My Travel Log 2015 Annual Report

October 10, 2018

My Travel Log

What moves you?

Whether you drive to work, bus to school, bike to the corner store, or take a walk around the neighbourhood, the transportation network is there to help get you to your destination now and for years to come. My Travel Log looks at how the transportation network is used today to anticipate how it will be used in the future.

New survey, long history

The City of Calgary has been conducting household travel surveys for over 50 years. Results from these studies have been a key source of travel information used in a wide variety of transportation projects. Large household travel surveys were conducted every 10 years up to 2012, however due to Calgary's constantly changing circumstances every decade is proving too infrequent.

Increasingly decision makers are looking for better data about travel behaviour to support the work they do. Further, citizens are looking for data to make their own decisions about the world they live in. My Travel Log is a new, continuous household travel survey that collects information from a smaller number of households almost every day of the year.

My Travel Log collects data to report on annual city-wide travel statistics and, over time, will combine multiple years of data to produce more detailed analysis.

Want to participate? Look in your mailbox.

My Travel Log captures travel behaviour from about 1500 households every year. Households are selected randomly from residential addresses in Calgary and the surrounding region. Selected households are mailed invitations to participate in the survey and households can provide information either over the phone or online.

My Travel Log collects information about how, when, where, and why people travel in the Calgary Region.

Privacy Protection

My Travel Log collects personal information from survey participants. The City of Calgary takes the protection of that information seriously and takes precautions to ensure that the information is protected. Participation in the survey is voluntary and the information collected is only used to study travel behaviour in the Calgary Region. Participants are free to exit the survey at any time.

Data Sources

Unless otherwise specified, all data in this report was obtained from the City of Calgary My Travel Log 2015 dataset. This data was collected from residents in the Calgary Region from March to December 2015. Further information on survey methodology and response rates can be found in the My Travel Log 2015 Survey Operation Report.

Only data collected from Calgary city residents is included in this report. Responses from regional households were excluded due to sample limitations.

Uncertainty with travel times and distances

Travel times used in the related reports are based on times reported by participants and may vary as people tend to round to the nearest 5, 10, or 15 minute increments. This may impact the accuracy of travel time information.

Travel distance is not captured by My Travel Log, however, free flow distances are obtained from Google auto network to estimate the travel distance for trips.

Calgarians make over 5 million trips every day.

Every day Calgarians travel around the city as they go about their daily lives. This includes travelling to work, taking kids to school, attending medical appointments, or running household errands. For a complete list of travel purpose, see Table 1. There are patterns in how people travel around the city. In an average day, about 30% of daily travel is for work or to attend school. Most trips are for other reasons such as shopping, visiting friends, or escorting someone to or from a destination.

Work and school travel are the most common travel purposes in the morning peak times.

In Calgary, the morning peak period begins to build around 6 AM and ends around 9 AM. During that time period, about 40% of trips are made for work purpose, almost a quarter for school purposes and just over 20% of trips were made to drop someone off (or pick someone up.).

Table 1: Description of Travel Purposes

Work	Travel for paid work or work related activities
School	Travel to attend school.
Escort	Drop someone off / pick someone up
Shopping	Travel to shop for household errands, routine shopping, or major purchases.
Social and Recreation	Travel to visit with friends, go out for meals, attend a movie, or go to the gym.
Personal	Travel for legal or medical appointments and religious, civic or volunteer activities.

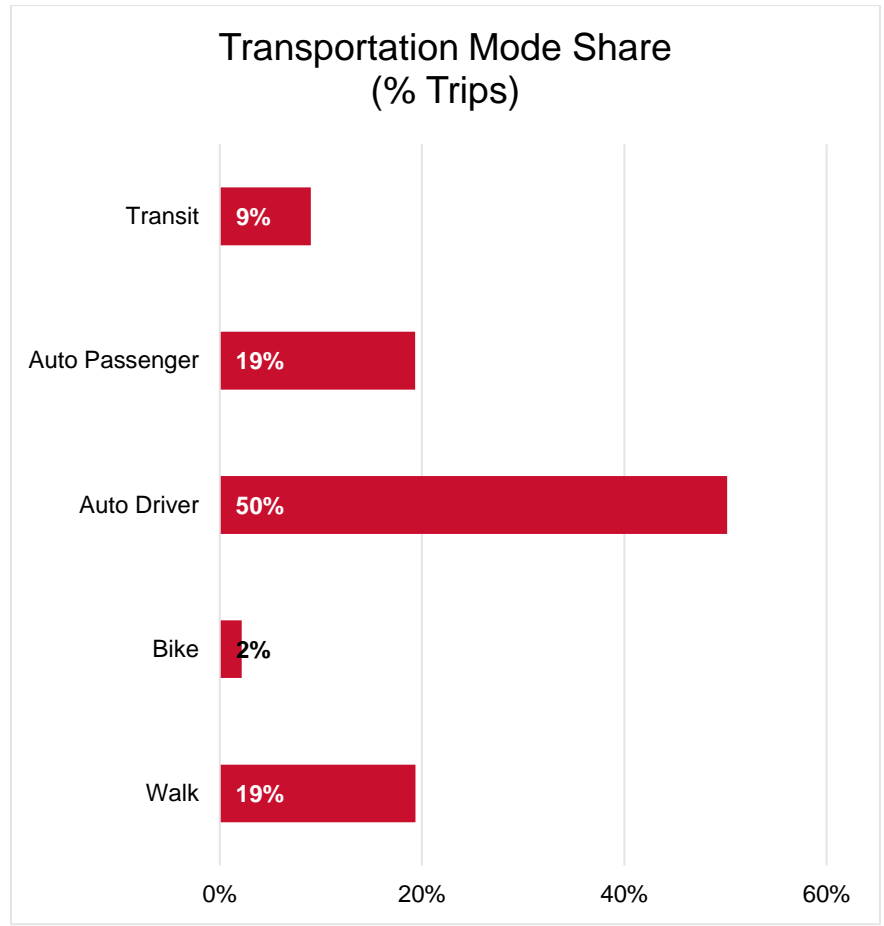## Afternoon peak times have more variation in travel purposes.

