



# DALHOUSIE UNIVERSITY COMMUTER STUDY 2022-2023

Prepared by:  
A.W. Memon and M.A. Habib

Prepared for:  
Office of Sustainability, Dalhousie University

Submission: July 2023

Dalhousie Transportation Collaboratory (DalTRAC)  
Room B105, Dalhousie University, PO Box: 15000  
1360 Barrington Street, Halifax, NS Canada, B3H 4R2

# Contents

<b>1.</b>	<b>Introduction.....</b>	<b>1</b>
1.1.	Background.....	1
1.2.	About the commuter survey.....	2
<b>2.</b>	<b>Respondent Information.....</b>	<b>4</b>
2.1.	Group, classification, and campus.....	4
2.2.	Residence locations .....	5
2.3.	Gender.....	8
2.4.	Age .....	9
2.5.	Household income.....	10
<b>3.</b>	<b>Commute to and from Dalhousie .....</b>	<b>11</b>
3.1.	Primary mode .....	11
3.2.	Secondary Mode.....	12
3.3.	Commuting habits and barriers.....	13
3.4.	Parking preference and transportation initiatives .....	14
3.5.	Distance from campus .....	16
3.6.	Commute duration .....	17
3.7.	Arrival and departure time.....	18
<b>4.</b>	<b>Intercampus Travel.....</b>	<b>19</b>
4.1.	Travel among Halifax campuses.....	19
4.2.	Travel between Halifax and Agricultural campuses.....	21
<b>5.</b>	<b>Comparison by Campus.....</b>	<b>24</b>
5.1.	Commute mode .....	24
5.2.	Commute distance.....	26
5.3.	Commute duration .....	26
<b>6.</b>	<b>Comparison by Year.....</b>	<b>28</b>
6.1.	Commute mode .....	28
6.2.	Commute distance.....	30
<b>7.</b>	<b>Campus Sustainability.....</b>	<b>32</b>
7.1.	Sustainability awareness.....	32
7.2.	Understanding of Sustainability .....	33
7.3.	Fostering sustainability action.....	34
<b>8.</b>	<b>Conclusion .....</b>	<b>36</b>
	<b>Appendix A. Summary of 2023 Survey Data.....</b>	<b>A</b>

## List of Tables

Table 1-1. Survey responses by academic year.....	3
Table 2-1. Response distribution percentage by gender and group.....	8
Table 2-2. Age distribution percentage by group.....	9
Table 2-3. Annual household income percentage by group.....	10
Table 3-1. Primary commute mode distribution percentage by group.....	12
Table 3-2. Secondary commute mode distribution percentage by group.....	13
Table 4-1. Travel frequency among Halifax campuses by group.....	20
Table 4-2. Travel frequency between Halifax and Truro campuses by group.....	22
Table 4-3. Primary travel mode between Halifax and Truro campuses by group.....	22

## List of Figures

Figure 1-1. Dalhousie University campus locations.....	2
Figure 2-1. Respondent group (n = 2190 responses, 150 non-responses).....	4
Figure 2-2. Student, Staff, and Faculty classification (n = 1955 responses, 385 non-responses).....	4
Figure 2-3. Primary campus distribution (n = 1958 responses, 382 non-responses).....	5
Figure 2-4. Respondents' residence locations.....	6
Figure 2-5. Density of Agricultural campus respondents in Truro area.....	6
Figure 2-6. Density of Halifax campus respondents in Halifax area.....	7
Figure 2-7. Gender distribution (n = 1950 responses, 390 non-responses).....	8
Figure 2-8. Age distribution (n = 1989 responses, 351 non-responses).....	9
Figure 2-9. Annual household income distribution (n = 1840 responses, 500 non-responses).....	10
Figure 3-1. Primary commute mode (n = 2017 responses, 323 non-responses).....	11
Figure 3-2. Secondary commute mode (n = 1952 responses, 388 non-responses).....	12
Figure 3-3. Commuting habits after COVID-19 pandemic (n = 2186 responses, 154 non-responses).....	13
Figure 3-4. Commuter barriers to transportation options (n = 2001 responses, 339 non-responses).....	14
Figure 3-5. Parking preferences of respondents (n = 637 responses, 1703 non-responses).....	15
Figure 3-6. Respondents' suggestions for transportation initiatives at Dalhousie University.....	15
Figure 3-7. Average distance from campus (km) distribution for all respondents.....	16
Figure 3-8. Average commute distance (km) by respondent group.....	17
Figure 3-9. Distribution of commute duration for primary mode.....	17
Figure 3-10. Average commute duration by group.....	18
Figure 3-11. Distribution of arrival times (n = 1940 responses, 400 non-responses).....	18
Figure 3-12. Distribution of departure times (n = 1932 responses, 408 non-responses).....	19
Figure 4-1. Travel frequency among Halifax campuses (n = 2042 responses, 298 non-responses).....	20
Figure 4-2. Primary travel mode between Halifax campuses (n = 1439 responses, 901 non-responses).....	21

Figure 4-3. Travel frequency between Halifax and Truro campuses (n = 2042 responses, 298 non-responses) .....	21
Figure 4-4. Primary travel mode between Halifax and Truro campuses (n = 473 responses, 1867 non-responses) .....	22
Figure 5-1. Primary commute mode by campus.....	25
Figure 5-2. Average commute distance (km) by Dalhousie Campus.....	26
Figure 5-3. Average commute time by campus.....	27
Figure 6-1. Primary commute mode by year .....	29
Figure 6-2. Student primary commute mode by year.....	29
Figure 6-3. Faculty and Staff primary commute mode by year .....	30
Figure 6-4. Average commute distance (km) of Students, Faculty, and Staff over time.....	31
Figure 7-1. Levels of Awareness about United Nations' Sustainable Development Goals (SDGs) (n = 1971 responses, 369 non-responses).....	32
Figure 7-2. Word cloud of respondents' Perceptions of Sustainability .....	33
Figure 7-3. Word cloud of respondents' about Fostering Sustainability .....	34

# 1. Introduction

The Dalhousie University Transportation and Sustainability Survey, conducted annually by the Dalhousie Office of Sustainability, is a data collection initiative that was introduced in 2009. The survey gathers transportation and sustainability data from various members of the Dalhousie community, including Students, Staff, Faculty, Alumni, and Others. The primary objective is to track sustainable transportation activity and assess the effectiveness of sustainability programs. By summarizing the Winter 2023 survey results, this report presents one of the most comprehensive analyses, providing valuable insights and guiding future decision-making in sustainability initiatives.

## 1.1. Background

Founded in 1818, Dalhousie University is one of Canada's oldest educational institutions, situated in the Maritime region of Eastern Canada. Initially housed in the current Halifax City Hall building, the university has experienced consistent growth over the years. Presently, Dalhousie University comprises multiple campuses, namely Studley, Carleton, and Sexton, located in Halifax, along with the Agricultural Campus situated in Truro (Figure 1-1). Notably, all campuses of Dalhousie University are situated within Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq people.

In 2021, Dalhousie University concluded the updates to its Strategic Plan, with a primary focus on elevating the university's global reputation and empowering its students, staff, faculty, researchers, and local communities. The Strategic Plan involved comprehensive enhancements to the university's physical, digital, and social infrastructure, aiming to modernize its resources. To ensure the effectiveness of the Strategic Plan, insights were derived from a series of eight university studies conducted on various strategic themes, including Sustainability and Environmental Responsibility. The Sustainability and Environmental study drew upon findings from previous Transportation and Sustainability Surveys, contributing valuable conclusions and recommendations. These findings will play a continuous role in supporting the university's commitment to environmental stewardship and resource-efficiency.

The annual survey at Dalhousie University serves as a valuable platform for gathering the perspectives and feedback of the Dalhousie community on various sustainability-related matters. Over the past decade, Dalhousie University has made substantial investments of nearly \$100 million in diverse sustainability projects and programs, all aimed at advancing the institution's sustainability goals. Among these initiatives is SmartTrip Dalhousie, a program designed to inspire students, faculty, and staff to make sustainable transportation choices. The university has also implemented innovative strategies to incentivize alternative modes of transportation, including discounted transit passes for students, staff, and faculty, as well as free bike rentals through the Dalhousie Bike Centre. These efforts are part of Dalhousie's comprehensive approach to promoting sustainable transportation and encouraging the campus community to embrace environmentally friendly commuting options. Through the ongoing

commitment to sustainability, driven by insights gained from the Commuter Survey, Dalhousie University continues to forge ahead in its journey towards a more sustainable future.

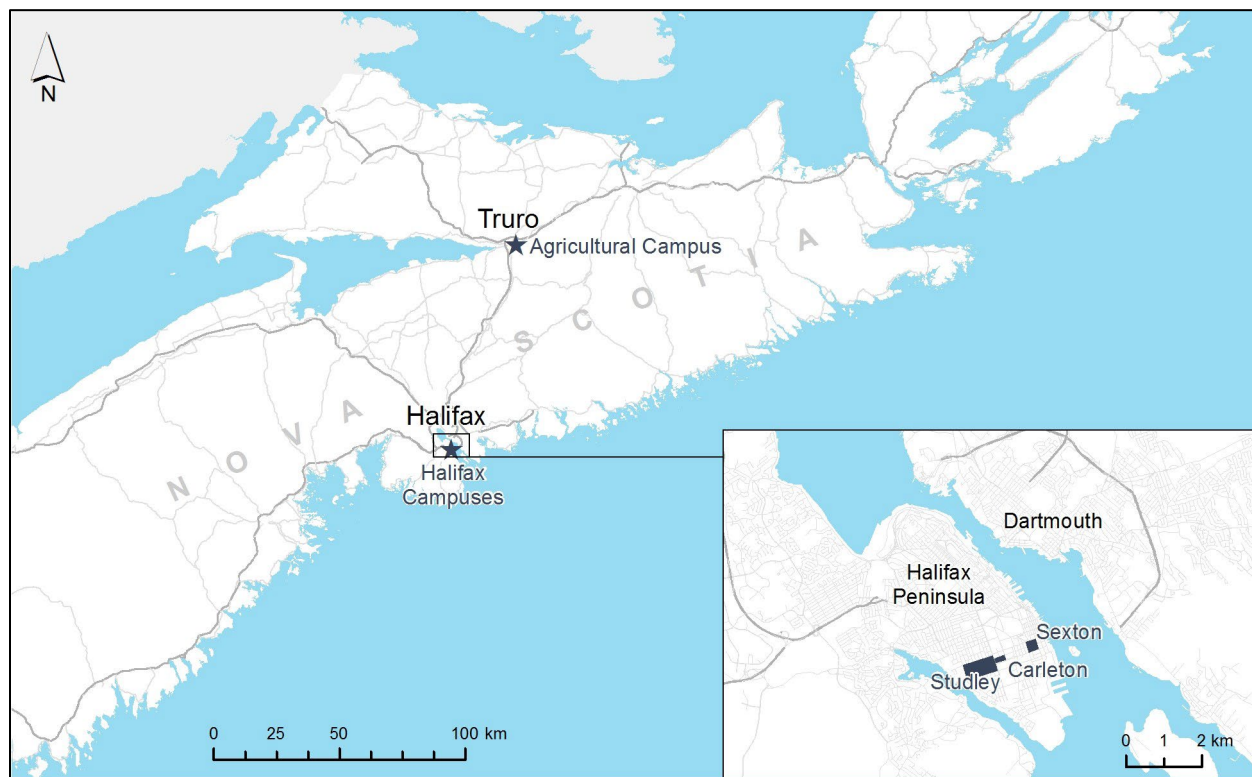


Figure 1-1. Dalhousie University campus locations

## 1.2. About the commuter survey

The Annual Sustainability and Transportation Survey, facilitated by the Dalhousie Office of Sustainability, serves as a valuable instrument for assessing the efficacy of sustainability programs and capturing the sustainability knowledge, values, and interests of the university community. This survey plays a pivotal role in examining transportation trends, including preferred commuting modes, travel distances, and mode accessibility. Moreover, it provides essential socio-demographic data and offers perspectives on sustainability initiatives within Dalhousie. The in-depth analysis of past survey data has enabled the identification of enduring trends and patterns in community transportation behavior. These findings have been instrumental in supporting the implementation of diverse sustainability programs, such as the introduction of the summer student transit pass and *Share the Road* campaign. By continuously monitoring and analyzing community viewpoints and preferences, Dalhousie University ensures that its sustainability efforts align with the diverse needs and aspirations of its community. The Office of Sustainability analyzes qualitative survey data through additional methods to understand specific program opportunities.

Through the annual survey, Dalhousie University strengthens its commitment to sustainability by gaining valuable insights, engaging the community, and shaping future initiatives. The survey acts as a catalyst for fostering a culture of sustainable transportation and environmental stewardship on campus, promoting a greener and more sustainable future for all.

Starting in 2010, the Office of Sustainability at Dalhousie University has conducted the Commuter Survey annually for the past 13 years (Table 1-1. Survey responses by academic year). The survey for the current year took place during the Winter Semester of 2022-2023, specifically between March 23 and April 16, 2023.

*Table 1-1. Survey responses by academic year*

Year	Students	Staff	Faculty	Alumni/Other	No answer	Responses	Completed
9-10	1322	1291		-	-	2613	-
10-11	315	436		-	-	751	-
11-12	329	547		-	277	1153	-
12-13	713	618	188	-	161	1680	1374
13-14	767	717	252	-	255	1991	1630
14-15	719	604	185	-	441	1949	1508
15-16	517	474	139	-	609	1739	1110
16-17	865	472	205	-	608	2150	1690
17-18	1975	668	204	41	249	3137	2700
18-19	1938	554	193	34	209	2928	2624
19-20	811	670	269	48	443	2241	1714
20-21	1987	761	221	55	364	3388	642
22-23	1382	593	198	17	150	2340	1232

In previous surveys, there has been variation in the size and representation of Students, Staff, and Faculty, with Students often being underrepresented compared to Faculty and Staff. The survey conducted this year received the fourth highest number of responses since its inception in 2009-2010, totaling 2340 responses. This was primarily due to a lower number of Student responses compared to previous years such as 2017-2018, 2018-2019, and 2020-2021, but higher than the response rate in 2019-2020, undoubtedly influenced by the impact of the COVID-19 pandemic. However, the representation of respondent groups in this year's survey was similar to that of the 2018-2019 and 2020-2021 surveys, which also saw increased participation from Students. As with those years, this year's survey closely mirrored the proportion of Students at Dalhousie University in comparison to other groups.



## 2. Respondent Information

The survey includes a range of questions targeting individual respondents, spanning diverse demographic and geographic aspects. By capturing these variables, the survey aimed to offer valuable insights into transportation trends and the composition of the University community. This section provides a summary of the findings from this year's survey.

### 2.1. Group, classification, and campus

The 2023 Commuter Survey witnessed a substantial increase in the number of responses, with Students accounting for the highest participation, followed by Staff, Faculty, Alumni, and Other respondents (Figure 2-1). The majority of Student, Staff, and Faculty respondents were identified as full-time (Figure 2-2), aligning with the University's enrollment statistics. Notably, the number of Student responses reached a record high like the previous years' survey. Conversely, the response numbers from other groups remained consistent with surveys conducted in recent years (2017-2021) (Table 1-1).

