

Mobility across Canada

Insights from a national transport survey

T R A M
TRANSPORTATION
RESEARCH AT MCGILL



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All photos and maps used in this report have been sourced from Transportation Research at McGill

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Territorial Acknowledgment

We would like to acknowledge that McGill University is located on unceded Indigenous lands. Tiohtià:ke/Montréal has long served as a site of meeting and exchange amongst Indigenous peoples, including the Kanien'keha:ka of the Haudenosaunee Confederacy, Huron/Wendat, Abenaki, and Anishinaabeg, among others. TRAM recognizes and respects these nations as the traditional stewards of the lands and waters. We respect the continued relationship these diverse Indigenous peoples have with the territory upon which we now gather.

Research Acknowledgment

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Summary

This report presents findings from the Canadian Mobility Survey (CMS) conducted by the Transportation Research at McGill (TRAM) group in Fall 2024. This nationwide bilingual online survey collects data about travel behaviour, perceived accessibility, travel experiences and attitudes, residential selection, and socioeconomic characteristics from 16,962 participants across 12 regions in Canada. The survey forms a part of the project titled "Linking accessibility measures to individuals' behavior and wellbeing in the Canadian context", funded through the Social Sciences and Humanities Research Council of Canada (SSHRC). This report documents the methodology used for the survey and provides a summary of the main findings.

Key Findings

- In our sample, **car is the most common commute mode** across all regions, with **public transit** and **active** represent a substantial share in **larger regions** such as Toronto, Montréal, and Vancouver.
- **Ottawa–Gatineau** has the highest proportion of **hybrid workers**, followed by Toronto and Montréal, while the majority of workers in **smaller regions**, such as Saskatoon, Victoria, and Winnipeg, primarily **work in person**.
- **Lower-income** respondents tend to **perceive cars as less essential** for getting around than higher-income respondents, across all regions.
- **Younger respondents** are more likely to agree that **online services play an important role** in their ability to get around, compared to older individuals.
- The majority of respondents in Calgary, Edmonton, Winnipeg, and Saskatoon—regardless of gender or transit use—believe that **harassment, discrimination, and crime are issues** on public transit in their respective regions.
- The majority of both **drivers and non-drivers** agree that **funding for public transit should be increased**. Most drivers preferred **provincial taxes** as the source of additional transit funding, while most non-drivers supported **car-related taxes**.
- **Active** mode users, especially cyclists, are more likely to agree that their **daily travel positively impacts their quality of life** and report greater **positive impacts** on their **health and well-being and performance at work** compared to car and transit users.

Sommaire

Ce rapport présente les résultats de l'Enquête sur la mobilité canadienne (EMC) menée par le groupe Transportation Research at McGill (TRAM) à l'automne 2024. Cette enquête en ligne bilingue recueille des données sur les habitudes de déplacement, l'accessibilité perçue, les expériences et attitudes envers les déplacements, le choix résidentiel et les caractéristiques socio-économiques de 16 962 participants dans 12 régions du Canada. L'enquête fait partie du projet intitulé *Linking accessibility measures to individuals' behavior and wellbeing in the Canadian context*, financé par le Conseil de recherches en sciences humaines du Canada (CRSH). Ce rapport documente la méthodologie utilisée pour l'enquête et fournit un résumé des principaux résultats.

Principaux résultats

- Dans notre échantillon, **la voiture est le mode de transport le plus courant** dans toutes les régions. **Le transport en commun, la marche et le vélo** représentent une part importante dans les **grandes régions** telles que Toronto, Montréal et Vancouver.
- **Ottawa-Gatineau** compte la plus forte proportion de **travailleurs hybrides**, suivie de Toronto et Montréal, tandis que la majorité des travailleurs des **petites régions** travaillent principalement **en présentiel**.
- Dans toutes les régions, les répondants à **faible revenu** ont tendance à percevoir **la voiture comme moins essentielle** pour se déplacer que les répondants à revenu élevé.
- Les répondants **plus jeunes sont davantage susceptibles** que leurs aînés de considérer que **les services en ligne jouent un rôle important** dans leurs déplacements.
- La majorité des répondants à Calgary, Edmonton, Winnipeg et Saskatoon, quel que soit leur genre ou leur utilisation des transports en commun, estiment que le **harcèlement, la discrimination et la criminalité sont des problèmes** dans le transport en commun de leur région respective.
- La majorité des **conducteurs et non-conducteurs** s'accordent à dire que le **financement du transport en commun devrait être augmenté**. La plupart des conducteurs préfèrent que ce financement supplémentaire provienne des **taxes provinciales**, tandis que la majorité des non-conducteurs soutiennent l'idée de **taxes liées à l'automobile**.
- Les utilisateurs de modes de **transport actifs**, en particulier les cyclistes, sont plus susceptibles d'être **d'accord avec le fait que leurs déplacements quotidiens ont un impact positif sur leur qualité de vie** et déclarent des **effets positifs** plus importants sur leur **santé**, leur **bien-être** et leur **performance au travail** que les utilisateurs de voitures et de transport en commun.

1 Introduction

1 Introduction

Transport is a crucial aspect of daily life, enabling people to access opportunities and participate in spatially dispersed activities. The quality of transport infrastructure and services can influence several aspects of one's life, contributing to their financial, educational, health, and psychological wellbeing. To design sustainable and equitable transport systems and implement effective strategies and policies, we must first understand how people

from diverse socioeconomic backgrounds use and perceive transport in their regions, and how it influences their daily lives. In this context, the TRAM group conducted the Canadian Mobility Survey (CMS), a national transport survey carried out in Fall 2024 across 12 Canadian metropolitan regions: Toronto, Montréal, Vancouver, Ottawa-Gatineau, Calgary, Edmonton, Québec, Winnipeg, Hamilton, Halifax, Victoria, and Saskatoon (Figure 1.1). This bilingual online survey collects data about travel behaviour, perceived accessibility, travel experiences

and attitudes, residential selection, and socioeconomic characteristics. Following a rigorous cleaning and validation process, the final dataset includes 16,962 complete and valid responses from participants aged 18 and older. This report describes the methodology for collecting and validating the CMS and presents key insights into calculated and perceived accessibility by public transit, travel behaviour, electric vehicle ownership, public transit perceptions, opinions on transit funding, and the impact of travel on quality of life.



Figure 1.1 Regions surveyed with the Canadian Mobility Survey (CMS)

2 Recruitment and Validation Methods



2.1 Recruitment

Recruitment of participants took place in October and November 2024, for participants aged 18 years or older, using a variety of strategies as recommended by Dillman et al. (2014). While the survey was completed exclusively online, participants were recruited through multiple methods mainly led by the TRAM team. Two dedicated websites, www.mobility-canada.ca (English) and www.mobilite-canada.ca (French), were used to circulate the survey and attract participants. Digital flyers linking to the survey were promoted via paid advertisements on Facebook and Instagram, targeting users within each region (Figure 2.1). Printed flyers containing a QR code and the survey URLs were mailed to a sample of households in selected areas of each region via the Canadian postal service. Following a media release presenting preliminary survey results, TRAM members did

radio interviews to promote the survey and encourage listeners to participate. Additional recruitment was performed by Leger, a company specializing in public opinion and surveys in Canada. The company contacted respondents from their list of potential survey respondents in each region. Table 2.1 presents a summary of the pre-validation responses recruited by TRAM and Leger for all 12 regions.

In keeping with best practices for survey recruitment (Dillman et al., 2014), incentives were employed to encourage participation. The following prizes were advertised to respondents and distributed based on a draw after finishing data collection:

- 1 x iPad Air - 128G - 11 inch
- 1 x Apple Watch SE - 2nd Gen
- 1 x AirPods - 3rd Gen
- 1 x Bose SoundLink Bluetooth Speaker
- 2 x Anker SoundCore Bluetooth Speaker
- 2 x Kindle Paperwhite
- 2 x Fujifilm Instax Mini Camera 11

- 1 x Fire TV Stick 4K Max
- 2 x Fire TV Stick 4K
- 2 x Fire TV Stick
- 2 x Anker USB-C 10K Portable Charger
- 4 x Echo Dot - 5th Gen
- 1 x Echo Dot - 4th Gen
- 1 x Echo Dot - 3rd Gen
- 2 x \$50 Gift Card
- 25 x \$10 Gift Card



Figure 2.1 Facebook and Instagram Ads

Table 2.1 TRAM and Leger total recruitment (pre-validation)

Recruited by	Toronto	Montréal	Vancouver	Ottawa-Gatineau	Calgary	Edmonton	Québec	Winnipeg	Hamilton	Halifax	Victoria	Saskatoon
TRAM	2,109	2,019	1,771	1,726	954	1,162	1,336	1,200	1,031	1,162	1,151	909
Leger	461	683	262	405	470	489	295	290	185	208	0	0
Total	2,570	2,702	2,033	2,131	1,424	1,651	1,631	1,490	1,216	1,370	1,151	909

2.2 Data Validation

Following data collection, a thorough data-cleaning procedure was applied to the CMS data. The cleaning process was subdivided into several sequential steps, each of which constituted a filter, reducing the number of valid responses and ensuring their validity. What follows is a description of each step of the cleaning process, which were applied sequentially in the following order:

1. Incomplete answers: All surveys that were not answered to completion were dropped.

2. Multiple IP addresses: If more than two surveys were submitted from the same IP address, all observations from this IP were dropped.

3. Repeated e-mail addresses: If the same e-mail was submitted for more than one survey, all observations from this address were dropped.

4. Age above 90: If a respondent reported being over 90 years old at the time of the survey, their response was dropped.

5. Weekly travel: If a person indicated that they make more than 40 trips to different destinations per week, their response was dropped.

6. Commute mode: If a respondent reported an unrealistic main mode of travel for their work or school commute, the observation was dropped.

7. Invalid home location: If a respondent's

home location was either not provided, outside of the Census Metropolitan Area (CMA) boundaries, or located in an invalid location (e.g., on water or on a bridge), the observation was dropped.

8. Work or school outside of CMA: If a work or school location was outside of the respondent's home CMA, or located in an invalid location (e.g., on water or on a bridge), the observation was dropped. An exception was made for Toronto and Hamilton given their proximity.

9. Answer speed: Surveys in the top 5%

Table 2.2 Number of dropped and validated observations by filtering step

	Step	Dropped	Remaining
0	Raw Database	-	28,786
1	Incomplete answers	8,508	20,278
2	Multiple IP addresses	400	19,878
3	Repeated e-mail	181	19,697
4	Age above 90	7	19,690
5	Weekly Travel	159	19,531
6	Commute mode	515	19,016
7	Invalid home location	385	18,631
8	Invalid work or school	354	18,277
9	Answer speed	1,315	16,962
	Final Cleaned Database	16,962	

of speed of completion were dropped. It must be noted that different groups of respondents, depending on their answers, got different sets of questions. Each of these groups were cleaned according to their own respective top 5% speed.

The results of the cleaning process are summarized in Table 2.2, showing how many observations were dropped in each of the steps, resulting in a final sample size of 16,962. The resulting sample sizes for the complete and valid responses by region is presented in Table 2.3.

Table 2.3 Complete and valid responses per region

Region	Complete and valid responses
Toronto	2,097
Montréal	2,223
Vancouver	1,705
Ottawa-Gatineau	1,856
Calgary	1,132
Edmonton	1,329
Québec	1,374
Winnipeg	1,264
Hamilton	1,000
Halifax	1,163
Victoria	1,046
Saskatoon	773
Total	16,962

3 Sample Characteristics



3.1 Demographic Characteristics

To gauge how representative the survey respondents are of the overall population, we compared our sample's demographic characteristics with 2021 Canadian census

data for each of the surveyed CMAs.

As shown in Table 3.1, our sample's demographic characteristics show a fair distribution among different genders, age groups, income brackets, migrant statuses, and work statuses compared to each respective CMA. Figure 3.1 on the following

pages shows the respondents' home locations in each of the regions included in the study. The sample spans a diverse range of residential locations throughout each of the regions, although in general, respondents are concentrated near the CMA downtown areas.

Table 3.1 Demographic characteristics of survey respondents compared with the CMA censuses

		Toronto		Montréal		Vancouver		Ottawa-Gatineau		Calgary		Edmonton	
		Survey	CMA	Survey	CMA	Survey	CMA	Survey	CMA	Survey	CMA	Survey	CMA
Total N (above age 18)		2,097	5,024,315	2,223	3,433,240	1,705	2,190,265	1,856	1,185,505	1,132	1,155,785	1,329	1,106,035
Gender	Woman	53.24%	51.84%	50.45%	51.50%	56.16%	51.58%	59.57%	51.67%	60.75%	50.79%	59.19%	50.66%
	Man	41.50%	48.16%	47.73%	48.50%	39.46%	48.42%	37.79%	48.33%	35.84%	49.21%	35.90%	49.34%
	Other	5.26%	--	1.82%	--	4.38%	--	2.59%	--	3.41%	--	4.92%	--
Age Group	18 to 24	9.78%	11.20%	9.81%	10.17%	9.44%	10.55%	9.05%	10.96%	9.72%	10.35%	9.93%	10.86%
	25 to 44	46.73%	35.68%	35.00%	34.62%	44.93%	36.01%	44.61%	33.97%	47.35%	39.29%	44.39%	39.08%
	45 to 64	29.57%	33.17%	37.61%	32.71%	28.80%	32.39%	34.05%	33.71%	30.65%	33.07%	32.36%	31.57%
	65 to 74	9.68%	11.30%	13.63%	12.38%	11.67%	12.12%	9.64%	12.44%	8.57%	10.68%	10.01%	11.10%
	75 +	4.24%	8.66%	3.96%	10.12%	5.16%	8.92%	2.64%	8.92%	3.71%	6.61%	3.31%	7.38%
Household Income (CAD)	< \$30k	7.52%	10.94%	7.33%	14.47%	8.56%	12.37%	4.75%	9.53%	8.34%	8.89%	10.03%	9.40%
	\$30k to \$60k	14.31%	17.43%	16.37%	24.20%	16.00%	19.34%	10.44%	17.21%	16.37%	16.93%	18.29%	17.87%
	\$60k to \$90k	16.29%	17.76%	17.60%	20.23%	20.49%	18.28%	14.87%	18.77%	19.98%	18.33%	20.05%	19.12%
	\$90k to \$150k	31.56%	26.38%	32.16%	24.41%	30.25%	25.54%	32.66%	28.12%	31.31%	27.70%	29.46%	28.47%
	> \$150k	30.32%	27.49%	26.54%	16.69%	24.70%	24.48%	37.28%	26.36%	24.00%	28.14%	22.16%	25.15%
Migrant Status	Non-immigrant	67.14%	51.42%	77.64%	74.71%	66.57%	55.97%	81.30%	78.04%	73.50%	67.93%	77.20%	73.48%
	Immigrant	32.86%	48.58%	22.36%	25.29%	33.43%	44.03%	18.70%	21.96%	26.50%	32.07%	22.80%	26.52%
Work Status	Employed	69.29%	56.06%	68.78%	60.75%	69.79%	60.01%	76.19%	59.61%	72.35%	60.79%	70.43%	59.97%
	Unemployed	8.35%	8.58%	3.37%	5.54%	6.57%	5.67%	2.64%	6.41%	6.45%	8.51%	6.09%	8.09%
	Not in Workforce	16.26%	35.36%	19.30%	33.71%	18.24%	34.32%	15.95%	33.98%	14.84%	30.70%	17.53%	31.94%
	Student	9.59%	--	11.70%	--	9.50%	--	9.54%	--	9.45%	--	11.51%	--

