

Langara.

THE COLLEGE OF HIGHER LEARNING.

Transportation Survey Report 2023

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EXECUTIVE SUMMARY

This report summarizes the results of Langara College's fourth biannual Transportation Survey conducted in 2023. Between October 23 and November 14, 2023, the online survey collected 2,941 responses from 1,108 domestic students, 1,119 international students, 377 staff members, and 337 faculty members.

Key findings of the survey are explained in detail within the report but are summarized as follows:

- Some Indicators are back to the Pre-COVID-19 Levels:** The global COVID-19 pandemic has significantly impacted the travel patterns of Langara's students and employees, and in 2021 many respondents reported a modal shift from transit to car commute. With more members of the Langara community taking transit since the last report, issues like overcrowding and being passed by busses are back to similar levels to the 2019 report.
- Langara Students Continue to Move Away from Vancouver:** While Vancouver remains the city where the largest number of our students live, the proportion of respondents living in Vancouver has decreased steadily over the last seven years. The decline was significant during the pandemic but has softened since. In contrast, the proportion of our student population living in Surrey increased from 2016 to 2023.
- Transit is the Primary Mode of Transportation to Langara for Majority of Commuters:** The 2023 Transportation Survey indicated that most people use transit to commute to Langara. Among all respondents, 62% selected "transit" and 24% selected "car" as their primary mode of transportation. These are similar numbers to the 2021 report, where the question was asked for the first time.
- Over 80% of Trips to or from Langara are made by Sustainable Modes:** The 2023 survey respondents together reported making 24,332 one-way trips to or from Langara in a typical week, and 81% of them were by sustainable modes (walking, cycling and transit). The share of cycling in the modal split was 3% in total. The demographic that cycles the most is employees (Staff and Faculty) at 8%.
- More Commuters Getting Passed Up by Over-Capacity Bus or Train:** Transit is very important to commuters, with 94% of respondents using it to travel to Langara. Despite a slight decrease in the previous survey, overcrowding remains a major issue. The percentage of respondents who said they had been passed up by a bus or a train when travelling to Langara increased significantly from 58% in the 2021 survey to 77% in the 2023 survey.
- Satisfaction with Langara Services is still high among Cyclists:** Cycling to Langara is convenient, with several bikeways nearby, and 11% of respondents have biked to Langara. Their level of satisfaction with various Langara services for cyclists, including showers, exterior bicycle parking, and on-campus bicycle security, was comparable to the previous report.
- Communication about Travel-Related Services is increasing:** The percentage of respondents that were aware of the travel-related services has increased in all categories compared to previous surveys. Over half of respondents stated that they knew the location of secured bicycle cages.
- Majority of Langara Commuters are Satisfied:** Overall, 10% of the respondents are very satisfied and 45% are satisfied with their commute to Langara. These numbers are comparable to those from the previous survey (13% very satisfied and 45% satisfied).

The Langara Transportation Survey is conducted every two years. We will continue to track changes in the survey results over the coming years to help us understand changes in the travel characteristics of the Langara community. It is also important for us to measure the impacts of our transportation-related initiatives to create a shift towards more sustainable travel behaviours in our community.

BACKGROUND

The 2023 Transportation Survey follows up on the same survey from 2017, 2019, and 2021. We are committed to conducting our Transportation Survey every two years to better understand how transportation services may be improved at Langara and/or within the Metro Vancouver transportation network.

The global COVID-19 pandemic caused a significant change in where Langara's students and employees live, study, and work, as well as in their travel behaviour and patterns. The 2023 Transportation Survey, therefore, offers an interesting insight in how these changes have affected the Langara community years after the first changes were implemented.

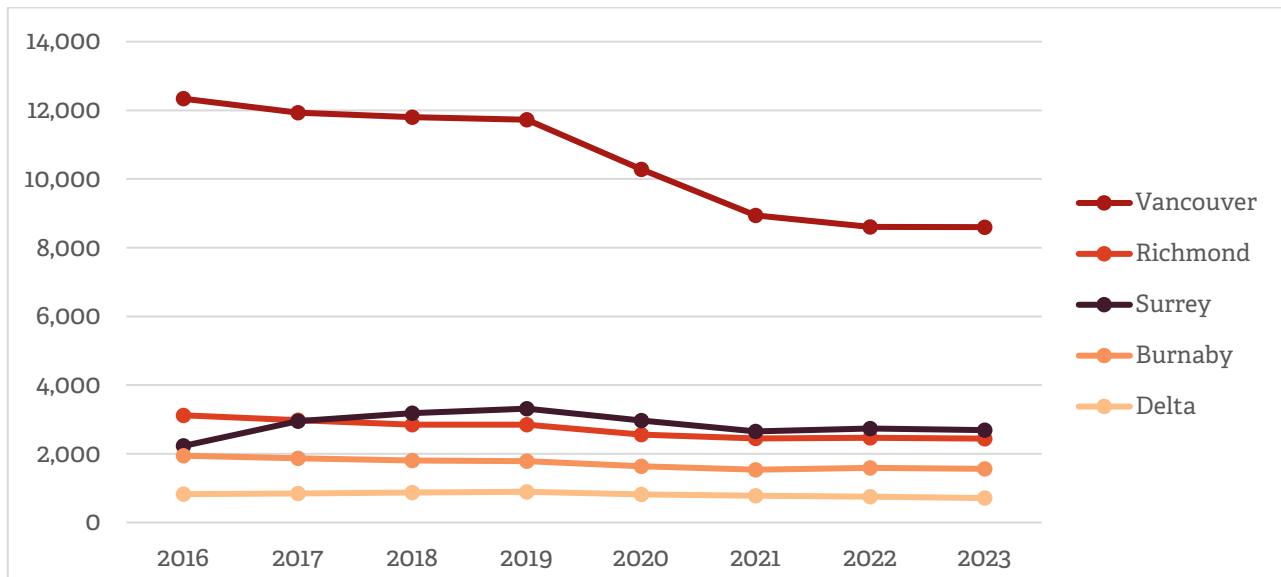
The number of students commuting to Langara College has decreased over the last two years. At the same time, our student population continues to move away from Vancouver into neighbouring cities. **Table 1** and **Figure 1** show which cities our students have lived in over the last seven years. The number of students living in Vancouver has decreased by 30% from 2016 to 2023. Over the same period, the number of students living in Richmond and Burnaby has also decreased by 22% and 19%, respectively. In contrast, the number of students who commute to Langara from Surrey has increased by 21% from 2016 to 2023.