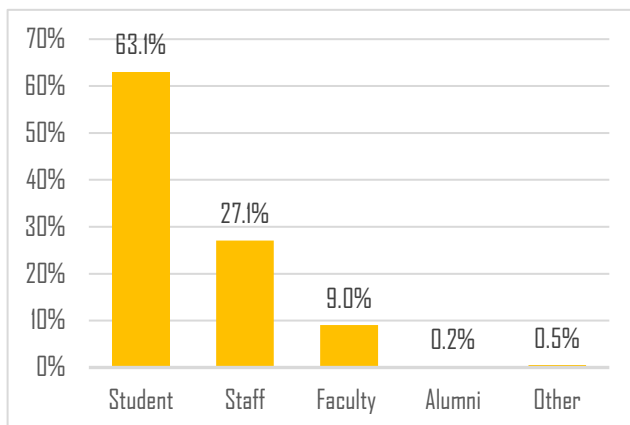


Figure 2-1. Respondent group ( $n = 2190$  responses, 150 non-responses)

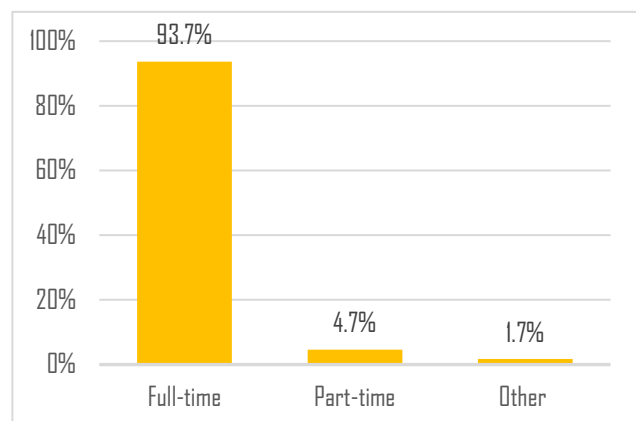


Figure 2-2. Student, Staff, and Faculty classification ( $n = 1955$  responses, 385 non-responses)

Studley emerged as the primary campus for the majority of respondents, with Carleton and Sexton following closely behind (Figure 2-3). On the other hand, the Agricultural, Health facilities, and home locations accounted for fewer responses. This follows population patterns with Studley being the largest campus, followed by Carleton, Sexton, and Agricultural campus. The distribution of responses across campuses has shown a relatively consistent pattern in recent surveys, although slight increase in responses was observed for the Sexton campus, indicating a growing level of participation from individuals associated with that particular campus compared to the 2020-2019 survey. Conversely, a decrease in responses was noted for the other campus locations. The decrease in responses for the other campus locations may be partially attributed to the introduction of remote work and study due to the COVID-19



pandemic. With the implementation of remote learning and telecommuting measures, many individuals may have experienced uncertainty regarding the appropriate selection of their primary campus.

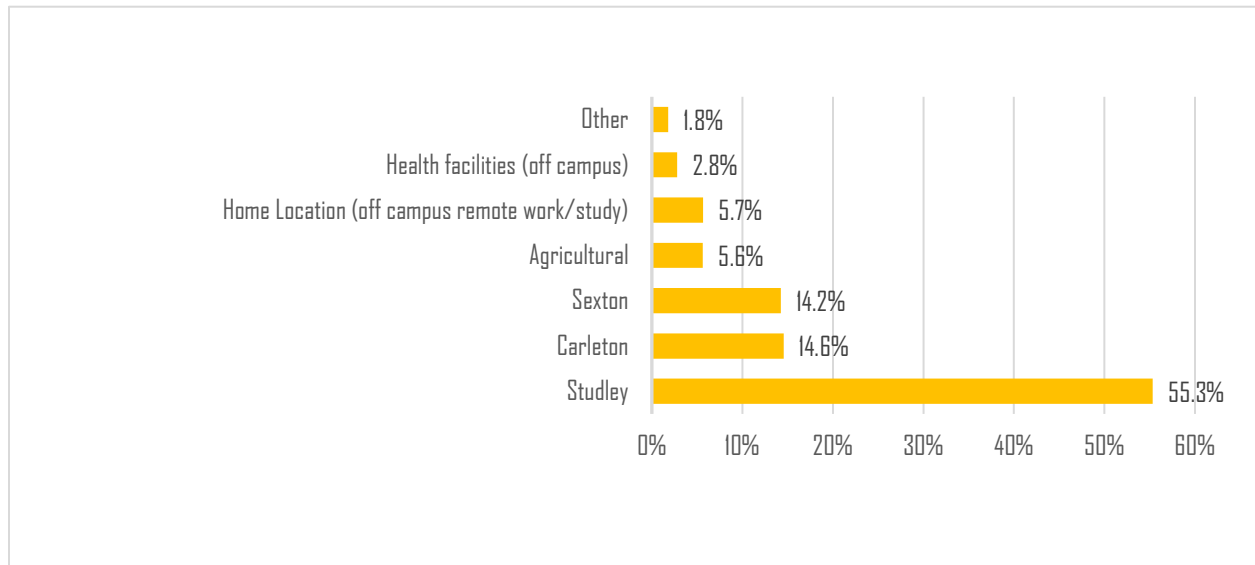


Figure 2-3. Primary campus distribution ( $n = 1958$  responses, 382 non-responses)

## 2.2. Residence locations

The geographical locations of respondents, based on their postal codes are represented in Figure 2-4. The visualization shows that respondents are primarily clustered near the campuses and along major roads such as Highway 102. Generally, individuals attending Halifax campuses tend to reside closer to Halifax, while those attending the Agricultural Campus are closer to Truro. It is worth noting that respondents who live farther away from the campus they attend may have provided their permanent address instead of their current residential address.

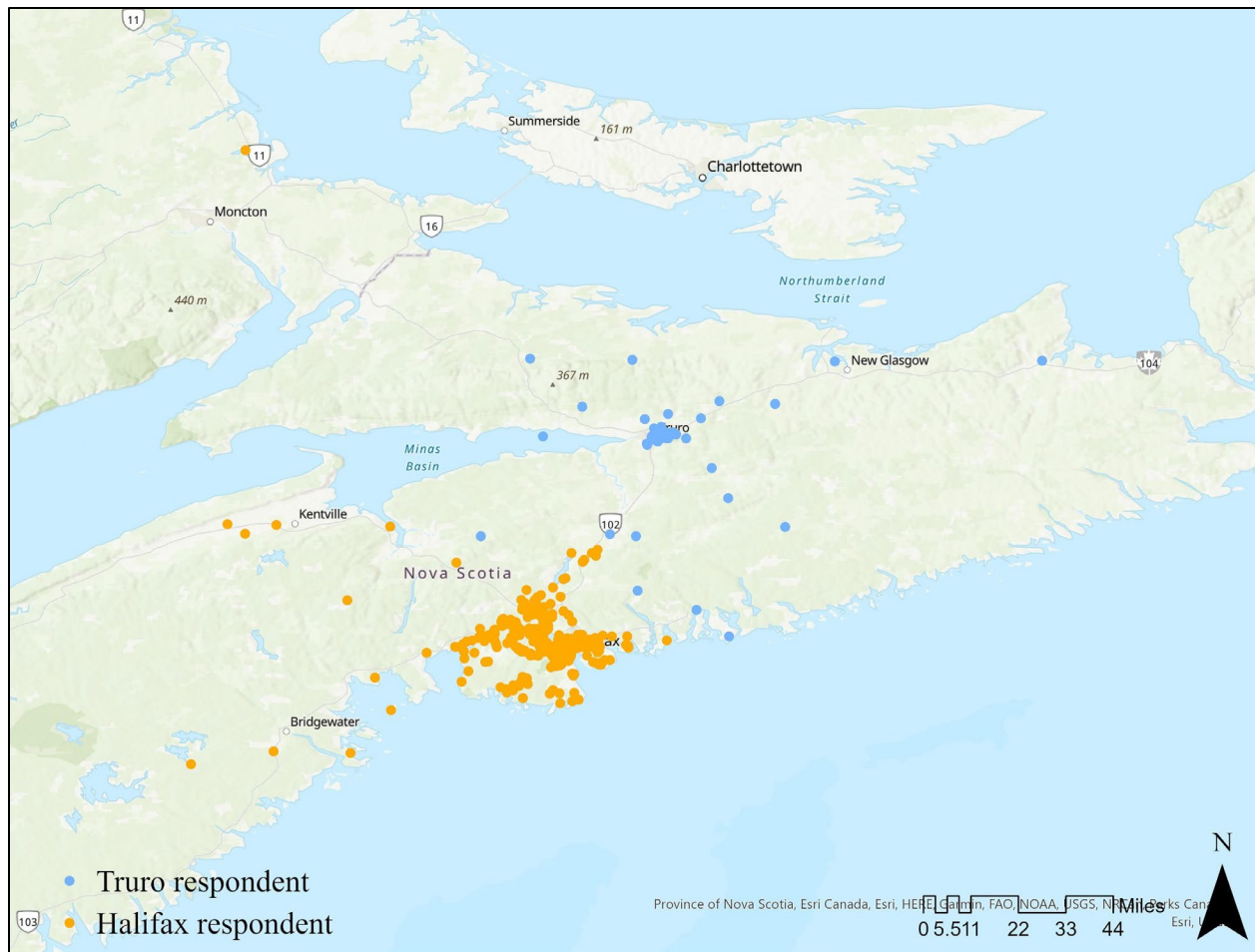


Figure 2-4. Respondents' residence locations

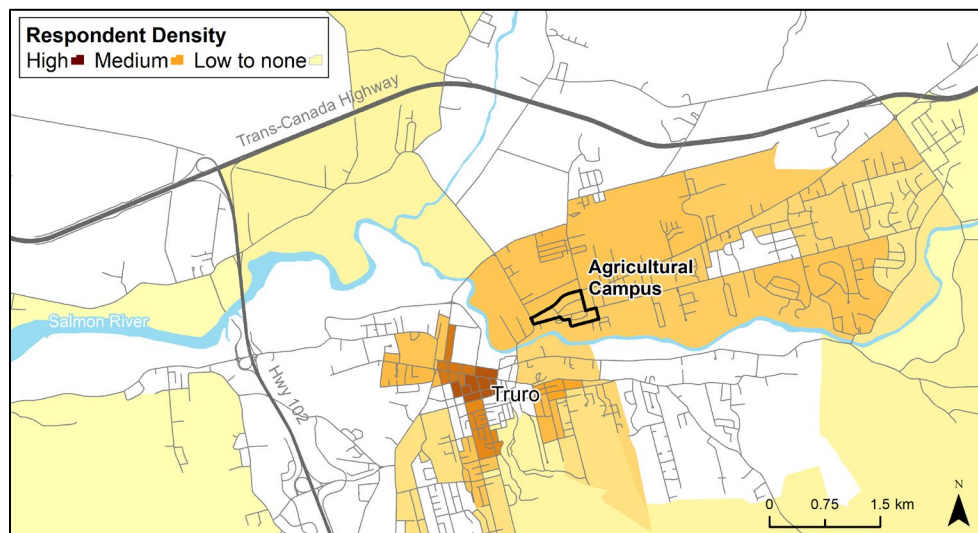
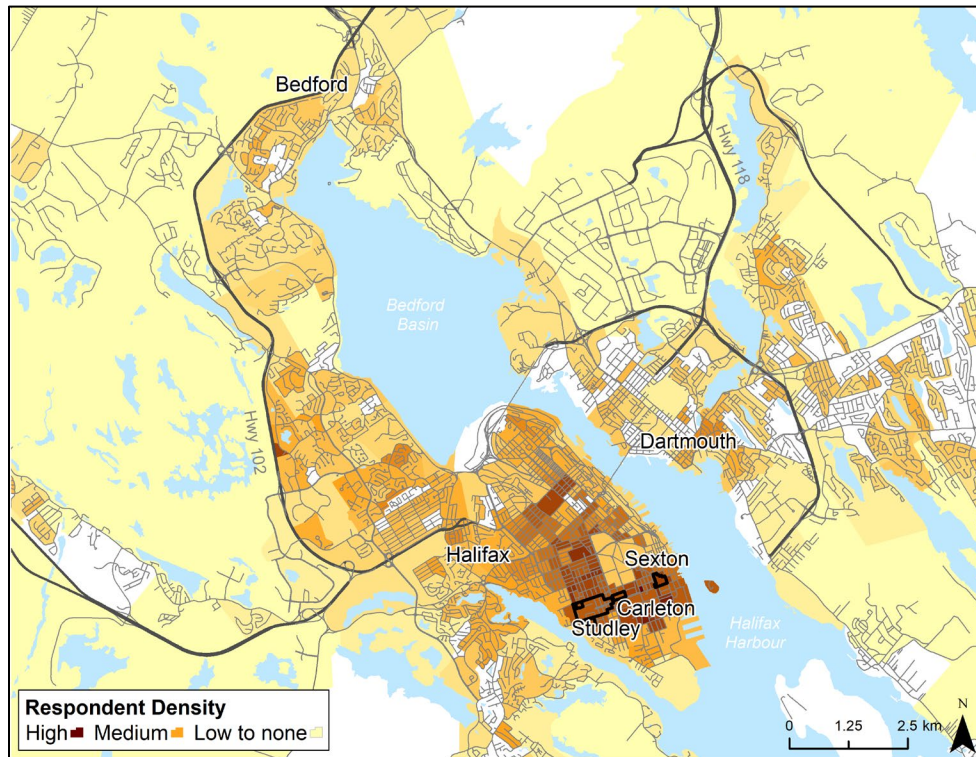


Figure 2-5. Density of Agricultural campus respondents in Truro area

Figure 2-5 presents the concentration of survey respondents in the Truro area. As observed in the 2018 survey, a significant number of respondents reside in Bible Hill, a suburb of Truro that is in close proximity to the Agricultural Campus. Additionally, a notable proportion of respondents live in the residential areas of downtown Truro. These findings align with the respondent distribution patterns observed in previous commuter surveys. However, this year's survey revealed an increase in respondents residing in areas just outside of Truro, including Harmony, Onslow, and Old Barns.



*Figure 2-6. Density of Halifax campus respondents in Halifax area*

Figure 2-6 illustrates a similar trend for Dalhousie's Halifax Campuses, where a significant number of respondents reside in close proximity to the campuses, particularly in the South End and Downtown areas of the Peninsula. These areas, known for their higher-density housing options, tend to attract more survey responses. As one moves away from the Peninsula, the density of respondents decreases. Comparing the 2022-2023 survey to the 2021 Commuter Survey, there was an increase in responses from suburban communities such as Bedford and Hammonds Plains. Beyond the boundaries of the Halifax Peninsula, clusters of respondents were observed in neighboring suburban communities including Bedford, Spryfield, Hammond Plains, Armdale, and Burnside. These areas showed a notable concentration of survey participants residing outside of the central Halifax area.

## 2.3. Gender

The survey received a majority of responses from women, comprising 64.1% of the total, which was more than double the number of male respondents at 29.9% (Figure 2-7). This gender distribution can be attributed to the high number of student responses and aligns with the demographic makeup of the Dalhousie student body, where over half of all undergraduate and graduate students in the 2021-2022 academic year identified as female (54.2%). It is worth noting that online surveys often exhibit gender imbalances, with a higher proportion of female respondents, which has been consistently observed in previous survey results. A small proportion of respondents identified as non-binary, another gender, or chose not to disclose their gender. The proportion of respondents in all categories was similar to the 2020-2021 survey, with slight increase in responses for non-binary and respondents who chose not to disclose their gender.

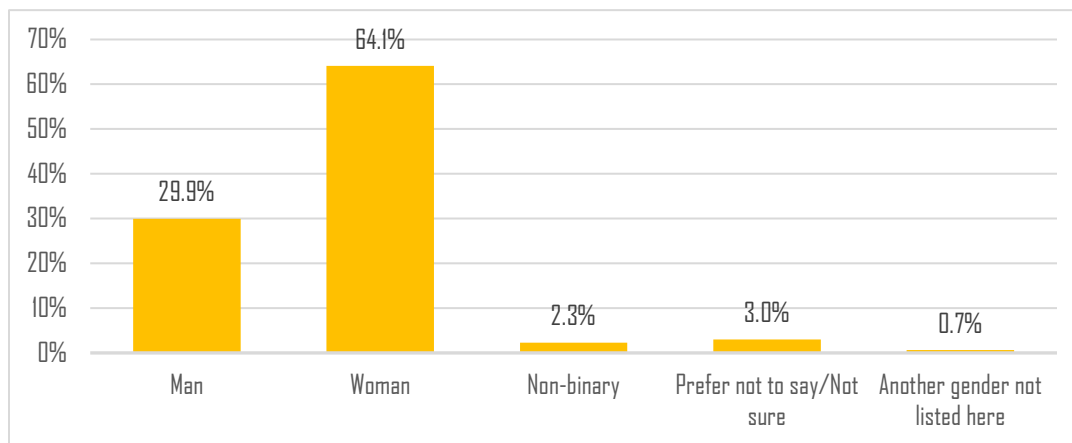


Figure 2-7. Gender distribution ( $n = 1950$  responses, 390 non-responses)

The examination of response distribution by gender and Dalhousie group revealed that female staff constituted the majority of respondents, accounting for 72.6% of the total staff response. They were followed by female students, who made up 62.3% of the student respondents. Among the male respondents, the highest representation was from male faculty, comprising 40.7% of the total faculty respondents. Male students accounted for 31.2% of the student responses (Table 2-2).