Table 3.1 (continued) Demographic characteristics of survey respondents compared with the CMA censuses

		Quebec City		Winnipeg		Hamilton		Halifax		Victoria		Saskatoon	
		Survey	CMA	Survey	CMA	Survey	CMA	Survey	CMA	Survey	CMA	Survey	CMA
Total N (above age 18)		1,374	681,805	1,264	665,340	1,000	632,650	1,163	382,520	1,046	335,830	773	245,790
Gender	Woman	49.96%	51.36%	60.13%	51.08%	59.01%	51.86%	59.89%	51.78%	54.72%	52.14%	63.44%	51.32%
	Man	48.85%	48.64%	34.46%	48.92%	36.23%	48.14%	34.74%	48.22%	39.73%	47.86%	33.64%	48.68%
	Other	1.18%	--	5.41%	--	4.76%	--	5.36%	--	5.55%	--	2.91%	--
Age Group	18 to 24	6.26%	9.05%	10.76%	12.14%	10.10%	10.34%	8.34%	11.20%	7.93%	9.31%	14.62%	11.98%
	25 to 44	36.24%	32.61%	43.59%	35.26%	49.10%	32.77%	42.56%	34.85%	33.46%	31.88%	41.01%	38.72%
	45 to 64	39.74%	31.68%	30.70%	31.50%	27.90%	33.24%	31.56%	32.80%	29.54%	31.15%	28.33%	30.18%
	65 to 74	14.41%	15.12%	11.95%	12.25%	10.20%	12.90%	13.50%	12.80%	21.41%	15.70%	11.13%	11.06%
	75 +	3.35%	11.55%	3.01%	8.85%	2.70%	10.75%	4.04%	8.35%	7.65%	11.97%	4.92%	8.07%
Household Income (CAD)	< \$30k	5.87%	12.50%	11.86%	11.97%	10.47%	10.70%	9.85%	12.20%	9.35%	11.20%	14.62%	10.65%
	\$30k to \$60k	14.39%	25.44%	18.34%	22.02%	17.69%	19.69%	19.60%	22.53%	17.59%	21.56%	19.91%	20.29%
	\$60k to \$90k	17.45%	20.76%	21.17%	20.63%	19.49%	18.80%	20.60%	21.01%	21.94%	20.29%	18.97%	19.93%
	\$90k to \$150k	37.22%	25.63%	29.56%	27.14%	26.84%	26.73%	28.36%	26.60%	28.29%	26.21%	26.75%	27.28%
	> \$150k	25.06%	15.66%	19.07%	18.24%	25.51%	24.09%	21.59%	17.67%	22.83%	20.73%	19.75%	21.84%
Migrant Status	Non-immigrant	90.47%	93.16%	79.35%	73.66%	79.20%	73.93%	82.63%	88.41%	81.17%	80.69%	79.82%	81.68%
	Immigrant	9.53%	6.84%	20.65%	26.34%	20.80%	26.07%	17.37%	11.59%	18.83%	19.31%	20.18%	18.32%
Work Status	Employed	71.32%	62.05%	71.04%	60.34%	68.30%	55.32%	69.05%	57.96%	59.85%	59.18%	64.55%	62.95%
	Unemployed	1.75%	4.26%	5.54%	5.68%	6.50%	7.43%	4.56%	7.43%	4.78%	4.37%	3.88%	5.65%
	Not in Workforce	20.67%	33.69%	17.56%	33.97%	16.50%	37.25%	20.29%	34.61%	29.73%	36.45%	17.08%	31.40%
	Student	6.77%	--	11.39%	--	12.00%	--	9.20%	--	6.88%	--	22.38%	--

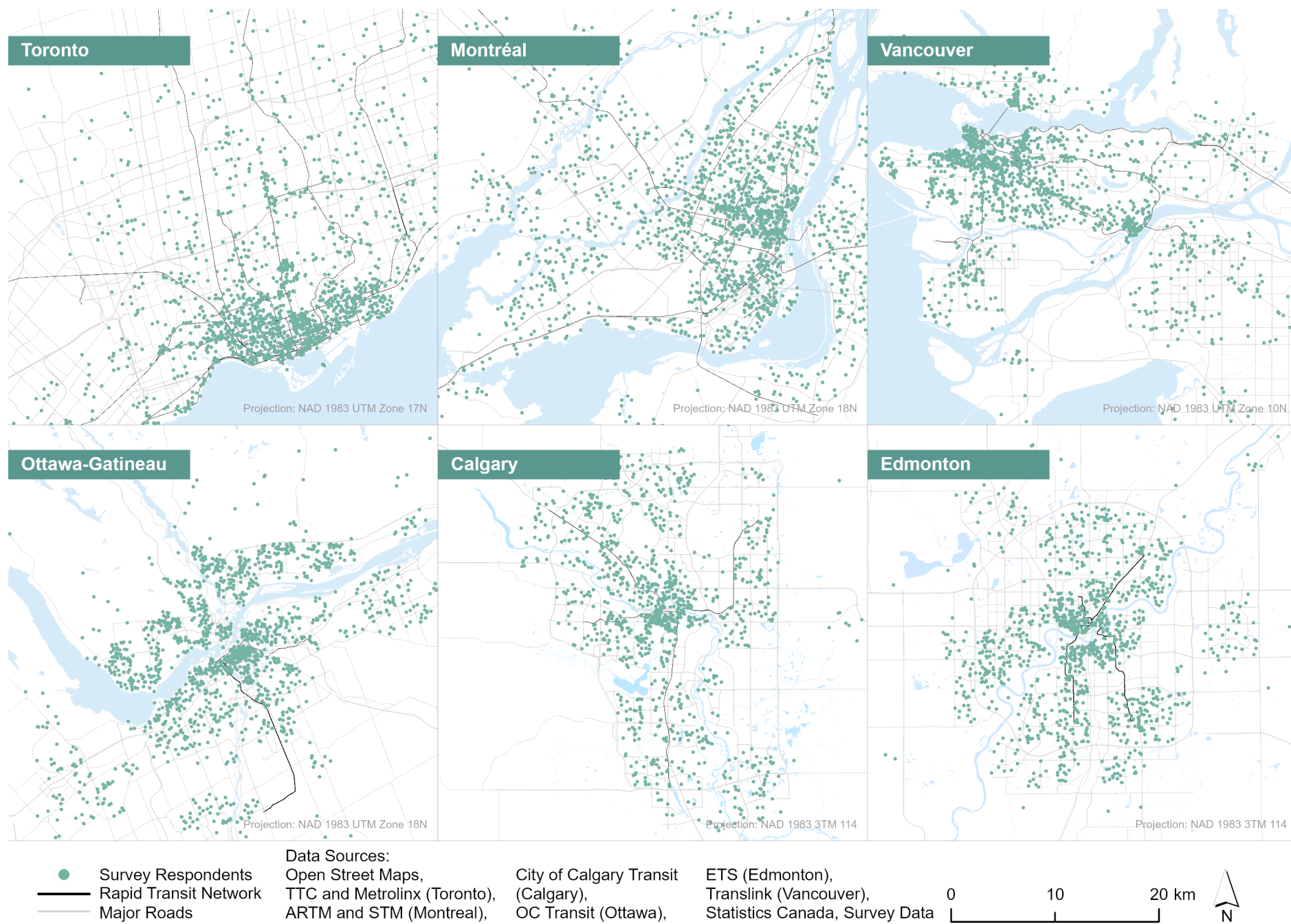
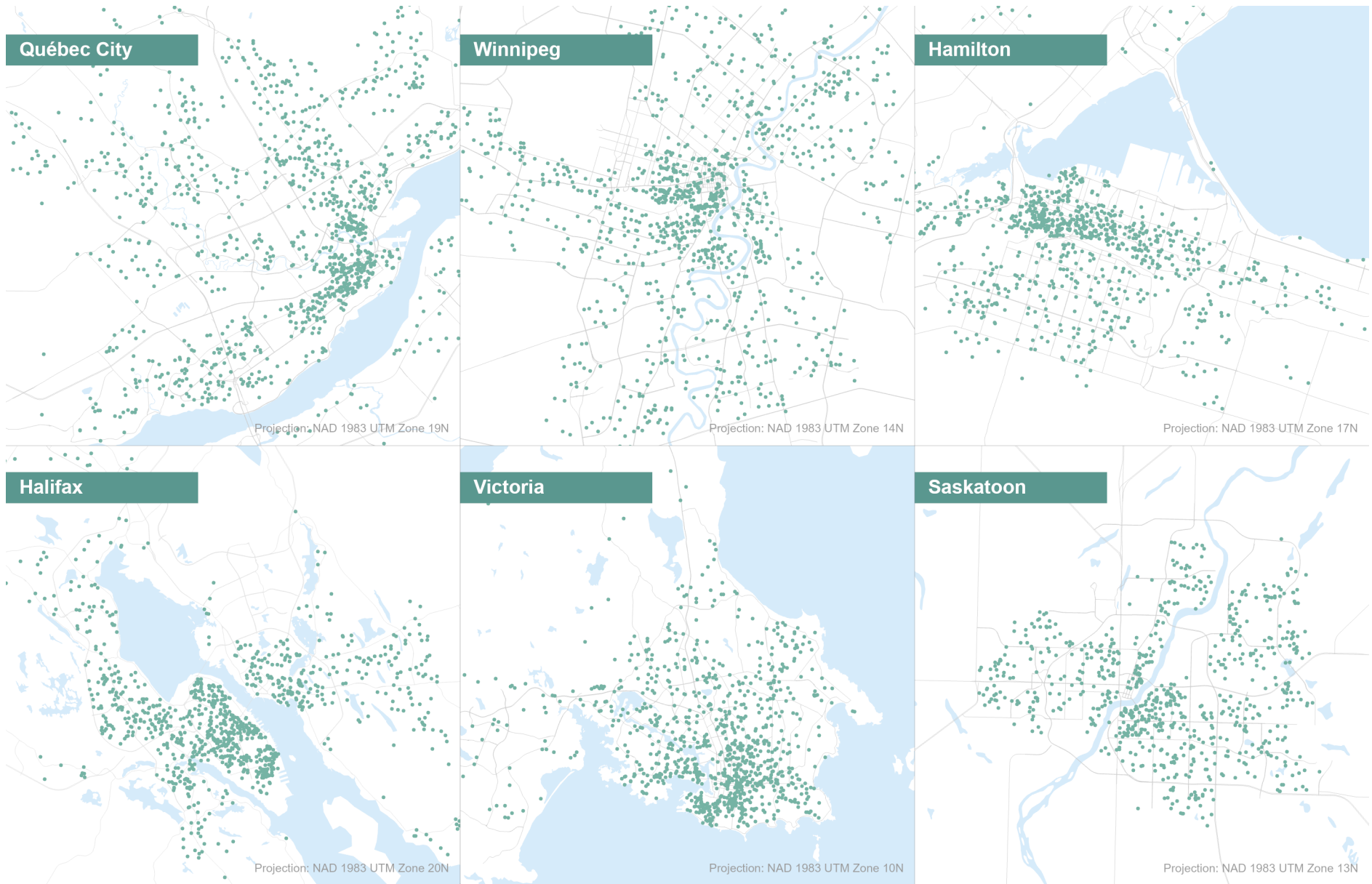


Figure 3.1 Survey respondents' home locations



● Survey Respondents
— Major Roads

Data Sources:
Open Street Maps, Survey Data, Statistics Canada, Government of Canada

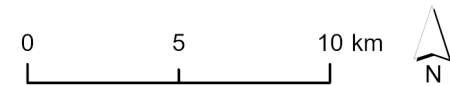


Figure 3.1 (continued) Survey respondents' home locations

4 Accessibility by Public Transit



4 Accessibility by Public Transit

Regional accessibility is one of the most inclusive measures linking land use to transport systems to assess how they benefit the population in reaching opportunities around them (El-Geneidy and Levinson, 2022; Levinson and Wu, 2020). In this section, the distribution of relative cumulative accessibility to employment by public transit is presented across the 12 regions (Figure 4.1). The Canadian population census and commuting flows (CCF) (Statistics Canada, 2017, 2023a) are used to identify the number of jobs present in each census tract (CT) in the Montréal metropolitan region. The number of jobs in an area is often used in the accessibility literature as a proxy for the quantity and diversity of services and products that the area offers (El-Geneidy and Levinson, 2022); thus, representing the different opportunities that individuals seek to reach. The latest polygon shapefiles for each region's dissemination areas (DA) were retrieved from the 2021 Canadian population census. The centroid for each polygon was then calculated to be used as a reference point for the DA. The CCF tables provide the number of workers commuting between their home and work CTs. In 2021, numerous jobs relied entirely on telecommuting due to



the COVID-19 pandemic, which may not accurately reflect the most recent circumstances. We determined that utilizing the 2016 CCF tables would provide a more representative depiction of the current situation, as many areas restored pre-pandemic activity. The 2016 job data were proportionally allocated to the 2021 dissemination areas (DAs) based on land area.

The regional accessibility by public transit to jobs at the DA level was calculated using the number of jobs per DA, General Transit Feed Specification (GTFS) data, and OpenStreetMap networks. GTFS data was obtained for each region from Transitland using an API for October 2024, to match the public transit services at the time of collecting the CMS. The OpenStreetMap street network was obtained for each CMA through BBBike extracts. The r5r package in R was used with GTFS data and the

OSM network for each CMA as inputs to calculate a travel time matrix (TTM) between DA centroids for every minute in a predefined period of the day (Pereira et al., 2021). This TTM represents the shortest travel time (TT) by public transit between each origin and destination (DAs) for a regular Wednesday between 8 and 9 AM, from which the median value is used to account for schedule variability. The calculated TT includes access, egress, waiting, in-vehicle, and transfer times if applicable. To calculate the cumulative opportunities measure, the travel-time threshold was set to 45 minutes as it is closest to the mean TT by public transit in the regions as suggested by Kapatsila et al. (2023). To allow for comparisons between regions, we divided the resulting accessibility values per DA by the total number of jobs available in each CMA, resulting in a proportional accessibility measure.