In contrast, the afternoon peak period which starts around 3 PM and continues until 6PM has more variety in travel purpose. There are just over 30% more trips in the afternoon peak and only about 20% of those trips are for work purposes. Travel purposes are more evenly split between work, shopping, social/recreation, and escort travel.

Trip Frequency & Purpose
(1000 Trips)

Legend: ■ Work □ School □ Escort ▨ Shopping ▨ Rec/Social ■ Personal
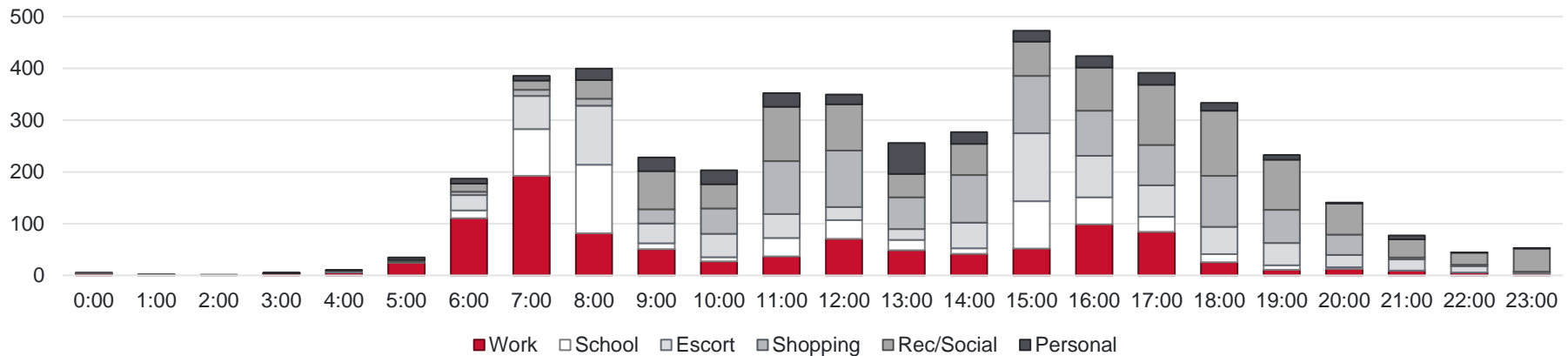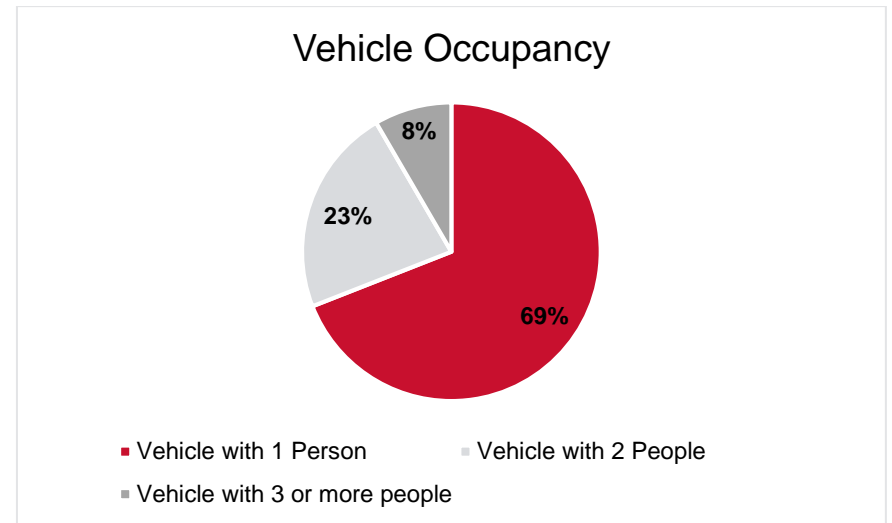
Calgarian's most common mode of transport is their car.

Almost 70% of trips made by Calgary residents are made in a car, either as a driver or a passenger. Almost 20% of trips are made by walking.

Transportation Mode Share (% Trips)

Mode	Share
Transit	9%
Auto Passenger	19%
Auto Driver	50%
Bike	2%
Walk	19%

NOTE: Care should be taken when comparing these results to previous survey results. My Travel Log uses a slightly different survey methodology to increase the quality of the results and decrease participant burden. These changes mean the survey has collected more walk trips than previous surveys. As a result, the walk mode share is showing a larger increase than expected when compared with data collected in 2012. It is unlikely that this change is due to real changes in travel behaviour

On an average day, there are about 2.5 million vehicles on Calgary roads.