Table 2-1. Response distribution percentage by gender and group

	Man	Woman	Prefer not to say	Non-binary	Another gender
Student	31.2%	62.3%	2.7%	3.0%	0.7%
Staff	23.3%	72.6%	2.2%	1.3%	0.6%
Faculty	40.7%	52.0%	0.6%	6.8%	0.0%
Alumni	20.0%	60.0%	20.0%	0.0%	0.0%
Other	50.0%	41.7%	0.0%	0.0%	8.3%

## 2.4. Age

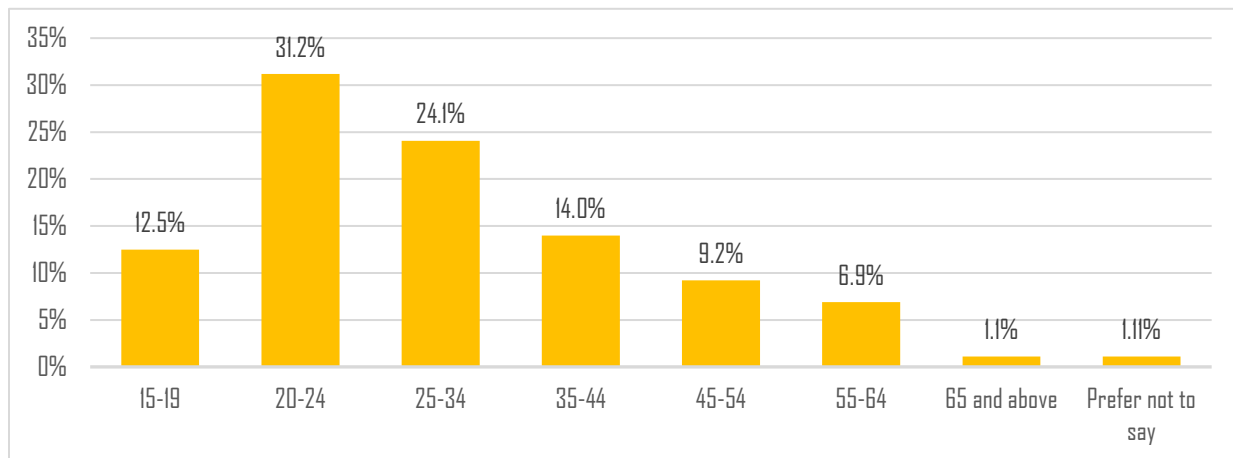


Figure 2-8. Age distribution (*n* = 1989 responses, 351 non-responses)

The age group that represented the largest proportion of respondents was the 20-24 years cohort, accounting for 31.2% of the total respondents. They were closely followed by the 25-34 years cohort, which made up 24.1% of the respondents (Figure 2-8). The distribution of responses by age groups in this year's survey closely resembled that of previous surveys with similar numbers of student responses, such as the 2018-2019 and 2020-2021 surveys. The higher number of respondents in the 20-34 age groups can be attributed to the fact that this age range is the most common among students (Table 2-3). It is worth noting that compared to the previous year's survey (2020-2021), this year's survey saw a similarity in respondents from the 15-19 age group, indicating a higher participation of first-year students. The staff and faculty groups were more likely to fall within the 35-64 age range. The majority of respondents in the 65 and above age group were faculty members, with some staff and other group members also belonging to this age cohort.

Table 2-2. Age distribution percentage by group

	15-19	20-24	25-34	35-44	45-54	55-64	65 and above	Prefer not to say
Student	19.9%	48.6%	26.4%	4.4%	0.2%	0.2%	0.2%	0.2%
Staff	0.0%	2.9%	22.7%	30.7%	23.2%	17.4%	0.9%	2.2%
Faculty	0.0%	0.0%	12.0%	27.9%	29.0%	20.8%	6.6%	3.8%
Alumni	20.0%	20.0%	20.0%	0.0%	0.0%	20.0%	20.0%	0.0%
Other	0.0%	0.0%	33.3%	33.3%	8.3%	8.3%	16.7%	0.0%



## 2.5. Household income

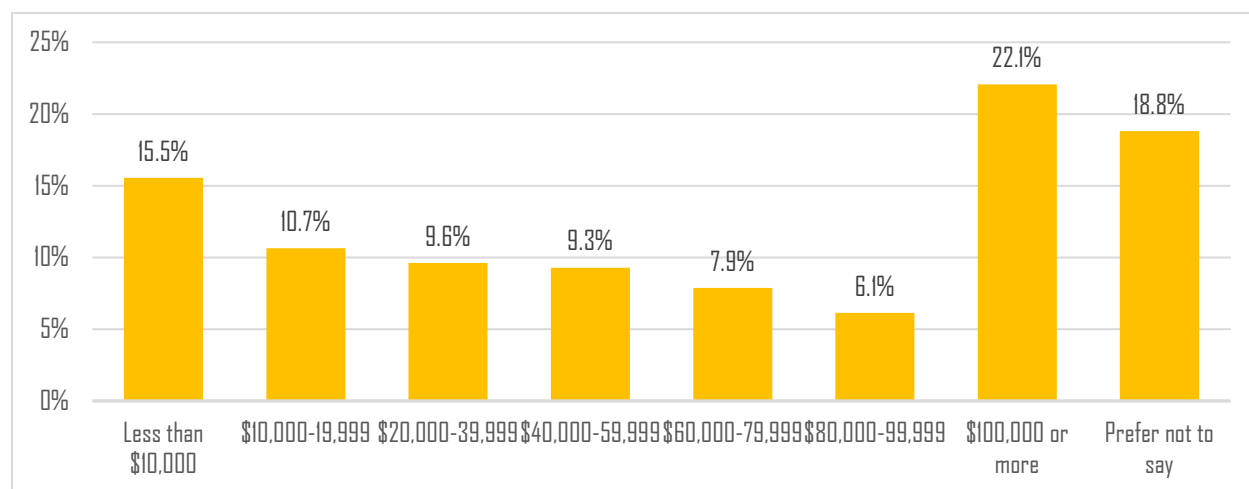


Figure 2-9. Annual household income distribution (n = 1840 responses, 500 non-responses)

Among the respondents, the most prevalent category for annual household income was "less than \$19,999," accounting for 26.2% of the participants, which was the most common category in the previous year's survey (2020-2021) (Figure 2-9). This was followed by the category of "\$100,000 or more" with a representation of 22.2%, which was the most common category in the previous year's survey (2019-2020). The similarity in the "less than \$19,999" category compared to the previous survey is likely attributed to the higher participation of students in this year's survey as well, as the majority of students fell within this income range (Table 2-4). Consistent with past surveys, the majority of faculty and staff reported incomes in the "above \$100,000" category. The annual household incomes of alumni and other respondents exhibited a more diverse distribution across all income categories.

Table 2-3. Annual household income percentage by group

	Less than \$10,000	\$10,000 - 19,999	\$20,000 - 39,999	\$40,000 - 59,999	\$60,000 - 79,999	\$80,000 - 99,999	\$100,000 or more	Prefer not to say
Student	25.3%	17.2%	13.4%	6.4%	5.0%	2.5%	9.8%	20.5%
Staff	0.0%	0.2%	4.2%	17.0%	15.1%	12.6%	35.4%	15.5%
Faculty	0.0%	0.0%	1.8%	4.1%	4.1%	8.9%	62.7%	18.3%
Alumni	0.0%	0.0%	20.0%	0.0%	20.0%	0.0%	20.0%	40.0%
Other	0.0%	0.0%	0.0%	25.0%	16.7%	33.3%	25.0%	0.0%

## 3. Commute to and from Dalhousie

A key objective of the survey is to collect information about the travel patterns of the Dalhousie community to and from the campuses. This section provides an overview of various aspects of survey respondents' commutes, encompassing their choice of transportation mode, distance traveled, duration of trips, and timing of their journeys.

### 3.1. Primary mode

The primary mode of transportation is determined as the method used for commuting to and from campus, accounting for 70% or more of the total travel time. As depicted in Figure 3-1, walking emerges as the predominant mode of travel within the Dalhousie community, followed by public transit, and then driving alone.

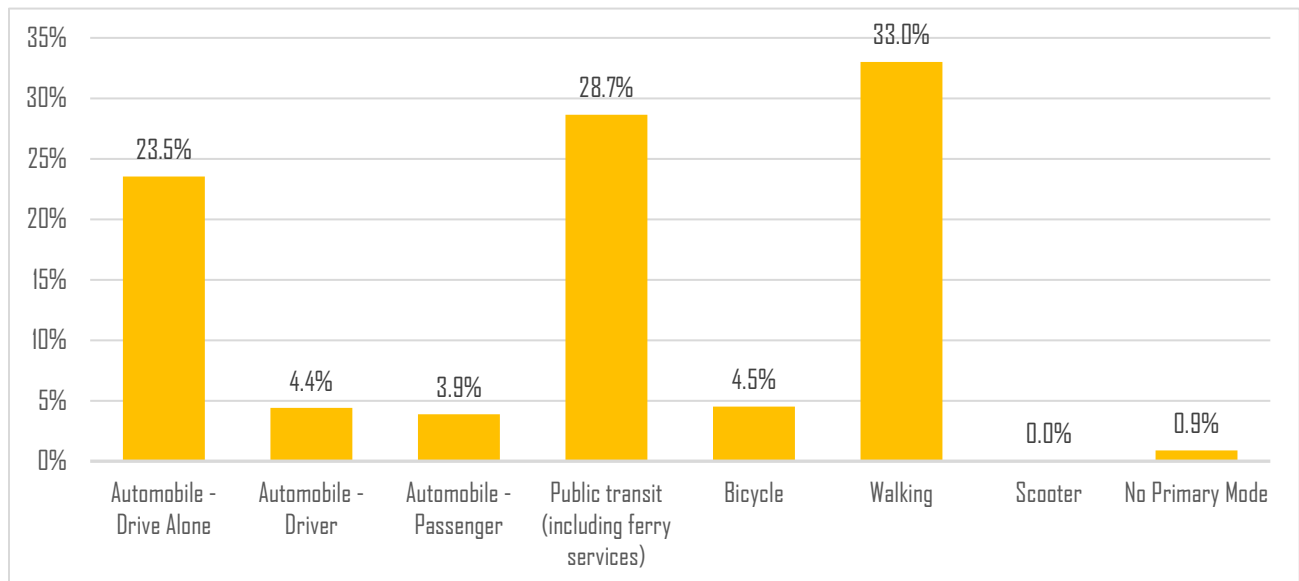


Figure 3-1. Primary commute mode ( $n = 2017$  responses, 323 non-responses)

Table 3-1 provides an overview of the primary commute mode for each respondent group. It reveals that staff, faculty, and other groups predominantly rely on private vehicles as their primary mode of transportation. Public transit emerges as the second most popular option for staff and other respondents, while faculty members often choose walking as their primary commute mode. Staff tend to live further away from campus than students and faculty. Among students, walking is the most common mode of transportation, followed by public transit. Alumni respondents primarily reported private vehicles as their primary mode of commute, followed by walking. Comparing the results to the 2020-2021 Commuter Survey, all groups exhibited similar response patterns except for students, where the use of private vehicles reported (as 'alone', 'driver' and 'passenger' in this survey) increased (22.2% in 2019-2020) and walking decreased (36.8% in 2019-2020). The decrease in the use of private vehicles and increase in walking among



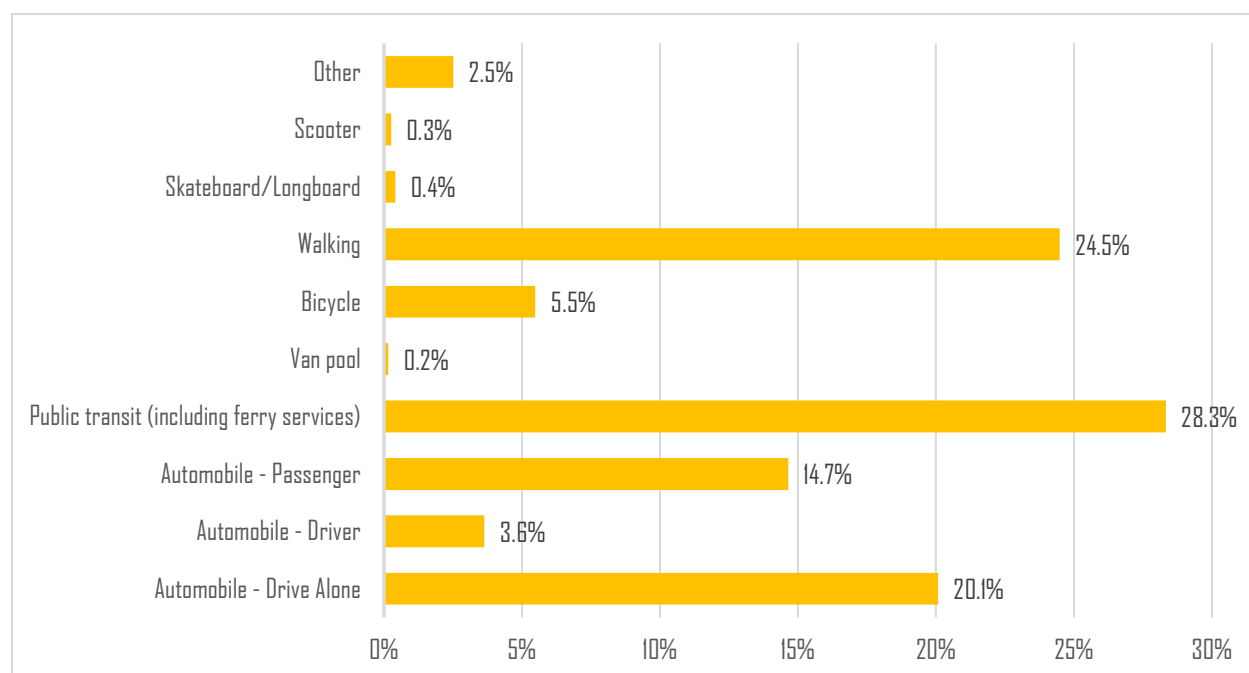
students can be attributed to the full reopening of the campus after the COVID-19 pandemic, as well as the fact that many students are residing in close proximity to the campus.

*Table 3-1. Primary commute mode distribution percentage by group*

	Student	Staff	Faculty	Alumni	Other
Automobile - Drive Alone	12.60%	44.94%	35.33%	66.67%	50.00%
Automobile - Driver	2.70%	7.37%	7.61%	0.00%	0.00%
Automobile - Passenger	3.00%	6.45%	2.72%	0.00%	0.00%
Public transit (including ferry services)	33.60%	23.76%	9.78%	0.00%	12.50%
Bicycle	3.40%	3.31%	15.76%	0.00%	12.50%
Walking	43.00%	12.34%	25.54%	33.33%	12.50%
Scooter	0.00%	0.18%	0.00%	0.00%	0.00%
No Primary Mode	1.00%	0.18%	2.17%	0.00%	0.00%

## 3.2. Secondary Mode

The secondary mode of transportation refers to the method of travel utilized for less than 30% of the total commute time. According to (Figure 3-2), the majority of respondents reported public transit as their secondary mode of transportation. This distribution aligns with the findings of the previous 2018-2019 and 2019-2020 Commuter Survey, with a slight increase in the popularity of walking as a secondary mode (Figure 3-2).



