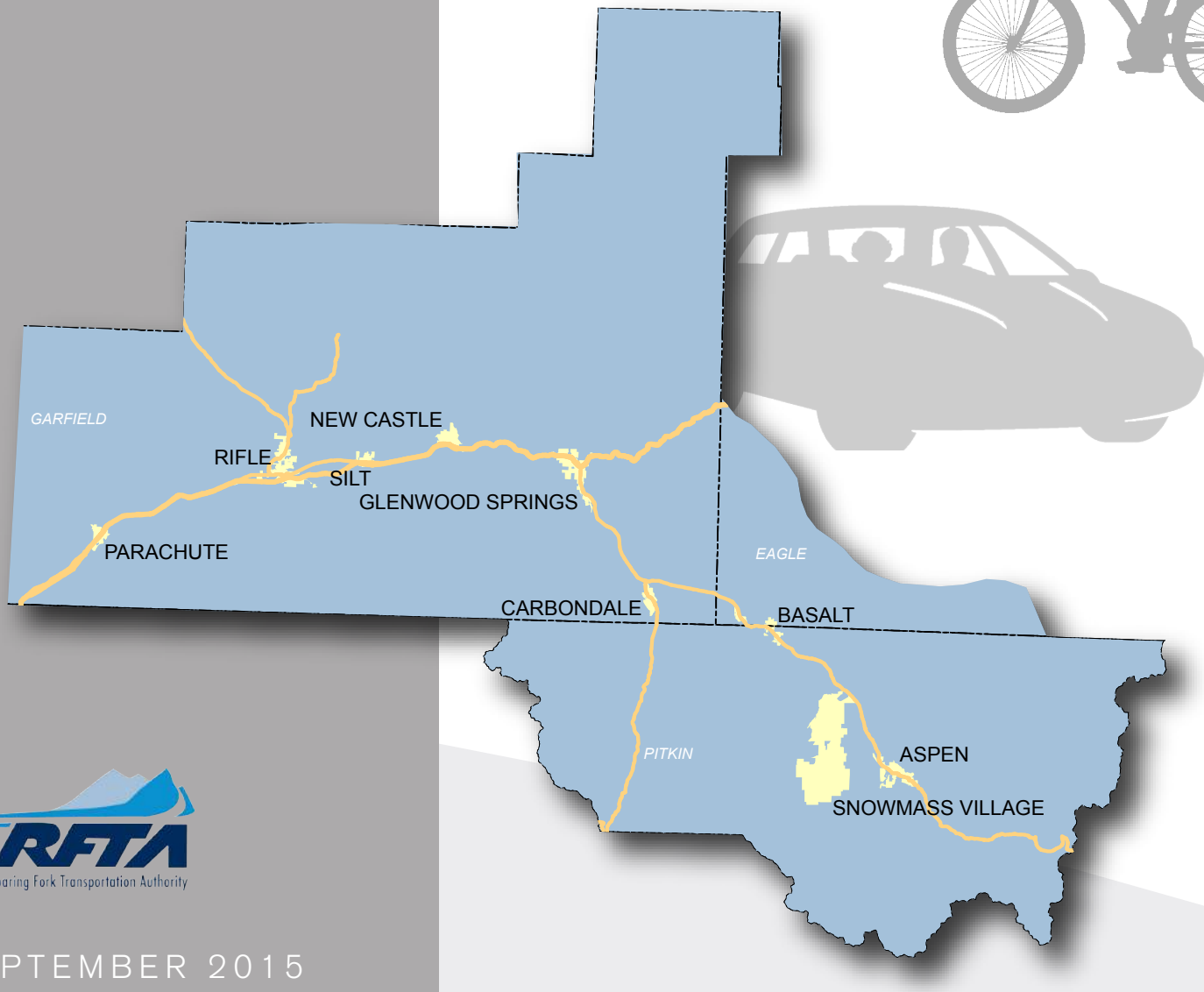
2014 REGIONAL TRAVEL PATTERNS STUDY

ROARING FORK + COLORADO RIVER VALLEY







RFTA
Roaring Fork Transportation Authority

SEPTEMBER 2015

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1 INTRODUCTION

INTRODUCTION

OVERVIEW

In 2014, the Roaring Fork Transportation Authority (RFTA) conducted a regional travel patterns study of the Colorado River Valley and Roaring Fork Valley from Parachute to Aspen. Previous studies were completed in 1998 and 2004. The project was a cooperative effort funded by RFTA, Colorado DOT, and area counties and municipalities.

SURVEY DATA HIGHLIGHTS

- where people **live** and **work**
- the **mode of travel** (to work & other trips)
- employer **policies** (bus passes, parking, telecommuting)
- local **walking & biking** environment
- **transit use** patterns
- **demographic** information

Report chapters:

Chapters 2 to 9 provide a summary by topic of data collected from employee, employer and resident travel pattern surveys conducted in the winter and summer of 2014 in addition to relevant data from other sources including (but not limited to) RFTA, Colorado Department of Transportation (CDOT) and the American Community Survey (U.S. Census). Chapter 10 provides a synthesis summary of the critical findings and associated implications for local and regional planning.

PURPOSE

The Regional Travel Patterns Study provides local jurisdictions and planning agencies with information on travel demand within the study area. This report is intended to serve as a resource for those agencies seeking information about current and future travel needs for motor vehicles, for public transit and for walking and bicycling. Data from the study may also be used to help local companies and agencies design commuter support programs to address needed changes in travel choices.

As part of the 2014 study, a set of 23 transportation analysis zones (TAZs) were defined and mapped (see Appendix F). Survey data was collected and analyzed using these new TAZs (see Appendix G). Mapping the data to smaller zones will support development of a future travel model and development of travel forecasts for the region. As part of this project a white paper was developed regarding potential for using a travel demand analysis tool within the Roaring Fork region (see Appendix E).

PREVIOUS STUDIES

Two previous travel pattern studies were completed in 1998 and 2004. Highlights of those studies are summarized below. The 2014 study builds upon the previous studies by utilizing similar data collection techniques (and survey questions) to allow analysis of trends in winter travel behavior over the past fifteen years. In addition, several enhancements were implemented in this study:

- While previous surveys primarily addressed commuting during winter (ski season), this update includes both winter and summer travel patterns
- Both employee surveys and resident surveys were implemented, providing more detail about non-commute travel;
- Survey forms were modified to include more questions about various transportation demand management measures and to reflect changes in RFTA's services (especially the addition of VelociRFTA BRT service).
- A more systematic outreach and recruitment program was undertaken which resulted in a larger survey sample and more statistically valid database.
- Survey data was collected by transportation analysis zones (TAZs) in preparation for use in a potential future modeling/ forecasting system (see Appendix F for a map and description of the TAZ's and Appendix G for raw data by TAZ)

	1998 Study	2004 Study	2014 Study
Lead agency	Healthy Mountain Communities	Garfield County	RFTA
Season	Winter	Winter	Winter & Summer
Employee/resident surveys	480	1,027	1,679
Employer surveys	96	123	110
Study Area	Parachute to Aspen	Parachute to Aspen + Gypsum and Eagle	Parachute to Aspen

1998 Major Findings

- Interdependent region
- Upstream intercity commute flows
- Long driving commutes
- Potential for regional transit

2004 Major Findings

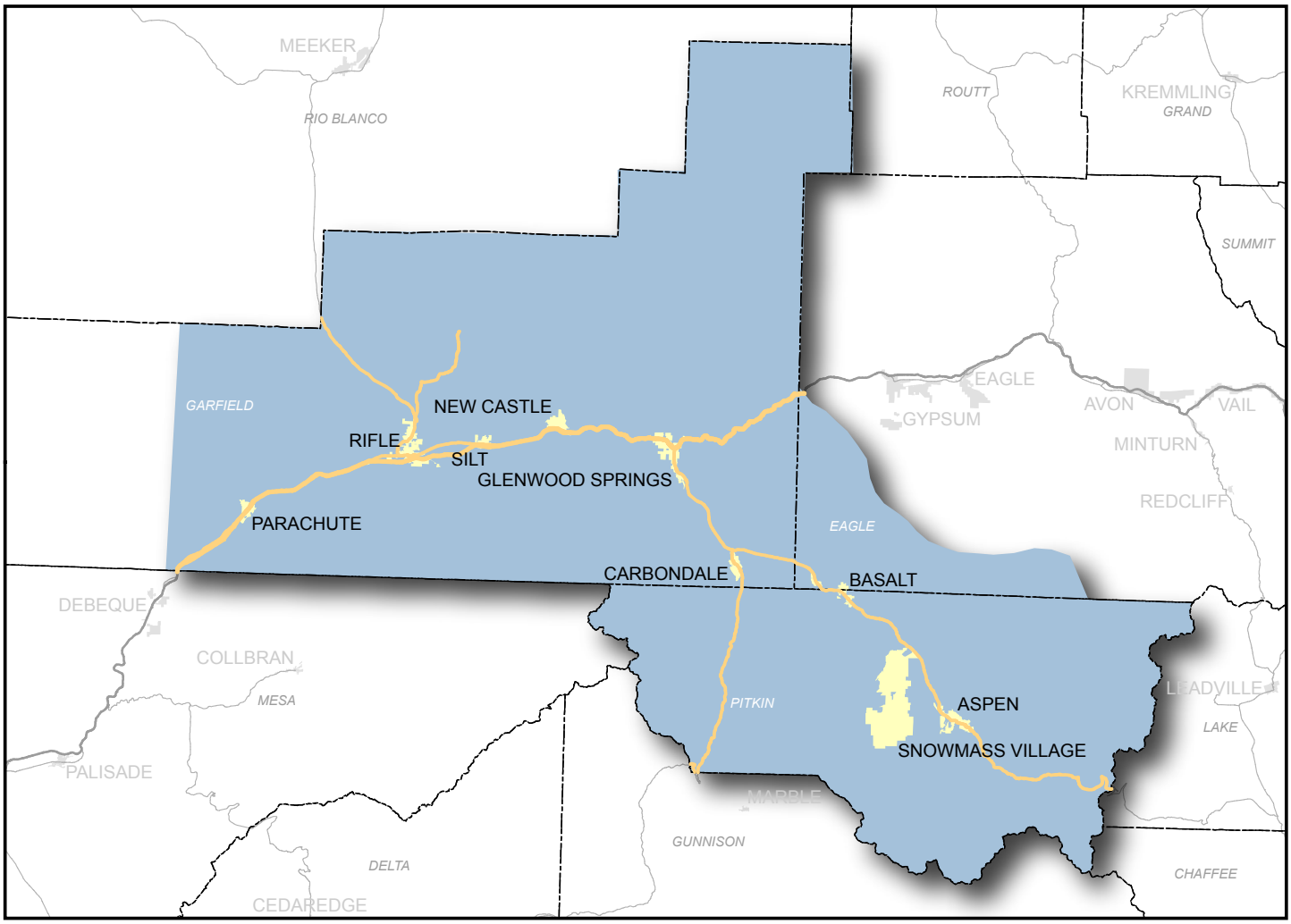
- Low levels of walking and biking
- Fewer living & working in the same place
- Potential for expanded transit passes

2014 Major Findings

- Emerging employment centers in Garfield County
- Decreasing VMT per capita
- Transit ridership growth
- Potential to expand transit in I-70 corridor

STUDY AREA

The study area includes the Roaring Fork and Colorado River Valleys between Aspen and Parachute (see map below). This includes Garfield County, Pitkin County, and the southwest corner of Eagle County (the portion in the Roaring Fork Valley). The study area boundaries encapsulate an 80-mile corridor connected by I-70 and SH-82. The corridor forms a single geographically and economically integrated region with many residents and visitors traveling long distances between towns to access jobs, services and recreational opportunities.



SURVEY METHODOLOGY

The data collection methodology included two rounds of surveys in 2014, a winter and summer survey. The winter survey targeted employees and employers within the study area. The summer survey targeted residents. A total of 1,679 surveys of residents and employees were collected (1,352 in the winter and 327 in the summer) in addition to 110 employer surveys. Surveys were available online and in paper format in both English and Spanish. Of the 1,679 surveys received 1,389 were completed online and a total of 26 were completed in Spanish. A thorough explanation of the survey methodology and data analysis approach is provided in Appendix A, including weighting, minimum sample size and geographic groupings.

WINTER SURVEY

- Conducted March & April
- Surveys distributed primarily through employers
- 330 employers contacted
- 1,352 employee surveys received
- 110 employer surveys received

SUMMER SURVEY

- Conducted July & August
- Surveys distributed primarily via resident mailing
- Postcards mailed to 6,000 households
- 327 resident surveys received

WINTER VS. SUMMER SURVEY

About 880 winter survey respondents who provided their contact information were also asked to complete a shorter version of the summer survey. A total of 208 people completed both winter and summer surveys. It should be noted that these duplicate surveys were not double counted in data analyses that summarize the combined winter and summer surveys (such as commute flows – see Chapter 3). However, duplicate surveys were included in seasonal-specific data presented in Chapter 3 (such as mode share). Regional data was also weighted by place of residence (see Appendix A).

EMPLOYER SURVEY

A separate survey was sent to employers in March 2014 to collect additional data on the local workforce travel patterns, including employer provided parking data and company policies and programs related to commuting among other information. A similar set of questions was used as in 2004 in order to provide continuity in the data. A total of 110 surveys were received from employers in 2014. Combined these companies provide employment to about 5,500 employees within the Roaring Fork and Colorado River Valleys. Key findings from this survey (along with comparisons where applicable to the 2004 Employer Survey) are presented in Chapter 8.

LATINO FOCUS GROUPS

Latinos are a growing and important population segment within the region. Every effort was made in the winter and summer surveys to include an accurate cross-section of the population living and working in the region, including Latinos. In order to collect additional travel pattern data specific to the Latino population within the region two focus groups were conducted as part of this study, one in Rifle on January 15, 2015 with 19 attendants and one in New Castle 4 days later with 7 attendants. Since this data was collected separately from the other survey data, the results were kept separate so as not to create a bias within the database. A summary of the findings from these focus groups is provided in Appendix D.

SUMMARY OF FINDINGS

Since 2004 the region's population has grown steadily at about 1.8% per year to about 82,000 people in 2013. Job growth has been slower overall, growing an average of about 1.6% per year and has fluctuated more. Population and job growth has occurred at a higher rate in Garfield than Pitkin County. Construction, oil and gas drilling, and tourism helped fuel significant job growth from 2004 to 2008 (6% per year, mostly in Garfield County). This was followed by an 11% loss in jobs 2008-2010. While the region has since recovered from the recession (posting a 1.6% annual job growth since 2010), as of 2013 there were still 6% fewer jobs than there were in 2008. Slower job growth has resulted in a slight decrease in the average number of employed persons per household (from 1.9 to 1.8) despite no change in average household size (2.6). There has also been a 12% decrease in the inflation-adjusted median annual household income in the region from $75,000 in 2004 to $66,000 in 2014 reducing the income available for housing and transportation.

2 DEMOGRAPHICS

DEMOGRAPHICS

since 2004

POPULATION GROWTH

(71K → 83K) ↑ 1.8%/yr

JOB GROWTH

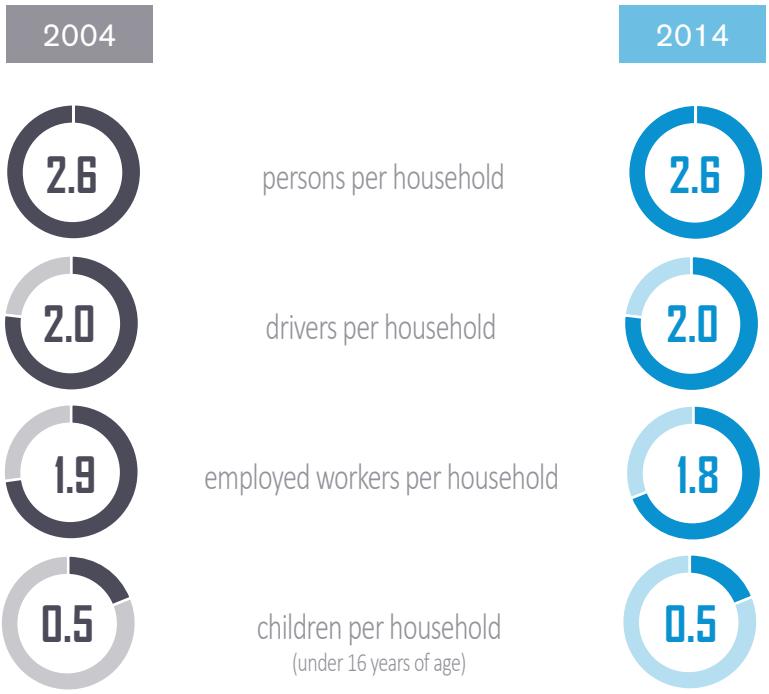
(51K → 61K) ↑ 1.6%/yr

MEDIAN HOUSEHOLD INCOME

($75K → $66K) ↓ 1.2%/yr

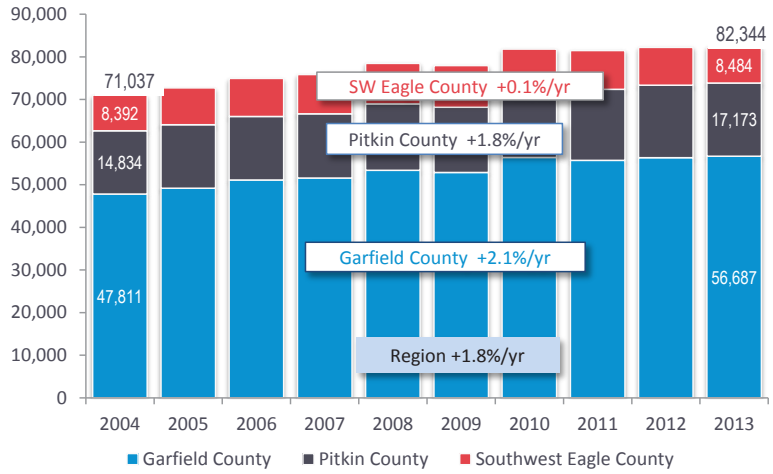
HOME OWNERSHIP

(70% → 65%) ↓ 0.7%/yr



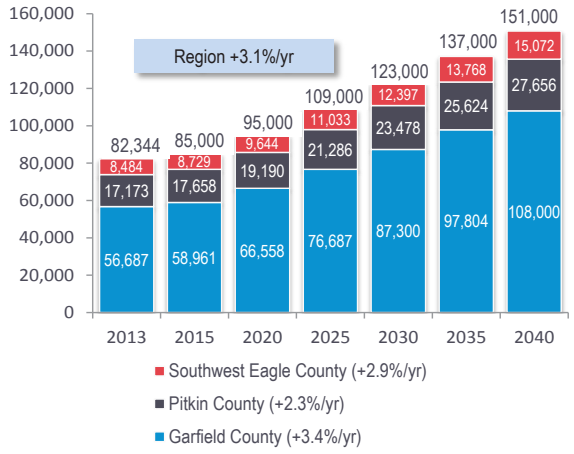
POPULATION TRENDS

POPULATION GROWTH BY COMMUNITY



Source: U.S. Census Bureau

POPULATION FORECAST BY COMMUNITY

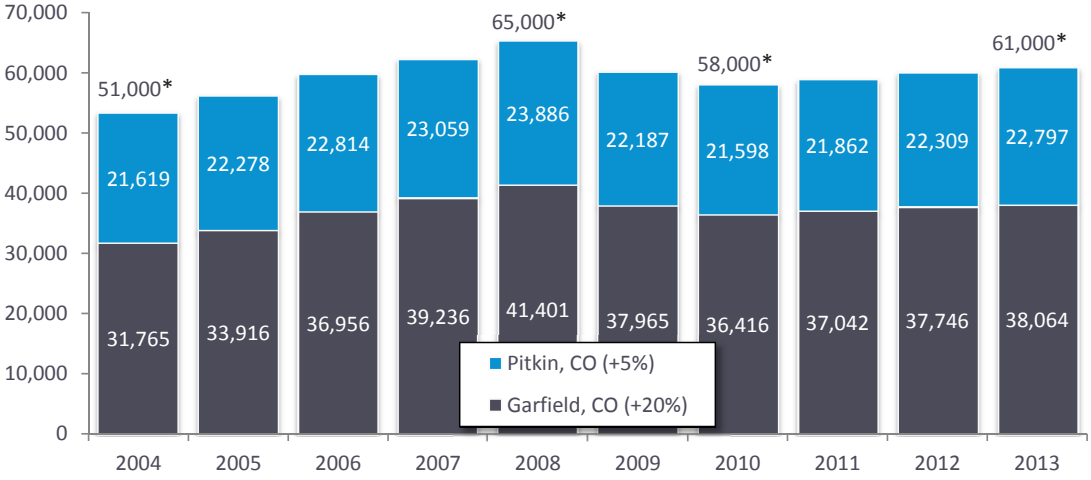


Source: Colorado State Demography Office
Note: Eagle County forecast based on percent in study area

- The region's population has been growing steadily at about 1.8% per year since 2004 and is forecast to grow by 3.1% per year through 2040
- Job growth since 2004 has been slower than population growth (1.6% per year) and less consistent
- Garfield County's population has grown slightly faster (2.1%/yr.) than Pitkin County (1.8%/yr.) since 2004
- Job growth since 2004 has also been higher in Garfield County (2.2%/yr.) than Pitkin County (0.6%/yr.), although since 2010 the job growth rate has been higher in Pitkin County (1.9%/yr.) than Garfield County (1.5%/yr.)

JOB TRENDS

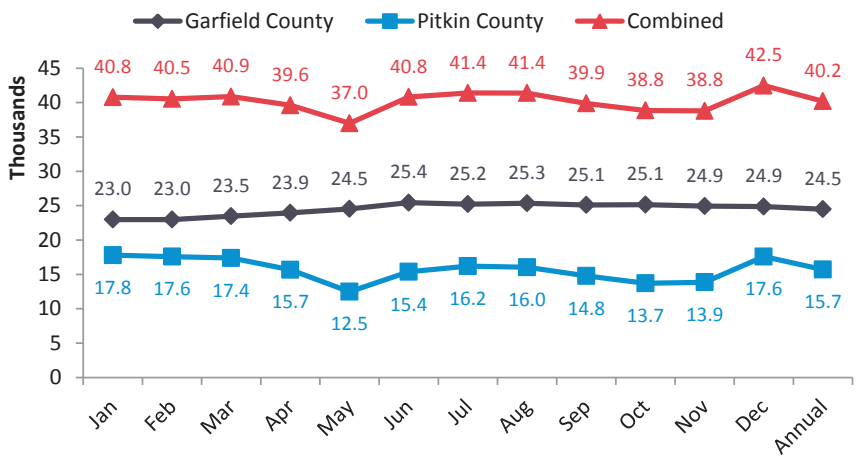
FULL + PART-TIME JOBS



Source: Bureau of Economic Analysis (BEA)
Note: Annual percentages are linear (non-compound)

JOB TRENDS

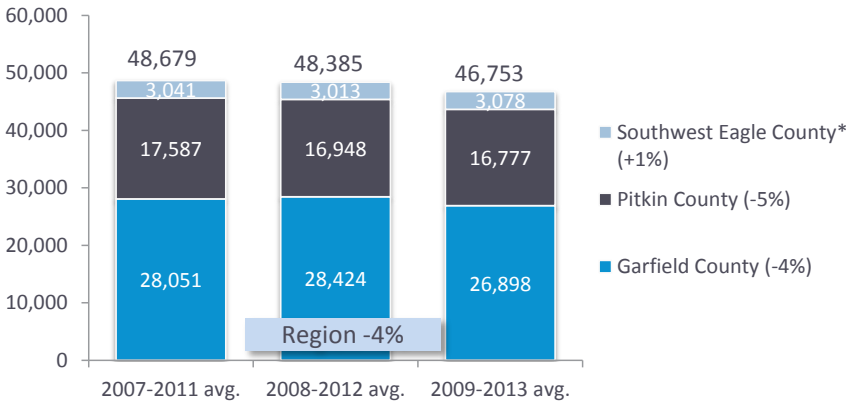
2013 SEASONAL JOBS BY WORKPLACE



Source: Bureau of Labor Statistics (BLS)

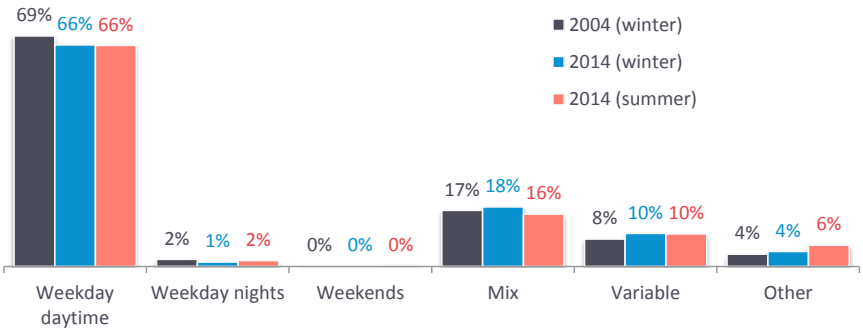
- The seasonal variation in jobs is higher in Pitkin County than Garfield County
- The "high season" for number of jobs occurs in the winter in Pitkin County and in the summer in Garfield County
- The "low" season for job counts occurs in the shoulder months (May, October and November) in Pitkin County and in the winter in Garfield County

WORKER POPULATION BY WORKPLACE



Source: American Community Survey, 5-year averages
*Southwest Eagle County includes Basalt and El Jebel
Note: These are 5-year averages. Actual number of workers in 2013 is likely higher than they were in 2011 given that the 2011 number includes the pre-recession boom years of 2007 and 2008 and the 2013 number include the recession years of 2009 and 2010.

TYPICAL WORK SCHEDULE



Source: 2004 Employee Survey, 2014 Employee/Resident Survey

- About 66% of workers in the winter typically work weekdays during the day, a slight decline from 69% in 2004
- There is very little variation in the typical work schedule between the winter and the summer

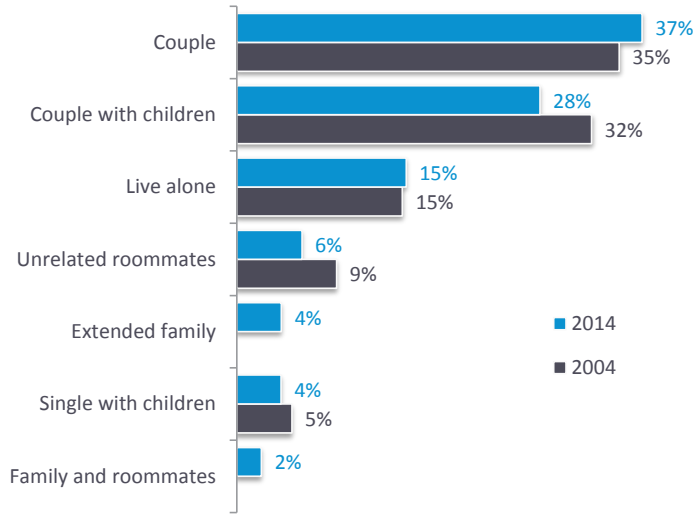
HOUSING

Housing	2004	2014
Population*	71,037	82,344
Population residing year-round	94%	94%
Lived in region > 1 year	92%	93%
Own home	70%	65%
Persons per household	2.6	2.6
Drivers licence per household	2.0	2.0
Employees per household	1.9	1.8
Children 15 or younger per household	0.5	0.5
Receive housing assistance	12%	12%
Median Annual Household Income**	$75,000	$66,000

Source: 2004 Employee Survey, 2014 Employee/Resident Survey
*U.S. Census Bureau (2004 & 2013 population estimates)
**Adjusted for 2014 dollars

- The number of people who own a home has decreased 7% since 2004
- Average household size is the same as in 2004 (2.6), but the average number of employees per household has dropped slightly from 1.9 to 1.8
- The percent of households with children is unchanged since 2004 (31% or 0.5 per household)
- The percent of households receiving housing assistance is unchanged since 2004 (12%) despite the fact that the median annual household income (adjusted for 2014 dollars) decreased 12% 2004-2014 from $75,000 to $66,000
- The percent of people who live in an apartment or condo has increased, while the percent living in all other housing types decreased

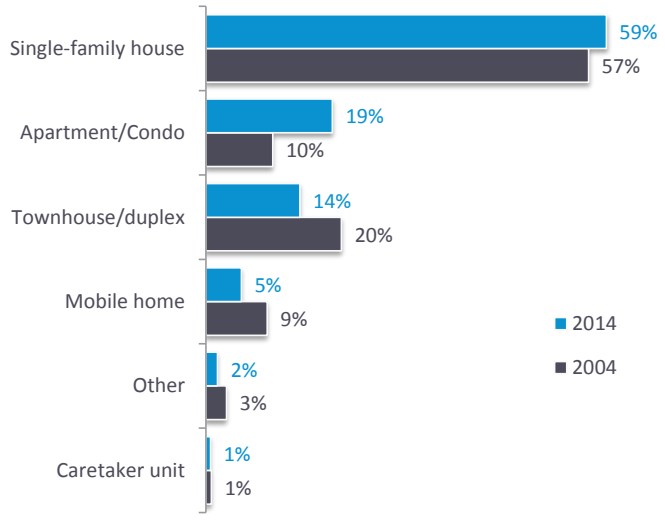
HOUSEHOLD TYPE



Source: 2004 Employee Survey, 2014 Employee/Resident Survey

Note: Two categories were added to this question in 2014 (extended family; family and roommates), which may partially account for the decrease in couples with children, unrelated roommates, and single with children households.

