



Dalhousie University Commuter Study 2015

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1. INTRODUCTION

Each November the Dalhousie University community receives an invitation to participate in the annual Sustainability and Commuter Survey conducted by the Dalhousie Office of Sustainability. Since 2009, the invitation to complete the online survey has been distributed to students, faculty and staff within the campus population. The 2015 survey was comprised of 43 questions which were used to gain insight into the Dalhousie communities' travel patterns, knowledge on current sustainable practices and ideas for future sustainable initiatives. A significant portion of the survey was dedicated to collecting travel information from participants, including mode choice, commute time and distance, and car and bicycle ownership. Using the analysis of these responses, Dalhousie University could identify opportunities for future transportation initiatives and present suggestions for strategy development as discussed in the Transportation Demand Management Plan (2011).

The purpose of this report is to analyse the universities travel information provided through the 2015 Sustainability Survey and compare the results to previously conducted surveys.

1.1 Sustainable Transportation at Dalhousie University

In 2010, Dalhousie University released the first plan addressing campus wide sustainability, specifically targeting university operations. The Sustainability Operations Plan addresses all aspects of sustainability including the built and natural environment, transportation, water, energy, and waste and emissions. The main transportation related goal of this plan was to increase available sustainable transportation options (Dalhousie University Office of Sustainability, 2010). To be able to address and achieve more specific transportation related goals outlined in that plan, the Transportation Demand Management (TDM) Plan was developed. The TDM Plan (2011) takes the goal of the Sustainable Operations Plan (2010) further, as it aims to “[shift the demand from single-occupant vehicles and auto-oriented travel for each person to a transportation system that is focused on ridesharing, transit, parking management and active transportation” (IBI Group in association with UrbanTrans, 2011, p.1). The TDM Plan will “[provide information and education about travel options and offer incentives and programs that discourage single occupant vehicle (SOV) travel” (IBI Group in association with UrbanTrans, 2011, p.2). From the analysis of the annual Sustainability Surveys, TDM strategies can be developed for the University.

1.2 Previous Surveys

The first Dalhousie Sustainability Survey was distributed to the university population in 2009. Every year since then improvements have been made to the questions to ensure consistency, and new questions are added related to current events that may influence how people move (i.e. Macdonald Bridge closure in 2015). Dalhousie University merged with the Agriculture College in Truro in 2012 and distributed the Sustainability survey through that campus for the first time. Figure 1-1 shows a timeline of the key milestones regarding transportation sustainability plans at Dalhousie University.

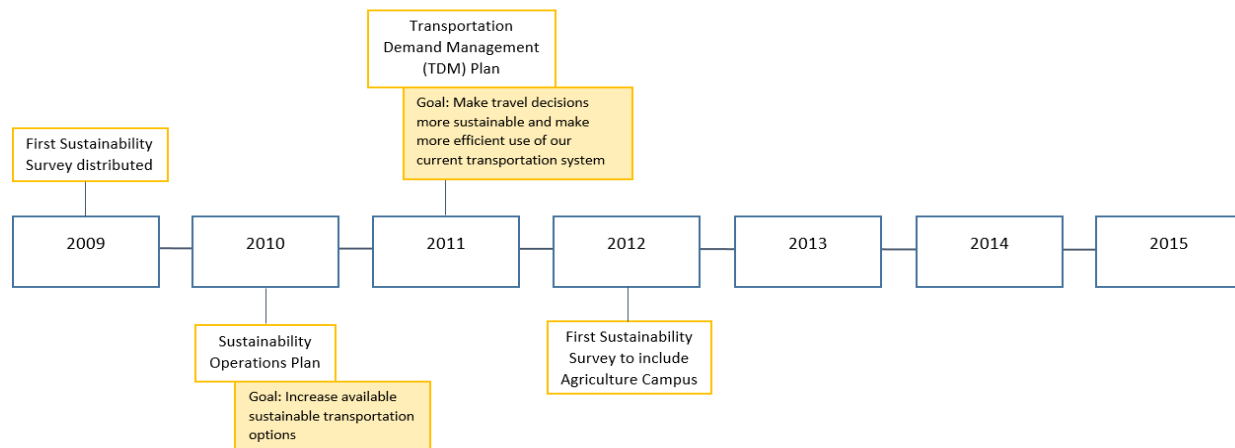


Figure 1-1: Timeline of Transportation Sustainability Plans at Dalhousie University

Although the distribution of respondents by mode has changed since 2009, the primary and secondary mode choices for commuting over the last seven years has not (Table 1-1). The primary mode choices have been walking, automobile drive alone and public transit, with secondary mode choices being public transit, walking and automobile drive alone.

Table 1-1: Primary and Secondary Commute Mode (2009 - 2015)

Responses to Sustainability Survey (2009 – 2015)							
	2009	2010	2011	2012	2013	2014	2015
Primary Commute Mode	1. Walking	1. Automobile Drive Alone	1. Walking	1. Walking	1. Walking	1. Walking	1. Walking
	2. Automobile Drive Alone	2. Walking	2. Automobile Drive Alone	2. Automobile Drive Alone / Public Transit	2. Automobile Drive Alone	2. Automobile Drive Alone / Public Transit	2. Automobile Drive Alone
	3. Public Transit	3. Public Transit	3. Public Transit		3. Public Transit		3. Public Transit
Secondary Commute Mode	1. Public Transit	1. Public Transit	1. Public Transit	1. Public Transit	1. Public Transit	1. Public Transit	1. Public Transit
	2. Walking / Automobile Drive Alone	2. Walking / Automobile Drive Alone	2. Walking	2. Walking	2. Walking	2. Walking	2. Walking
			3. Automobile Drive Alone	3. Automobile Drive Alone	3. Automobile Drive Alone	3. Automobile Drive Alone	3. Automobile Drive Alone

An example of an incentive or program that discourages this Single Occupant Vehicle travel, as outlined in the TDM, would be the summer and employee bus pass. In the 2011 and 2012 Sustainability survey, respondents were asked about their interest in summer and employee bus passes. In 2011, 74% of respondents were interested in a summer student bus pass and 80% of respondents were interested in an employee bus pass. Similar to the previous year, the 2012 survey had the majority of respondents in favour of a summer bus pass. Following this interest and support, Dalhousie University approved a summer student bus pass and an employee bus pass in 2013.

1.3 2015 Survey Summary

The 2015 Sustainability Survey was the seventh of its kind to be conducted at Dalhousie University. The 2015 survey had 1739 respondents and 1110 completed responses. Questions were added to this survey to gauge how the Macdonald Bridge Big Lift project may be influencing travel patterns of Dalhousie students, faculty and staff. These questions included how the bridge closures have affected daily life, how people have adapted to closures, and how people have learned of bridge closures.

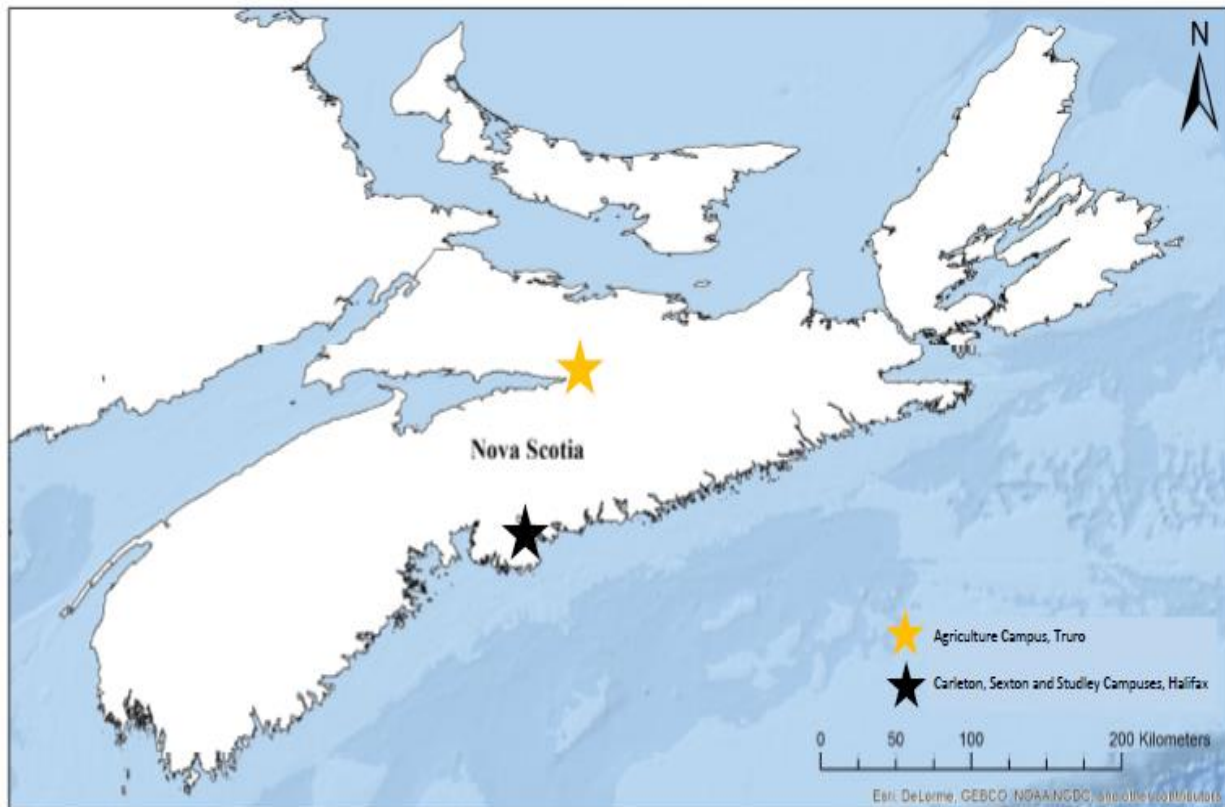


Figure 1-2: Dalhousie University Campus Locations



Figure 1-3: Dalhousie University Halifax Campus Locations

Figure 1-2 displays the location of Dalhousie's Agriculture campus, located in Truro, and the Halifax campuses, located on the Halifax peninsula. The Agriculture campus is approximately 110km away from the Halifax campuses. Figure 1-3 shows the location of the Carleton, Studley and Sexton campuses on the Halifax peninsula. The Halifax campuses are approximately 1km in distance from each other. The distances between the Agriculture and Halifax campus locations influence the mode in which people choose to travel.

2. DEMOGRAPHICS OF SURVEY RESPONDENTS

Every Dalhousie Sustainability Survey asks a series of demographic questions such as respondent group, age, gender, household income, primary campus and residential location, as these factors also influence the way people travel.

2.1 Respondent Group

Students represented the largest respondent population with 46% of survey respondents, followed by staff with 42% and faculty with 12% (Figure 2-1). Approximately 92% of respondents were full-time staff, faculty or students and 8% were part-time (Figure 2-2).

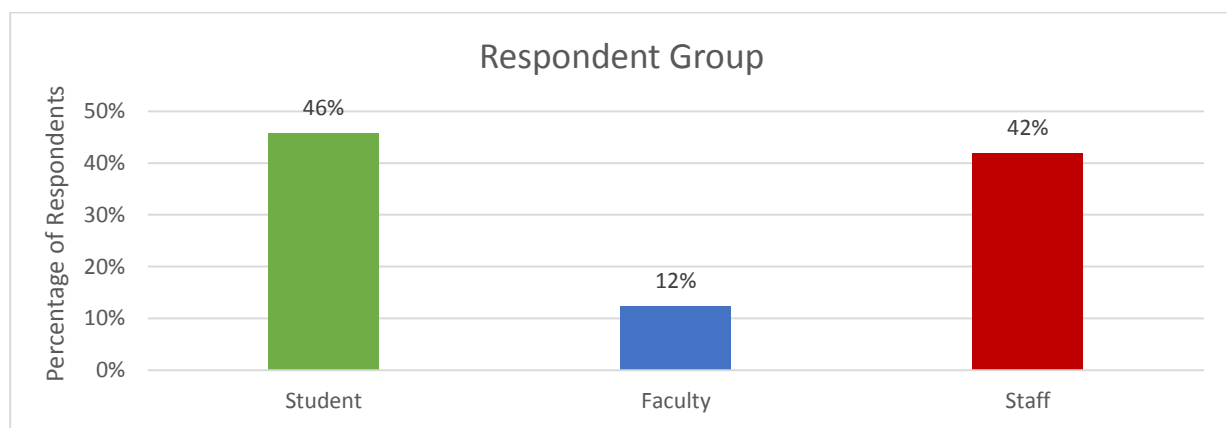


Figure 2-1: Respondent Group

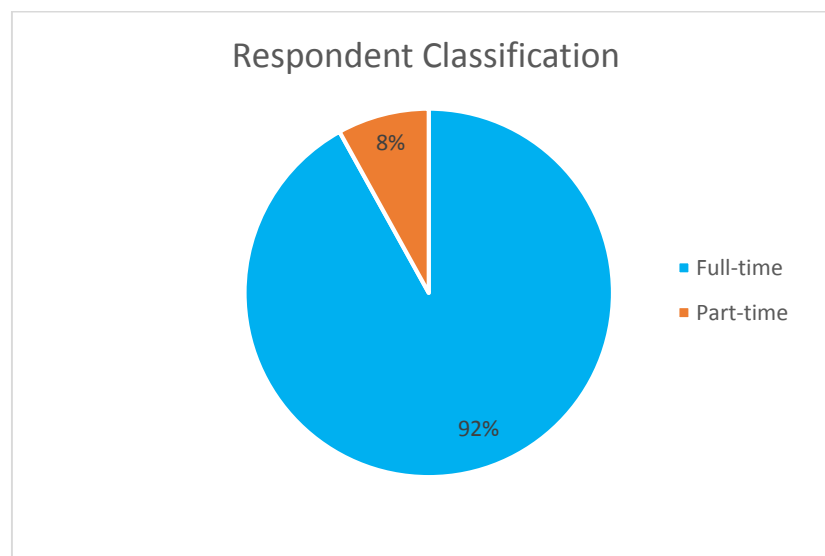


Figure 2-2: Repdondent Classification

2.2 Age

Over half (52%) of the respondents were between the ages of 20-34 years old (25% between the ages of 20-24 and 27% between the ages of 25-34) (Figure 2-3). This would be due to high response rate of students.

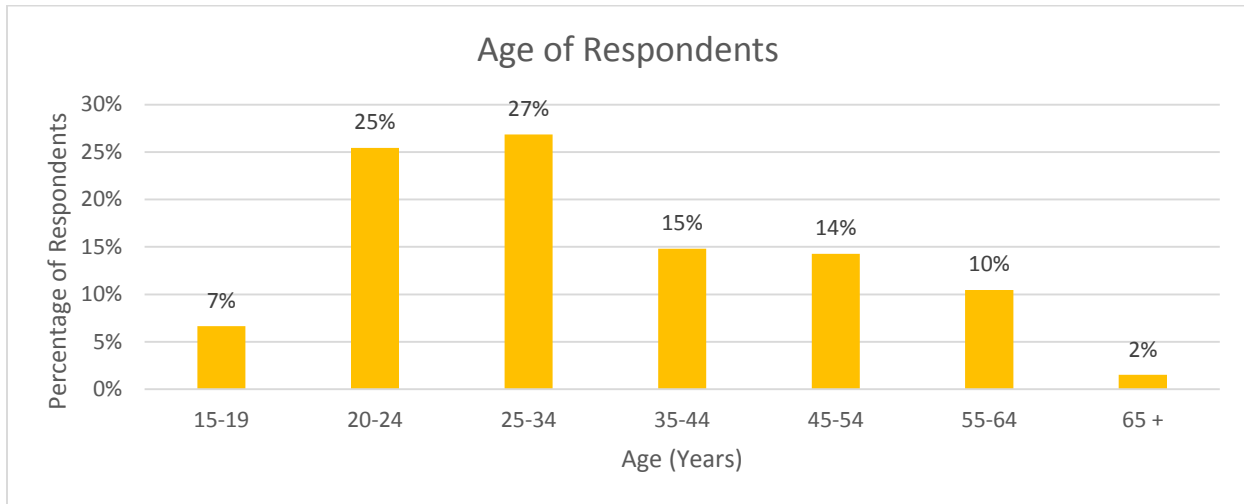


Figure 2-3: Age of Respondents

2.3 Gender

Respondents who identify as female represented 70.5% of survey respondents, with 27.6% identifying as male (Figure 2-4). Survey respondents who identified as transgender represented 0.2% and 1.7% of survey respondents preferred not to say.

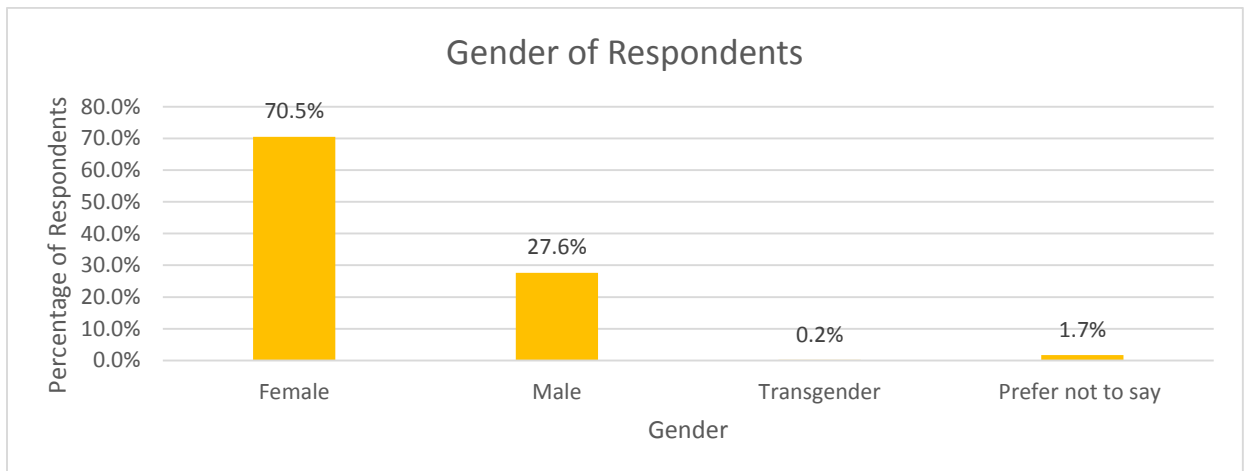


Figure 2-4: Gender of Respondents

2.4 Income

A large percentage (22%) of respondents had an annual household income of less than \$19,999 (Figure 2-5). This would also be due to the sample of student respondents, as 46% of students had an annual household income of less than \$19,999 (Figure 2-6). The same percentage (22%) had an annual household income of above \$100,000. This would be due to 59% of faculty respondents and 26% of staff respondents reporting having an annual household income over \$100,000. Approximately 18% of respondents preferred not to say.

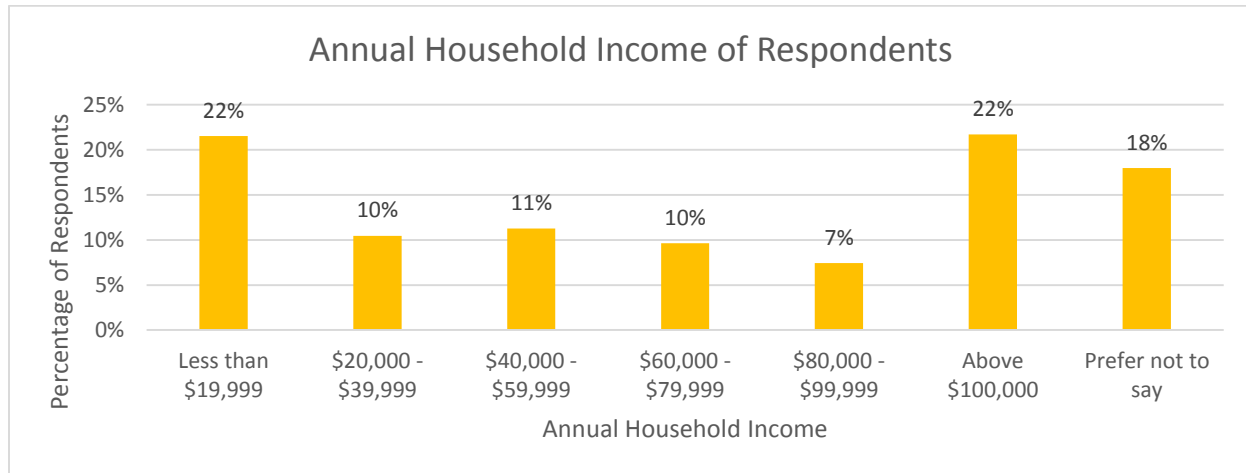


Figure 2-5: Annual Household Income of Respondents

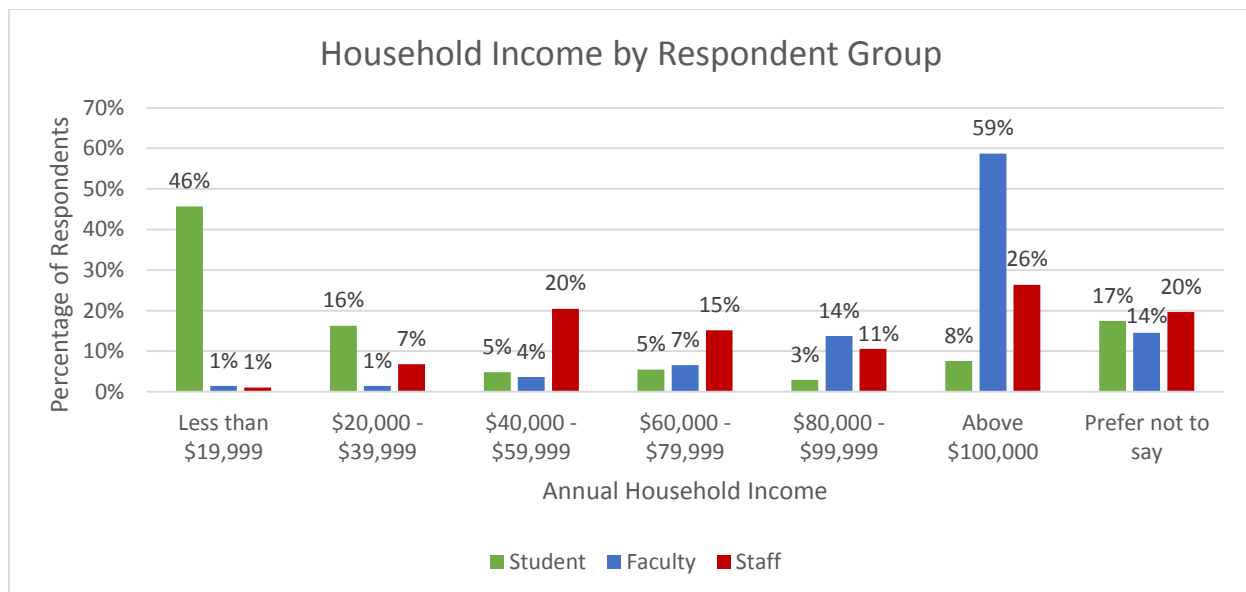


Figure 2-6: Annual Household Income by Respondent Group

2.5 Primary Campus

The largest percentage of respondents (61%) reported that Studley was their primary campus (Figure 2-7). Only 8% of respondents were from the Agriculture campus in Truro and 3% reported being part of the health facilities off campus.

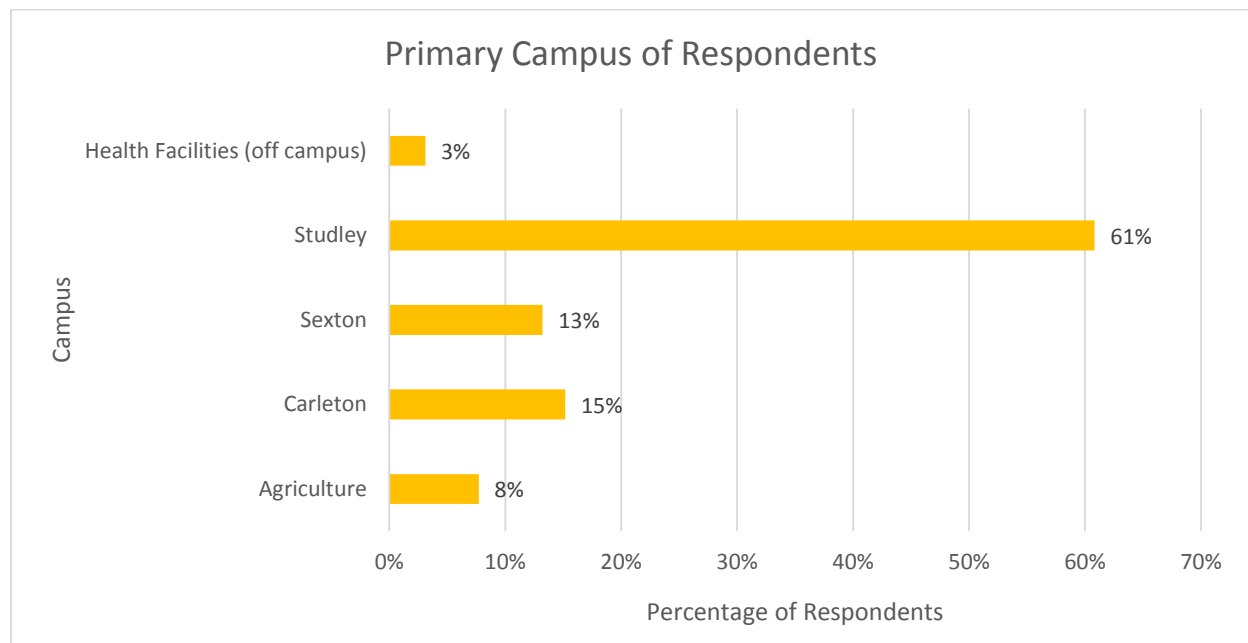


Figure 2-7: Primary Campus of Respondents

3. TRIP TO AND FROM CAMPUS

3.1 Distance between Home and Campus

The distance it takes to commute from home to work or school can determine which mode of transportation is selected. As seen in Figure 3-1, almost all of the respondents live within 30km of their primary campus.