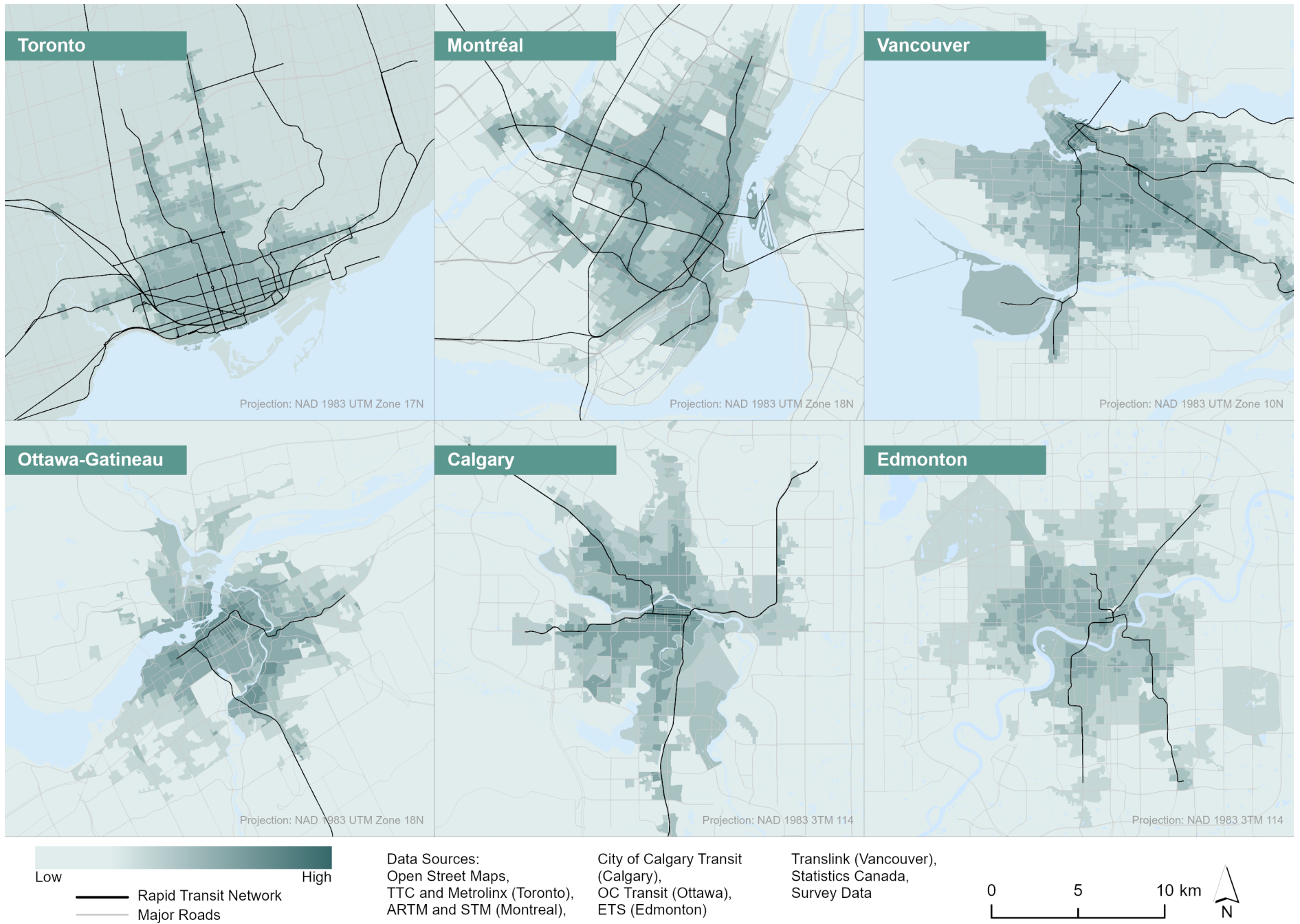


Figure 4.1 Proportional cumulative accessibility to jobs by public transit at the DA Level

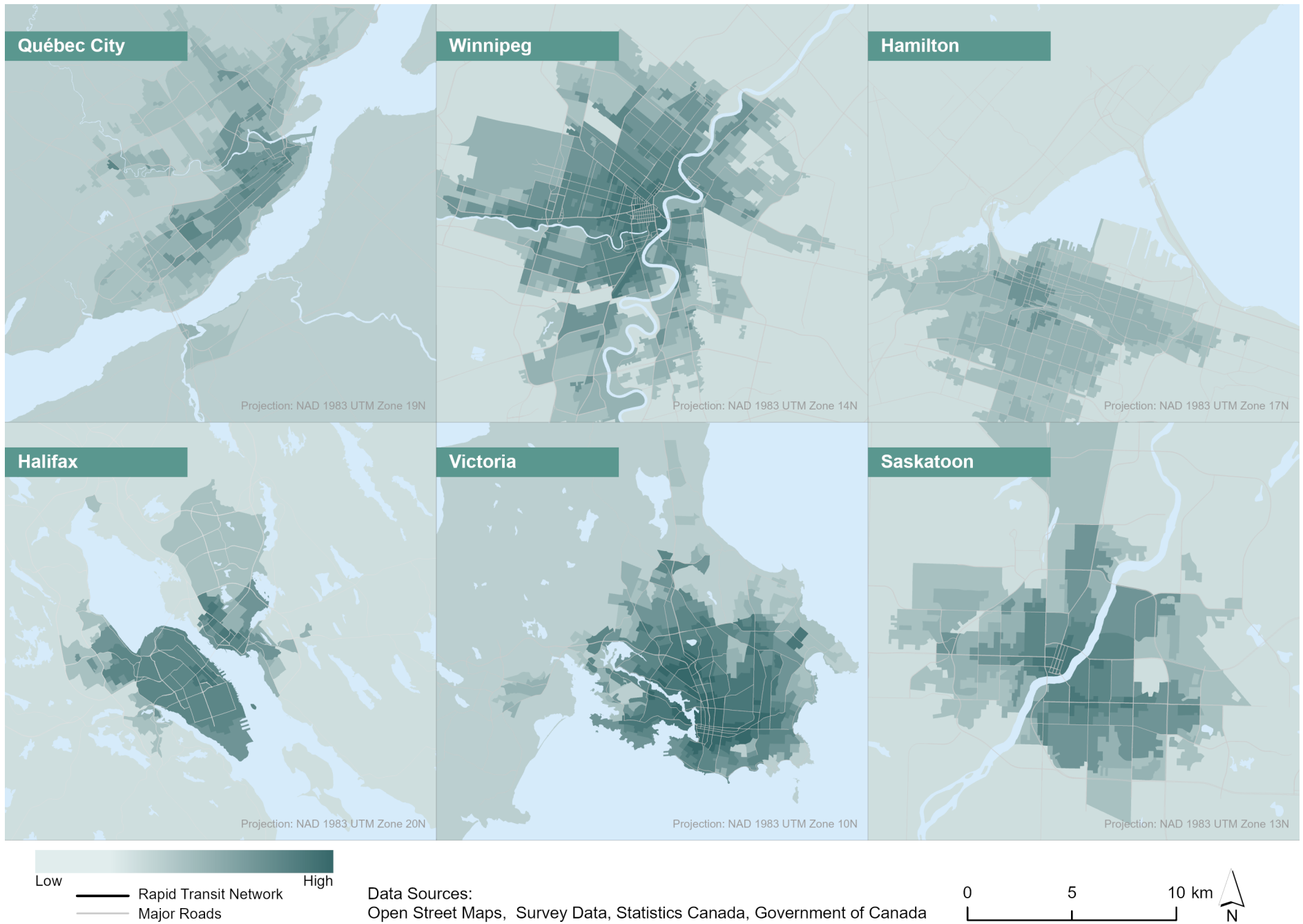


Figure 4.1 (continued) Proportional cumulative accessibility to jobs by public transit at the DA Level

5 Perceived Accessibility to Work

5.1 Perceived Accessibility to Work

Understanding how people perceive their accessibility by public transit and the reasons behind these perceptions is essential to developing strategies that encourage transit use. In the CMS, we ask workers about their agreement with the statement: “By public transit, I can easily reach my workplace.” We compare responses from two groups: those who consider themselves to be transit users and those who do not.

Across the 12 regions, a higher percentage of workers who identify as transit users tend to agree that public transit allows easy access to their workplace, compared to non-transit users (Figure 5.1). Meanwhile, non-transit users largely tended to disagree with this statement. This highlights a trend where identifying as a transit user aligns with more positive perceptions of accessibility by public transit. However, there are exceptions with some users reporting negative perceived accessibility and some non-users reporting positive perceived accessibility.

The reasons for positive and negative perceived accessibility are explored by user type in Figure 5.2 and Figure 5.3, respectively. Transit stops being

located near work and home are the most commonly mentioned reasons for perceiving accessibility to work positively. Over 80% of both transit users and non-users mention the allocation of stops as a key factor. Other reasons mentioned by more than 50% of transit users include ease of use, alignment with schedules, good coverage, affordability, and reliability.

Negative perceived accessibility is most frequently associated with public transit being too slow, unreliable, or not operating at desired times, among both transit users and non-users. Other concerns, especially among non-users, include inflexibility (for example, transit not allowing for spontaneous changes of plans) and feelings of unsafety. While the location of transit stops being too far from home and work was a notable factor in negative perceptions, especially for transit users, it did not appear to be as decisive as proximity was in shaping positive perceptions.

In many cases, there are clear differences in the reasons cited by transit users and non-users. For example, Figures 5.2 and 5.3 show that non-transit users are more likely to view the system as too complicated to use. This finding reinforces the need for educational campaigns that explain how transit systems work, which could in turn positively impact perceptions and encourage greater transit use.

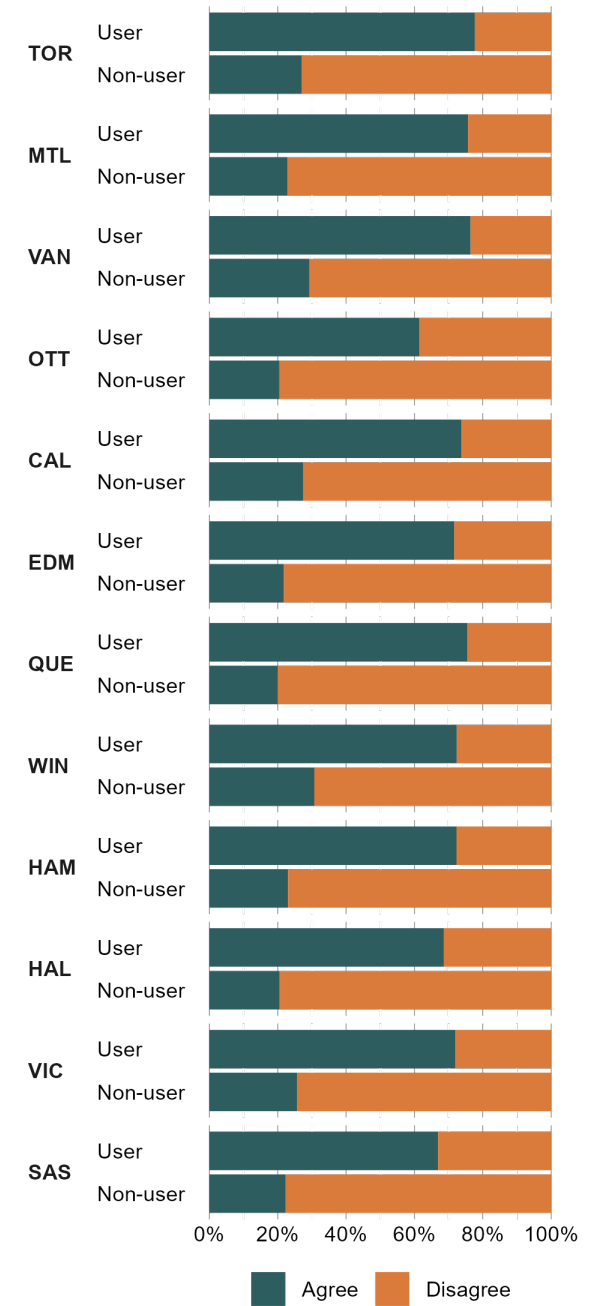


Figure 5.1 Perceived accessibility to work by public transit (transit users vs. non-users)

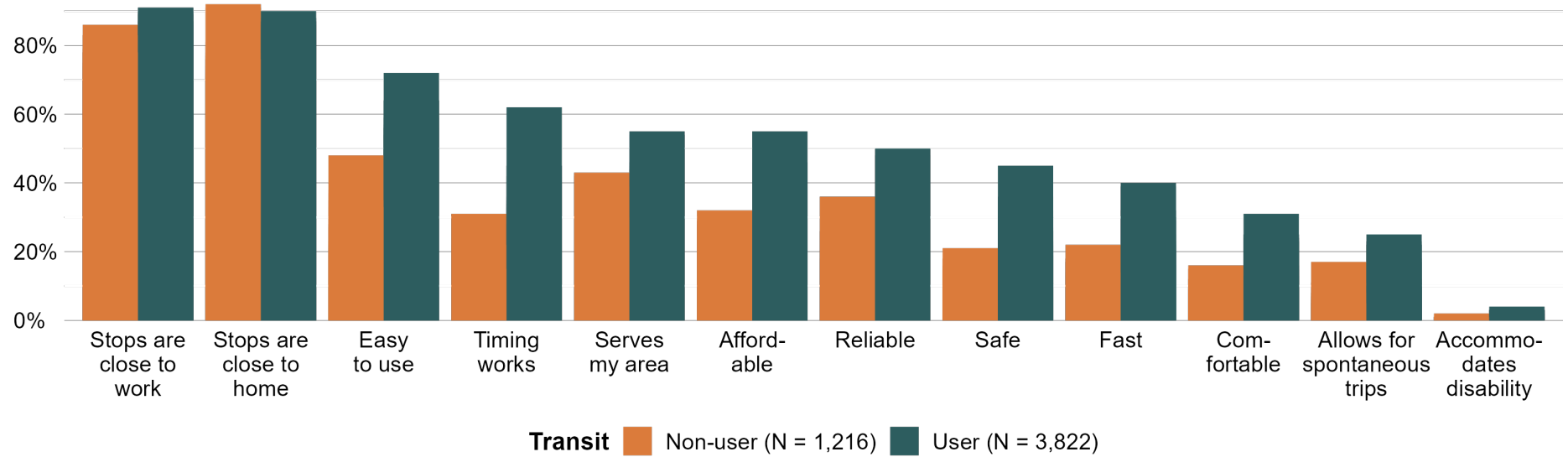


Figure 5.2 Reasons why participants **can** access their work place by public transit