HOUSING TYPE

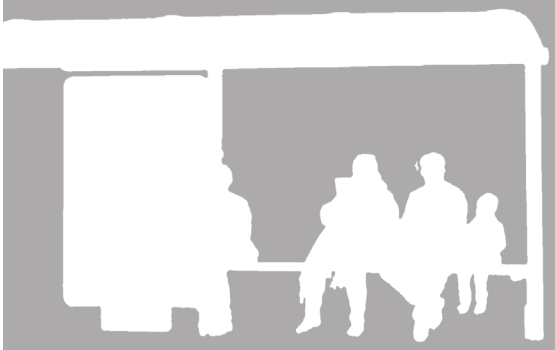


Source: 2004 Employee Survey, 2014 Employee/Resident Survey

SUMMARY OF FINDINGS

The 2014 survey revealed several notable trends among commute patterns:

1. Long commutes continue to be an integral part of the region as about 62% percent of the region's workforce commutes to a different town or city than they live.
2. The dominant commute flow is up-valley to the nearest job center in Rifle, Glenwood Springs or Aspen, which combined account for 75% of region's jobs.
3. The three regional job centers (Rifle, Glenwood Springs and Aspen) have the highest percentage of residents working in their home community, and (along with Carbondale and Snowmass Village) also have the highest percentage of commuters walking and biking to work.
4. More winter workers are commuting by bus than in 2004, up from 12% to 19% and fewer are driving to work, down from 80% to 74%. This is particularly true in the Roaring Fork Valley where the winter bus commute mode share is around 35%.
5. The survey revealed a 10% commute mode shift from driving to walking and biking between the winter and summer months.
6. There has been a dramatic increase in the percent of employees working from home 3 or more days a week since 2004 (from 1% to 7%).



3 COMMUTING

COMMUTING

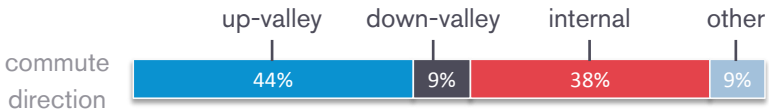
since 2004

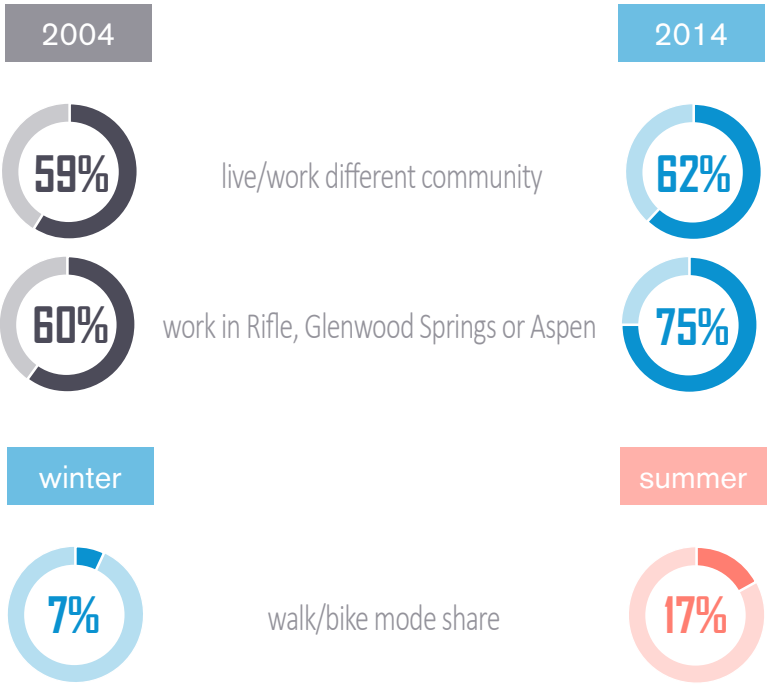
WINTER BUS COMMUTE MODE SHARE

(12% → 19%) ↑ 58%

TELECOMMUTE 3+ DAYS PER WEEK

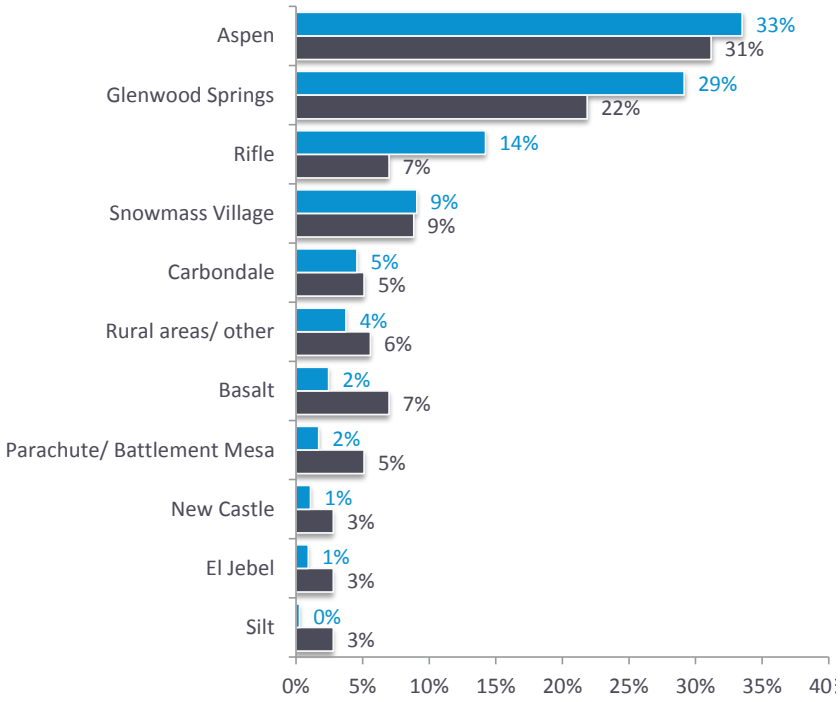
(1% → 7%) ↑ 450%





COMMUTE FLOWS

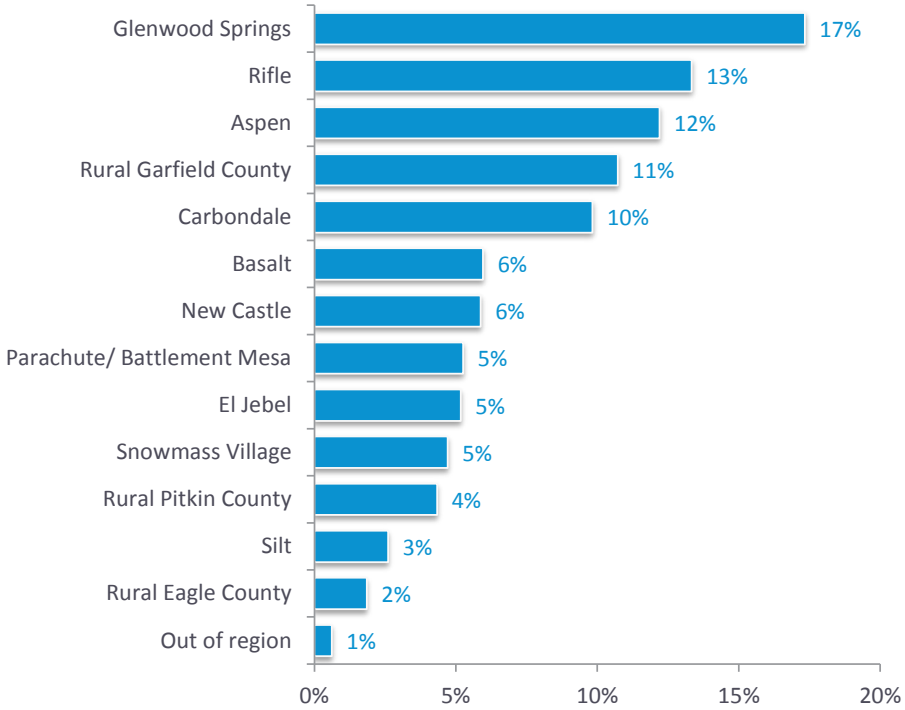
WHERE THE REGION'S WORKFORCE WORKS



Source: 2004 Employee Survey, 2014 Employee/Resident Survey

Over 75% of the region's workforce works in three regional centers: Rifle, Glenwood Springs and Aspen, an increase from 60% in 2004.

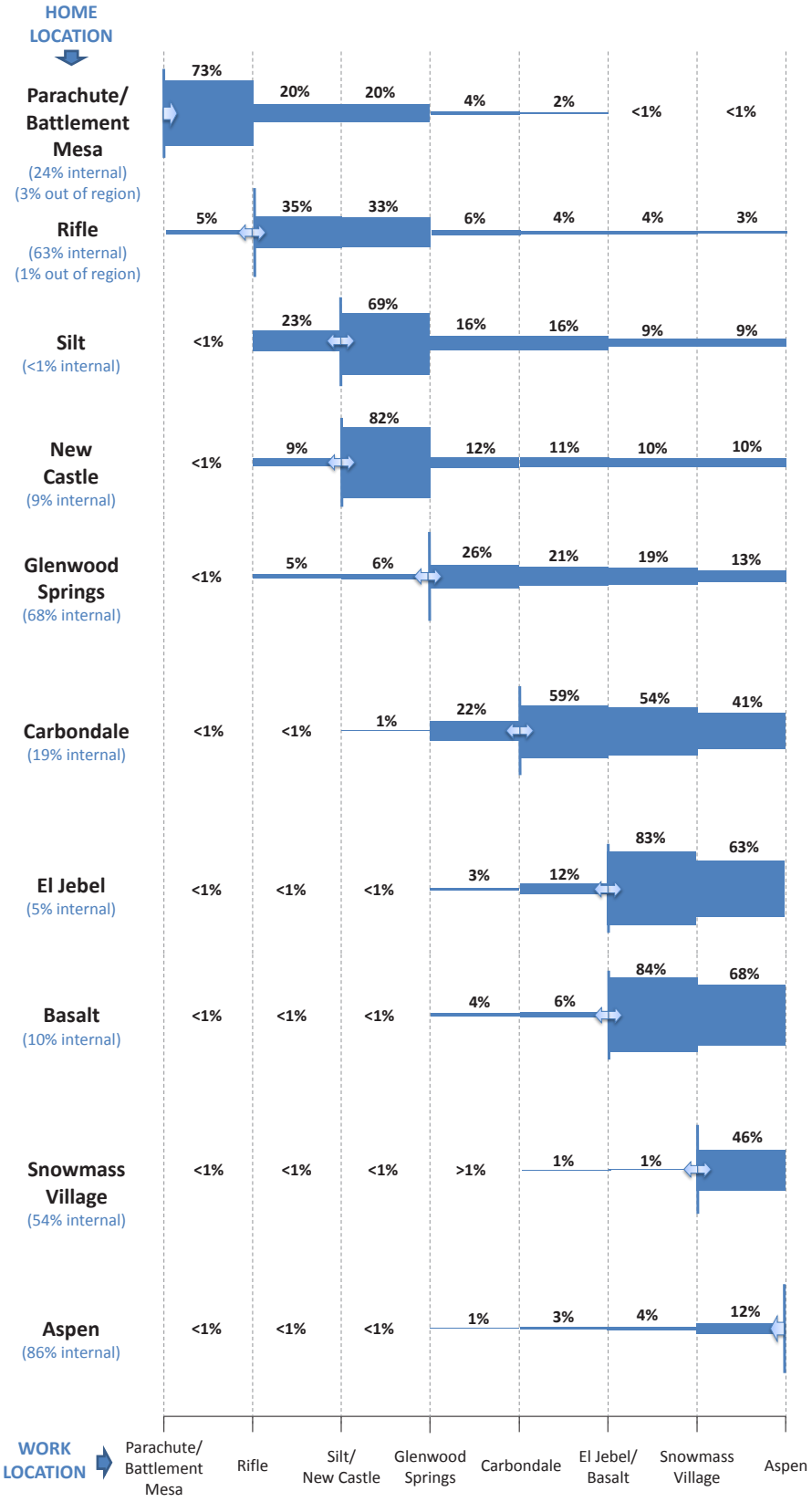
WHERE THE REGION'S WORKFORCE LIVES



Source: 2014 Employee/Resident Survey

COMMUTE FLOWS

COMMUTE FLOWS BY HOME LOCATION



Commute Flow Charts

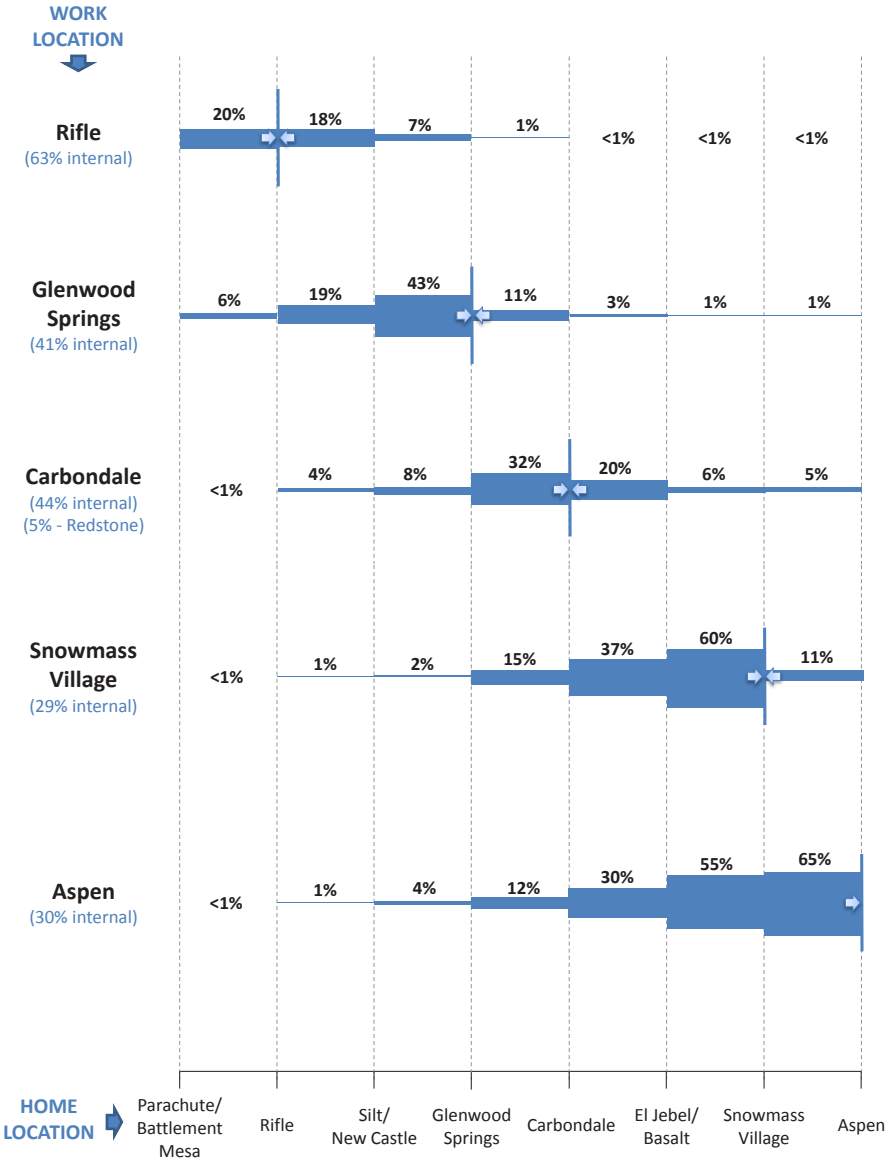
The commute flow charts to the left describe the percent of commuters from a given home location that are commuting between each link in the road network between Parachute and Aspen. For example, 35% of workers living in Rifle commute up-valley, while 5% commute down-valley, and 63% commute within Rifle. Six percent commute past Glenwood Springs, with 3% commuting all the way to Aspen.

- The dominant commute flow is up-valley to the next regional job center in Rifle, Glenwood Springs or Aspen
- Most workers living in Parachute and Battlement Mesa work in Rifle
- Most workers living in Silt and New Castle work in Glenwood Springs
- Most workers living in Carbondale, El Jebel and Basalt work in Aspen or Snowmass
- Most workers living in Rifle, Glenwood Springs, Snowmass Village and Aspen work in their home community

Source: 2014 Employee/Resident Survey

COMMUTE FLOWS

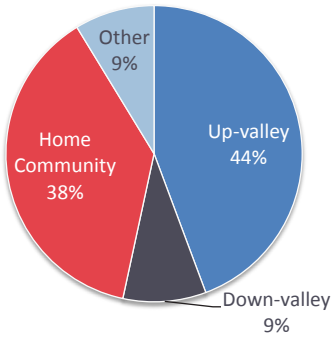
COMMUTE FLOWS BY WORK LOCATION



Source: 2014 Employee/Resident Survey

Note: Only communities where more than 40 respondents indicated the location as their workplace were included.

COMMUTE DIRECTION



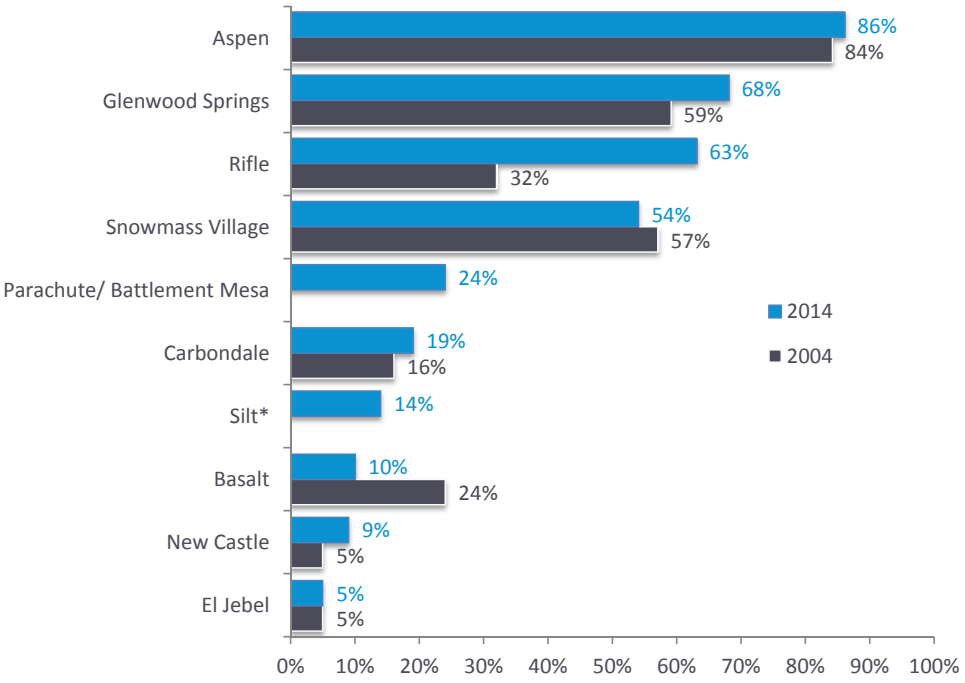
Source: 2014 Employee/Resident Survey

Note: Up-valley and down-valley refer to the commute direction. Commuters traveling up-valley would be traveling in the direction toward Aspen and commuters traveling down-valley would be traveling in the direction toward Parachute. Other includes those commuting outside the region, in a direction that is neither up-valley or down-valley, or in an unknown direction (such as to/from or within the rural TAZ's).

- 44% of workers commute up-valley, while only 9% commute down-valley
- Most in-commuters to the region's job centers (Rifle, Glenwood Springs, Carbondale, Snowmass Village and Aspen) are commuting from down-valley locations

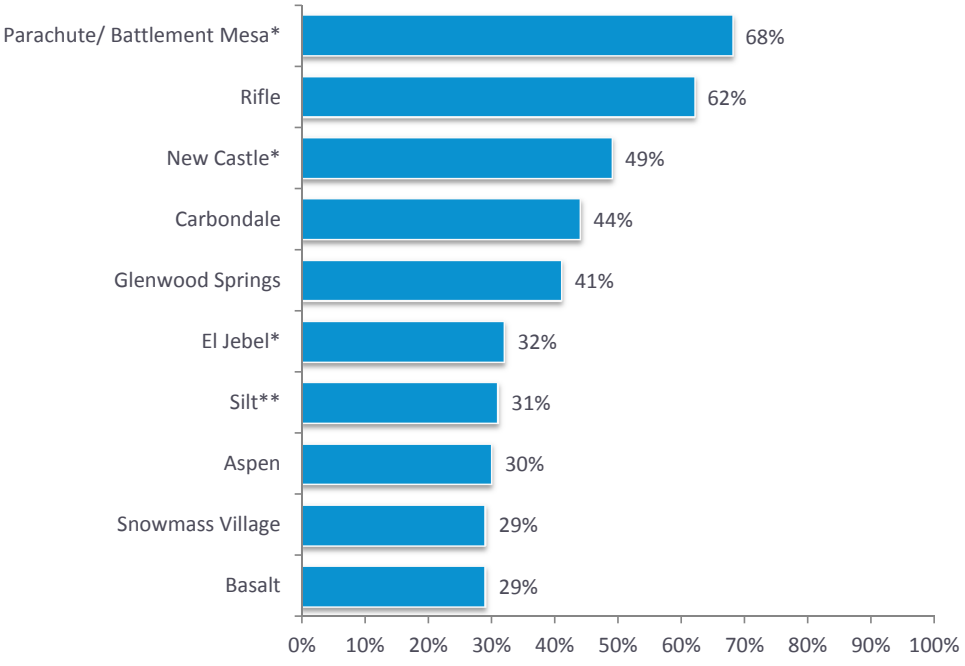
LIVE/WORK SAME COMMUNITY

PERCENT OF RESIDENTS WHO WORK IN HOMETOWN



Source: 2004 Employee Survey, 2014 Employee/Resident Survey
*American Community Survey, 2006-2010 5-year average

PERCENT OF WORKFORCE LIVING IN TOWN



*sample size <40
**2006-2010 ACS

Source: 2014 Employee/Resident Survey
*Sample size <40
**American Community Survey, 2006-2010 5-year average

- The percentage of the region's workforce living and working in the same community decreased from 41% in 2004 to 38% in 2014
- Most residents who live in one of the three regional job centers (Rifle, Aspen, Glenwood Springs) and Snowmass Village also work in their home community
- Most residents of non-regional job centers work outside their home community
- Communities in the Roaring Fork Valley import a higher percentage of their workforce (about 70% on average) than communities in the Colorado River Valley (about 56% on average)
- Rifle achieved the best jobs-housing balance of any community in 2014 - as it was the only community where the majority of residents worked in the same community (63%) and the majority of the workforce lived in the same community (62%)

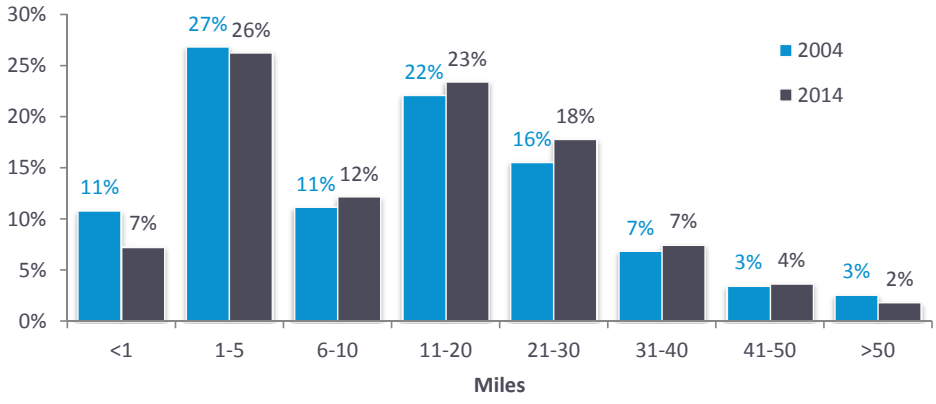
COMMUTE DISTANCE/TIME

Location		Commute Distance (miles)		Commute Time (minutes)	
		Home	Work	Home	Work
Region		16	16	25	25
Community	Parachute/ Battlement Mesa	22	11*	27	14*
	Rifle	14	11	19	17
	Silt	24	-	28	-
	New Castle	18	6*	27	10*
	Glenwood Springs	13	15	21	21
	Carbondale	21	12	35	26
	El Jebel	20	-	32	-
	Basalt	19	13*	30	19*
	Snowmass Village	6	18	19	31
	Aspen	5	20	14	33
County	Garfield County	17	13	26	20
	Southwest Eagle County	20	16	31	21
	Pitkin County	8	19	19	33
Valley	Colorado River Valley	16	14	23	19
	Roaring Fork Valley	15	18	26	31
Type	Towns/ Cities	14	16	23	26
	Rural Areas	21	17	32	23

Source: 2014 Employee/Resident Survey
*Fewer than 40 respondents
Note: Home indicates location of residence and work indicates location of work. Colorado River Valley includes locations between Parachute and Glenwood Spring and Roaring Fork Valley includes locations between Carbondale and Aspen.

- The average region-wide commute distance and time increased from 15 miles and 22 minutes in 2004 to 16 miles and 25 minutes in 2014
- About 14% of workers are commuting more than 30 miles to work (up slightly from 13% in 2004)
- About 37% of workers were commuting 5 miles or less to work (down from 43% in 2004)

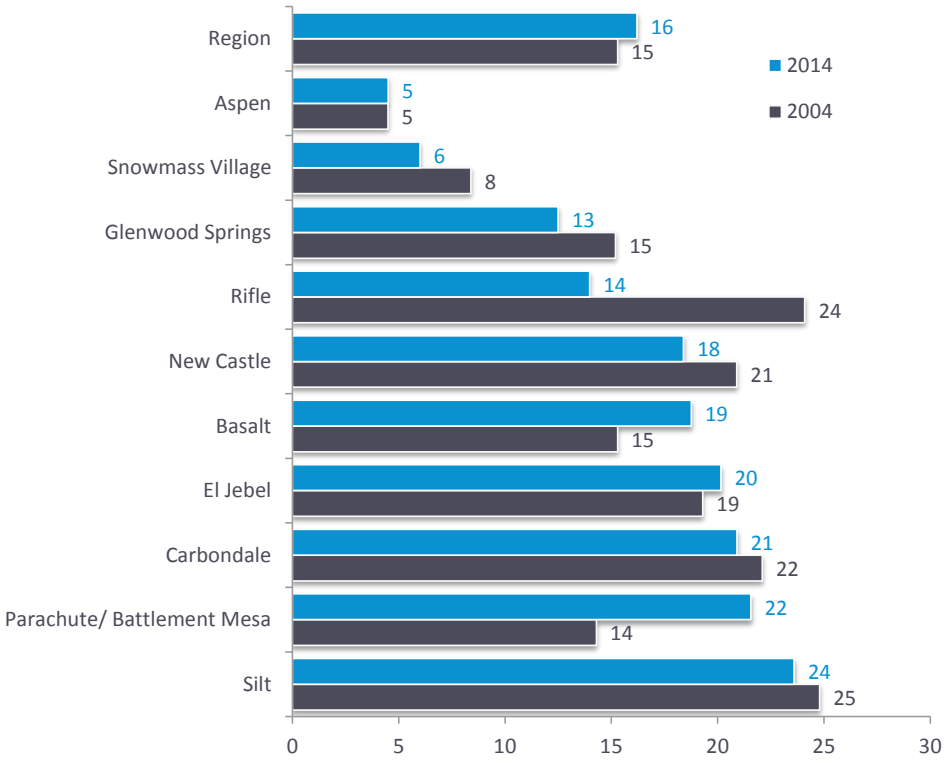
DISTANCE TO WORK



Source: 2004 Employee Survey, 2014 Employee/Resident Survey

COMMUTE DISTANCE/TIME

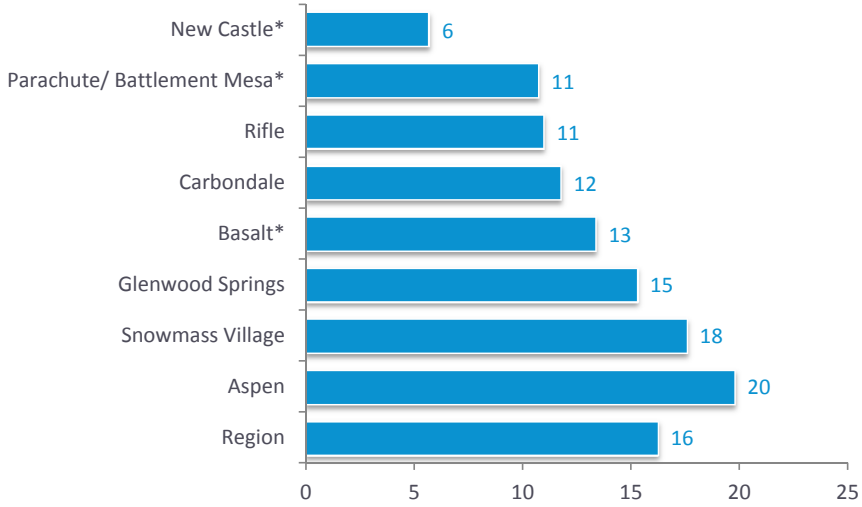
AVERAGE COMMUTE DISTANCE (IN MILES) BY COMMUNITY OF RESIDENCE



Source: 2004 Employee Survey, 2014 Employee/Resident Survey

Since 2004 the average commute distance in most communities appears to have decreased despite an increase region-wide. In some communities this may be more a reflection of differences in data collection between the two survey years. In 2004 respondents were asked which community they "live in or nearest to," thus grouping those who live in rural areas with the community they are closest to. In 2014 rural locations were identified separately from towns and cities. Since residents of rural areas have a longer average commute this may actually explain most of the change from 2004 at the community level. The one exception is Rifle, where the average commute distance by residents decreased dramatically from 24 miles to 14 miles, a reflection of the fact the more residents are working in Rifle.