Table 1: Number of Langara Students by City of Residence, 2016-2023

	2016	2017	2018	2019	2020	2021	2022	2023	% Change 2016-2023
Vancouver	12,340	11,934	11,803	11,729	10,280	8,944	8,603	8,601	-30%
Richmond	3,122	2,980	2,852	2,851	2,564	2,448	2,465	2,443	-22%
Surrey	2,229	2,955	3,183	3,315	2,966	2,655	2,739	2,690	21%
Burnaby	1,944	1,866	1,807	1,786	1,633	1,538	1,591	1,566	-19%
Delta	824	845	874	895	822	782	756	713	-13%
Coquitlam/PoCo/Pt.Moody	630	579	580	598	556	539	568	534	-15%
North Vancouver	505	494	428	438	434	465	389	362	-28%
New Westminister	463	419	422	430	408	383	383	392	-15%
West Vancouver	156	135	133	140	125	118	93	94	-40%
Langley/Aldergrove	184	169	135	128	122	128	151	160	-13%
Mission/Abbotsford	141	134	143	139	145	144	147	138	-2%
Maple Ridge/Pitt Meadows	122	95	102	104	96	98	103	103	-16%
White Rock	51	45	46	36	33	39	41	40	-22%
Other B.C.	685	573	517	467	478	509	482	493	-28%
Other Provinces	323	409	513	462	349	243	235	199	-38%
Other Countries	415	478	449	461	712	1825	1141	2,178	425%
Unknown	344	331	401	444	268	136	130	105	-69%
Total	24,478	24,441	24,388	24,423	21,991	20,994	20,017	20,811	-15%

Source: Office of Institutional Research. The numbers include both Regular Studies and Continuing Studies students.

Figure 1: Number of Langara Students Living in Top 5 Cities, 2016-2023



Langara’s main campus is situated in a residential neighborhood with parking constraints, and we encourage commuters to explore alternative modes of transportation to the campus. Nevertheless, should there be an uptick in the number of commuters covering substantial distances, the reliance on cars may escalate. This study aims to build on previous versions and identify current trends, behaviours and patterns identified in transportation choices. To do so, this document delves into the travel patterns of commuters and devise strategies to promote carpooling, public transit usage, biking, or walking as viable options for commuting to our campus.

SURVEY RESULTS

Respondent Profiles

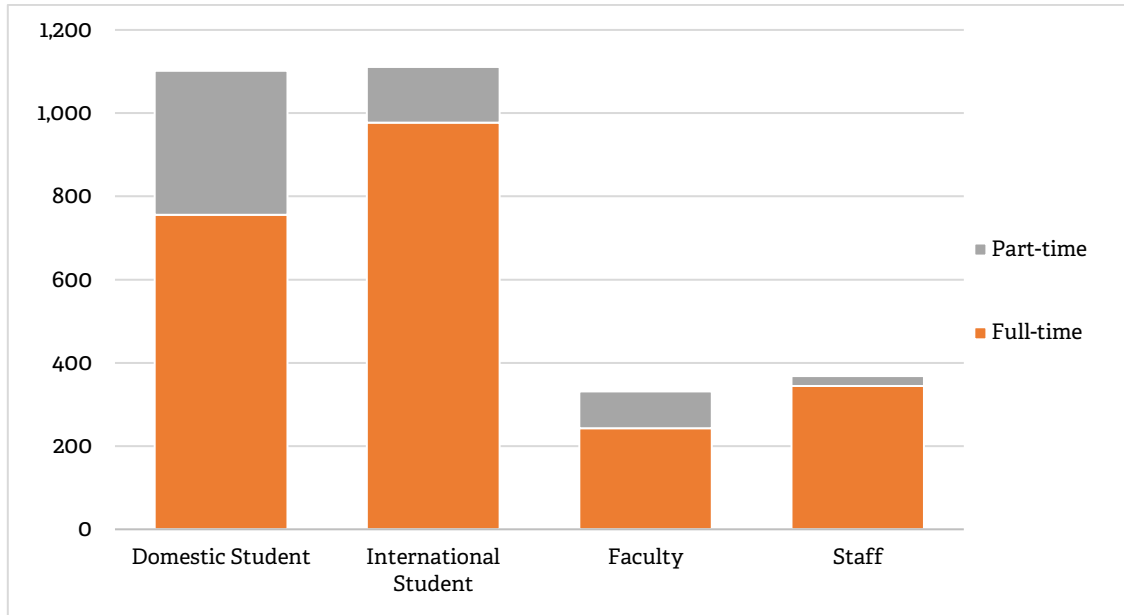
The 2023 Langara College Transportation Survey was implemented from October 23 to November 14, 2023. The link to the survey was sent out to the College community via email and posted on the College website. All respondents used the link to respond to the survey online. The response rate was 15.5% among students and 31.1% among faculty and staff.

In total, the survey received responses from 2,941 people (compared to 3,759 in the 2021 survey). As Table 2 shows, 76% of the respondents were students and the split was essentially even between domestic and international students. Faculty and staff accounted for 11% and 13% of the respondents respectively. Most of the respondents were full-time students or employees (See Figure 2).

Table 2: Number of Respondents by Primary Role at Langara

	Number of Respondents	Percent
Domestic Students	1,108	38%
International Students	1,119	38%
Faculty	337	11%
Staff	377	13%
Total	2,941	100%

Figure 2: Number of Respondents by Primary Role at Langara & Full-time/Part-time Status



Among the 2023 survey respondents, 45.46% said they lived in Vancouver. This is lower than 49.20% in 2021. On the other hand, the proportion of respondents living in Surrey increased from 14.20% in 2021 to 18.43% in 2023 (See Table 3). The opposite happened in the previous report; in 2021, the proportion of residents living in Vancouver increased, and the proportion of residents in Surrey declined compared to 2019.

Table 3: Number of Survey Respondents by City of Residence (2023 vs. 2021)

City	Number of Respondents (2023)	Percent (2023)	Number of Respondents (2021)	Percent (2021)	Change 2021-2023 (pp)
Vancouver	1,337	45.46%	1,849	49.20%	-3.74
Surrey	542	18.43%	534	14.20%	4.23
Richmond	315	10.71%	406	10.80%	-0.09
Burnaby	232	7.89%	323	8.60%	-0.71
Delta	119	4.05%	148	3.90%	0.15
Coquitlam/PoCo/Pt.Moody	88	2.99%	115	3.10%	-0.11
North Vancouver	68	2.31%	110	2.90%	-0.59
New Westminster	87	2.96%	90	2.40%	0.56
Mission/Abbotsford	18	0.61%	34	0.90%	-0.29
Langley/Aldergrove	29	0.99%	38	1.00%	-0.01
Maple Ridge/Pitt Meadows	21	0.71%	22	0.60%	0.11
West Vancouver	14	0.48%	20	0.50%	-0.02
White Rock	8	0.27%	6	0.20%	0.07
Other B.C.	25	0.85%	20	0.50%	0.35
Unknown	38	1.29%	44	1.20%	0.09
Total	2,941	100%	3,759	100%	

Figure 3 shows where the survey respondents live by Forward Sortation Area (FSA). The darker colour gradients on the map show a higher concentration of residents. The map indicates that the larger number of respondents live in V5X, Vancouver (SE Oakridge / East Marpole / South Sunset). For the actual number of respondents by FSA, see Table 4. While V5X is still the most represented FSA, the percentage of respondents in that area decreased from 6.0% in 2021 to 4.5% in 2023. On the other hand, V5R, Vancouver (South Renfrew Collingwood) which represented 3.6% in 2021 now accounts for 4.3% of respondents.