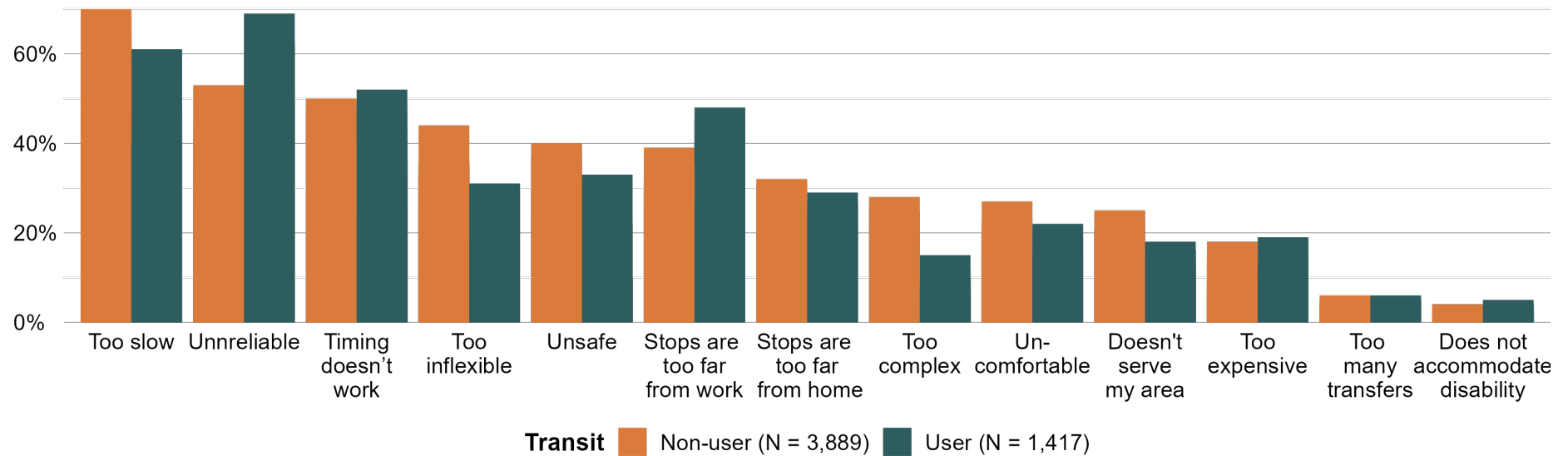


Figure 5.3 Reasons why participants **cannot** access their work place by public transit

5.2 Calculated and Perceived Accessibility (Mis)match

We further investigated perceived accessibility to work by comparing it with calculated accessibility. Figure 5.4 illustrates the (mis)match between these two aspects. Calculated accessibility was categorized as high or low based on the median value of proportional cumulative opportunities accessibility to work within each region (see Section 4).

In all regions, the majority of respondents' calculated accessibility aligns with their perceived accessibility—whether positively (high-high) or negatively (low-low). The three largest regions, Toronto, Montréal, and Vancouver, display the highest percentages of respondents with both high calculated accessibility and a positive perception of accessibility (approximately 30% in each region).

Among those who negatively perceive their accessibility despite having high calculated accessibility (N=2,034), the most frequently cited reasons are consistent with the overall sample. These include public transit being too slow, unreliable, not operating at desired times, or stops being too far from their workplace. These issues should be taken into account by transit authorities when developing strategies to encourage transit use.

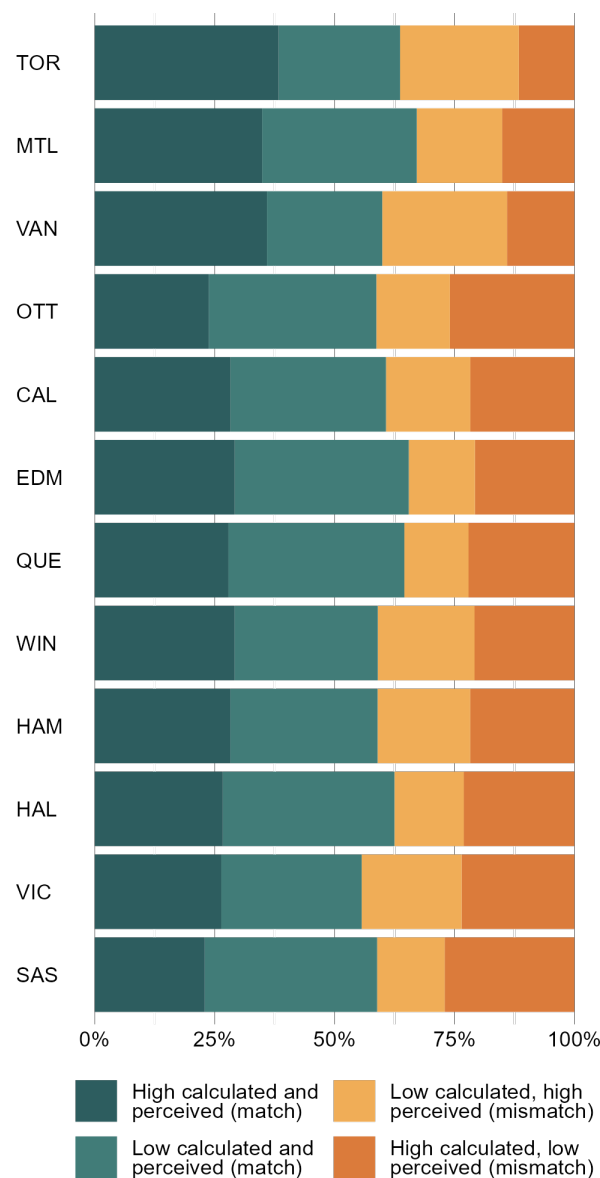
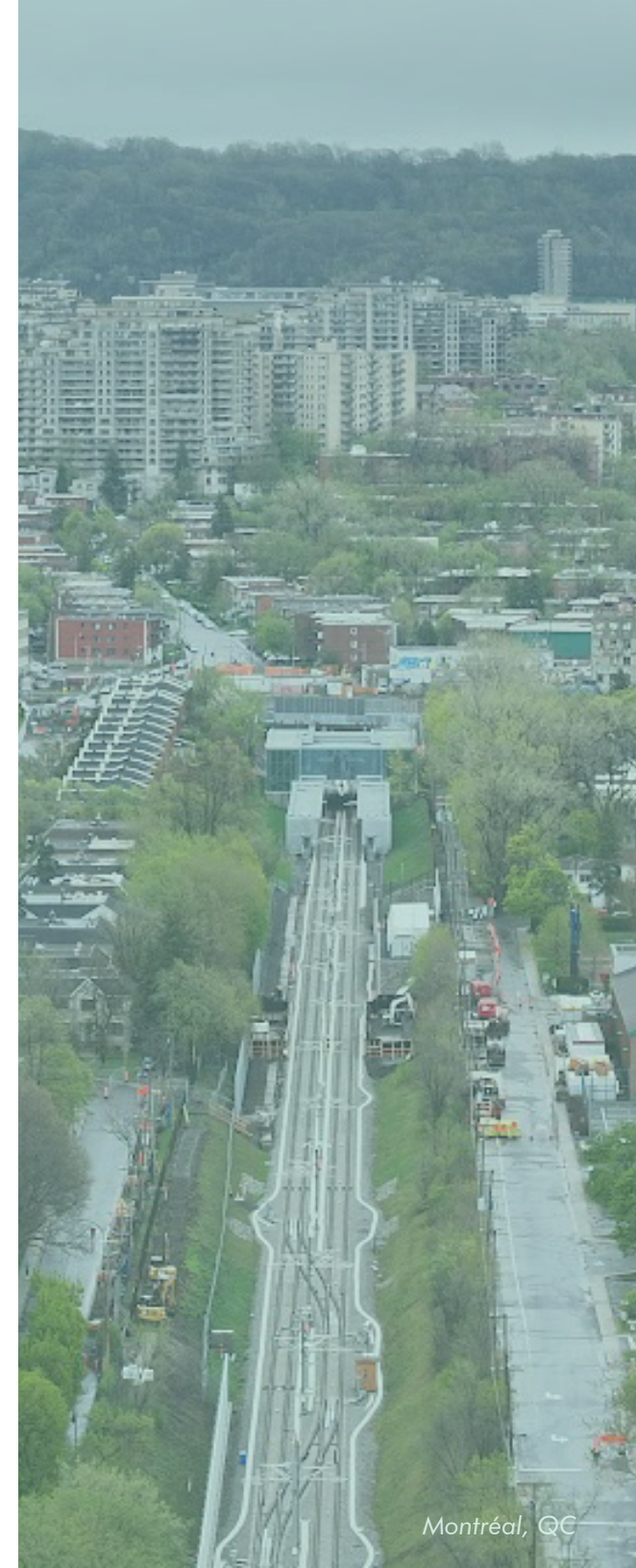


Figure 5.4 (Mis)match between perceived accessibility to work by public transit and calculated cumulative opportunities accessibility by public transit - 45 mins travel time





6 Travel Behaviour



6.1 Commute Main Mode

Commuting to work is a central and regular part of people's weekly travel. Figure 6.1 displays the commute mode share for the workers in our sample across the 12 regions. For respondents with multiple commute modes, the mode with which they travelled the furthest was considered their main mode. The transit category includes the modes available in each region. For example, it includes subway, bus, LRT, BRT, and commuter rail in Montréal, whereas, it includes only bus service in Saskatoon.

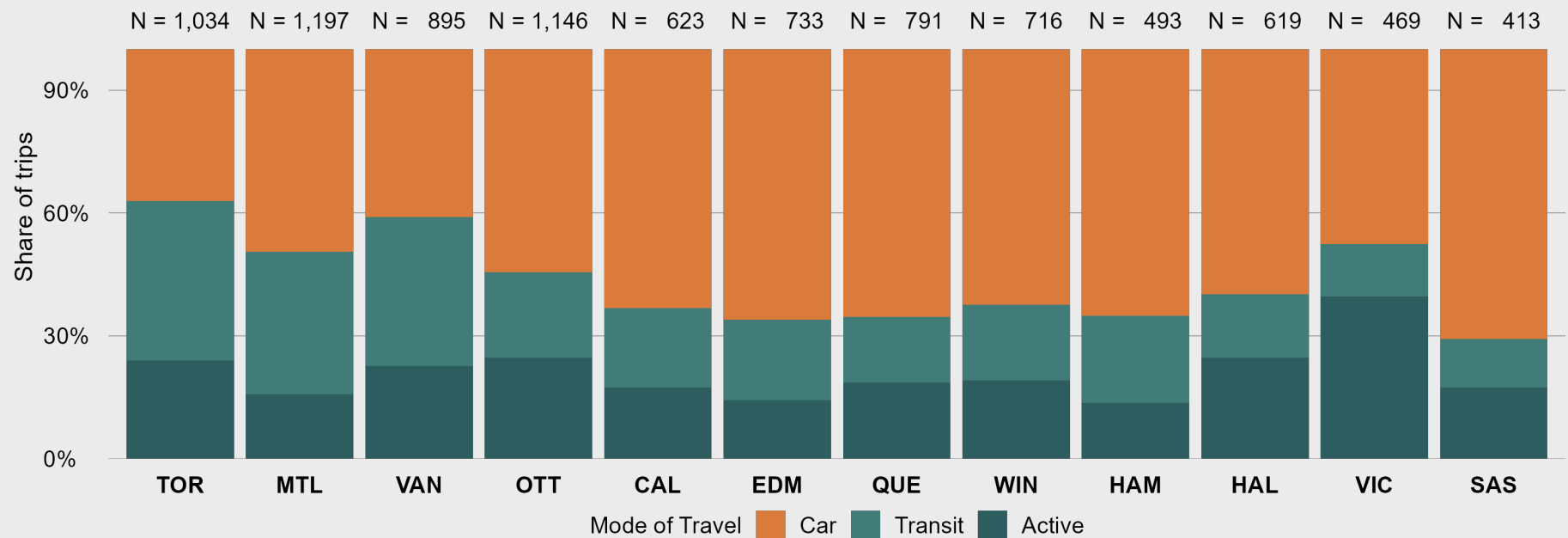


Figure 6.1 Commute modal share by region



Toronto, ON

Figure 6.2 compares CMS survey respondents' commute mode shares to census data for each region's metropolitan area (CMA). With the exception of Toronto, over 40% of respondents in each region use a car to commute to work and/or school. However, CMS respondents exhibit significantly lower car commuting rates across all regions compared to census data, highlighting a greater tendency toward transit use and active travel among the sample. Respondents in Toronto, Montréal,

and Vancouver exhibit higher proportions of public transit use when compared to their less populous counterparts, and more than half of the commute trips in these three regions are made using sustainable modes (transit and active modes) in the CMS.

Of the smaller regions, Victoria has an exceptionally high proportion of active travel (i.e., walking and cycling) at 40%, followed by Ottawa-Gatineau and Halifax, both seeing active travel shares of around 25%.