Not only do Calgarians prefer to travel by car, almost 70% of vehicle trips have only one person in the car.

Vehicle Occupancy

Category	Share
Vehicle with 1 Person	69%
Vehicle with 2 People	23%
Vehicle with 3 or more people	8%

Did you know…

Calgarians spend about 18 minutes travelling per trip?

Over the course of the day, people living in Calgary are travelling about 18 minutes per trip. This includes all trip purposes such as work, shopping, and escort travel.

The average trip in Calgary is just over 7km?

The average trip length for all travel purposes in Calgary is 7.4 km. This includes trips made at any point in time during the day.

Calgarians make about 4 trips per day, on average?

In a typical day, Calgarians make about 4 trips per day. When looking only at people who left home on their travel day, the number increases to 4.6 trips per day. About 13% of Calgarians do not travel on a given day.

## Just over 10% of people do not travel on a given day?

While most Calgarians do spend time travelling around the city for a variety of reasons, 13% of Calgarians are staying at home on any given day. This could include people who are staying home to do household chores, take care of children, or other household activities.

Work Travel in Calgary

For the purpose of this analysis, a trip is considered a work trip if either the origin or the destination purpose included work activities.

Workers are more likely to use alternative transportation modes than average.

Although the auto remains the most common mode choice, only 55% of work trips are made by auto compared with 70% of trips overall. There is an increased use of transit where 16% of work trips are made by transit compared with 9% of overall trips. Active modes are also higher than average as almost a quarter of work trips are made by walking or biking.

Work Trip Transportation Mode Share

Mode	Percentage
Active	24%
Transit	16%
Auto Passenger	5%
Auto Driver	55%
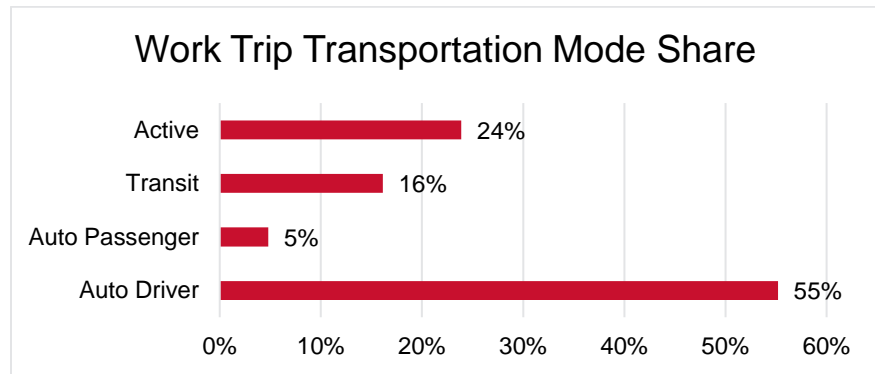
## Average home to work trip distance in Calgary was 14 km in 2015.

The average work trip length is almost double the average trip length. This suggests work locations are located further away from people's homes than non-work locations. (This measure only includes trips that start at a person's home and end at a person's work.)

Average travel time from home to work was 27 minutes in 2015.

Calgarians travel longer for work purposes than they do for non-work purposes. This may be related to the distance between home and work locations and the impacts of congestion. (This measure only includes trips that start at a person's home and end at a person's work.)

Work trip distribution follows a consistent peak pattern over a 24-hour period.

Calgary's work travel follows a typical peak hour pattern with a large peak in the morning starting at about 6:00 AM and continuing to 9:00 AM. There is a midday peak where workers often leave work to go for lunch, run household errands, or go for a walk. The PM peak period typically starts around 3:00 PM and continues until about 6:00 PM. The PM peak is smaller than the AM peak which may reflect different work shifts or that some people are not going directly home after work.

