

The University of Winnipeg's 2023 Commuter Survey: Summary Report

Prepared by the University of Winnipeg Campus Sustainability Office

Introduction

This document reports the results of the University of Winnipeg 2023 Commuter Survey. As an urban campus in the heart of downtown, parking is limited and much of the University population relies on both public transit and active transportation for commuting. The University is committed to increasing sustainable commuting rates among staff and students, with the following published targets in the Active Transportation Infrastructure Guidelines:

- 80% of students commuting using a mode other than single-occupancy vehicle
- 10% of students commuting by bicycle from May-October
- 80% of faculty/staff commuting using a mode other than single-occupancy vehicle
- 15% of faculty/staff commuting by bicycle from May-October

A number of incentives exist across campus to promote sustainable transportation. Full-time students have access to UPass, a fee-based universal bus pass program available in the Fall and Winter semesters. The University of Winnipeg Students' Association (UWSA) runs the UWSA Bike Lab, a space with trained mechanics to provide tools and guidance for bike repairs as well as relevant programming. All university community members can also access outdoor bike storage and indoor bike storage for a nominal fee; shower areas for active transportation users are available to all. The University also provides a Wellness and Sustainability Account to some employees, a benefit worth up to \$100 that can be used for bus passes, bicycle parts or repairs, and carbon offsets, among other eligible expenses. Finally, University departments can opt-in to Peg City Car Co-op membership as a replacement for a fleet vehicle.

The University Campus Sustainability Office (CSO) has collected commuter data in two other surveys, in 2015 and 2018. In the wake of the COVID-19 pandemic, the CSO added questions to assess remote attendance of classes and work-from-home staff and faculty data. Though the CSO does not have good data about remote commuting prior to this survey, we hope to track changes in remote attendance over time.

Methods

The survey was available from September to November 2023. It was advertised across campus e-mails as well as in the CSO newsletter and social media. Respondents had the option to be entered into a draw for one of five \$100 Amazon gift cards. The survey had 59 questions total and used conditional branching to save respondents time and effort where possible. A list of all survey questions can be found in the Appendix. Based on data prepared for UWinnipeg's STARS report, UWinnipeg has a total of 7650 students and 2901 staff/faculty. 1337 respondents finished the survey and consented to have their answers used in this report; this included 1058 students, 212 staff and faculty, and 67 respondents that were both students and employees. As

such, this document will report answers for 1337 respondents when describing all data, and 1125 students (14.7%) and 279 staff and faculty (9.6%) when breaking the data out.

For modal breakdowns, answers to Question 28, “What type of transportation do you most often use each day to commute to and from campus?,” were weighted equally, with each respondent getting a total weight of 1. For example, for a respondent that answered only “Walk or run,” a value of one would be assigned to the “Walk or run” bin. However, if a respondent answered “Public transit” and “Walk or run,” a value of 0.5 would be assigned to both the “Public transit” and “Walk or run” bins.

Remote work data was drawn from two questions: Question 54, “Select ‘Yes’ if you commute to UWinnipeg more than once in an academic year. Select ‘No’ if you do not commute to UWinnipeg at all” and Question 25, “Select the approximate time you arrive to campus for each day of the week. Select Do Not Commute on the days you do not travel to UWinnipeg.” Respondents were only reported as not commuting if they choose “Do not commute;” those who left the question blank were not counted.

To obtain distances for the climate emissions section, we used postal codes from Question 21, “What is your postal code?,” and approximated driving distances as calculated by CDX Technologies. We then used the answer to Question 18, “How many there-and-back trips do you make between UWinnipeg and your residence per week?” and Question 15, “How many months per year do you typically travel to campus for any reason?” to calculate yearly kilometers travelled. We used the same climate emissions factors as the University’s 2018 commuter survey. This year, no passenger carpool data was collected, so all carpools were assumed to have two riders. All bus emissions were calculated at the capacity of the smallest bus in the Winnipeg transit fleet, with 38 seats.