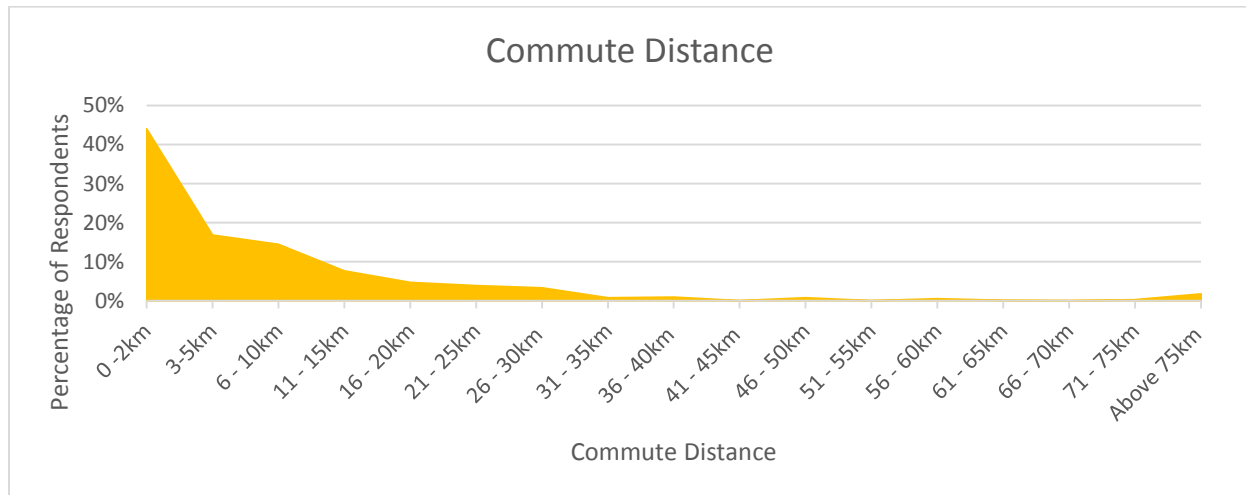


Figure 3-1: Commute Distance of Respondents

More specifically, Figure 3-2 shows the cumulative commute distance for respondents, which shows 52% of Dalhousie Sustainability Survey respondents live within 5km of their primary campus and 38% live within 2km of their campus. This shows that over half (52%) of the survey respondents could take active transportation as their mode to commute to Dalhousie.

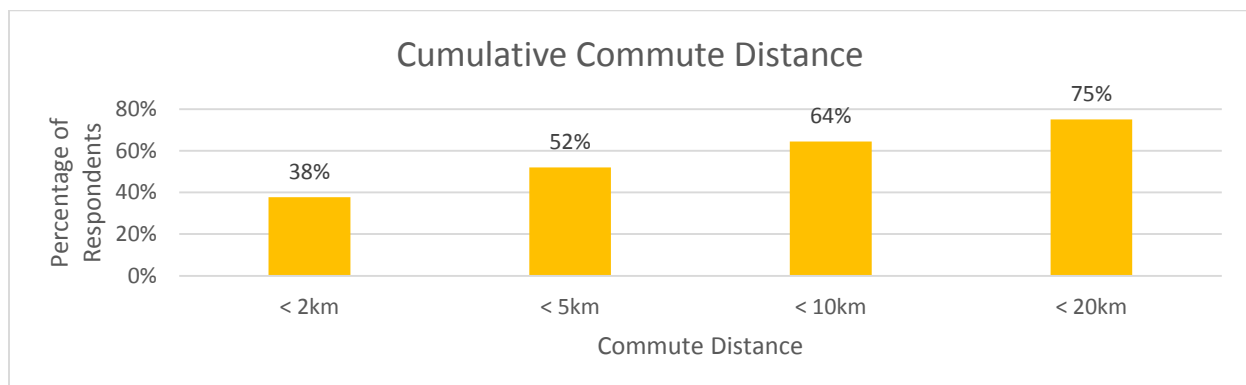


Figure 3-2: Cumulative Commute Distance of Respondents

When evaluating commute distance by respondent group, students live closest to their primary campus, followed by faculty, and staff lived farthest away (Figure 3-3).

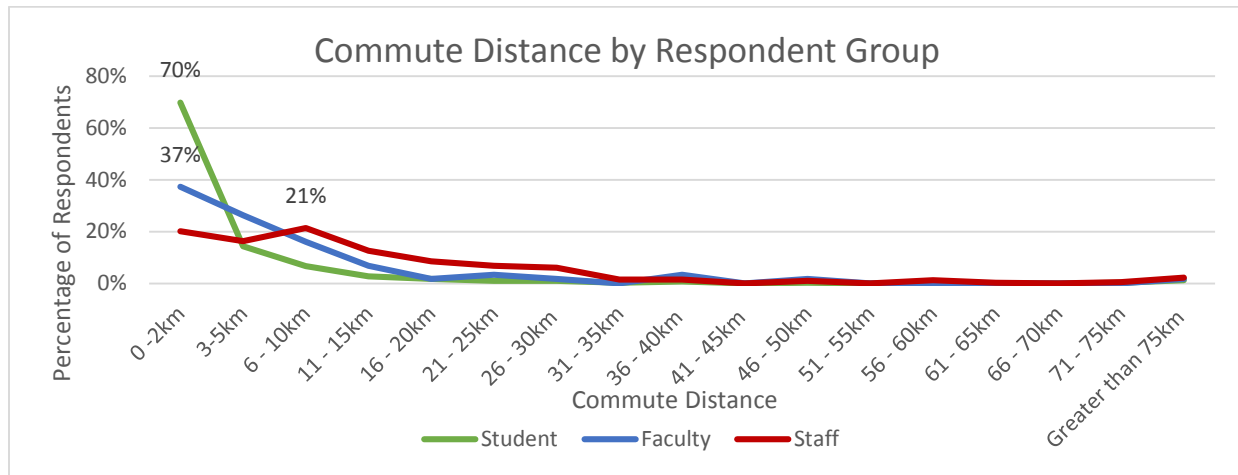


Figure 3-3: Commute Distance by Respondent Group

The greatest percentage of students (70%) and faculty (37%) lived within 2km of their primary campus, whereas the greatest percentage of staff (21%) lived within 10km of their primary campus. Almost all students lived with 20km of campus (95%) whereas 20% of staff lived over 20km away from campus (Figure 3-4).

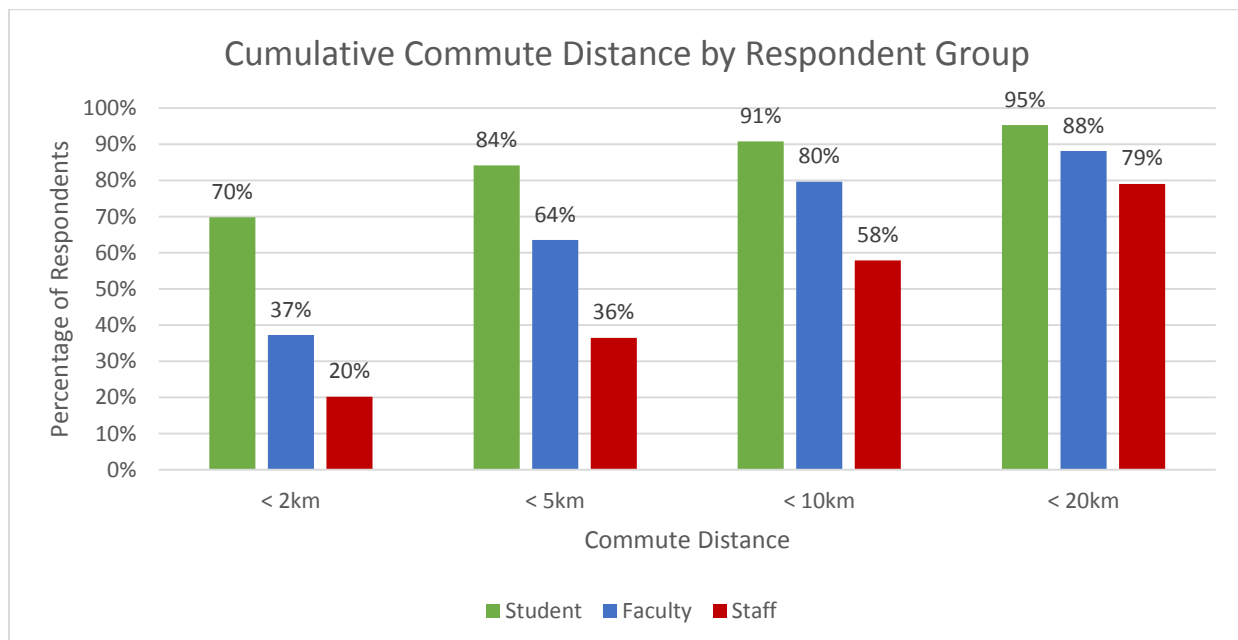


Figure 3-4: Cumulative Commute Distance by Respondent Group

3.2 Arrival and Departure Time

The majority of survey respondents arrived on campus between 7am – 10am and departed between 3pm – 6pm (Figure 3-5). Peak arrival time was between 8am – 9am, as approximately 39% of respondents arrived on campus during that time period. Peak departure time would be between 4pm – 6pm, as 25% of respondents reported leaving between 4pm – 5pm and 25% reported leaving between 5pm – 6pm. Interestingly, 7% of survey respondents reported departing their primary campus at 5am.

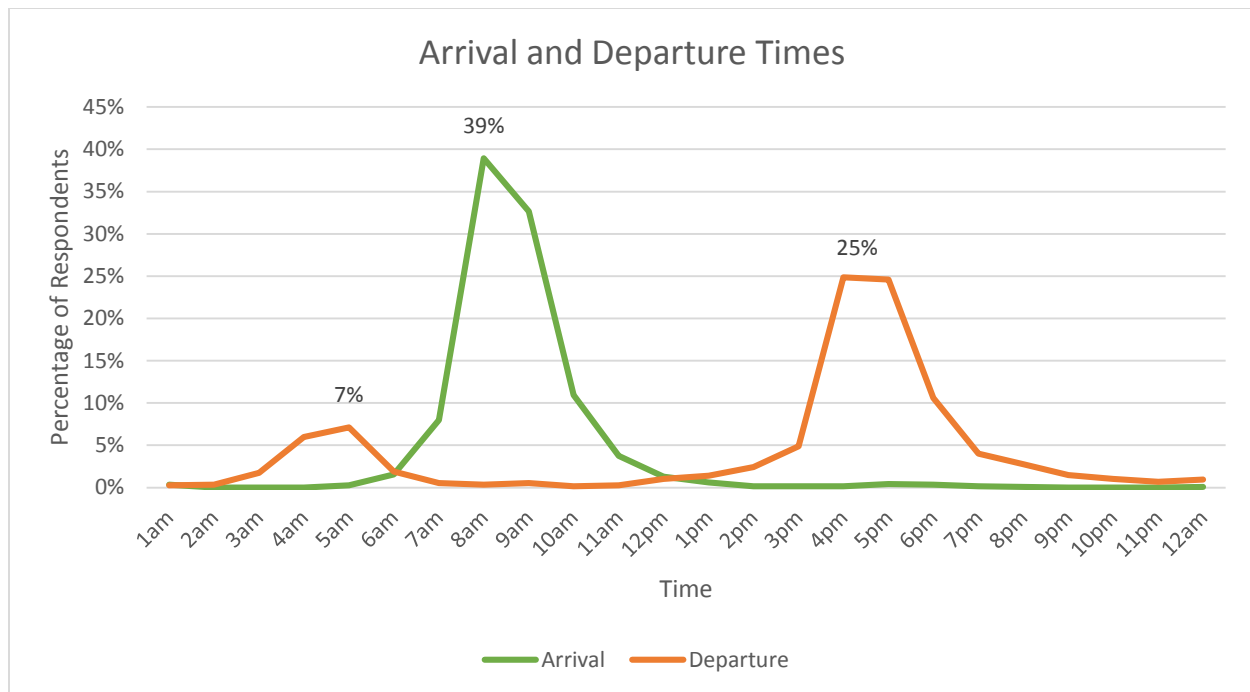


Figure 3-5: Arrival and Departure Times of Respondents

3.3 Commute Time

Approximately 73% of survey respondents had a commute time of less than 30 minutes (Figure 3-6). The highest percentage of respondents (32%) had a commute time between 11 – 20 minutes. Only 8% of respondents had a commute time greater than 50 minutes.

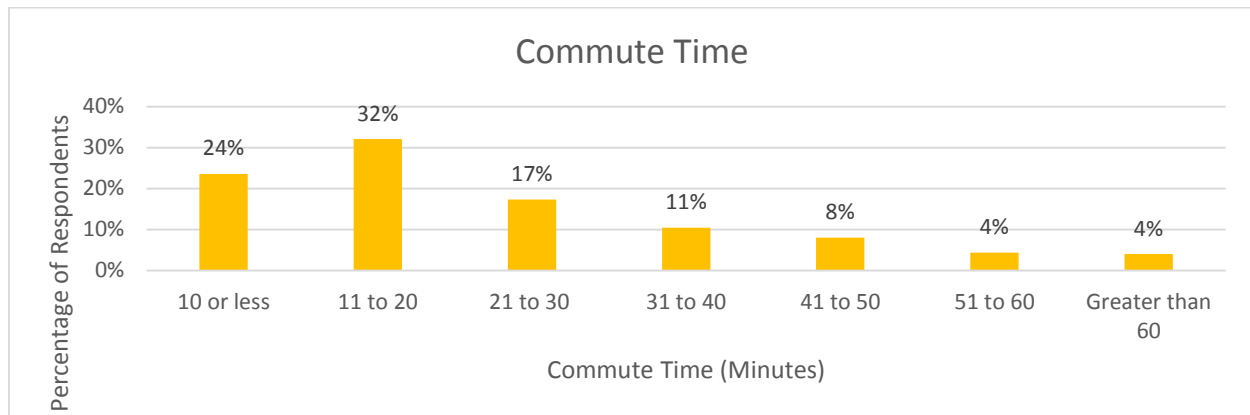


Figure 3-6: Commute Time of Respondents

As shown in Figure 3-7, the greatest percentage of students (39%) took less than 10 minutes to commute. The greatest percentage of faculty (48%) and staff (22%) could commute in 11 – 20 minutes. Staff had the longest commute time from all respondent groups which is directly related to staff living farther away from campus than students or faculty.

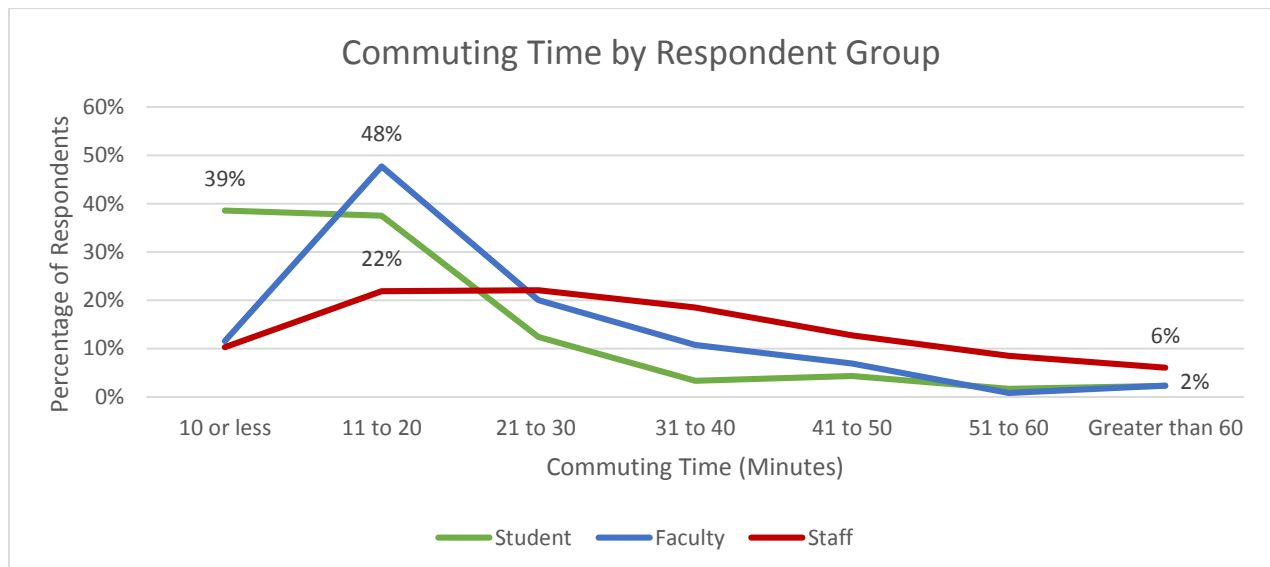


Figure 3-7: Commute Time by Respondent Group

4. MODAL SPLIT

For this survey, primary mode is defined as the mode used for 70% of trips to campus and secondary mode is defined as the mode used for 30% of trips to campus. Carpooling is defined as two or more people, from different households, in a car going to Dalhousie and/or surrounding areas.

4.1 Primary Mode

Similar to previous surveys, commute by walking had the highest percentage (34.9%) for primary mode of transportation to campus (Figure 4-1). The second most used primary mode of transportation is automobile drive alone with 22.7%, followed by public transit with 20.9%.

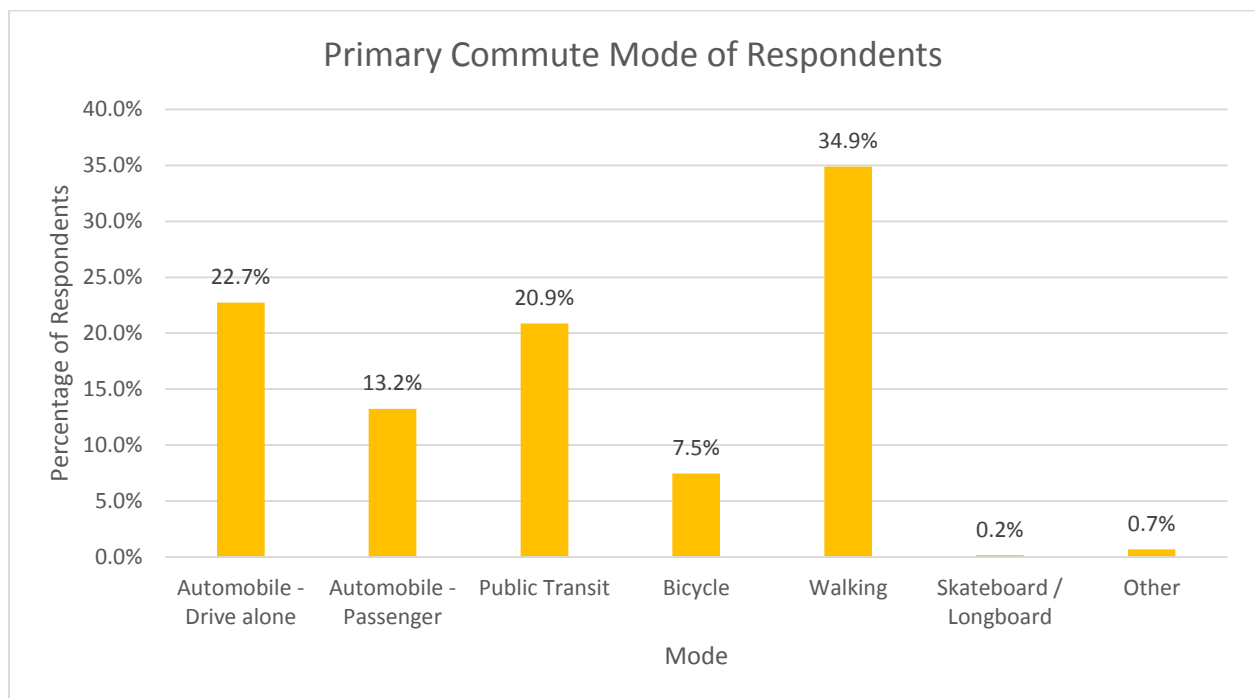


Figure 4-1: Primary Commute Mode of Respondents

Approximately 57% of students walk to campus as their primary mode, followed by public transit (22%) (Figure 4-2). The highest percentage of faculty (33%) and staff (37%) commute by driving a single occupant vehicle. A significant amount (17%) of faculty commute to Dalhousie using a bicycle.

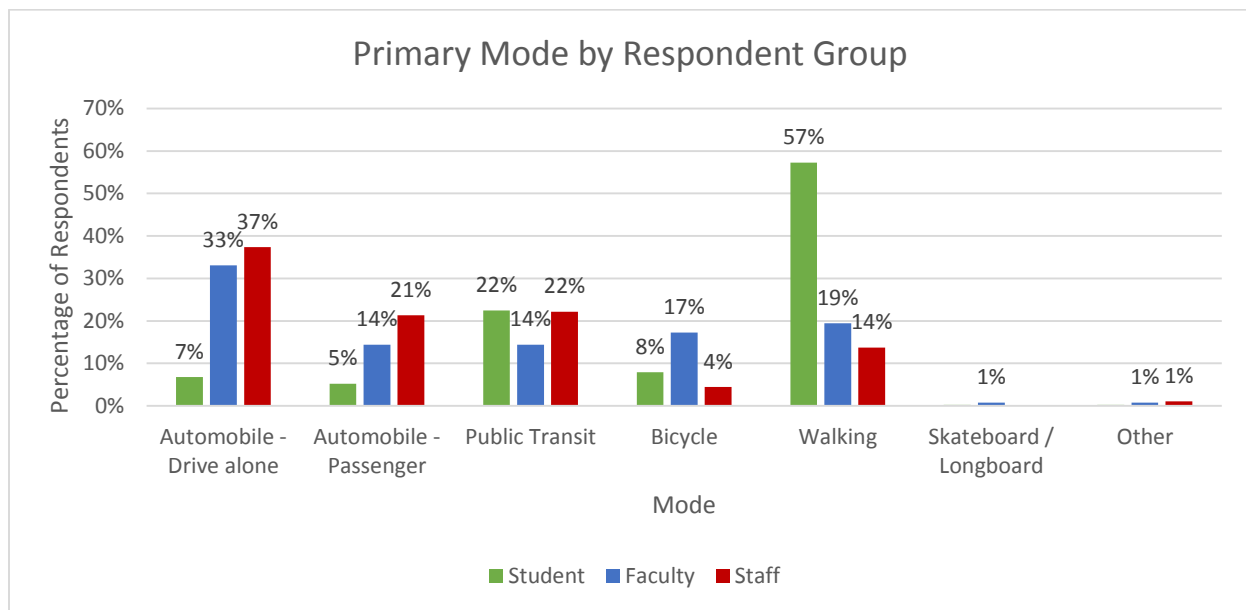


Figure 4-2: Primary Commute Mode by Respondent Group

4.2 Secondary Mode

Public transit (26%) was the most used secondary mode of transportation of all respondents (Figure 4-3). Walking was the second most used (18.8%) followed by automobile passenger with 14.4%. Approximately, 16.8% of respondents stated they always use their primary mode of transportation.