AVERAGE COMMUTE DISTANCE (IN MILES) BY WORKPLACE

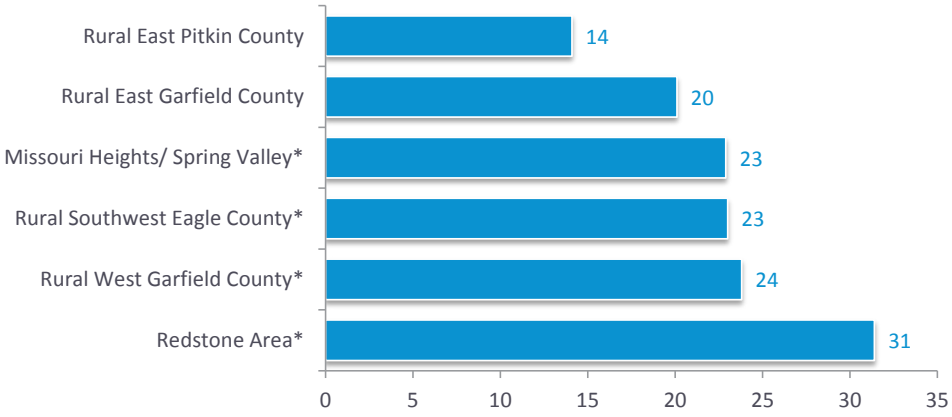


Source: 2014 Employee/Resident Survey
*Sample size <40

Aspen residents had the shortest average commute of any community (5 miles and 14 minutes) because most residents work in Aspen, but the Aspen workforce had the longest average commute of any workplace (20 miles and 33 minutes) because most workers commute from outside Aspen.

COMMUTE DISTANCE/TIME

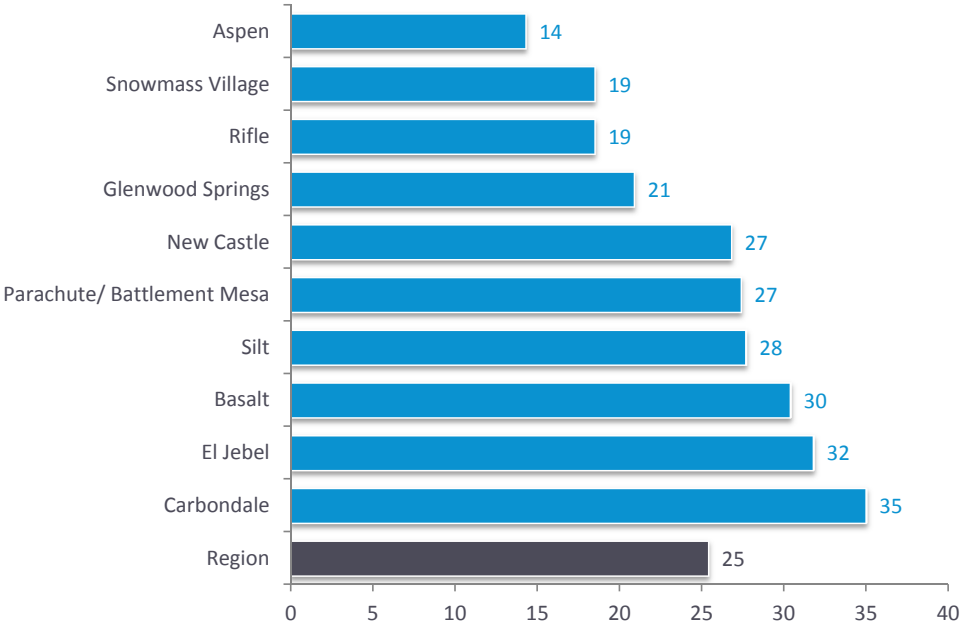
AVERAGE COMMUTE DISTANCE (IN MILES) BY RURAL AREAS OF RESIDENCE



Source: 2014 Employee/Resident Survey
*Sample size <40

Residents living in the rural parts of the region tend to have longer average commutes than those living in the towns and cities.

AVERAGE COMMUTE TIME (IN MINUTES) BY COMMUNITY OF RESIDENCE



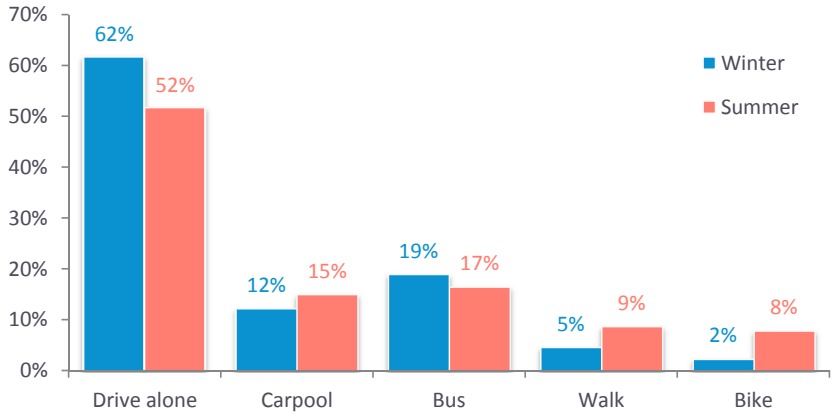
Source: 2014 Employee/Resident Survey

MODE SHARE

What is mode share?

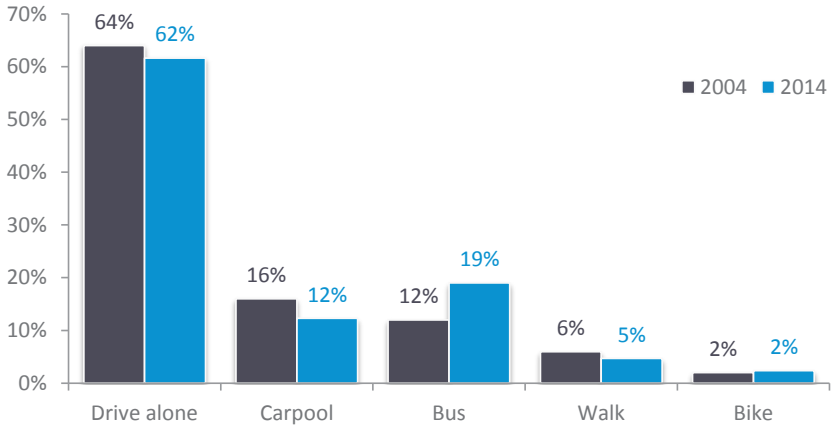
Mode share describes the percentage of person trips made by a particular mode of transportation. A person trip is defined as one-way travel by one person more than 200 feet (about 1 block) and excludes short stops that are less than twenty minutes. The commute mode share data reflects the mode respondents actually used during the previous workday (as oppose to typical mode share which is the mode commuters report that they typically use).

COMMUTE MODE SHARE BY SEASON



Source: 2014 Employee/Resident Survey

WINTER COMMUTE MODE SHIFT

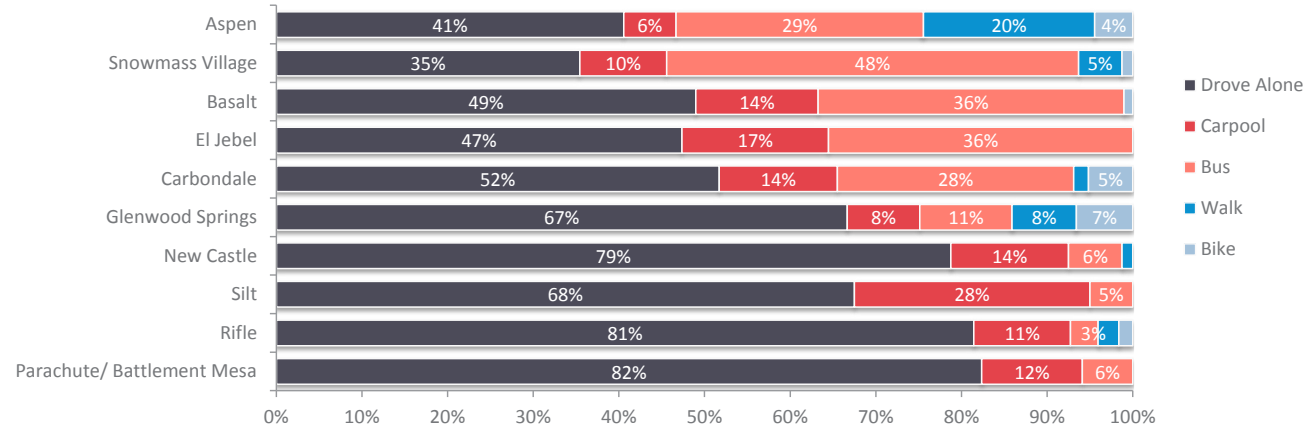


Source: 2004 Employee Survey, 2014 Employee/Resident Survey

- The "active" commute mode share (the percentage of commute trips made by walking and biking) was more than twice as high in the summer (17%) than the winter (7%)
- The percentage of commute trips made by driving alone was higher in the winter (62%) than the summer (52%)
- The percentage of commute trips made by bus was slightly lower in the summer than the winter, while the percentage of commute trips made by carpooling was slightly higher in the summer than the winter.
- The winter bus commute mode share increased 58% from 12% of commute trips in 2004 to 19% in 2014
- The winter driving commute mode share (both alone and carpooling) decreased from 80% in 2004 to 74% in 2014
- The walking and biking winter commute mode share is about the same as it was in 2004

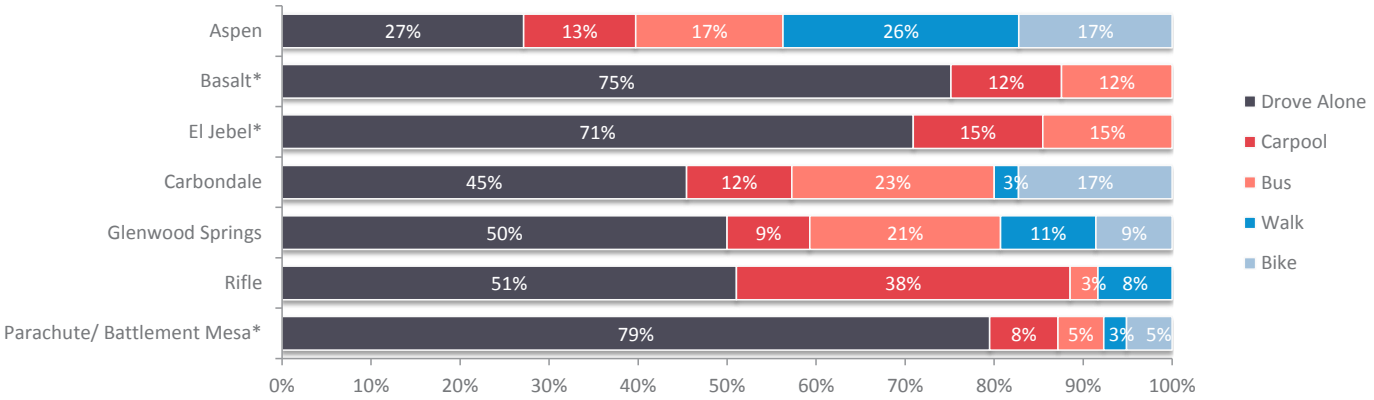
MODE SHARE BY HOME LOCATION

2014 WINTER COMMUTE MODE SHARE BY HOME LOCATION



Source: 2014 Employee/Resident Survey

2014 SUMMER COMMUTE MODE SHARE BY HOME LOCATION

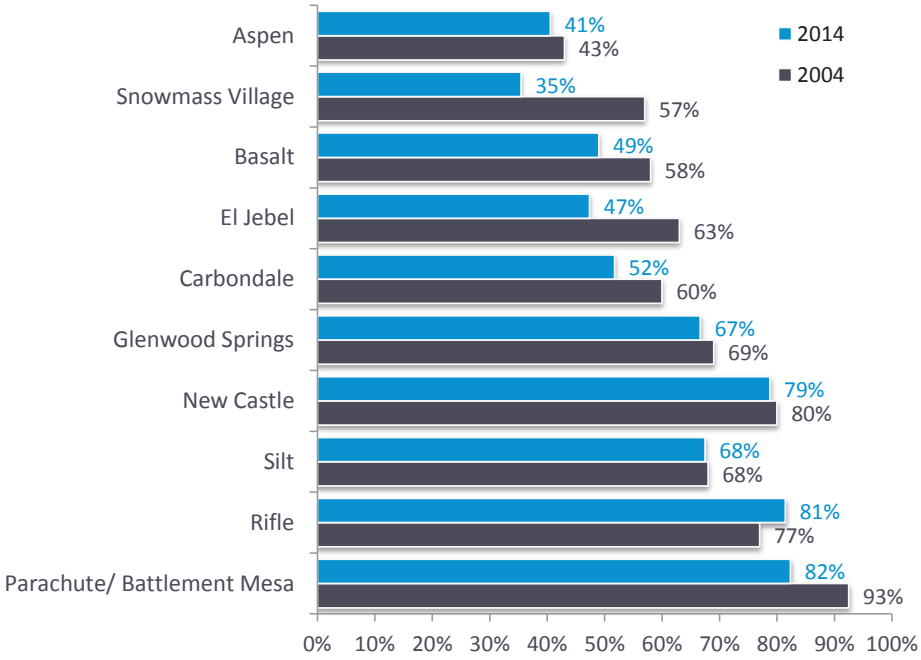


Source: 2014 Employee/Resident Survey
*Sample size <40

- The winter bus commute mode share is higher (and the drive alone commute mode share is lower) among residents of the Roaring Fork Valley than the Colorado River Valley
- Aspen residents had the highest walk mode share for commute trips of any community in both winter (20%) and the summer (26%)
- Glenwood Springs residents had the highest bike commute mode share of any community in the winter (7%) and Carbondale residents had the highest in the summer (17%)
- Silt residents had the highest carpool commute mode share in the winter (28%) and Rifle residents had the highest in the summer (38%)
- The active commute mode shares (walking and biking) were highest among residents living in the regional job centers (Rifle, Glenwood Springs, Aspen) and in Carbondale

MODE SHIFT BY HOME LOCATION

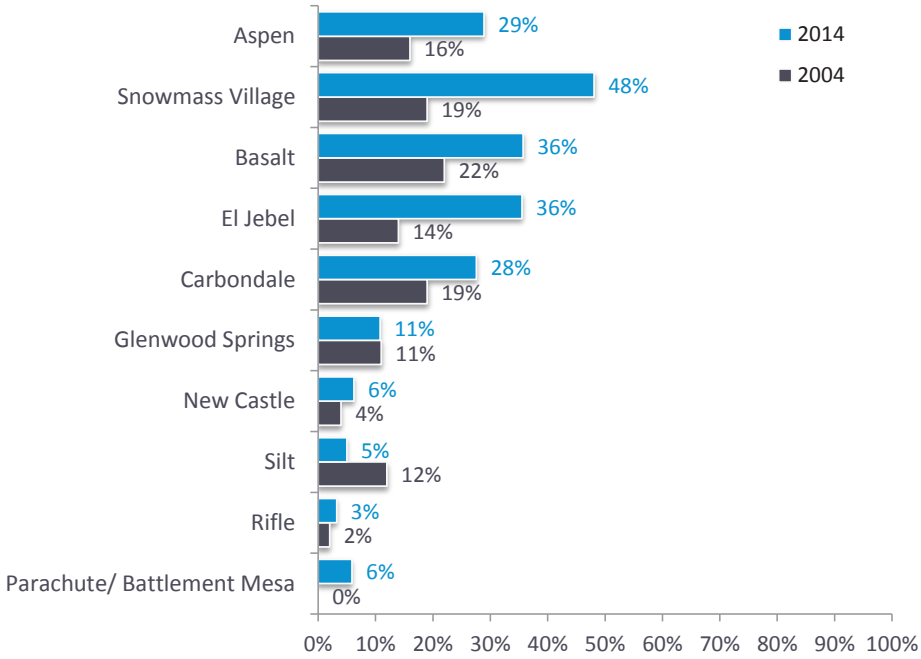
DRIVE ALONE TO WORK WINTER MODE SHIFT BY HOME LOCATION



- The winter single-occupant vehicle (SOV) commute mode share decreased significantly since 2004 among residents in communities along SH-82 between Carbondale and Snowmass Village
- There was little or no change in the winter SOV commute mode share among Aspen residents and residents of most communities in the Colorado River Valley (Parachute to Glenwood Springs)

Source: 2004 Employee Survey, 2014 Employee/Resident Survey

BUS TO WORK WINTER MODE SHIFT BY HOME LOCATION

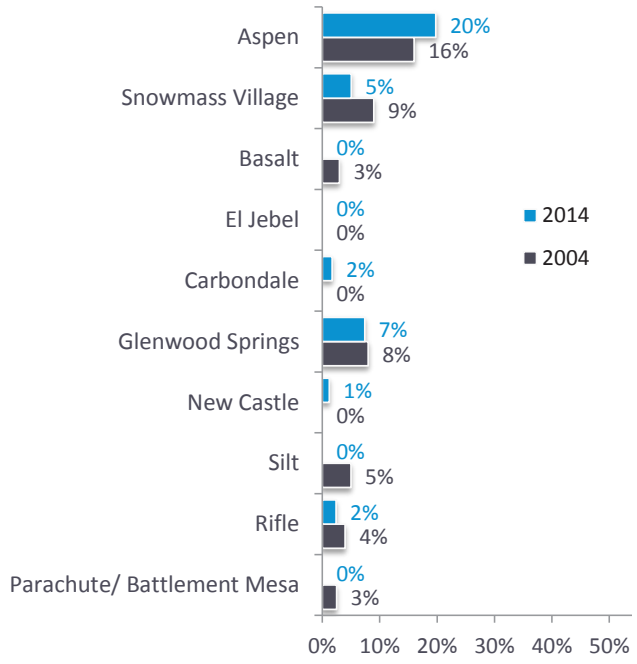


- The winter bus commute mode share doubled or nearly-doubled among residents of each community in the Roaring Fork Valley (from Carbondale to Aspen) since 2004
- There was little or no consistent change in the winter bus commute mode share among residents of communities in the Colorado River Valley (Parachute to Glenwood Springs)

Source: 2004 Employee Survey, 2014 Employee/Resident Survey

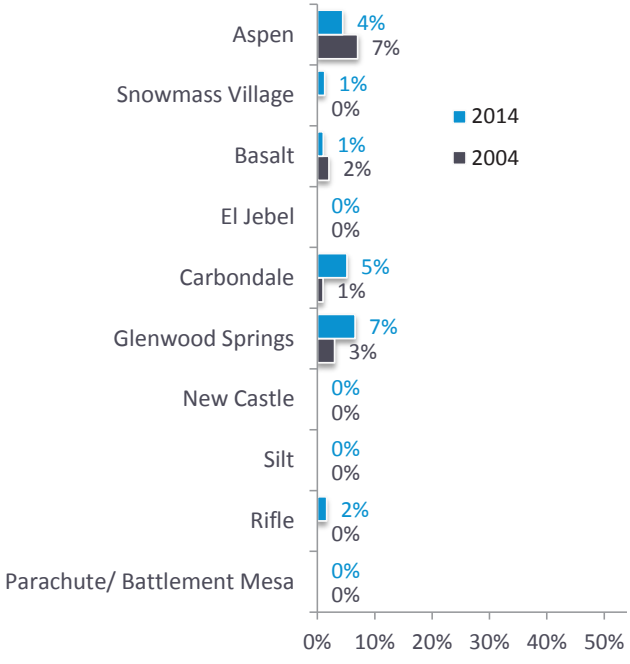
MODE SHIFT BY HOME LOCATION

WALK TO WORK WINTER MODE SHIFT BY HOME LOCATION



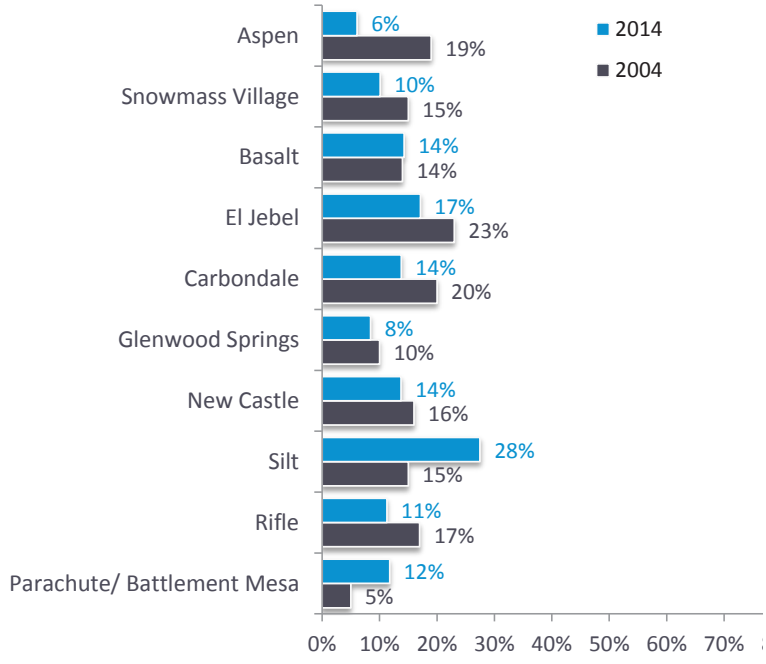
Source: 2004 Employee Survey, 2014 Employee/Resident Survey

BICYCLE TO WORK WINTER MODE SHIFT BY HOME LOCATION



Source: 2004 Employee Survey, 2014 Employee/Resident Survey

CARPOOL TO WORK WINTER MODE SHIFT BY HOME LOCATION

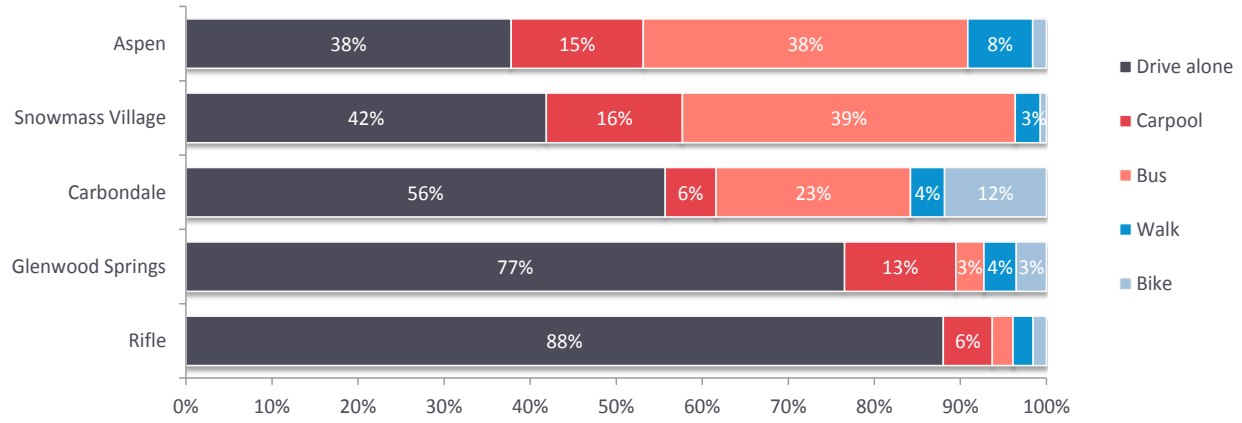


Source: 2004 Employee Survey, 2014 Employee/Resident Survey

- The winter walk and bike to work mode shares among residents were only significant in communities that were also regional employment centers
- The winter walk commute mode share increased slightly among residents of Aspen and Carbondale and decreased slightly among residents of Snowmass Village, Glenwood Springs and Rifle
- The percent of residents biking to work in the winter decreased in Aspen, but increased significantly in Carbondale and Glenwood Springs and to a lesser extent in Rifle
- The winter commuter carpool mode share decreased among residents in most communities (which is typical when bus ridership increases), the exception is Silt, which had a very high carpool to work mode share (28%)

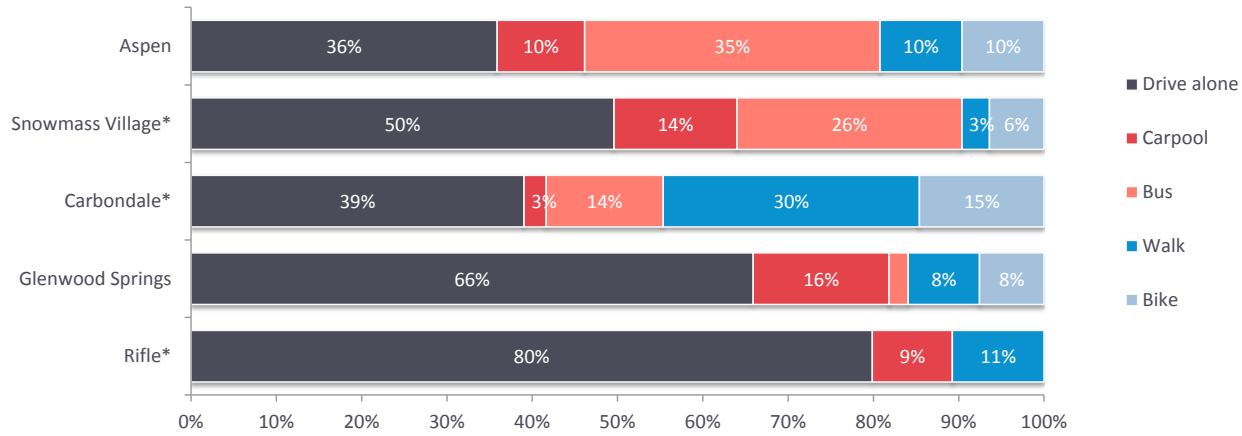
MODE SHARE BY WORK LOCATION

2014 WINTER COMMUTE MODE SHARE BY WORK LOCATION



Source: 2014 Employee/Resident Survey
Note: Only communities with a significant employee sample size are shown (the regional job centers)

2014 SUMMER COMMUTE MODE SHARE BY WORK LOCATION

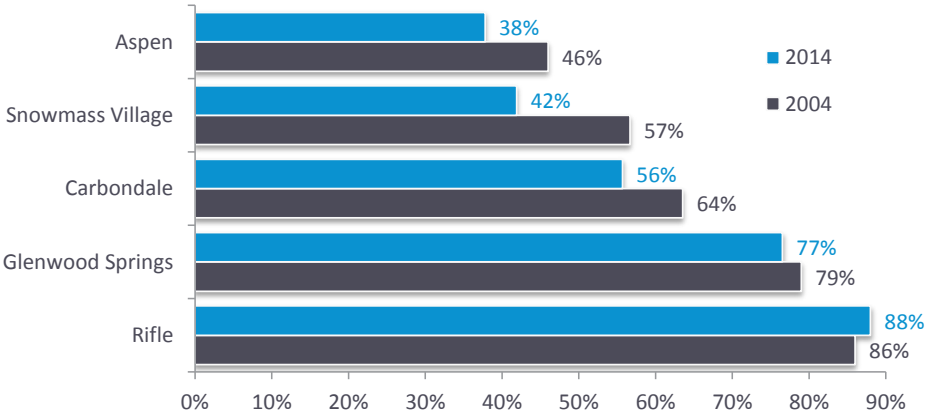


Source: 2014 Employee/Resident Survey
Note: Only communities with a significant employee sample size are shown (the regional job centers)
*Sample size <40

- Commuters who worked up-valley (toward Aspen) were more likely to commute by bus and less likely to drive alone than commuters who worked down-valley (both in the summer and winter)
- Of the communities with a large enough workforce to gather sufficient data, Carbondale had the highest percentage of its workforce who walked and biked to work both in the summer (45%) and in the winter (16%)
- The employee bus commute mode share is higher in the winter than the summer in each of the five regional job centers
- Workers in each regional job center drove alone to work less in the summer than the winter despite a lower bus mode share, due in large part to the higher active commute mode share in the summer (with the exception of Snowmass Village, which had a higher single-occupant vehicle commute mode share among workers in the summer than the winter)

MODE SHARE BY WORK LOCATION

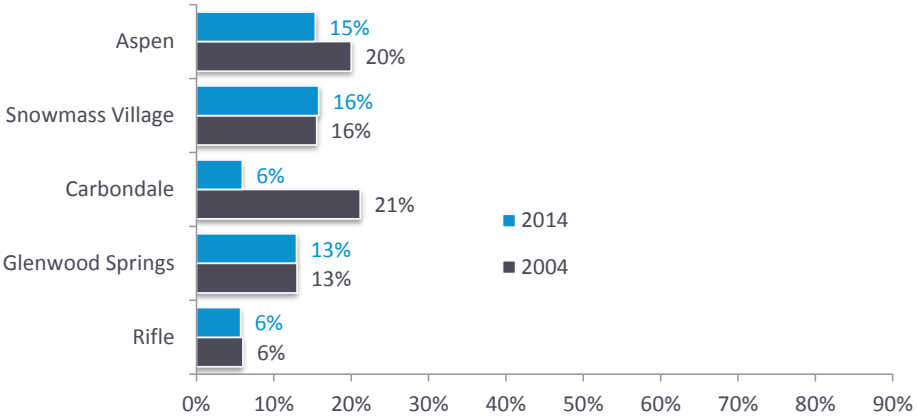
DRIVE ALONE TO WORK MODE SHIFT BY WORK LOCATION



Source: 2004 Employee Survey, 2014 Employee/Resident Survey

A much smaller percent of winter employees in Aspen, Snowmass Village and Carbondale were driving alone to work than in 2004, while employees working in Glenwood Springs and Rifle were driving alone to work about the same as they were in 2004.