To examine commuting choice, we used Question 33, “What is the main reason you commute to UWinnipeg as a driver or passenger in a car, truck or van?,” Question 34, “What would encourage you to take an alternative form of transportation more often?,” and Question 36, “What is your reason for using active transportation (cycling or walking) during your commute to campus?”. Answers were reported as percentages of all respondents who answered the question. (Note: Respondents could choose all answers that applied to them, so percentages will not equal 100%.) There was a high rate of fill-in answers for these questions, which are not reported here but may be used to inform future surveys.

Commuter Modal Split

Below, we report the modal split for all commuters (n=1337) at the University of Winnipeg (Figure 1). This year, we have grouped modes according to categories defined by the Association for the Advancement of Sustainability in Higher Education’s Sustainability Rating and Tracking System (AASHE STARS). We have further broken out walking and biking.

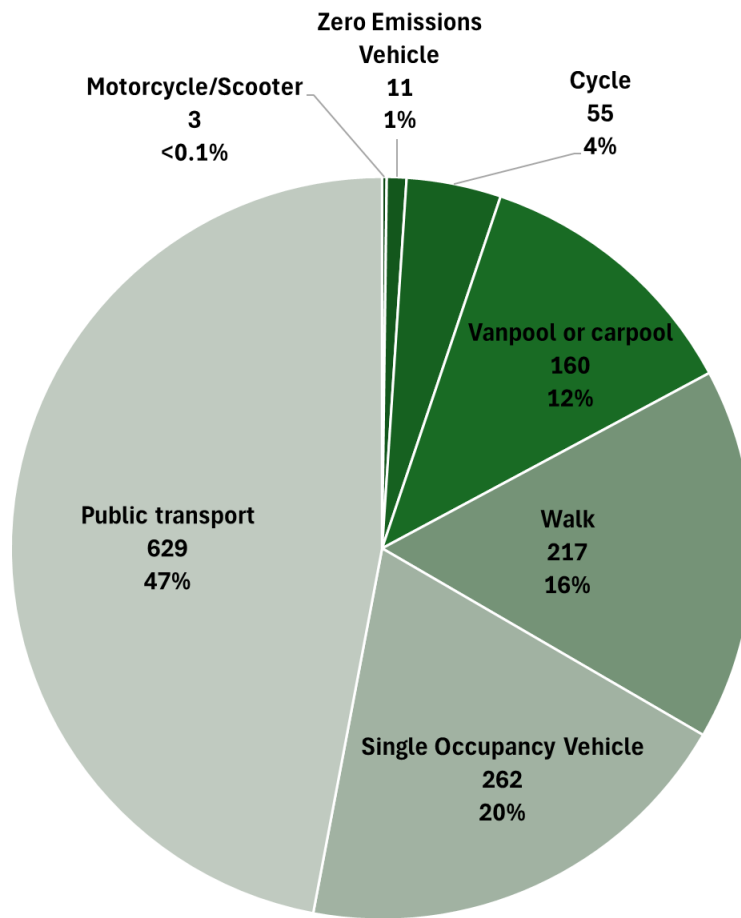


Figure 1. Commuting modal split of all respondents to the 2023 Commuter Survey.

We also wanted to compare student modal split (n=1125) to that of staff and faculty (n=279, hereafter referred to together as “staff”) and examine our targets for each. A larger percentage of students (50%) take public transit when compared to staff (33%), while more staff bike (11% of staff vs. 3% of students) and carpool (17% of staff vs. 11% of students). Single occupancy vehicle commuting is similar across both groups (around 20%). The University has met its goals of both 80% of staff and students commuting by modes other than single occupancy vehicle. Neither student nor staff goals for biking have been achieved yet, with students falling 7% short of the 10% goal and staff falling 4% short of the 15% goal. It is worth noting that this survey did not capture the seasonal nature of commuting; respondents were able to choose the commute type they take most often across a range of modes. As such, it is possible that a greater percentage of respondents than reported commute by bike when weather allows, but this was not captured by the survey.