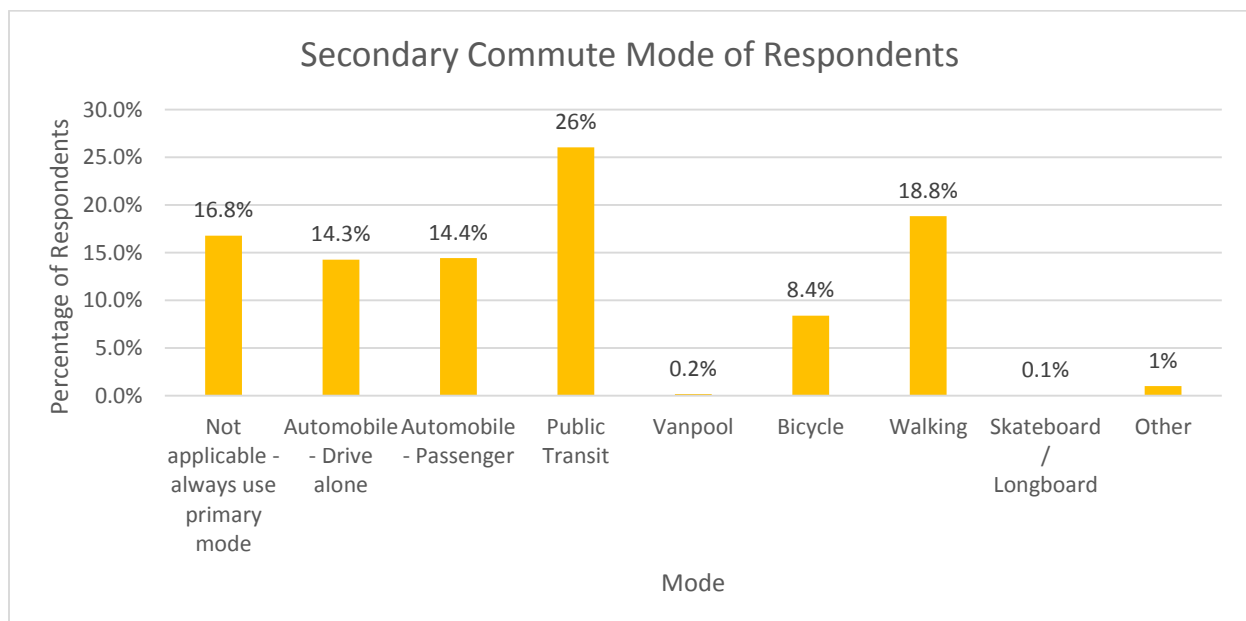


Figure 4-3: Secondary Commute Mode of Respondents

Among respondent groups, the highest percentage of students (32%) take public transit as their secondary mode and the highest percentage of faculty walk as their secondary mode (27%) (Figure 4-4). Approximately 20% of staff respondents will be an automobile passenger or use public transit as their secondary mode of commuting.

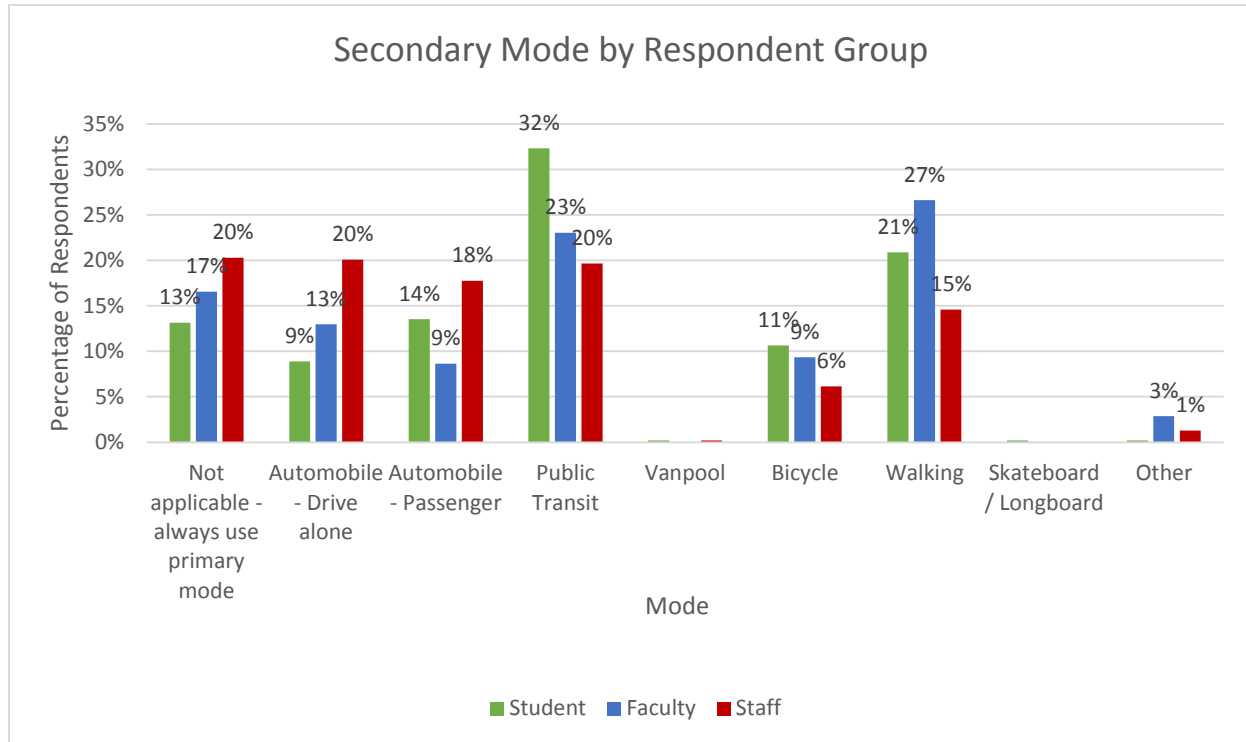


Figure 4-4: Secondary Commute Mode by Respondent Group

4.3 Vehicle Access and Ownership

The majority (57%) of survey respondents owned a vehicle, with 16% responding that they can borrow a car or have access to a car when needed (Figure 4-5). Approximately, 23% stated they did not own or have access to a car and 4% were already a member of a car sharing service.

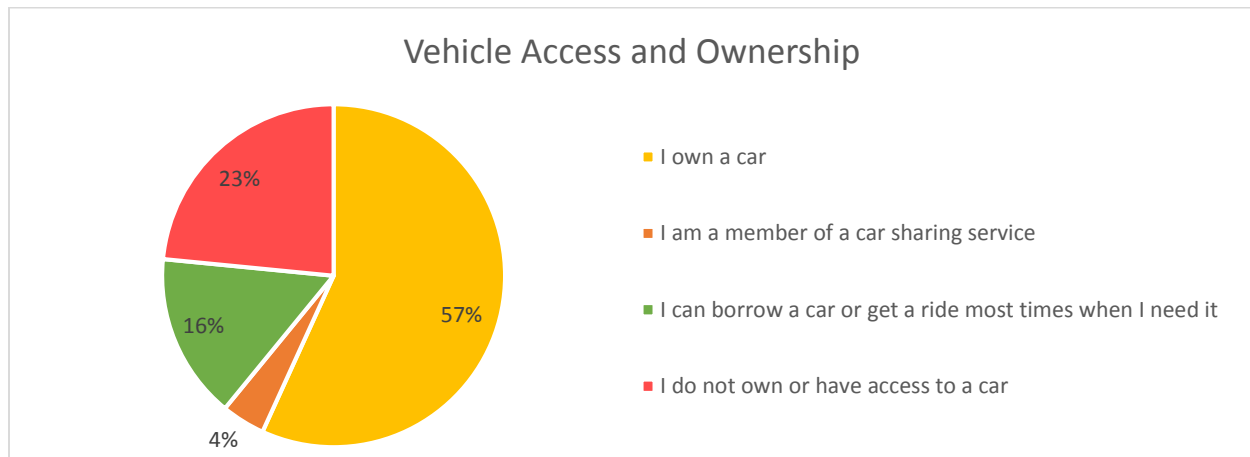


Figure 4-5: Vehicle Access and Ownership of Respondents

Approximately 81% of faculty and staff own a car, whereas the highest percentage of students (42%) do not own or have access to a car (Figure 4-6). As almost all students (84%) commute less than 5km and spend 20 minutes or less (77%) on their commute it is less necessary to own a car. This may also be the reason that a higher percentage of students (5%) are part of a car sharing service compared to faculty (4%) or staff (3%).

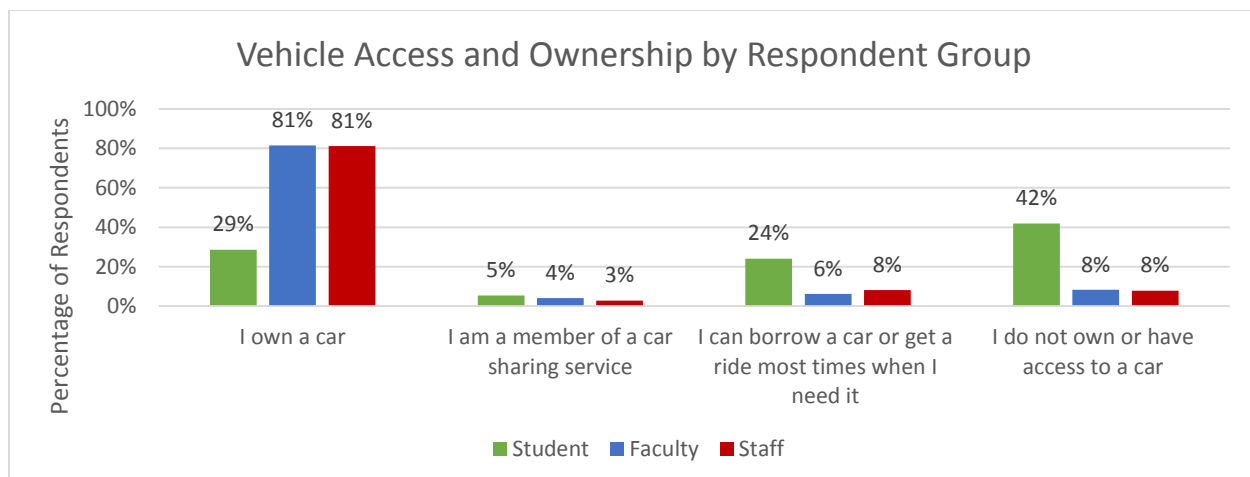


Figure 4-6: Vehicle Access and Ownership by Respondent Group

4.4 Bicycle Access and Ownership

Almost half (48%) of respondents owned a bicycle, with 7% stating they can use or borrow a bicycle when needed (Figure 4-7).

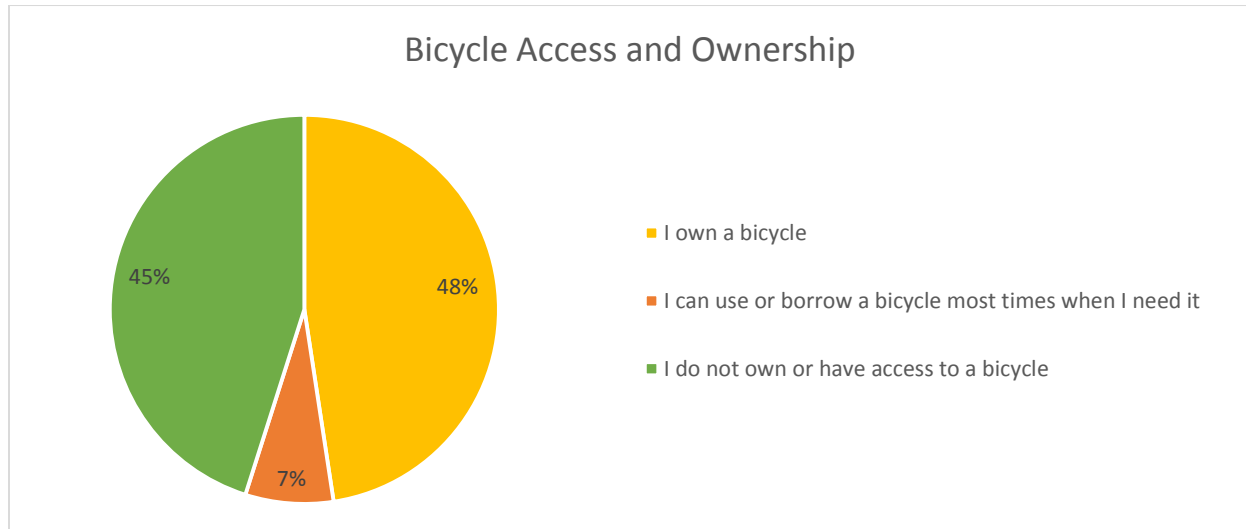


Figure 4-7: Bicycle Access and Ownership of Respondents

Of all respondents, faculty members had the highest percentage (72%) of people who owned a bicycle (Figure 4-8). This relates to why faculty members had the highest percentage of respondents (17%) who used a bicycle as their primary mode to commute.

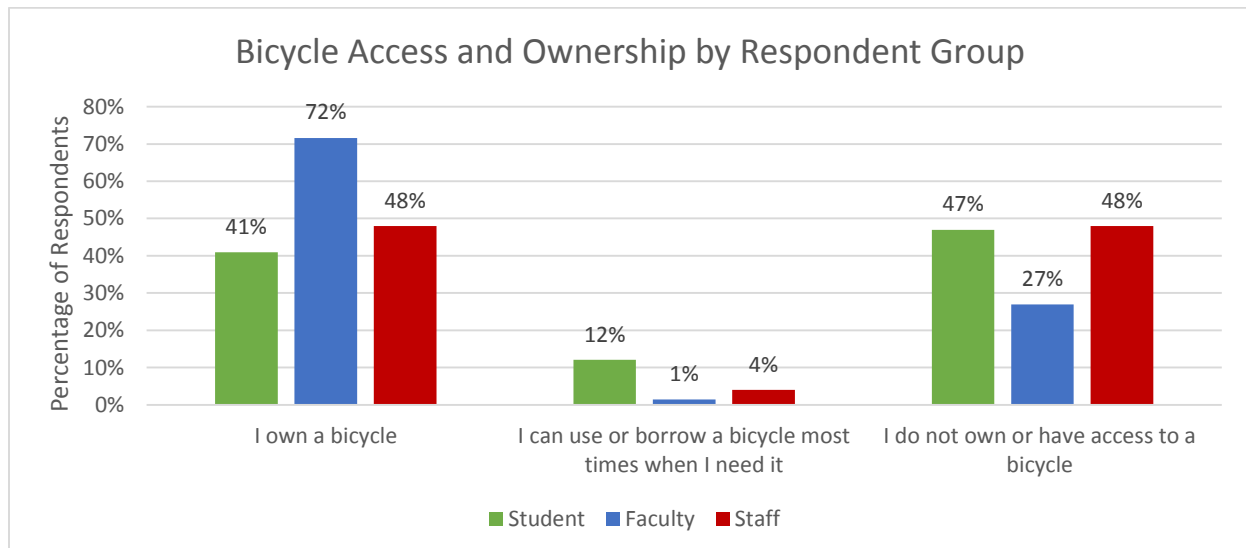


Figure 4-8: Bicycle Access and Ownership by Respondent Group

Of those respondents who commute by bicycle, summer (34%) was the most favourable season to commute (Figure 4-9). Over half (56%) of respondents stated they used their bicycle to commute in spring, summer and fall, and 20% stated they cycle in all four seasons.

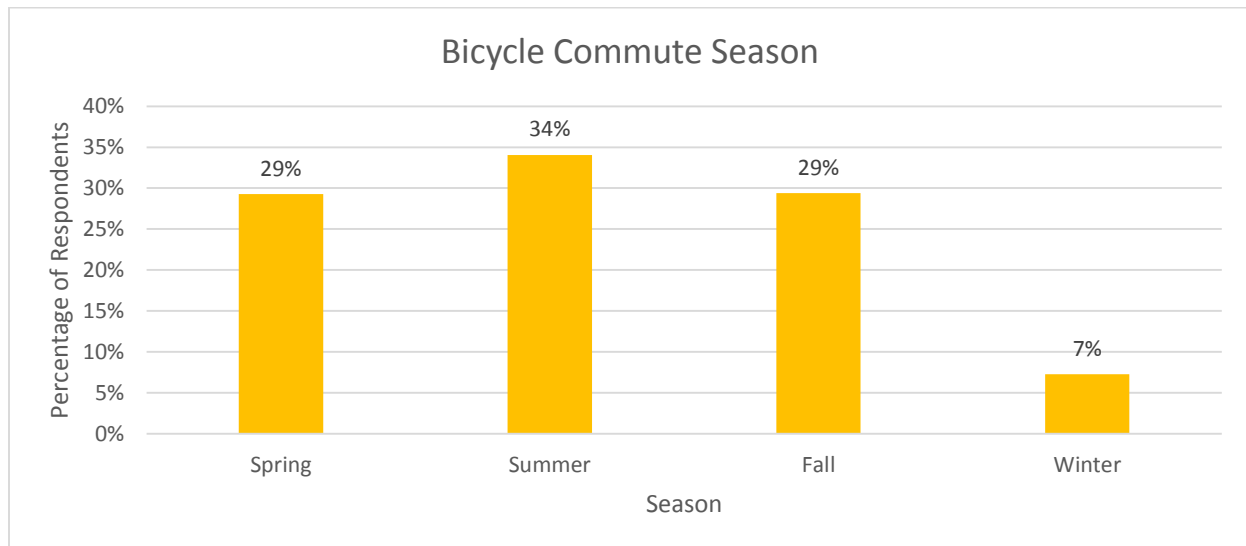


Figure 4-9: Seasonality of Bicycle Commuters

4.5 Travel Expenditure

Monthly travel expenditure for the 2015 sustainability survey was defined as the out-of-pocket money spent on a monthly basis for transportation purposes (gas, parking, etc.). This did not include the cost of ownership or vehicle maintenance. Over half (67%) of respondents spent \$100 or less a month on travel expenses (Figure 4-10). As seen in Figure 4-11, 71% of students spend \$50 or less a month on travel expenses. Compared to students and faculty, staff spend more money on travel expenses with 14% spending over \$250 a month.

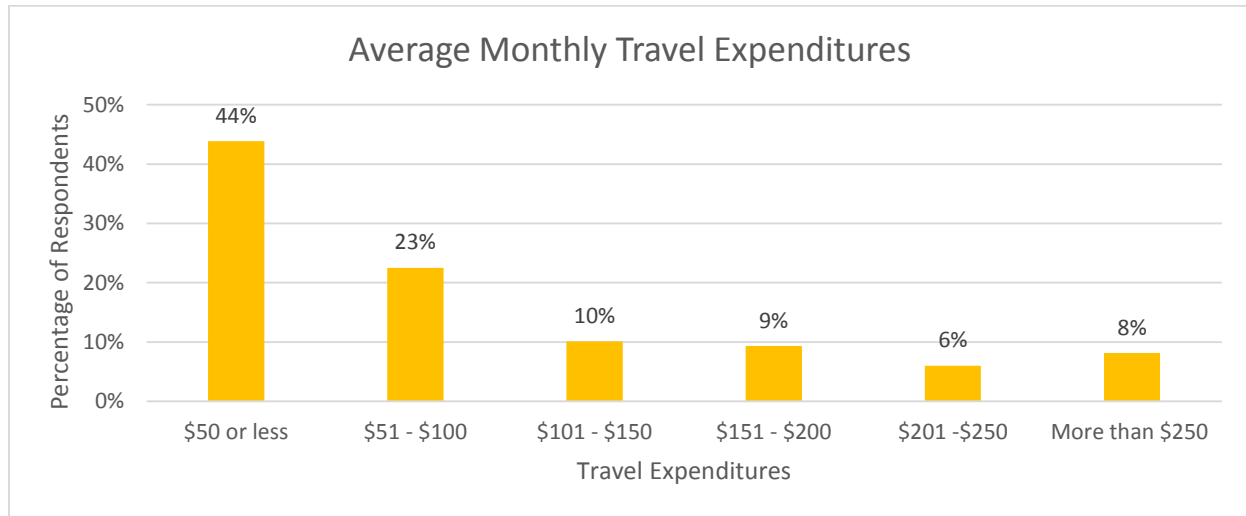


Figure 4-10: Average Monthly Travel Expenditure of Respondents

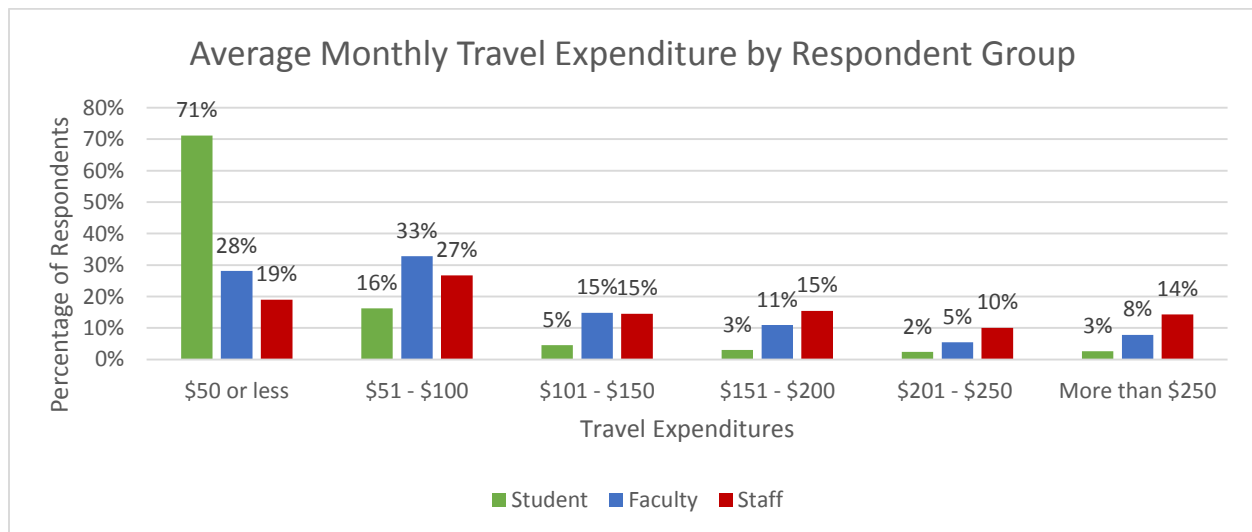


Figure 4-11: Average Monthly Travel Expenditure by Respondent Group

4.6 Mode Changes

When asked if they used a different primary mode this year in comparison to their primary commute mode in 2014-2015, 76% of respondents had not changed their primary mode. Only 13% of respondents stated they had changed their primary commute mode over the last year, and 11% stated it was not applicable as this was their first year on campus.

4.7 Intercampus Travel

4.7.1 Travel Frequency between Campuses

Approximately 72% of respondents have travelled between the Halifax campuses (Carleton, Sexton and Studley), however only 25% do so on a daily or weekly basis (Figure 4-12).

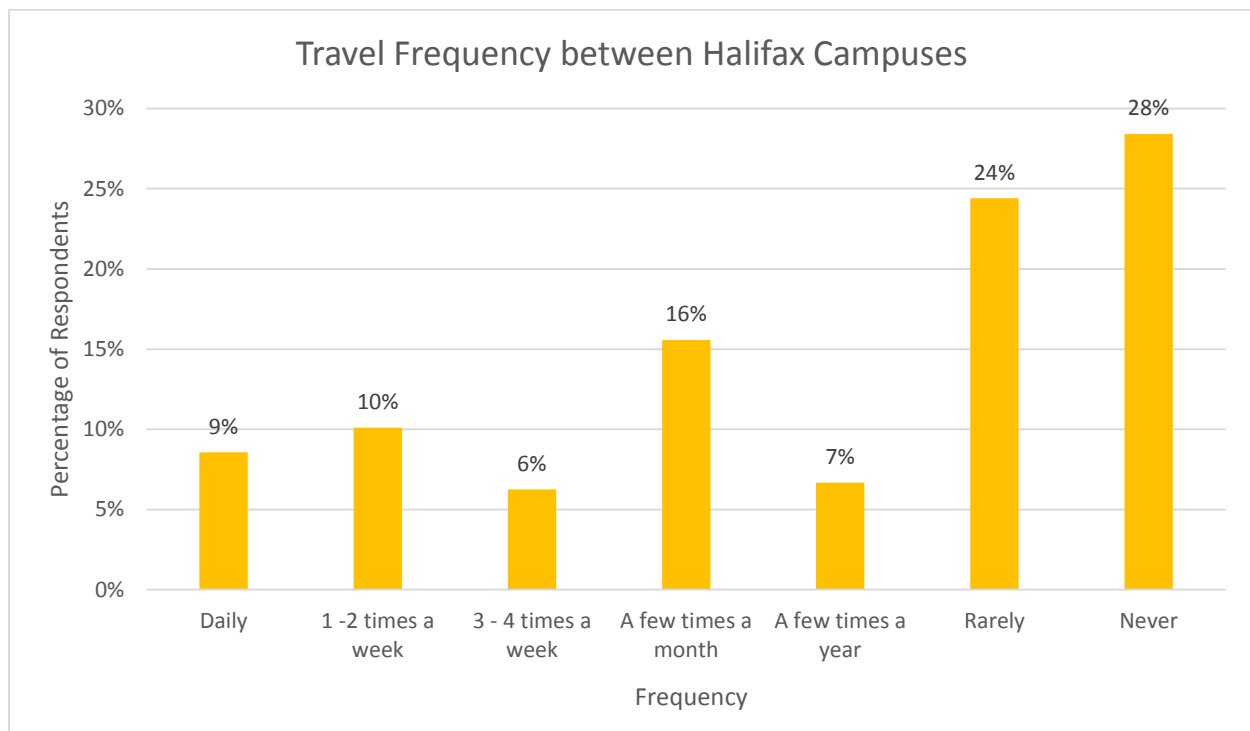


Figure 4-12: Travel Frequency between Halifax Campuses

Compared to the Halifax campus travel frequency, the opposite trend can be seen for travel frequency between the Agriculture and Halifax campuses. Approximately 77% of respondents reported never traveling between the Halifax and Agriculture campuses (Figure 4-13). Only 0.8% of respondents make the trip between Agriculture and Halifax campuses on a daily or weekly basis.