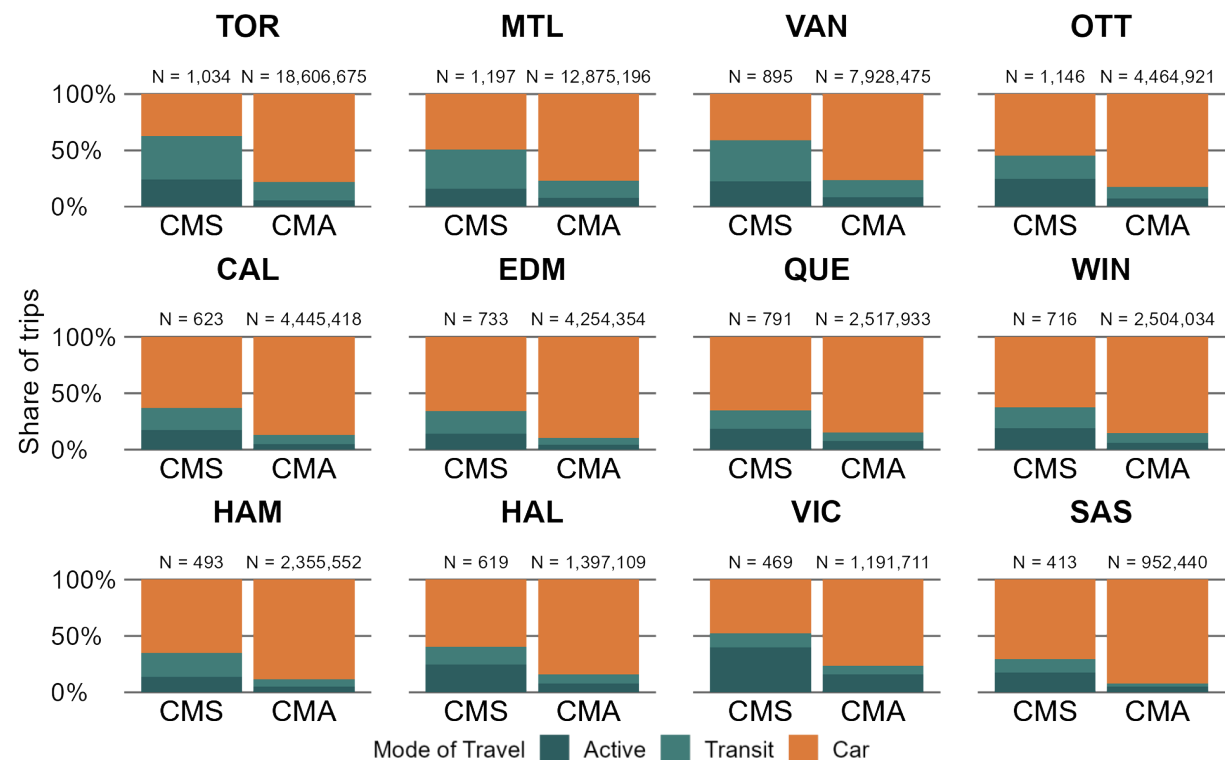


Figure 6.2 Commute modal share comparison between CMS and CMA.

6.2 Telecommuting

Figure 6.3 shows the share of workers in each region by their weekly frequency of telecommuting. The sample captures a wide range of telecommuting behaviours, from those who do not telecommute at all (0 telecomm. days) to those who telecommute part-time (1-4 telecomm. days) or full-time (5 telecomm. days). Despite significant shifts in telecommuting behaviour due in large part to the COVID-19 pandemic,

full-time telecommuting still remains relatively uncommon, with fewer than 20% of workers across all 12 regions working remotely five days a week. Trends also show lower rates of telecommuting in the smaller metro areas. For instance, over 60% of respondents in Saskatoon do not telecommute at all, compared to only about 35% of respondents in Toronto. In Toronto, Montréal, Vancouver, Ottawa-Gatineau, Québec, and Hamilton, over 50% of respondents reported telecommuting at least once a week.

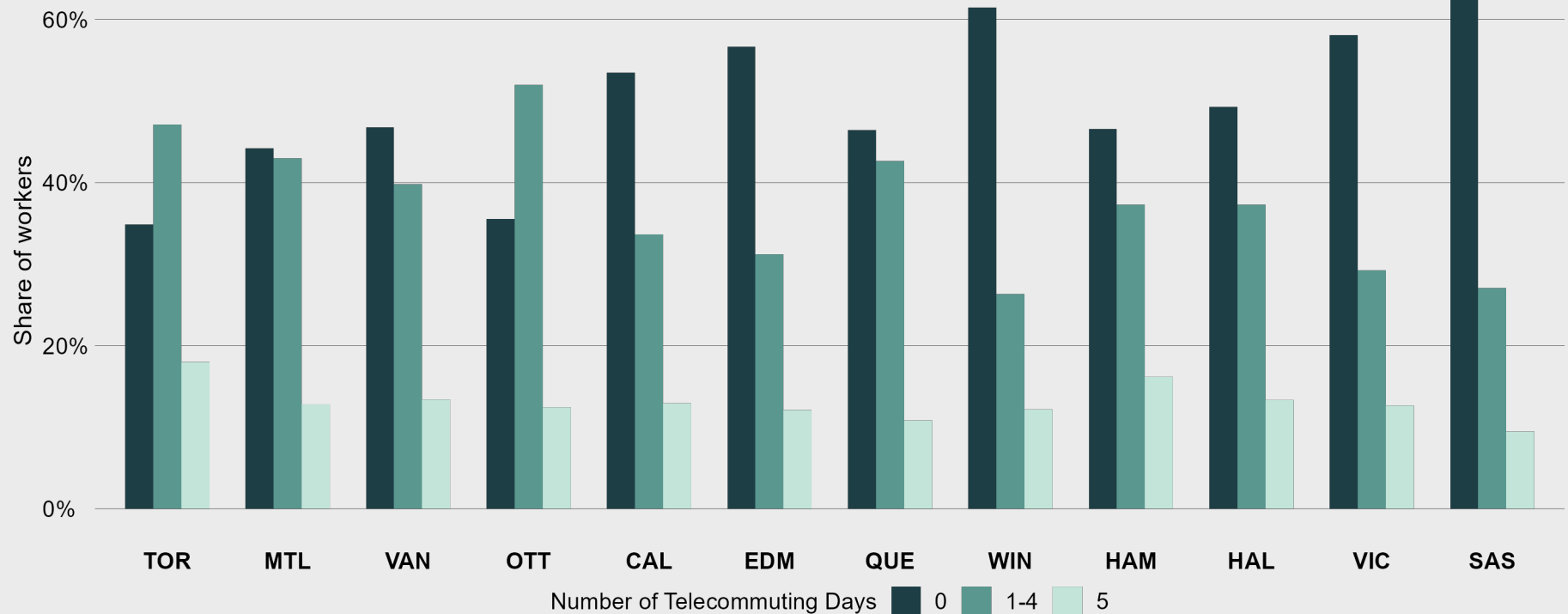


Figure 6.3 Share of telecommuting workers by frequency of telecommuting



7 Electric Vehicles



7.1 Electric Vehicle Ownership and Travel Distances

Among all respondents who own a personal vehicle, electric vehicles (EVs) account for approximately 3.9% of all primary vehicles, i.e., the most frequently used vehicle by the respondent. This is a relatively high share, as according to Statistics Canada (2024), EVs represented 2% of active registrations for light-duty vehicles in 2023. For the survey respondents, 11.6% of those with an EV as their primary vehicle also reported

owning an EV as their secondary vehicle. In contrast, only 2.9% of non-EV users reported owning an EV as a secondary vehicle.

This suggests that having an EV as a primary vehicle could be associated with a higher likelihood of also using an EV as a secondary vehicle, indicating that EV ownership may influence subsequent purchasing decisions. Households that earn \$60,000 or more annually have a slightly higher proportion of EV ownership; 4.6% of this group have an EV as a primary vehicle, compared to 1.6% for lower-income households.

Across all regions, EV owners exhibit longer median work trip distances by driving compared to non-EV owners (Figure 7.1). The median car work trip for EV owners is 12.4 km, approximately 27% longer than the 9.8 km median for non-EV owners. This suggests that EVs may be contributing to greater wear on road infrastructure due to longer driving distances. It is important to note that, while EVs are promoted as environmentally friendly, they still contribute to congestion, urban sprawl, demand for parking, and air pollution through non-exhaust sources such as brake and tire wear.

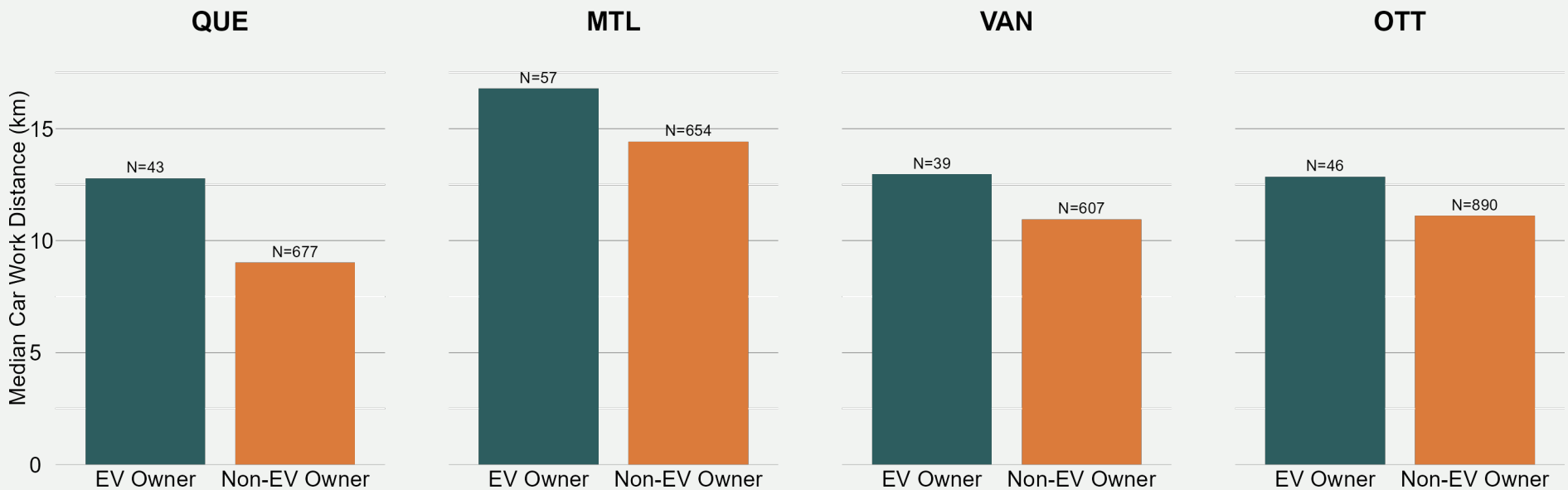


Figure 7.1 Electric vehicle ownership and median car work distance*

*Regions with less than 30 respondents not included

8 Travel Perceptions



8.1 Perceived Car Dependence

Survey respondents were asked a series of questions regarding their perceptions of travel modes and services as well as their knowledge use of online services. They were asked whether they agreed with the statement: “I need a car to do many of the things I like to do.” The results are shown by region in Figure 8.1.

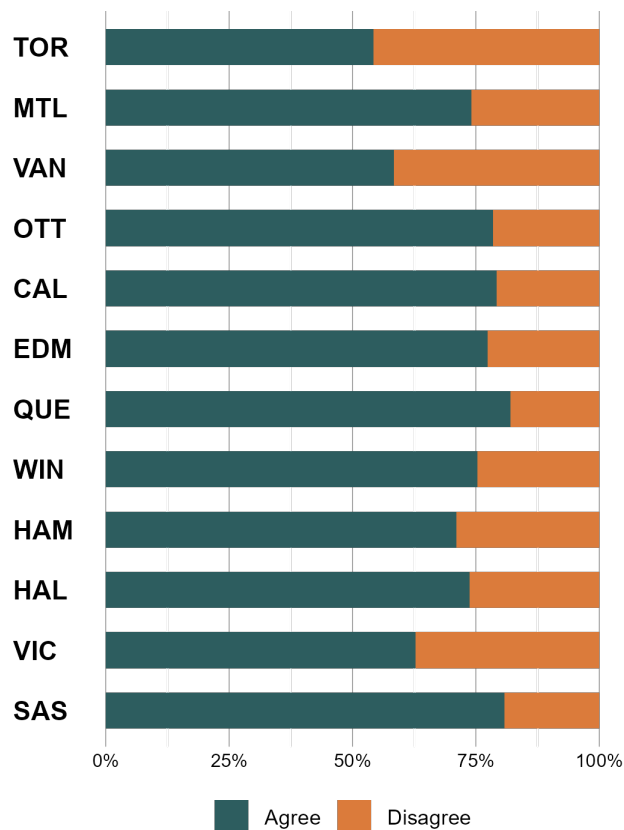


Figure 8.1 Perceived car dependence by region

Overall, 71% of respondents agreed that a car is necessary for them to conduct their desired activities, showing consistently high tendencies of car dependence across Canada. In the CMS, participants in Toronto, Vancouver, and Victoria showed the lowest reported levels of car dependence, with 46%, 42%, and 37% respectively disagreeing that a car is necessary. Meanwhile, participants in other regions displayed more consistent car dependence, with about 70% agreeing that they need a car to do the things they like to do.

These perceptions generally align with rates of vehicle access. Among the 71% who reported needing a car, 90% have access to at least one vehicle at all times (excluding car sharing). Even among those who said they didn't need a car, 48% still have access to a vehicle at least some of the time.

Respondents who do not believe that car access is necessary tend to rely on alternative modes such as public transit, cycling, and walking. Walking is the most common mode among those who believe driving is unnecessary (34%), followed by multimodal travel (20%) and public transit (18%). Among those who agree that they need a car to conduct their activities, 65% drive as their main mode, with multimodal travel following at 13%.



8.2 Perceived Car Dependence by Income

Across all regions in the study, lower-income respondents were more likely to disagree that a car is necessary for the activities they want to do (Figure 8.2). As income increases, so does the likelihood of agreeing that a car is essential. While the trend is generally consistent across the 12 regions, the proportion of respondents who agree or disagree varies from region

to region. Montréal shows the largest difference in perceived car dependence between the highest and lowest income groups, while Victoria shows the smallest variation. In Toronto, 40% of the lowest income group do not consider a car necessary for their daily travel, this group displays the lowest level of perceived car dependence across all regions. In the lowest income group Toronto, Montréal and Vancouver are the only regions with more than 50% that do not consider a car necessary for activities.