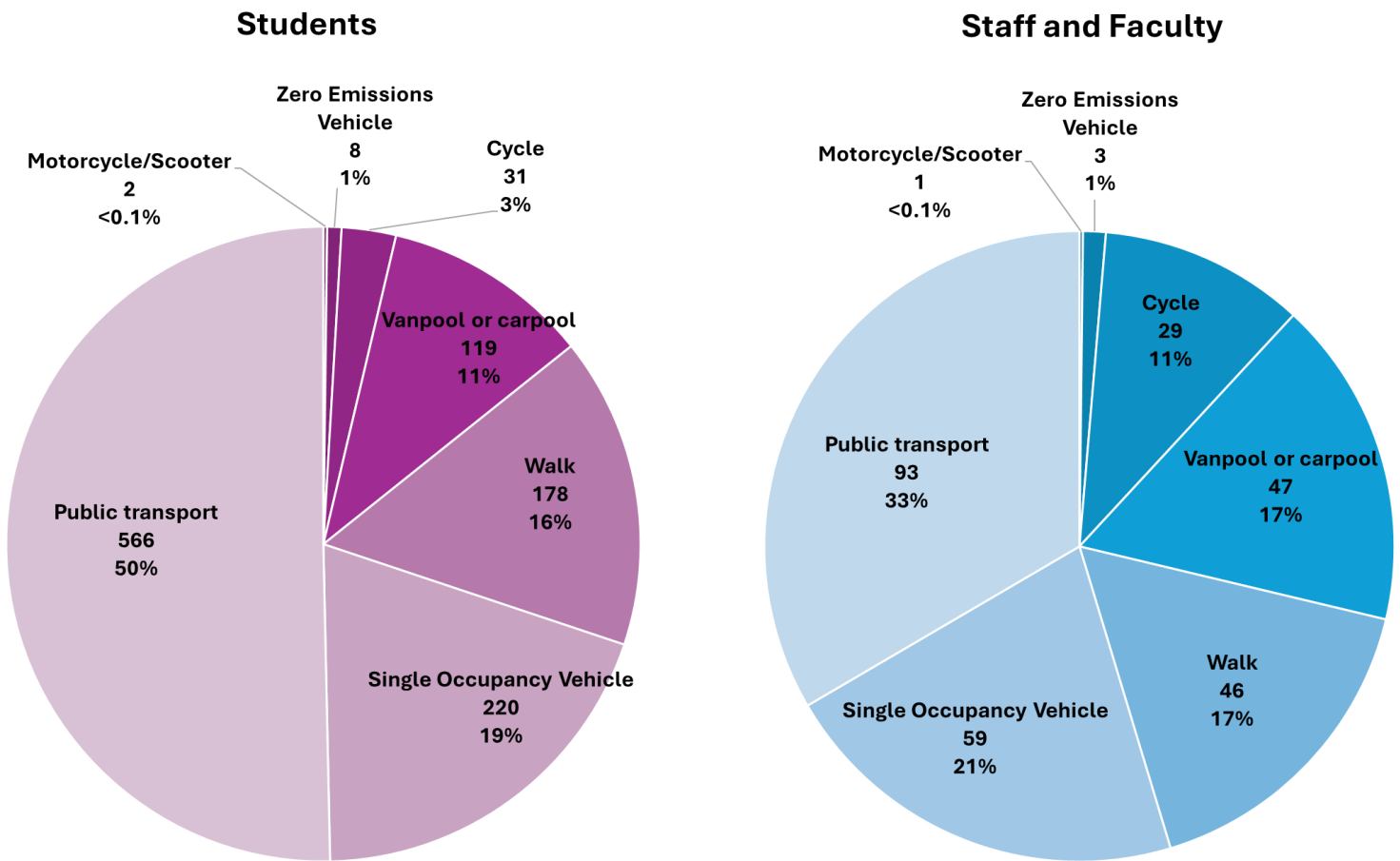


Figure 2. Commuting modal splits of students (left) and staff and faculty (right) to the 2023 Commuter Survey.