*Figure 3-2. Secondary commute mode (n = 1952 responses, 388 non-responses)*

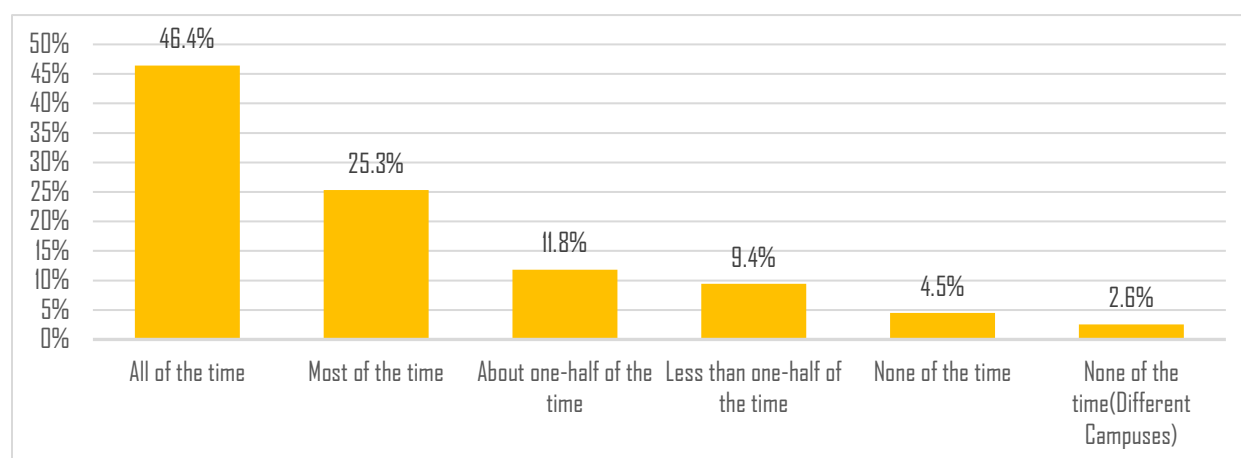
Table 3-2 reveals that students tend to opt for public transit as their secondary mode of transportation, whereas faculty and staff are more inclined to maintain their primary mode of transportation without utilizing a secondary mode.

*Table 3-2. Secondary commute mode distribution percentage by group*

	Student	Staff	Faculty	Alumni	Other
Automobile - Drive Alone	12.80%	35.30%	25.90%	33.30%	33.30%
Automobile - Driver	2.60%	6.10%	4.10%	0.00%	0.00%
Automobile - Passenger	14.20%	16.80%	12.40%	0.00%	0.00%
Public transit (including ferry services)	33.70%	19.70%	15.30%	33.30%	33.30%
Van pool	0.20%	0.20%	0.00%	0.00%	0.00%
Bicycle	5.00%	4.40%	11.80%	0.00%	33.30%
Walking	28.90%	14.10%	24.70%	33.30%	0.00%
Skateboard/Longboard	0.60%	0.20%	0.00%	0.00%	0.00%

### 3.3. Commuting habits and barriers

When respondents were asked about their engagement in studying, researching, or engaging in community activities, a significant proportion expressed their frequency of coming to campus for these purposes. The majority of respondents indicated that they visit the campus regularly to participate in these activities, as shown in Figure 3-3. It is worth noting that this trend of increased commuting to campus for academic and community engagement has seen a notable upswing after the campus was fully reopened following the COVID-19 pandemic. The resumption of in-person activities and the return to a more vibrant campus environment have contributed to a heightened level of involvement among respondents, reaffirming the value they place on on-campus participation in academic pursuits and community engagement.



*Figure 3-3. Commuting habits after COVID-19 pandemic (n = 2186 responses, 154 non-responses)*

When respondents were asked about barriers preventing them from using a particular commute option, the majority indicated that they did not face any significant obstacles (Figure 3-4). However, a notable portion of respondents reported encountering barriers in their commuting choices. Among the identified barriers, inadequate biking infrastructure emerged as a prominent issue, hindering individuals from utilizing bicycles as a preferred mode of transportation. Additionally, some respondents expressed challenges related to using public transport, such as limited availability or inconvenient schedules. Barriers related to car usage were also highlighted, including traffic congestion, limited parking spaces, and associated costs. These findings suggest that while many respondents do not face barriers in their commuting choices, certain factors such as biking infrastructure, public transport accessibility, and car-related concerns pose challenges for some individuals in their daily commutes.

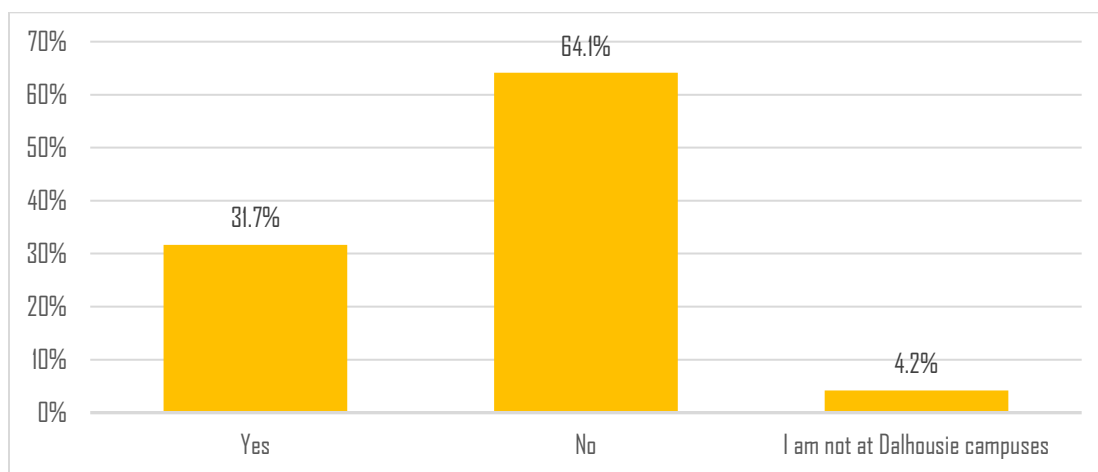
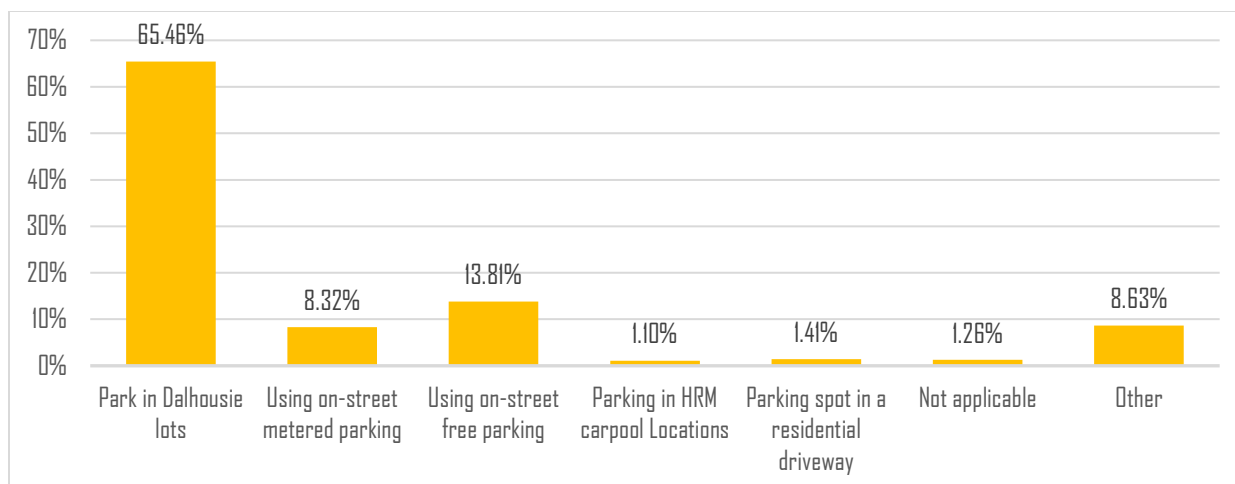


Figure 3-4. Commuter barriers to transportation options ( $n = 2001$  responses, 339 non-responses)

### 3.4. Parking preference and transportation initiatives

When respondents were asked about their parking preferences, the majority stated that they generally park their cars in Dalhousie University parking lots, while some opt for on-street free parking (Figure 3-5). The distribution of commute modes in this year's survey differs from the previous year's survey (2019-2020), indicating notable changes in transportation patterns.



When respondents were asked about their thoughts on additional transportation initiatives they would like to see at Dalhousie, their feedback revealed a word cloud analysis, depicted in Figure 3-6. This word cloud highlights prominent terms of their feedback.



Figure 3-6. Respondents' suggestions for transportation initiatives at Dalhousie University

Respondents put forward several suggestions for transportation initiatives at Dalhousie University, aiming to enhance the campus mobility experience and promote sustainability. These suggestions included the implementation of a campus-wide robust bike loan program, providing convenient access to bicycles for students and staff. Respondents also expressed the need for EV charging stations to support the use of electric vehicles and encourage their adoption on campus. Another popular suggestion was the introduction of campus-wide shuttle services, connecting different parts of the campus to facilitate easy and efficient transportation. The respondents emphasized the importance of affordable and accessible parking, suggesting reduced or free parking prices for sustainable vehicle options. Additionally, the inclusion of e-scooters and car-sharing services were recommended to diversify transportation choices and reduce reliance on individual cars. Respondents also expressed the desire for bus passes that are valid through the summer, allowing for continued access to public transportation during off-peak months. Finally, the availability of free bicycle access and the provision of more e-scooters were suggested to further promote active and sustainable modes of transportation on campus. These suggestions provide valuable insights for future transportation planning at Dalhousie, helping to shape a comprehensive and sustainable transportation system that meets the needs and preferences of the university community.

### 3.5. Distance from campus

To determine the distances between respondents' residences and their primary campus, the straight-line distance was calculated based on their postal codes. The shift towards hybrid work/study from home and on-campus culture during the COVID-19 pandemic resulted in a broader distribution of responses. The distribution of distances to campus remained consistent with the findings of the 2020-2021 Commuter Survey. The majority of respondents still resided within a 2-kilometer radius of their primary campus (Figure 3-7).

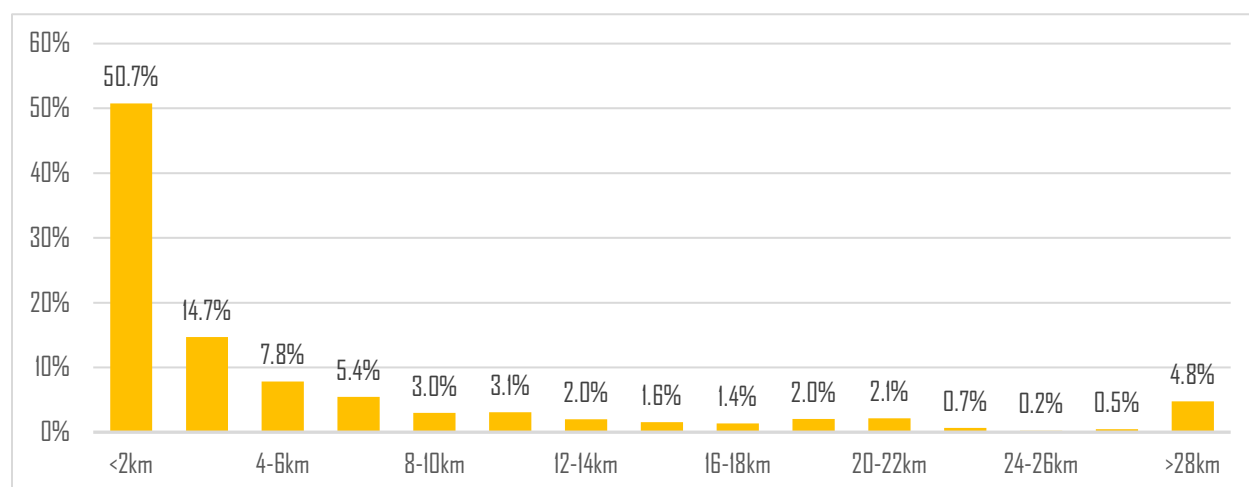


Figure 3-7. Average distance from campus (km) distribution for all respondents

The median distance for all respondents was calculated to be 1.94 kilometers. Figure 3-8 illustrates the average commute distance for each respondent group. The average distances for Staff and Faculty were comparable to the findings of the 2020-2021 survey, with slight decrease

in average distance for staff. While the average distance for Students was significantly lower. The lower average distance for students can be attributed to the full reopening of campus after the COVID-19 pandemic, with students returning to live in proximity to the university campuses, as compared to the year of 2020-2021.

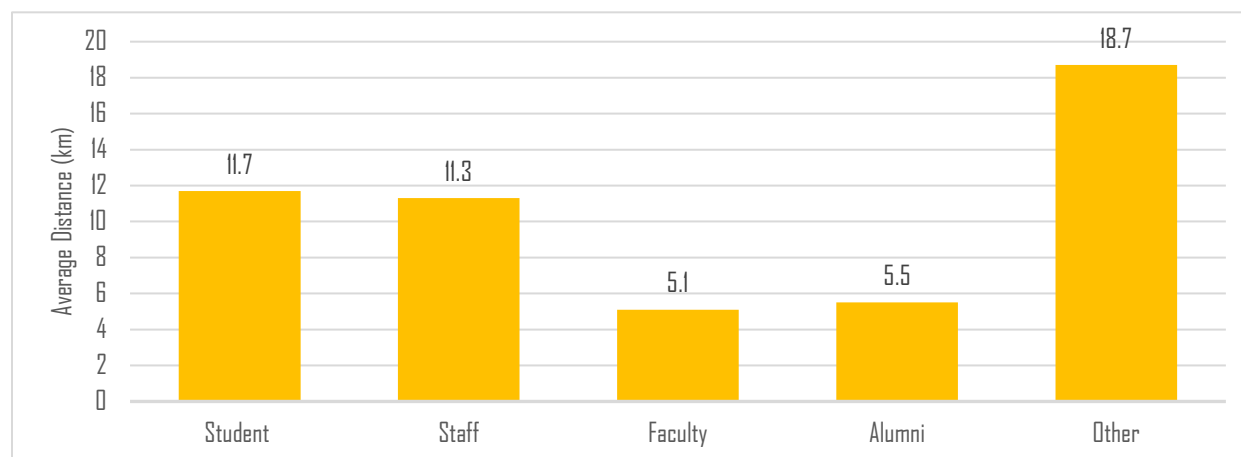


Figure 3-8. Average commute distance (km) by respondent group

### 3.6. Commute duration

Participants were requested to provide information regarding the shortest and longest duration it took them to travel to Dalhousie University using their primary mode of transportation. These responses were used to calculate the average commute time, as shown in Figure 3-9. The majority of participants reported commute durations ranging from 5 to 20 minutes. The median commute time was determined to be 21 minutes.