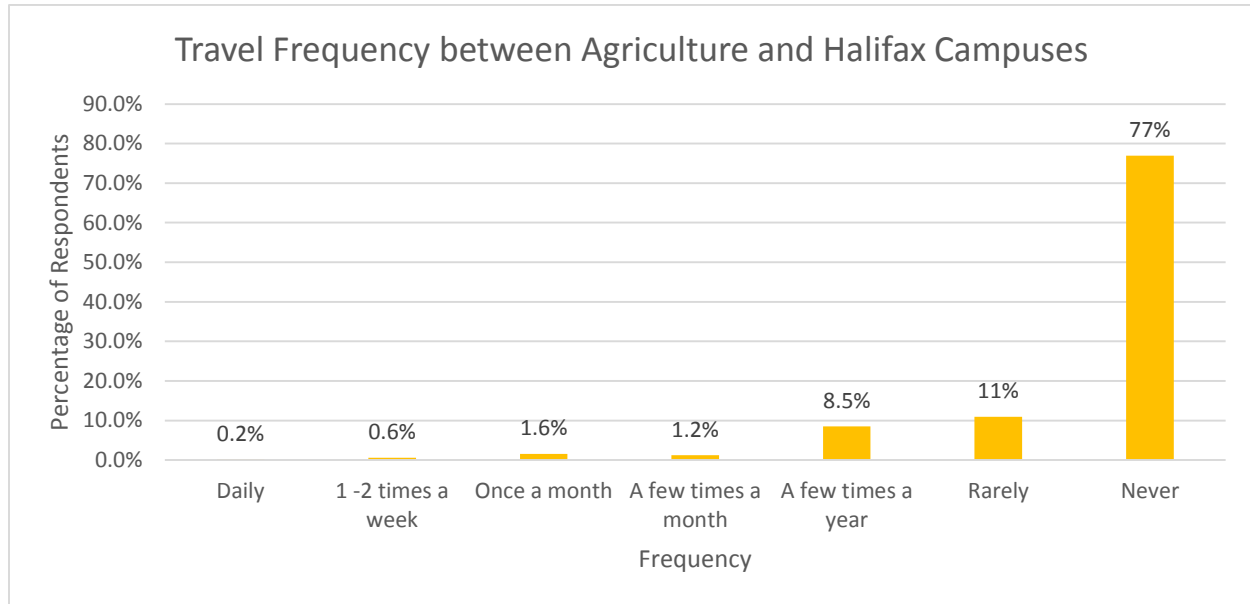


Figure 4-13: Travel Frequency between Agriculture and Halifax Campuses

4.7.2 Intercampus Modal Split

Of those respondents who travel between the Halifax campuses, the majority (82%) used active transportation (77% walk and 5% bicycle, Figure 4-14). A significantly lower percentage of respondents used private car and taxi (6% and 2%), as the Halifax campuses are in close proximity of one another.

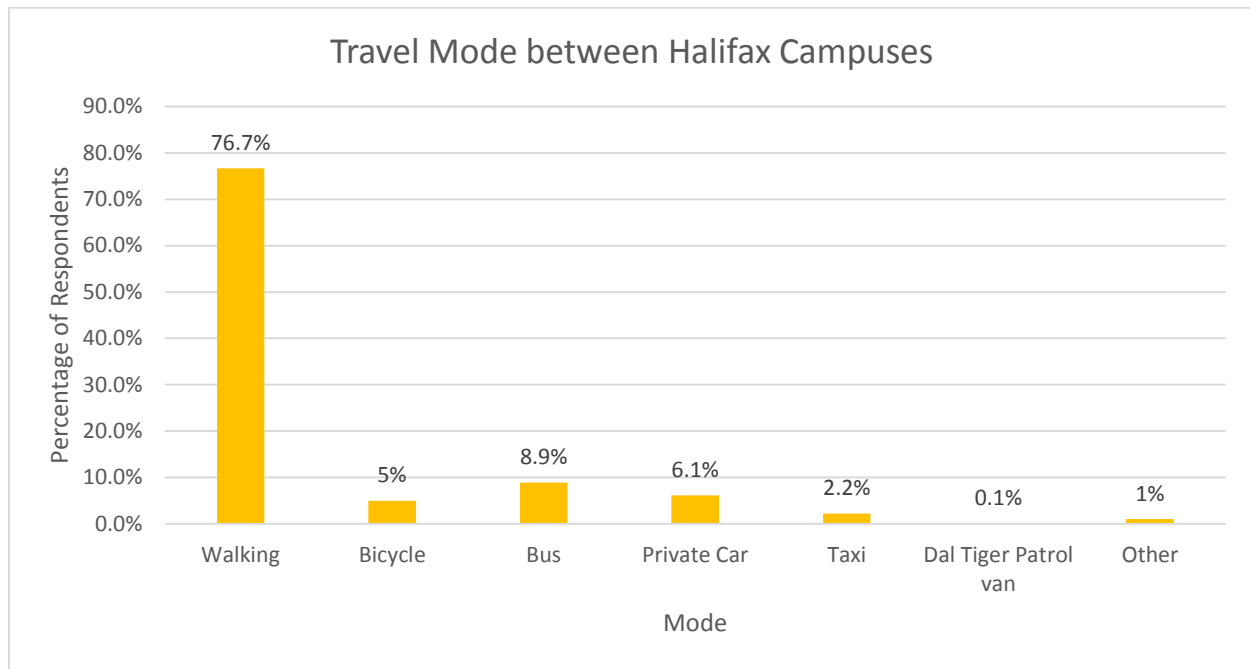


Figure 4-14: Travel Mode between Halifax Campuses

Of those people who traveled between the Agriculture and Halifax campuses, almost half (49%) did so by automobile drive alone (Figure 4-15).

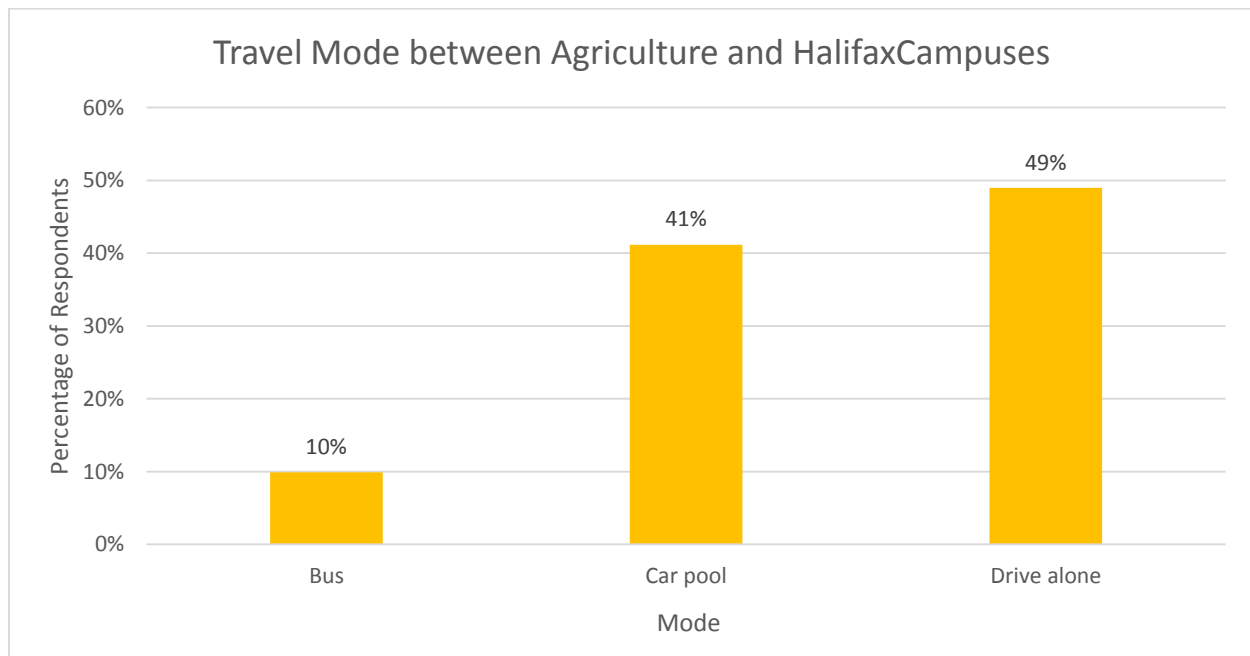


Figure 4-15: Travel Mode between Agriculture and Halifax Campuses

4.8 Carpooling

For the 2015 survey, carpooling was defined as two or more people, from different households, in a car going to any of the Dalhousie campuses and/or surrounding areas. Approximately 30% of the respondents whose primary mode was “automobile - passenger” carpooled (Figure 4-16).

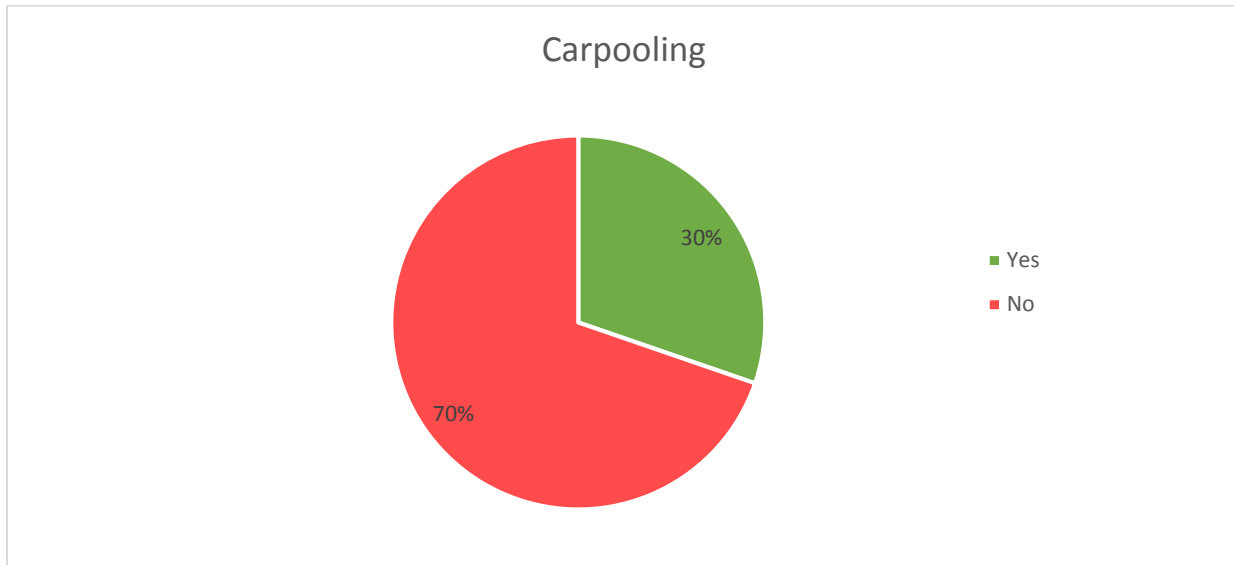


Figure 4-16: Percentage of Automobile Passengers that Carpooled

5. PARKING BEHAVIOUR

Of those respondents who stated their primary mode of transportation was automobile (drive alone or passenger), 66% parked in Dalhousie University lots and 17% used free on street parking (Figure 5-1).

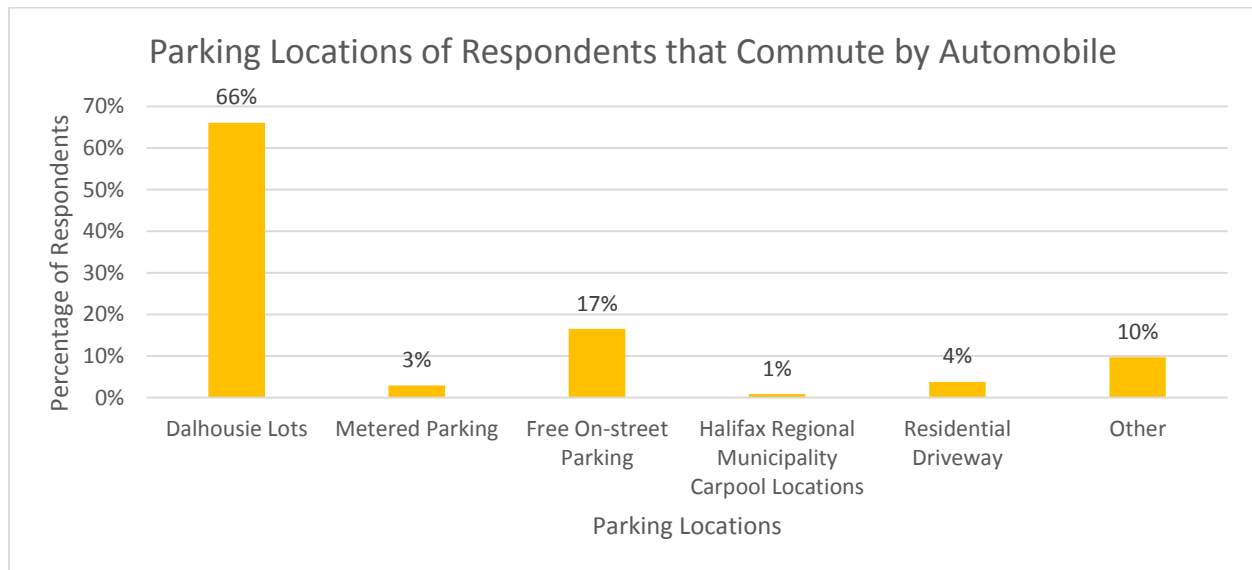


Figure 5-1: Parking Locations of Respondents that Commute by Automobile

Of those respondents who purchased a parking permit this year, 69% purchased a general annual permit (Figure 5-2). The second most purchased Dalhousie parking permit was the reserved annual permit with 27% of respondents purchasing that type.

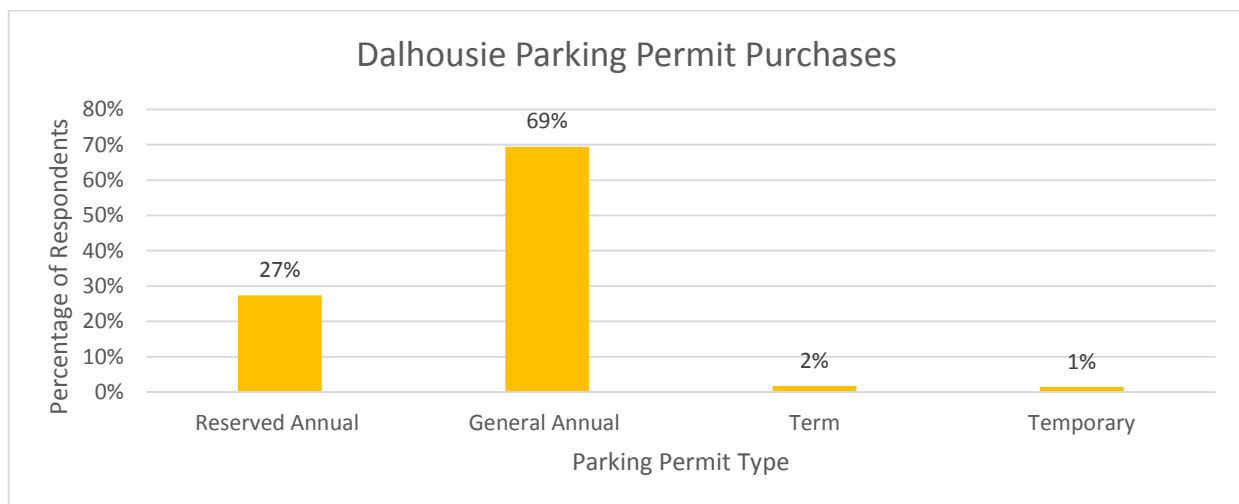


Figure 5-2: Parking Permit Purchase of Respondents that Commute by Automobile

6. SUSTAINABLE TRANSPORTATION ACTIVITY

6.1 Interest in Carpool Initiatives

Of respondents who drive alone, over half (56%) were interested in carpool initiatives (Figure 6-1). Approximately 23% were interested in carpooling with anyone, 21% were interested in carpooling with friends, and 12% were interested in carpooling with co-workers.

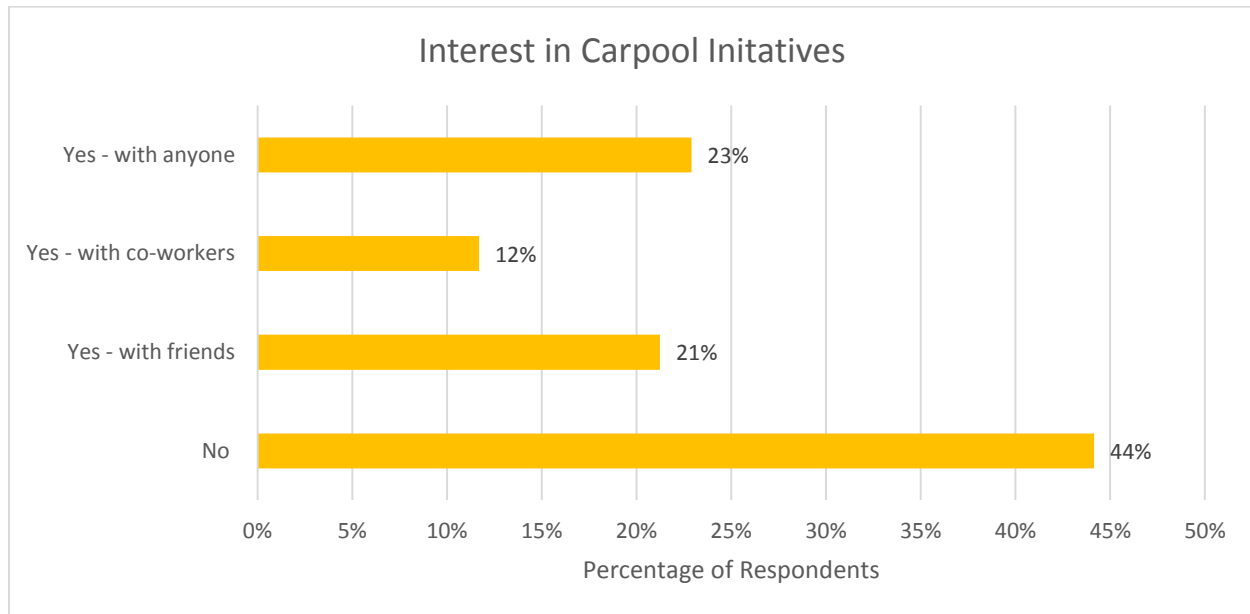


Figure 6-1: Interest in Carpooling Initiatives of Respondents who Drive Alone

6.2 Share the Road NS Awareness

Share the Road NS is a community based Share the Road awareness campaign for Nova Scotia, promoting positive behavioural change and safe sharing of the road for all users – pedestrians, cyclists and motorists. This campaign is run by Dalhousie Transportation Collaboratory (DalTRAC) on the Sexton campus of Dalhousie University. Approximately 24% of respondents of the 2015 survey were aware of Share the Road NS campaign (Figure 6-2), compared to 21% in the 2014 survey.

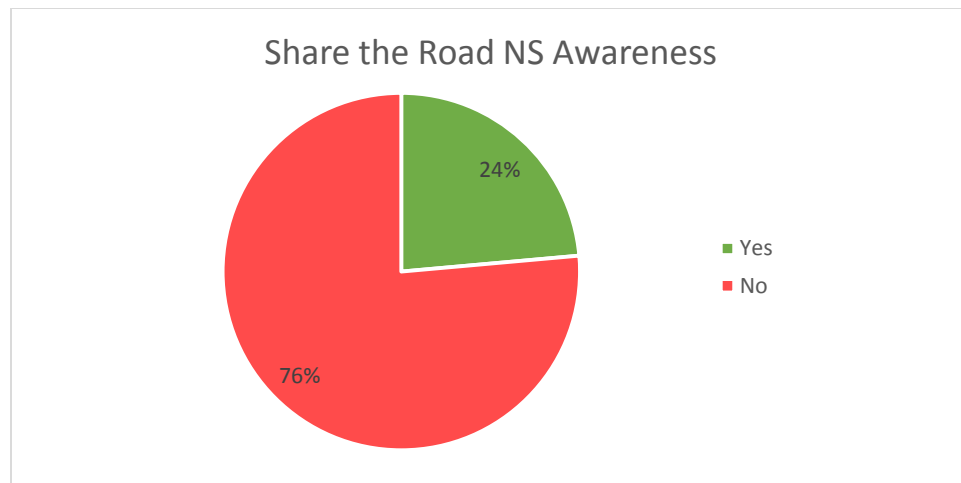


Figure 6-2: Share the Road NS Awareness among Respondents

When asked the importance of sharing the road, approximately 68% of respondents reported that sharing the road is important or very important to them (Figure 6-3).

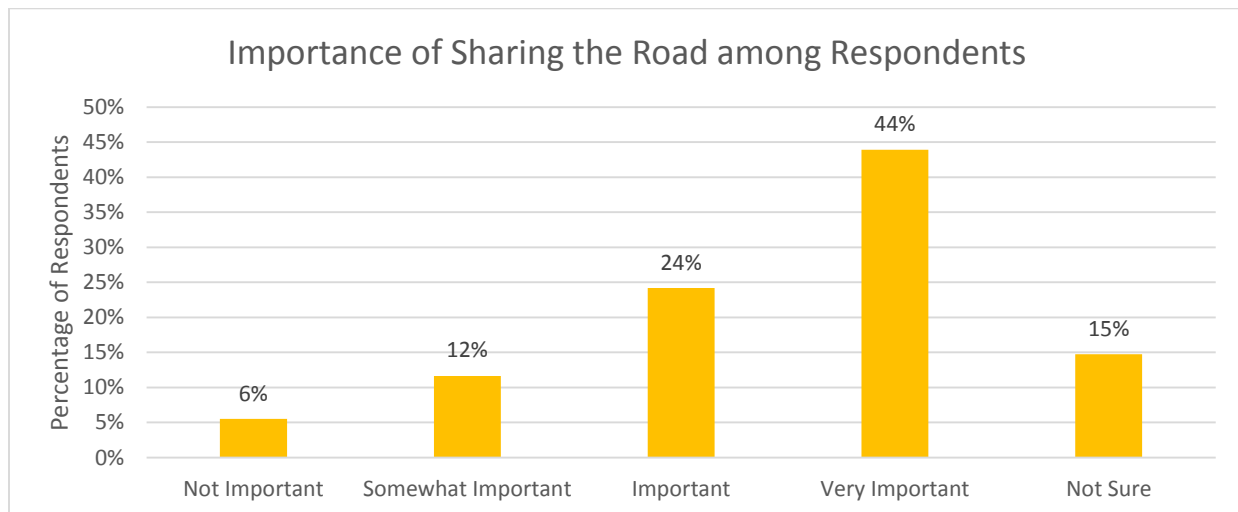


Figure 6-3: Importance of Sharing the Road among Respondents

7. CAMPUS DIFFERENTIATION

Each of Dalhousie's four campuses (Agriculture, Carleton, Sexton and Studley) has unique commuting behaviour. Understanding the needs of each campus and respondent group will inform sustainable transportation planning and design for the university.

7.1 Modal Split by Campus

7.1.1 Primary Mode

As shown in Figure 7-1 and Figure 7-2 there is a significant difference between the primary modes of the Halifax campuses compared to the Agriculture campus. For example, 44% of Agriculture campus respondents commuted as automobile driver whereas only 21% of Halifax campus respondents commuted in the same way. Due to the Agriculture campus more rural location, no respondents commuted by public transit as their primary mode, however a significant percentage (47%) were able to walk to commute.