Figure 3: Map of Respondents by FSA

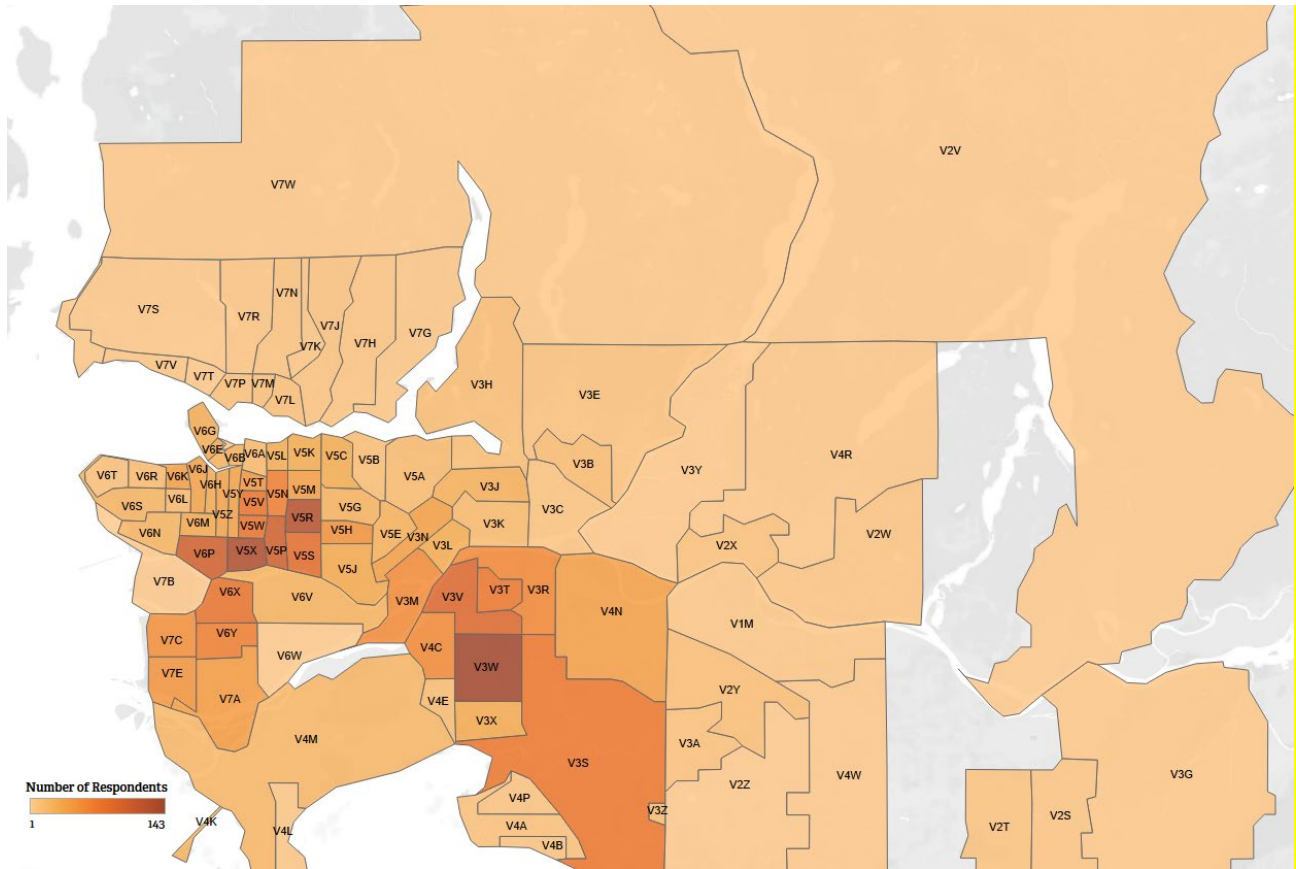


Table 4: Number of Respondents by FSA

City	FSA	Area	# of resp.	%
Vancouver	V5X	Vancouver (SE Oakridge / South Sunset)	131	4.5%
	V5R	Vancouver (South Renfrew Collingwood)	126	4.3%
	V6P	Vancouver (SE Kerrisdale / West Marpole)	103	3.5%
	V5P	Vancouver (Victoria Fraserview)	102	3.5%
	V5S	Vancouver (Killarney)	85	2.9%
	V5W	Vancouver (SE Riley Park Little Mountain / North Sunset)	77	2.6%
	V5V	Vancouver (West Kensington Cedar Cottage)	76	2.6%
	V5N	Vancouver (South Grandview Woodland)	66	2.2%
	V5T	Vancouver (East Mount Pleasant)	46	1.6%
	V5M	Vancouver (South Hastings Sunrise)	41	1.4%
	V6K	Vancouver (Central Kitsilano / Greektown)	40	1.4%
	V5Y	Vancouver (West Mount Pleasant)	38	1.3%
	V6J	Vancouver (NW Shaughnessy / East Kitsilano)	37	1.3%
	V5Z	Vancouver (East Fairview / South Cambie)	37	1.3%
	V6M	Vancouver (South Shaughnessy / SE Arbutus Ridge)	32	1.1%
	V6E	Vancouver (SE West End / Davie Village)	31	1.1%

City	FSA	Area	# of resp.	%
Vancouver (cont.)	V6H	Vancouver (West Fairview / Granville Island)	31	1.1%
	V5K	Vancouver (North Hastings Sunrise)	30	1.0%
	V5L	Vancouver (North Grandview Woodland)	29	1.0%
	V6G	Vancouver (NW West End / Stanley Park)	27	0.9%
	V6B	Vancouver (NE Downtown / Yaletown)	25	0.9%
	V6Z	Vancouver (SW Downtown)	23	0.8%
	V6N	Vancouver (West Kerrisdale / Musqueam)	22	0.7%
	V6S	Vancouver (NW Dunbar Southlands / Chaldecutt)	21	0.7%
	V6A	Vancouver (Strathcona / Downtown Eastside)	17	0.6%
	V6L	Vancouver (NW Arbutus Ridge / NE Dunbar Southlands)	17	0.6%
	V6R	Vancouver (West Kitsilano / West Point Grey / Jericho)	15	0.5%
	V6T	Vancouver (UBC)	10	0.3%
	V6C	Vancouver (Waterfront / Coal Harbour / Canada Place)	2	0.1%
Surrey	V3W	Surrey Upper West	143	4.9%
	V3V	Surrey Outer Northwest	91	3.1%
	V3S	Surrey East	72	2.4%
	V3T	Surrey Inner Northwest	72	2.4%
	V3R	Surrey North	60	2.0%
	V4N	Surrey Northeast	41	1.4%
	V3X	Surrey Lower West	31	1.1%
	V3Z	Surrey Lower East	15	0.5%
	V4A	Surrey Southwest	10	0.3%
	V4P	Surrey South	7	0.2%
Richmond	V6X	Richmond North	77	2.6%
	V6Y	Richmond Central	66	2.2%
	V7C	Richmond Northwest	53	1.8%
	V7E	Richmond Southwest	49	1.7%
	V7A	Richmond South	44	1.5%
	V6V	Richmond Northeast	24	0.8%
	V6W	Richmond Southeast	1	0.0%
	V7B	Richmond (Sea Island / YVR)	1	0.0%
Burnaby	V5H	Burnaby (Maywood / Windsor)	51	1.7%
	V3N	Burnaby (East Big Bend / Edmonds)	40	1.4%
	V5J	Burnaby (Suncrest / West Big Bend)	33	1.1%
	V5C	Burnaby (Burnaby Heights / Willingdon Heights)	30	1.0%
	V5E	Burnaby (Kingsway Beresford)	25	0.9%
	V5G	Burnaby (Cascade Schou / Douglas Gilpin)	24	0.8%
	V5A	Burnaby (Lake City / Burnaby Mountain)	16	0.5%
	V5B	Burnaby (Parkcrest Aubrey / Ardingley Sprott)	13	0.4%
Delta	V4C	Delta Northeast	58	2.0%
	V4K	Delta Northwest	23	0.8%
	V4M	Delta Southwest	20	0.7%