Looking at AASHE STARS data across the last three reporting periods (2015, 2019, and 2024 reporting on STARS with the data collected here in 2023), we see that the student modal split has remained fairly constant (Figure 3), while staff modal split has exhibited some fluctuations (Figure 4). Rates of staff single occupancy vehicle use have remained fairly steady; staff modal split in 2024 most closely resembles that reported in 2015, while data from 2018 shows higher rates of public transport ridership and lower rates of walking and carpooling.

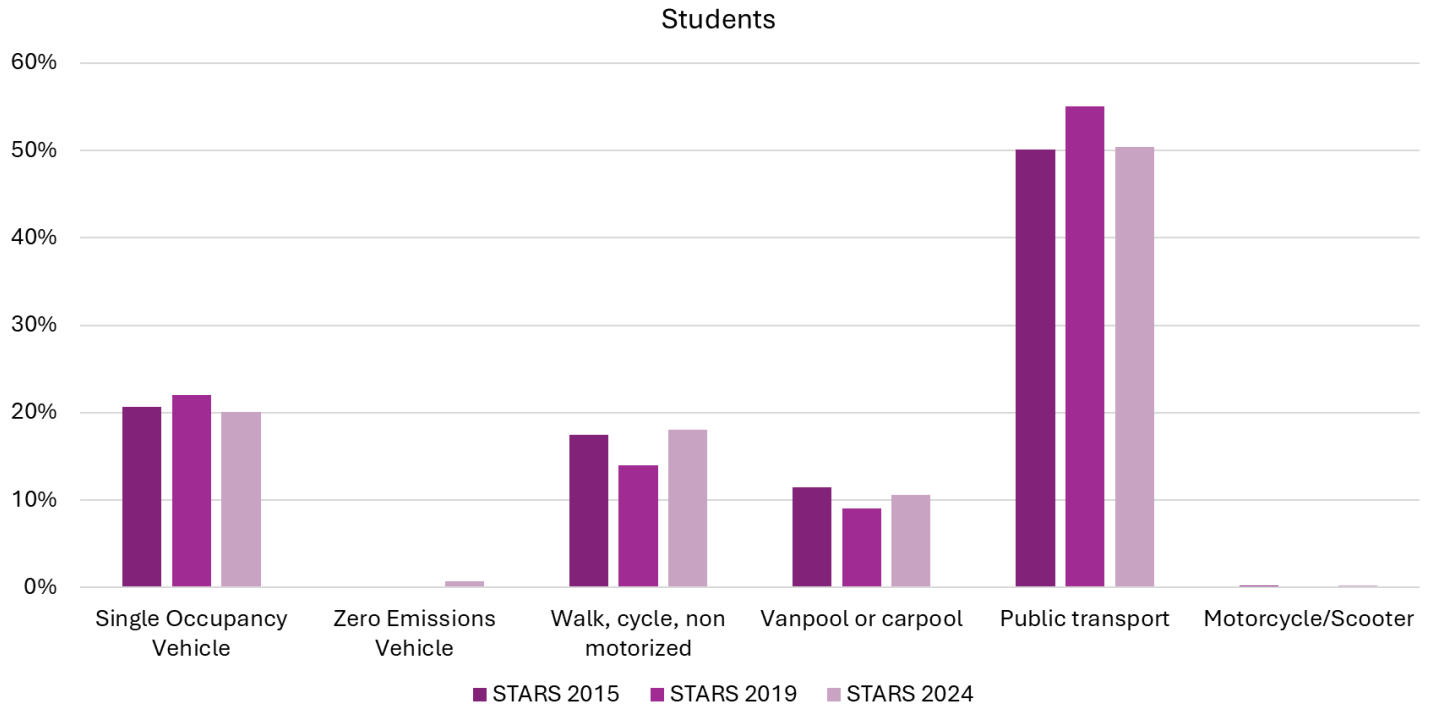


Figure 3. Commuting modal split of students over time (2015, 2019, 2024).