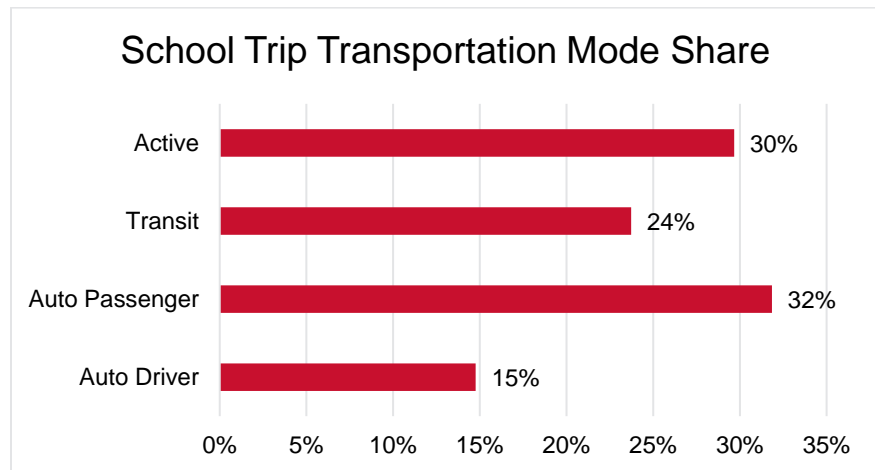### Work Trip Time of Day Distribution
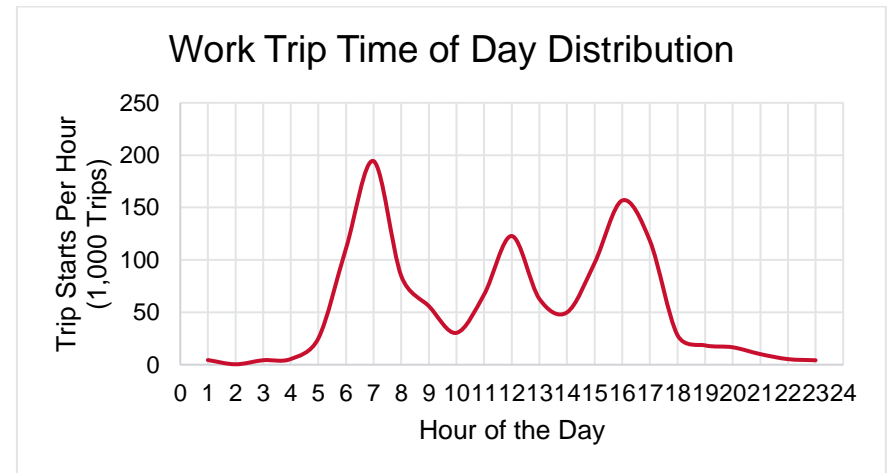
School Travel in Calgary

For the purpose of this analysis, a trip is considered a school trip if either the origin or the destination are to attend school. It includes both grade school and post secondary students due to sample size limitations.

A little over half of Calgary students travel to school by transit or active modes.

The most common mode choice for students is as a passenger in an auto. The combined auto mode share is less than adults because schools are closer to home, parents may be unavailable to drive, or auto availability at home. In this case, transit includes yellow school buses and Calgary Transit school services.

School Trip Transportation Mode Share

Mode	Share
Active	30%
Transit	24%
Auto Passenger	32%
Auto Driver	15%

## Average home to school trip distance in Calgary was 6.7 km in 2015.

School trips are slightly shorter than average trips across Calgary. This is likely because many schools are located within residential communities which reduces the travel distance.

Average travel time from home to school was 20 minutes in 2015.

Travel time for school trips is slightly longer than average. This is likely because students have higher walk and transit mode shares with also have longer travel times.

School trips have shorter peak periods than work trips.

School trips have shorter peak periods than work trips because school times are less variable than work times. There is also a small midday peak when children are heading home for lunch during the school day or early dismissal days.

### School Trip Time of Day Distribution
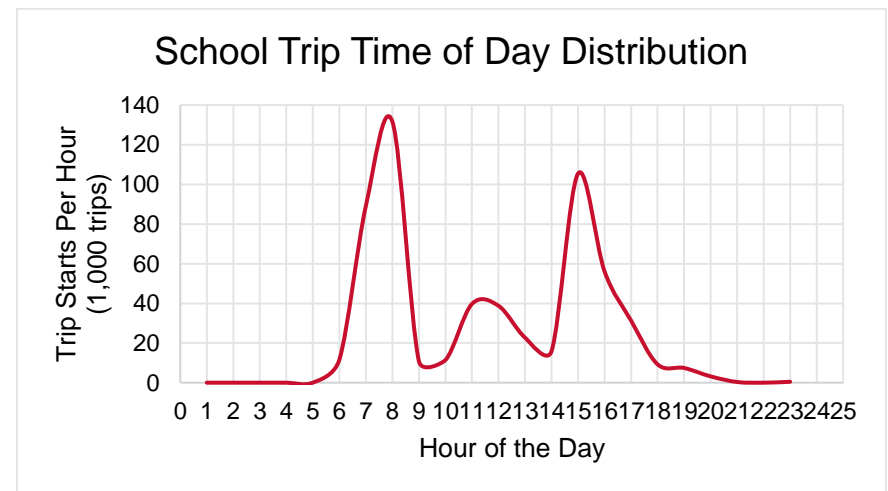
Travel for Other Purposes in Calgary

Calgarians travel for a wide variety of reasons – not just work and school. Other travel purposes may include escorting others, shopping, social or recreation travel, and travel for personal business. This analysis includes all trips with where either the origin or the destination purpose of the trip was unrelated to work or school.

Less than 5% of trips made for other purposes were made by transit.

Just over 75% of other trips were made by auto and only 3% were made by transit. This is likely because these trips are often to destinations that are not located near transit, have free parking, or are places where people do not travel frequently.