City	FSA	Area	# of resp.	%
Delta (cont.)	V4E	Delta East	14	0.5%
	V4L	Delta Southeast	4	0.1%
Coquitlam/PoCo/Pt.Moody	V3J	Coquitlam North	26	0.9%
	V3K	Coquitlam South	17	0.6%
	V3B	Port Coquitlam Central	15	0.5%
	V3H	Port Moody	13	0.4%
	V3E	Coquitlam North	9	0.3%
	V3C	Port Coquitlam South	8	0.3%
	North Vancouver	V7L	North Vancouver South Central	11
V7M		North Vancouver Southwest Central	11	0.4%
V7P		North Vancouver Southwest	10	0.3%
V7N		North Vancouver Northwest Central	8	0.3%
V7J		North Vancouver East Central	7	0.2%
V7H		North Vancouver Inner East	6	0.2%
V7R		North Vancouver Northwest	6	0.2%
V7K		North Vancouver North Central	5	0.2%
V7G		North Vancouver Outer East	4	0.1%
New Westminster	V3M	New Westminister Southwest	57	1.9%
	V3L	New Westminister Northeast	30	1.0%
Mission/Abbotsford	V2T	Abbotsford Southwest	8	0.3%
	V2S	Abbotsford Southeast	6	0.2%
	V3G	Abbotsford East	3	0.1%
	V2V	Mission East	1	0.0%
Langley/Aldergrove	V2Y	Langley Township Northwest	12	0.4%
	V3A	Langley City	10	0.3%
	V1M	Langley Township North	4	0.1%
	V4W	Langley Township East	2	0.1%
	V2Z	Langley Township Southwest	1	0.0%
Maple Ridge/Pitt Meadows	V2X	Maple Ridge West	10	0.3%
	V2W	Maple Ridge East	6	0.2%
	V4R	Maple Ridge Northwest	3	0.1%
	V3Y	Pitt Meadows	2	0.1%
West Vancouver	V7V	West Vancouver South	5	0.2%
	V7S	West Vancouver North	3	0.1%
	V7T	West Vancouver Southeast	3	0.1%
	V7W	West Vancouver West	3	0.1%
White Rock	V4B	White Rock	8	0.3%
Other B.C.			25	0.9%
Unknown			38	1.3%
Total			2,941	100%

The Main Campus of Langara College is located at 100 West 49th Avenue, and 98% of respondents said they primarily traveled to this location (See Table 5). The other location is the Broadway Campus at 601 West Broadway. In this survey report, the analysis of transportation-related questions focuses mostly on the 2,891 respondents that commute to the Main Campus.

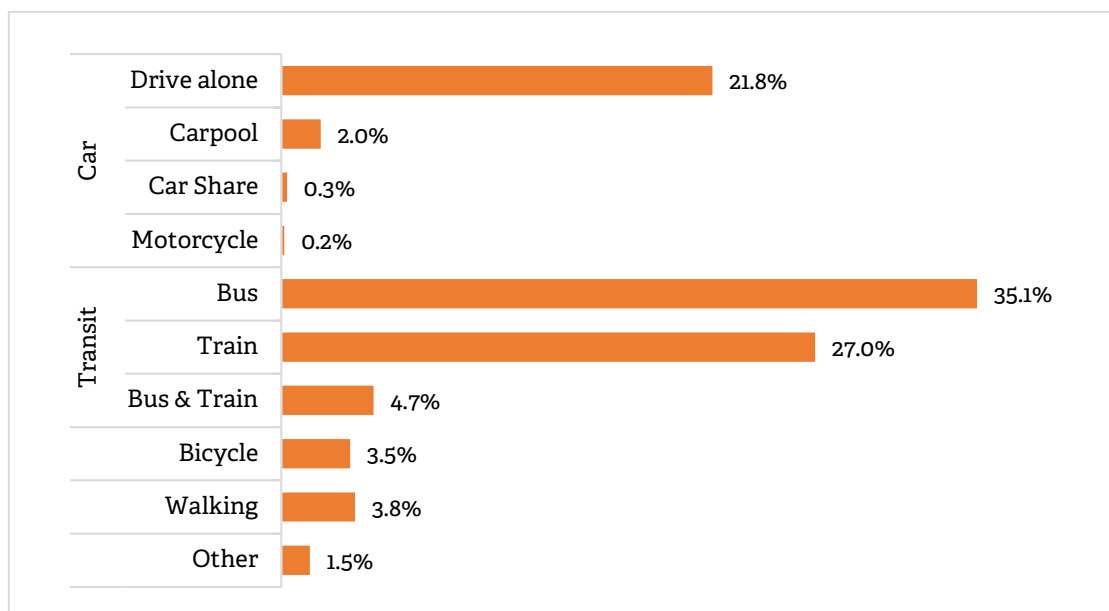
Table 5: Number of Respondents by Campus

Campus	Number of Respondents	Percent
Main Campus (100 West 49th Avenue)	2,891	98%
Broadway Campus (601 West Broadway)	50	2%
Total	2,941	100%

Primary Mode of Transportation to Langara

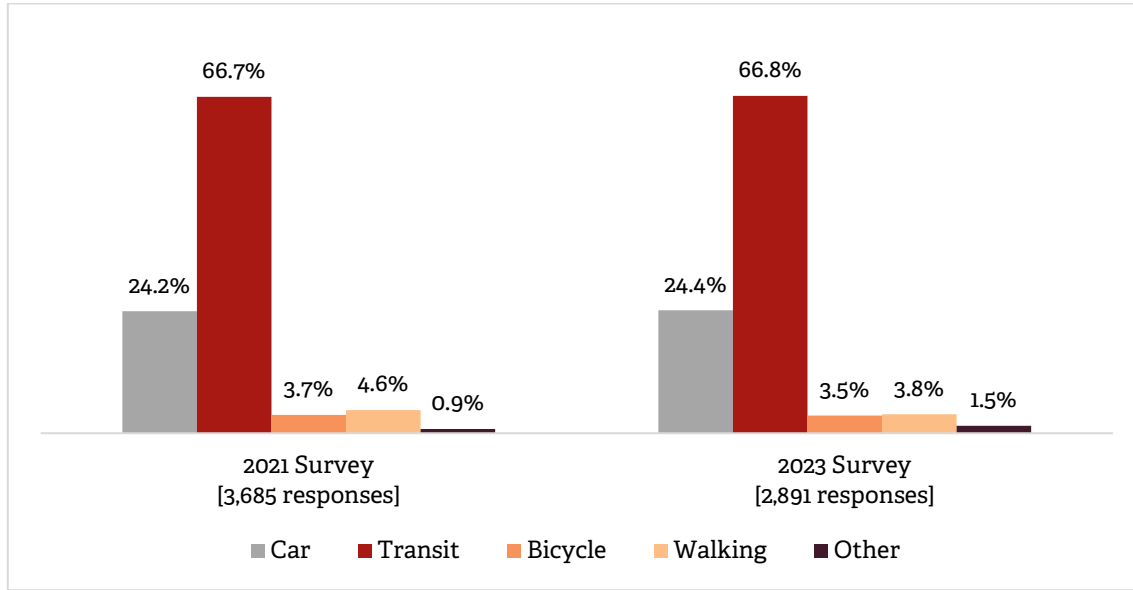
The 2021 survey introduced a new question regarding the primary mode of transportation to Langara, including by car, transit, bicycle, and walking. Later, the 2023 survey added more options to understand specifics about means of transportation better. Among all respondents, 21.8% selected “Drive alone” and 35.1% selected “Bus” as their primary mode of transportation (See Figure 4).