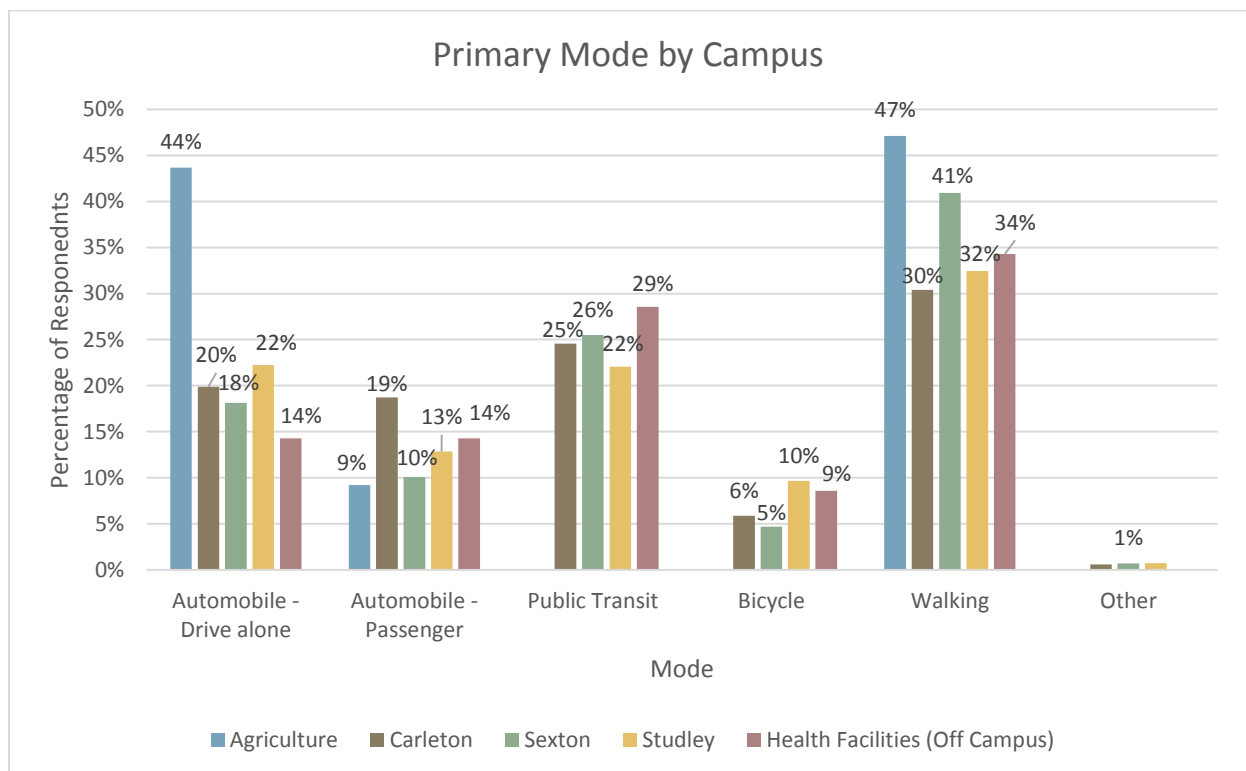


Figure 7-1: Primary Mode by Campus

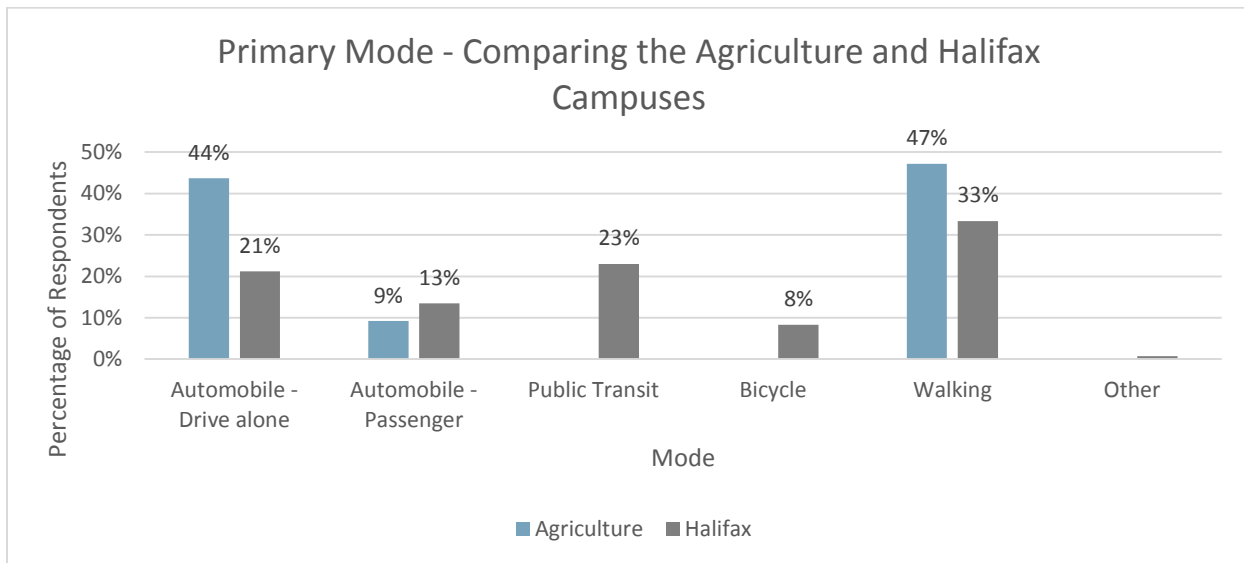


Figure 7-2: Comparing Agriculture and Halifax Campuses Primary Mode

Figure 7-3 shows the primary mode by respondent group for Halifax campuses. Students have the highest percentage (55%) of respondents who walk to commute to Halifax campuses. The highest percentage of faculty (32%) and staff (35%) commute by driving, however a significant amount (19%) of faculty also commute by bicycle.

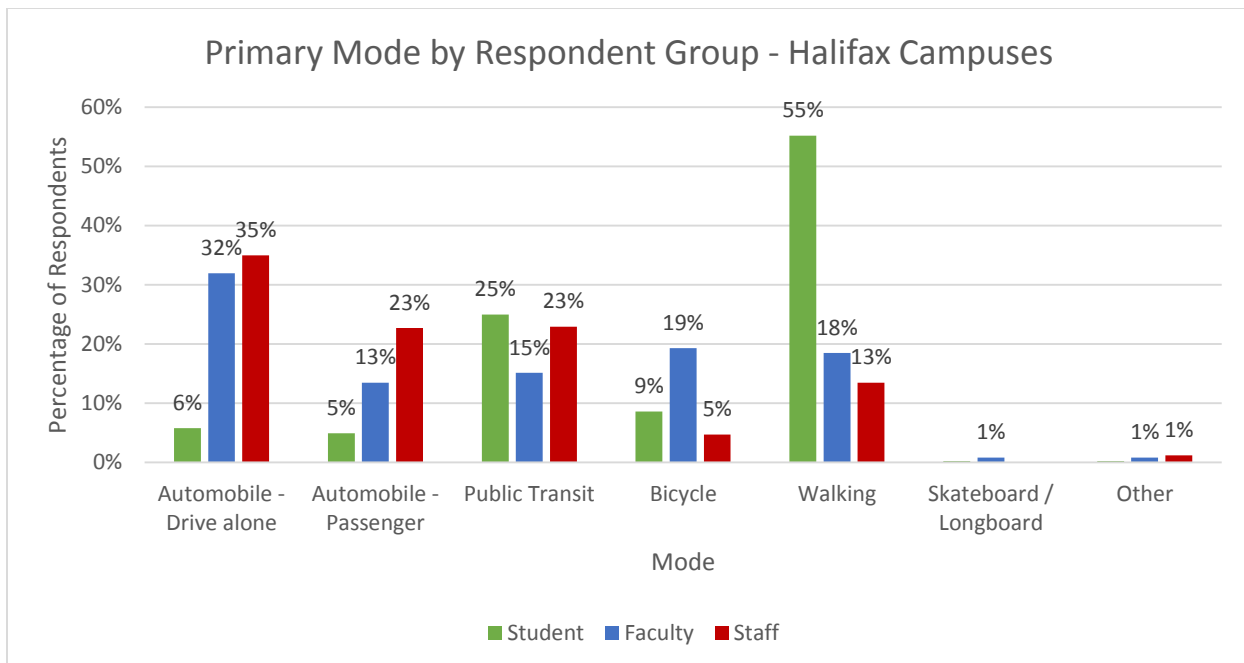


Figure 7-3: Primary Mode by Respondent Group for Halifax Campuses

Compared to the Halifax Campuses, the primary commute modes for the Agriculture campus also shows that most students (78%) chose to commute by walking (Figure 7-4). The highest percentage of faculty (70%) and staff (75%) chose to commute by driving.

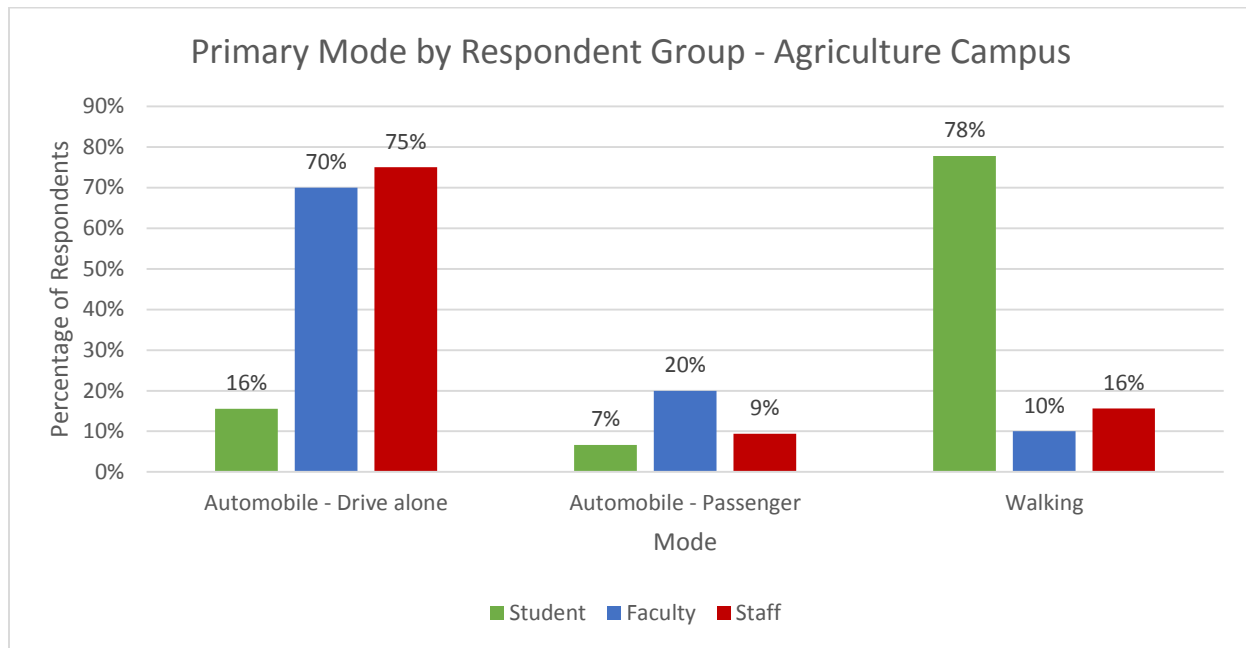


Figure 7-4: Primary Mode by Respondent Group for Agriculture Campus

7.1.2 Secondary Mode

Figure 7-5 shows the secondary modes by campus and Figure 7-6 specifically focuses on the comparison of secondary modes between the Agriculture and Halifax campuses. Over half (55%) of the Agriculture campus respondents rely on automobiles (drive alone or passenger) as their secondary mode to commute. Halifax respondents use public transit (28%) and walk (19%) as their secondary mode. Interestingly, a similar percentage of respondents from the Agriculture (8%) and Halifax (9%) campuses commute by bicycle as their secondary mode (Figure 7-6).

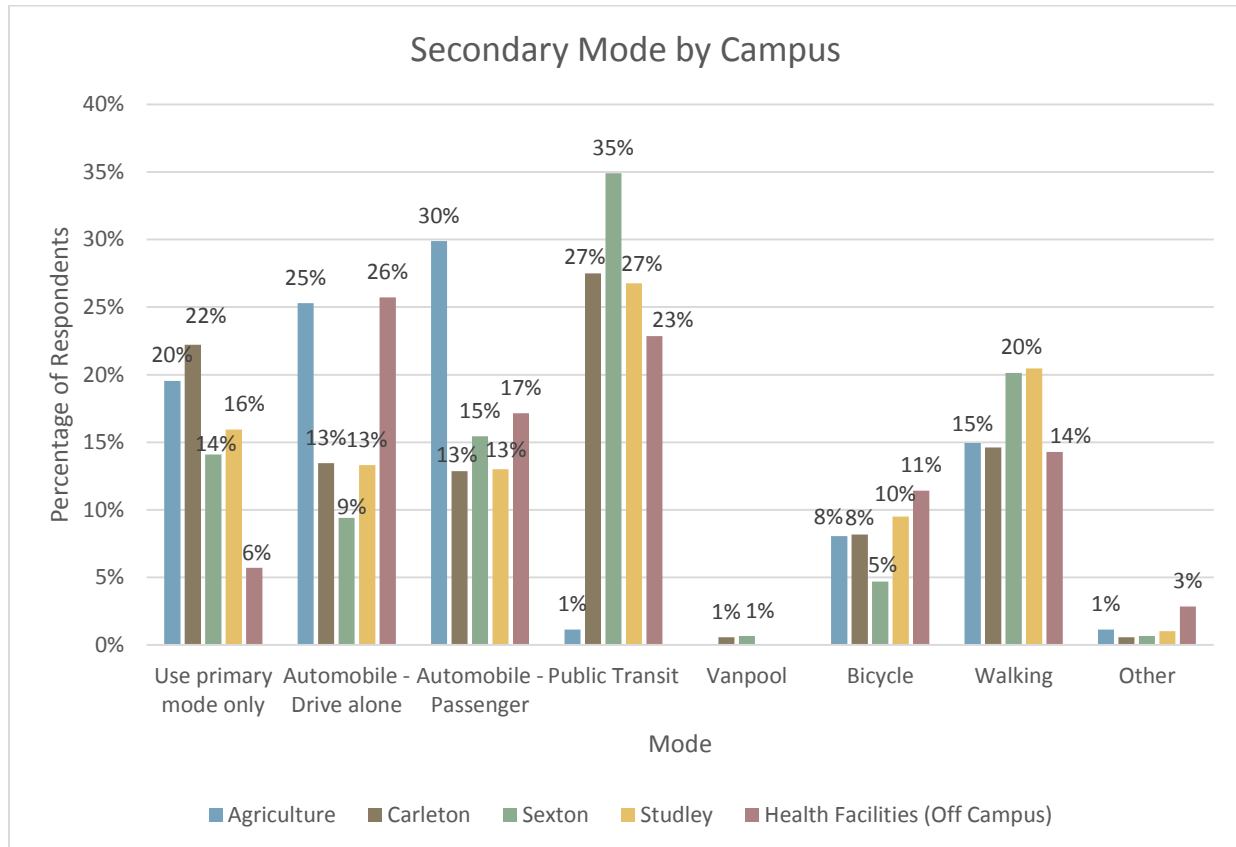


Figure 7-5: Secondary Mode by Campus

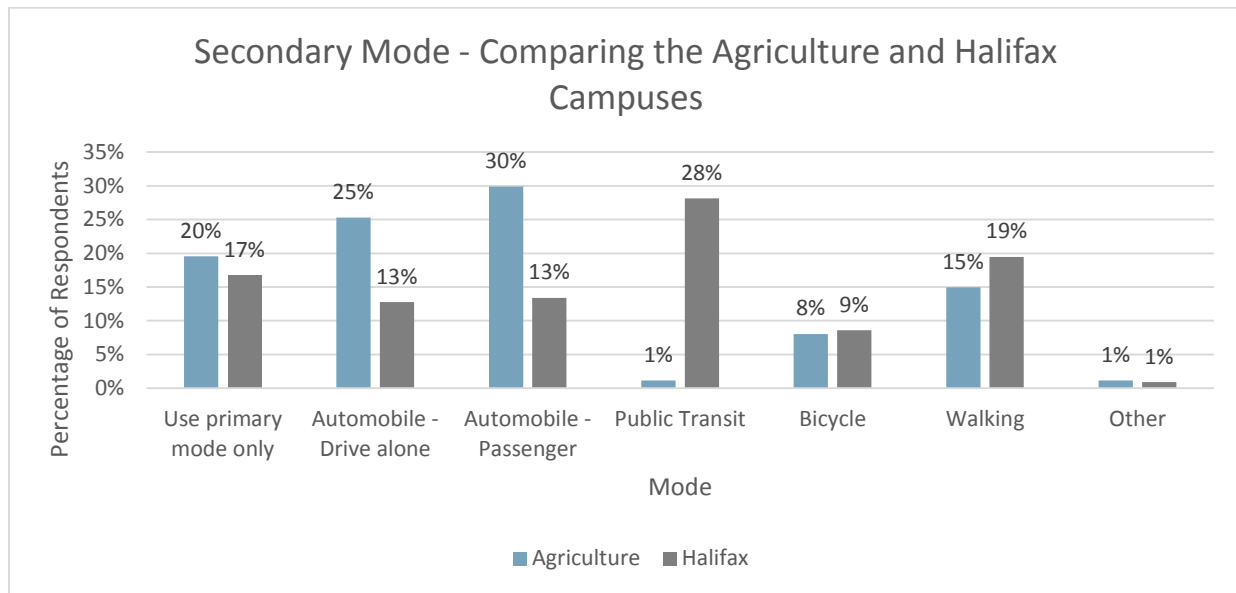


Figure 7-6: Comparing Agriculture and Halifax Campuses Secondary Mode

As displayed in Figure 7-7, the highest percentage of student (36%) respondents from the Halifax campuses use public transit as their secondary mode. Faculty respondents from the Halifax campuses walk (31%) as their secondary mode and staff respondents still have a high reliance on the automobile (drive alone and passenger, 37%) as their secondary mode.

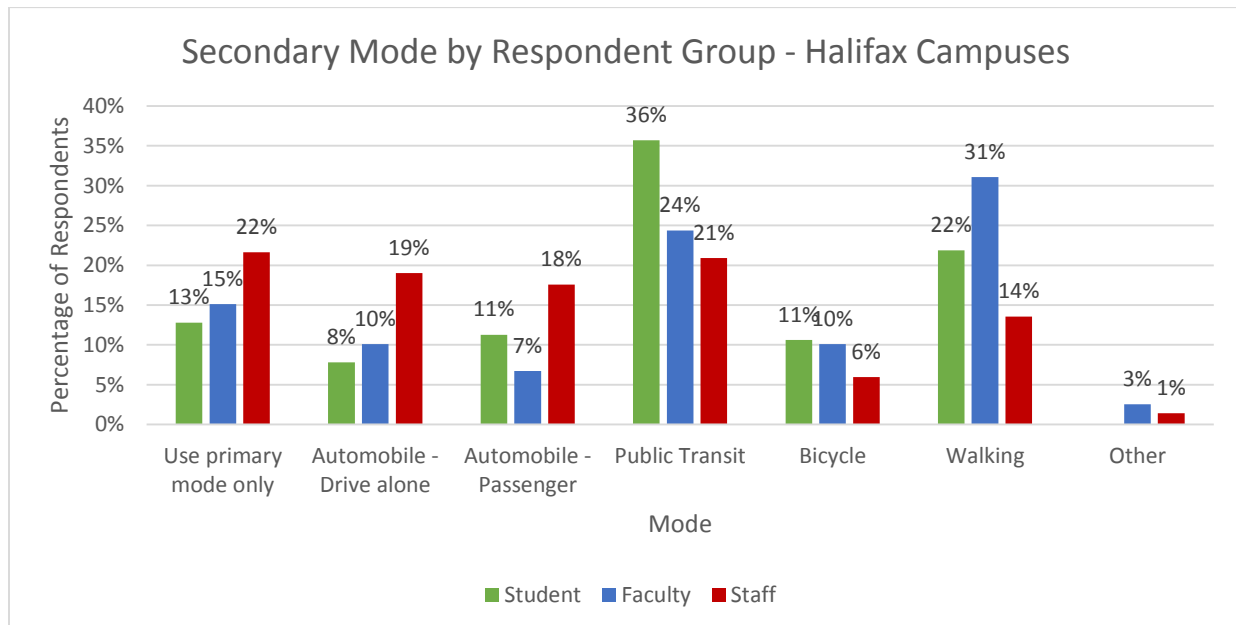


Figure 7-7: Secondary Mode by Respondent Group for Halifax Campuses

Figure 7-8 shows the secondary mode choice by respondent group at the Agriculture campus. All respondent groups (students, staff and faculty) have a reliance on using a vehicle (drive alone and passenger) as their secondary mode (58%, 50% and 43% respectively). A significant amount (25%) of staff respondents walk as their secondary mode.

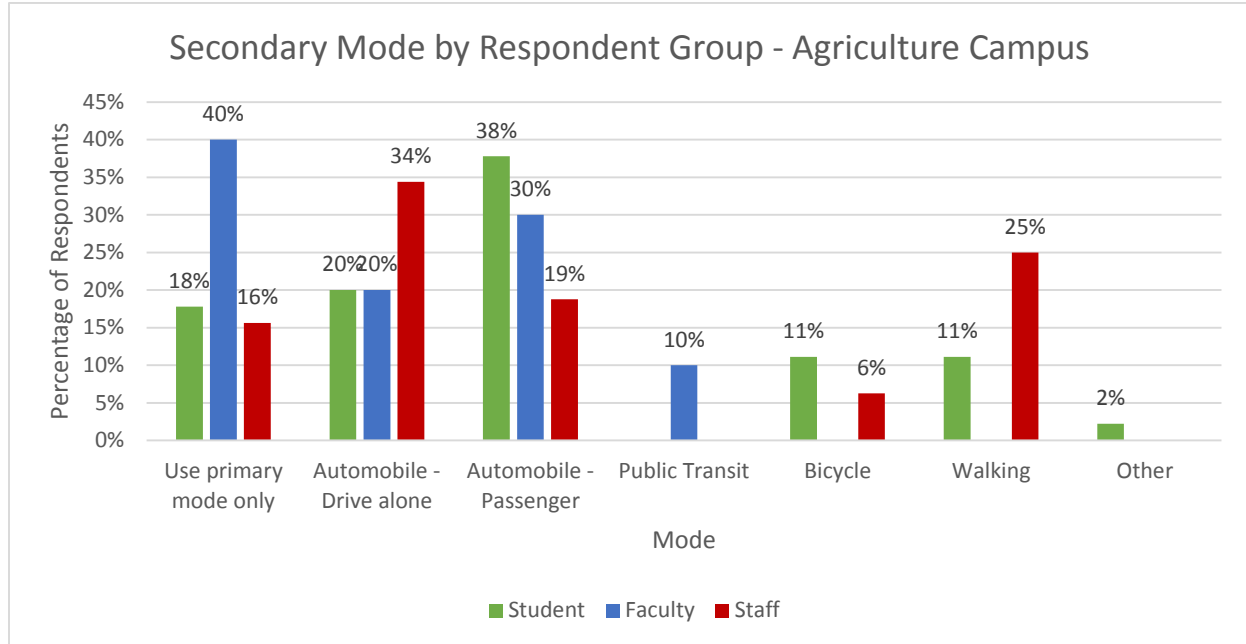


Figure 7-8: Secondary Mode by Respondent Group for Agriculture Campus

7.2 Car Ownership and Access by Campus

Carleton campus respondents have the highest percentage of car owners (67%) among Halifax campuses (Figure 7-9). More respondents from Sexton campus do not own or have access to a car than any other campus (32%). However, among all campuses, Sexton campus respondents have a higher percentage of respondents who are members of car sharing services (7%).

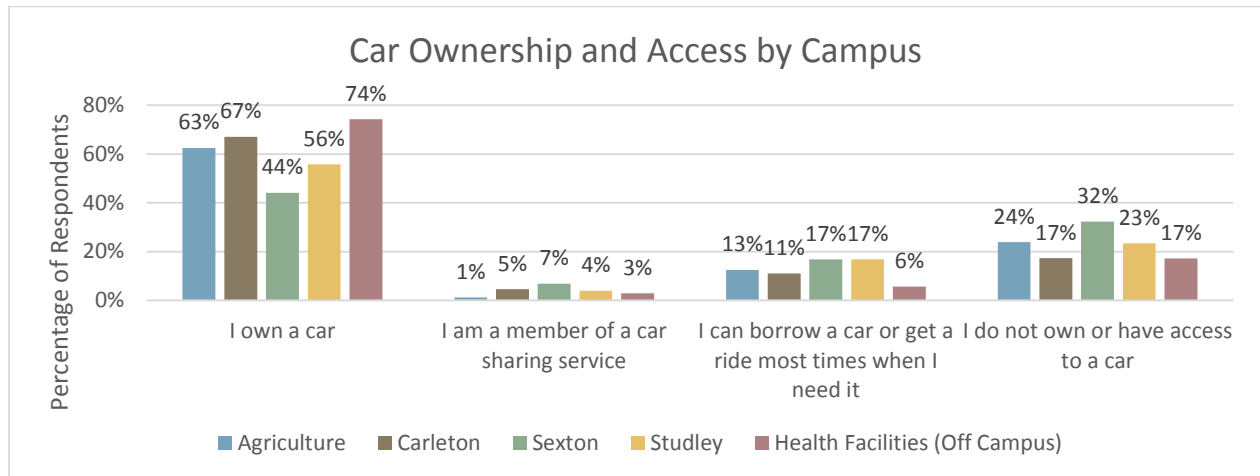


Figure 7-9: Car Ownership and Access by Campus

7.3 Bicycle Ownership and Access by Campus

Similar to car ownership, more respondents (58%) from Carleton campus own a bicycle than any other campus (Figure 7-10). Sexton campus respondents have the lowest percentage of ownership (39%).