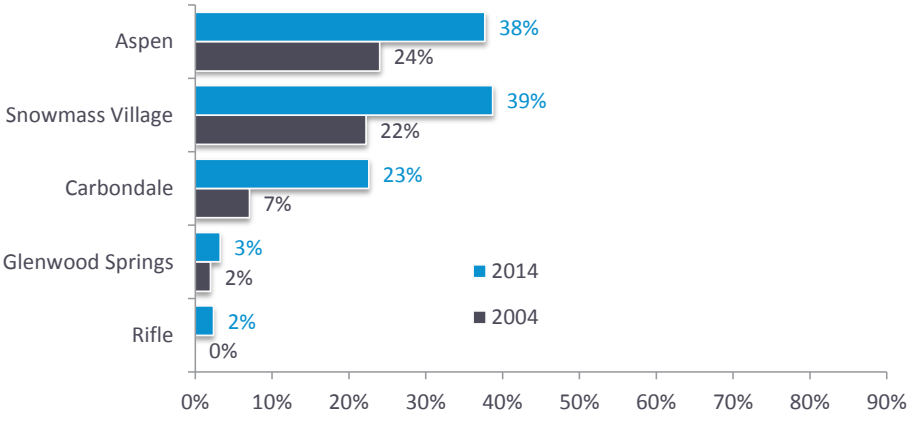
CARPOOL TO WORK MODE SHARE BY WORK LOCATION



Source: 2004 Employee Survey, 2014 Employee/Resident Survey

The carpool mode share by work community dropped in Aspen and Carbondale since 2004, but remained about the same in other communities.

BUS TO WORK MODE SHARE BY WORK LOCATION

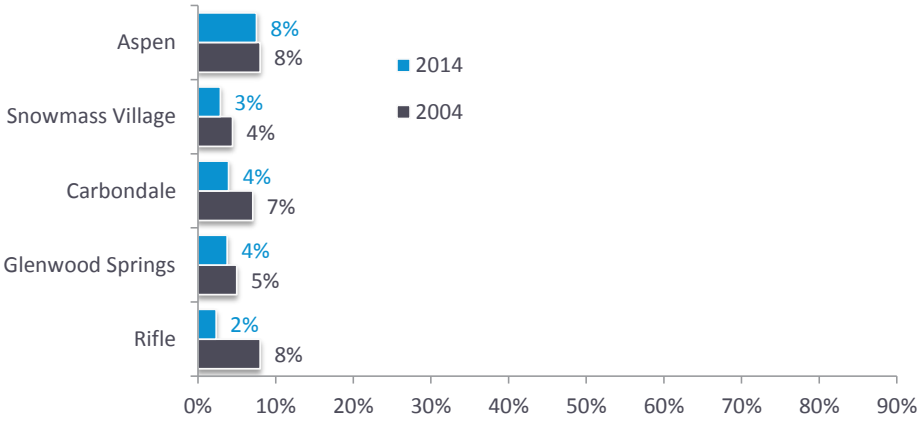


Source: 2004 Employee Survey, 2014 Employee/Resident Survey

Employees in each community are commuting to work in the winter by bus more than in 2004, particularly those working in Carbondale, Snowmass Village and Aspen.

MODE SHARE BY WORK LOCATION

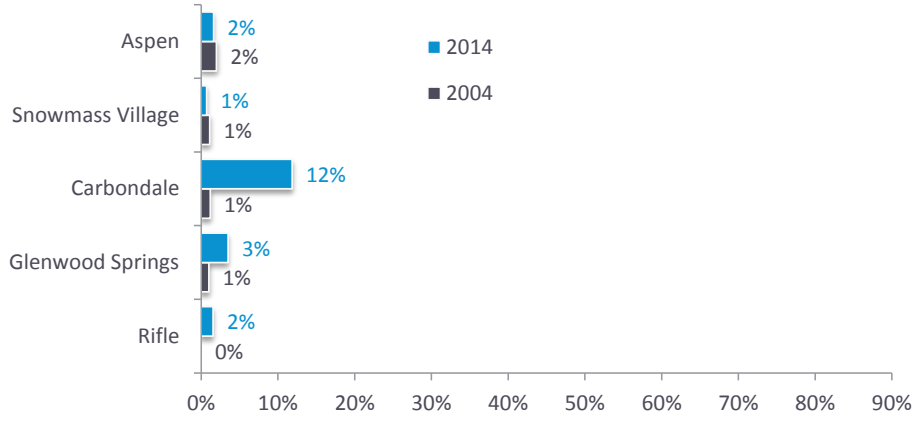
WALK TO WORK MODE SHARE BY WORK LOCATION



Source: 2004 Employee Survey, 2014 Employee/Resident Survey

The percent of employees walking to work in the winter declined in every community since 2004, most significantly among employees working in Carbondale and Rifle.

BICYCLE TO WORK MODE SHARE BY WORK LOCATION

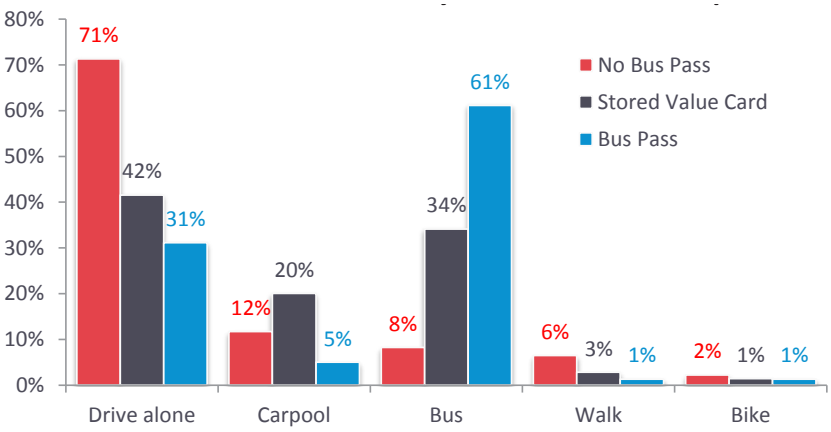


Source: 2004 Employee Survey, 2014 Employee/Resident Survey

- The percent of employees biking to work in the winter increased in Carbondale, Glenwood Springs and Rifle since 2004.
- The percent of employees working in Carbondale who bike to work in the winter increased dramatically from 1% in 2004 to 12% in 2014

MODE SHARE BY BUS PASS OWNERSHIP

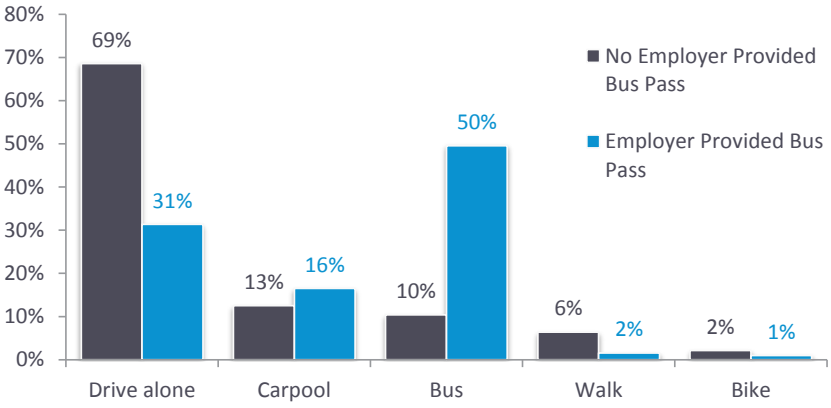
COMMUTE MODE SHARE BY BUS PASS OWNERSHIP



Source: 2014 Employee/Resident Survey

Commuters with a bus pass were about 8 times as likely to take the bus to work (and drove to work less than half as frequently) as those without a bus pass or stored value card.

COMMUTE MODE SHARE BY EMPLOYER PROVIDED BUS PASS

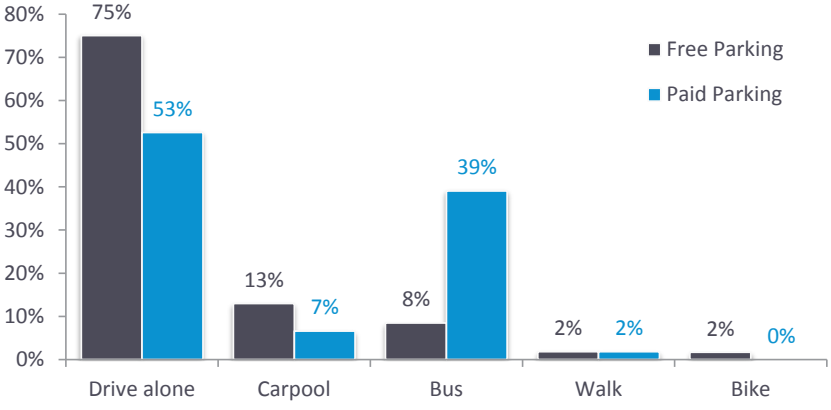


Source: 2014 Employee/Resident Survey

Commuters with an employer provided bus pass were about 5 times as likely to take the bus to work (and drove to work less than half as frequently) as employees without an employer provided bus pass.

MODE SHARE BY PARKING TYPE AT WORK

COMMUTE MODE SHARE BY PARKING TYPE AT WORK

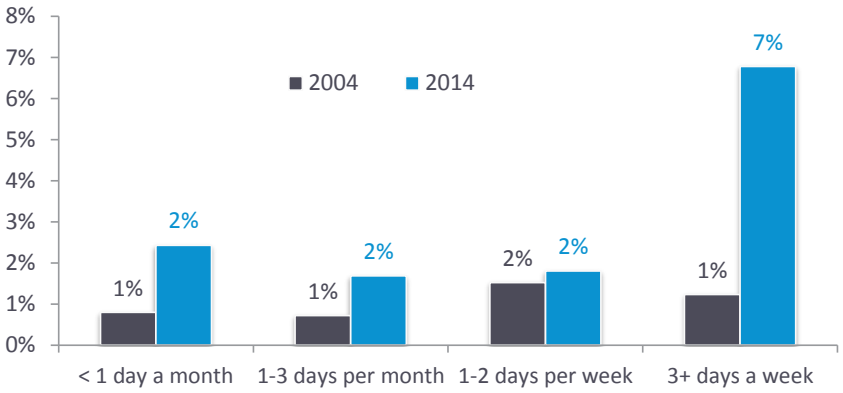


Source: 2014 Employee/Resident Survey

39% of commuters who had to pay to park at their workplace commuted by bus compared to only 8% of those with free parking at work.

TELECOMMUTE

WORK FROM HOME FREQUENCY

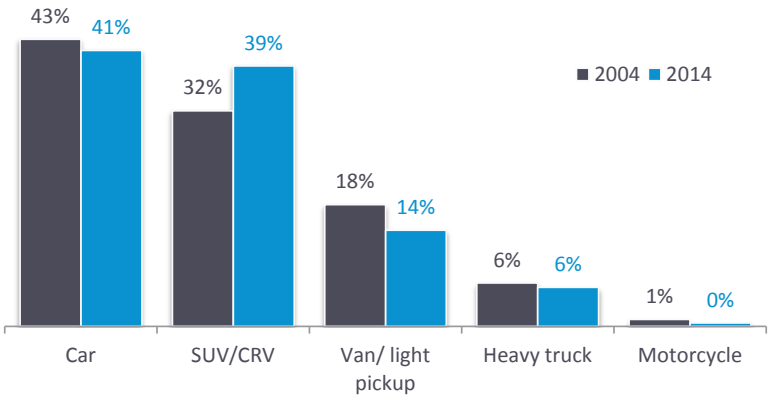


Source: 2004 Employee Survey, 2014 Employee/Resident Survey

The percent of workers who worked from home 3 days or more a week has increased nearly 7-fold since 2004 from 1% to 7%

COMMUTE VEHICLE

COMMUTE VEHICLE

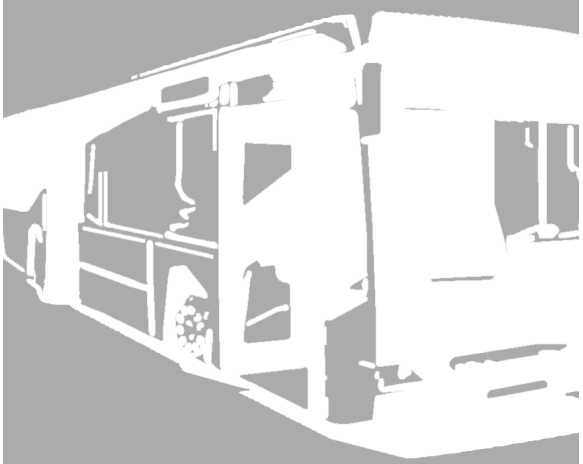


Source: 2004 Employee Survey, 2014 Employee/Resident Survey

- The percent of workers with a vehicle available for commuting is about the same as in 2004 (87%)
- More commuters are using an SUV/CRV (sports utility vehicle or crossover) to commute than in 2004 and fewer are using a van/light pickup or car
- 80% of commuters who drive to work used a car or SUV to commute in 2014 (up from 75% in 2004)

SUMMARY OF FINDINGS

Transit ridership on RFTA has grown substantially since 2004 despite a 2-year decline during the recession years (2008-2010). At least part of the ridership growth is attributed to the introduction of the VelociRFTA bus rapid transit (BRT) system in September 2013, as evidenced by a 16% jump in ridership just in the last year. Some other trends appear to be a result of the new BRT system including increased mobility in the region (about 11% of VelociRFTA riders did not take the trip before the system was introduced) and increased reliance on park-n-rides to access the bus system (about 25% of winter bus commuters drove to get to the bus in 2014 compared to only 15% in 2004). A longer-term trend appears to be a higher rate of ridership growth in the summer than the winter. Summer ridership as a percent of winter ridership increased from about 75% in 2004 to 90% in 2014 narrowing the gap historically seen between the two seasons. The number of employees with an employer provided bus pass increased from 15% to 18% despite a slight decline in overall bus pass ownership from 31% to 28%. The WE-cycle bike share, which began in 2010 in Aspen, has also added another mobility option for transit users to get to their final destination in Aspen, accounting for about 2% of all "last-mile" trips in the summer.



4 TRANSIT

TRANSIT

since 2004

ANNUAL TRANSIT RIDERSHIP

(3.5k → 4.8k) ↑ 4.0%/yr

PER CAPITA MONTHLY TRANSIT RIDERSHIP

(1.6 → 1.9) ↑ 1.9%/yr

BUS COMMUTERS DRIVING TO THE BUS

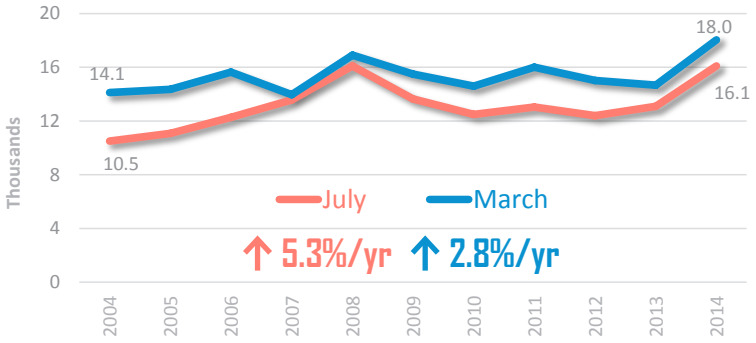
(15% → 25%) ↑ 6.6%/yr

since 2013

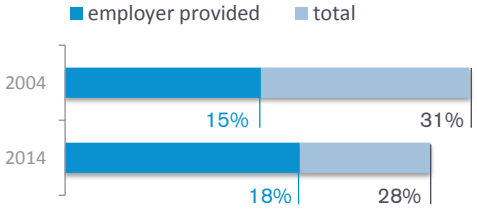
ANNUAL TRANSIT RIDERSHIP

(4.1k → 4.8k) ↑ 16%

average daily transit ridership



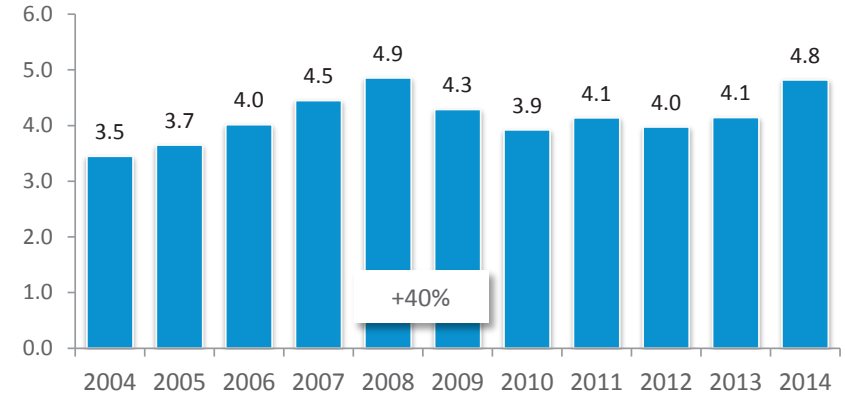
bus pass ownership



last mile
WE-cycle mode share
(from bus to destination)

TRANSIT RIDERSHIP

ANNUAL RIDERSHIP (IN MILLIONS)

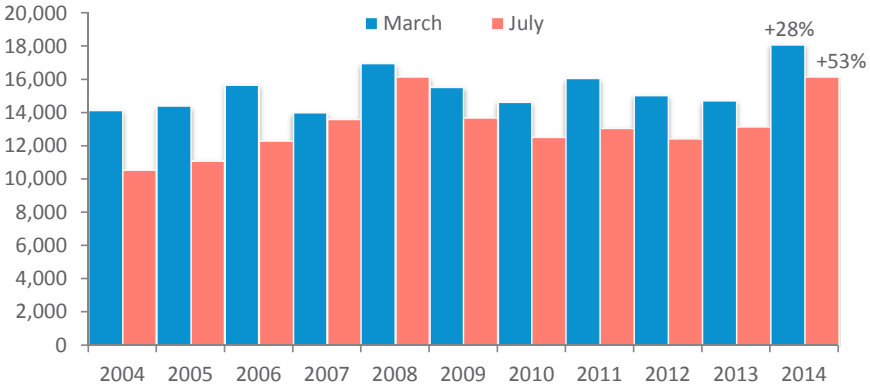


Source: RFTA

Roaring Fork Transportation Authority (RFTA) annual transit ridership:

- Increased rapidly 2004-2008
- Declined 2008-2010 during the recession
- Increased slightly 2010-2013
- Increased rapidly since 2013 reflecting the addition of the VelociRFTA bus rapid transit (BRT) system in September, 2013 and an improving economy

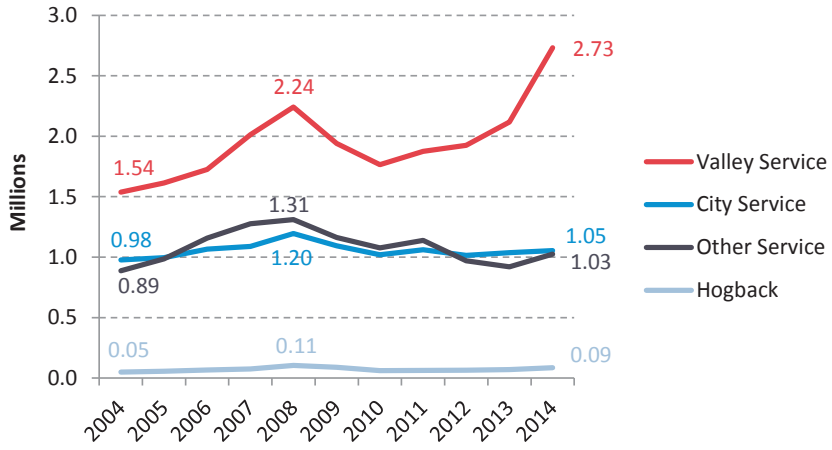
DAILY RIDERSHIP BY MONTH



Source: RFTA

Since 2004 ridership has been growing at a faster rate in the summer than the winter.

ANNUAL RIDERSHIP BY SERVICE (IN MILLIONS)

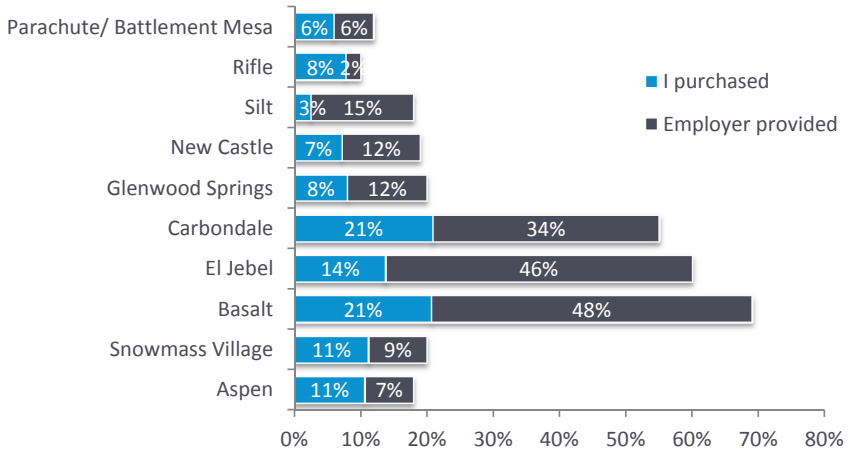


Source: RFTA

- Most of RFTA's ridership growth since 2004 has been on the Valley Service (between Glenwood Springs and Aspen) including a 29% jump just in the last year (the first full operating year of VelociRFTA)
- In 2014 the Hogback route, which operates between Rifle and Glenwood Springs, accounted for less than 2% of system-wide ridership

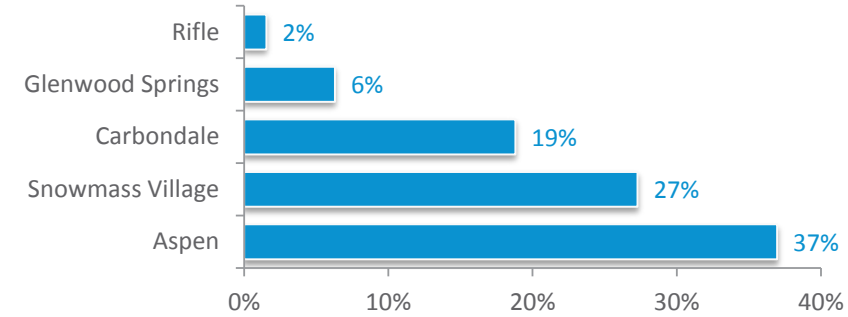
BUS PASS OWNERSHIP

BUS PASS OWNERSHIP BY HOME COMMUNITY



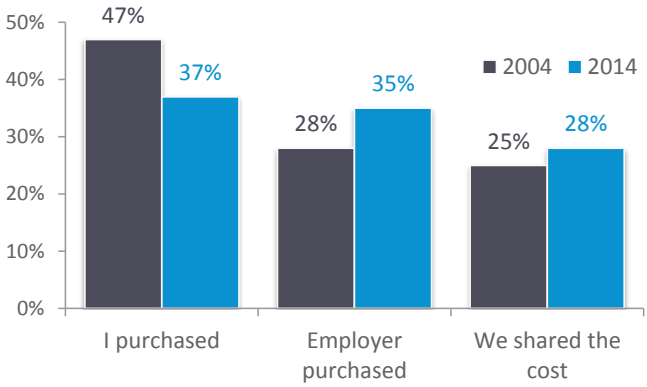
Source: 2014 Employee/Resident Survey

EMPLOYER PROVIDED BUS PASS BY WORK COMMUNITY



Source: 2014 Employee/Resident Survey

WHO PURCHASED YOUR BUS PASS?