Figure 4: Primary Mode of Transportation to Langara



Overall, 24.4% of respondents use a car (drive alone, carpool/vanpool/dropped off, car share or motorcycle/moped) while 66.8% of respondents use transit (bus or train). The percentage of respondents that selected transit as their primary mode of transportation to Langara was about the same in the 2021 survey (66.7% of respondents) (See Figure 5).

Figure 5: Primary Mode of Transportation to Langara, 2021 vs. 2023



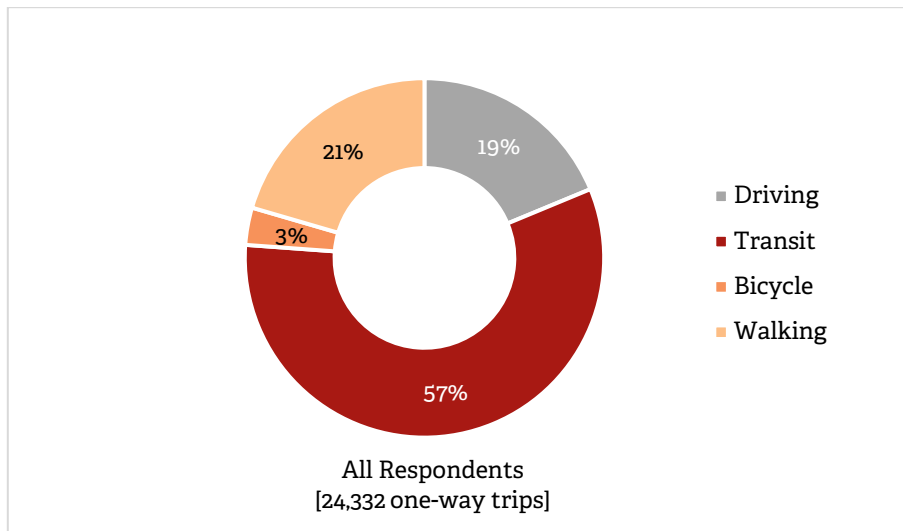
Most students (65.4% of domestic students and 90.6% of international students) said they mainly used transit to travel to Langara. On the other hand, the majority of employees (57.5% of faculty and 52.7% of staff) use a car as their primary mode of transportation. The percentage of respondents who said that cycling was their primary mode of transportation to Langara was 3.5% among all respondents and 10.7% among the faculty members (See Table 6).

Table 6: Primary Mode of Transportation to Langara by Primary Role

		Domestic Students	International Students	Faculty	Staff	Total
Car	Drive alone	21.7%	3.4%	53.8%	48.1%	21.8%
	Carpool	3.1%	0.1%	2.8%	4.0%	2.0%
	Car Share	0.5%	0.1%	0.6%	0.3%	0.3%
	Motorcycle	0.4%	0.0%	0.3%	0.3%	0.2%
	Car Total	25.7%	3.6%	57.5%	52.7%	24.4%
Transit	Bus	35.2%	48.3%	10.1%	18.3%	35.1%
	Train	25.5%	36.0%	11.9%	18.3%	27.0%
	Bus & Train	4.7%	6.3%	2.8%	1.6%	4.7%
	Transit Total	65.4%	90.6%	24.8%	38.2%	66.8%
Bicycle	3.5%	0.8%	10.7%	5.1%	3.5%	
Walking	3.5%	4.3%	4.3%	2.7%	3.8%	
Other	1.9%	0.7%	2.8%	1.3%	1.5%	
Total	100%	100%	100%	100%	100%	
# Respondents	1,099	1,093	327	372	2,891	

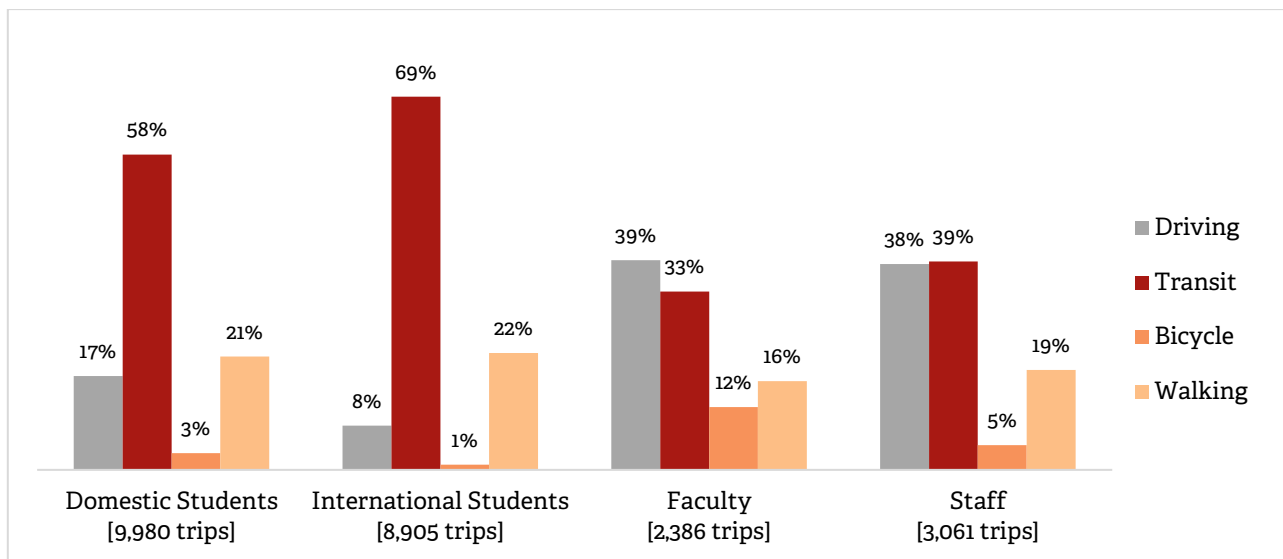
The survey also asked respondents to indicate the number of one-way trips to or from Langara during a normal week for each mode of transportation. All the respondents together reported making 24,332 one-way trips in a normal week, and 57% were by transit (See Figure 6). Cycling accounted for 3% of all one-way trips to or from Langara, a slight decrease from 4% in the previous survey.

Figure 6: Percentage of One-Way Trips to or from Langara by Travel Mode



Domestic students reported 9,980 one-way trips to and from Langara during a normal week, and 58% of them were by transit. International students reported 8,905 one-way trips, and 69% of them were by transit. For faculty and staff, transit accounted for 33% and 39%, respectively, while driving represented 39% and 38% (See Figure 7). Compared to the previous report, there was a significant change in the way staff commutes to Langara; now, the number of one-way trips that staff make by transit is higher than the number of driving trips.