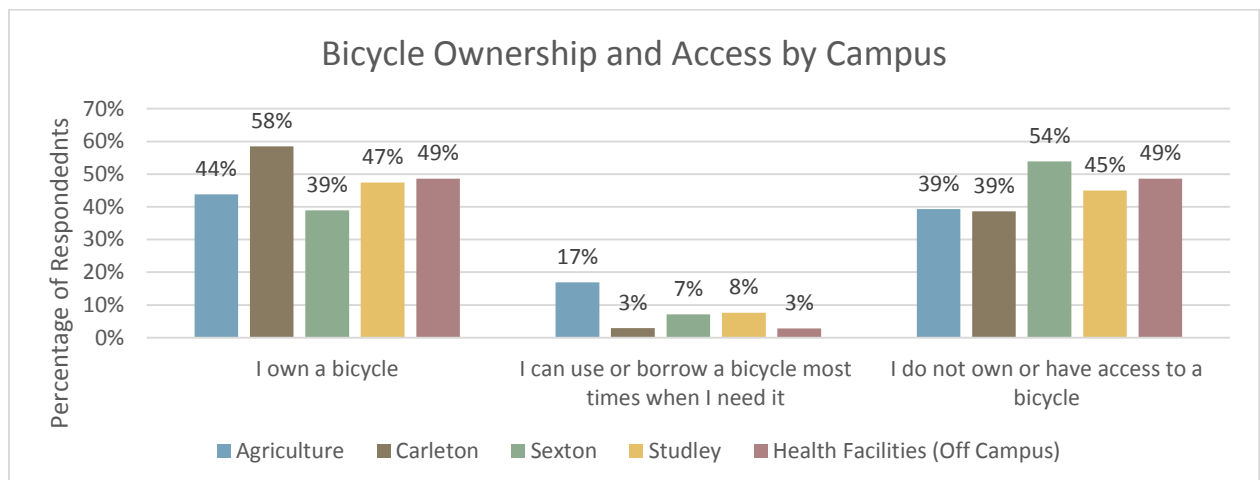


Figure 7-10: Bicycle Ownership and Access by Campus

7.4 Macdonald Bridge Use

The Macdonald Bridge is one of the two bridges that crosses the Halifax harbour. In 2015, the Halifax Harbour Bridge Commission began the Big Lift project to replace the bridge decks on the Macdonald Bridge. To replace the deck pieces the bridge has to close to all traffic between the hours of 7pm and 5:30am on weeknights and both Saturday and Sunday most weekends. In the 2015 Sustainability Survey five questions were asked regarding the impacts and experiences of the Macdonald Bridge closures.

The first bridge question asked respondents to explain how bridge closures have affected their work, study, family, and social life. Approximately 32% of respondents answered this question, with the most common responses being reported in Figure 7-11.

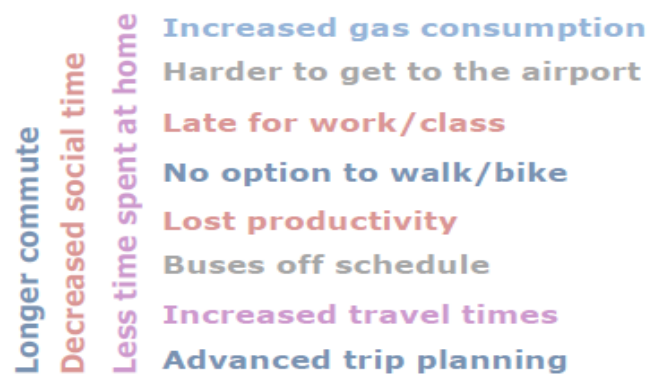


Figure 7-11: Bridge Closure Effects on Work, Study, Family and Social Life

Of those people that use the Macdonald Bridge on a regular basis and are affected by the closures, 62% reported that the Macdonald Bridge closures have been as expected (Figure 7-12). Approximately 26% of respondents state it has been worse than expected and 12% report it has been better than expected.

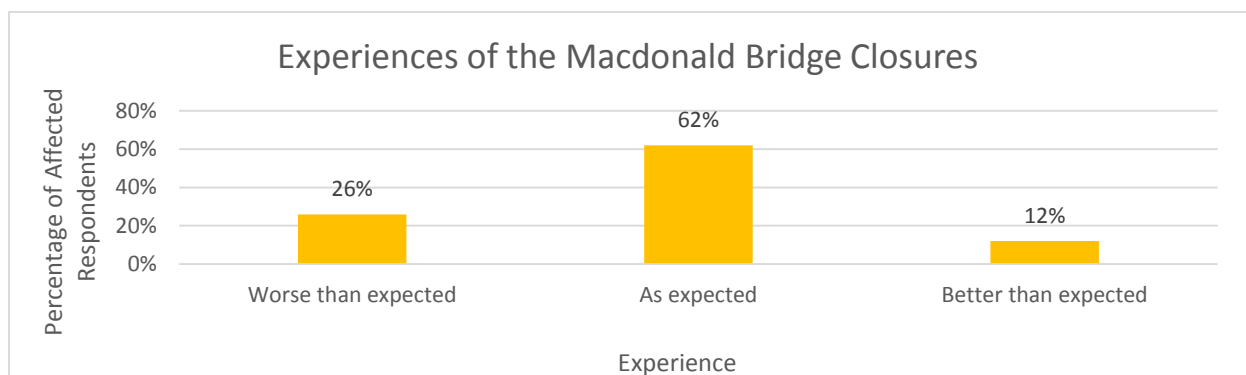


Figure 7-12: Experiences of the Macdonald Bridge Closures

7.5 Distance between Respondent Homes and Campuses

7.5.1 Agriculture Campus

Approximately 59% of Agriculture campus respondents lived within 5km of campus, with 39% living within 2km (Figure 7-13). These respondents could use active transportation to commute to campus on a regular basis. However, 9% of respondents live greater than 75km away from campus showing a continued need for vehicles.

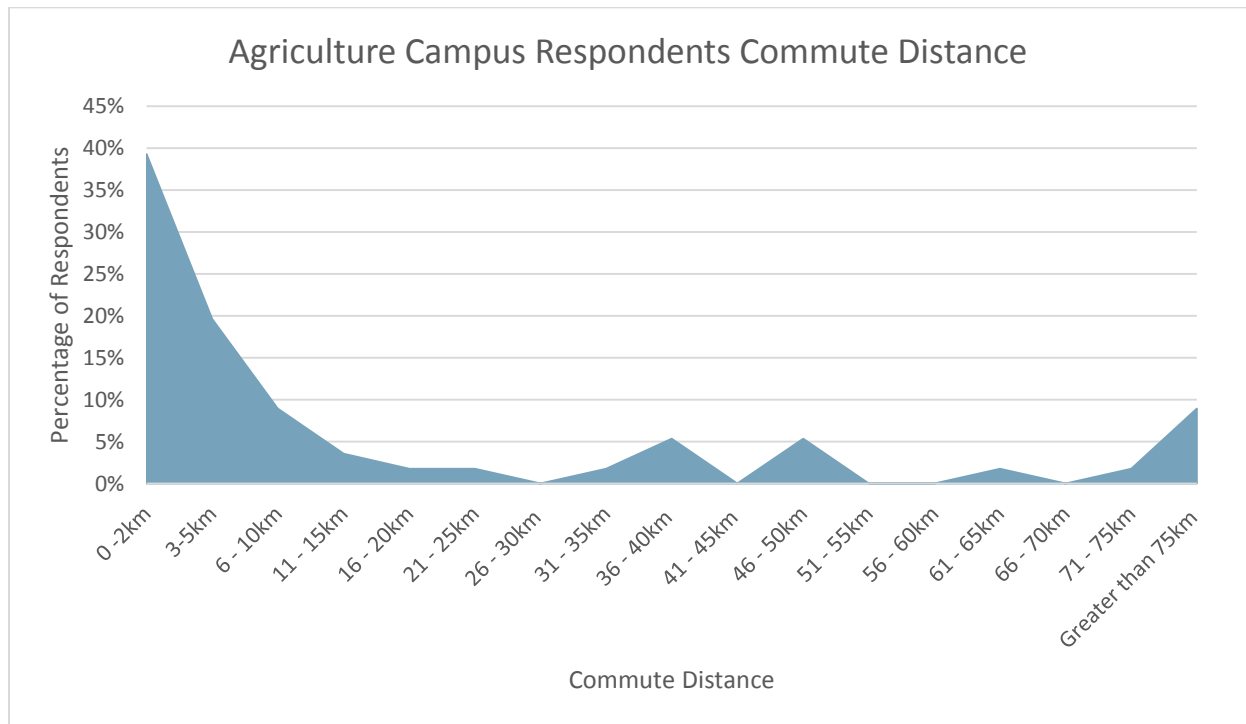


Figure 7-13: Commute Distance of Agriculture Campus Respondents

7.5.2 Carleton Campus

As shown in Figure 7-14, 85% of Carleton campus respondents live within 20km of campus. Similar to the Agriculture campus, 54% of respondents lived within 5km of campus and 36% lived within 2km.

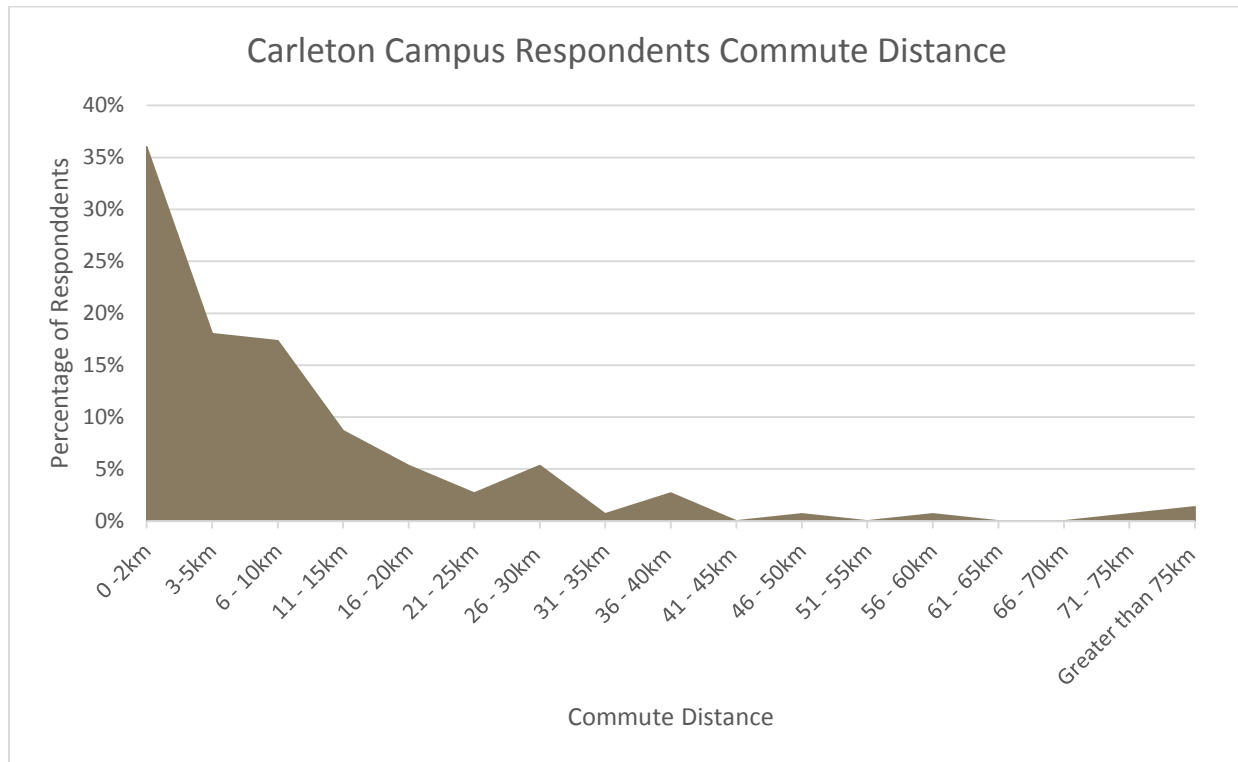


Figure 7-14: Commute Distance of Carleton Campus Respondents

7.5.3 Sexton Campus

Compared to all Dalhousie campuses, Sexton campus respondents tend to live closest to campus. Almost half (49%) of Sexton campus respondents lived within 2km of the campus, with 86% living within 10km (Figure 7-15).

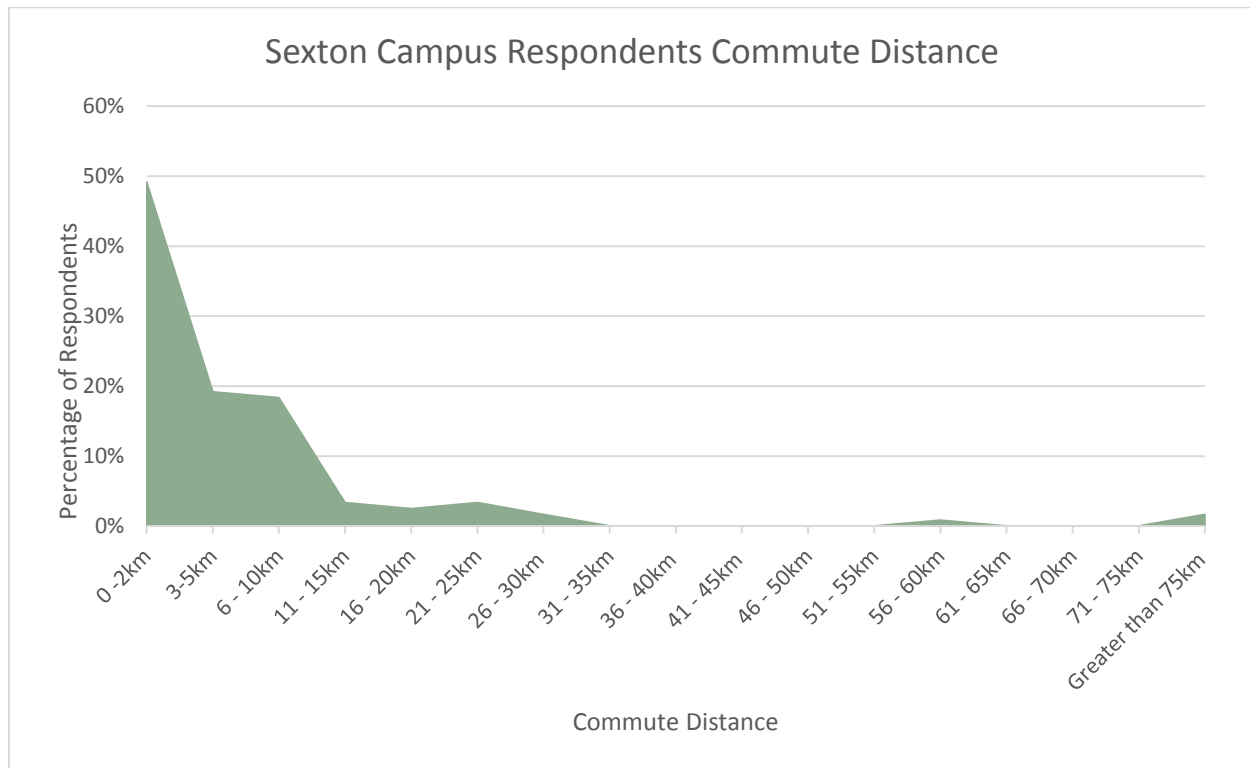


Figure 7-15: Commute Distance of Sexton Campus Respondents

7.5.4 Studley Campus

Studley campus had the second highest percentage of respondents living within 2km of campus with 45% (Figure 7-16). Approximately 74% of Studley respondents lived within 10km of campus. Only 1% of respondents lived over 75km away from campus.

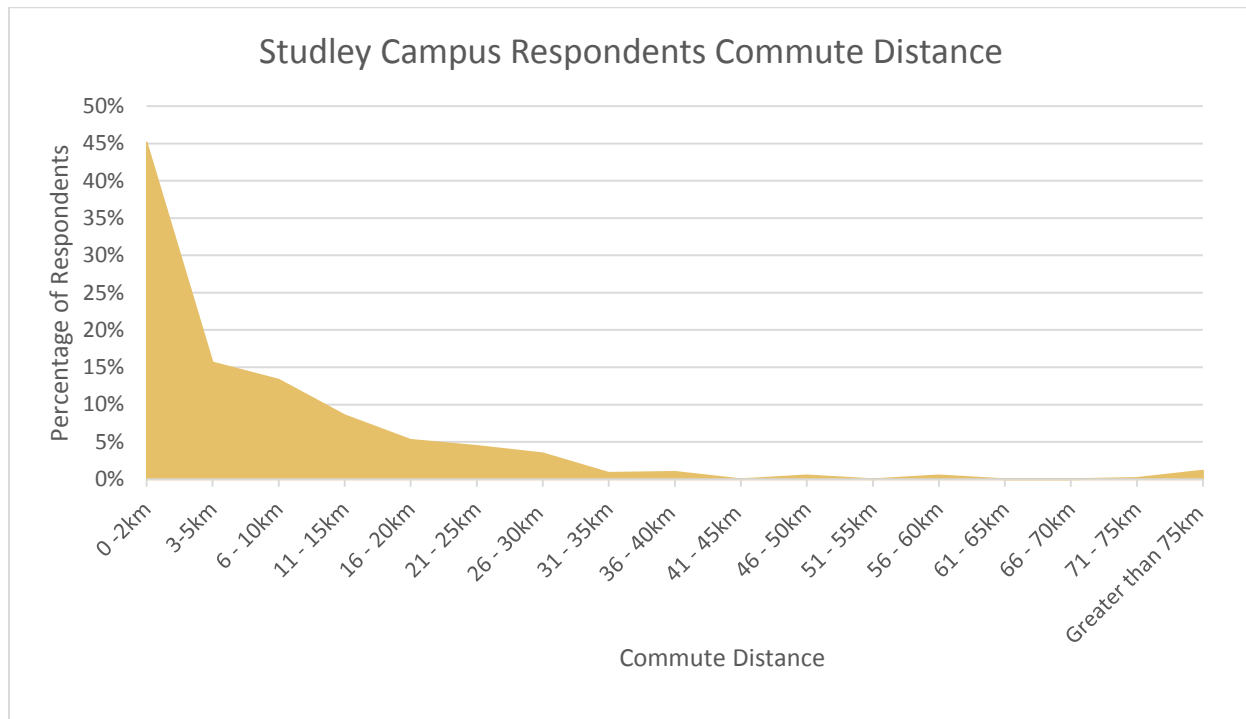


Figure 7-16: Commute Distance of Studley Campus Respondents

8. COMPARISON BY YEAR (2009 - 2015)

8.1 Modal Split Comparison

8.1.1 Comparison of Primary Mode

The order of primary commute mode to Dalhousie campuses has stayed relatively the same since 2011. Over the last five years the order (from most used to least used) has been being walk, automobile drive, public transit, automobile passenger and bicycle (Figure 8-1). Since 2011, walking has increased from 30% to 35% as primary mode to commute.

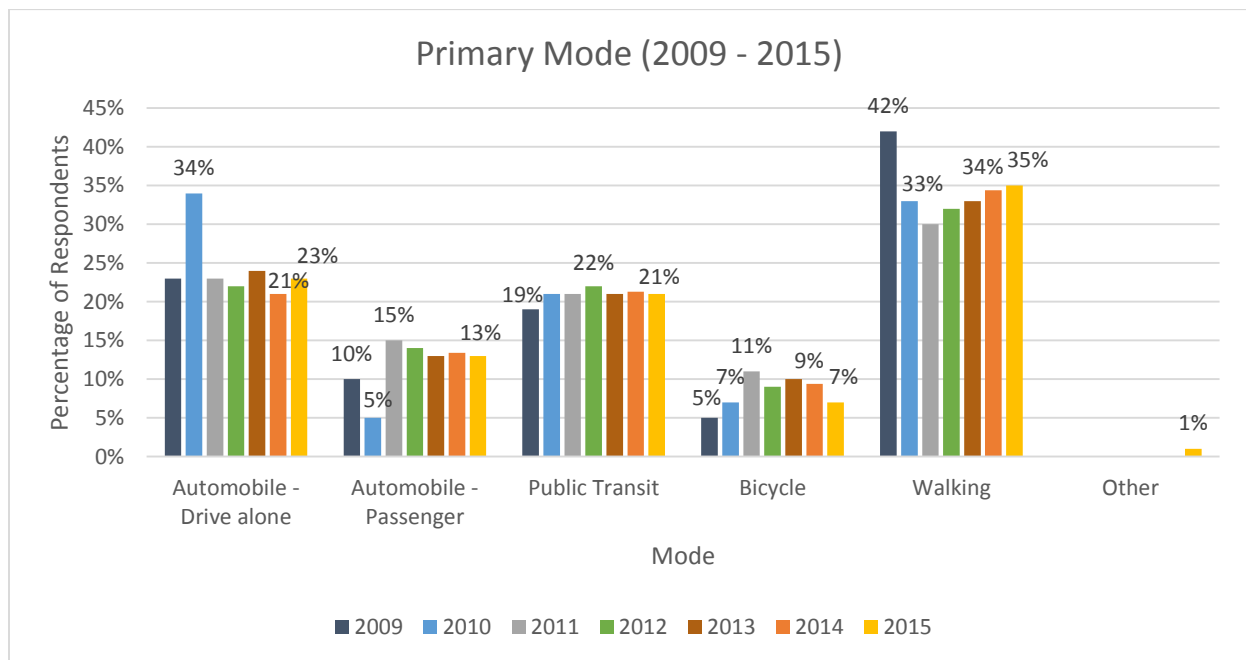


Figure 8-1: Primary Mode (2009 - 2015)

As seen in Figure 8-2, students continue to use walking as their primary mode of commute, followed by public transit.

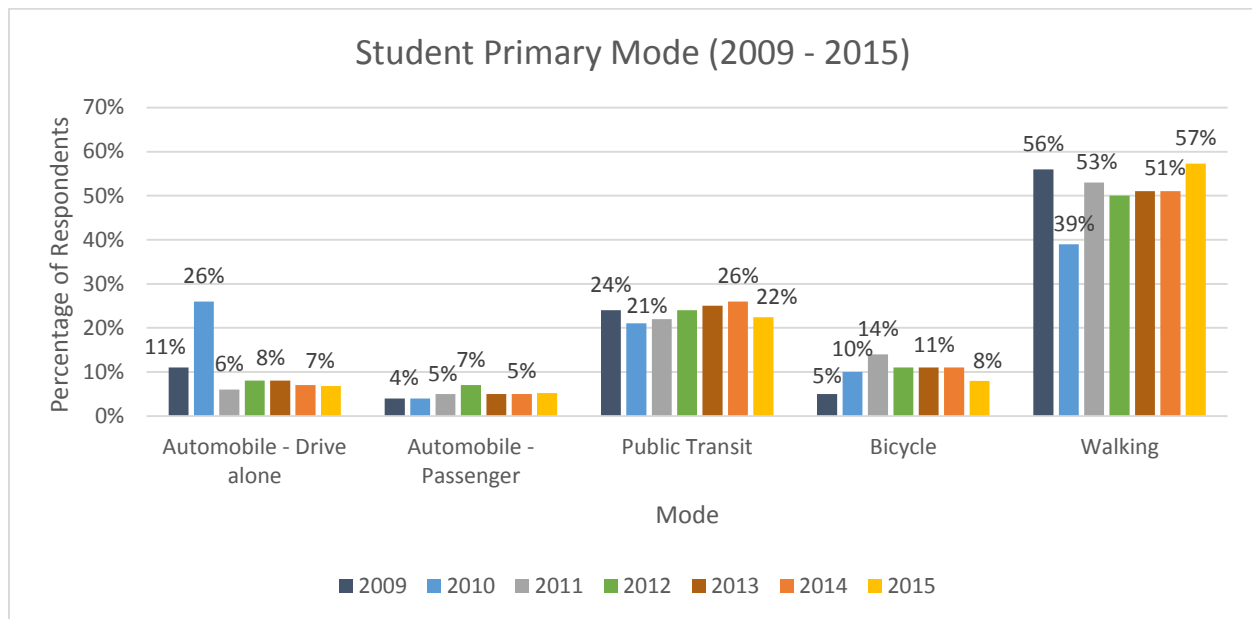


Figure 8-2: Primary Mode of Students (2009 - 2015)

When combining responses from faculty and staff since 2009, the primary mode of commute is automobile drive alone (Figure 8-3). The 2015 survey respondents showed a 3% increase in public transit use to commute since 2013.