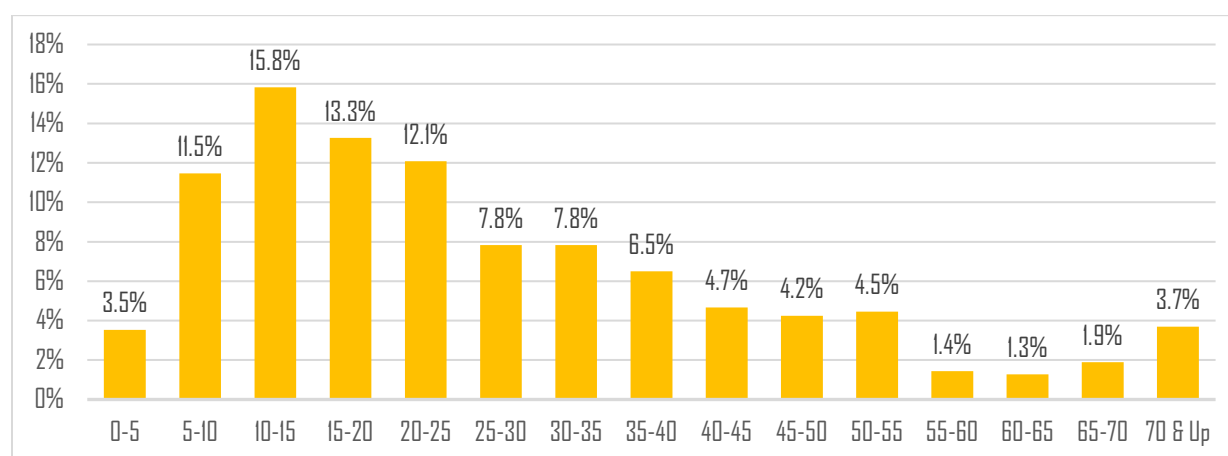


Figure 3-9. Distribution of commute duration for primary mode

On average, staff members had the longest commuting time, followed by faculty and students, as illustrated in Figure 3-10. It is noteworthy that the commute time among respondent groups

closely aligns with the findings of the 2018-2019 and 2019-2020 Commuter Survey, demonstrating a remarkable consistency over time.

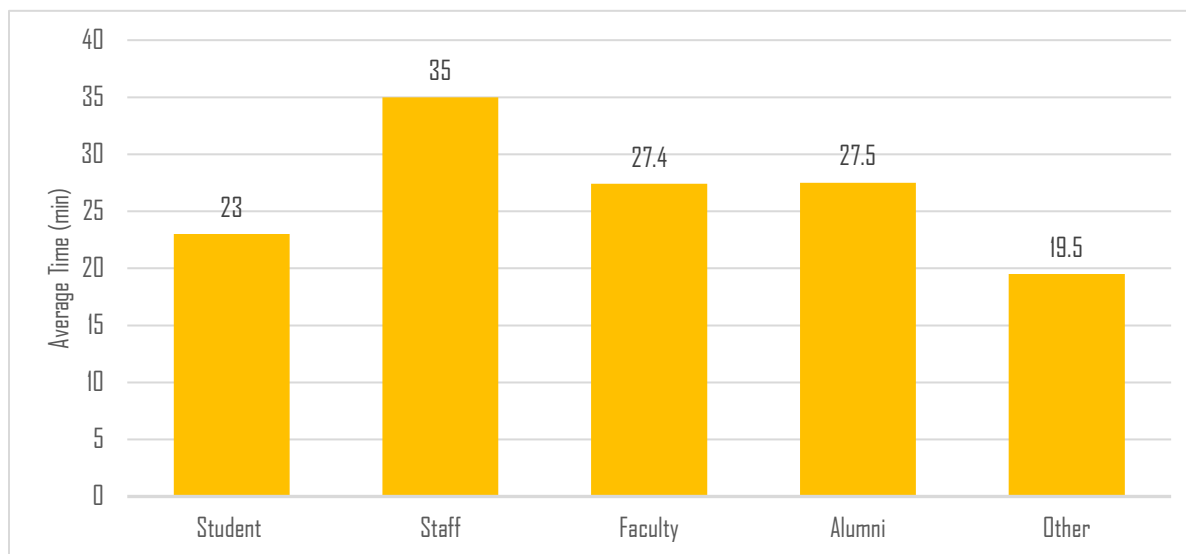


Figure 3-10. Average commute duration by group

### 3.7. Arrival and departure time

The Dalhousie community adheres to standard workday hours for their arrival and departure times. According to Figure 3-11, the majority of respondents typically arrive on the campuses of Dalhousie University between 8:00 am and 10:00 am. Similarly, Figure 3-12 reveals that most respondents tend to leave campus between 4:00 pm and 6:00 pm.

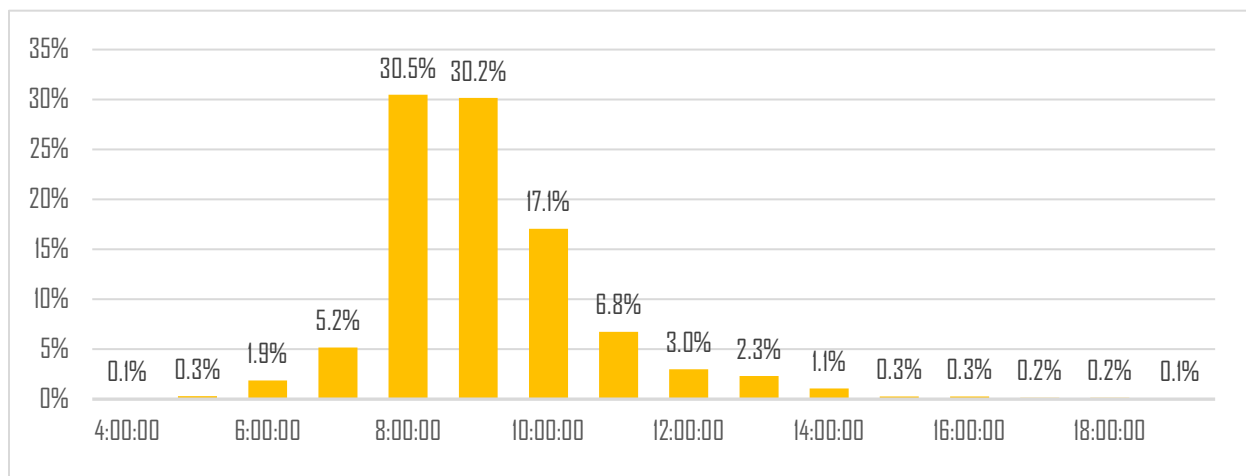


Figure 3-11. Distribution of arrival times ( $n = 1940$  responses, 400 non-responses)



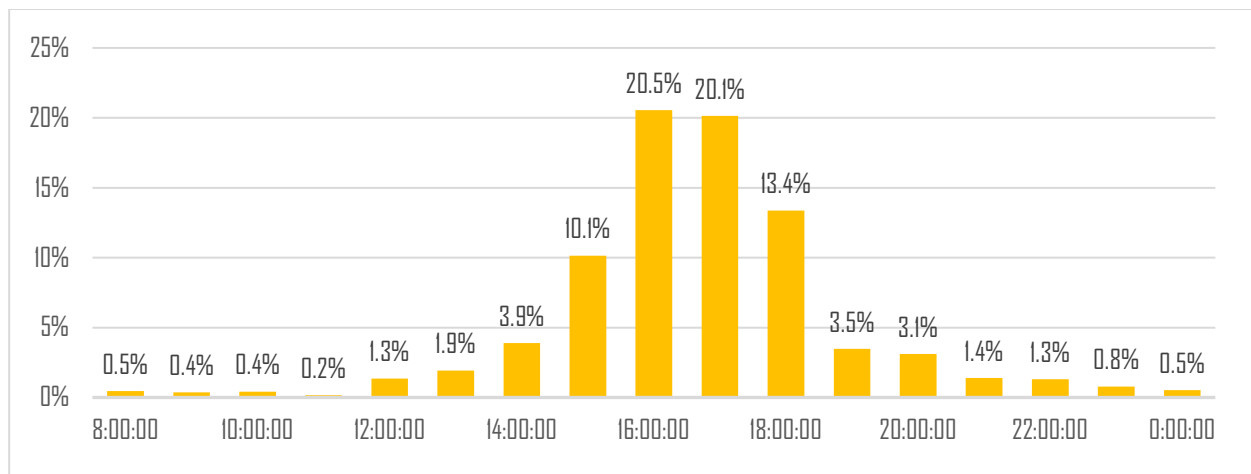


Figure 3-12. Distribution of departure times ( $n = 1932$  responses, 408 non-responses)

## 4. Intercampus Travel

Dalhousie University encompasses multiple campuses in Halifax, including Studley, Carleton, Sexton, and off-campus health facilities, while its Agricultural campus is situated in Truro. The survey sought to gather information from respondents about their travel patterns between these campuses, specifically focusing on inter-Halifax campus travel and Halifax-Truro travel. Figure 2-3 illustrates the predominant campus reported by respondents, with Studley Campus being the most frequently mentioned, followed by Carleton and Sexton.

### 4.1. Travel among Halifax campuses

The majority of respondents indicated that they frequently travel among the campuses in Halifax, although the frequency of these trips varied among participants (Figure 4-1). Those who reported making such trips did so daily or at least once a week, highlighting the regularity of inter-Halifax campus travel (Figure 4-1).

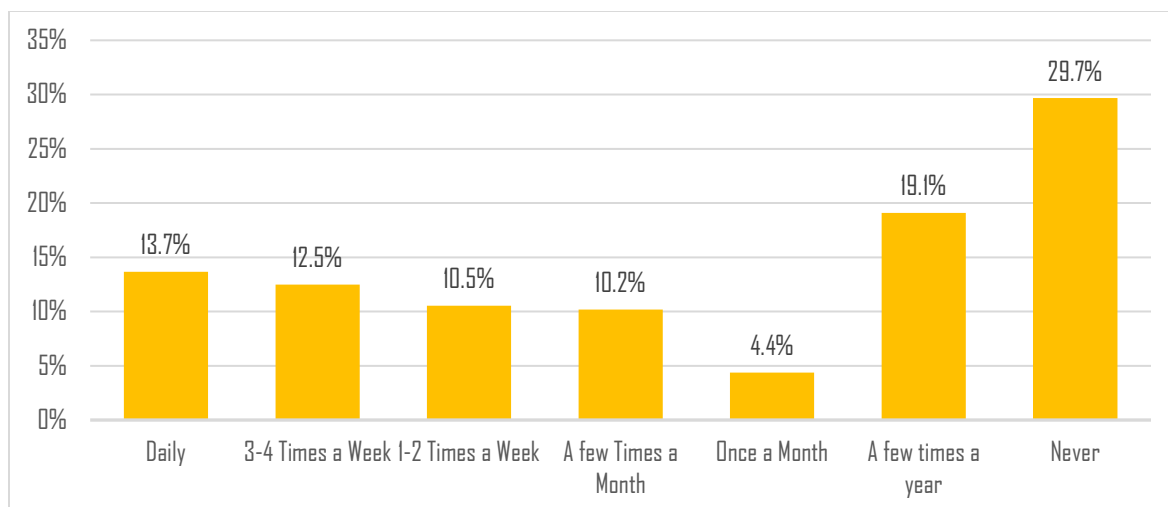


Figure 4-1. Travel frequency among Halifax campuses (*n* = 2042 responses, 298 non-responses)

According to the information provided in Table 4-1, it is evident that the majority of respondent groups engage in travel among the Halifax campuses, although the frequency of these trips varies. Among students, there is an almost equal proportion of individuals who either never travel between Halifax campuses or do so at least daily or once a week. In the case of faculty members, more than half of them reported traveling between these campuses a few times a year or less. On the other hand, most staff members indicated that they traveled among the Halifax campuses at least once a year.

Table 4-1. Travel frequency among Halifax campuses by group

	Daily	3-4 times a week	1-2 times a week	A few times a month	Once a month	A few times a year	Never
Student	17.8%	14.8%	11.7%	9.8%	3.5%	12.0%	30.6%
Staff	7.4%	8.5%	8.5%	11.1%	5.5%	31.6%	27.6%
Faculty	5.3%	10.1%	9.6%	10.6%	6.9%	29.8%	27.7%
Alumni	0.0%	0.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Other	8.3%	0.0%	0.0%	0.0%	0.0%	16.7%	75.0%

The Halifax campuses of Dalhousie University are situated in close proximity to each other, resulting in the majority of intercampus travel being accomplished on foot, as depicted in Figure 4-2. This finding aligns with the results of the 2019-2020 Commuter Survey.

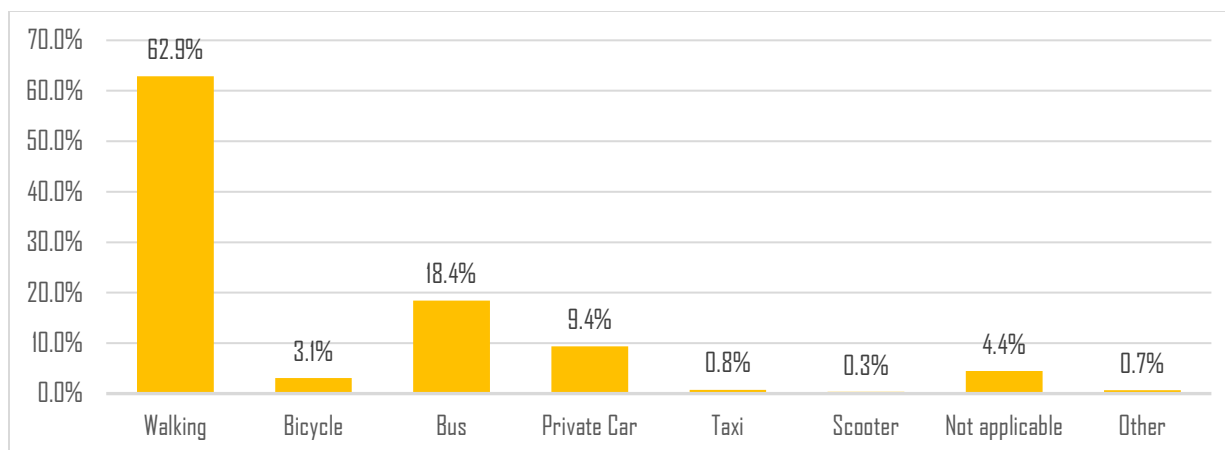


Figure 4-2. Primary travel mode between Halifax campuses ( $n = 1439$  responses, 901 non-responses)

## 4.2. Travel between Halifax and Agricultural campuses

Figure 4-3 illustrates that a significant portion of respondents do not engage in travel between Dalhousie University's Halifax and Truro campuses. Among those who do undertake such travel, it occurs infrequently. Compared to the 2019-2020 Commuter Survey, respondents in this year's survey show a slightly lower tendency to travel between the two campus locations, with most indicating that they do so a few times a year or less.

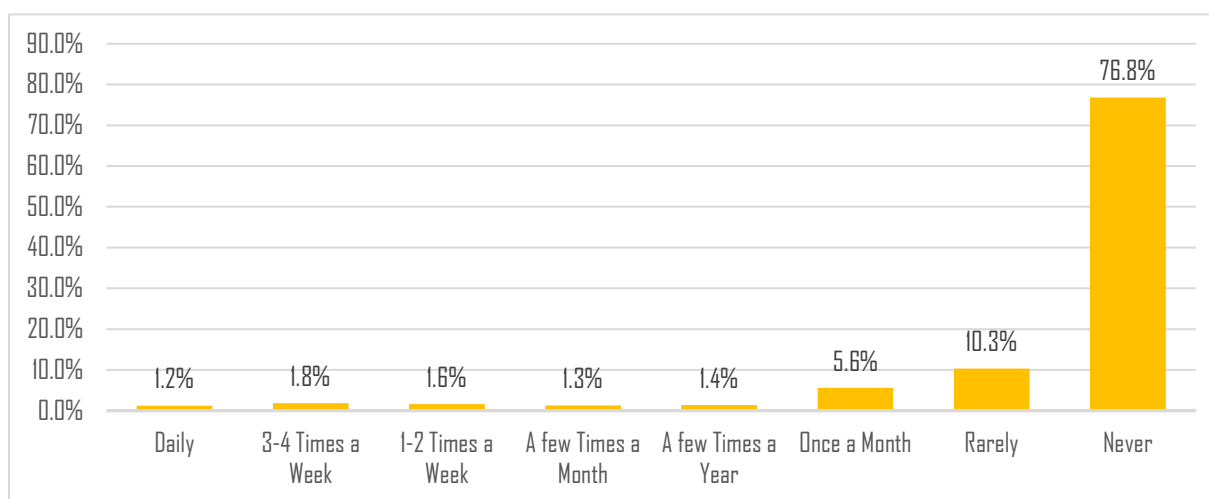


Figure 4-3. Travel frequency between Halifax and Truro campuses ( $n = 2042$  responses, 298 non-responses)

Table 4-2 indicates that staff and faculty members exhibit a higher likelihood of engaging in travel between Dalhousie University's Halifax and Truro campuses, while students display the lowest likelihood of such travel.