Figure 7: Percentage of One-Way Trips to or from Langara by Travel Mode & Primary Role



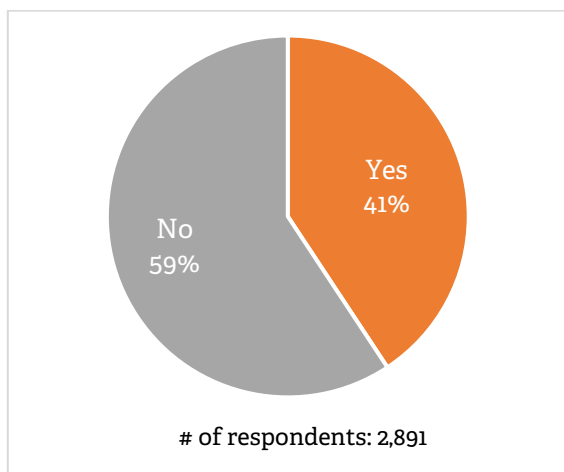
Travelling to Langara

In this section of the survey, respondents were asked whether they have any experience driving, taking transit, cycling or walking to Langara. The respondents with experience with the mode of transportation were asked specific questions related to it.

Driving to Langara

Of the 2,891 respondents who responded to the survey question, 41% said they have driven to Langara, including driving alone, carpool/vanpool/dropped off, car share, and motorcycle/moped (See Figure 8). The proportion increased from 39% in the 2021 survey.

Figure 8: Percentage of Respondents that Drive to Langara



Among the four respondent groups, 48% of domestic students, 14% of international students, 76% of faculty, and 67% of staff said they drove to Langara (See Figure 9). For the faculty group, the proportion that drove to Langara increased significantly from 66% in the 2019 survey to 76% in the 2021 survey. That number has stayed the same in the 2023 survey.

Figure 9: Percentage of Respondents that Drive to Langara by Primary Role

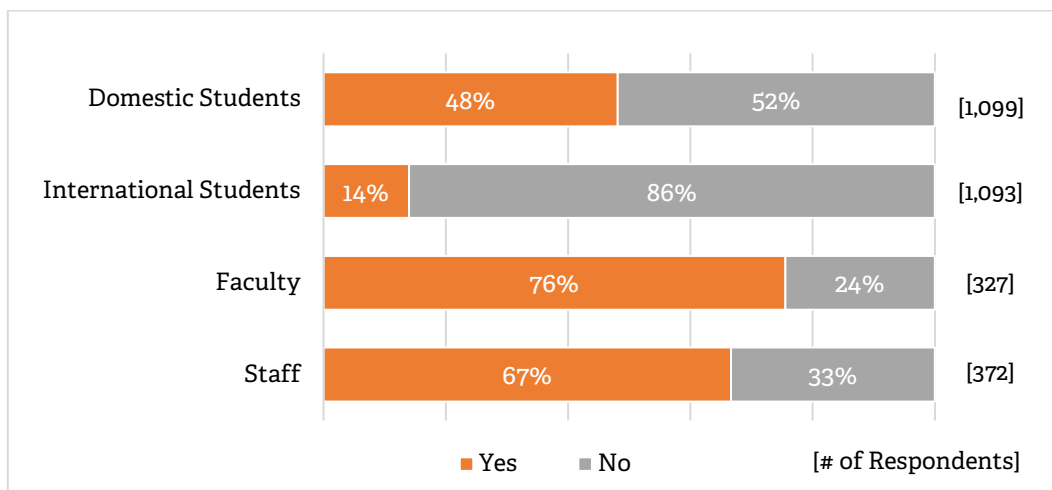
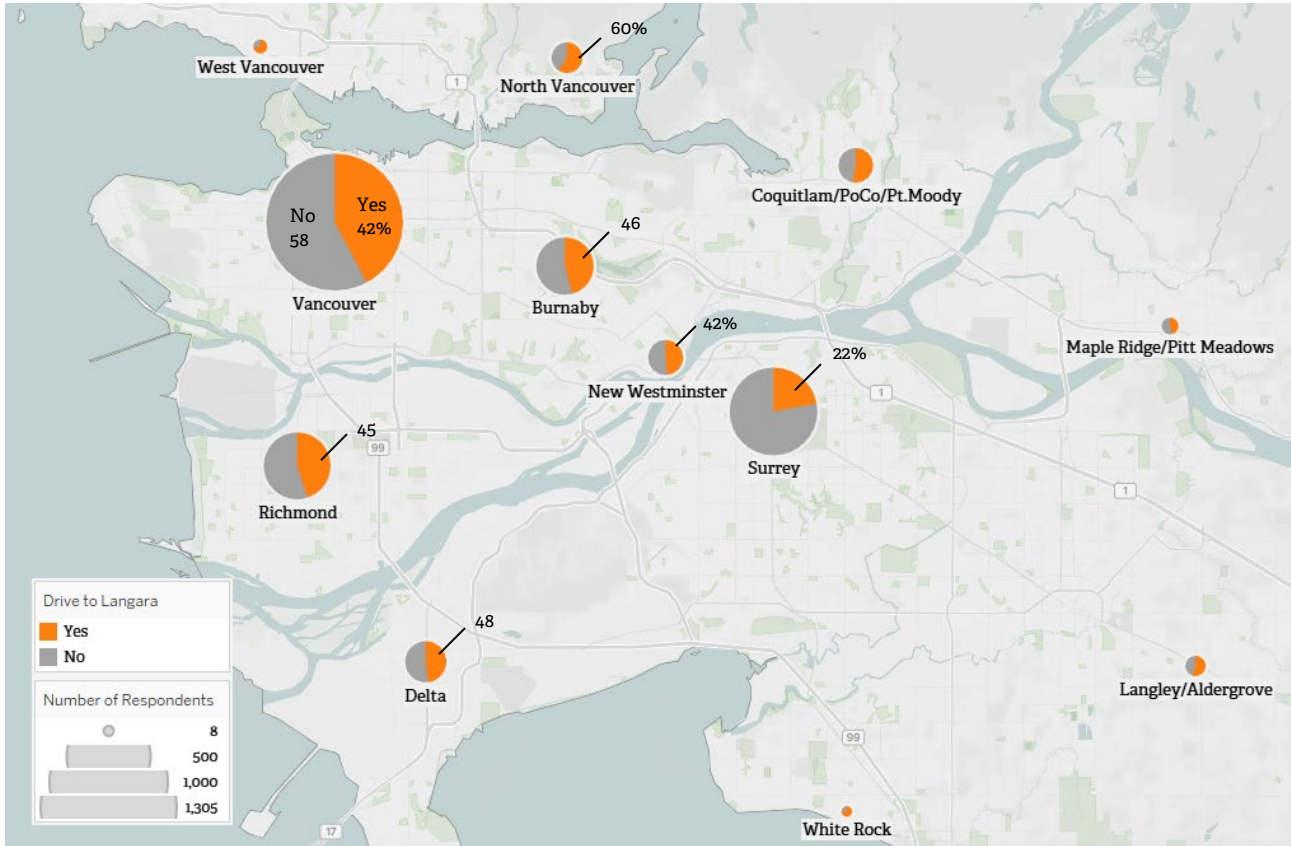


Table 7 and Figure 10 show the percentage of respondents that drive to Langara by their city of residence. 42% of respondents living in Vancouver, 45% of respondents living in Richmond, and 46% of respondents living in Burnaby said they drove to Langara.