Other Trip Transportation Mode Share
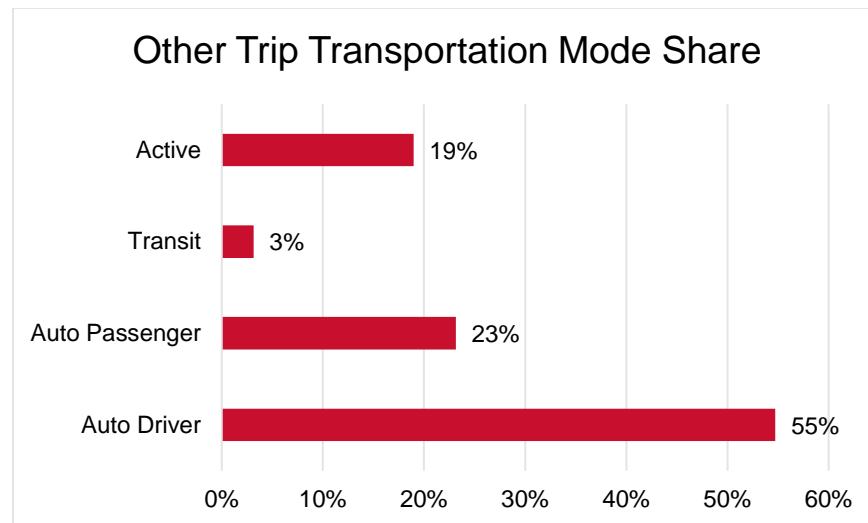
## Average trip distance for other purposes in Calgary was 6 km in 2015.

Trips for non-work or school purposes are shorter than average as most of the services that people travel to regularly such as schools or shopping centres are often located near homes.

Average travel time for trips for other purposes was 15 minutes in 2015.

Other travel time is lower than average because the trips are trip disanc is shorter and they occur in off peak times of day when congestion is less.

Other trips do not follow a typical peak period pattern.

The time of day profile for other trips is different that work or school. It starts to build when shops open and then climbs all day until the stores close. There are small peaks when shops open, lunch hours, when school is finished, and when the work day is finished.

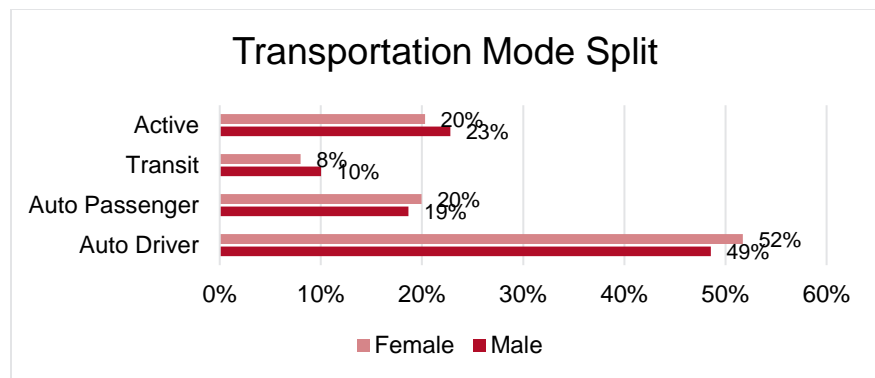### Time of Day Distribution Trips for Other Purposes
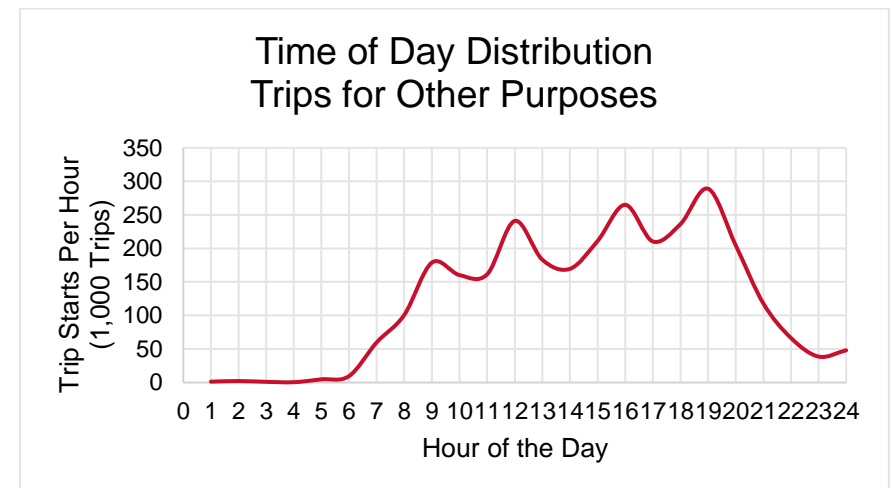
Differences in Gender Travel Behaviour

Men and women have different travel patterns from each other. These differences include the amount of travel per day, the transportation mode chosen for each trip, and the purpose of each trip. Women travel slightly more than men as they make 4.1 trips per day compared with men who make 3.9 trips per day.

Women are more likely to travel by auto mode than men.