Table 4-2. Travel frequency between Halifax and Truro campuses by group

	Student	Staff	Faculty	Alumni	Other
Daily	1.80%	0.20%	0.50%	0.00%	0.00%
3-4 times a week	2.30%	0.50%	2.70%	0.00%	0.00%
1-2 times a week	2.40%	0.40%	0.50%	0.00%	0.00%
A few times a month	1.60%	0.70%	1.10%	20.00%	0.00%
Once a month	0.90%	2.50%	1.10%	0.00%	0.00%
A few times a year	3.00%	9.90%	9.60%	40.00%	0.00%
Rarely	6.00%	16.80%	20.20%	0.00%	8.30%
Never	82.10%	69.00%	64.40%	40.00%	91.70%

The distance of approximately 100 km between Dalhousie University's Halifax and Truro campuses influences the transportation choices of individuals commuting between them. Nearly half of the respondents prefer to drive alone when traveling between campuses (Figure 4-4), while others opt for carpooling or taking the bus.

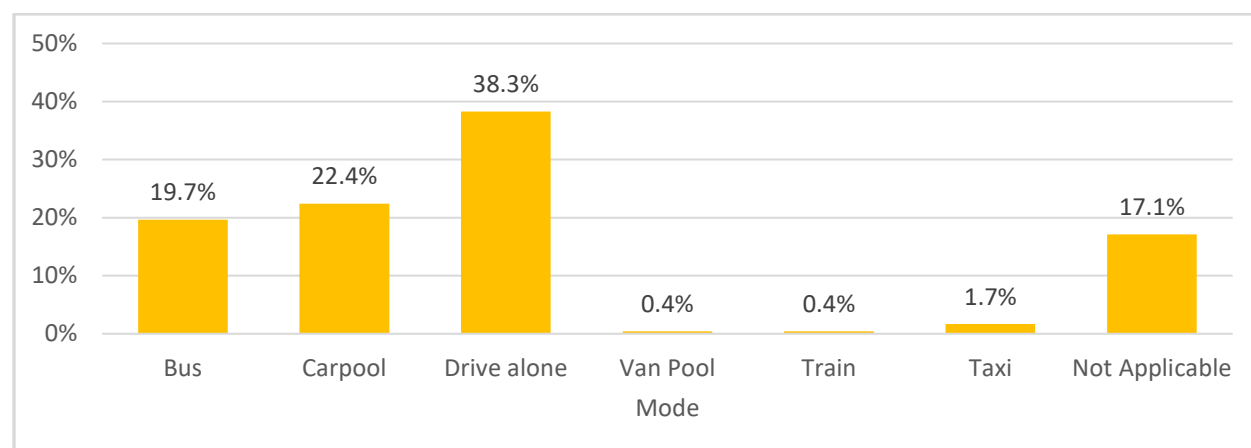


Figure 4-4. Primary travel mode between Halifax and Truro campuses ( $n = 473$  responses, 1867 non-responses)

When commuting between Dalhousie's Halifax and Truro campuses, students predominantly rely on the bus as their primary mode of travel (Table 4-3). On the other hand, nearly three-quarters of faculty members who make this journey opt for solo car travel. Staff members, on the other hand, tend to choose between driving alone or carpooling when traveling between campuses (Table 4-3).

Table 4-3. Primary travel mode between Halifax and Truro campuses by group

Bus	Carpool	Drive alone	Van pool	Train	Taxi
-----	---------	-------------	----------	-------	------

Student	37.6%	11.5%	23.0%	0.9%	0.4%	2.7%
Staff	4.5%	36.9%	47.2%	0.0%	0.6%	0.6%
Faculty	0.0%	22.4%	65.7%	0.0%	0.0%	0.0%
Alumni	0.0%	0.0%	66.7%	0.0%	0.0%	33.3%
Other	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

## 5. Comparison by Campus

Dalhousie University encompasses multiple campuses in different locations, including Studley, Carleton, and Sexton in Halifax, the Agricultural Campus in Truro, and medical teaching facilities in Saint John, New Brunswick. These geographical variations significantly influence the commuting behaviors of individuals attending these campuses. In the following section, we analyze the commuting characteristics specific to each campus. While the Halifax campuses exhibit similar transportation patterns, the Agricultural Campus and the University's Health Facilities show distinct commuting trends, which will be further explored below. Figure 2-3 illustrates the primary campus distribution among the respondents, with Halifax's Studley Campus being the most frequently attended, followed by Carleton and Sexton.

### 5.1. Commute mode

In contrast to previous surveys, the primary commute mode varied across the Halifax campuses. Public transportation and walking emerged as the most common modes for the Studley and Sexton campuses, while private vehicle and walking were predominant for the Carleton campus (Figure 5-1). Similarly, the Agricultural Campus exhibited significantly higher levels of private vehicle use compared to transit use, following a trend observed in previous years. These findings reflect the influence of the campus' location and the transportation systems available in proximity to each campus. This is no public transit available at the Agricultural Campus. In this year's survey, a new feature was added to inquire about "scooter" usage. However, it was observed that students have not yet adopted scooters as their primary mode of commuting to any of the Halifax campuses, likely due to the recent introduction of scooters in the transportation options. A new feature introduced in this year's survey was the inclusion of "home location" as a response option, reflecting the impact of the COVID-19 pandemic on work and study arrangements. Respondents who selected their home location as their primary work/study place showed a preference for walking or using a private vehicle as their main mode of commuting. This finding suggests that individuals who work or study from home tend to rely on these modes of transportation, possibly due to the convenience and flexibility they offer for shorter distances. The addition of the "home location" feature provides valuable insights into the changing commuting patterns and preferences resulting from the pandemic.

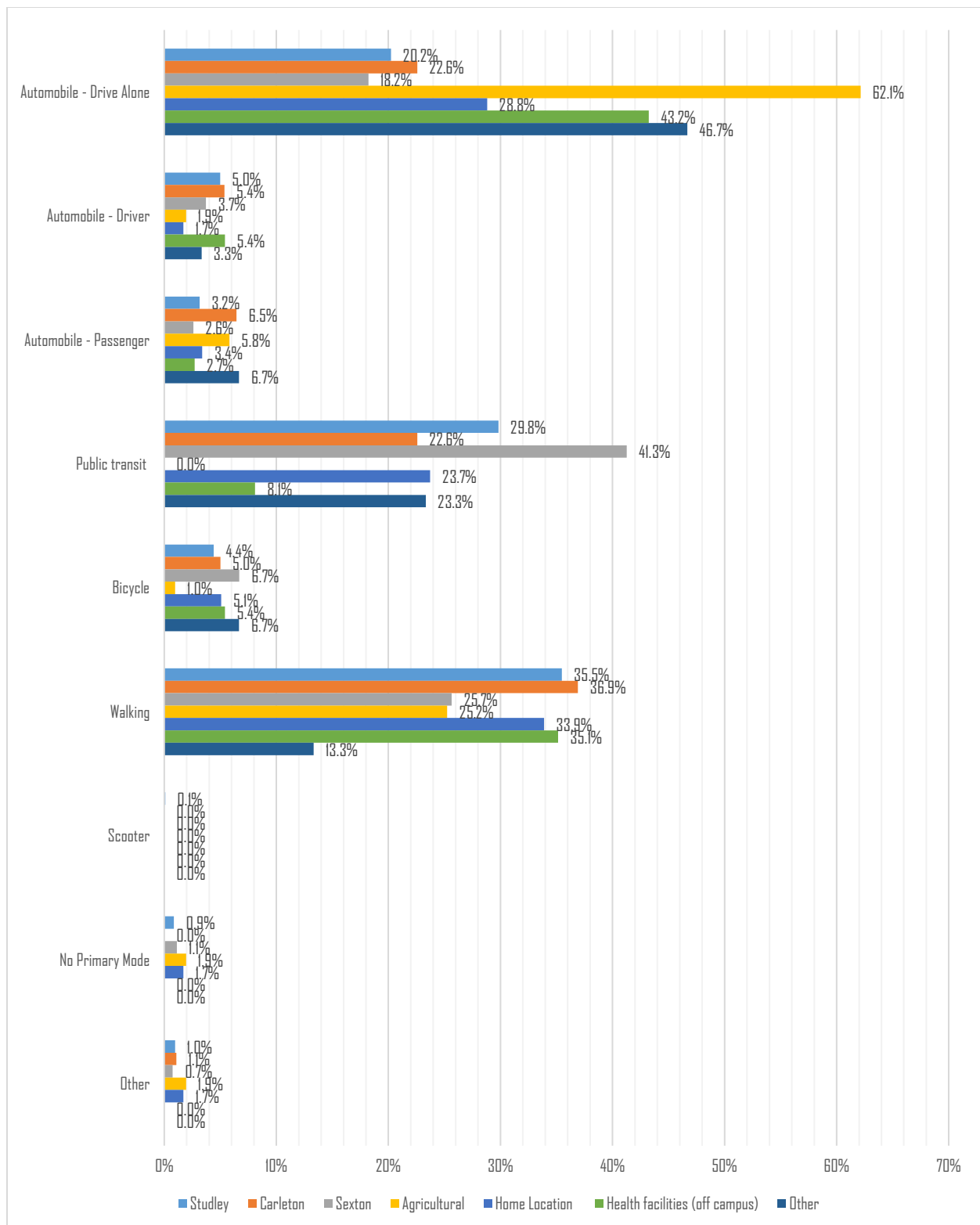
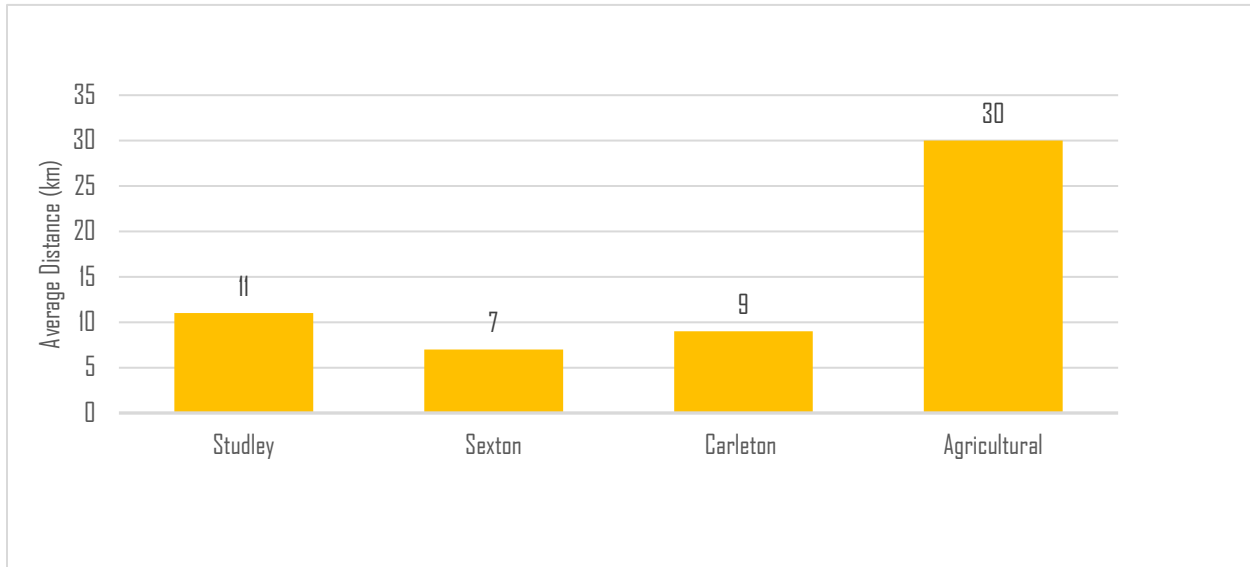


Figure 5-1. Primary commute mode by campus



## 5.2. Commute distance

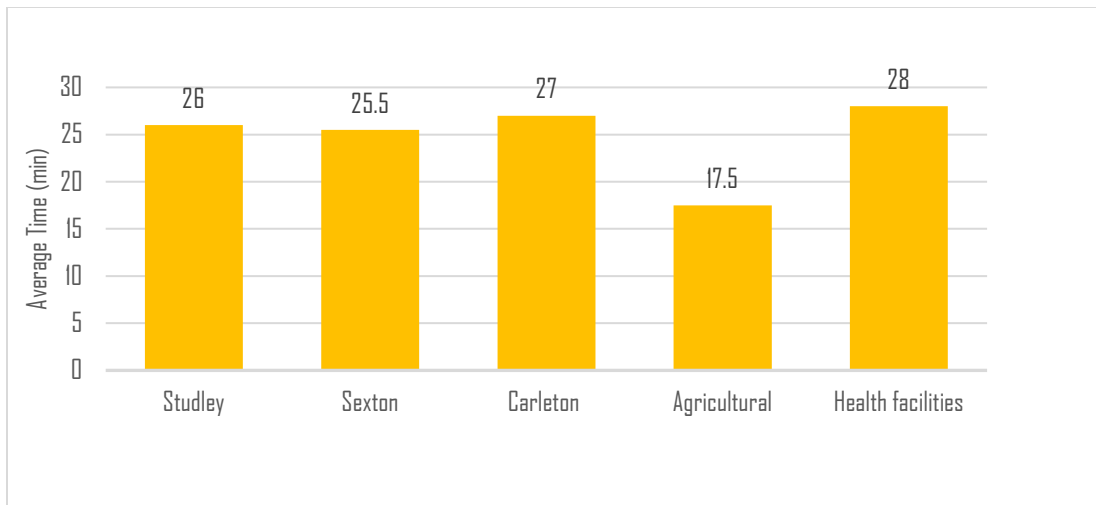
Figure 5-2 illustrates the variation in average commute distances across Dalhousie's four main campuses. The analysis revealed that respondents from the Agricultural campus had the longest average commute, whereas the three Halifax campuses displayed considerably shorter average commute distances, with the Sexton campus recording the lowest average.



*Figure 5-2. Average commute distance (km) by Dalhousie Campus*

## 5.3. Commute duration

The average commute time of respondents to their respective campuses is depicted in (Figure 5-3). Interestingly, most respondents reported similar commute times regardless of the campus they attended. However, respondents attending the Agricultural campus, despite having longer commute distances, experienced one of the shortest average commute times. This can be attributed primarily to the higher prevalence of auto travel among this group which is also faced with less traffic. The average commute time is found to be highest for respondents in the health facilities (off-campus) category, primarily due to their residences being located further away from their main campus.



*Figure 5-3. Average commute time by campus*

## 6. Comparison by Year

The following section examines the patterns observed over the years of conducting the survey. It is noteworthy to highlight that the survey does not employ a random sample, and the proportions of respondent groups may differ annually. Consequently, the trends depicted in the following figures may be influenced by the year-to-year variation and sample composition rather than being indicative of underlying trends in commuter behaviors. This is exemplified by the 2010 Commuter Survey, where the smaller sample size and inconsistent results deviated from the patterns observed in other years.

### 6.1. Commute mode

The primary commute modes reported by respondents have shown a consistent pattern over the years, as observed in Figure 6-1. The findings of the 2022-2023 Commuter Survey align closely with those of the 2020-2021 survey. Notably, there was an increase in the number of respondents who reported walking as their primary mode of transportation this year. This change can be attributed to a larger participation of Students in the survey, similar to the previous year. The shift towards walking may be a result of Students opting for this mode of transportation over private vehicles. Furthermore, the impact of the COVID-19 pandemic and the rise of remote working and learning could have contributed to a decrease in walking rates in the previous year survey. Changes in residential patterns, including individuals relocating from urban areas, may have influenced a shift towards more convenient transportation options. As the campus fully reopened after the COVID-19 pandemic, walking rates witnessed an increase among respondents.