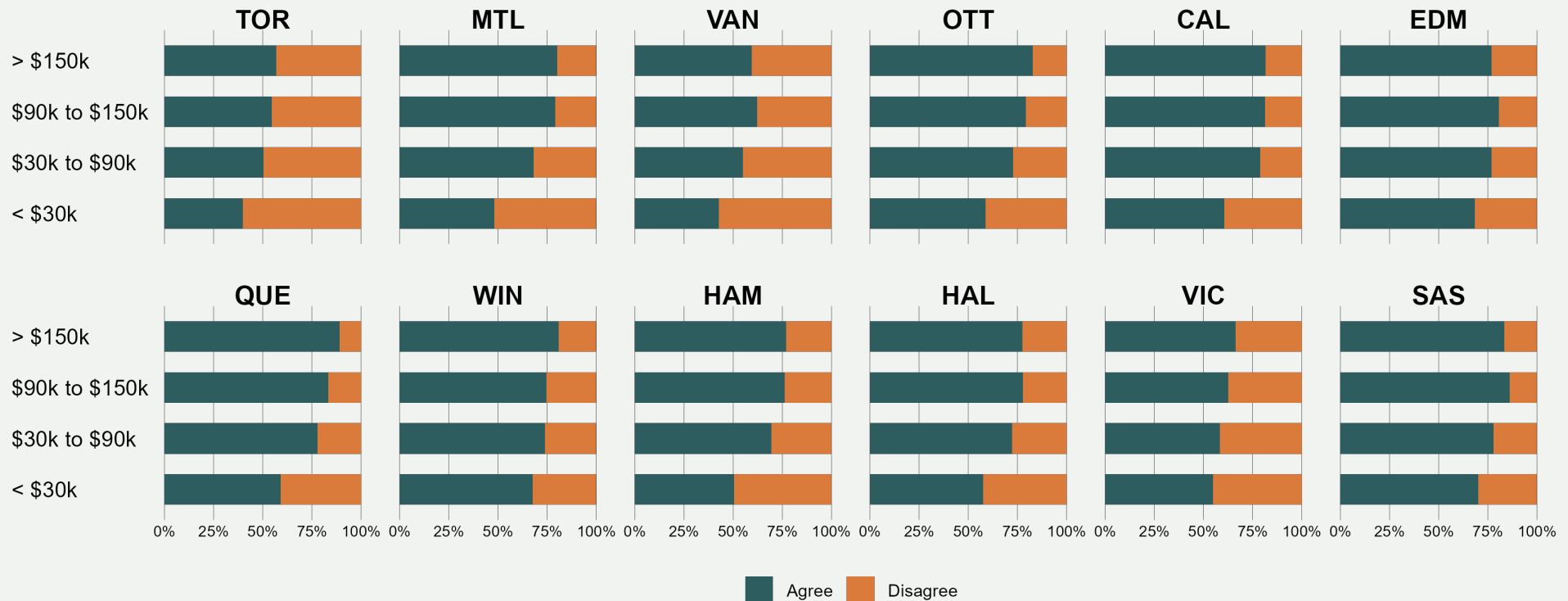
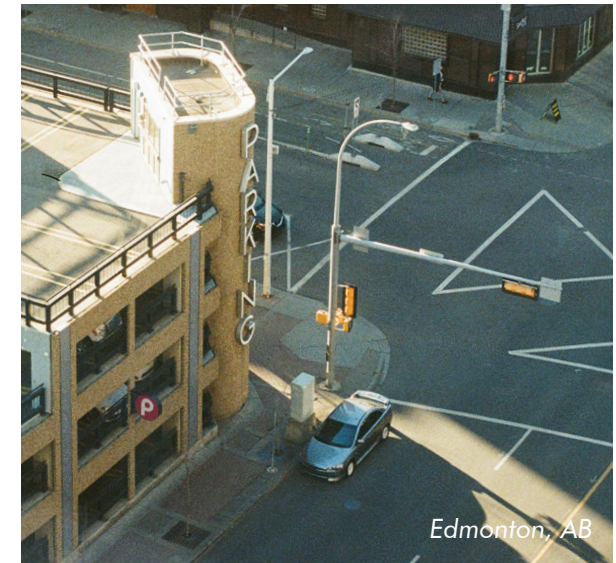


Figure 8.2 Perceived car dependence by income

8.3 Reliance on Online Services

Participants in the CMS were asked if they agree that online services play an important role in their ability to find their way around. This includes the use of Google Maps, Waze, and other online services and apps. Figure 8.3 shows that younger respondents perceived online services as more necessary for getting around than older respondents, older people tending to rely on them less. This trend is consistent across all 12 regions.

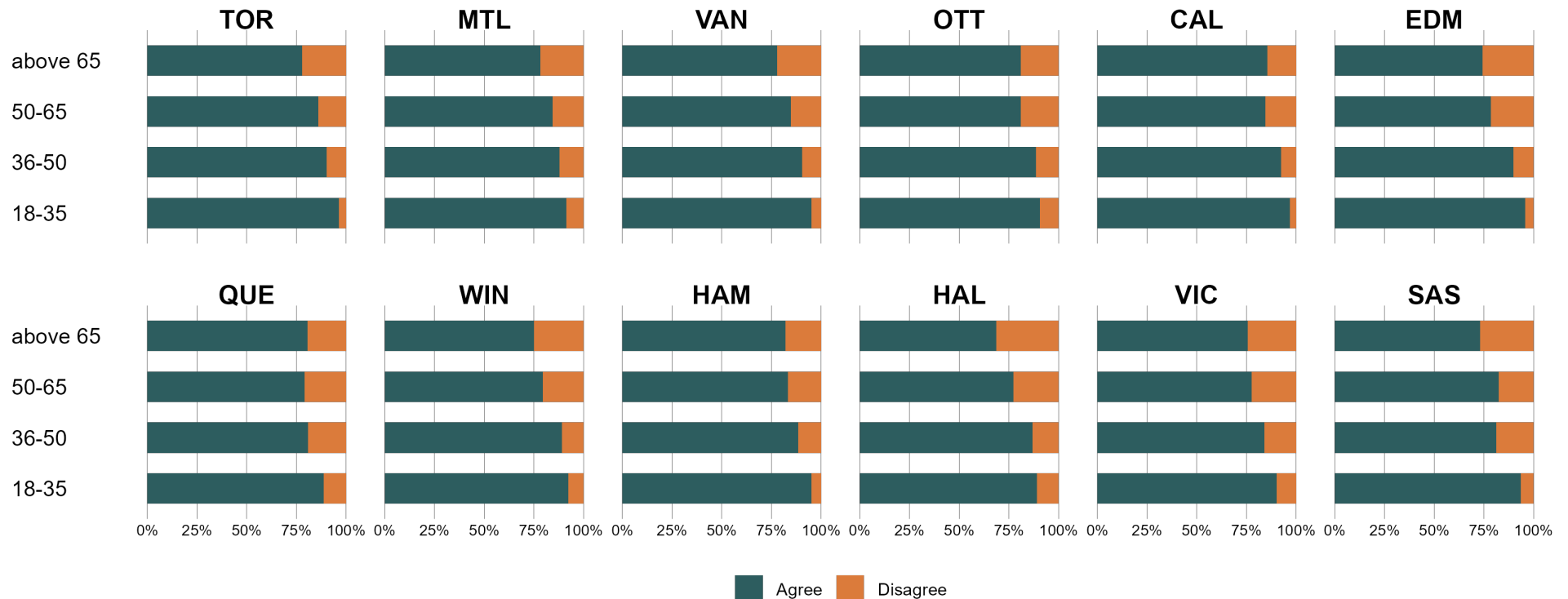


Figure 8.3 Perceived reliance on online services by age



9 Public Transit Perceptions



9.1 Public Transit Perceptions by Gender

Perceptions of crime, harassment, and discrimination in public transit vary across regions and groups. Figure 9.1 shows that women across all regions are slightly more likely than men to believe harassment and discrimination are issues in public transit. Perceptions of harassment and discrimination are especially high in Edmonton and Winnipeg: 80% of women in both cities agreed that harassment and discrimination are issues in public transit. Quebec women, on the

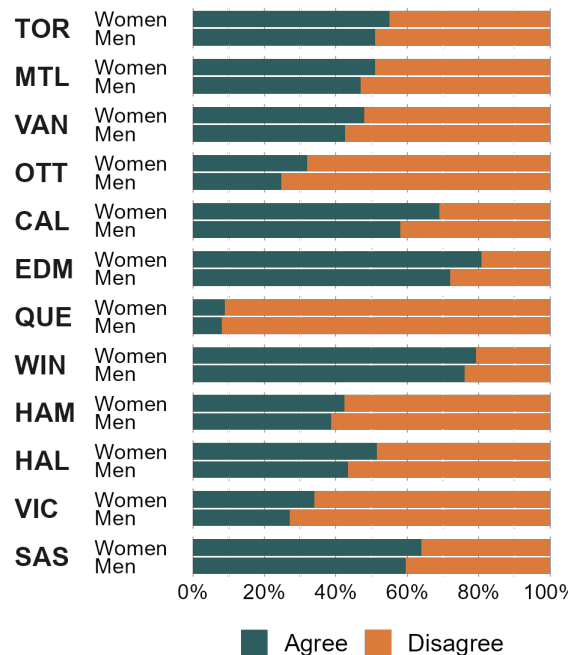


Figure 9.1 Perception of harassment and discrimination on public transit by gender

other hand, stand out for their overwhelming positive perception of transit safety: only 9% of women agreed that harassment and discrimination are issues in public transit. The majority of respondents in Calgary, Edmonton, Winnipeg, and Saskatoon—regardless of gender—believe harassment and discrimination are issues in public transit. Despite heightened safety concerns, women across all regions comprise the majority of transit riders.

9.2 Public Transit Perceptions by Transit User

Figure 9.2 shows that non-users across all regions are more likely than users to believe crime is an issue in public transit. These findings suggest that first-hand experience can influence how individuals perceive the public transit system. Non-users may form their perceptions based on second-hand information, media coverage, or isolated incidents. Perceptions of crime are especially high in Edmonton and Winnipeg: 86% of non-users in both cities agreed that crime is an issue in public transit. Quebec residents stand out for their overwhelming positive perception of transit safety: only 3% of users and 7% of non-users agreed that crime is an issue in public transit. The majority of respondents in Calgary, Edmonton, Winnipeg, and Saskatoon—regardless of transit use—believe crime is an issue in public transit.

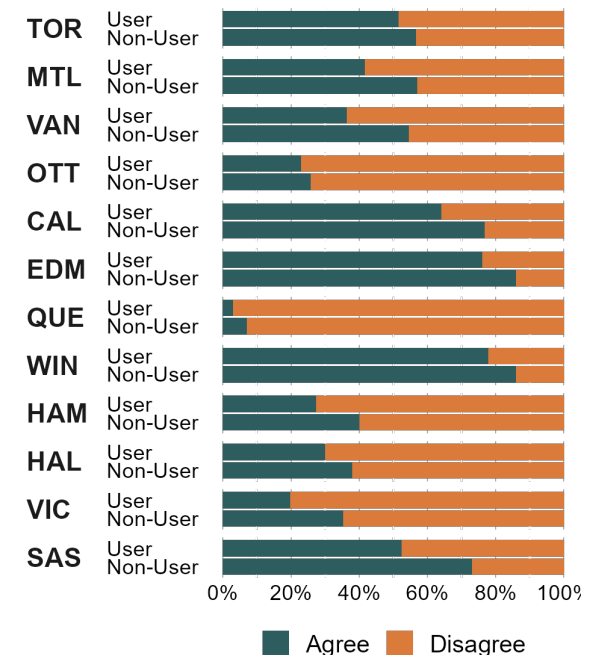
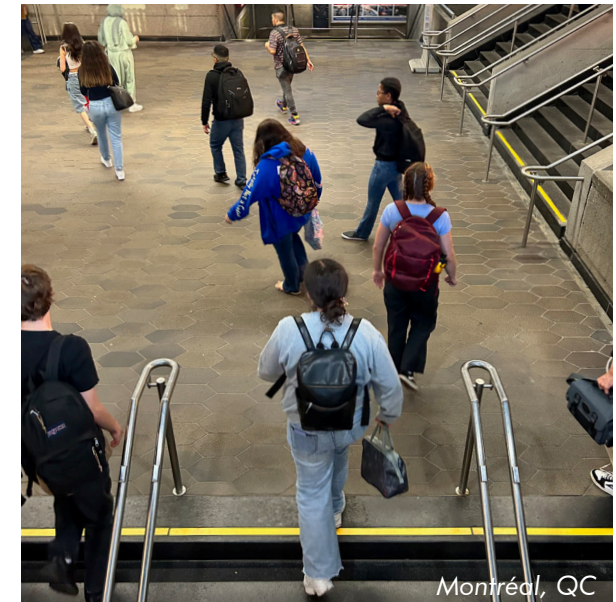


Figure 9.2 Perception of crime on public transit by transit user and non-user



10 Transit Funding



10.1 Transit Funding

Due to decreased ridership resulting from the COVID-19 pandemic, public transit agencies across Canada are facing difficulties in financially sustaining day-to-day operating expenses such as salaries, fuel, maintenance, and utilities (French and Cooper, 2024).

With the aim of understanding levels of public support for financing transit, respondents were asked if they supported increasing operating funding by 5% in

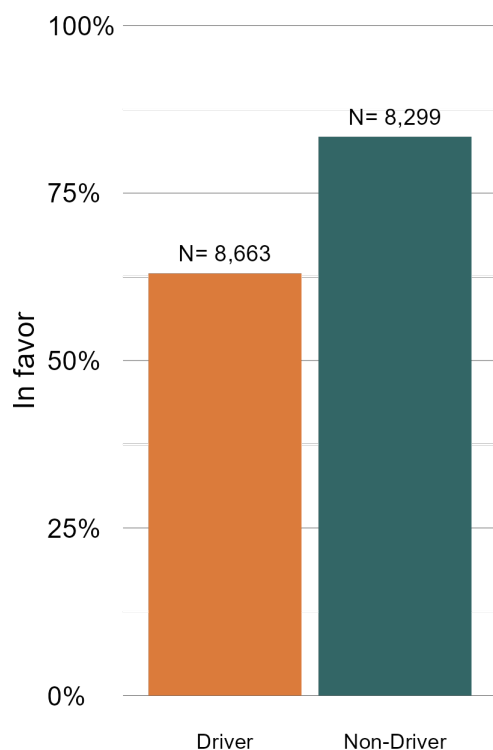


Figure 10.1 Public transit funding support

their region. We split participants into two categories: drivers, users who use cars as their predominant mode of travel; and non-drivers, users who mainly rely on public transit and active travel to get around. Figure 10.1 shows that the majority of both drivers (67%) and non-drivers (84%) support increasing transit funding.

Respondents were asked whether they believe that the additional transit funding should come from car related taxes (e.g. gas taxes, road tolls, license plate fees), transit fares (ticket sales), federal taxes or provincial taxes (e.g. income, corporate and sales taxes) or municipal taxes (property taxes).

Figure 10.2 and 10.3 show the results for drivers and non-drivers, respectively. Overall, most respondents believe additional funding should come from provincial governments with generally lower support for federal or municipal taxation.

Across all regions, drivers are more likely than non-drivers to agree that additional transit funding should come from transit fares. Non-drivers are typically more likely to support car-related taxes than any other funding source, showing very low support for increased transit fares. However, in Ottawa, Winnipeg, Toronto, Edmonton, and Québec, driver opinions are more closely aligned with those of transit users, and driver support for car-related taxes is notably higher than driver support for funding from transit fares.