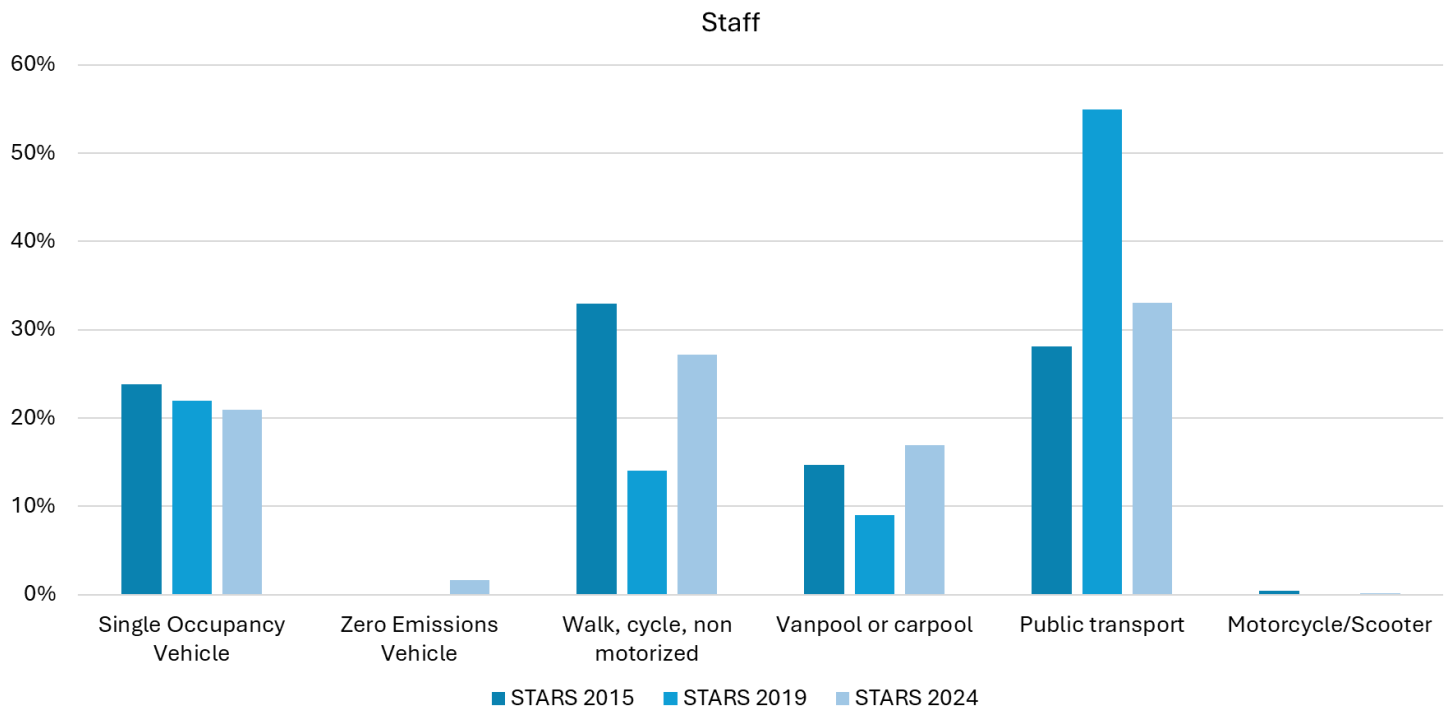


Figure 4. Commuting modal split of staff over time (STARS reporting 2015, 2019, 2024).

Greenhouse Gas Emissions

While staff emissions per person have dropped since 2018, student emissions have grown considerably. Since there appear to be no significant differences in the modal split for students since 2018, this could be due to students commuting longer distances or more days per week or longer periods of the year than in the past. While annual GHG emissions for staff have increased by nearly three times, it is important to note that the number of staff has also increased by over three times. Emissions calculations also have ample room for error from year to year, so differences in methodology may also account for some of the difference.