The usage of automobiles and private vehicles remained consistent compared to last year's survey. There was a slight increase in the proportion of respondents who reported bicycling, breaking the declining trend observed since its peak in 2011. Public transportation use also showed a slight increase compared to the previous year. Although scooter services were included as a new primary mode choice in this year's survey, the number of scooter users was minimal. However, as scooter services become more widely available around Halifax campuses, it is anticipated that the number of scooter users will increase in the future. The convenience and accessibility of scooters as a mode of transportation may attract more individuals to utilize them for their daily commutes. With the growing popularity of micro-mobility options, including scooters, there is a potential for an upward trend in scooter usage in upcoming surveys.

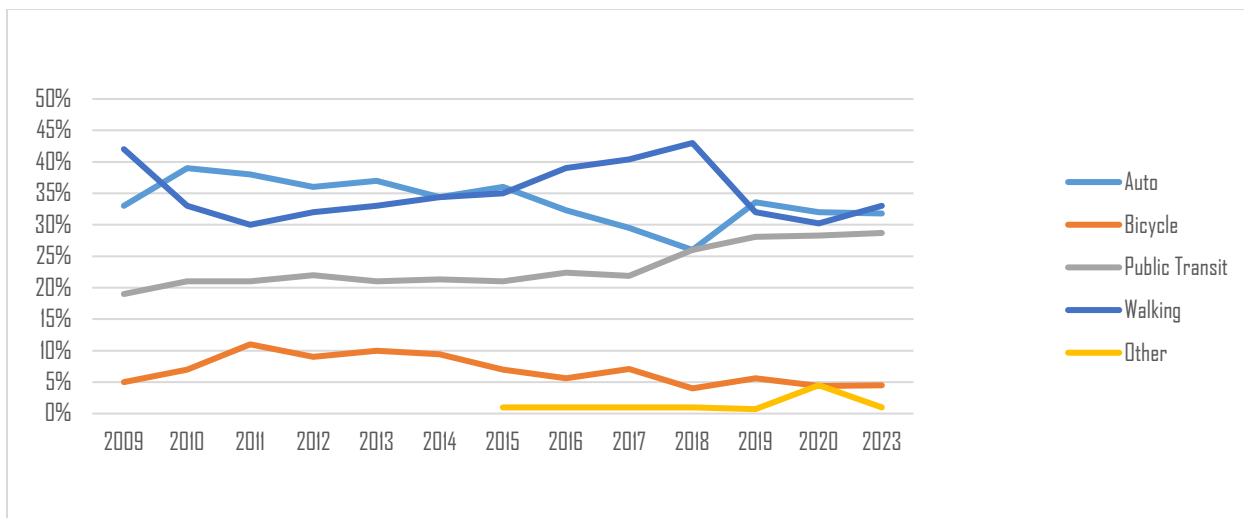


Figure 6-1. Primary commute mode by year

Figure 6-2 illustrates the distribution of primary mode choices among Students. The most common modes of commute for Students are walking, public transit, and auto (includes 'alone', 'driver' and 'passenger' in this survey). Interestingly, this year's results indicate a decline in auto usage among Students, while the number of Students walking and using public transit has increased compared to the previous year. Possible reasons for this include a decline in the prevalence of COVID-19 in communities, resulting in a return to the use of public transit for some, as well as the increasing cost of gas, and the desire to reduce environmental impacts.

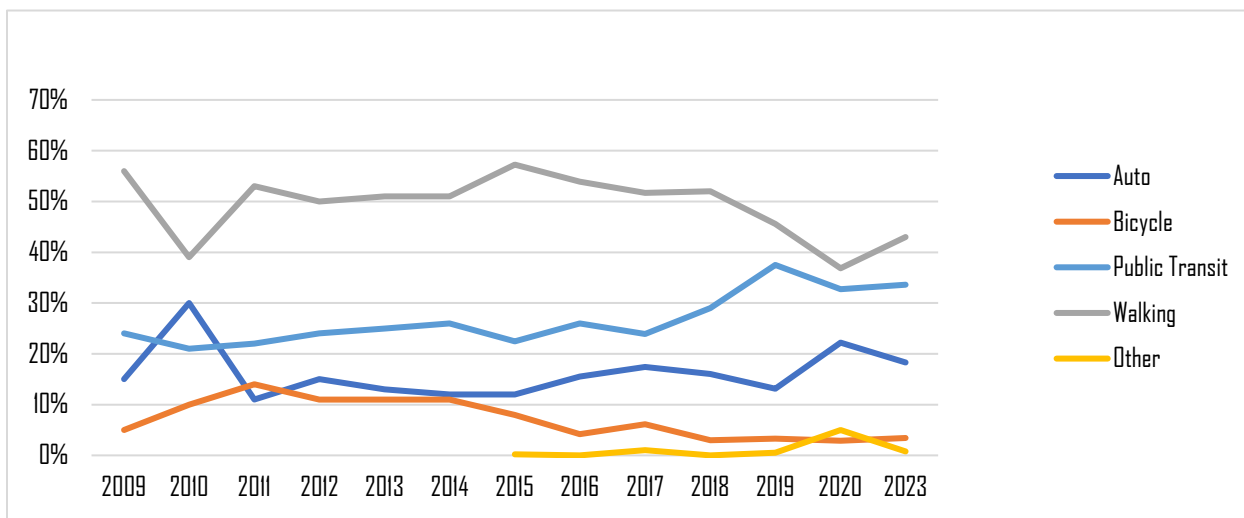


Figure 6-2. Student primary commute mode by year

Figure 6-3 presents the distribution of primary mode choices among Faculty and Staff. Auto usage remains the most common mode of transportation for both groups, although it has shown a consistent decline since 2017. However, it is noteworthy that this year's survey indicates a deviation from the declining trend, as auto use has actually increased. Walking and public transit usage among Faculty and Staff have remained relatively consistent with previous surveys, with

a slight decrease in walking. bicycling and other modes of transportation remained constant compared to last year's survey, but they still represent a small fraction of the primary mode choices.

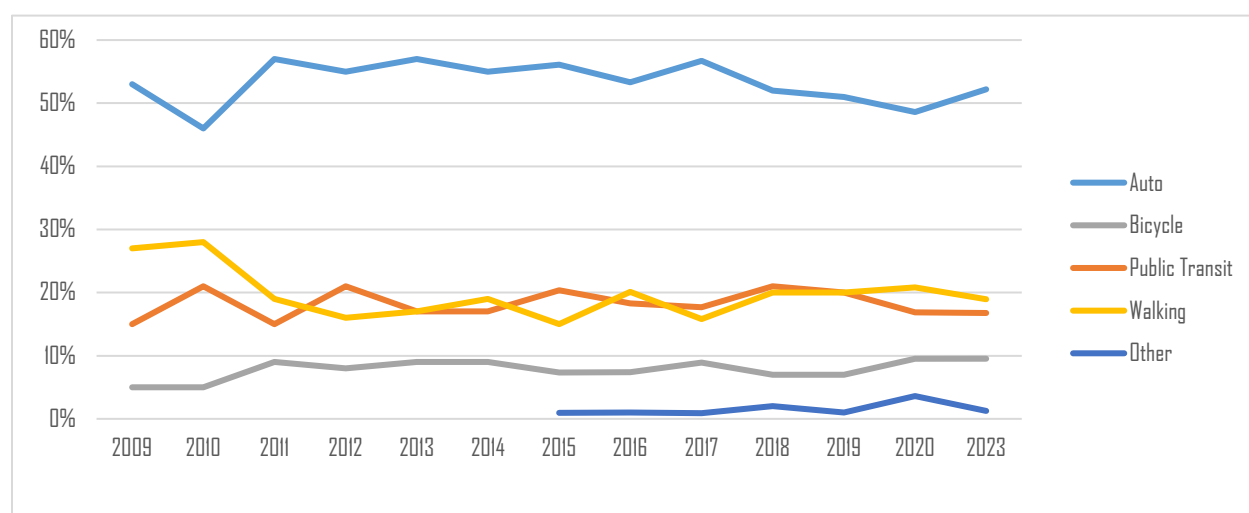
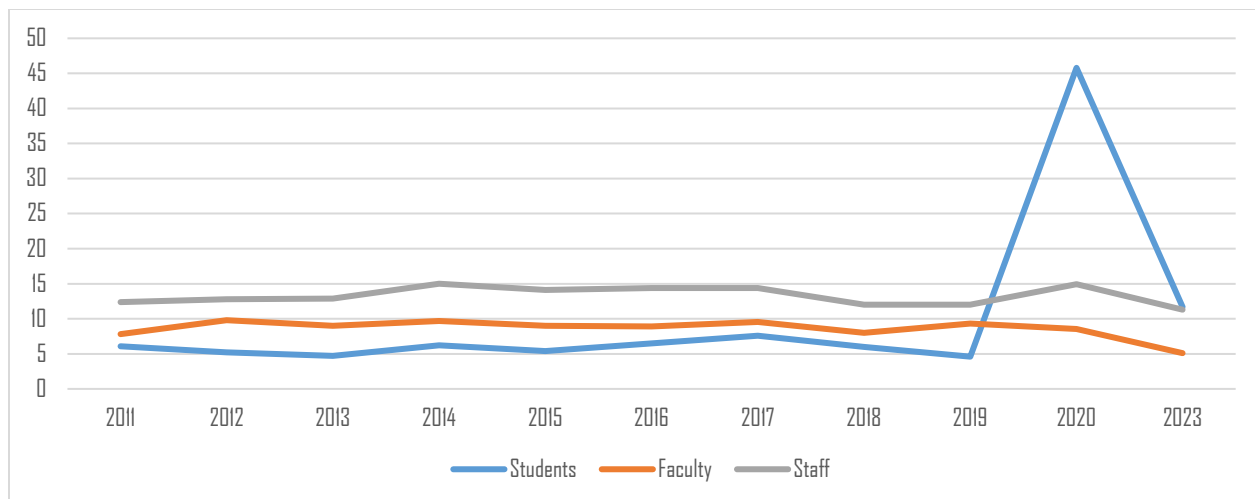


Figure 6-3. Faculty and Staff primary commute mode by year

## 6.2. Commute distance

The average commute distances of respondents across survey years are presented in Figure 6-4. In the 2020-2021 Commuter Survey, the results for the Staff and Faculty groups showed similar commute distances as in previous years. However, there was a significant increase in the average commute distance for the Students group. This increase can be attributed to the impact of the COVID-19 pandemic and the shift towards online learning. However, it is important to note that in the current survey (2022-2023), the drastic increase in student commute distance has returned to a more normal trend. This can be attributed to the reopening of the campus and students resuming their residence close to the campus, resulting in shorter commute distances.



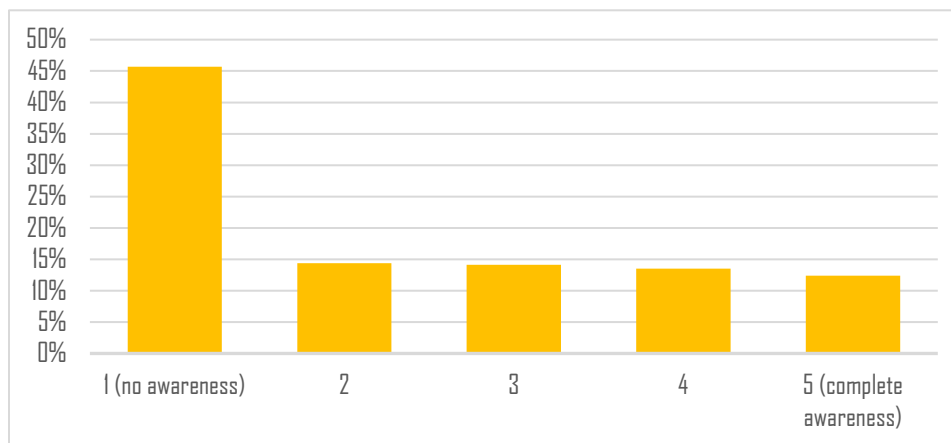
*Figure 6-4. Average commute distance (km) of Students, Faculty, and Staff over time*

## 7. Campus Sustainability

The Office of Sustainability at Dalhousie University implemented the Operational Sustainability Plan in 2010 to guide the university towards sustainable campus operations. This plan has been instrumental in providing strategic direction for achieving sustainability goals across Dalhousie campuses. In 2022, an updated version of the plan and six sub plans, including Transportation Demand Management, were developed. Over the years, the annual surveys have included specific questions focused on sustainability, gathering insights and perspectives from university members on various sustainability topics. These survey findings have played a crucial role in informing sustainability planning and decision-making processes. In this section, we present a summary of the outcomes derived from this year's sustainability-related questions in the survey conducted at Dalhousie University.

### 7.1. Sustainability awareness

When participants were asked about their awareness of the United Nations' Sustainable Development Goals (SDGs) on a scale of 1-5, where 1 indicated no awareness and 5 represented complete awareness, the survey revealed interesting findings (Figure 7-1). The majority of respondents, comprising approximately 45%, indicated having no awareness of the SDGs. On the other hand, around 12% to 14% of participants expressed varying degrees of awareness, ranging from the highest level to some extent. Several reasons can contribute to this disparity in awareness. Firstly, the SDGs might not have received sufficient attention or promotion within the university community, leading to a lack of information dissemination. Secondly, limited educational programs or initiatives specifically focusing on the SDGs could have resulted in lower awareness levels among the participants. Additionally, varying levels of engagement with sustainability topics and global issues could influence individuals' familiarity with the SDGs.



*Figure 7-1. Levels of Awareness about United Nations' Sustainable Development Goals (SDGs) (n = 1971 responses, 369 non-responses)*



When participants were asked to provide their understanding of the term 'sustainability' using one or a few words, their responses (Figure 7-2) revealed key concepts that collectively shed light on their knowledge and perception. Analysis of the data highlighted prominent terms such as 'Resources,' 'Environment,' 'Needs,' 'Renewable,' 'Without,' 'Future,' 'Impact,' 'Long term,' 'Generations,' 'Friendly,' and 'Energy.' These terms indicate an awareness of the intricate relationship between human activities and the environment. The mention of 'Resources' suggests an appreciation for the finite nature of natural resources and the necessity of sustainable resource management practices. 'Environment' signifies an acknowledgment of the interconnectedness of ecological systems and human well-being. The inclusion of 'Renewable' and 'Energy' indicates an understanding of the significance of transitioning to sustainable energy sources to reduce environmental impact. By focusing on 'Needs,' 'Future,' and 'Generations,' respondents recognize the imperative of meeting present needs while ensuring the ability of future generations to meet their own. Overall, these responses reflect an understanding of sustainability as a long-term approach that balances environmental preservation, resource stewardship, and the well-being of current and future generations.



Fostering sustainability action and involvement at Dalhousie University requires a multifaceted approach that aligns with the perspectives and recommendations of respondents. A word cloud analysis of their feedback shown in Figure 7-3, revealed prominent terms such as 'Parking,' 'Campus,' 'Initiatives,' 'Awareness,' 'Engage,' 'Fossil,' 'Public,' and 'Continuity.' According to the respondents' suggestions, Dalhousie should prioritize certain actions to engage campus and community members in sustainability action. These recommendations include expanding sustainability initiatives on campus, raising awareness about sustainable practices, and creating opportunities for meaningful engagement. Respondents emphasized the importance of addressing fossil fuel usage and promoting alternatives. In light of their insights, a key recommendation from the respondents is to foster continuity in sustainability efforts, ensuring that initiatives are ongoing and not sporadic, thereby creating a sense of commitment and long-term impact.



To effectively promote public transportation as a means of engaging the community in sustainability, a strong recommendation from the respondents is for Dalhousie University to take proactive measures. It is recommended that the university provide convenient access to public transportation options, offer incentives or discounted passes for students and staff, and actively promote the benefits of using public transportation for commuting to campus. Additionally, respondents strongly suggested adjusting parking fees to reflect the university's commitment to sustainability, as this can serve as an additional incentive for community members to choose sustainable transportation alternatives. By implementing these recommendations put forth by the respondents, Dalhousie can effectively engage the community in sustainability action and contribute to a greener and more sustainable future.