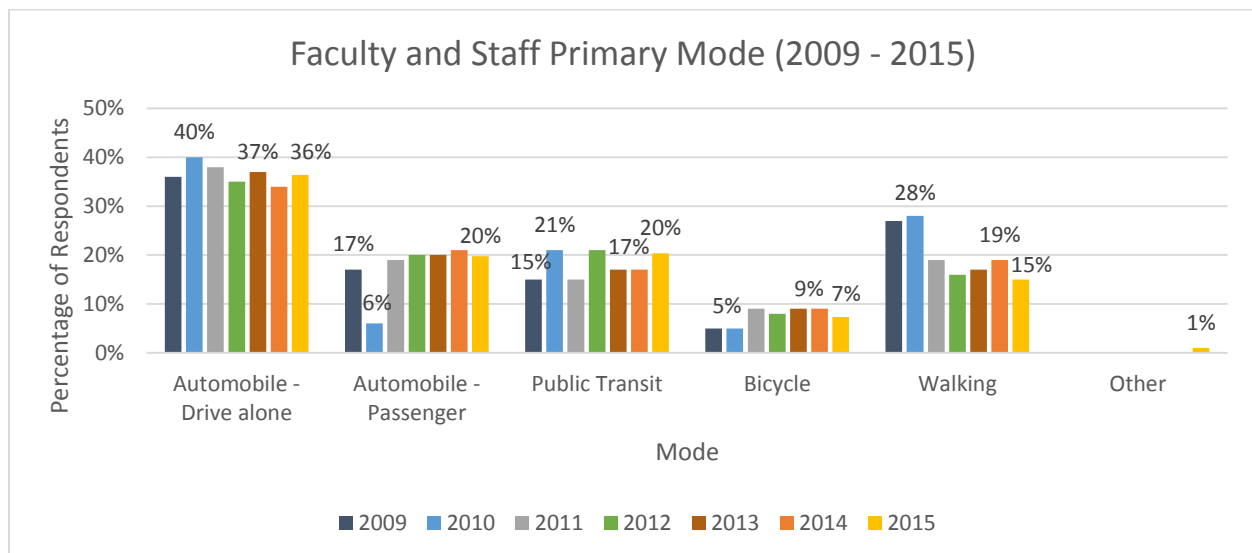


Figure 8-3: Primary Mode of Faculty and Staff (2009 - 2015)

8.1.2 Comparison of Secondary Mode

The general trends seen in Figure 8-4 of the secondary mode of all respondents from 2009 - 2015 are that respondents have slightly increased (4%) in use of automobiles (drive alone and passenger) for their secondary mode in the last two years. Public transit and active transportation use for secondary mode has seen a slight decrease due to this.

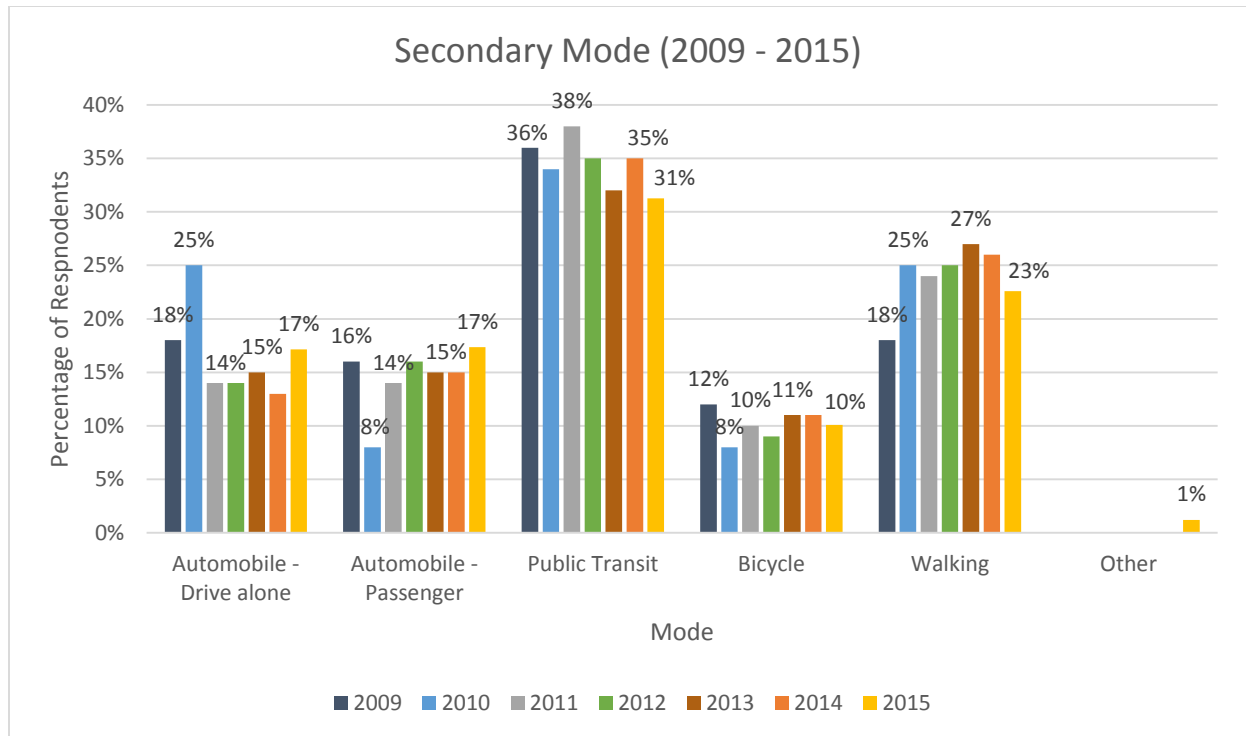


Figure 8-4: Secondary Mode (2009 - 2015)

Comparing student's secondary mode in Figure 8-5, suggests that more students (4%) are choosing to commute by automobile passenger, which includes carpooling. There is also a 1% increase in cycling as secondary mode.

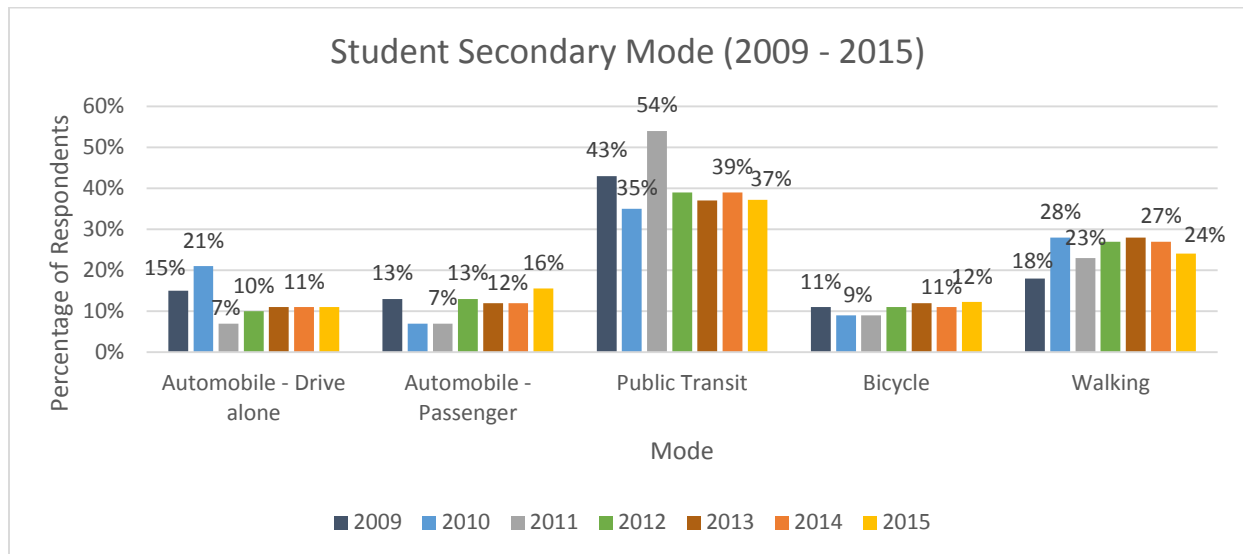


Figure 8-5: Secondary Mode of Students (2009 - 2015)

Similar to the primary mode comparison of faculty and staff, the secondary mode comparison shows an increase in automobile reliance (both drive alone and passenger). Figure 8-6 also shows a decrease in transit use and active transportation as secondary mode for faculty and staff.

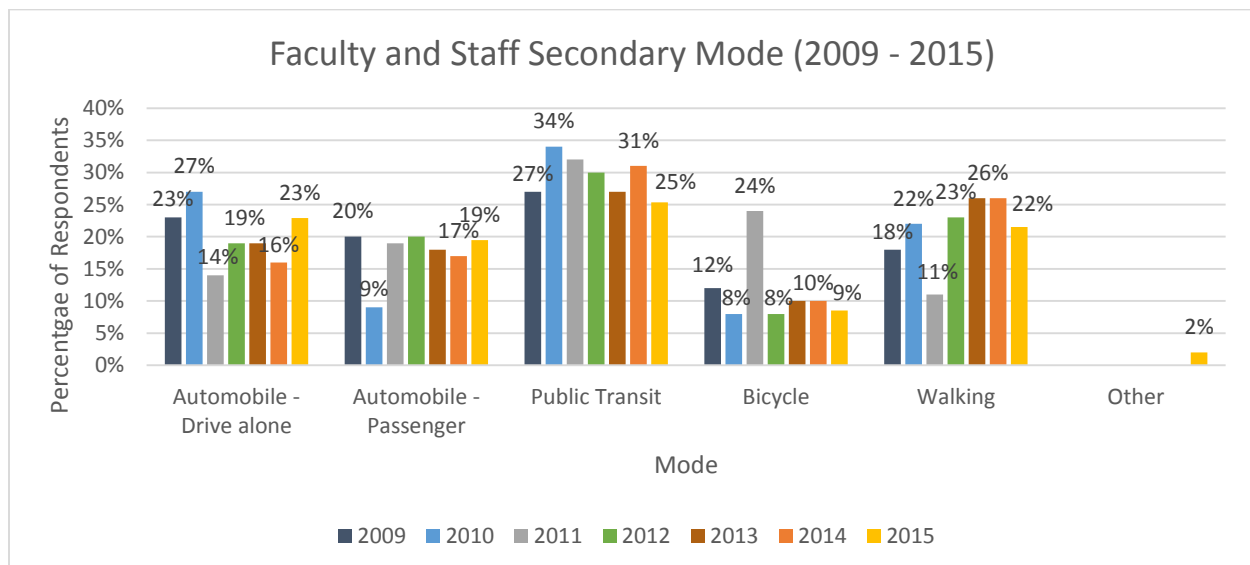


Figure 8-6: Secondary Mode of Faculty and Staff (2009 - 2015)

8.1.3 Comparison of Combined Modes

Figure 8-7 compares the combined commute mode of the Halifax campuses since 2009. Since 2009, automobile drive alone use has decreased by 3%. Public transit use and bicycle use for commute have both increased since 2009 (4% and 2% respectively).

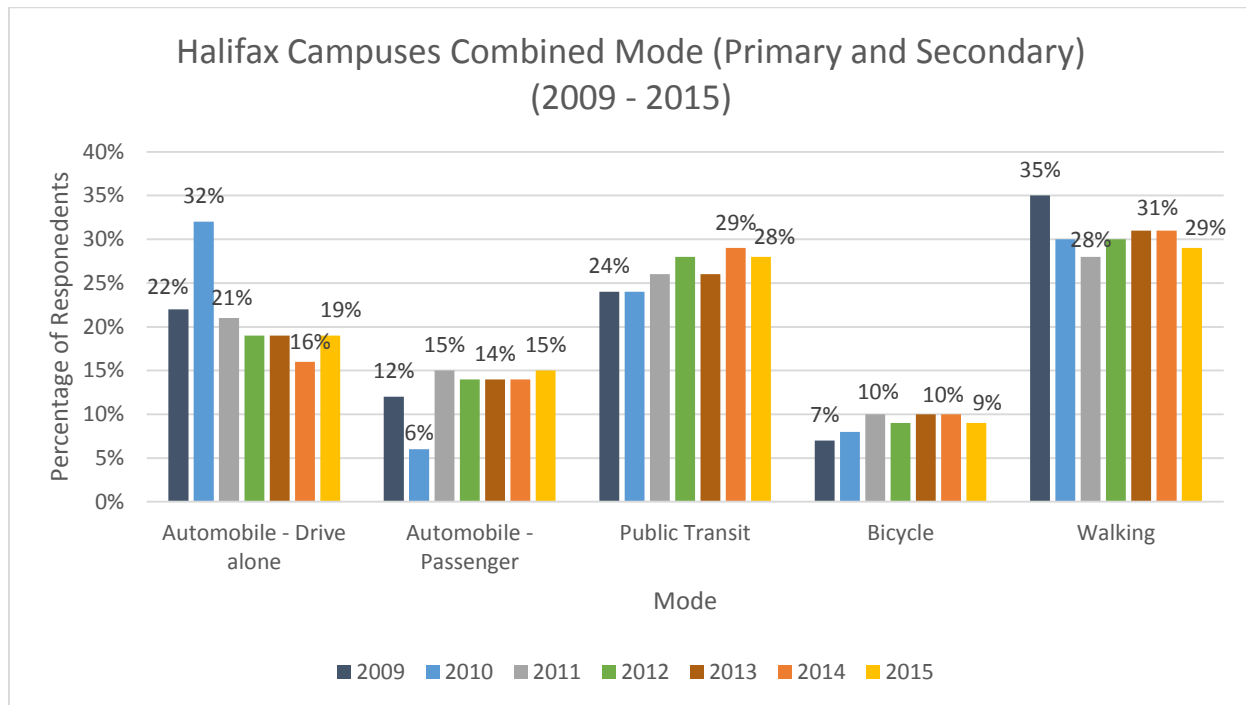


Figure 8-7: Halifax Campuses Combined Mode of all Commuters (2009 - 2015)

When comparing the Agriculture campuses combined (primary and secondary) mode, there has been a significant increase (10%) in walking as a commute mode in the last year (Figure 8-8). There is also a noticeable difference in the percentage of respondents using automobile drive alone as their commute mode, as it has decreased by (8%) in the last year and (16%) since 2013.

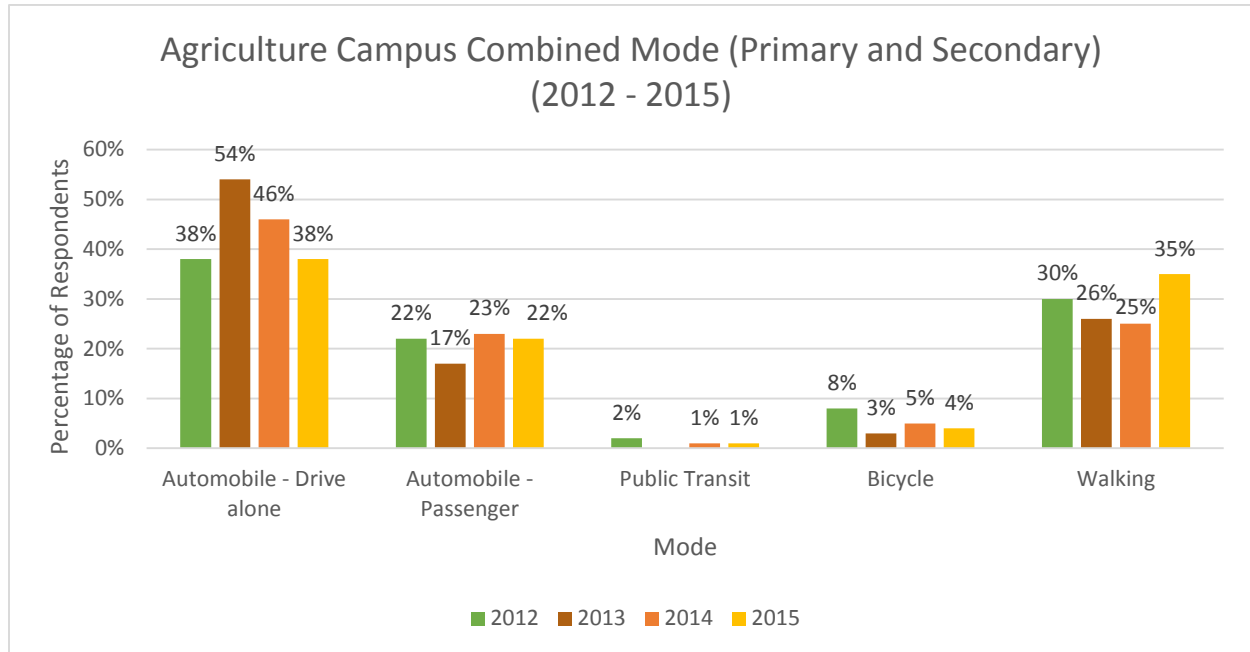


Figure 8-8: Agriculture Campus Combined Mode of all Commuters (2012 - 2015)

8.2 Travel Time

Figure 8-9 shows the commute time of Dalhousie respondents since 2009. Significant changes can be seen since 2009, with over half (56%) of Dalhousie University respondents spending less than 20 minutes commuting in 2015. Now only 4% of respondents commute for over an hour to campus compared to 9% in 2012.

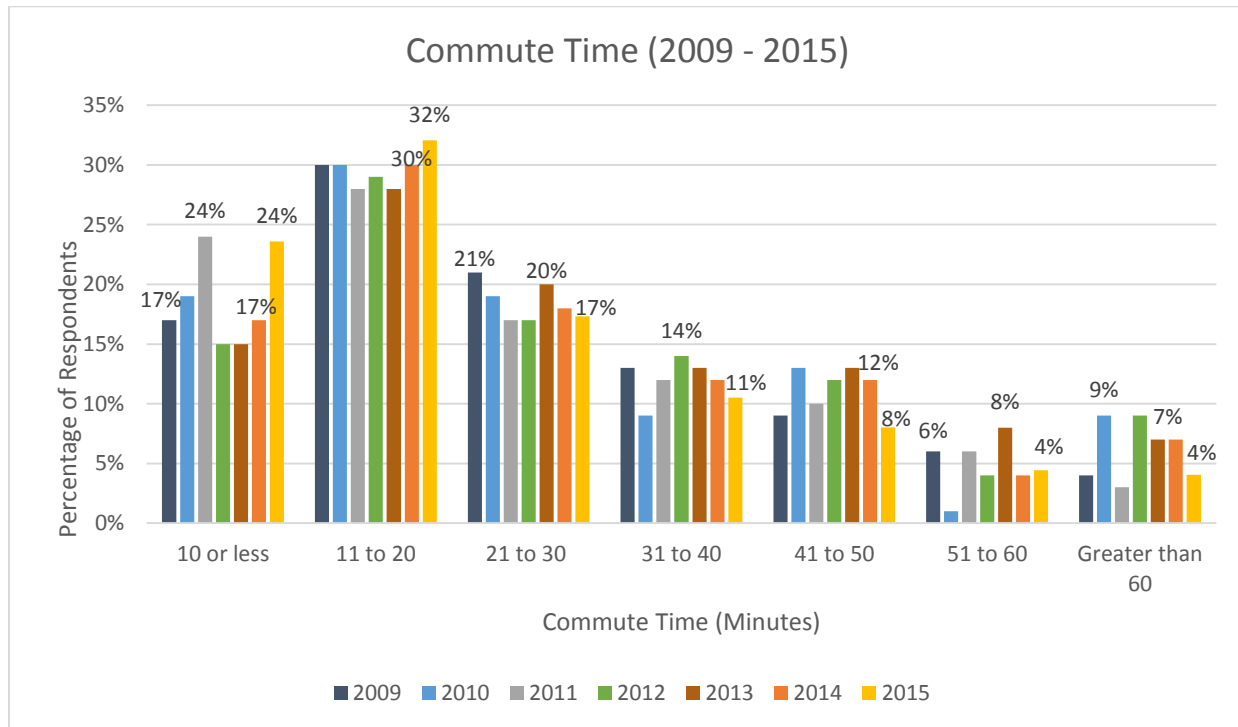


Figure 8-9: Commute Time (2009 - 2015)

8.3 Commuting Distance

As shown in Figure 8-10, the average commute distance has decreased since 2014 for all respondent groups. Staff and faculty's commute time has increased since 2011, and students has decreased. Staff has the greatest average commute distance compared to students and faculty over time.

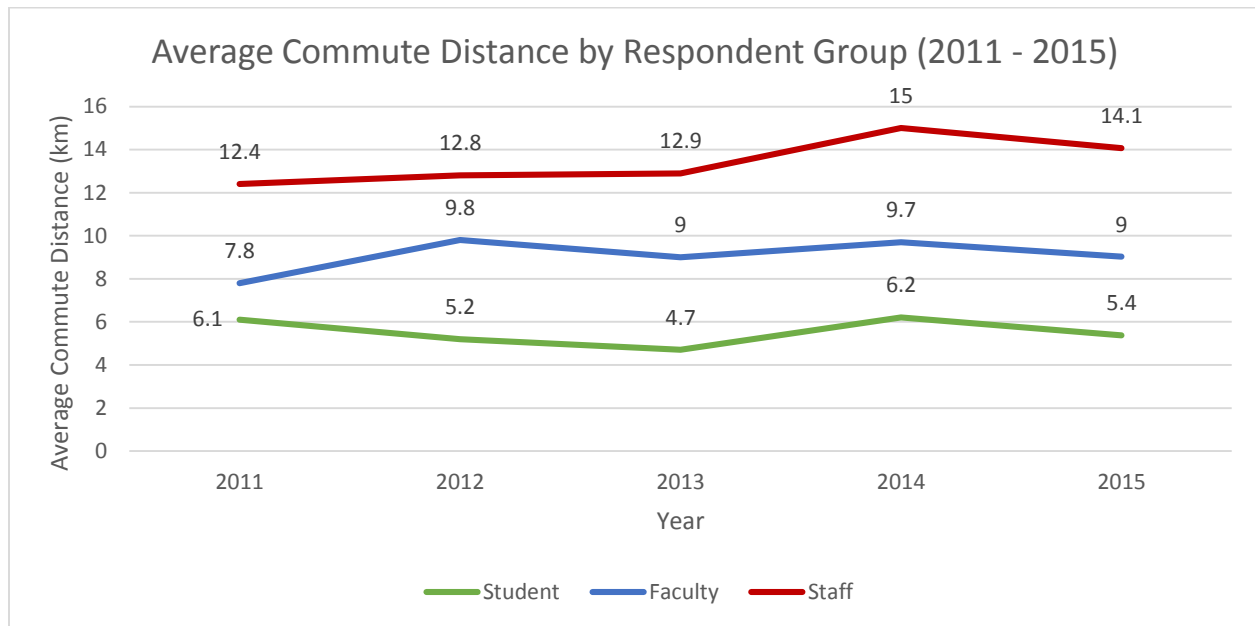


Figure 8-10: Average Commute Distance by Respondent Group (2011 - 2015)

9. RECOMMENDATIONS FOR THE 2016 SURVEY

The following recommendations should be considered when preparing the 2016 Sustainability Survey.

1. The carpooling question (Q11) “If your primary mode is ‘automobile – passenger’ do you carpool?” should have an option “Yes – Informal carpooling with members of my household”. Many comments suggest that people may not always be able to carpool with coworkers or friends but they commute with members of their household, instead of each member taking a separate vehicle. Adding a response to Q8 and Q9 “What is your primary/secondary mode of transportation?” such as “Automobile – drive with passengers” may also solve this issue.
2. Add a survey question, similar to the 2012 survey, which asks if the respondents take more than one mode of transportation to commute to Dalhousie campuses. This would help gauge the percentage of respondents who use park and ride, bus and bike, ferry and bike, etc.
3. Update the Macdonald Bridge related questions and possibly include questions to gauge changes in bicycle ridership and seasonality, if the University Avenue Protected Bike Lane Pilot Project has been implemented. Make the responses easier to analyse by using set responses instead of making them text box responses.
4. In Q17, “What time did you leave campus?” there is a peak period around 5am. This could be due to respondents not understanding that their responses should have been in 24 hour format. Next year make the time a drop down menu so that there is no confusion in what time should be selected.
5. Lastly, if Q14 “Do you use a different primary commute mode this year?” is being asked there should be a secondary question “If yes, what was your primary commute mode previously? and Why did it change?”