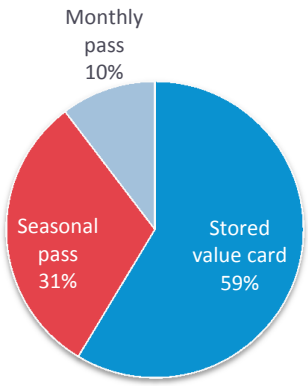
Source: 2014 Employee/Resident Survey

- Bus pass ownership among residents is highest in the central Roaring Fork Valley (Carbondale, El Jebel, Basalt)
- The percentage of employees with an employer provided bus pass increases gradually from down-valley communities (2% of workers working in Rifle) to up-valley communities (37% of workers working in Aspen)
- Bus pass ownership in the region has declined slightly since 2004 (from 31% to 28% of the working population)
- The rate of employer purchased bus passes (partial or full cost) has increased since 2004 (from 53% to 63% of bus passes issued)

Bus Pass Ownership	2004	2014
Own a bus pass	31%	28%
Employer provided bus pass	15%	18%

Source: 2004 Employee Survey, 2014 Employee/ Resident Survey

TYPE OF BUS PASS OWNED



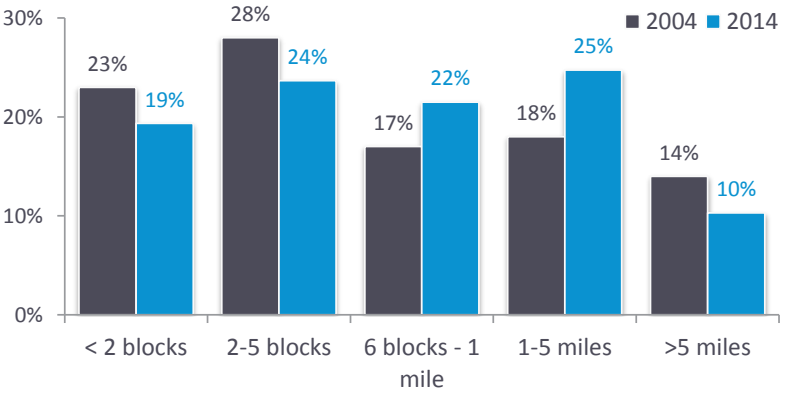
Source: 2014 Employee/Resident Survey

DISTANCE TO BUS STOP

Distance to bus stop	2004	2014
Average distance from home to nearest bus stop (miles)	1.7	1.7
Live within 5 blocks of a bus stop	52%	43%
Live more than a mile from nearest bus stop	29%	34%

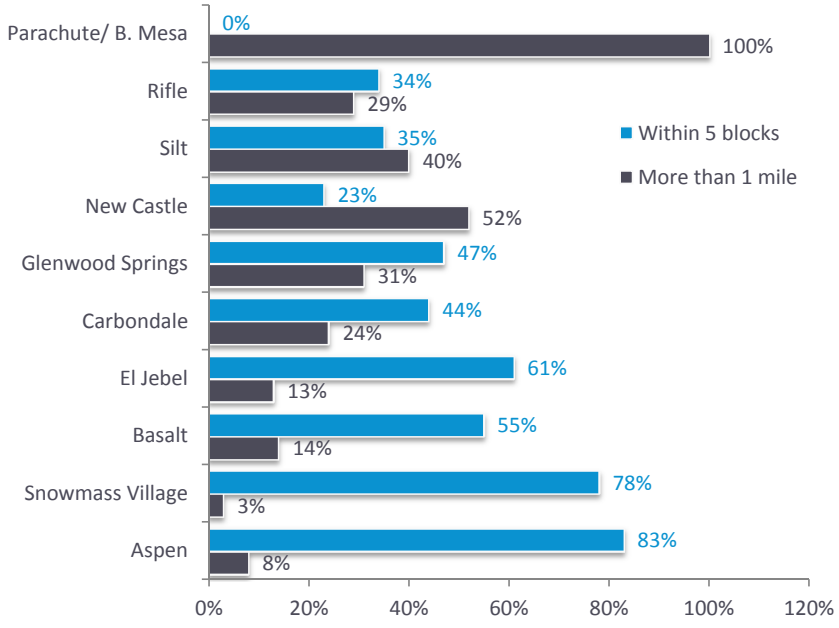
Source: 2004 Employee Survey, 2014 Employee/Resident Survey

DISTANCE FROM HOME TO THE NEAREST BUS STOP



Source: 2004 Employee Survey, 2014 Employee/Resident Survey

DISTANCE TO BUS STOP BY HOME COMMUNITY

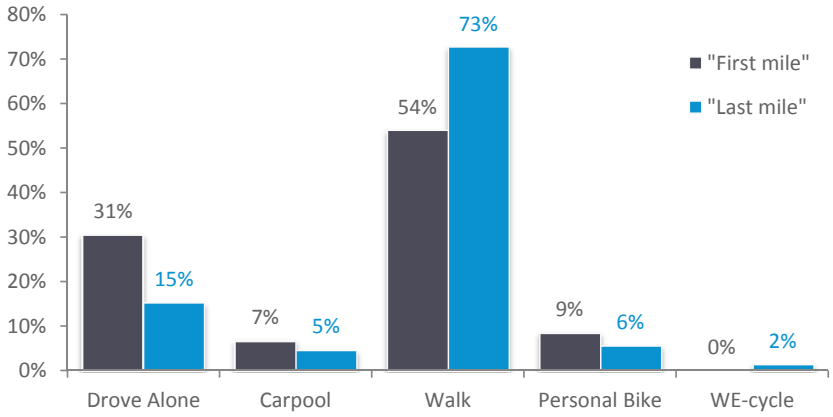


Source: 2014 Employee/Resident Survey

- The average distance to the nearest bus stop is about the same as in 2004 (1.7 miles)
- However, the percent of people living within 5 blocks of a bus stop decreased from 52% in 2004 to 43% in 2014 and the percent of people living 6 blocks to 5 miles from the nearest bus stop increased from 35% to 47%
- The percent of people that live within a short walk from the nearest bus stop (5 blocks) gradually increases from down-valley communities to up-valley communities
- Of the communities with a bus stop, New Castle residents live the farthest from the nearest bus stop and Aspen residents live the closest (only 23% of New Castle residents are within 5 blocks of a bus stop, while 83% if Aspen residents live within 5 blocks of a bus stop)

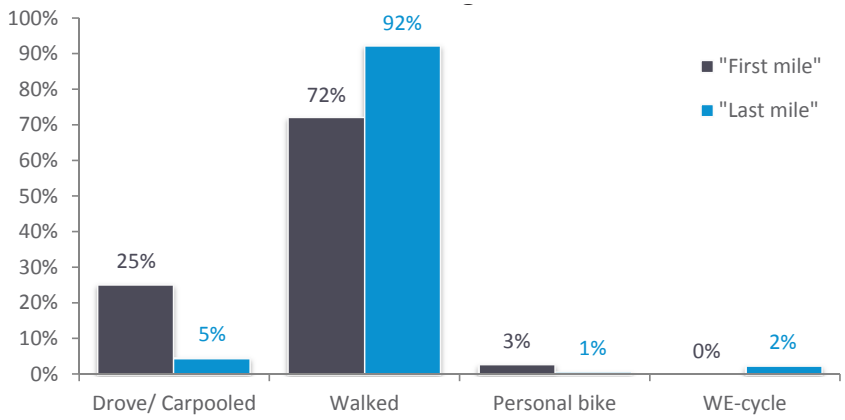
FIRST + LAST MILE MODE SHARE

HOW SUMMER BUS RIDERS GOT TO + FROM THE BUS



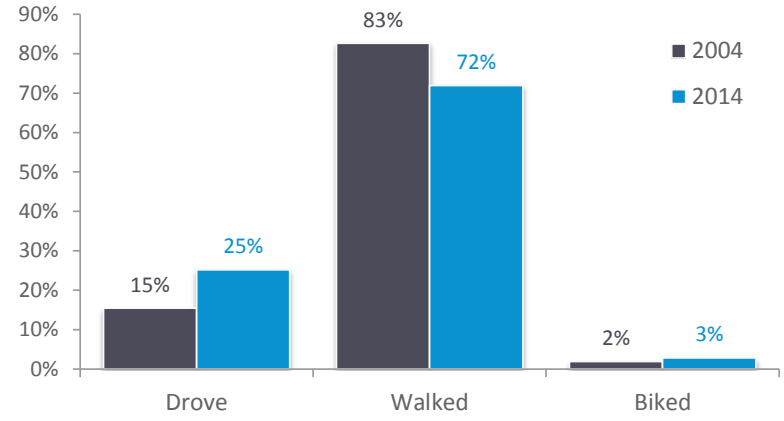
Source: 2014 Employee/Resident Survey

HOW WINTER COMMUTERS GOT TO + FROM THE BUS



Source: 2014 Employee/Resident Survey

HOW WINTER COMMUTERS GOT TO + FROM THE BUS



Source: 2004 Employee Survey, 2014 Employee/Resident Survey

First and Last Mile

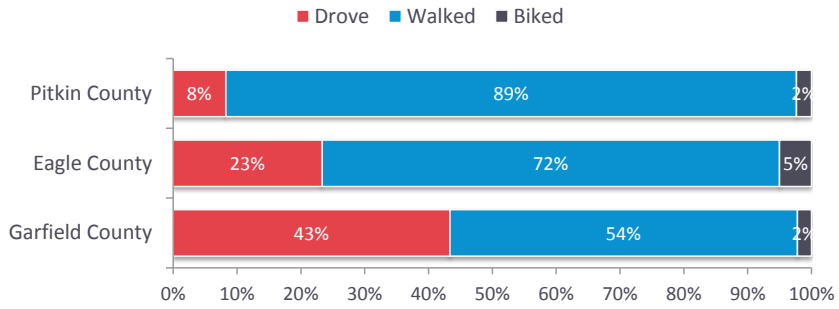
The terms “first mile” and “last mile” refer to the hypothetical “mile” that must be traveled to get to or from the bus. Barriers to the first and last mile (such as a lack of a safe and comfortable environment to walk, a disconnected street network or long distances between one’s home or work and the bus stop) can have negative impacts on bus ridership. RFTA and various communities have implemented strategies to reduce first and last mile barriers including park-n-rides, the WE-cycle bike sharing program in Aspen, circulator buses and bike-on-bus accommodations.

- About 25% of winter bus commuters and 38% of summer bus riders drove or carpooled to the bus stop from their home
- In the summer, 9% of bus riders use a bike to get to the bus and 8% use a bike to get from the bus to their destination including 2% who use WE-cycle in Aspen
- Over 90% of winter bus commuters walk to get from the bus to work
- The percent of winter bus commuters who drove to get to the bus increased from 15% in 2004 to 25% in 2014
- There was a slight increase from 2% to 3% of winter bus commuters who used a bicycle to get to the bus since 2004

Note about the data:
The summer data reflects bus rides on all trips, while the winter data reflects just commute trips. Additionally, an unusually high percentage of summertime bus riders reported driving alone from the bus to their final destination, which may be more a reflection of some survey respondents misunderstanding the question and less a reflection of what is occurring. Lastly, based on the way the survey was worded, the percent of commuters driving to get to the bus in the winter may be underrepresented.

FIRST + LAST MILE MODE SHARE BY HOME OR WORK LOCATION

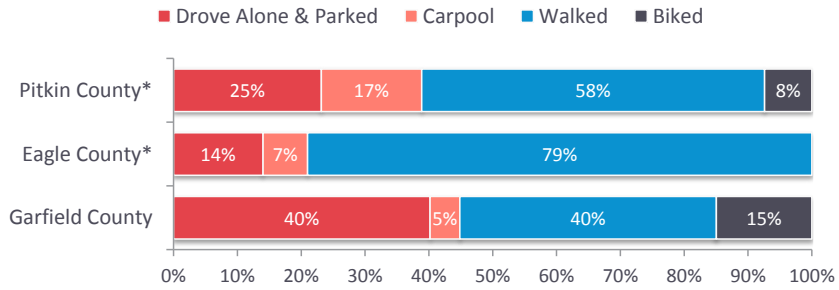
HOW WINTER COMMUTERS GOT TO THE BUS BY HOME LOCATION



Source: 2014 Employee/Resident Survey

- Nearly half of all winter bus commuters who live in Garfield County drive or carpool to the bus compared to only 23% in Eagle County and 8% in Pitkin County
- About 5% of winter bus commuters living in Eagle County bike to the bus, the highest of any county

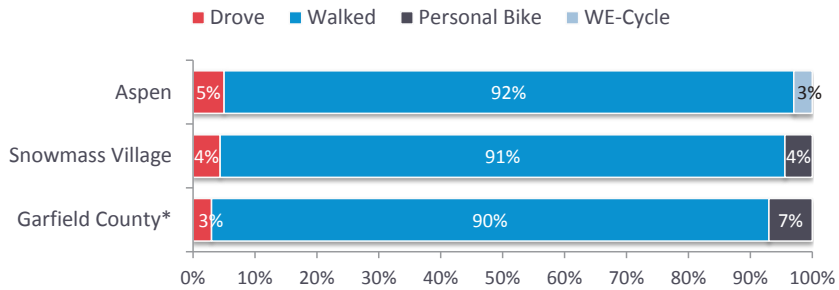
HOW SUMMER BUS RIDERS GOT TO THE BUS BY HOME LOCATION



Source: 2014 Employee/Resident Survey
*Sample size <40

A relatively high percent of summer bus riders who live in Garfield County (Rifle to Carbondale) are bicycling to get to the bus (15%) compared to 8% in Pitkin County.

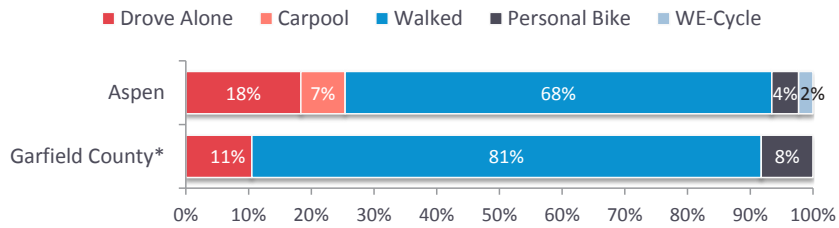
HOW WINTER COMMUTERS GOT FROM THE BUS TO WORK BY WORK LOCATION



Source: 2014 Employee/Resident Survey
*Sample size <40

Most winter commuters walk from the bus to work, but a slightly higher percent of those who work in Garfield County than Pitkin County are using a bike to travel the "last mile" from the bus to work.

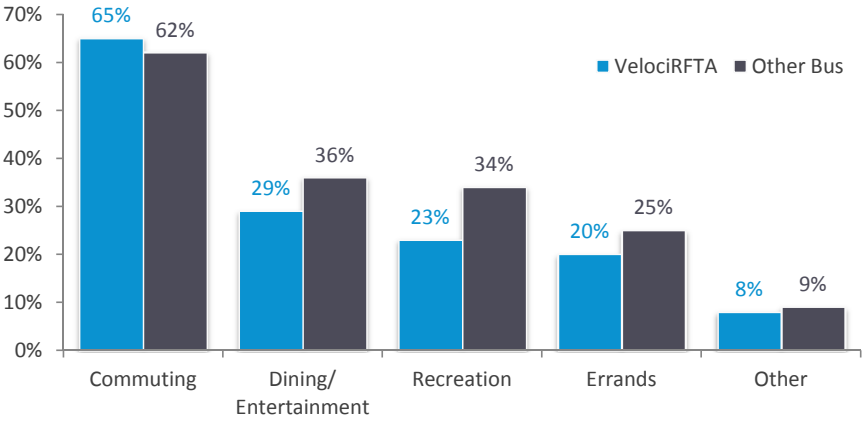
HOW SUMMER BUS RIDERS GOT FROM THE BUS TO DESTINATION BY WORK LOCATION



Source: 2014 Employee/Resident Survey
*Sample size <40

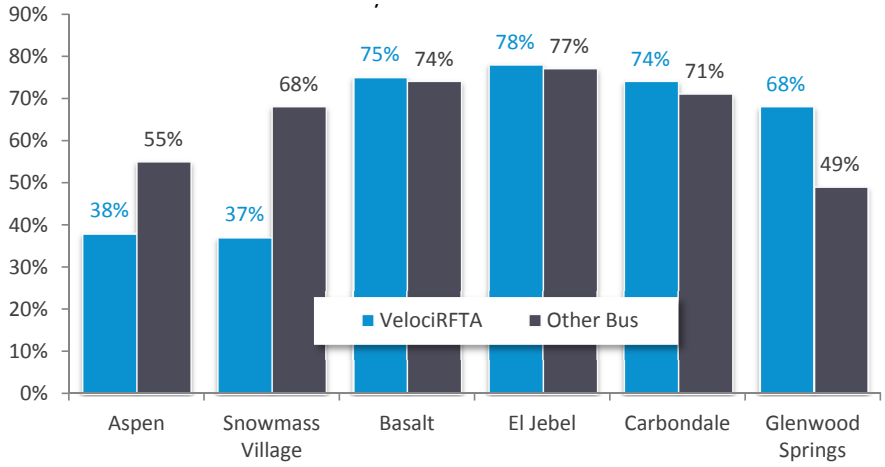
BUS TRIP PURPOSE

HOW PEOPLE ARE USING THE BUS (BY PERCENT OF BUS RIDERS)



Source: 2014 Employee/Resident Survey

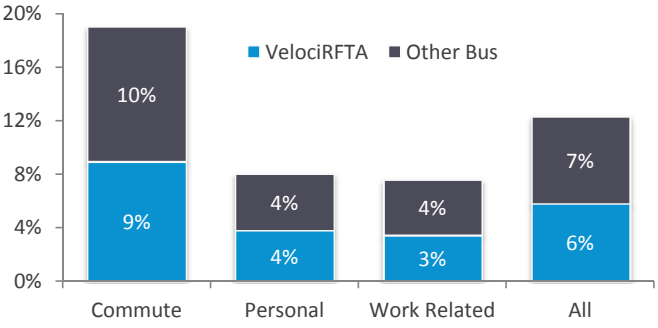
PERCENT OF BUS RIDERS THAT USE THE BUS TO COMMUTE BY HOME LOCATION



Source: 2014 Employee/Resident Survey

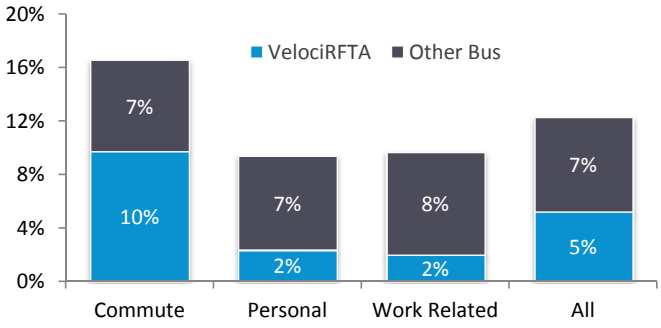
- The majority of bus riders (over 60%) use the bus to commute while less than 40% use the bus for other purposes
- A higher percentage of trips on VelociRFTA are commute trips as compared to RFTA's other bus service
- A much smaller percentage of bus riders (<40%) who live in Aspen and Snowmass are using VelociRFTA to commute than residents living between Glenwood Springs and Basalt (>65%)
- In the summer, most work-related and personal trips were made using traditional bus service, while most commute trips were made using VelociRFTA
- In the winter, ridership for all trip purposes was evenly split between VelociRFTA and other buses

BUS MODE SHARE BY PURPOSE (WINTER)



Source: 2014 Employee/Resident Survey

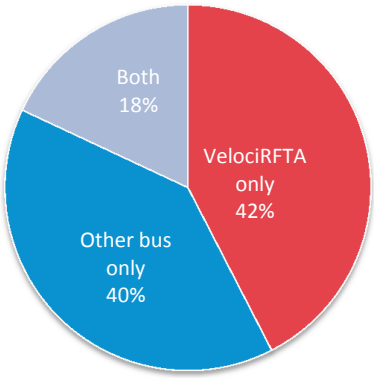
BUS MODE SHARE BY PURPOSE (SUMMER)



Source: 2014 Employee/Resident Survey

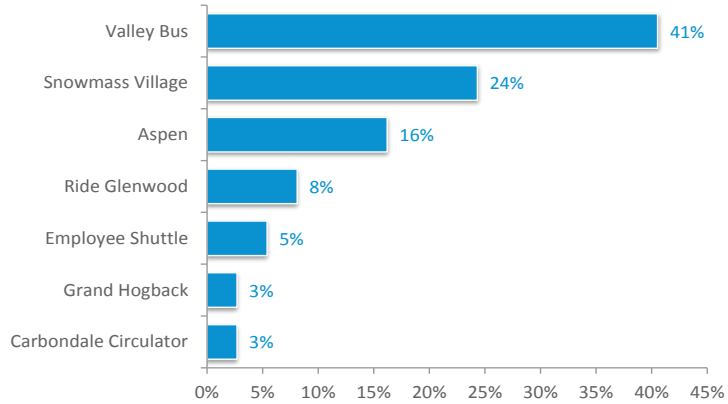
BUS USED

BUS USED FOR TYPICAL COMMUTE



Source: 2014 Employee/Resident Survey
Note: "Other bus" includes all non-VelociRFTA buses (see table below)

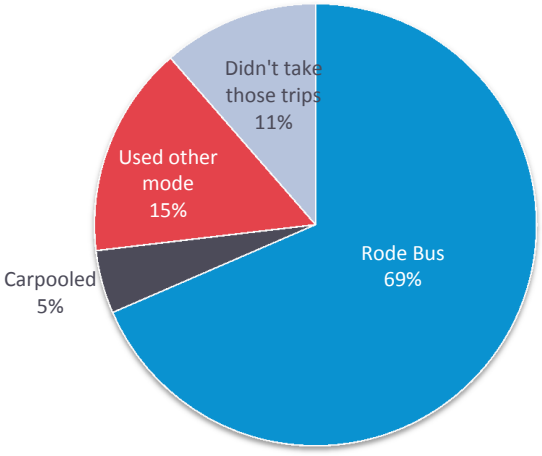
"OTHER" (NON VELOCIRFTA) BUS USED FOR TYPICAL COMMUTE*



About 11% of trips on VelociRFTA were induced trips that people didn't take before the service was initiated.

Source: 2014 Employee/Resident Survey
*Sample size <40

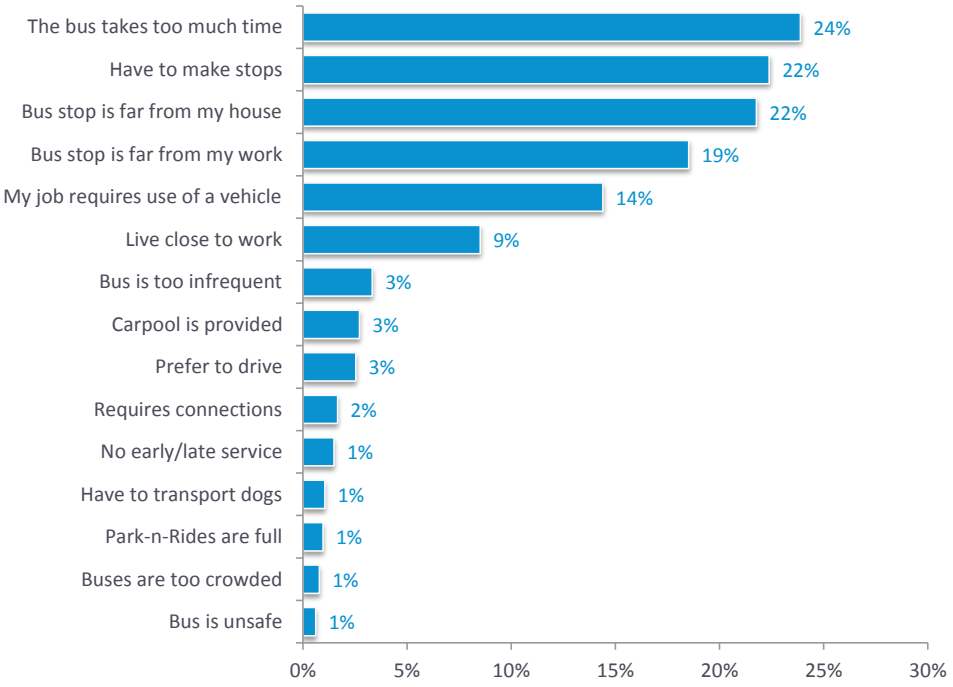
HOW BUS RIDERS FORMERLY TOOK TRIPS NOW TAKEN ON VELOCIRFTA



Source: 2014 Employee/Resident Survey
Note: only includes responses from those who have lived in the region more than a year

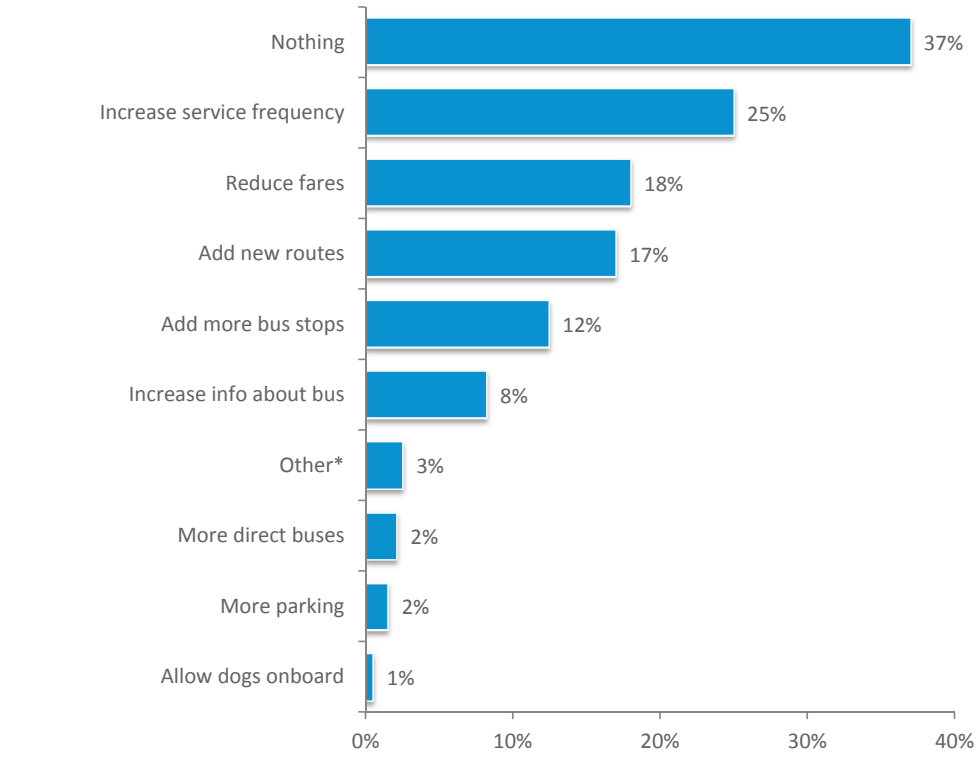
OPINION DATA

WHY DO YOU GENERALLY NOT RIDE THE BUS?



Source: 2014 Employee/Resident Survey

WHAT WOULD ENCOURAGE YOU TO USE THE BUS MORE?



Source: 2014 Employee/Resident Survey
*Other includes make buses free, improve connections, improve bike-on-bus, reduce overcrowding, use friendlier/safer drivers, add WiFi and improve safety

Barriers to riding the bus:

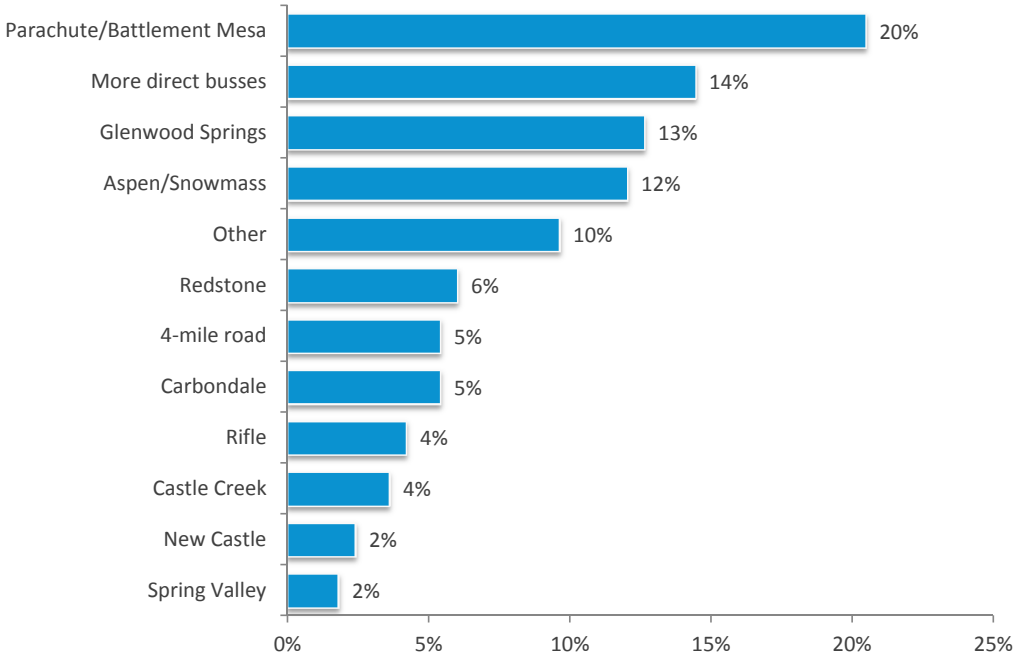
- The biggest barrier reported for why people are not using the bus more was that it takes too much time (24% of people)
- The need to make stops (often for transporting children), and the distance from the nearest bus stop to home and work were also common barriers identified for why people for not using the bus more

How to encourage higher ridership:

- 37% of people said that nothing would encourage them to use the bus more, leading one to infer that 63% would use the bus more with certain improvements
- The most common improvement people cited as a way to increase bus ridership was to increase service frequency (25%)
- Other popular strategies were to reduce fares (18%), add new routes (17%) and add more bus stops along existing routes (12%)

OPINION DATA

WHERE SHOULD NEW ROUTES BE ADDED?



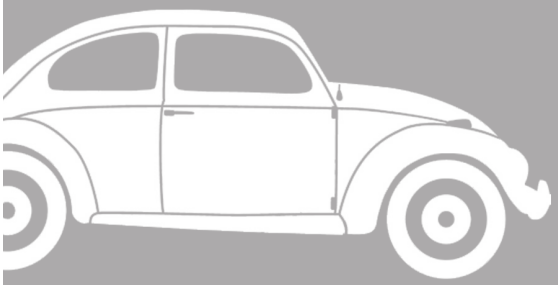
Source: 2014 Employee/Resident Survey

Where to add new routes:

- Of the people who said the addition of new bus routes would encourage them to use the bus more, the most popular suggestion (20%) was to add a route to Parachute and Battlement Mesa (the current nearest bus service is 17 miles away in Rifle)
- Other common suggestions for new routes included the addition of more direct buses (14%) and new routes within Glenwood Springs (13%) and Aspen/ Snowmass (12%)

SUMMARY OF FINDINGS

Traffic has grown modestly since 2004 and traffic volumes in the region are still generally lower than they were in 2008. Vehicle miles of travel on the state highways has increased an average of 0.3% per year since 2004, much less than population growth (1.8% per year) or job growth (1.6% per year). Nearly all of the VMT growth has occurred in Pitkin County and during the summer. Similar to national trends, VMT per capita has declined every year since hitting a peak in 2008. The slow (or no growth down-valley) in traffic is a reflection of both local and national trends, including (but not limited to) slow job growth, an increase in bus ridership, an increase in telecommuting, and an aging baby-boomer population that is traveling less. The percent of workers who can park for free at work, however, increased from 81% in 2004 to 92% in 2014, despite data showing that workers who must pay to park at work are about 5 times more likely to commute by bus than workers with free parking.