	Students		Staff	
Year	Annual GHG Total (T CO ₂ e)	GHG/person (kg CO ₂ e)	Annual GHG Total (T CO ₂ e)	GHG/person (kg CO ₂ e)
2018	3742.47	396.07	340.27	391.57
2023	3736.49	488.43	1001.60	345.26

Arrivals and Departures

Because campus community members make decisions based on ease of movement, it is important to know when peaks in arrivals and departures occur on campus. We compiled data for weekday arrivals and departures; unsurprisingly, the majority of commuters arrive between 5 am and 9 am and depart between 3 and 6 pm. See Figures 5 and 6 for a breakdown of arrival and departure times by day.

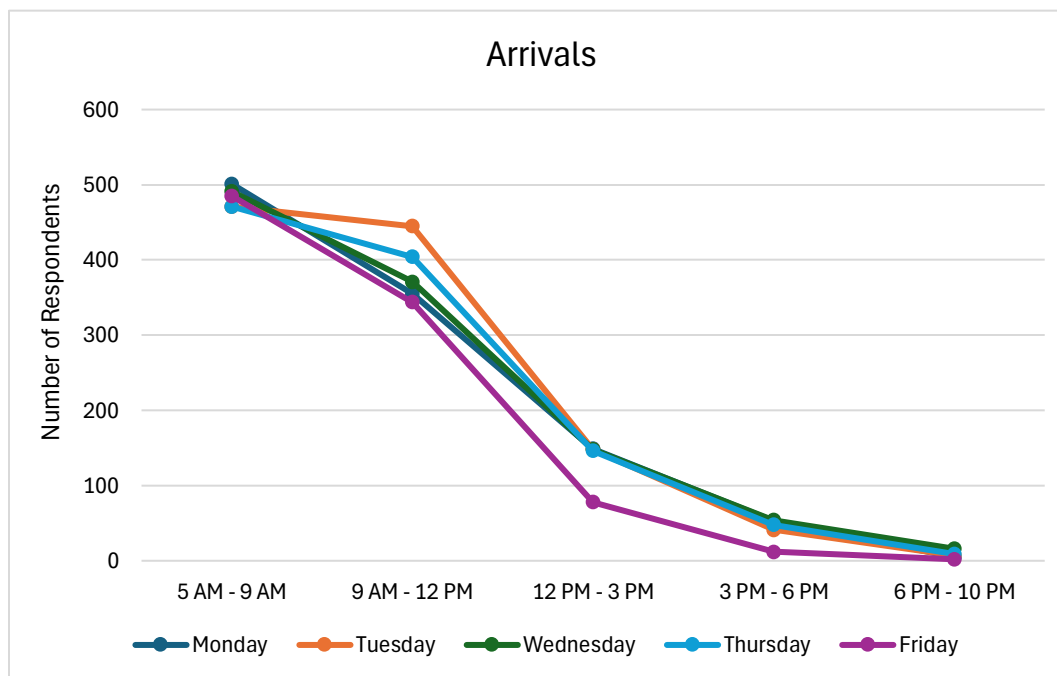


Figure 5. Arrival times of survey respondents broken out by weekday.