10. CONCLUSION

The purpose of this report is to analyse the universities travel information provided through the 2015 Sustainability Survey and compare the results to previously conducted surveys. Table 10-1 reports the general summary of the 2015 survey, showing that primary mode for commute is walking and automobile drive alone and secondary commute mode is public transit and walking. From the 2015 survey, over half (52%) of respondents live within 5km of campus and 56% of respondents are interested in carpool initiatives.

Since 2012, Agriculture campus respondents have decreased automobile drive alone dependence and increased walking as commute mode. However, in general, faculty and staff respondents have remained automobile dependent. Travel between campuses is not frequent, but most people walk when traveling between Halifax campuses and drive alone between Agriculture and Halifax campuses. Travel time of all respondents has decreased, however average commute distance has increased since 2011.

Table 10-1: General Summary of the 2015 Survey

	Most Common Response	Second Most Common Response
Primary Mode	Walking	Automobile – Drive Alone
Secondary Mode	Public Transit	Walking
Do you carpool?	70% No	30% Yes
Do you own a car?	57% Yes	23% No
Do you own a bike?	48% Yes	45% No
Parking Location	Dalhousie Lots	Free On-street
Parking Permit	General Annual	Reserved Annual
Intercampus Frequency	Never	Rarely
Intercampus Travel Mode	Walking	Automobile – Drive Alone

Acknowledgements

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Appendix

A. Code Book for 2015 Survey

Question #	Description	Codes	
	I hereby agree that I have read and understood these instructions. I also have the knowledge that I am free to withdraw from the survey at any time without penalty	Answers	
		I agree	1
		I do not agree	2
8	What is your primary mode of transportation (70% of the time or more) for your daily commute to campus throughout the year?	Question ID	PRIMODE
		Answers	
		Automobile – Drive Alone	1
		Automobile – Passenger (including carpooling)	2
		Public transit (including ferry services)	3
		Bicycle	4
		Walking	5
		Skateboard/Longboard	6
		Other (e.g. Motorcycle, Electric Scooter)	7
9	What is your secondary mode of transportation (less than 30% of the time) for your daily commute to campus?	Question ID	SECMODE
		Answers	
		Not applicable – always use the primary mode	1
		Automobile – Drive Alone	2
		Automobile – Passenger (including carpooling)	3
		Public transit (including ferry services)	4
		Van pool	5
		Bicycle	6
		Walking	7
		Skateboard/Longboard	8
		Other (e.g. Motorcycle, Electric Scooter)	9
10	If you commute by cycling, in primary or secondary mode, what season do you cycle in? (Choose all that apply)	Question ID	SEASBIKE
		Answers	
		Spring	1
		Summer	2
		Fall	3
		Winter	4
		Not applicable	5
11	If your primary mode is “Automobile – Passenger”, do you carpool?	Question ID	DOCARPL
		Answers	
		Yes	1
		No	2
		Not applicable	3

12	If your primary mode is Automobile (Drive Alone or Passenger), where do you generally park your car?	Question ID	WHEREPARK
		Answers	
		Dalhousie Lots	1
		Metered Parking	2
		On-street Free Parking	3
		HRM Carpool Locations	4
		Residential Driveway	5
		Not applicable	6
		Other	7
13	What kind of Dalhousie parking permit did you purchase this year?	Question ID	PERMTYPE
		Answers	
		Reserved Annual	1
		General Annual	2
		Term	3
		Temporary (Daily or Weekly)	4
		Did not purchase any permit	5
		Not applicable	6
14	Do you use a different primary commute mode this year (in comparison to your primary commute mode in 2014-2015)?	Question ID	PRIMODECH
		Answers	
		Yes	1
		No	2
15	How many minutes, on average, does it take to get from your home to Dalhousie when you use your primary mode of transportation?	Question ID	AVGTMCOM
		Answers	
		10 or less	1
		11-20	2
		21-30	3
		31-40	4
		41-50	5
		51-60	6
16	At what time, on average, do you arrive at Dalhousie?	Question ID	TMARRIVE
		Answers	
		01:00	1
		02:00	2
		03:00	3
		04:00	4
		05:00	5
		06:00	6
		07:00	7
		08:00	8
		09:00	9
		10:00	10
		11:00	11
		12:00	12
		13:00	13
		14:00	14
		15:00	15
		16:00	16
		17:00	17

		18:00	18
		19:00	19
		20:00	20
		21:00	21
		22:00	22
		23:00	23
		24:00	24
17	At what time, on average, do you leave Dalhousie?	Question ID	TMDEPART
		Answers	
		01:00	1
		02:00	2
		03:00	3
		04:00	4
		05:00	5
		06:00	6
		07:00	7
		08:00	8
		09:00	9
		10:00	10
		11:00	11
		12:00	12
		13:00	13
		14:00	14
		15:00	15
		16:00	16
		17:00	17
		18:00	18
		19:00	19
		20:00	20
		21:00	21
		22:00	22
		23:00	23
		24:00	24
18	If you drive alone, would you be interested in a carpooling initiative?	Question ID	CARPLINI
		Answers	
		Yes – with my friends	1
		Yes – with my co-worker	2
		Yes - with anyone	3
		No	4
		Not applicable	5
20	How often do you travel between the Halifax campuses? (Carleton, Sexton and Studley)	Question ID	INCAMFR
		Answers	
		Daily	1
		3 – 4 times a week	2
		1 – 2 times a week	3
		A few times a month	4
		Once a month	5
		A few times a year	6
		Never	7
21	What is your primary means of travel between Halifax campuses?	Question ID	INCAMMODE
		Answers	

		Walking	1
		Bicycle	2
		Bus	3
		Private Car	4
		Taxi	5
		Dalhousie Tiger Patrol Van	6
		Not applicable	7
		Other	8
22	How often do you travel between the Halifax and Agricultural campuses?	Question ID	AHCAMFR
		Answers	
		Daily	1
		1 -2 times a week	2
		A few times a month	3
		Once a month	4
		A few times a year	5
		Rarely	6
		Never	7
23	What is your primary means of travel between the Halifax and Agricultural campuses?	Question ID	AHCAMMODE
		Answers	
		Bus	1
		Carpool	2
		Drive alone	3
		Not applicable	4
24	Are you aware of the Share the Road – Thumbs Up! Campaign, which is running at Dalhousie?	Question ID	STRCMPG
		Answers	
		Yes	1
		No	2
25	How important is sharing the road to you?	Question ID	IMPSTR
		Answers	
		Not important	1
		Somewhat important	2
		Important	3
		Very important	4
		Not sure	5
27	Do you own or have access to a car? (Choose all that apply)	Question ID	ACCVEH
		Answers	
		I own a car	1
		I am a member of a car sharing service	2
		I can borrow a car or get a ride most times I need it	3
		I do not own or have access to a car	4
28	Do you own or have access to a bicycle? (Choose all that apply)	Question ID	ACCBKE
		Answers	
		I own a bicycle	1
		I can use or borrow a bicycle most times I need it	2

		I do not own or have access to a bicycle	3																			
29	How much on average (in Canadian dollars) do you spend out-of-pocket on a monthly basis for transportation purposes (for gas, parking, etc.)?	<table border="1"> <tr> <th>Question ID</th> <th>SPNDTRANS</th> </tr> <tr> <th colspan="2">Answers</th> </tr> <tr> <td>\$0 - \$50</td> <td>1</td> </tr> <tr> <td>\$51 - \$100</td> <td>2</td> </tr> <tr> <td>\$101 - \$150</td> <td>3</td> </tr> <tr> <td>\$151 - \$200</td> <td>4</td> </tr> <tr> <td>\$201 - \$250</td> <td>5</td> </tr> <tr> <td>Above \$250</td> <td>6</td> </tr> </table>	Question ID	SPNDTRANS	Answers		\$0 - \$50	1	\$51 - \$100	2	\$101 - \$150	3	\$151 - \$200	4	\$201 - \$250	5	Above \$250	6				
Question ID	SPNDTRANS																					
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32	Now that the Bridge closures have been going on for eight months, how have your experiences of the Bridge closures been?	<table border="1"> <tr> <th>Question ID</th> <th>EXPBRIDGE</th> </tr> <tr> <th colspan="2">Answers</th> </tr> <tr> <td>Worse than expected</td> <td>1</td> </tr> <tr> <td>As expected</td> <td>2</td> </tr> <tr> <td>Better than expected</td> <td>3</td> </tr> <tr> <td>Unsure, I just moved to Halifax</td> <td>4</td> </tr> <tr> <td>Not applicable</td> <td>5</td> </tr> </table>	Question ID	EXPBRIDGE	Answers		Worse than expected	1	As expected	2	Better than expected	3	Unsure, I just moved to Halifax	4	Not applicable	5						
Question ID	EXPBRIDGE																					
Answers																						
Worse than expected	1																					
As expected	2																					
Better than expected	3																					
Unsure, I just moved to Halifax	4																					
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34	How have you learned about the Bridge closures? (Choose all that apply)	<table border="1"> <tr> <th>Question ID</th> <th>LRNBIDGE</th> </tr> <tr> <th colspan="2">Answers</th> </tr> <tr> <td>Local Radio</td> <td>1</td> </tr> <tr> <td>Local TV</td> <td>2</td> </tr> <tr> <td>Newspaper notices</td> <td>3</td> </tr> <tr> <td>Social media (e.g. Facebook, Twitter, etc.)</td> <td>4</td> </tr> <tr> <td>Email</td> <td>5</td> </tr> <tr> <td>Internet</td> <td>6</td> </tr> <tr> <td>Word of mouth</td> <td>7</td> </tr> <tr> <td>I have not learned about the status of the bridge closures</td> <td>8</td> </tr> </table>	Question ID	LRNBIDGE	Answers		Local Radio	1	Local TV	2	Newspaper notices	3	Social media (e.g. Facebook, Twitter, etc.)	4	Email	5	Internet	6	Word of mouth	7	I have not learned about the status of the bridge closures	8
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35	What is your age?	<table border="1"> <tr> <th>Question ID</th> <th>AGE</th> </tr> <tr> <th colspan="2">Answers</th> </tr> <tr> <td>15 – 19</td> <td>1</td> </tr> <tr> <td>20 – 24</td> <td>2</td> </tr> <tr> <td>25 – 34</td> <td>3</td> </tr> <tr> <td>35 – 44</td> <td>4</td> </tr> <tr> <td>45 – 54</td> <td>5</td> </tr> <tr> <td>55 – 64</td> <td>6</td> </tr> <tr> <td>65 and above</td> <td>7</td> </tr> </table>	Question ID	AGE	Answers		15 – 19	1	20 – 24	2	25 – 34	3	35 – 44	4	45 – 54	5	55 – 64	6	65 and above	7		
Question ID	AGE																					
Answers																						
15 – 19	1																					
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36	What is your gender?	<table border="1"> <tr> <th>Question ID</th> <th>GENDER</th> </tr> <tr> <th colspan="2">Answers</th> </tr> <tr> <td>Female</td> <td>1</td> </tr> <tr> <td>Male</td> <td>2</td> </tr> <tr> <td>Trans</td> <td>3</td> </tr> <tr> <td>Prefer not to say</td> <td>4</td> </tr> </table>	Question ID	GENDER	Answers		Female	1	Male	2	Trans	3	Prefer not to say	4								
Question ID	GENDER																					
Answers																						
Female	1																					
Male	2																					
Trans	3																					
Prefer not to say	4																					
37	What is your annual household income?	<table border="1"> <tr> <th>Question ID</th> <th>INCOME</th> </tr> <tr> <th colspan="2">Answers</th> </tr> <tr> <td>Less than \$19,999</td> <td>1</td> </tr> <tr> <td>\$20,000 - \$39,999</td> <td>2</td> </tr> </table>	Question ID	INCOME	Answers		Less than \$19,999	1	\$20,000 - \$39,999	2												
Question ID	INCOME																					
Answers																						
Less than \$19,999	1																					
\$20,000 - \$39,999	2																					

		\$40,000 - \$59,000	3
		\$60,000 - \$79,000	4
		\$80,000 - \$99,999	5
		\$100,000 and above	6
		Prefer not to say	7
38	What is the postal code of your local residence (i.e. the NS address from which you commute daily to Dalhousie)?		
39	What is your primary campus?	Question ID	PRICAM
		Answers	
		Studley	1
		Carleton	2
		Sexton	3
		Agriculture	4
		Health Facilities (off campus)	5
40	Which of these groups do you currently belong to?	Question ID	RESPGRP
		Answers	
		Students	1
		Faculty	2
		Staff	3
41	Are you a full-time or part-time staff, faculty, or student?	Question ID	FTPT
		Answers	
		Full-time	1
		Part-time	2

B. Summary of 2015 Survey Data

Summary of Travel Behaviour for the Dalhousie Sustainability Survey 2015				
Code				
PRIMODE	Long Name	Primary Mode		
	Description	What is your primary mode of transportation (70% of the time or more) for your daily commute to campus throughout the year?		
			2015	
			n	%
	1	Automobile – Drive Alone	271	22.72%
	2	Automobile – Passenger (including carpooling)	158	13.24%
	3	Public transit (including ferry services)	249	20.87%
	4	Bicycle	89	7.46%
	5	Walking	416	34.8%
	6	Skateboard/Longboard	2	0.17%
	7	Other (e.g. Motorcycle, Electric Scooter)	8	0.67%
		Total	1193	100.00
SECMODE	Long Name	Secondary Mode		
	Description	What is your secondary mode of transportation (less than 30% of the time) for your daily commute to campus?		
			2015	
			n	%
	1	Not applicable – always use the primary mode	200	16.79%
	2	Automobile – Drive Alone	170	14.27%
	3	Automobile – Passenger (including carpooling)	172	14.44%
	4	Public transit (including ferry services)	310	26.03%
	5	Van pool	2	0.17%
	6	Bicycle	100	8.40%
	7	Walking	224	18.81%
	8	Skateboard/Longboard	1	0.08%
	9	Other (e.g. Motorcycle, Electric Scooter)	12	1.01%
		Total	1191	100.00
SEASBIKE	Long Name	Bicycle Season		
	Description	If you commute by cycling, in primary or secondary mode, what season do you cycle in? (Choose all that apply)		
			2015	
			n	%
	1	Spring	201	13.48%
	2	Summer	234	15.69%
	3	Fall	202	13.55%
	4	Winter	50	3.35%
	5	Not applicable	804	53.92%
		Total	1491	

DOCARPL	Long Name	Do you Carpool?		
	Description	If your primary mode is "Automobile – Passenger", do you carpool?		
			2015	
			n	%
	1 Yes		109	9.72%
	2 No		251	22.37%
	3 Not applicable		762	67.91%
		Total	1122	100.00
WHEREPARK	Long Name	Where do you park?		
	Description	If your primary mode is Automobile (Drive Alone or Passenger), where do you generally park your car?		
			2015	
			n	%
	1 Dalhousie Lots		312	27.34%
	2 Metered Parking		14	1.23%
	3 On-street Free Parking		78	6.84%
	4 HRM Carpool Locations		4	0.35%
	5 Residential Driveway		18	1.58%
	6 Not applicable		669	58.63%
	7 Other		46	4.03%
		Total	1141	100.00
PERMTYPE	Long Name	Permit Type		
	Description	What kind of Dalhousie parking permit did you purchase this year?		
			2015	
			n	%
	1 Reserved Annual		93	7.97%
	2 General Annual		236	20.26%
	3 Term		6	0.52%
	4 Temporary (Daily or Weekly)		5	0.43%
	5 Did not purchase any permit		270	23.18%
	6 Not applicable		555	47.64%
PRIMODECH		Total	1165	100.00
	Long Name	Did your primary mode change?		
	Description	Do you use a different primary commute mode this year (in comparison to your primary commute mode in 2014-2015)?		
			2015	
			n	%
	1 Yes		151	12.72%
AVGTMCOM	2 No		902	75.99%
	3 Not applicable (first year on campus)		134	11.29%
		Total	1187	100.00
AVGTMCOM	Long Name	Average commute time		
	Description	How many minutes, on average, does it take to get from your home to Dalhousie when you use your primary mode of transportation?		
			2015	

			n	%
	1	10 or less	256	23.59%
	2	11-20	348	32.07%
	3	21-30	188	17.33%
	4	31-40	114	10.51%
	5	41-50	87	8.02%
	6	51-60	48	4.42%
	7	Greater than 60	44	4.06%
		Total	1085	100.00
TMARRIVE	Long Name	Arrival time		
	Description	At what time, on average, do you arrive at Dalhousie?		
			2015	
			n	%
	1	01:00	4	0.35%
	2	02:00	0	0
	3	03:00	0	0
	4	04:00	0	0
	5	05:00	3	0.26%
	6	06:00	18	1.56%
	7	07:00	92	8.00%
	8	08:00	448	38.92%
	9	09:00	376	32.67%
	10	10:00	126	10.95%
	11	11:00	43	3.74%
	12	12:00	15	1.30%
	13	13:00	7	0.61%
	14	14:00	2	0.17%
	15	15:00	2	0.17%
	16	16:00	2	0.17%
	17	17:00	5	0.43%
	18	18:00	4	0.35%
	19	19:00	2	0.17%
	20	20:00	1	0.09%
	21	21:00	0	0
	22	22:00	0	0
	23	23:00	0	0
	24	24:00	1	0.09%
		Total	1151	100.00
TMDEPART	Long Name	Departure time		
	Description	At what time, on average, do you leave Dalhousie?		
			2015	
			n	%
	1	01:00	3	0.26%
	2	02:00	4	0.35%
	3	03:00	20	1.74%
	4	04:00	69	6.01%
	5	05:00	82	7.00%
	6	06:00	22	1.91%
	7	07:00	6	0.52%
	8	08:00	4	0.35%
	9	09:00	6	0.52%

	10	10:00	2	0.17%
	11	11:00	3	0.26%
	12	12:00	12	1.04%
	13	13:00	16	1.39%
	14	14:00	28	2.43%
	15	15:00	56	4.87%
	16	16:00	286	24.87%
	17	17:00	283	24.61%
	18	18:00	122	10.61%
	19	19:00	46	4.00%
	20	20:00	32	2.78%
	21	21:00	17	1.48%
	22	22:00	12	1.04%
	23	23:00	8	0.70%
	24	24:00	11	0.96%
	Total		1150	100.00
CARPLIN	Long Name	Car pool initiatives		
	Description	If you drive alone, would you be interested in a carpooling initiative?		
			2015	
			n	%
	1	Yes – with my friends	89	7.73%
	2	Yes – with my co-worker	49	4.26%
	3	Yes - with anyone	96	8.34%
	4	No	185	16.07%
	5	Not applicable	732	63.60%
	Total		1151	100.00
INCAMFR	Long Name	Intercampus Frequency		
	Description	How often do you travel between the Halifax campuses? (Carleton, Sexton and Studley)		
			2015	
			n	%
	1	Daily	100	8.56%
	2	3 – 4 times a week	73	6.25%
	3	1 – 2 times a week	118	10.10%
	4	A few times a month	182	15.59%
	5	Once a month	78	6.68%
	6	A few times a year	285	24.40%
	7	Never	332	28.42%
	Total		1168	100.00
INCAMMODE	Long Name	Intercampus mode		
	Description	What is your primary means of travel between Halifax campuses?		
			2015	
			n	%
	1	Walking	664	57.14%
	2	Bicycle	43	3.70%
	3	Bus	77	6.63%
	4	Private Car	53	4.56%
	5	Taxi	19	1.64%
	6	Dalhousie Tiger Patrol Van	1	0.09%
	7	Not applicable	296	25.47%

	8	Other	9	0.77%
	Total		1162	100.00
AHCAMFR	Long Name	Agriculture and Halifax frequency		
	Description	How often do you travel between the Halifax and Agricultural campuses?		
			2015	
			n	%
	1	Daily	2	0.18%
	2	1 -2 times a week	7	0.61%
	3	A few times a month	14	1.23%
	4	Once a month	18	1.58%
	5	A few times a year	97	8.49%
	6	Rarely	125	10.95%
	7	Never	879	76.97%
		Total	1142	100.00
AHCAMMODE	Long Name	Agriculture and Halifax mode		
	Description	What is your primary means of travel between the Halifax and Agricultural campuses?		
			2015	
			n	%
	1	Bus	24	2.12%
	2	Carpool	100	8.85%
	3	Drive alone	119	10.53%
	4	Not applicable	887	78.50%
		Total	1130	100.00
STRCMPG	Long Name	Share the Road campaign		
	Description	Are you aware of the Share the Road – Thumbs Up! Campaign, which is running at Dalhousie?		
			2015	
			n	%
	1	Yes	269	23.58%
	2	No	872	76.42%
		Total	1141	100.00
IMPSTR	Long Name	Importance of road sharing		
	Description	How important is sharing the road to you?		
			2015	
			n	%
	1	Not important	63	5.52%
	2	Somewhat important	133	11.66%
	3	Important	276	24.19%
	4	Very important	501	43.91%
	5	Not sure	168	14.72%
		Total	1141	100.00
ACCVEH	Long Name	Vehicle Access		
	Description	Do you own or have access to a car? (Choose all that apply)		
			2015	

			n	%
		I own a car	676	56.80%
		I am a member of a car sharing service	49	4.12%
		I can borrow a car or get a ride most times I need it	186	15.63%
		I do not own or have access to a car	279	23.45%
		Total	1190	100.00
ACCBIKE	Long Name	Bicycle Access		
	Description	Do you own or have access to a bicycle? (Choose all that apply)		
			2015	
			n	%
		I own a bicycle	553	47.59%
		I can use or borrow a bicycle most times I need it	85	7.32%
		I do not own or have access to a bicycle	524	45.09%
		Total	1162	100.00
SPNDTRANS	Long Name	Spend on Transit		
	Description	How much on average (in Canadian dollars) do you spend out-of-pocket on a monthly basis for transportation purposes (for gas, parking, etc.)?		
			2015	
			n	%
	1	\$0 - \$50	452	43.88%
	2	\$51 - \$100	232	22.52%
	3	\$101 - \$150	104	10.10%
	4	\$151 - \$200	96	9.32%
	5	\$201 - \$250	62	6.02%
	6	Above \$250	84	8.16%
		Total	1030	100.00
EXPBRIDGE	Long Name	Bridge Experience		
	Description	Now that the Bridge closures have been going on for eight months, how have your experiences of the Bridge closures been?		
			2015	
			n	%
	1	Worse than expected	125	11.03%
	2	As expected	299	26.39%
	3	Better than expected	58	5.12%
	4	Unsure, I just moved to Halifax	28	2.47%
	5	Not applicable	623	54.99%
		Total	1133	100.00
LRNBRIDGE	Long Name	Learn of Bridge		
	Description	How have you learned about the Bridge closures? (Choose all that apply)		
			2015	
			n	%
	1	Local Radio	540	26.71%
	2	Local TV	126	6.23%
	3	Newspaper notices	142	7.02%

	4	Social media (e.g. Facebook, Twitter, etc.)	368	18.20%
	5	Email	20	1.00%
	6	Internet	273	13.50%
	7	Word of mouth	415	20.52%
	8	I have not learned about the status of the bridge closures	138	6.82%
	Total		2022	100.00
AGE	Long Name	Age		
	Description	What is your age?		
			2015	
			n	%
	1	15 – 19	75	6.65%
	2	20 – 24	287	25.44%
	3	25 – 34	303	26.86%
	4	35 – 44	167	14.81%
	5	45 – 54	151	14.27%
	6	55 – 64	118	10.46%
	7	65 and above	17	1.51%
	Total		1128	100.00
GENDER	Long Name	Gender		
	Description	What is your gender?		
			2015	
			n	%
	1	Female	796	70.50%
	2	Male	312	27.64%
	3	Trans	2	0.18%
	4	Prefer not to say	19	1.68%
	Total		1129	100.00
INCOME	Long Name	Income		
	Description	What is your annual household income?		
			2015	
			n	%
	1	Less than \$19,999	243	21.53%
	2	\$20,000 - \$39,999	118	10.45%
	3	\$40,000 - \$59,000	127	11.25%
	4	\$60,000 - \$79,000	109	9.65%
	5	\$80,000 - \$99,999	84	7.44%
	6	\$100,000 and above	245	21.70%
	7	Prefer not to say	203	17.98%
	Total		1129	100.00
PRICAM	Long Name	Primary Campus		
	Description	What is your primary campus?		
			2015	
			n	%
	1	Studley	686	60.82%
	2	Carleton	171	15.16%

	3	Sexton	149	13.21%
	4	Agriculture	87	7.71%
	5	Health Facilities (off campus)	35	3.10%
	Total		1128	100.00
RESPGRP	Long Name	Respondent Group		
	Description	Which of these groups do you currently belong to?		
			2015	
			n	%
	1	Students	517	45.75%
	2	Faculty	139	12.30%
	3	Staff	474	41.95%
	Total		1130	100.00
FTPT	Long Name	Full-time or Part-time		
	Description	Are you a full-time or part-time staff, faculty, or student?		
			2015	
			n	%
	1	Full-time	1039	91.95%
	2	Part-time	91	8.05%
	Total		1130	100.00