Table 7: Respondents that Drive to Langara by City of Residence

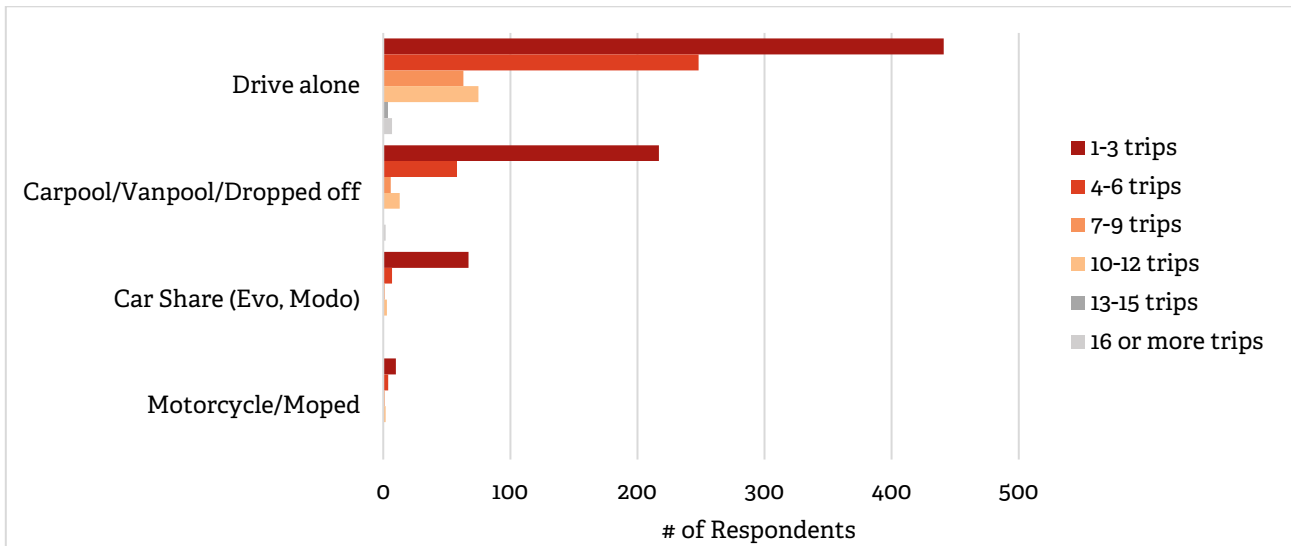
	Drive	Do not Drive	% Drive	% Do not Drive	Total
Vancouver	551	754	42%	58%	1,305
Surrey	119	418	22%	78%	537
Richmond	140	172	45%	55%	312
Burnaby	105	124	46%	54%	229
Delta	57	61	48%	52%	118
New Westminster	42	45	48%	52%	87
Coquitlam/PoCo/Pt. Moody	45	40	53%	47%	85
North Vancouver	40	27	60%	40%	67
Langley/Aldergrove	16	13	55%	45%	29
Maple Ridge/Pitt Meadows	9	11	45%	55%	20
Mission/Abbotsford	11	7	61%	39%	18
West Vancouver	10	4	71%	29%	14
White Rock	6	2	75%	25%	8
Other B.C.	16	9	64%	36%	25
Unknown	10	27	27%	73%	37
Total	1,177	1,714	41%	59%	2,891

Figure 10: Percentage of Respondents that Drive to Langara by City of Residence



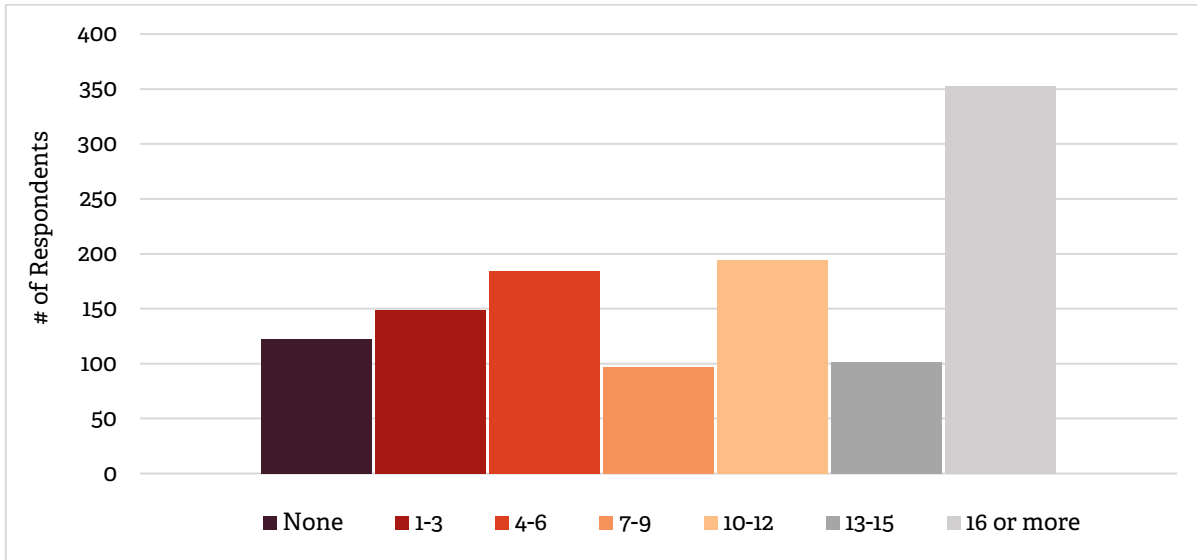
A total of 838 respondents said they drove alone to Langara as opposed to carpool/vanpool/dropped off (296 respondents), car share (78 respondents), and motorcycle/moped (17 respondents). Over half of those that drive alone to Langara make only 1-3 one-way trips to and from Langara in a normal week (See Figure 11).

Figure 11: Number of One-Way Driving Trips to or from Langara during a Normal Week by Mode



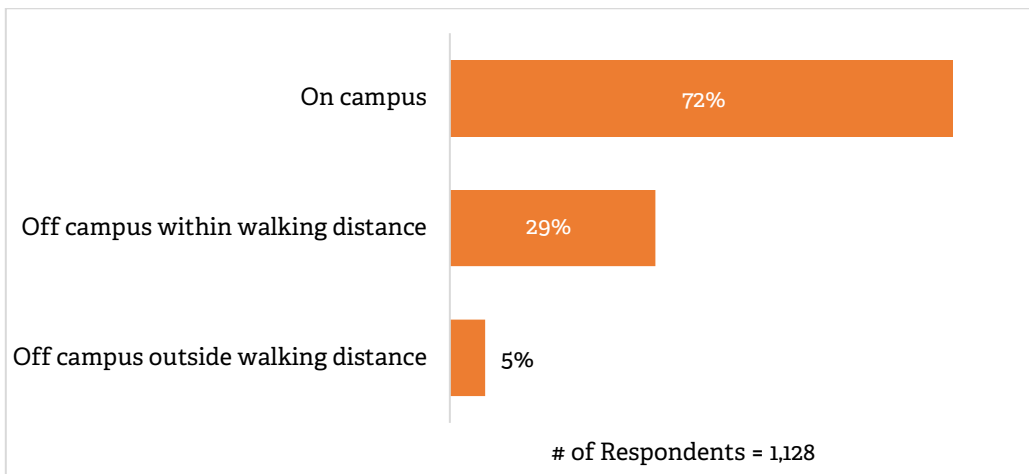
In the 2023 report, we can see the effects of the COVID-19 pandemic, which had a long-term impact on people's commute. The previous report, in 2021, indicated significant changes caused by the pandemic. These changes are still reflected in the 2023 report. Among the 1,200 people who responded to this question, 194 (16% of respondents) selected 10-12 trips, 101 (8% of respondents) selected 13-15 trips, and 353 (29% of respondents) selected 16 or more trips (See Figure 12).