5 VEHICLE TRIPS

VEHICLE TRIPS

2004 to 2013

DAILY VMT*
(2.23k → 2.28k) ↑ 0.3%/yr

PER CAPITA DAILY VMT*
(35.7 → 31.0) ↓ 0.5%/yr

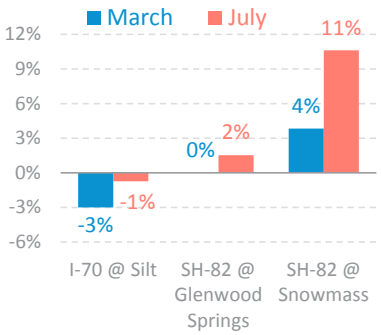
2008 to 2013

DAILY VMT*
(2.67k → 2.28k) ↓ 2.9%/yr

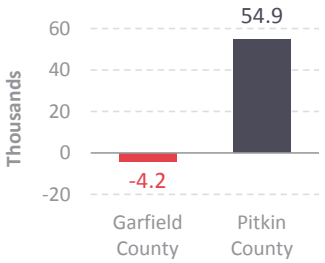
PER CAPITA DAILY VMT*
(38.7 → 31.0) ↓ 4.0%/yr

*VMT on state highways

change in traffic volume since 2004



VMT growth since 2004
(average daily on state highways)



2004

workers who can park for free at work

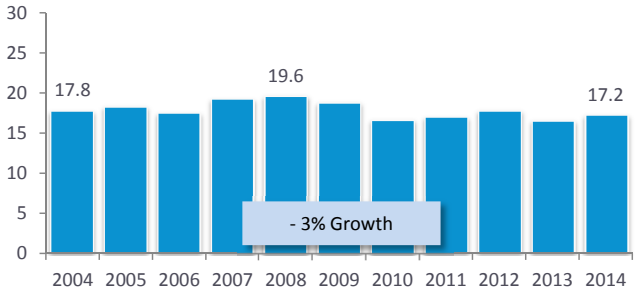
2014

TRAFFIC TRENDS

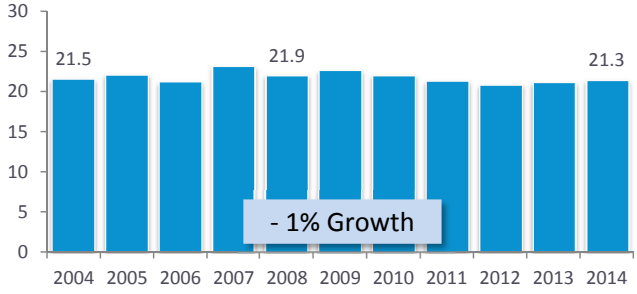
- CDOT maintains three permanent traffic count stations in the study area that record monthly data:
  - I-70 at Silt
  - SH-82 at Glenwood Springs
  - SH-82 at Snowmass
- Traffic volumes at all three permanent count locations were lower in 2014 than they were in 2008 when traffic peaked
- Since 2004 highway traffic has been growing faster up-valley than down-valley (traffic has actually decreased along I-70 west of Glenwood Springs)
- Traffic in the region has been growing faster in the summer than the winter

Source for all data: CDOT

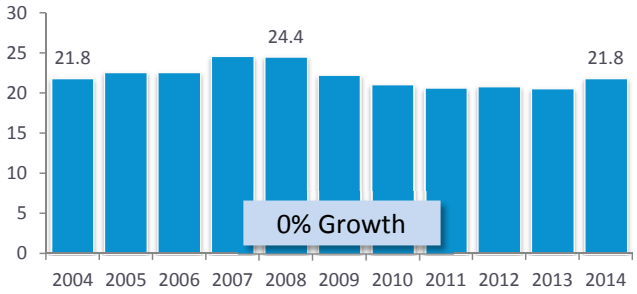
I-70 AT SILT IN **MARCH**
(AVERAGE DAILY TRAFFIC IN THOUSANDS)



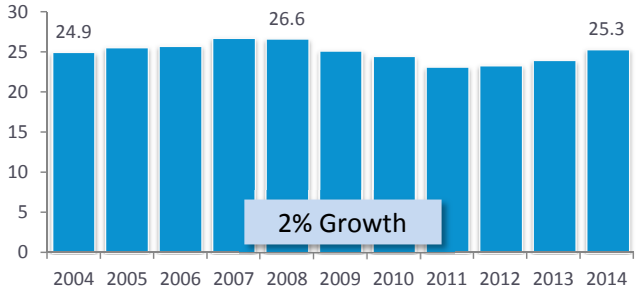
I-70 AT SILT IN **JULY**
(AVERAGE DAILY TRAFFIC IN THOUSANDS)



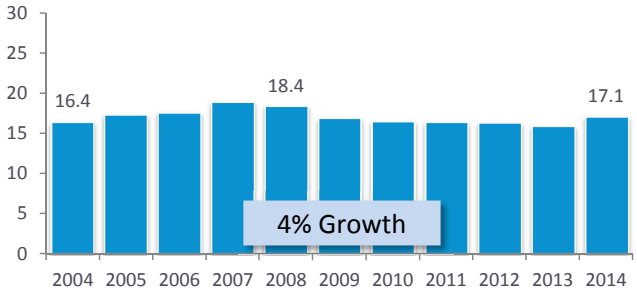
SH-82 AT GLENWOOD SPRINGS IN **MARCH**
(AVERAGE DAILY TRAFFIC IN THOUSANDS)



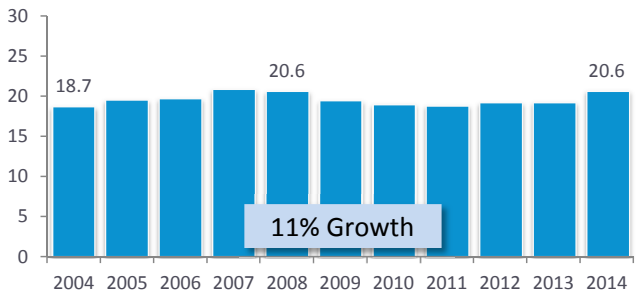
SH-82 AT GLENWOOD SPRINGS IN **JULY**
(AVERAGE DAILY TRAFFIC IN THOUSANDS)



SH-82 AT SNOWMASS IN **MARCH**
(AVERAGE DAILY TRAFFIC IN THOUSANDS)

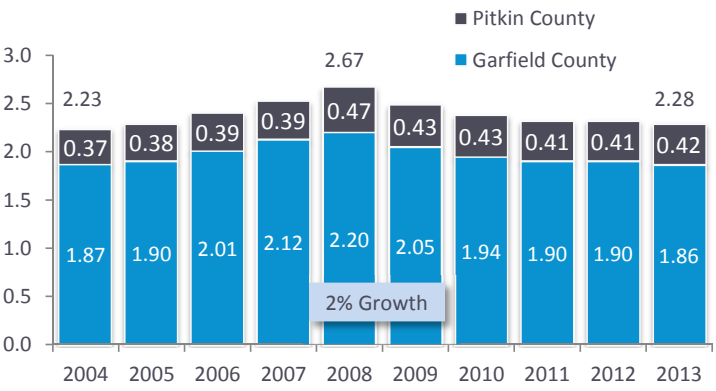


SH-82 AT SNOWMASS IN **JULY**
(AVERAGE DAILY TRAFFIC IN THOUSANDS)



VMT TRENDS

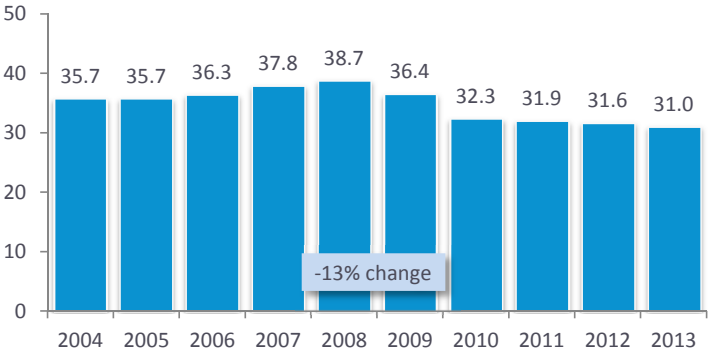
AVERAGE DAILY STATE HIGHWAY VMT (IN MILLIONS)



Source: CDOT

- Since reaching a peak in 2008, VMT on the state highways has steadily declined an average of -2.9% per year and VMT per capita has declined even faster at -4.0% per year
- Since 2004, VMT has grown 15% in Pitkin County and 0% in Garfield County
- Total VMT is 2% higher than in 2004, but VMT per capita is 13% lower

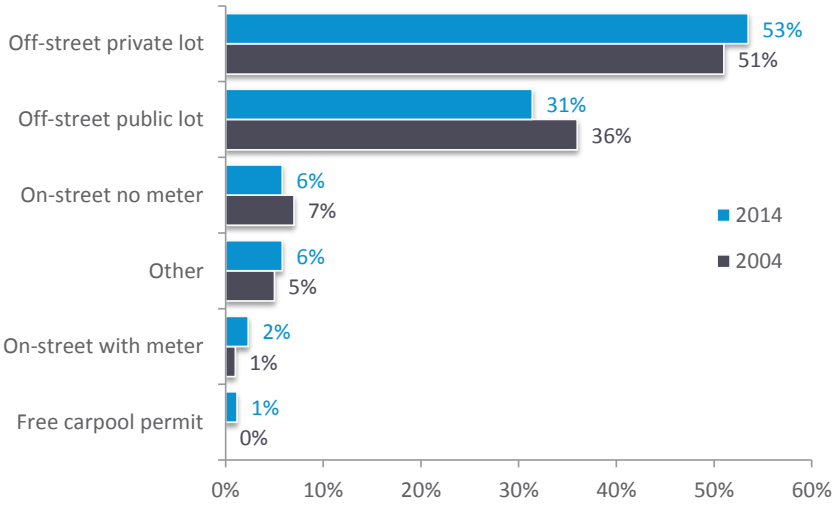
DAILY VMT PER CAPITA (ON STATE HIGHWAYS)



Source: CDOT; U.S. Census Bureau

PARKING

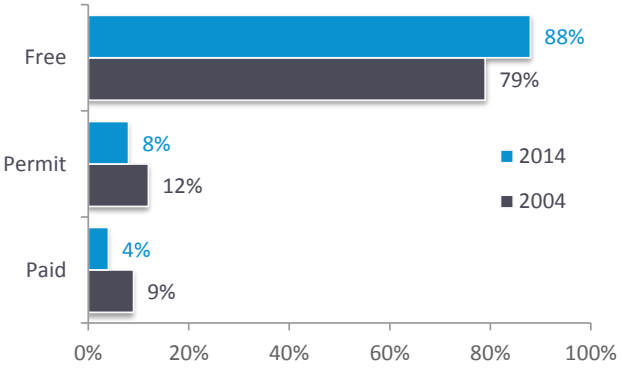
USUAL PARKING SPOT AT WORK



Source: 2004 Employee Survey, 2014 Employee/Resident Survey

- The percent of workers who park for free at work increased from 81% to 92% 2004-2014
- Of the 84% of employees who park in an off-street lot, 88% park in a free facility, an increase from 79% in 2004
- Of the 10% of employees who park in an off-street paid or permit lot, 49% are subsidized (partially or fully) for the cost of parking by their employer, an increase from 31% in 2004
- The percent of employees parking on-street at a meter increased from 1% in 2004 to 2% in 2014

TYPE OF OFF-STREET PARKING

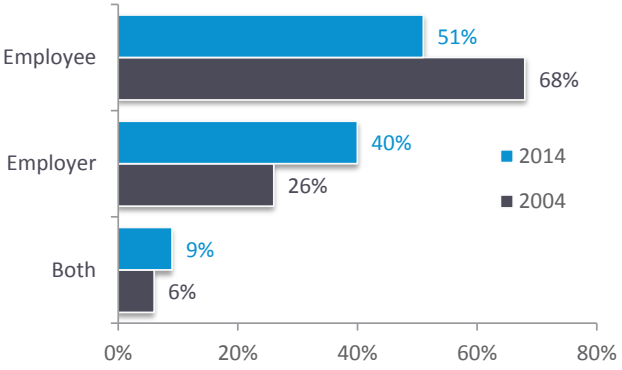


Source: 2004 Employee Survey, 2014 Employee/Resident Survey

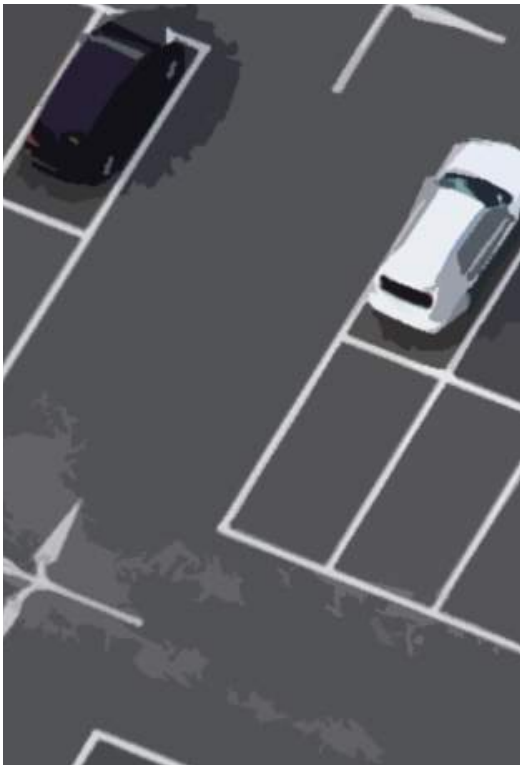
Free Parking	2004	2014
Workers with free parking at work	81%	92%

Source: 2004 Employee Survey, 2014 Employee/Resident Survey

WHO PAYS FOR PARKING IN PAID/PERMIT LOTS



Source: 2004 Employee Survey, 2014 Employee/Resident Survey

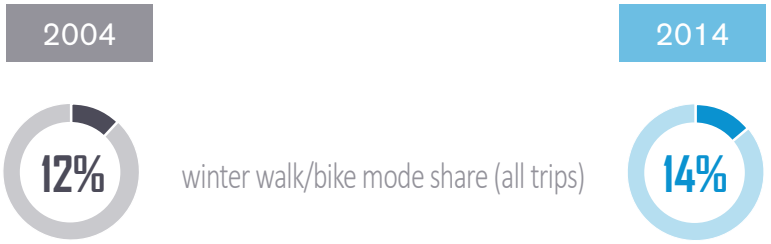


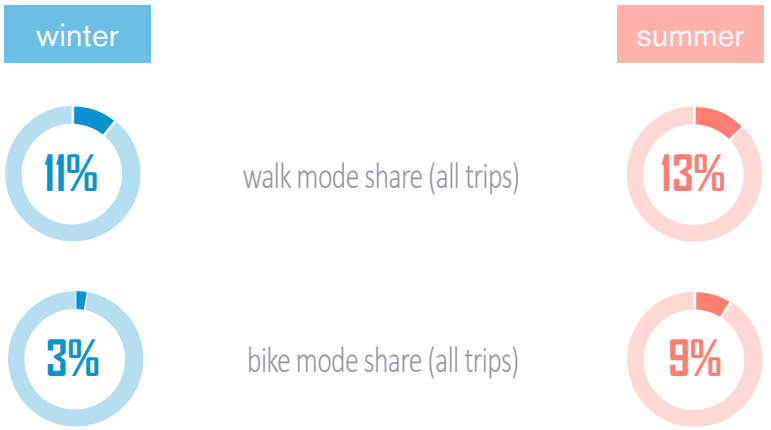
SUMMARY OF FINDINGS

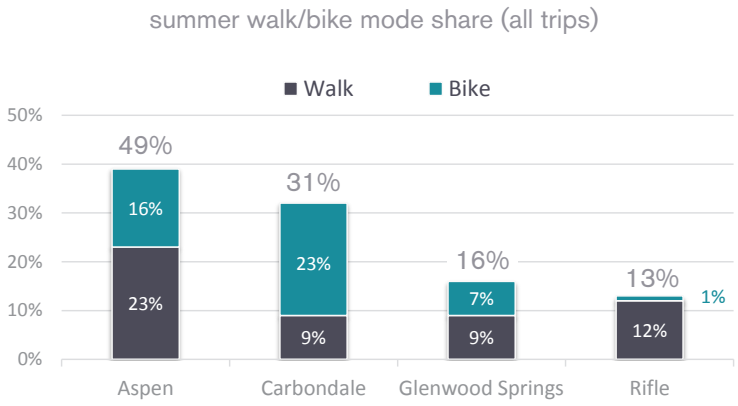
The winter walk and bike mode share increased only slightly since 2004 from 12% to 14%. People walk and bike more in the winter than the summer, although the amount that people walk does not appear to be as affected by the season as much as biking. For example, the walk mode share (among all trips) is only slightly higher in the summer (13%) than the winter (11%), while the bike mode share is about 3 times higher in the summer (9%) than the winter (3%). The exception to this trend is among commute trips, in which case the walk mode share is about twice as high in the summer (9%) as the winter (5%). The walk and bike mode share also varies widely among communities. Aspen has the highest summer walk/bike mode share of all the communities surveyed, 49%, which is about twice the average for the region (22%). Other communities with a high walk/bike mode share among all trips in the summer include Carbondale (33%), Basalt (26%) and Glenwood Springs (22%).

6 WALKING + BIKING

WALKING + BIKING

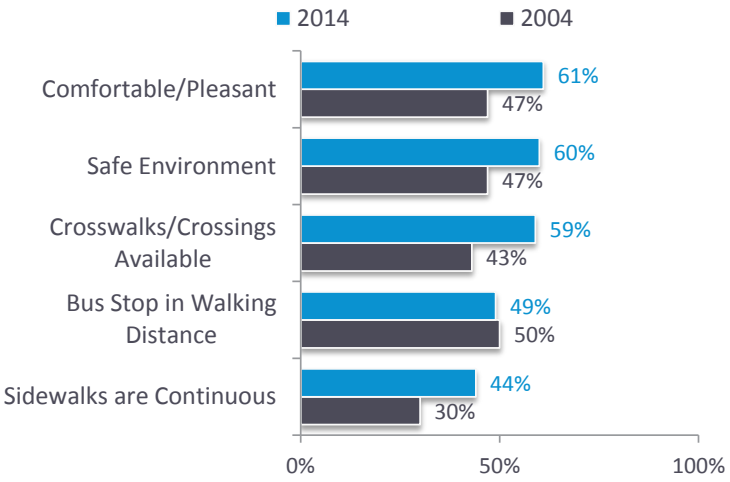






WALKING IN YOUR COMMUNITY

WALKING IN YOUR COMMUNITY (AGREE THAT . . .)

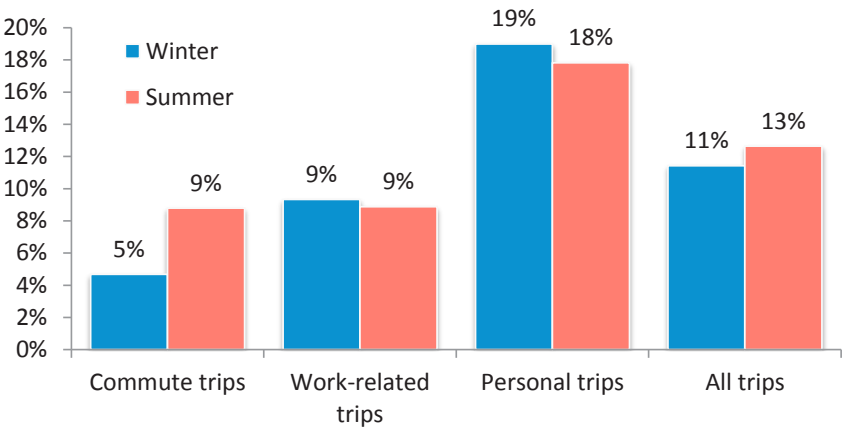


Source: 2004 Employee Survey, 2014 Employee/Resident Survey

- The percent of respondents that agree it's comfortable/pleasant to walk, its safe to walk, that sidewalks are continuous and that crosswalks/crossings are available in one's community has increased significantly since 2004
- The percent of respondents that agree that a bus stop is within walking distance is about the same as 2004 (49%)
- Despite the increase since 2004, less than 50% of respondents agree that sidewalks are continuous in their community, the lowest response of any question

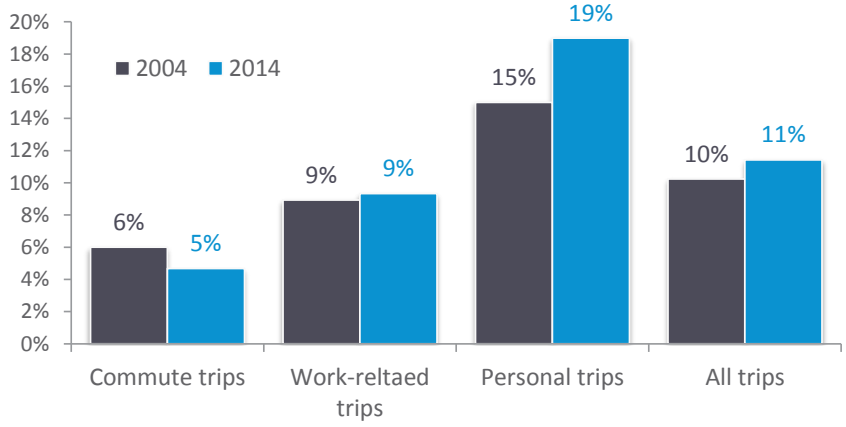
WALK MODE SHARE

WALK MODE SHARE BY SEASON



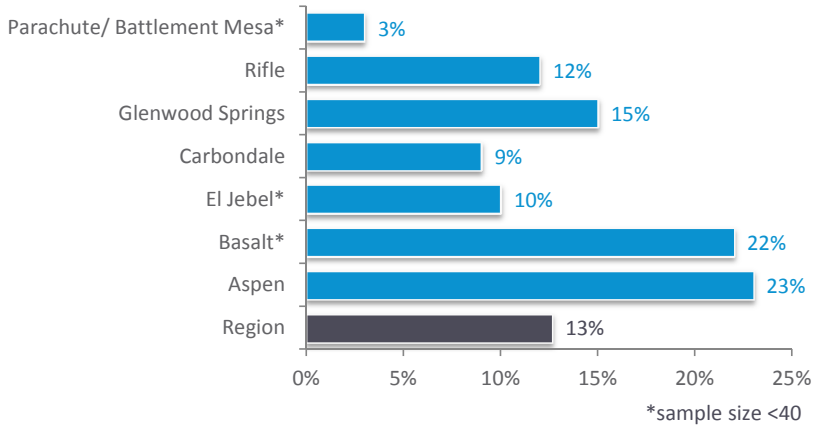
Source: 2014 Employee/Resident Survey

WINTER WALK MODE SHIFT



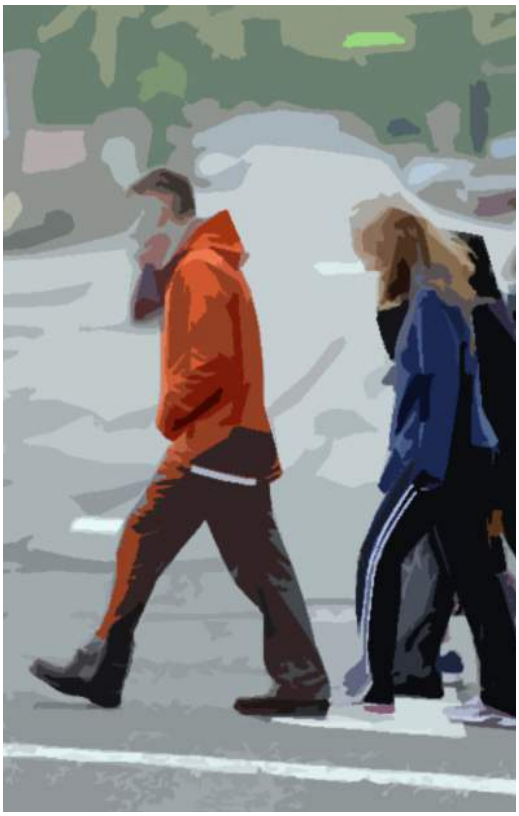
Source: 2004 Employee Survey, 2014 Employee/Resident Survey

SUMMER WALK MODE SHARE (ALL TRIPS)



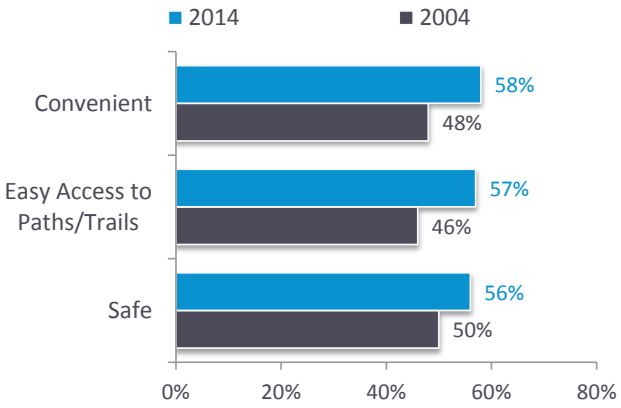
Source: 2014 Employee/Resident Survey

- The walk mode share varies very little between the summer and the winter for all trip purposes except commute trips (higher commute walk mode share in the summer)
- The walk mode share for personal trips is about twice as high as commute and work-related trips
- The percent of winter commute trips made by walking decreased slightly since 2004 (from 6% to 5%), but the percent of winter personal trips made by walking increased (from 15% to 19%)
- The summer walk mode share is highest in Aspen and Basalt and lowest in Parachute/Battlement Mesa.



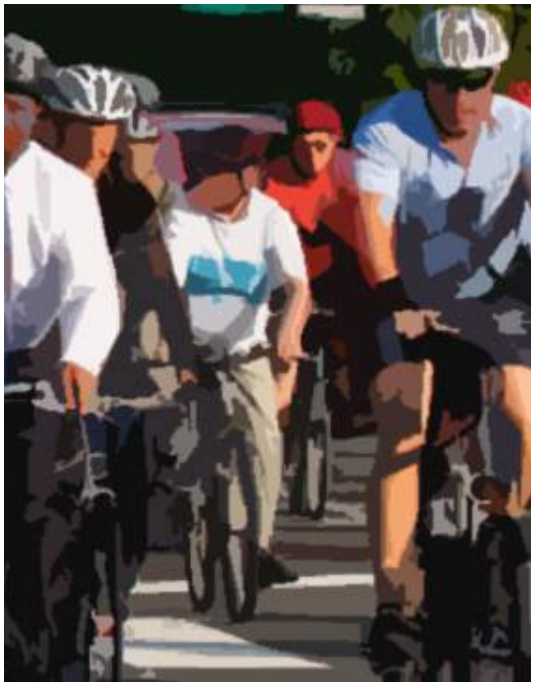
BIKING IN YOUR COMMUNITY

BIKING IN YOUR COMMUNITY (AGREE THAT . . .)



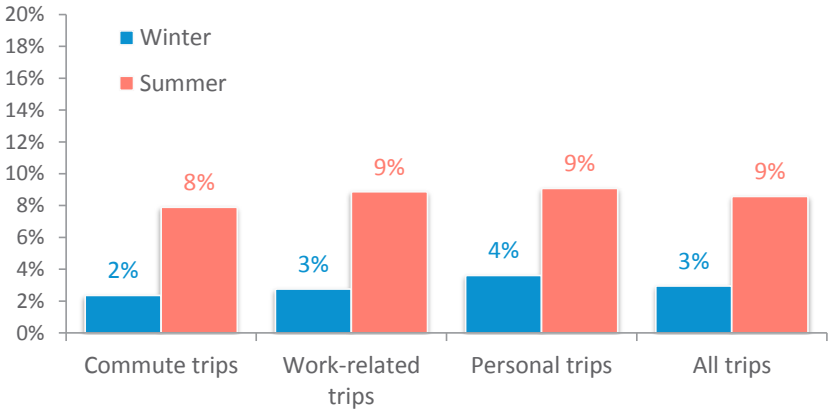
Source: 2004 Employee Survey, 2014 Employee/Resident Survey

In 2014 more people agreed than did in 2004 that it's convenient to bike, that access to bike paths/trails is easy and that biking is safe in their community.