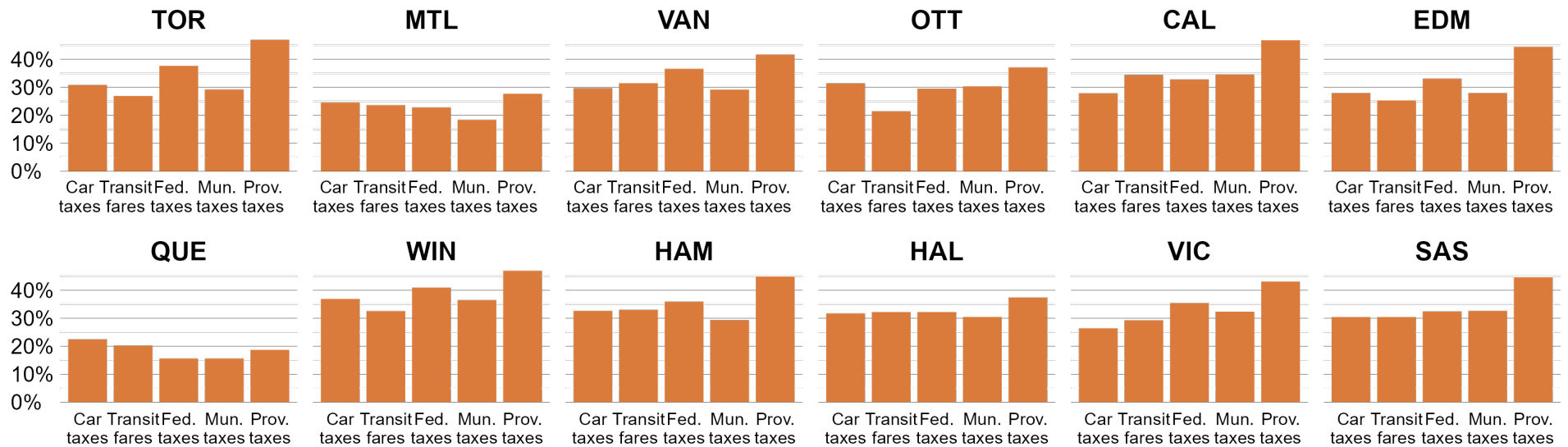


Figure 10.2 Support for different public transit funding sources by region (Drivers)

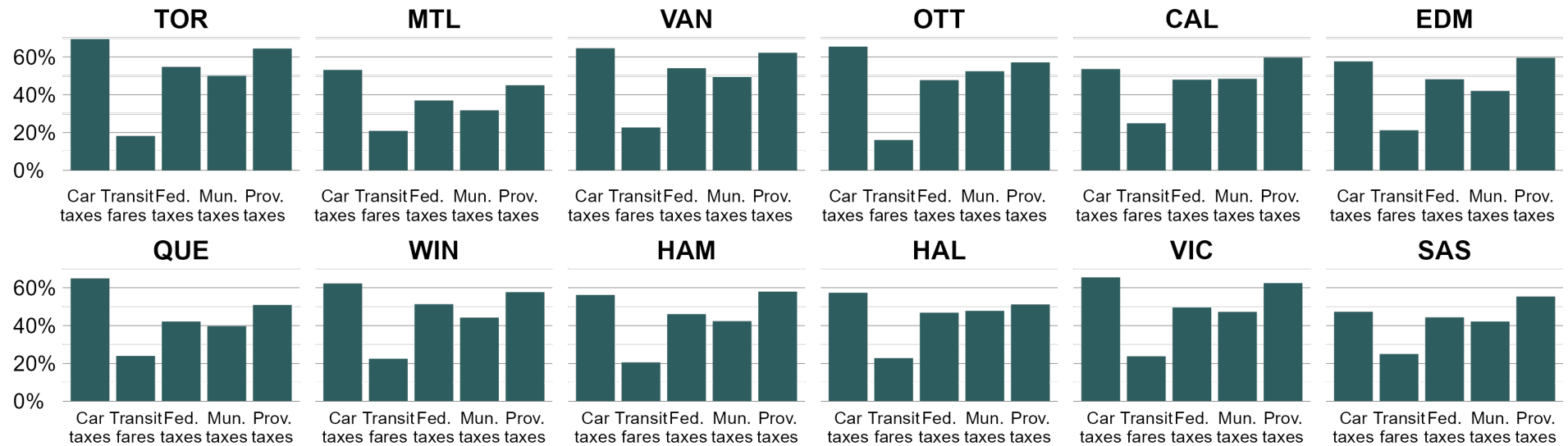


Figure 10.3 Support for different public transit funding sources by region (Non-drivers)

10.2 Transit Funding Open Ended Responses

Open ended responses indicated that the public was aware of the financial issues many public transportation agencies have faced across Canada, with many respondents citing their respective provincial governments as the source of their strained relationship with public transport. This sentiment was seen coast to coast, with a respondent from Vancouver saying that *“transit is facing severe funding shortages as a result of the pandemic and chronic underfunding. It is not being adequately addressed by any level of government”*. A Calgary respondent expressed frustration with the cancellation of funding for an expansion project, saying: *“I am livid beyond decent reason that our Alberta Government cancelled their funding for the Calgary LRT Green Line”*. A Montréal respondent advocated for both the Federal and Provincial governments to better fund public transit: *“Various governments, especially the provincial one, should invest heavily in the maintenance and development of the Montréal network.”*

Nonetheless, many conveyed frustrations with the management of local public transit agencies. A Montréaler claimed that transit agencies were *“badly*

administered”, and a respondent from Calgary held a similar sentiment, saying that Calgary Transit *“could be better operated”*. Other respondents indicated that they felt their local transit agency was disconnected from their riders, with a user criticizing Halifax Transit, saying that the network is *“designed by people who never used public transportation. They sit at a computer and make a plan without any idea how it really feels to be a transit user and the practicality of what people require to get places in a timely efficient manner”*. These perceptions display the nuances in the public’s perceptions of public transportation funding.

A demand for more transit is called for across the country. A respondent from Halifax mentioned how *“There are insufficient options. It needs to expand to areas that it does not reach yet. And some areas it needs more frequent service”*, and a person from Toronto saying *“I just really want more and more frequent public transit routes so I have more autonomy to get around”*.

Throughout the responses, respondents expressed concern for their safety on public transportation, with participants from several cities, especially Winnipeg and Edmonton, voicing that they did not feel safe using public transport. A person from Winnipeg claimed that *“public transit*

continues to be unsafe. Incidents have increased over the past few years on buses, taxis and ride shares. I do not feel safe using any of these modes of transport”. While remarks about safety generally remained vague, some offered more insight into the perception of crime on transit, with a respondent from Edmonton claiming that the *“Alberta provincial government is against social systems and will not improve the current public transportation networks”*, hinting that a lack of resources for those in need is a potential cause of crime on transit.

These public sentiment findings underscore the narrative that public transportation agencies across Canada require more funding to improve their services, and most importantly, prevent further decline. Post COVID-19 funding reductions have already led to certain indications of said downward spiral commencing, with many commenting on not feeling safe while riding transit, or that transit doesn’t serve them as it fails to reach their origin or destination in an efficient manner. This can lead to a decline in public transit ridership, as the majority of Canadians own a car and can choose to forgo transit use. Ultimately, this results in less riders, less funding and a subsequent reduction in services, rendering public transportation less competitive for many Canadians.

11 Travel and Quality of Life



11.1 Mode Choice and Quality of Life

Respondents were asked to recall the number of trips they took in the past seven days by cycling, walking, transit, and driving. A main mode was assigned to individuals who used one mode for at least half of their weekly trips; those without a clear dominant mode were categorized as multimodal. Respondents also rated their agreement with the following statement: "My daily travel positively impacts my quality of life." Figure 11.1 shows that active mode users reported the highest level of agreement, with 91% of cyclists and 82% of pedestrians agreeing that their daily travel has a positive impact on their quality of life. Multimodal and transit users reported lower levels of agreement (77% and 75% respectively), while drivers reported the lowest level of agreement at 70%. Figure 11.2 highlights regional differences in how travel influences quality

"My daily travel positively impacts my quality of life."

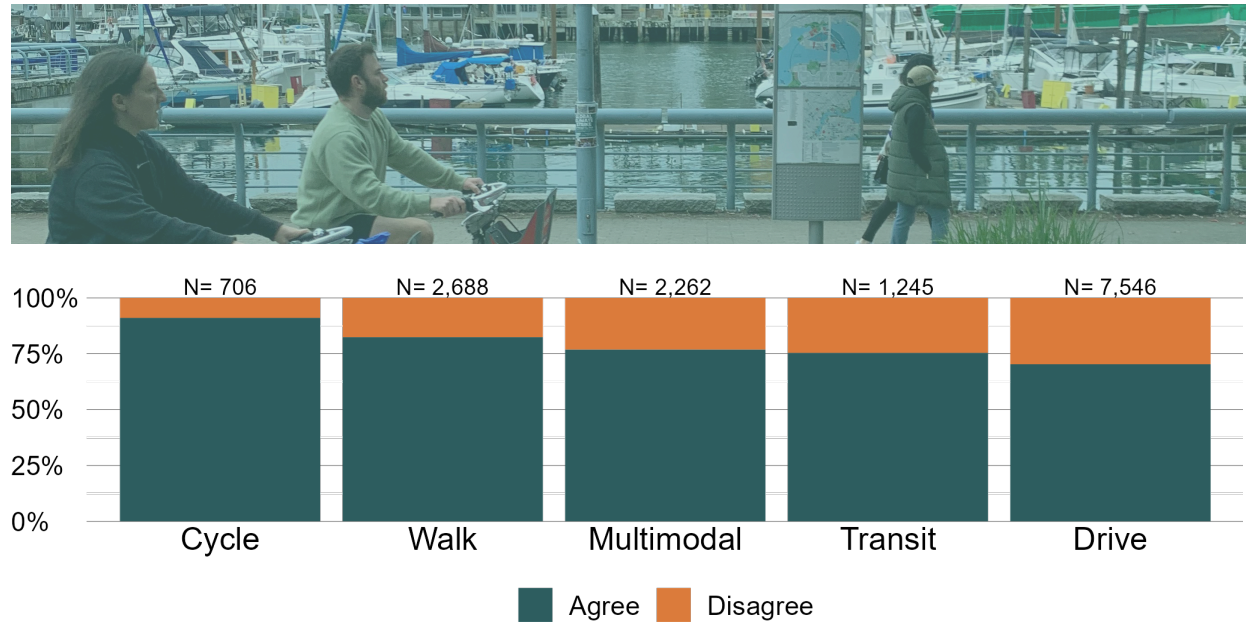


Figure 11.1 Mode choice & quality of life

of life, with drivers having the lowest level of agreement in Hamilton (62%), Ottawa (53%), and Halifax (64%). For transit users, agreement about the impact of travel varies widely across cities with 87% of transit users in Victoria reporting positive impacts compared to just 60% in Ottawa-Gatineau. Among transit users in larger cities, Montréal (83%) and Vancouver (79%) report the highest

level of agreement. Cyclists tend to agree about their travel having positive impacts, especially in Edmonton (98%), Victoria (97%), and Québec (94%), with the lowest level of agreement being 87% in Halifax. Walking has slightly more variation, with the greatest agreement in Victoria (90%), Québec (89%), and Montréal (87%), and the lowest in Toronto and Saskatoon (76% for each).



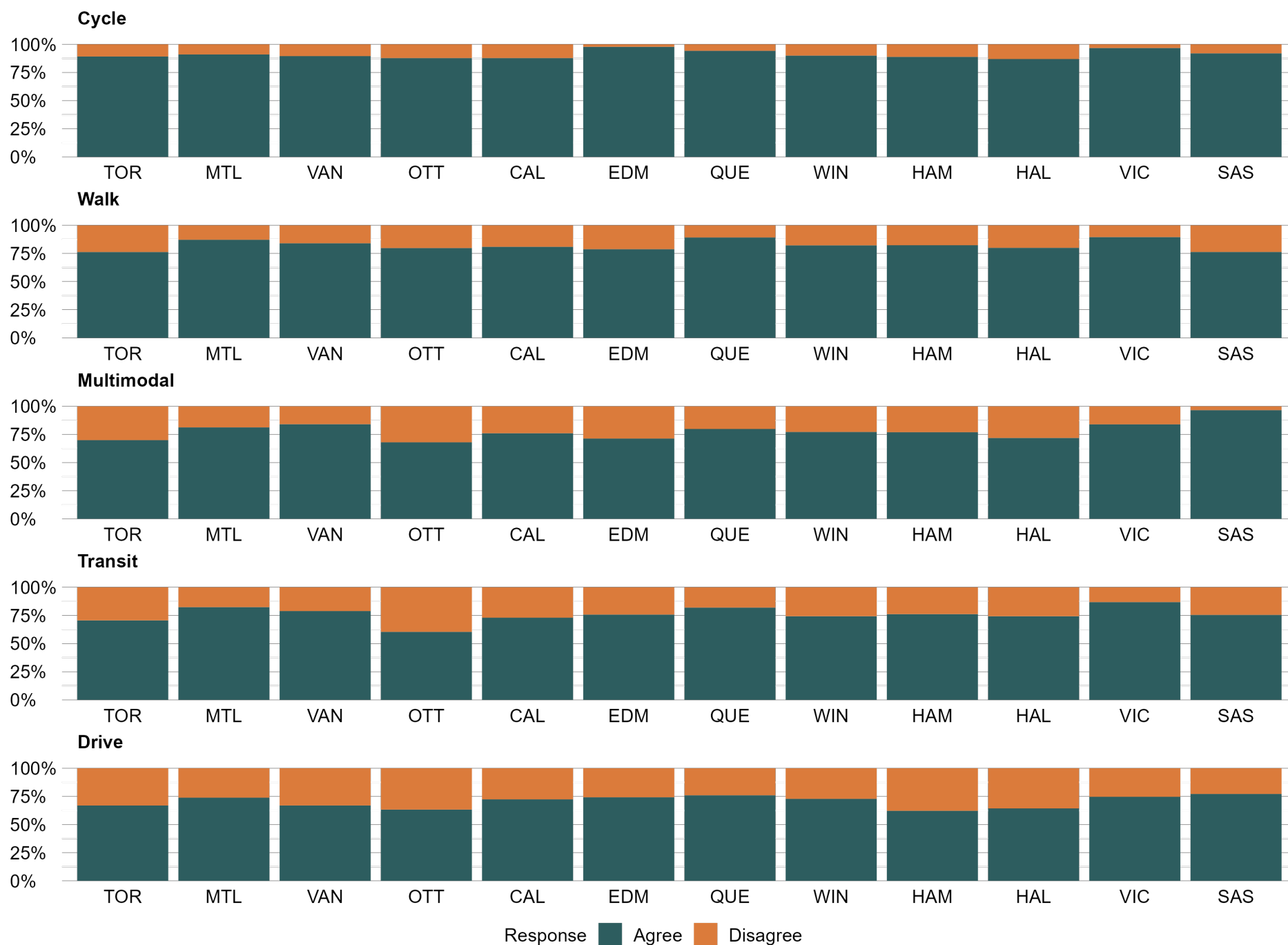


Figure 11.2 Agreement that daily travel positively impacts quality of life, by main mode of travel and region

11.2 Commuting and Work Performance

To understand how commute mode choice impacts various aspects of performance at work, respondents were asked to rate how the main mode they used for their most recent commute impacted their energy levels, productivity, and punctuality at work (Figure 11.3). Cyclists report the most positive effects across all domains of work performance

followed by walkers for energy and productivity. In terms of punctuality, few drivers report no impact and are more likely to report both positive and negative effects of driving to work compared to walkers. Transit users report the lowest levels of energy and productivity at work and experience more negative effects on their punctuality than drivers and active mode users. Among transit users, commuter train and subway users tend to report more positive outcomes than LRT, BRT, bus or streetcar users.