Just over 70% of trips made by women are by auto either as a driver or a passenger compared with 67% of men. Women are also more likely to be an auto driver than men. It is likely that this effect is because women are more likely to be travelling with children. Men are more likely to use transit as about 10% of trips made by men are by transit. This may be related higher to employment participation rates as transit mode share is typically higher for work travel than other purposes.
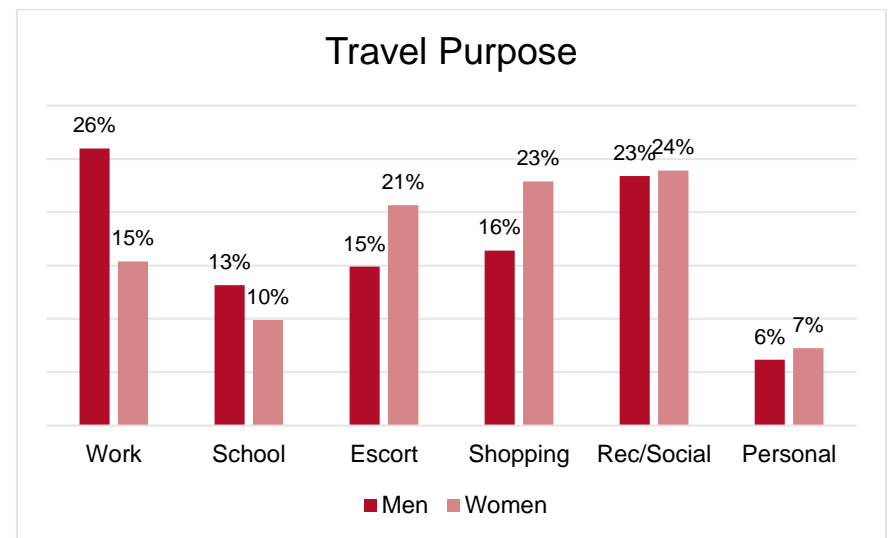
Transportation Mode Split

Mode	Female	Male
Active	20%	23%
Transit	8%	10%
Auto Passenger	20%	19%
Auto Driver	52%	49%

■ Female ■ Male

Women are less likely to travel for work purposes than men.

Men and women travel for different purposes. Just over a quarter of trips made by men are for work purposes compared with 15% of trips made by women. This is likely related to the difference in labour participation rates between each gender. According to Statistics Canada, 78% of men in Calgary participate in the labour force compared with 68% of women[1].

One outcome of fewer women participating in the labour force is that they make more escort trips (trips to drop people off or pick them up) than men and they make more shopping trips than men. This suggests what women are more likely to be dropping children off at various activities and they are more likely to be the one running household errands.

Travel Purpose

Purpose	Men	Women
Work	26%	15%
School	13%	10%
Escort	15%	21%
Shopping	16%	23%
Rec/Social	23%	24%
Personal	6%	7%

■ Men ■ Women

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[1] Statistics Canada, 2016 Census of Population, Statistics Canada Catalogue no. 98-400-X2016284.

Vehicle Ownership

Vehicle ownership refers to the number of motorized vehicles that are owned by households. For the purposes of this analysis, a household vehicle can be any passenger vehicle or motorcycle owned or leased by the household. It does not include recreation vehicles, ATVs, or other vehicles that are not permitted on Calgary's roads.

On average, Calgarians own 1.76 vehicles per household.

Household auto ownership varies across the city. Suburban areas have higher auto ownership with the southeast quadrant of the city having the highest auto ownership rate. Households in the downtown core have the lowest auto ownership rates.
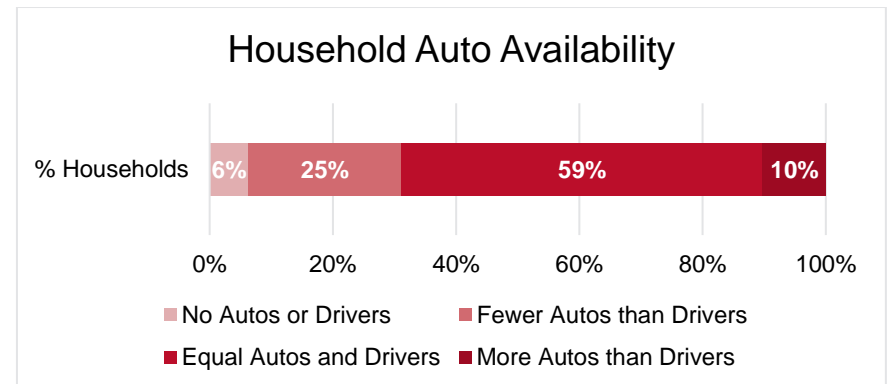
Autos Per Household

	Value
Calgary Average	1.76
NW	1.87
NE	1.83
CBD	0.72
SE	2.21
SW	1.72
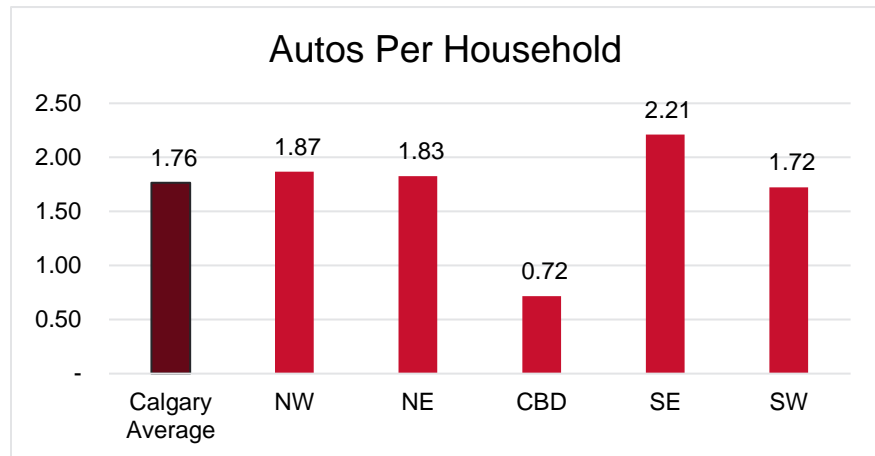
Almost every household in Calgary owns at least one vehicle.