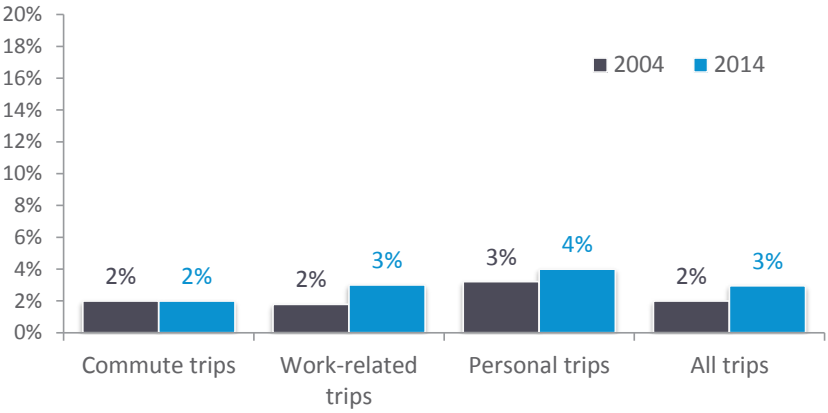
BIKE MODE SHARE

BIKE MODE SHARE BY SEASON



Source: 2014 Employee/Resident Survey

WINTER BIKE MODE SHIFT

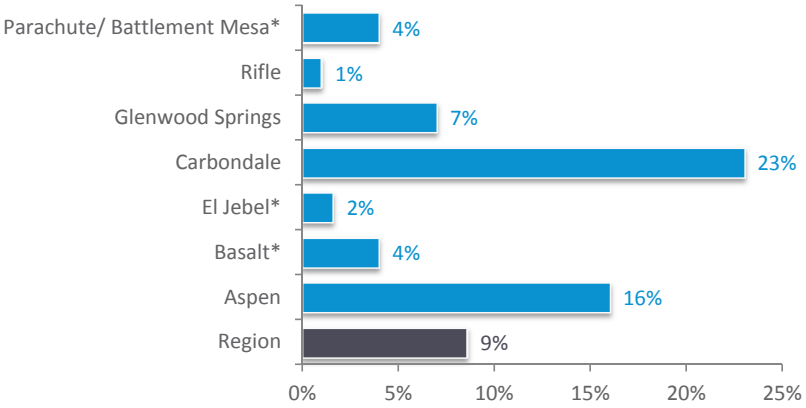


Source: 2004 Employee Survey, 2014 Employee/Resident Survey

- The bike mode share is about the same regardless of the trip purpose and is about three times higher in the summer (9%) than the winter (3%)
- The winter bike mode share increased slightly for all trip purposes 2004-2014 (from 2% to 3%)

BIKE MODE SHARE

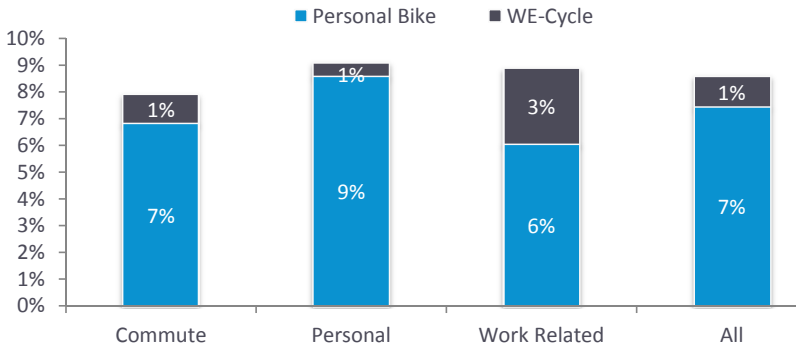
SUMMER BIKE MODE SHARE (ALL TRIPS)



Source: 2014 Employee/Resident Survey
*Sample size <40

- Carbondale had the highest summer bike mode share of all trips (23%) and Rifle (1%) and El Jebel (2%) had the lowest
- Summer mode share of the WE-cycle bike share in Aspen was highest for work-related trips (3%) and lowest for personal trips (1%)

SUMMER BICYCLE MODE SHARE BY TRIP PURPOSE



Source: 2014 Employee/Resident Survey

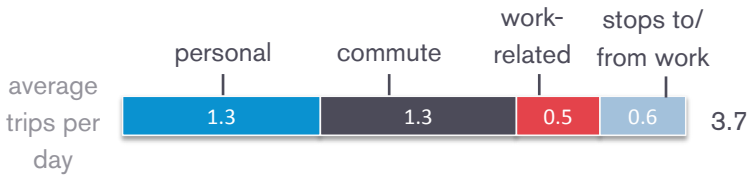
SUMMARY OF FINDINGS

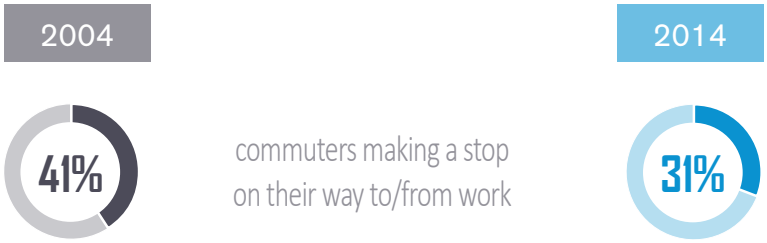
This section of the report describes data for all trips made in the study area. The data is organized into three trips types: commute trips, which are trips made to/from work, work-related trips, which are trips made during work by employees for business purposes, and personal trips, which cover all other trips that are not commute or work related trips. In 2014, commute trips accounted for about 41% of all trips (see the chapter on commuting for additional data specific to commute trips). Personal trips accounted for another 41% and work-related trips accounted for the remaining 18% of trips. Despite growing transit ridership (see the Transit Chapter) and a high walk/bike mode share particularly in the summer, the predominant mode of travel in the region regardless of trip purpose or season was still by single-occupant vehicle. However, a much higher percentage of people use transit, walking and biking to travel in the region than the national average. The non-driving mode share for the region is 34% in the summer and 26% in the winter compared to a national average of about 16%. Single-occupant vehicle mode share (as a percentage of all trips) is higher in the winter (59%) than the summer (48%), due primarily to the higher bike mode share in the summer.

7 ALL TRIPS

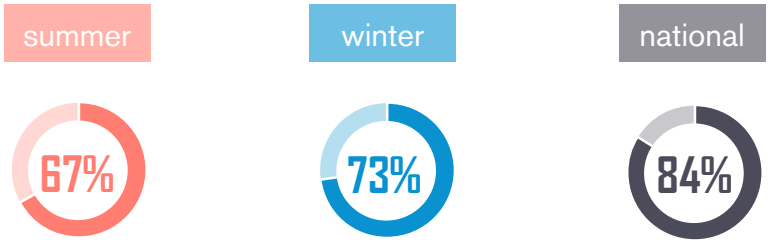
ALL TRIPS

50 trip characteristics
50 mode share





drive mode share (all trips)



TRIP CHARACTERISTICS

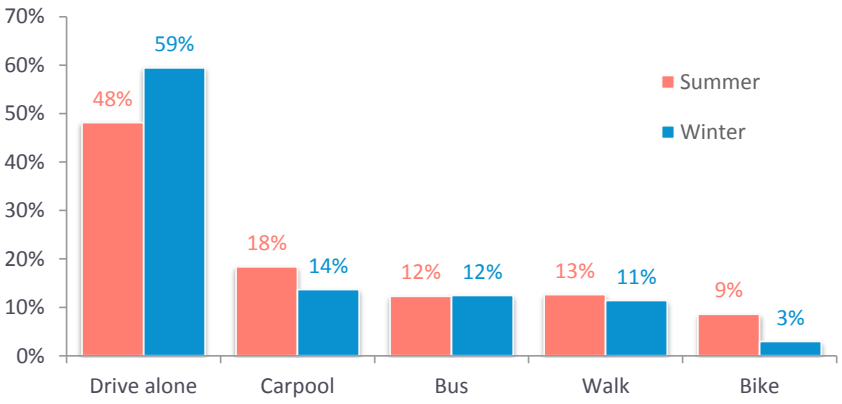
Distance to bus stop	2004	2014
Percent commuters that stop to/from work	41%	31%
Average number of stops to/from work	0.7	0.6
Average daily personal trips	1.3	1.3
Average daily work-related trips	0.6	0.5
Average daily commute trips	no data	1.3
Average daily trips (total)	no data	3.7

Source: 2004 Employee Survey, 2014 Employee/Resident Survey
Note: Average daily commute trips is based only on the summer resident survey

- The percentage of commuters making a stop on their way to or from work decreased from 41% to 31% 2004-2014
- The average number of daily trips made per person in 2014 was 3.7, 41% were commute trips, 41% were personal trips and 18% were work-related trips

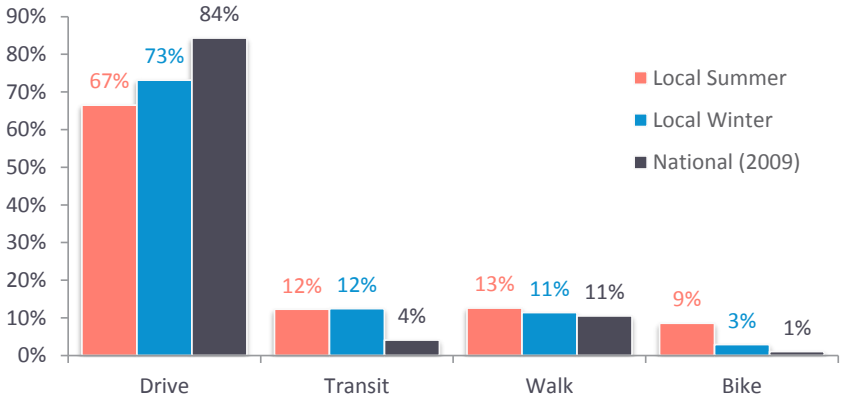
MODE SHARE

2014 MODE SHARE (ALL TRIPS)



Source: 2014 Employee/Resident Survey

MODE SHARE (ALL TRIPS) COMPARED TO NATIONAL AVERAGE

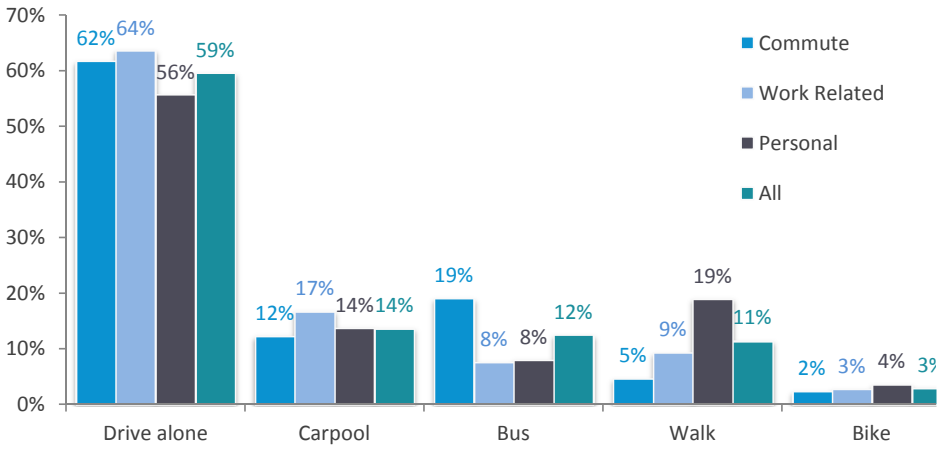


Source: 2014 Employee/Resident Survey, 2009 National Household Travel Survey (NHTS)
Note: Certain trips categorized as "other" in the published NHTS Summary Report were assigned to drive or transit

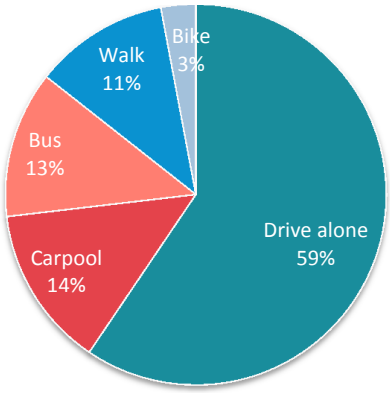
- The SOV (single-occupant vehicle) mode share is much lower in the summer (48%) than the winter (59%) with the bulk of the difference caused by a higher bike mode share in the summer
- Despite increased use of non-driving modes in the summer and since 2004 more trips are still made by driving alone (regardless of the season or trip purpose) than any other travel mode
- Compared to the national average, residents in the region tend drive less and use transit and bicycle more

MODE SHARE

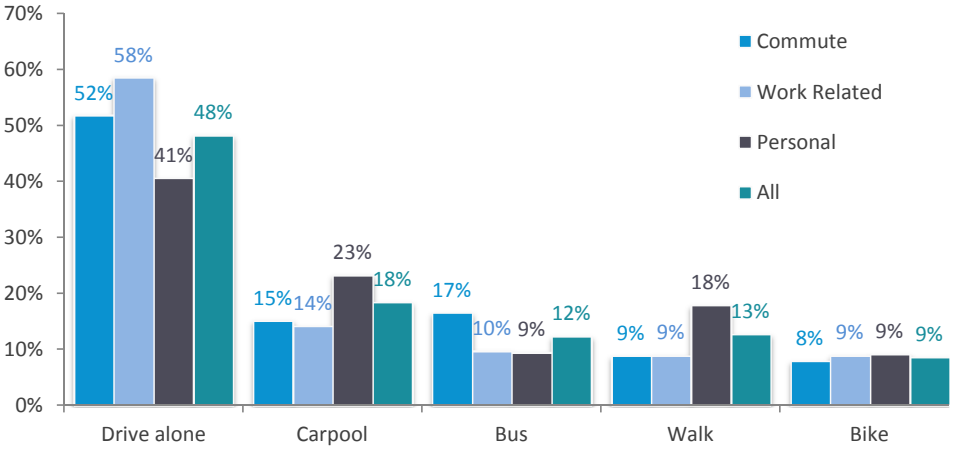
WINTER MODE SHARE BY TRIP PURPOSE



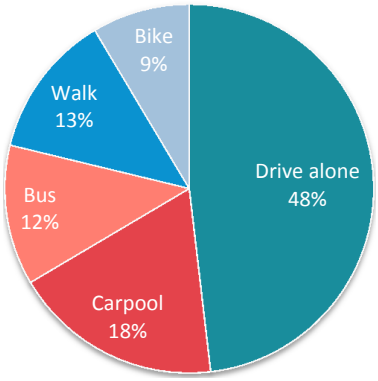
WINTER MODE SHARE



SUMMER MODE SHARE BY TRIP PURPOSE



SUMMER MODE SHARE



SUMMARY OF FINDINGS

Since 2004 employers reported a 50% increase in the percent of employees commuting by bus from 10% to 15%. The number of companies that encourage and support telecommuting doubled from 15% to 30%. The majority of companies (85%) continue to offer free parking to some or all of their employees and there was a slight increase in the percent of employers that offer free or subsidized bus passes to employees (from 19% to 21%). Companies reported a higher percentage of seasonal employees in the summer (20%) than the winter (14%), which is a reversal from 2004 when 29% of winter employees were reported as seasonal as compared to 19% in the summer. Companies are reporting an increase in the percentage of their employees that are Spanish speaking from 11% to 19%. The percent of companies offering non-driving commute incentives to employees is about the same (29%), but those companies are offering more incentives than before. The two most common improvements suggested by employers for how VelociRFTA could better serve employee needs are: improve service to Rifle and reduce bus pass pricing.

8 EMPLOYER SURVEY RESULTS

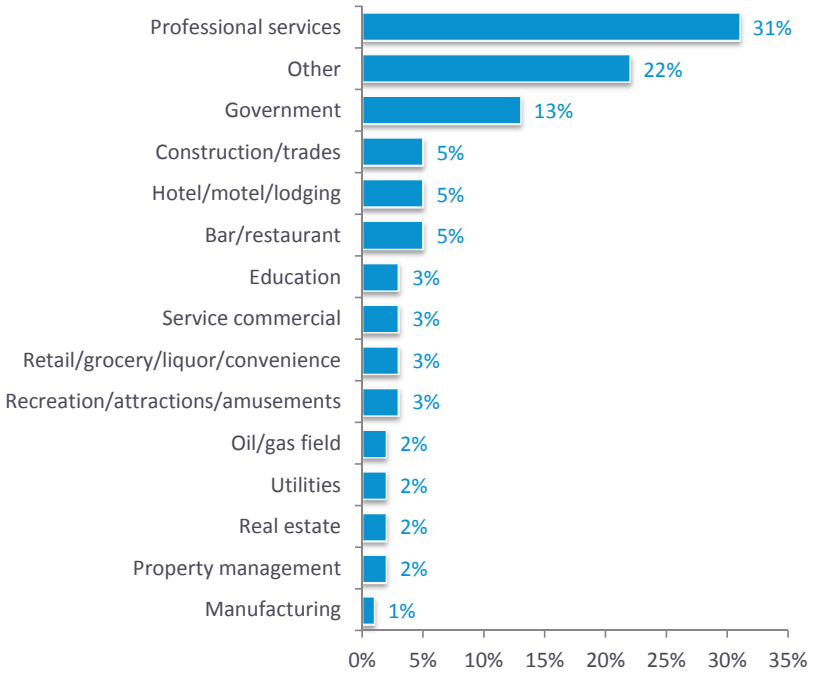
EMPLOYER SURVEY RESULTS

SURVEY SAMPLE

Employers Survey Sample	2004	2014
Employers Surveyed	123	110
Winter employees represented	12,100	5,400
Summer employees represented	6,300	5,600

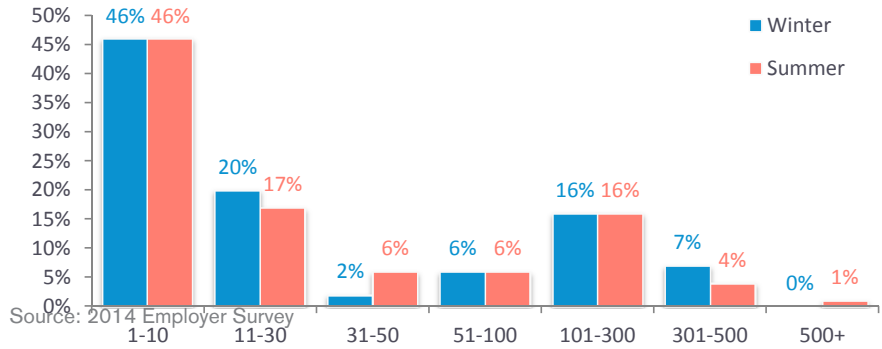
Source: 2014 Employer Survey
Note: The sizable decline in winter employees represented between 2004 and 2014 is likely attributable to the lack of participation of Aspen Ski Co. in the 2014 employer survey. However, it should also be noted that Aspen Ski Co. employees did participate in the 2014 employee survey (data presented in Chapters 2-7).

BUSINESSES SURVEYED



Source: 2014 Employer Survey

SIZE OF COMPANIES SURVEYED (NUMBER OF EMPLOYEES)

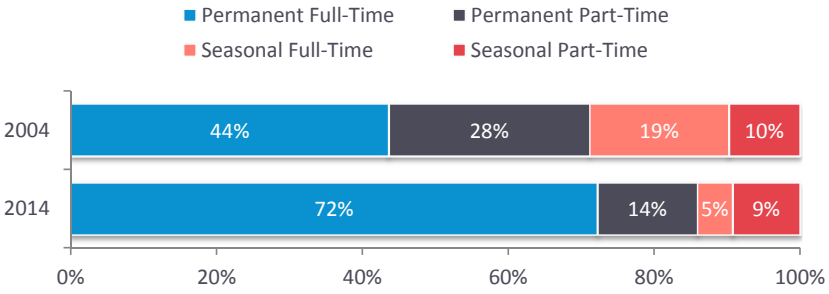


Source: 2014 Employer Survey

Nearly half the employers surveyed were small companies with 10 or fewer employees and about 23% of companies surveyed employed 100 or more people in the winter (21% in the summer).

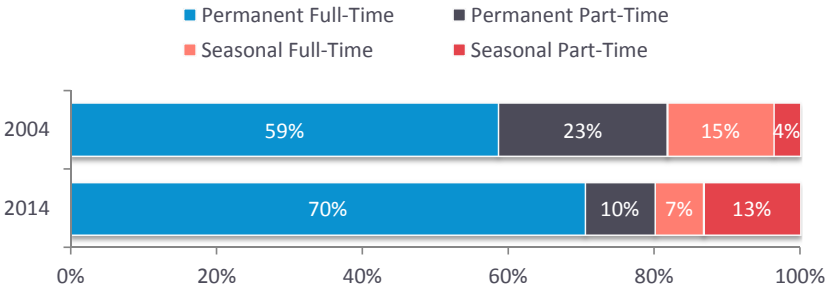
WORKFORCE

REPORTED WINTER EMPLOYEE WORKFORCE



Source: 2004 Employer Survey, 2014 Employer Survey
Note: This data is likely affected by the participation of Aspen Ski Co. in the 2004 employer survey, but not the 2014 survey.

REPORTED SUMMER EMPLOYEE WORKFORCE



Source: 2004 Employer Survey, 2014 Employer Survey

- Employers reported having a higher percentage of winter full-time employees in 2014 (77%) than 2014 (63%) and a higher percent of year-round employees in 2014 (86%) than in 2004 (72%)
- Employers reported having a larger percentage of seasonal workers in the summer (20%) than the winter (14%) in 2014
- The average percentage of the workforce who is Spanish speaking nearly doubled since 2004 (from 11% reported in 2004 to 19% in 2014)

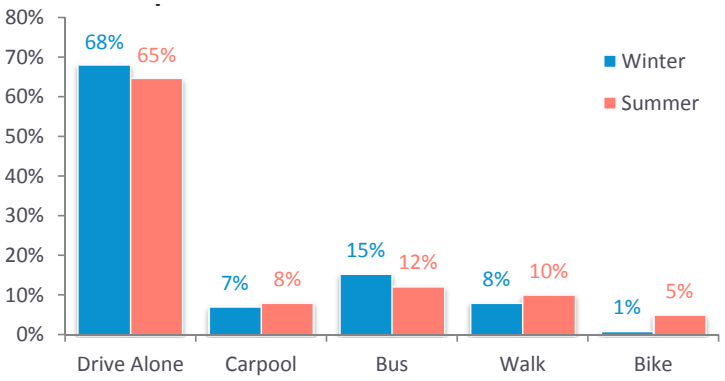
SPANISH SPEAKING EMPLOYEES

Workforce Average	2004	2014
% Spanish Speaking	11%	19%

Source: 2004 Employer Survey, 2014 Employer Survey

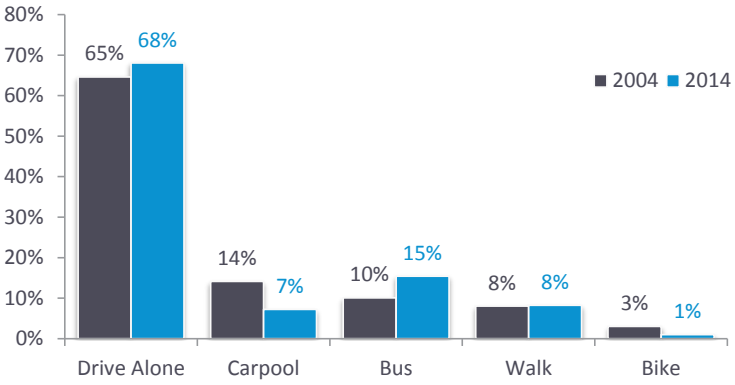
REPORTED COMMUTE MODE SHARE

REPORTED 2014 COMMUTE MODE SHARE



Source: 2014 Employer Survey

REPORTED WINTER COMMUTE MODE SHIFT



Source: 2004 Employer Survey, 2014 Employer Survey

- Employers estimated that a higher percentage of employees walk and bike to work in the summer (15%) than the winter (9%) and fewer take the bus
- Employers reported a 50% increase in employees commuting by bus in the winter than in 2004 (15% vs. 10%) and a decrease in employees carpooling to work (from 14% to 7%) and biking to work (3% to 1%)
- Employers reported a slight increase in the percentage of employees driving alone to work in the winter from 65% in 2004 to 68% in 2014

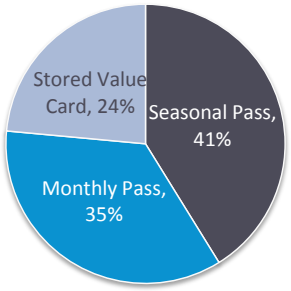
EMPLOYEE COMMUTING INCENTIVES

COMPANIES OFFERING NON-DRIVING COMMUTE INCENTIVES

Non-driving commute incentives	2004	2014
None	71%	71%
RFTA Bus Pass	19%	21%
Other	6%	11%
Bike fleet		9%
Transportation coordinator	2%	7%
Bike share memberships		6%
Company vehicle for employee errands	11%	5%
Car pooling program	5%	5%
Van pooling program	3%	4%
Cash incentives	2%	3%
Preferential parking for carpools		3%
Car share memberships		3%

Source: 2004 Employer Survey, 2014 Employer Survey

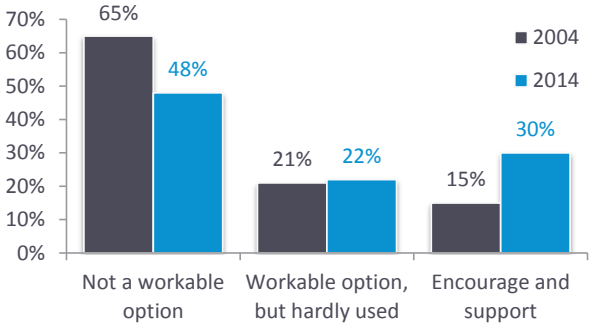
TYPE OF RFTA PASS OFFERED



Source: 2014 Employer Survey

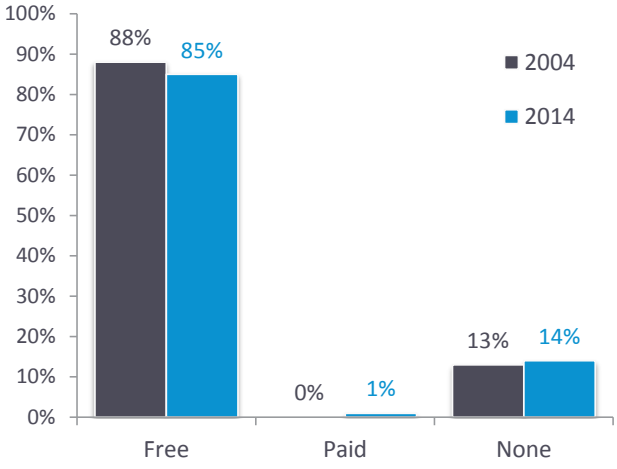
- The percent of employers who offer non-driving commute incentives is the same as 2004 (29%), however, employers that do offer non-driving commute incentives are offering more of them particularly for bicycling
- The percent of employers who offer bus passes increased from 19% in 2004 to 21% in 2014 (most common is a seasonal pass)
- The percent of companies that encourage and support telecommuting has doubled since 2004 from 15% to 30%
- 85% of employers provide free parking to some or all employees, a slight drop from 88% in 2004
- More companies reported that showers were available to employees walking/biking to work (45%), but fewer companies reported that secure bike parking was available (52%)

TELECOMMUTING POLICIES



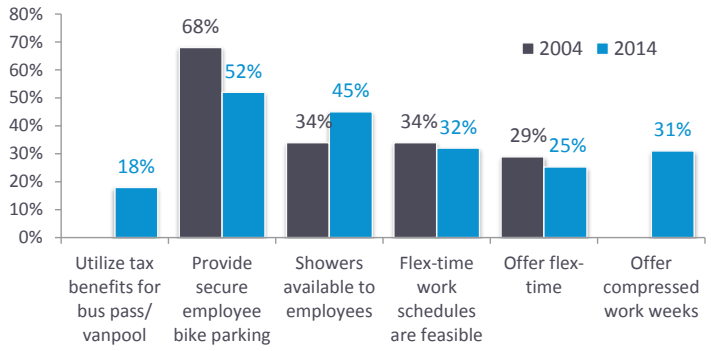
Source: 2004 Employer Survey, 2014 Employer Survey

OFF-STREET EMPLOYEE PARKING PROVIDED



Source: 2004 Employer Survey, 2014 Employer Survey

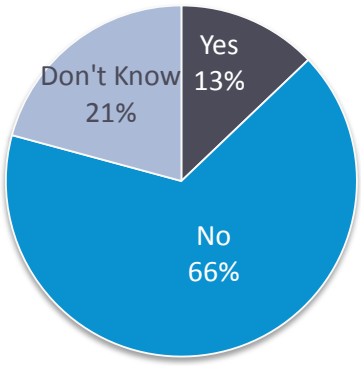
AMENITIES OFFERED



Source: 2004 Employer Survey, 2014 Employer Survey

VELOCIRFTA IMPACTS

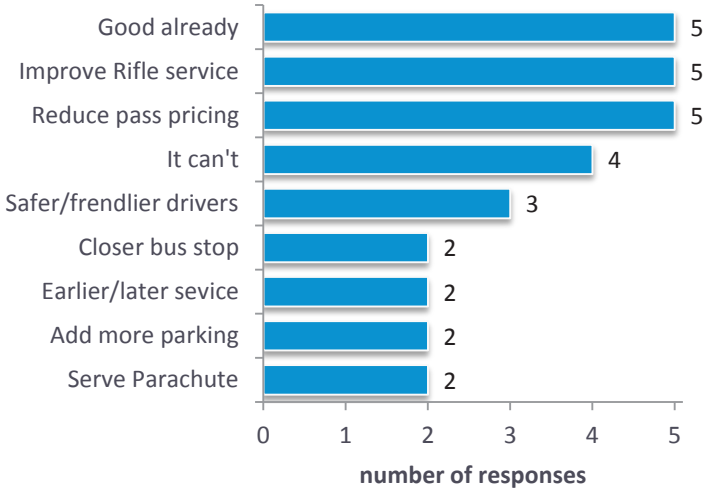
HAS VELOCIRFTA CHANGED YOUR EMPLOYEES COMMUTING PATTERNS?