## 8. Conclusion

The 2022-2023 Dalhousie University Commuter Survey received an impressive response, with over 2000 participants sharing their insights. This annual survey continues to serve as a valuable platform for engaging staff, faculty, and students from all four campuses and off-campus health facilities. Notably, this year's survey shed light on important aspects such as the awareness of United Nations Sustainable Development goals, the significance of sustainability, and the level of engagement in sustainable practices among Dalhousie commuters. Additionally, the survey provided valuable insights into the barriers that prevent individuals from utilizing various commuter options, allowing for a more comprehensive understanding of the commuting experiences within the Dalhousie community.

Conclusions from the 2022-2023 survey:

- Walking and public transit are the predominant modes of transportation chosen by members of the Dalhousie community for their daily commutes.
- Commuting characteristics vary among respondents based on their roles at the university. Students, in particular, tend to reside closer to campus and prefer walking or using public transit as their primary modes of transportation, while staff and faculty members exhibit different commuting patterns.
- With the exception of auto drivers who consider their primary mode of transportation reliable enough without the need for a backup option, most respondents from Halifax campuses rely on public transit as their secondary travel mode. This trend is observed across all other commuter groups, highlighting the importance of accessible and reliable public transportation for commuting purposes.
- While the majority of respondents did not face significant barriers in their commuter options, a notable portion encountered obstacles that impacted their choices. Inadequate biking infrastructure, limited availability and inconvenient schedules of public transport, and challenges associated with car usage such as traffic congestion, limited parking, and costs were identified as common barriers. These findings emphasize the importance of addressing these issues to promote sustainable and accessible commuting options for all individuals. By improving biking infrastructure, expanding public transport services, and implementing effective traffic management strategies, policymakers and transportation authorities can create a more inclusive and efficient commuting environment for the community.
- Respondents who are affiliated with Halifax campuses tend to make occasional trips between different campuses throughout the year, while trips between Halifax and Truro campuses are less common among respondents.
- Commuting habits differ between respondents who attend the Agricultural campus and those who attend the Halifax campuses, primarily due to limited access to public transit at the Agricultural campus.
- The survey findings regarding participants' awareness of the United Nations' Sustainable Development Goals (SDGs) reveal interesting trends. A considerable portion of respondents indicated having no awareness of the SDGs, while a notable percentage

demonstrated varying degrees of awareness, ranging from minimal to moderate and high.

- As per the suggestions provided by the respondents, Dalhousie University should prioritize specific actions to actively involve both campus and community members in sustainable practices. These recommendations emphasize the need to expand existing sustainability initiatives on campus, increase awareness regarding sustainable practices, and create meaningful engagement opportunities.

The Annual Sustainability and Transportation Survey remains an essential instrument for tracking and evaluating the sustainability advancements and transportation patterns at Dalhousie University. Through this survey, the Office of Sustainability engages with the university community to gather valuable insights into their commuting behaviors and attitudes towards sustainability initiatives. This year's survey serves as another significant milestone in the ongoing monitoring and advancement towards a healthier and more sustainable university. The findings presented in this report will serve as valuable evidence to inform future sustainability plans and policies at the university, ensuring that the decision-making process is guided by the feedback and perspectives of the respondents.

# Appendix A. Summary of 2023 Survey Data

## Contents:

1. Which of these groups do you currently belong to?
2. When you are engaged with campus activities such as work, class, studying, and/or research, are you commuting to the Halifax or Agricultural campuses on average.
3. If you are coming to campus, what is your primary mode of transportation (most or all of the time – over 70%) for your commute to campus throughout the year?
4. What is your secondary mode of transportation (less than 30% of the time) for your daily commute to campus?
5. If your primary mode is automobile (drive alone or passenger), where do you generally park your car?
6. How many minutes, on average, does it take to get from your home to Dalhousie when you use your primary mode of transportation?
7. At what time, on most days, do you arrive at Dalhousie?
8. At what time, on average, do you leave Dalhousie?
9. At Dalhousie, there are student and employee bus pass programs (Halifax), workplace car share services (Halifax), and campus bike loan programs (Agricultural and Halifax campuses). What, if any, other transportation initiatives would you like to see at Dalhousie?
10. Are there barriers that prevent you from using a particular commuter option?
11. Which of the following best describes how often, if at all, you travel between the Halifax campuses? (Carleton, Sexton, and Studley)
12. What is your primary means of travel between Halifax campuses?
13. And which of the following best describes how often, if at all, you travel between the Halifax and Agricultural campuses?
14. What is your primary means of travel between the Halifax and Agricultural campuses?
15. At Dalhousie campuses, do you use?
16. To what extent, if at all, are you aware of the United Nation's Sustainable Development Goals (SDGs)?
17. In one or a few words, what does the word 'sustainability' mean to you?
18. What, if anything, could Dalhousie do more of to engage campus and community members in sustainability action?
19. What is your age?
20. What is your gender? OPTIONAL
21. What is your annual household income? OPTIONAL
22. What is the postal code of your local residence (that is, the address from which you commute to Dalhousie. If you don't commute the postal code that you remote work or study from). Please provide it in six digit UPPERCASE format without a space. (that is, B3B1B9)
23. What is your primary campus or work/study location?
24. Are you a full-time or part-time staff, faculty, or student?
25. What is your primary department and/or faculty?
26. How did you hear about this survey?

<b>Question</b>	<b>n (total 2340)</b>	<b>% of total</b>
<b>1. Which of these groups do you currently belong to?</b>		
Students	1382	59.06%
Faculty	198	8.46%
Staff	593	25.34%
Alumni	5	0.21%
Other	12	0.51%
Total	2190	93.59%
Not answered	150	6.41%
<b>2. When you are engaged with campus activities such as work, class, studying, and/or research, are you commuting to the Halifax or Agricultural campuses on average.</b>		
All of the time (with perhaps a few off-campus sessions)	1015	43.38%
Most of the time	553	23.63%
About one-half of the time	258	11.03%
Less than one-half of the time	206	8.8%
None of the time (100% remote)	98	4.19%
None of the time (Study/Research at a health care)		
Total	56	2.39%
Not answered	2186	93.42%
<b>3. If you are coming to campus, what is your primary mode of transportation (most or all of the time – over 70%) for your commute to campus throughout the year?</b>		
Automobile - Drive alone	475	20.3%
Automobile – Am the driver, usually or always with passengers	89	3.8%
Automobile – Am a Passenger (including carpooling)	78	3.33%
Public transit (including ferry services)	578	24.7%
Bicycle	91	3.89%
Walk	666	28.46%
Scooter	1	0.04%
No primary mode of transportation	18	0.77%
Other (for example, Motorcycle)	21	0.9%
Total	2017	86.2%
Not answered	323	13.8%
<b>4. What is your secondary mode of transportation (less than 30% of the time) for your daily commute to campus?</b>		
Automobile - Drive alone	392	16.75%
Automobile – Am the driver, usually or always with passengers	71	3.03%
Automobile – Am a Passenger (including carpooling)	286	12.22%
Public transit (including ferry services)	553	23.63%
Van pool	3	0.13%
Bicycle	107	4.57%
Walk	478	20.43%

Skateboard/Longboard	8	0.34%
Scooter	5	0.21%
Other (for example, Motorcycle)	49	2.09%
Total	1952	83.42%
Not answered	388	16.58%

5. If your primary mode is automobile (drive alone or passenger), where do you generally park your car?

Park in Dalhousie lots	417	17.82%
Using on-street metered parking	53	2.26%
Using on-street free parking	88	3.76%
Parking in Halifax Regional Municipality carpool locations	7	0.3%
Parking spot in a residential driveway	9	0.38%
Not applicable (i.e. automobile is not my primary mode)	8	0.34%
Other	55	2.35%
Total	637	27.22%
Not answered	1703	72.78%

6. How many minutes, on average, does it take to get from your home to Dalhousie when you use your primary mode of transportation?

Minimum		
0 - 17	1131	48.33%
18 - 35	572	24.44%
36 - 53	169	7.22%
54 - 71	63	2.69%
72 - 89	6	0.26%
90 - 107	7	0.3%
108 - 125	2	0.09%
162 - 179	2	0.09%
Total	1952	83.42%
Not answered	388	16.58%
Maximum	1253	53.55%
0 - 35	547	23.38%
36 - 71	113	4.83%
72 - 107	16	0.68%
108 - 143	4	0.17%
144 - 179	5	0.21%
180 - 215	1	0.04%
216 - 251	1	0.04%
324 - 359	1940	82.91%
Total	400	17.09%
Not answered		

7. At what time, on most days, do you arrive at Dalhousie? Please identify the time to the nearest hour.

01:00	9	0.38%
02:00	4	0.17%



03:00	3	0.13%
04:00	2	0.09%
05:00	6	0.26%
06:00	36	1.54%
07:00	100	4.27%
08:00	591	25.26%
09:00	585	25%
10:00	331	14.15%
11:00	131	5.6%
12:00	58	2.48%
13:00	45	1.92%
14:00	21	0.9%
15:00	5	0.21%
16:00	5	0.21%
17:00	3	0.13%
18:00	3	0.13%
19:00	1	0.04%
24:00	1	0.04%
Total	1940	82.91%
Not answered	400	17.09%

---

8. At what time, on average, do you leave Dalhousie? Please identify the time to the nearest hour

01:00	2	0.09%
02:00	12	0.51%
03:00	39	1.67%
04:00	123	5.26%
05:00	96	4.1%
06:00	45	1.92%
07:00	6	0.26%
08:00	9	0.38%
09:00	7	0.3%
10:00	8	0.34%
11:00	3	0.13%
12:00	26	1.11%
13:00	37	1.58%
14:00	75	3.21%
15:00	196	8.38%
16:00	397	16.97%
17:00	389	16.62%
18:00	258	11.03%
19:00	67	2.86%
20:00	60	2.56%
21:00	27	1.15%
22:00	25	1.07%
23:00	15	0.64%
24:00	10	0.43%
Total	1932	82.56%
Not answered	408	17.44%

---

10. Are there barriers that prevent you from using a particular commuter option?

---

Yes	634	27.09%
No	1283	54.83%
I am not at Dalhousie campuses as I am remote or off-campus location	84	3.59%
Total	2001	85.51%
Not answered	339	14.49%

11. Which of the following best describes how often, if at all, you travel between the Halifax campuses? (Carleton, Sexton, and Studley).

---

Daily	279	11.92%
3-4 times a week	255	10.9%
1-2 times a week	215	9.19%
A few times a month	208	8.89%
Once a month	89	3.8%
A few times a year	390	16.67%
Never	606	25.9%
Total	2042	87.26%
Not answered	298	12.74%

12. What is your primary means of travel between Halifax campuses?

---

Walk	905	38.68%
Bicycle	44	1.88%
Bus	265	11.32%
Private car	135	5.77%
Taxi	11	0.47%
Scooter	5	0.21%
Not applicable	64	2.74%
Total	10	0.43%
Not answered	1439	61.5%

13. And which of the following best describes how often, if at all, you travel between the Halifax and Agricultural campuses?

---

Daily	25	1.07%
3-4 times a week	37	1.58%
1-2 times a week	33	1.41%
A few times a month	27	1.15%
Once a month	28	1.2%
A few times a year	114	4.87%
Rarely	210	8.97%
Never	1568	67.01%
Total	2042	87.26%
Not answered	298	12.74%

14. What is your primary means of travel between the Halifax and Agricultural campuses?

---

Bus	93	3.97%
Carpool	106	4.53%
Drive alone	181	7.74%
Van Pool	2	0.09%

Train	2	0.09%
Taxi	8	0.34%
Not applicable	81	3.46%
Total	473	20.21%
Not answered	1867	79.79%

15. At Dalhousie campuses, do you use (select all that apply):

Computers/laptops in computer labs	530	11.83%
Your own personal computer/laptop	1444	32.22%
Office or Lab computer/laptop provided by the university	765	17.07%
Your own Smartphone	1614	36.01%
Smartphone provided by the University	129	2.88%
Total	4482	100%
Not answered	360	11.83%

16. To what extent, if at all, are you aware of the United Nation's Sustainable Development Goals (SDGs)? Scale of 1-5, in which 1 represents having no awareness of the SDGs, and 5 represents having complete awareness of SDGs

1	900	38.46%
2	283	12.09%
3	278	11.88%
4	266	11.37%
5	244	10.43%
Total	1971	84.23%
Not answered	369	15.77%

19. What is your age?

15-19	248	10.6%
20-24	620	26.5%
25-34	479	20.47%
35-44	278	11.88%
45-54	183	7.82%
55-64	137	5.85%
65 or above	22	0.94%
Prefer not to say	22	0.94%
Total	1989	85%
Not answered	351	15%

20. What is your gender? OPTIONAL

Man	584	24.96%
Woman	1250	53.42%
Non-binary	45	1.92%
Prefer not to say/Not sure	58	2.48%
Another gender not listed here (Optional, please specify)	13	0.56%
Total	1950	83.33%
Not answered	390	16.67%

21 What is your annual household income? OPTIONAL

Less than \$10,000	286	12.22%
--------------------	-----	--------

\$10,000-19,999	196	8.38%
\$20,000-39,999	177	7.56%
\$40,000-59,999	171	7.31%
\$60,000-79,999	145	6.2%
\$80,000-99,999	113	4.83%
\$100,000 or more	406	17.35%
Prefer not to say	346	14.79%
Total	1840	78.63%
Not answered	500	21.37%

23. What is your primary campus or work/study location?

Studley	1083	46.28%
Carleton	285	12.18%
Sexton	279	11.92%
Agricultural	110	4.7%
Home Location (off campus remote work/study)	111	4.74%
Health facilities (off campus)	55	2.35%
Other (Please specify)	35	1.5%
Total	1958	83.68%
Not answered	382	16.32%

24. Are you a full-time or part-time staff, faculty, or student?

Full-time	1831	78.25%
Part-time	91	3.89%
Other (please specify):	33	1.41%
Total	1955	83.55%
Not answered	385	16.45%

25. What is your primary department and/or faculty?

Ancillary Services	13	0.56%
Athletics and Recreational Services	6	0.26%
College of Continuing Education	7	0.3%
College of Sustainability	26	1.11%
Communications and Marketing	12	0.51%
Dalhousie Art Gallery & Arts Centre	2	0.09%
Dalhousie Libraries	26	1.11%
Environmental Health and Safety	5	0.21%
Facilities Management	42	1.79%
Faculty of Agriculture	87	3.72%
Faculty of Architecture and Planning	48	2.05%
Faculty of Arts and Social Sciences	136	5.81%
Faculty of Computer Science	113	4.83%
Faculty of Dentistry	38	1.62%
Faculty of Engineering	196	8.38%
Faculty of Graduate Studies	90	3.85%
Faculty of Health	170	7.26%
Faculty of Law	56	2.39%
Faculty of Management	93	3.97%
Faculty of Medicine	177	7.56%

Faculty of Science	396	16.92%
Financial Services	21	0.9%
Human Resources	11	0.47%
Information Technology Services	18	0.77%
Legal & Internal Audit Services	8	0.34%
Office of Advancement	14	0.6%
President's Office & Provost's Office	6	0.26%
Registrar's Office	20	0.85%
Research Services	20	0.85%
Student Services	26	1.11%
Prefer not to say	37	1.58%
Other	39	1.67%
Total	1959	83.72%
Not answered	381	16.28%

26. How did you hear about this survey? (Choose all that apply)

\*Note: percentages are individual and are not representative of total responses

---

Faculty/departmental administrator	31	1.32%
Office of sustainability website	9	0.38%
LCD screen	5	0.21%
Word of mouth	6	0.26%
Direct email	1115	47.65%
"Today at Dal"	34	1.45%
"My Dal announcement"	34	1.45%
Student society	4	0.17%
Departmental newsletter	13	0.56%
Facebook	1	0.04%
Twitter	7	0.3%
DalMobile	6	0.26%
Other	23	0.98%
Total	1288	52.78%
Not answered	1105	47.22%