Most households in Calgary own a vehicle. Only 6% of households surveyed either don't own a vehicle or have any licensed drivers. 77% of households have 1 or 2 household vehicles.

Household Auto Ownership Distribution (Percent of Households)

0 Cars	1 Car	2 Cars	3 Cars	4+ Cars
6%	35%	42%	12%	5%
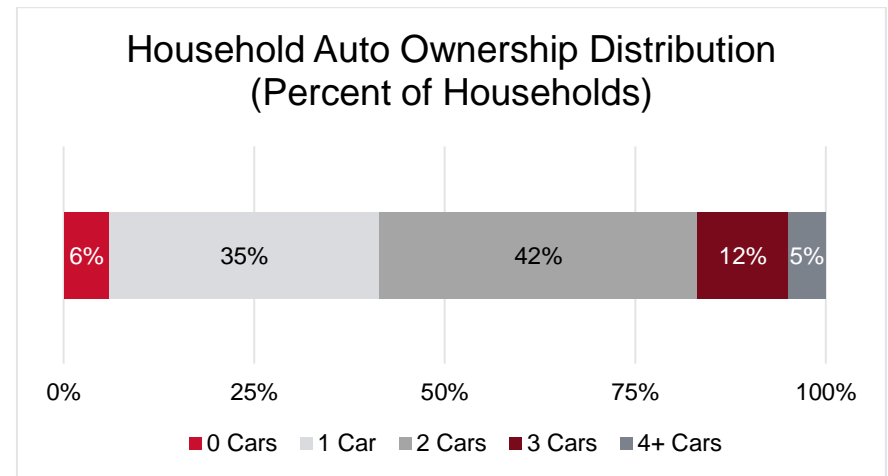
Most households have a car available for every driver in the household.

The number of vehicles per household is one measure of auto ownership, it's also important to look at auto availability. Auto availability is the relationship between the number of vehicles and the number of licensed driver's in the household. In Calgary, almost 70% of households have a vehicle available for every driver.

Household Auto Availability

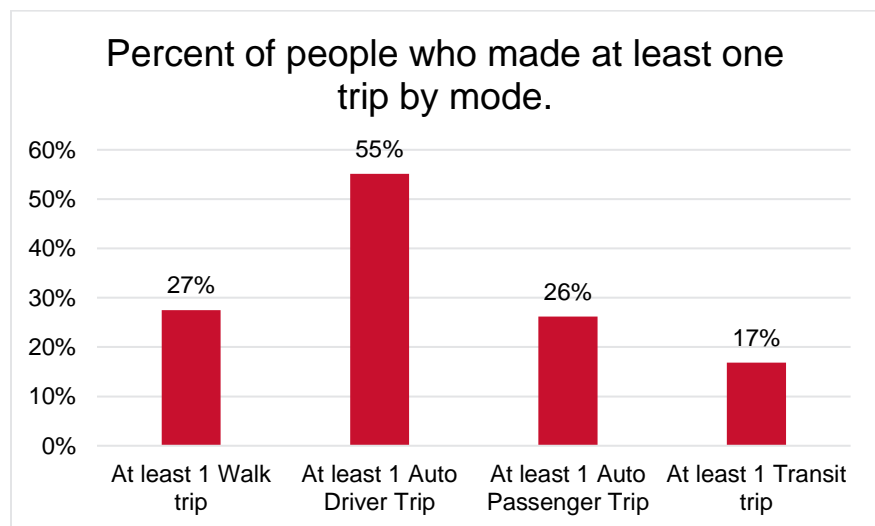| % Households	No Autos or Drivers	Fewer Autos than Drivers	Equal Autos and Drivers	More Autos than Drivers
	6%	25%	59%	10%

How are Calgarians travelling in Calgary?

Trip mode split, which was discussed earlier in this report, is one way of looking at how Calgarians travel. However, people generally make more than one trip in their day so while mode split is one indicator of how people are travelling, looking at how many people made at least one trip by each mode is another measure of how Calgarians are using the transportation system.
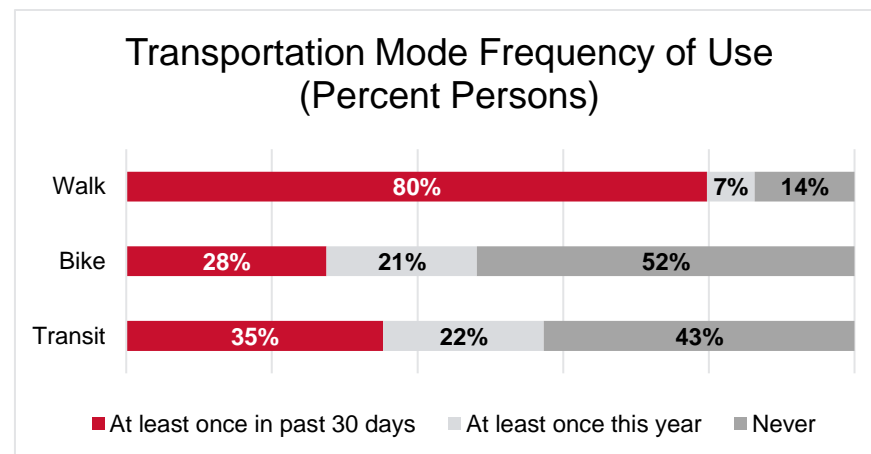
Almost 30% of Calgarians make at least one walk trip per day.