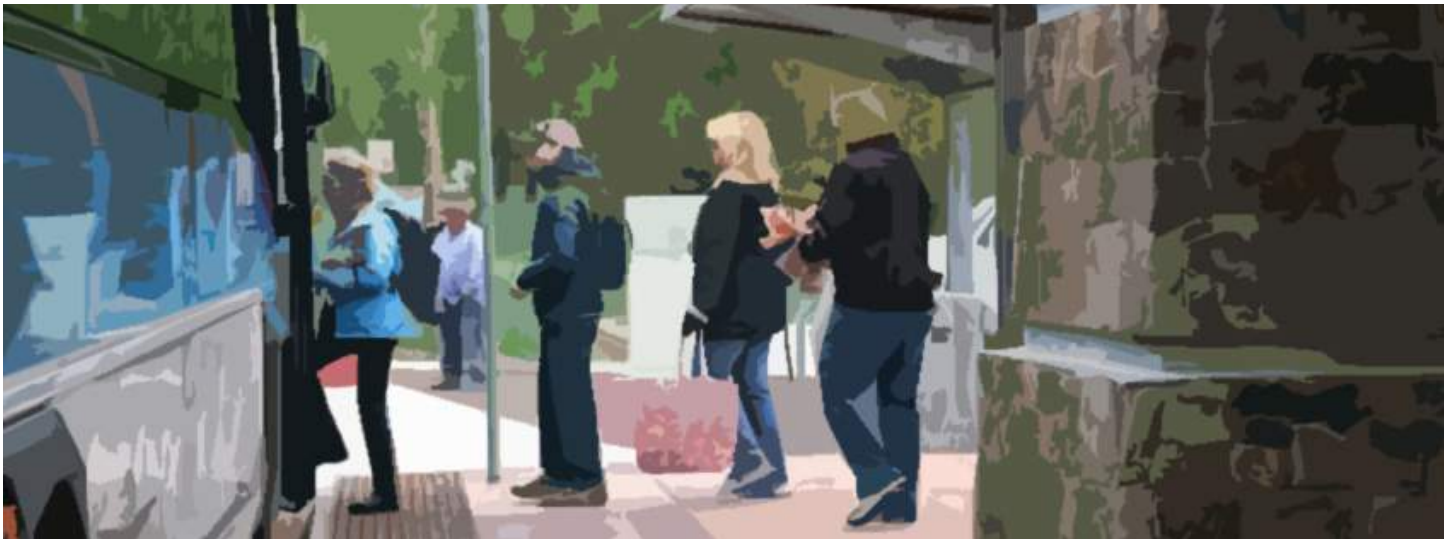
Source: 2014 Employer Survey

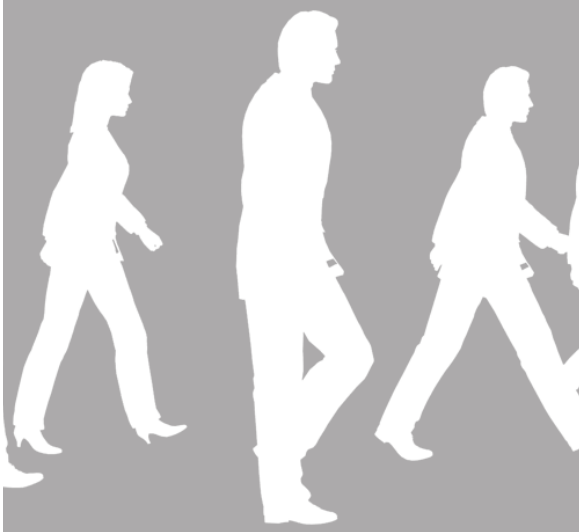
- 13% of employers reported that the introduction of VelociRFTA in 2013 has changed their employees' commuting patterns
- The two most common improvements suggested for how VelociRFTA could better serve employee needs were to improve service to Rifle and reduce pass pricing

HOW VELOCIRFTA COULD BETTER SERVE YOUR EMPLOYEE TRANSPORTATION NEEDS (MOST FREQUENT RESPONSES)



Source: 2014 Employer Survey

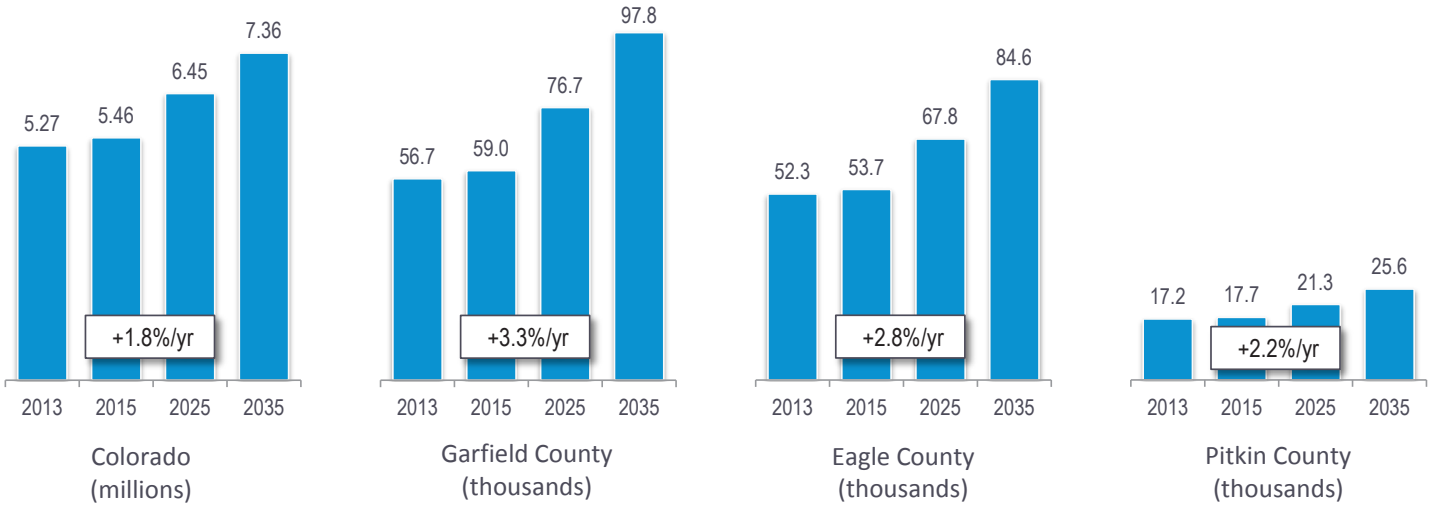




9 FUTURE TRAVEL DEMAND

FUTURE TRAVEL DEMAND

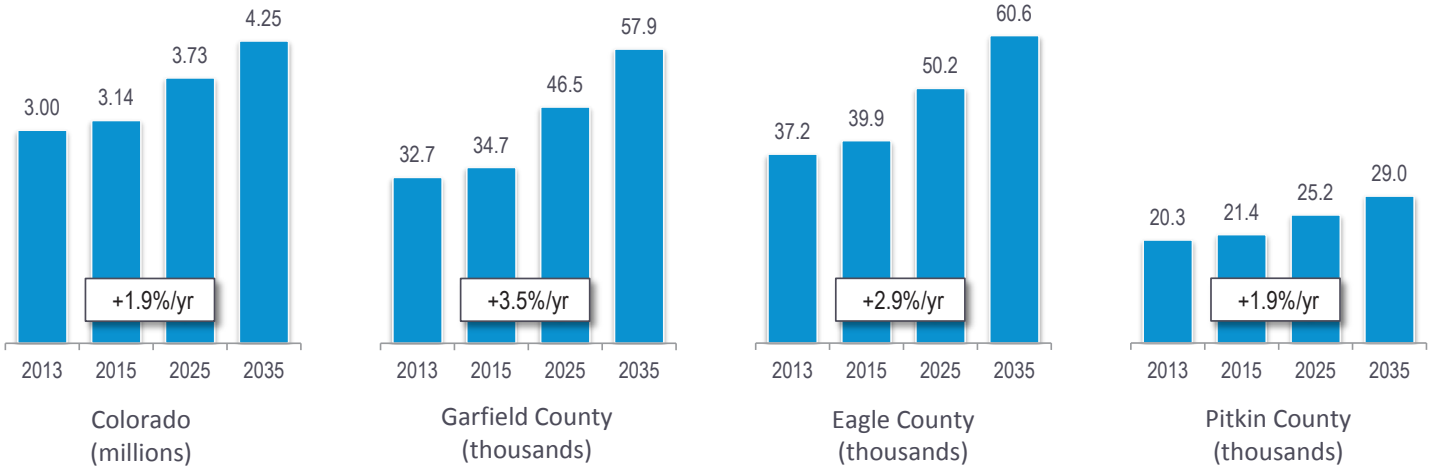
POPULATION FORECAST



Source: Colorado State Demography Office

- Both the resident population and number of jobs in the region are forecast to grow through 2035 at higher rates than the state average and at higher rates than have occurred over the last 10 years in the region (between 2004 and 2013 population grew at a rate of 1.8%/year and jobs at 1.6%/year within the region)
- Job growth and population growth are expected to be highest in Garfield County
- Pitkin County is forecast to continue to have a higher number of jobs than residents although the ratio of jobs to residents is forecast to decline slightly from 1.18 in 2013 to 1.13 by 2035
- By 2035, roughly 66% percent of the region's jobs and 71% of the region's population will live in Garfield County

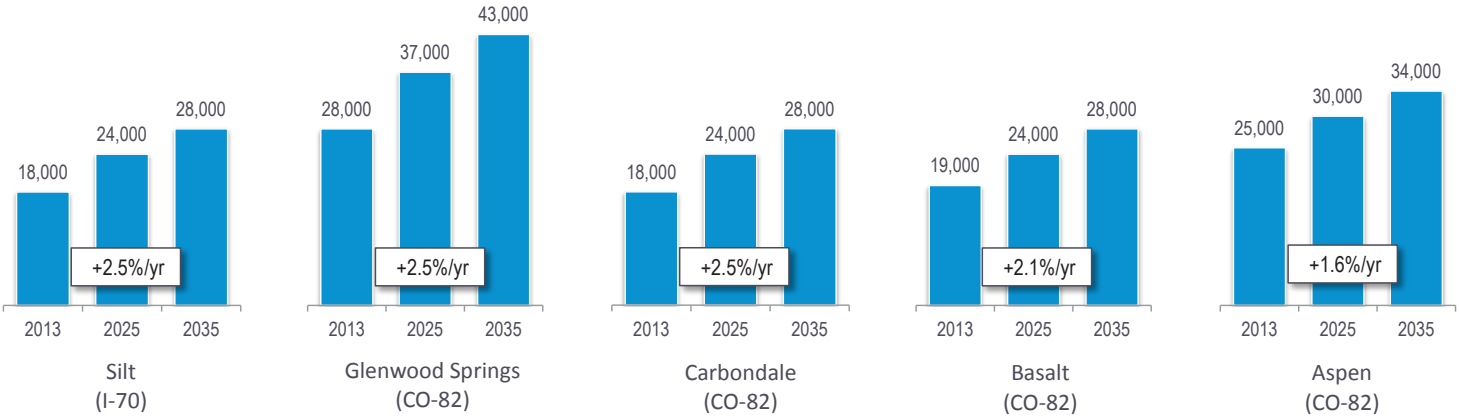
JOBS FORECAST



Source: Colorado State Demography Office (Total Jobs)

POTENTIAL TRAVEL DEMAND

AVERAGE ANNUAL DAILY CORRIDOR TRIPS

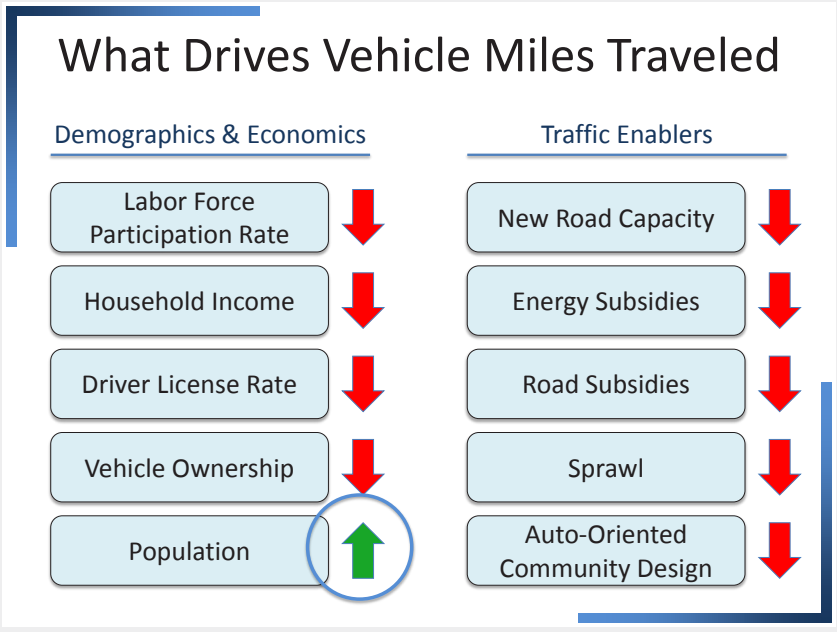


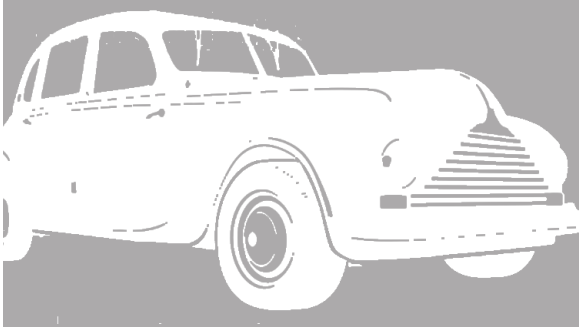
Source: Colorado State Demography Office, Colorado Department of Transportation, Regional Travel Patterns Study

Future Travel Demand

The graphics above summarize estimated travel demand growth by corridor segment within the region to the year 2035. If mode shares and other travel behavior characteristics remain unchanged from today's statistics, this data would represent an estimate how much motor vehicle traffic would increase in the region, based on the population increases shown on the previous page. However, it is unlikely that all of this increased demand will manifest as increases in traffic. More likely, at least some and perhaps much of this growth will actually gravitate toward RFTA's regional bus services, including especially the VelociRFTA BRT service.

In other words, recent trends toward increased bus patronage and reduced auto mode share are likely to continue. This is a reasonable expectation because of the demographic, economic and political factors that are contributing to declining VMT per capita (see graphic at right). Since 2004, VMT per capita in this region has declined at a rate of 0.5% per year and since 2008, has declined at a rate of 4.0% per year (see Chapter 5). This trend could also be significantly influenced by the recommended reallocation of resources toward road, transit, pedestrian and bike infrastructure as well as the recommended land-use planning and transportation policy decisions (see Chapter 10 on Implications).





9 IMPLICATIONS

IMPLICATIONS

OVERVIEW

This chapter summarizes five key trends emerging from the travel pattern data presented in chapters 2-9 (see side box) and examines the implications of these trends for local land use and transportation planning. Guidance is provided on what the anticipated future trends mean for employers, towns, cities, counties, RFTA and CDOT within the study region as well as suggestions for what type of transportation investments should be considered given these trends.

Key Regional Trends

- population growth
- employment centers
- active transportation
- traffic demand
- transit demand

KEY TRENDS

POPULATION GROWTH

The population of the study region has increased steadily for many years, growing at an average rate of about 1.8% per year since 2004. This trend is forecast to continue during future decades. According to the Colorado State Demography Office, the regional population through 2025 is forecast to grow at an average rate of 2.1% per year in Pitkin County, 2.6% per year in Eagle County and 3.0% per year in Garfield County. That means the region's population is expected to grow from about 82,000 in 2013 to about 110,000 by 2025.

EMPLOYMENT CENTERS

An emerging trend over the last ten years has been the concentration of jobs in three primary employment centers within the region. About 75% of the region's 2014 workforce indicated they work in Aspen, Glenwood Springs or Rifle, an increase from 60% in 2004. (An additional 14% indicated they work in Carbondale or Snowmass Village.) While Aspen has been a significant employment center within the region for a number of years, Glenwood Springs and Rifle are also emerging as major regional nodes, a trend that is expected to continue.

ACTIVE TRANSPORTATION

The active transportation modes, walking and biking, play an important role in the region, particularly in the regional employment centers. Since 2014 was the first year in which summer travel was monitored, trend data is only available for comparison in the winter. The active commute mode share in the winter actually decreased slightly between 2004 and 2014 from 8% to 7%. However, the active commute mode share in the summer is more than twice as high as the winter, accounting for 17% of summer commute trips. The higher rates of walking and biking to work in the summer correspond to a similar rate of decrease in the single-occupant vehicle commute mode share from 62% in the winter to the 52% in the summer.

The active commute mode shares are also particularly high in the regional employment centers, especially during the summer. The percent of summer residents walking and biking to work is 43% in Aspen, 20% in Carbondale, 20% in Glenwood Spring and 8% in Rifle. Among the workforce of the regional employment centers, the active commute mode share in the summer is 20% in Aspen, 9% in Snowmass Village, 45% in Carbondale, 16% in Glenwood Springs and 11% in Rifle. The active modes account for an even higher percent of total trips (including those for non-commute purposes), representing 14% of the mode share of all trips (region-wide) in the winter and 27% in the summer.

TRAFFIC DEMAND

For decades, transportation planning in Colorado has focused primarily on responding to traffic growth. Throughout this period, traffic on the Western Slope has grown steadily – often increasing as fast or even faster than traffic in the Front Range. Now, however, this trend has leveled off. Annual vehicle miles of travel (VMT) within the study region grew by only 2% over the ten years from 2004 to 2014 and has been declining since 2008.

While the recession played a role in this trend, larger factors were at work. Most importantly, personal vehicular travel – per capita VMT – began declining at the turn of the millennium. Since 2004, per capita VMT in the study region has dropped 13%. The phenomenon of reduced driving is not just a regional trend; it is playing out statewide in Colorado, across the western states and nationally. At work are cultural shifts away from reliance on driving among Baby Boomers and Millennials, greater acceptance of telecommuting and working at home, lower average household incomes, and related lifestyle shifts. Another major factor in the Roaring Fork Valley has been the significant improvement in transit service.

However, as noted above, the regional population is growing and this may tend to counterbalance declines in per capita driving. In years of robust economic growth or surges in tourism due to low gas prices, there may be net increases in total regional VMT, while in other years there may be net decreases. However, over the long term traffic demand will not return to the 20th Century pattern of 2% to 3% annual growth in daily traffic. Those days appear to be behind us.

TRANSIT DEMAND

Over the ten-year period between the 2004 and 2014 regional travel patterns studies, RFTA regional transit service has become a major factor in regional travel trends. As of 2014 public transit was providing thousands of residents and visitors with daily access to jobs, services and recreational activities in the region.

The new VelociRFTA Bus Rapid Transit (BRT) system between Glenwood Springs and Aspen, along with a general rise in demand for transit have produced a 40% increase in annual transit ridership since 2004. By comparison, during this same decade, vehicular travel grew by only 2%, as noted in Chapter 5. Survey findings revealed that the BRT service is not just shifting trips from cars to buses, but is also increasing overall personal mobility in the region: 11% of daily trips on VelociRFTA were not made at all before its startup in September, 2013.

The proportion of winter commuters using transit to get to work grew by nearly 60%, from 12% of commute trips in 2004 to 19% in 2014. At the same time, transit patronage is no longer primarily a winter phenomenon. Summer ridership has grown faster than winter ridership over the last ten years with the result that, by 2014, average daily ridership in the summer was only slightly less than the winter average.

Clearly, transit is playing an ever more important role in the region's economy. And, the data shows that continued expansion of the transit system will be important for a number of reasons:

- The majority of employees in the region continue to travel to work outside their home community;
- Average commute distances (which were high in 2004) have further increased over the last ten years; and
- The median household income when adjusted for inflation decreased by over 10% since 2004, leaving households with less income available for transportation.

Opportunities for RFTA and local jurisdictions to continue to grow and enhance the regional transit system are described further on the following pages.

IMPLICATIONS FOR LOCAL AND REGIONAL POLICY

The implications of the key regional trends (described on the previous pages) for future land use planning, transportation planning, and transportation demand management by state and regional agencies, local jurisdictions and employers within the region are described in this section.

Implications for Local and Regional Policy

- regional transportation demand management program (TDM)
- TDM – transit passes
- TDM – parking management
- strategic community development
- transit service in the I-70 corridor
- access to VelociRFTA service
- roadway state of good repair
- local connectivity

REGIONAL TRANSPORTATION DEMAND MANAGEMENT (TDM) PROGRAM

The key trends outlined above and described in more detail throughout the main body of this report suggest that this region (Roaring Fork and Lower Colorado River Valleys, Aspen to Parachute) may have a window of opportunity open for the next few years to encourage a broad shift away from reliance on personal vehicles for commuting and other travel. Such an effort would coincide with a general trend already underway caused by the economic and cultural changes described in the previous section.

The most direct and effective way to encourage a regional "mode shift" would be to implement a regional transportation demand management (TDM) program that would coordinate local TDM programs in each community similar to the Transportation Program already in place in the City of Aspen. TDM programs are public/private partnerships that work with employers and employees to improve access to bus passes, to coordinate carpools and vanpools, to address parking solutions, to provide current commuter and traveler information, and to organize special events such as bike to work day and commuter fairs. The data provided by this study indicates that two significant opportunities could be the initial focus of a regional TDM program – transit passes and parking management. Additional TDM strategies, while not the focus of this report's findings, would also be of merit and should be considered.

TDM – TRANSIT PASSES

Transit passes play a crucial role in building transit ridership. The survey results revealed that the propensity to commute by bus is eight times higher for those with a bus pass than for those without. This is not just self-selection (people who want to ride the bus buy passes). The propensity to commute by bus is also five times higher for workers with an employer-provided bus pass than for those without a bus pass.

The percent of employees in the region who hold a transit pass decreased from 31% in 2004 to 28% in 2014, although the percent of workers with an employer-provided bus pass increased from 15% to 18%. As would be expected, there are significant differences in the percentage of employees with bus passes in individual employment centers. Only 2% of employees in Rifle and 6% of employees in Glenwood Springs own a bus pass, whereas 19% of Carbondale, 27% of Snowmass Village, and 37% of Aspen workers own passes.

A regional program coordinated by or with RFTA to increase the number of workers with bus passes would pay direct and significant dividends in increased ridership, reduced dependency on auto commuting and employment growth.

TDM – PARKING MANAGEMENT

Few local policies are more controversial than parking management measures, especially imposition of paid parking. However, parking availability plays an major role in influencing how people commute: those with access to free parking are much more likely to drive – and drive alone – than those who do not. The survey data indicates that 88% of commuters with access to free parking drive to work, while only 60% of those who do not have access to free parking drive to work. Similarly, 39% of workers who must pay for parking commute by bus, while only 8% of those with access to free parking commute by bus.

As employment grows in the regional job centers, local communities and employers should consider taking a more active role in parking management in order to reduce vehicle trips, more efficiently utilize developable land and facilitate the creation of more pedestrian-friendly urban environments. The role of a regional TDM program could be to provide technical support for parking management measures such as commuter permits, assigned spaces for carpools and vanpools, cafeteria plans for employer benefits programs, and similar commonly-used techniques.

STRATEGIC COMMUNITY DEVELOPMENT

The growth of ridership on RFTA bus routes, in part due to the impact of the new VelociRFTA service, has created the potential for municipalities in the region to integrate land use and community development with these transit services. One way to do this would be update local comprehensive plans to include transit-oriented development (TOD) strategies. TOD is a type of community development that encourages walkable, mixed-use development (mixture of housing, office, retail and other amenities) near transit stations and stops. With population growth in the region forecast to continue at or above 2% annually, there will be ample opportunity to guide this new housing and employment toward transit-served places. Such an approach would pay major long-term dividends in the form of transportation and land use efficiencies that would reduce future tax burdens and encourage economic development.

TRANSIT SERVICE IN THE I-70 CORRIDOR

The emergence of Glenwood Springs and Rifle as significant employment centers has implications for the regional transit network. The transit service enhancements and ridership growth in the region since 2004 have occurred within the Roaring Fork Valley between Glenwood Springs and Aspen – an area that generally corresponds to RFTA district boundaries (with New Castle added in to the west). As a result, the transit commute mode share among workers in those communities increased substantially since 2004. In 2014, 38% percent of all winter commute trips by Aspen workers, 39% by Snowmass workers and 23% by Carbondale workers were made by transit. However, transit only accounts for 3% of winter commute trips by Glenwood Springs employees, and 2% by Rifle employees.

These differences in transit propensities are a direct result of the limited transit service currently available within and to these communities. For example, while 80% of Glenwood Springs workers commute to work from within Glenwood or from west-valley locations, only about 7% of RFTA's 2014 system-wide bus miles were targeted to this market (including two routes: the Grand Hogback between Rifle and Glenwood Springs and the Ride Glenwood circulator within Glenwood Springs).

Similarly in Rifle, 83% of the workforce commutes to work from within Rifle or from west-valley locations (primarily Parachute and Battlement Mesa), but existing transit services are available only between Rifle and up-valley locations. No local transit service is available in Rifle and no regional service is available west of Rifle to the communities of Parachute and Battlement Mesa, the primary locations from which in-commuting Rifle workers originate.

The survey revealed a recognition among employers and employees of the need for more service in the Lower Colorado River Valley. Fully 43% percent of survey respondents region-wide indicated that addition of new routes or increased service frequency would encourage them to use the bus more. Of the 17% who cited new routes, 48% wanted routes added within or between communities in the I-70 corridor. Similarly, when employers were asked how VelociRFTA could better serve their employee needs, 25% said by providing service to Rifle or Parachute.

There may be an opportunity for transit to play a larger role in how people commute and travel within these Lower Colorado River Valley communities. This could potentially include the eventual extension of BRT-style services (bus rapid transit) to Rifle or even Parachute, an effort that could begin with an increase in regular bus and express bus service in the I-70 corridor. With a high-capacity freeway (I-70) already in place, extension of BRT service could be achieved with modest capital investment.

ACCESS TO VELOCIRFTA SERVICE

The new VelociRFTA Bus Rapid Transit (BRT) between Glenwood Springs and Aspen has improved regional travel and contributed to substantial transit ridership growth. However, it's success has also created new challenges. Because the system is more streamlined, with fewer detours off the highway, it is producing greater demand for "first and last mile" travel (to and from the BRT stations) in the communities along the route. Since 2004 the percent of bus commuters who drove to the bus increased from 15% to 25%. At the same time, RFTA's park-n-ride lots are at or near capacity throughout most of the transit system, especially during peak travel times. Further, other than in Aspen and Snowmass (and to a lesser extent in Carbondale and Glenwood Springs), there are limited opportunities to use local transit as a means to get to the BRT system.

In such a linear corridor, with communities situated along SH-82 and most urban growth located reasonably near the BRT stations, heavy reliance on driving to access the bus network represents a missed opportunity. Continued expansion of park-n-ride lots would be expensive and seems undesirable from an urban planning/urban design perspective – if it is even feasible. To leverage the BRT program investment and achieve the full potential that high-capacity transit service offers, future regional and local transportation investments should focus on improving facilities for walking and biking to the major bus stations and stops and increasing local bus circulation within communities, particularly in communities north and west of Aspen and Snowmass.

ROADWAY STATE OF GOOD REPAIR

As described in the first section above, future growth in motor vehicle traffic will be modest throughout this region (and the state) and there could even be declines in traffic levels over the long term. This represents an important opportunity for the state, the counties and local municipalities to begin shifting resources away from continual expansion of roadway capacity, and that could set the stage for higher priority to be placed on maintaining existing road and streets. As the roadway network ages, recapitalization, maintenance and repair needs will continue to grow even if traffic does not. Keeping facilities in a state of good repair would pay dividends in reduced vehicular maintenance and repair costs (for personal vehicles and private fleets as well as for RFTA), and would encourage increased bicycling.

LOCAL CONNECTIVITY

The three regional employment centers are not only growing in size, but the percent of residents who both live and work in those communities is also growing. The effect is an increase in the number of reasonably short, internal trips, which places disproportionately more strain on the local roadway networks than the regional highways. To address this effect, local jurisdictions should focus on increasing local street connectivity, thereby reducing local congestion and out-of-the-way traffic associated with short trips. An important benefit of such efforts would be to increase the percentage of local trips made by walking and biking. The extent of this opportunity is indicated by the fact that over 60% of the workforce working in Rifle and Glenwood Springs lives and works in the same community, yet only 11% and 16% respectively commuted to work by walking or biking in the summer. Some of the actions local jurisdictions could take to support more walking and biking and provide greater street connectivity within their communities include:

- Identifying and connecting missing links in the street, bike and pedestrian networks;
- Establishing robust connectivity requirements for future developments;
- Identifying and making safety improvements to the pedestrian and bicycle infrastructure; and
- Establishing policies that support and encourage walking and biking within these communities.

Increasing local connectivity and enabling more walking and bicycling would also encourage increased transit ridership by allowing for an efficient route structure and improving pedestrian and bicycle access to bus stops.