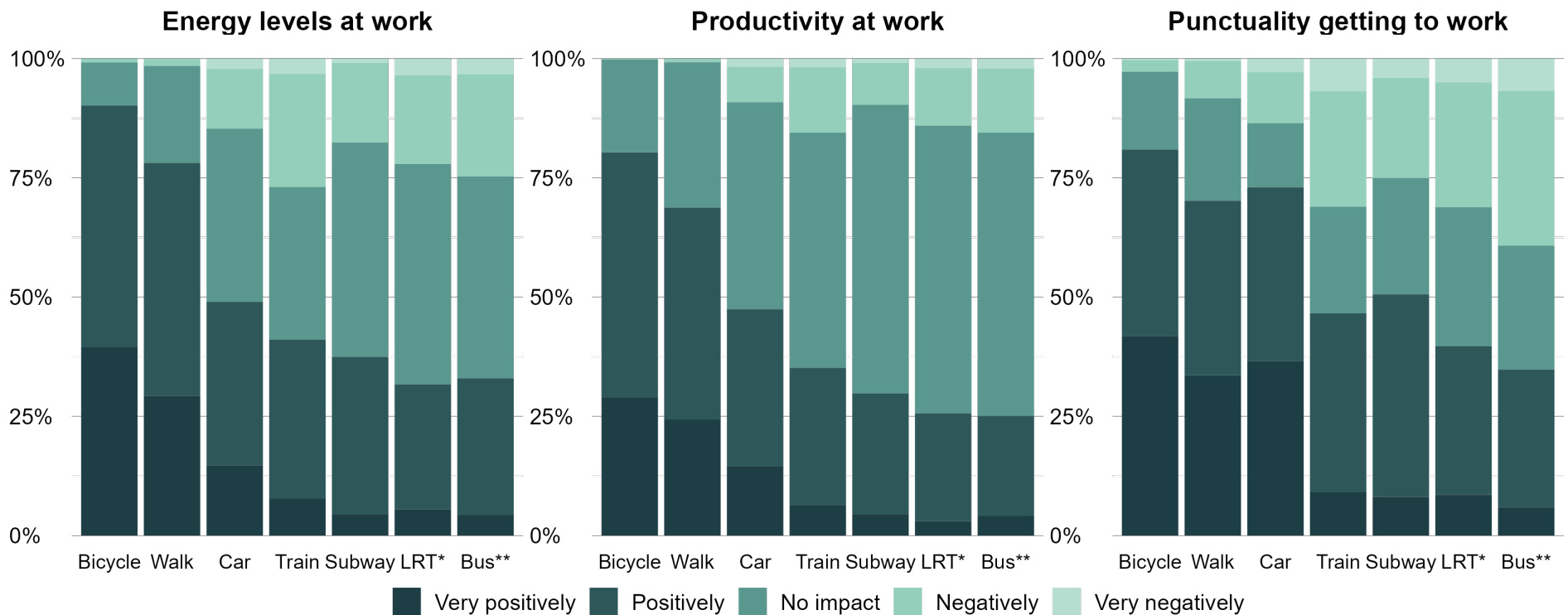


Figure 11.3 Reported impact of commuting mode on work performance

*Also includes BRT

**Also includes Streetcar

11.3 Commuting, Health and Well-Being

Commuting is a major component of daily travel for millions of Canadians. The journey to work shapes not only workplace performance, but also broader dimensions of health and well-being. Respondents were asked to rate how their main commute mode impacts their life in general, physical health, and mental health (Figure 11.4). Cyclists and

walkers report very high levels of positive effects across all aspects of health and well-being. Drivers experience the most negative effects on their physical health of any mode. The benefits of transit tend to be more positive for physical health than mental health. Those using the train or subway to commute tend to report more positive effects than LRT or BRT, and bus or streetcar users across all domains. Subway users are also better off than car users in terms of impact on life in general, mental health, and physical health.

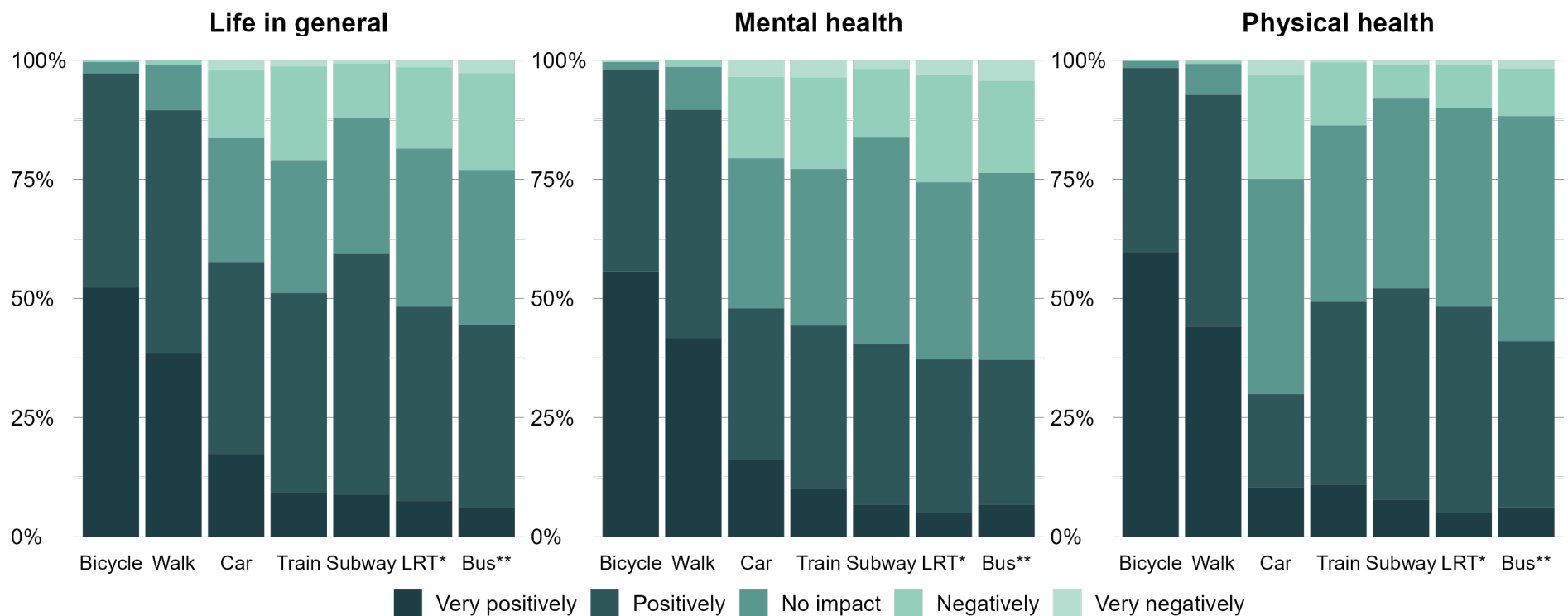


Figure 11.4 Reported impact of commuting mode on health and well-being

*Also includes BRT

**Also includes Streetcar



12 Conclusion

12 Conclusion

This report presented key findings from the CMS, a national transport survey carried out in Fall 2024 across 12 Canadian regions: Toronto, Montréal, Vancouver, Ottawa-Gatineau, Calgary, Edmonton, Québec, Winnipeg, Hamilton, Halifax, Victoria, and Saskatoon. The report provided insights on travel behaviour, telecommuting, perceived accessibility, travel perception, public transit perceptions, transit funding, and impact of travel on quality of life.

Travel Behaviour

Across all regions, car is the dominant commute mode. However, public transit and active travel hold considerable shares in larger metropolitan areas such as Toronto, Montréal, and Vancouver, reflecting differences in infrastructure investment and public transit service availability. This underscores the importance of offering reliable alternatives to car use in order to support sustainable mobility.

Telecommuting

Participants from Ottawa-Gatineau reported the highest level of hybrid work, likely due to the concentration of the public sector, followed by Toronto and Montréal. In-person work remains the norm in smaller regions such as Saskatoon, Victoria, and Winnipeg.

Perceived Accessibility

Across the 12 regions, most workers who identified as transit users agreed that public transit provides easy access to their workplace, whereas far fewer non-users shared this view. Positive perception of accessibility was attributed to the adequate allocation of public transit stops, while negative perceived accessibility was associated with public transit being too slow, unreliable, or not operating at desired times.

Travel Perception

Lower-income respondents were less likely to view car ownership as essential, potentially reflecting constrained resources or stronger reliance on sustainable modes. Younger individuals reported higher dependence on online services to get around, compared to older participants, indicating the evolving role of digital access in shaping transport needs and experiences.

Public Transit Perceptions

The majority of respondents in Calgary, Edmonton, Winnipeg, and Saskatoon—regardless of gender or transit use—believe that harassment, discrimination, and crime are issues on public transit in their respective regions.

Transit Funding

The majority of both drivers and non-drivers agree that funding for public transit

should be increased. Most drivers preferred provincial taxes as the source of additional transit funding, while most non-drivers supported car-related taxes.

Impact of Travel on Quality of Life

Active mode users, especially cyclists, are more likely to agree that their daily travel positively impacts their quality of life and report greater positive impacts on their health and well-being and performance at work compared to car and transit users.

Research Future Directions

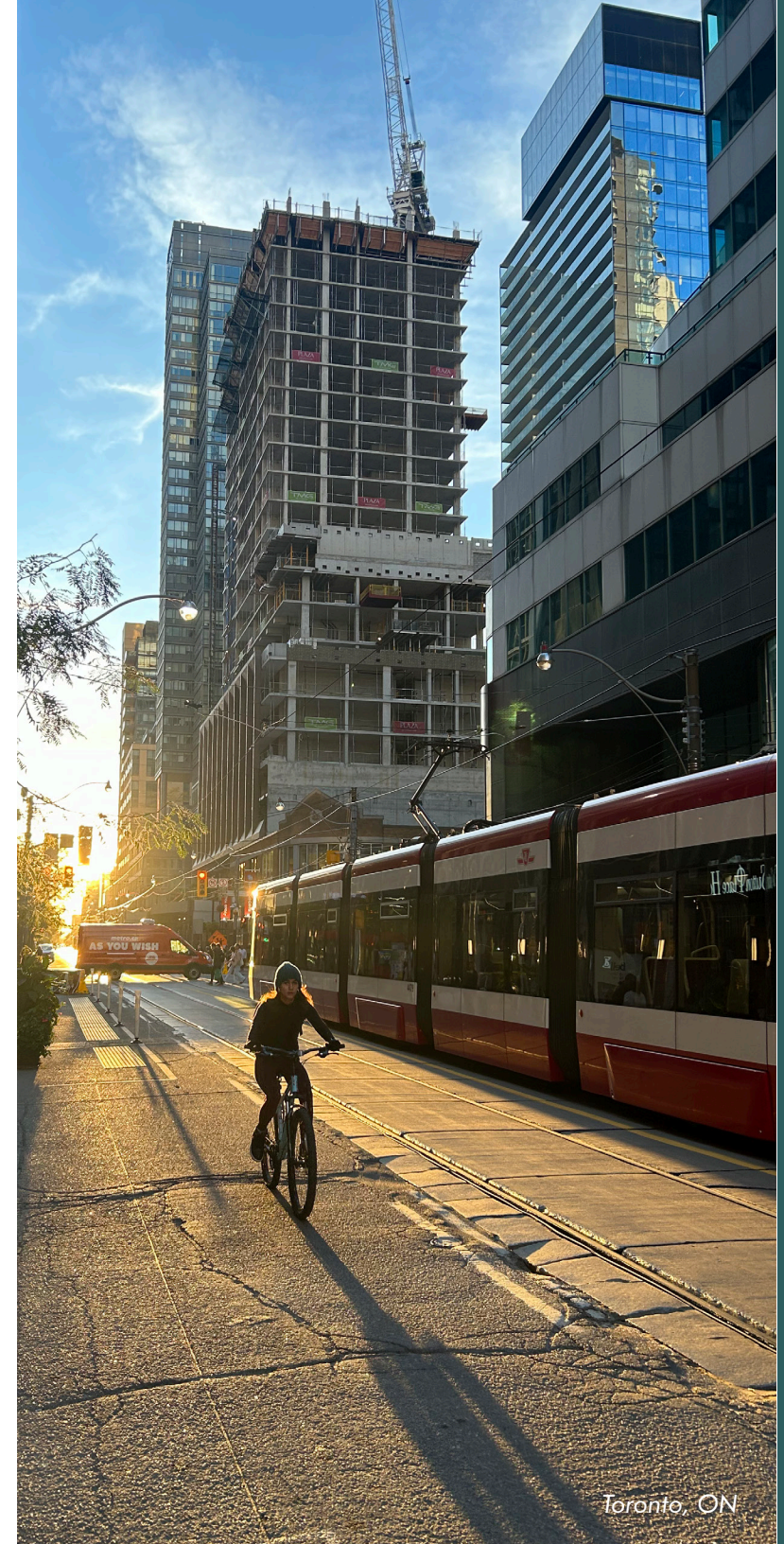
- Investigate the causes of fear of crime on public transit through in-depth interviews in each region.
- Conduct surveys with decision-makers to explore how to manage transit funding policies based on the acceptance from the public.
- Run educational campaigns to inform the public about the public transport options available around them.
- Explore electric vehicles integration in the market and its impact on travel behaviour and road use, leveraging high-technology data collection methods.
- Conduct in-depth interviews with lower-income individuals to understand their views on car independence.

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Survey Access

To access the CMS survey questions, please follow [this link](#) or visit tram.mcgill.ca



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