

2023 Household Travel Survey

ISSUE

This report provides information from the completion of the Saskatoon Household Travel Survey conducted in fall 2023.

BACKGROUND

A household travel survey (also called an origin-destination survey) provides a detailed picture of the trip patterns and travel choices of a city's residents. Household travel surveys provide quantitative data that can assist with decision making for future transportation options. To coordinate transportation options to address residents' needs, it is helpful to understand why and how travel decisions are made. This can help minimize the impact of the city's expansion while supporting economic growth and development.

Household travel surveys are typically undertaken approximately every ten years to recognize changes in travel patterns and characteristics, and measure travel and transportation trends.

The City of Saskatoon conducted its first household travel survey in 2013. It has helped inform transportation planning and investment decisions. At its meeting held on May 26, 2014, the Administration and Finance Committee received the Capital Project #2011 – Transportation Model Development & Design 2013 Household Travel Survey report for information.

CURRENT STATUS

The 2023 Saskatoon Household Travel Survey was a confidential and voluntary travel survey aimed at determining transportation patterns and preferences of the residents of Saskatoon. The City contracted independent research firm, R.A. Malatest & Associates Ltd., to conduct the survey, which took place from September to December 2023.

The household travel survey data will be used to help understand the travel patterns of residents and will be used by various civic departments to inform decisions on future transportation and land use options.

The Transportation Department will use the household travel survey data to update the Saskatoon Travel Demand Model, which is used to forecast future travel demand on major roadways as part of the planning process for infrastructure. The survey data will also be used to evaluate the impacts of investment in alternate modes of travel.

The Planning and Development Department will use the household travel survey data to help inform the corridor planning process, as well as establish a baseline for travel demand to facilitate future measurements and tracking of the impacts of the land use changes.

The household travel survey data will provide the Long Range Planning Section with a better understanding of how the urban form and structure of the city impacts the transportation and travel needs of residents. This in turn will help inform the neighbourhood, sector and regional planning process.

Saskatoon Transit will use the household travel survey data for transit planning to establish a baseline for travel demand, facilitate future measurements and tracking and gain insights for future marketing campaigns including target audiences.

The focus of the survey was on households and residents within the City of Saskatoon. The main survey was augmented with supplemental surveys for Saskatoon Transit users and University of Saskatchewan students.

The survey collected data related to the household size, type of dwelling, age, gender, access to a vehicle or bicycle, driver's licence status and information about trips taken within a 24-hour period including origin, destination, purpose, time of day and travel mode choice.

DISCUSSION/ANALYSIS

Summary of Survey Participation

For the main survey, a target sample of 5% of households was established for the study conducted from September to December 2023. A total of 41,400 household were invited to participate in the survey through an invitation letter or phone call. 6,627 households provided survey responses, resulting in an overall response rate of 16%.

Additional supplementary surveys targeting Saskatoon Transit users and University of Saskatchewan students were also conducted and provided an additional 421 and 1,227 survey responses respectively.

Following a data-validation process, the final survey dataset represents 7,879 households within Saskatoon. Compared to the estimated 116,800 total households in Saskatoon, the survey dataset resulted in a sampling rate of 6.7% and exceeded the target rate of 5%. The sample size results in findings that are statistically valid.

The survey data were validated against census statistics and the results generally compared favourably for most census characteristics. This suggests that the survey results can generally be taken to be representative of the total population.

Main Survey Statistics

Since the last household travel survey was conducted in 2013, lingering effects of the COVID-19 pandemic have led to societal shifts in social, economic, and travel activity. Table 1 shows the change in the travel statistics. Specific observations are as follows:

- Average daily trip rates have gone down 25% to 2.47 trips per person for people five years old and older.
- Person trip rates are highest for people in the 35-44 age group at 2.91 daily trips and lowest for people aged 85+ at 1.15 daily trips.

- Person trip rates are highest for households with an income of \$150,000 or more at 3.02 daily trips and lowest for households with an income less than \$15,000 at 1.82 daily trips.
- On average, there are 1.59 vehicles per household and 1.33 vehicles per worker.
- 90% of Saskatoon households have access to at least one vehicle.
- 52% of all Saskatoon households have access to at least one adult bicycle or e-bike.
- 79% of daily trips are made by auto. Five of every six vehicle trips are occupied by the driver alone.
- The overall sustainable mode share (transit + walking + cycling/micromobility) has increased slightly from 17% to 18%.
- While the cycling mode share decreased from 4% to 3%, walking increased from 8% to 10% and transit increased from 5% to 6%.
- The percentage of trips made for the purpose of shopping or other personal business has been reduced from 17% to 14%.
- The percentage of trips returning home has increased from 38% to 41%, indicating an increase in single purpose trips.
- Based on a 'bikeable' distance of 4.6 kilometres and a 'walkable' distance of 1.6 kilometres, 39% of the current auto driver trips could be made by a bicycle and 11% of auto drivers trips could be made by walking.

Table 1: Comparison of 2023 to 2013 Household Travel Survey Results

Statistic	Saskatoon 2013	Saskatoon 2023
Average Person Trip Rate per day	3.29	2.47
Mode (expressed in percentage)		
Driver	64	63
Passenger	17	16
Transit	5	6
Walk	8	10
Bike	4	3
Other	2	3
Trip Purpose (expressed in percentage)		
Work, work-related	18	17
Post-secondary education school	3	2
K-12 school	5	6
Serve passenger	8	8
Shopping / personal business / other	17	14
Restaurant	3	4
Social / recreation	8	9
Return home	38	41

When compared to other jurisdictions, the following observations can be made:

- Saskatoon's person and household trip rates are comparable with those of the other cities.
- All cities with pre- and post-pandemic data, including Saskatoon, show a general decrease in the individual and household trip rates.
- All cities with post-pandemic data show person-trip rates in the range of 2.41 to 2.90 trips per day with Saskatoon falling in the middle of the range at 2.74 trips per day.

FINANCIAL IMPLICATIONS

There are no financial implications.

OTHER IMPLICATIONS

Privacy Implications

Collection of information for the survey was undertaken in accordance with *The Freedom of Information and Protection of Privacy Act (FOIP)*. The confidentiality of any information collected is protected under the provisions of the Act. Any information obtained from each household was processed, stored and used in a form that does not permit any particular household to be identified. Names, addresses and phone numbers are deleted from the data file at the conclusion of the survey's data collection phase.

R.A. Malatest & Associates Ltd. conducted the survey data collection under the direction of the City of Saskatoon with the highest standards of the protection of privacy and confidentiality.

Environmental Implications

Ongoing initiatives to promote transit, walking and cycling will have a positive impact on greenhouse gas emissions but have not yet been quantified.

NEXT STEPS

No further reports are required.

The data will be used by various civic departments to inform decisions on future transportation and land use options.

APPENDICES

1. Saskatoon Household Travel Survey Infographic
2. Saskatoon Household Travel Survey Final Report

Report Approval

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