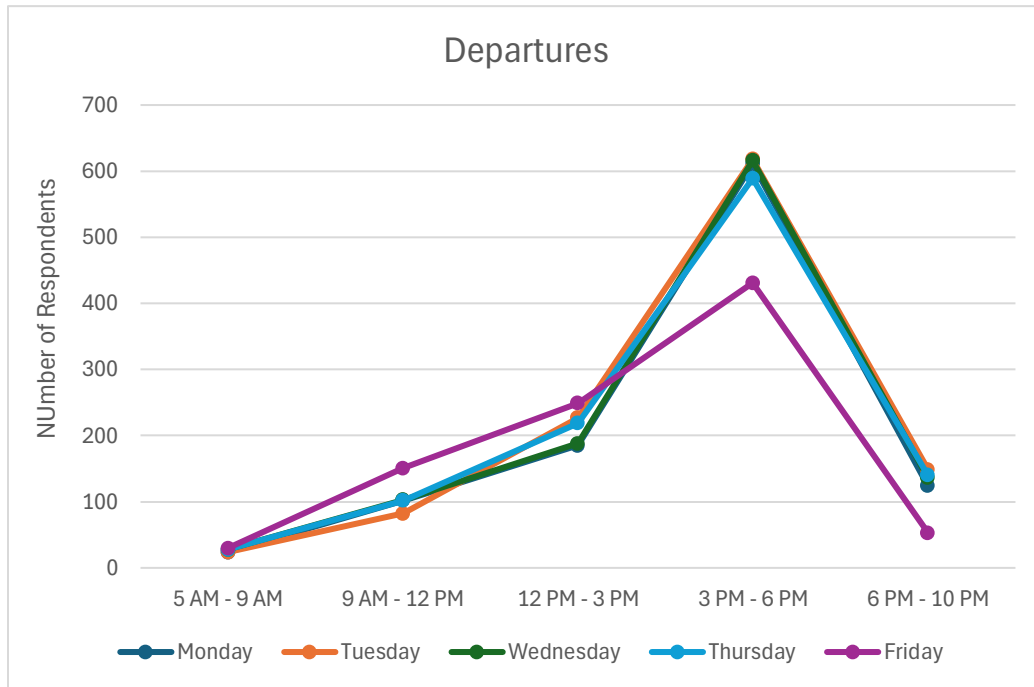


Figure 6. Departure times of survey respondents broken out by weekday.

Remote Work and Study

While only a small percentage of campus community members are fully remote, the University supports many remote work options for both students and staff. Since the outbreak of the COVID-19 pandemic, students have had increased opportunities for remote learning and work both on and off campus. Full-time support staff may be permitted to work from home for up to two days per week under the current Remote Work Guidelines for Support Staff. These guidelines outline some of the benefits of remote work, including increased employee satisfaction and retention and more efficient shared use of University office spaces. Remote work also saves emissions from commuting in gas vehicles and on public transit.

All these behavioral shifts mean that the University community may have increased flexibility about when to commute. In this year's commuter survey, some questions aimed to explore remote work and study at the University. To begin, respondents were asked if they commuted at least once a year; among staff and faculty, only one respondent answered no (<0.1%). Five students reported being enrolled exclusively in online courses (<0.1%). We also asked respondents about arrival times for commuting each day of the week, which included an option to respond "Do not commute." Staff and faculty answered "Do not commute" an average of 0.58 days per week (weekdays only); students answered "Do not commute" an average of 0.77 days per week (weekdays only). Friday was the most popular day to not commute for both staff and students.

Commuting Choices

The CSO is able to prioritize campaigns around commuter behavior if we understand why staff and students choose the modes of transportation they use. All vehicle commuters were asked why they choose to drive (Table 1) and what might encourage them to choose other modes of transportation (Table 2). We also surveyed respondents to explore motivations among those who commute by active transit (walking, biking, etc.). Table 3 shows responses for both students and staff.

Table 1. Top three reasons students (left) and staff and faculty (right) report choosing to commute by vehicle.

What is the main reason you commute to UWinnipeg as a driver or passenger in a car, truck or van?			
Students		Staff	
1. Fastest way to get to campus	66%	1. Fastest way to get to campus	70%
2. Convenience	55%	2. Convenience	61%
3. Personal safety	44%	3. Public transit would take too long	50%

Table 2. Top three reasons students (left) and staff and faculty (right) report they might take alternative forms of transportation.

What would encourage you to take an alternative form of transportation more often?			
Students		Staff	
1. Better public transit (routes, timing, prices, options, etc.)	59%	1. Better public transit (routes, timing, prices, options, etc.)	64%
2. Enhanced sense of safety	44%	2. Enhanced sense of safety	39%
3. More incentives from the Federal or Provincial governments	27%	3. Better cycling infrastructure	31%

Table 3. Top three reasons students (left) and staff and faculty right) report choosing to commute by active transportation.