Although only about 20% of trips made by Calgarians are made by walk, almost 30% of Calgarians walk somewhere at some point in their day. Auto trips are most common with about 80% of Calgarians make at least one auto trip in their day.

Percent of people who made at least one trip by mode.

Mode	Percent
At least 1 Walk trip	27%
At least 1 Auto Driver Trip	55%
At least 1 Auto Passenger Trip	26%
At least 1 Transit trip	17%

Most Calgarians make at least one walk trip per month.

My Travel Log asked survey respondents how often they used walk, bike, or transit modes in the previous month. Daily travel can vary substantially and looking at more than one day can provide some useful insight into how Calgarians are travelling. While only about 20% of trips made each day are made by walking, 80% of Calgarians made at least one walk trip per month. Bike travel shows a similar pattern where only 2% of daily trips were by bike, but almost 30% of Calgarians use a bike at least once a month.

Transportation Mode Frequency of Use (Percent Persons)

Mode	At least once in past 30 days	At least once this year	Never
Walk	80%	7%	14%
Bike	28%	21%	52%
Transit	35%	22%	43%

Just over 80% of households, with a bike, rode a bike in the past year.

My Travel Log also asked some questions about bike ownership. Almost 70% of Calgarians own a bike, and 82% of Calgarians that owned a bike, used it within the last 12 months.

Glossary / Definitions

Term	Definition
24 Hour Trips	All trips that occurred in one day from 00:00 to 23:59
All Purpose Trips	Trips that are made for any purposes which may include work, school, shopping, pick up/drop off etc.
Auto Ownership	The number of cars, pick up trucks, SUVs, or motorcycles owned by a household as reported by the household. Does not include recreation vehicles, commercial vehicles or vehicles that are not operational
Calgary Area	The city of Calgary and the surrounding Region. (See Region below)
CBD	Central Business District
Census of Canada	A survey of all Canadians that is conducted by Statistics Canada every 5 years.
Central Business District	In Calgary, and for the purposes of this report this is the central area of the city bounded by the Bow River on the North and East, 17 Avenue to the South, and Bow Trail to the West.
City	Area located within the 2012 city of Calgary boundary.
Civic Census	An annual survey of all residents in Calgary conducted by The City of Calgary.
Cordon Study	A study that counts vehicles, bikes, and pedestrians as they cross a particular boundary.
CTP / MDP	The Calgary Transportation Plan and Municipal Development Plan approved by Calgary City Council in 2009.
Dataset	A collection of data, usually presented in tabular form, where each column represents a particular variable.
Demographics	Statistical data relating to the population and particular groups within it such as household size, income, age, and gender.
Downtown	The same area as the Central Business District
Employment	The number of people who are employed in an area.
Escort Trips	A trip made to drop someone off or pick someone up
Household Income	Total annual pre-tax income for all members of the household.
Household Size	The number of people that live at an address and share a kitchen.
Household Travel Survey	Survey to collect information from households describing their travel choices and travel influences.
Income	See Household Income
Mode Share	The percentage of trips that are made by different travel modes.
Mode Split	The percentage of trips that are made by different travel modes.

New Communities	Residential communities that have been planned since the 1990s and are still being developed as defined in the Municipal Development Plan.
Peak Periods	Periods where travel demand in the study area is highest. Typically there is a peak in the morning from 6:00AM to 9:00AM and in the afternoon from 3:00PM to 6:00PM.
Personal Business Trips	Travel for legal or medical appointments and religious, civic or volunteer activities.
Population	The number of people living in an area.
Region	The area surrounding the City of Calgary that includes the MD of Foothills, Rockyview County, Wheatland County. It also includes all the towns and villages within that area such as Airdrie, Chestermore, Cochrane, Okotoks, Strathmore, and High River.
Sample	A set of data collected and/or selected from a population by a defined procedure.
School Trips	Travel to attend school
Shopping Trips	Travel to shop for household errands, routine shopping, major purchase, clothing, etc.
Social / Recreation Trips	Travel to visit with friends, go out for meals, attend a movie, or go to the gym.
Statistically Significant	A statistical assessment of whether observations reflect a pattern rather than just chance.
Study Area	Includes The city of Calgary and the surrounding Region. (See Region above).
Travel Mode	Different methods of travelling about the Study Area. Includes walk, bike, transit, and auto.
Trip	Travel between two points by any mode. In cases of transit trips where the travel mode changed between two points, such as a park and ride trip or a walk to the bus stop, the trips were linked together to form one transit trip.
Trip Distance	The distance travelled on the road network when going between two points.
Trip Purpose	The reason the trip was made and includes, work, school, shopping, etc and is primarily defined by the destination purpose unless otherwise specified.
Trip Rate	The number of trips made per person or per household.
Work Trips	Travel for paid work or work related activities