What is your reason for using active transportation (cycling or walking) during your commute to campus?					
Students			Staff		
1.	Close enough to walk/cycle	78%	1.	Health benefits	83%
2.	Affordability	51%	2.	Close enough to walk/cycle	78%
3.	Health benefits	51%	3.	Environmental impact	72%

Time and convenience are major factors for both students and staff in choosing their commutes. Students that report exclusively using a single-occupancy vehicle to commute travel almost eight times as far on average as students that exclusively walk (39.5 km vs. 5.3 km); staff similarly commute almost five times further on average if they drive exclusively than if they walk (13.1 km vs. 2.7 km). While recognizing this reality, the CSO looks forward to using input from the survey to create easier opportunities for distance commuters to try sustainable transportation, including carpooling, public transit, and cycling.

Safety also appears as a theme in commuting decisions for both students and staff. Women, trans and non-binary respondents were more likely to list safety as a concern than their cis-male counterparts. Twice as many female, trans, and non-binary respondents said they choose active transportation because public transit is not safe (12% vs 6% of cis-male respondents). Among female, trans, and non-binary people who commute in a single occupancy vehicle, 46% of respondents answered that an enhanced sense of safety would encourage them to commute using alternative modes of transportation, while only 37% of cis-male respondents said the same. Conditions that would allow for a feeling of safety can vary widely, so the CSO will explore this issue further before making recommendations to address safety concerns in the future.

Improving Sustainable Commuting at UWinnipeg

The CSO will use the data from this survey to inform future efforts to increase sustainable commuting to campus. Some areas for improvement are described below.

Electric Vehicle (EV) Charging Stations

In past commuting surveys, electric vehicle users were not captured in the data; in this year’s survey, approximately 1% of students and staff reported using an electric vehicle to commute. There are currently no EV charging stations on campus; it is important that the University

support this sustainable mode of transportation as it gains popularity with the campus community by providing charging stations.

Indoor Bike Parking

Bike theft is a common concern among campus cyclists. The most commonly used bike parking reported in the survey was “Main Campus bike racks” (52% of cyclists that responded), but the second most common answer (17% of those who responded) was “Inside the University (in an office, for example).” Indoor bike parking is currently marginal at best and does not provide quick and easy access to classrooms and offices like the main campus bike racks. It is likely that many cyclists choose to bring their bikes to their offices for ease of access and to prevent bicycle theft. The CSO is exploring the feasibility of easily accessible, secure indoor bike parking to encourage bike commuting and give cyclists a sense of security when they bring their bike to the University.

Increasing Staff Use of Public Transportation

While student transit use has remained stable, use of public transportation is down considerably among staff since the 2018 commuter survey (33%, down from 55% in 2018). The 2025 redesign of the Winnipeg transit network, with its promise of more efficient and centralized routes, may bring increased ridership across many populations at the University. 27% of staff that use a single-occupancy vehicle would also like to see “More incentives to use public transportation.” While the UPASS has been a successful initiative incentivizing transit use for students, there is no corresponding transit incentive for staff. The CSO will begin research into how other Universities have managed similar initiatives in the coming year.

Conclusion

The 2023 Commuter Survey has provided the CSO with valuable insights into the commuting behaviors and preferences of its student and staff population. The survey reveals that while the University has achieved some of its formalized sustainable commuting targets, particularly those relating to single-occupancy vehicle use among both students and staff, challenges remain in achieving goals related to cycling and enhanced public transit usage.

Key findings indicate a steady long-term trend of public transit use among students, and a larger preference for biking and carpooling among staff. Efforts to promote active transportation and reduce greenhouse gas emissions are pivotal as the University continues to grow. Furthermore, the survey highlights emerging trends such as the impact of remote work options, which have potential implications for future commuting patterns and sustainability efforts.

Moving forward, the CSO aims to leverage these findings to enhance infrastructure, address safety concerns, and explore new initiatives such as EV charging stations and improved indoor bike parking. By fostering a supportive environment for sustainable commuting choices and responding to community feedback, the University is poised to advance its commitment to environmental stewardship and commuter well-being.

As the University of Winnipeg continues to evolve, ongoing engagement and data-driven initiatives will be essential in promoting sustainable commuting practices and fostering a resilient campus community.