Figure 12: Number of One-Way Driving Trips to All Destinations during a Normal Week



Daily pay parking is available at the Main Campus in general surface lots as well as underground parkade beneath the library building, and 72% of respondents said they parked on campus after driving to Langara. On the other hand, 29% said they parked off-campus within walking distance, and 5% said they parked off campus outside walking distance (See Figure 13).

Figure 13: Parking Used after Driving to Langara



The top reasons for driving alone to Langara are time (66% of respondents), convenience (65%), and need for car for errands/appointments (42%) (See Figure 14).

Figure 14: Reasons for Driving Alone to Langara

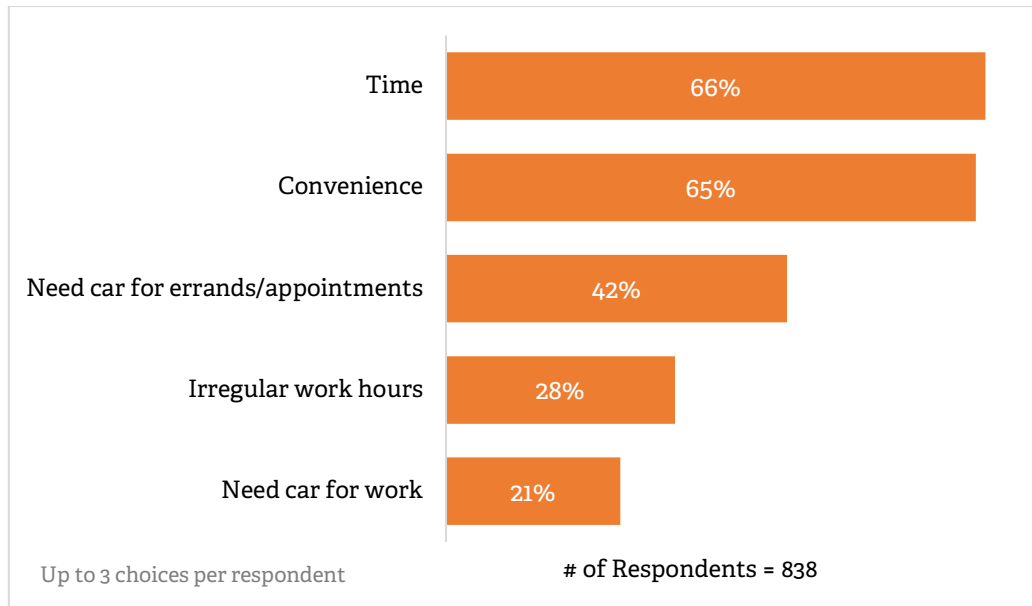
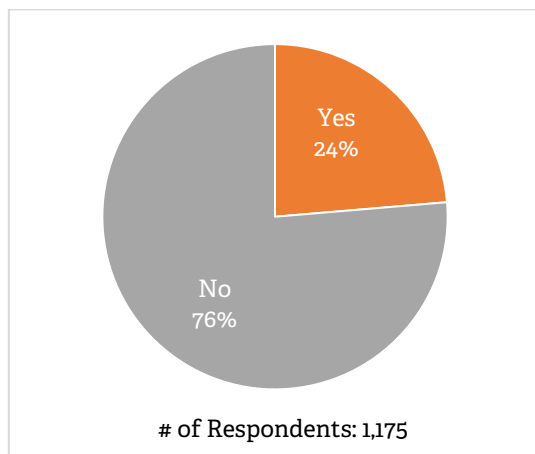


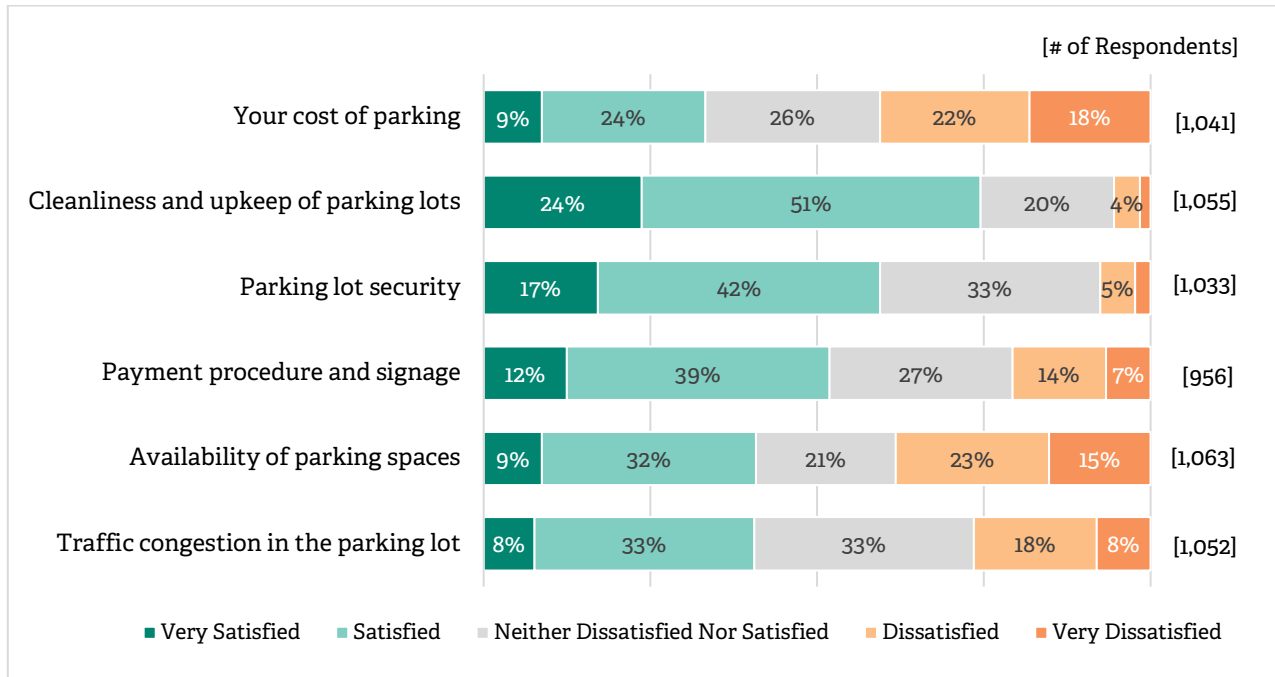
Figure 15 shows that 24% of respondents said carpooling/vanpooling was a viable option for them. However, among these respondents, only 59% reported commuting to Langara by carpooling/vanpooling in a normal week.

Figure 15: Carpooling/Vanpooling Is a Viable Option to Commute to Langara



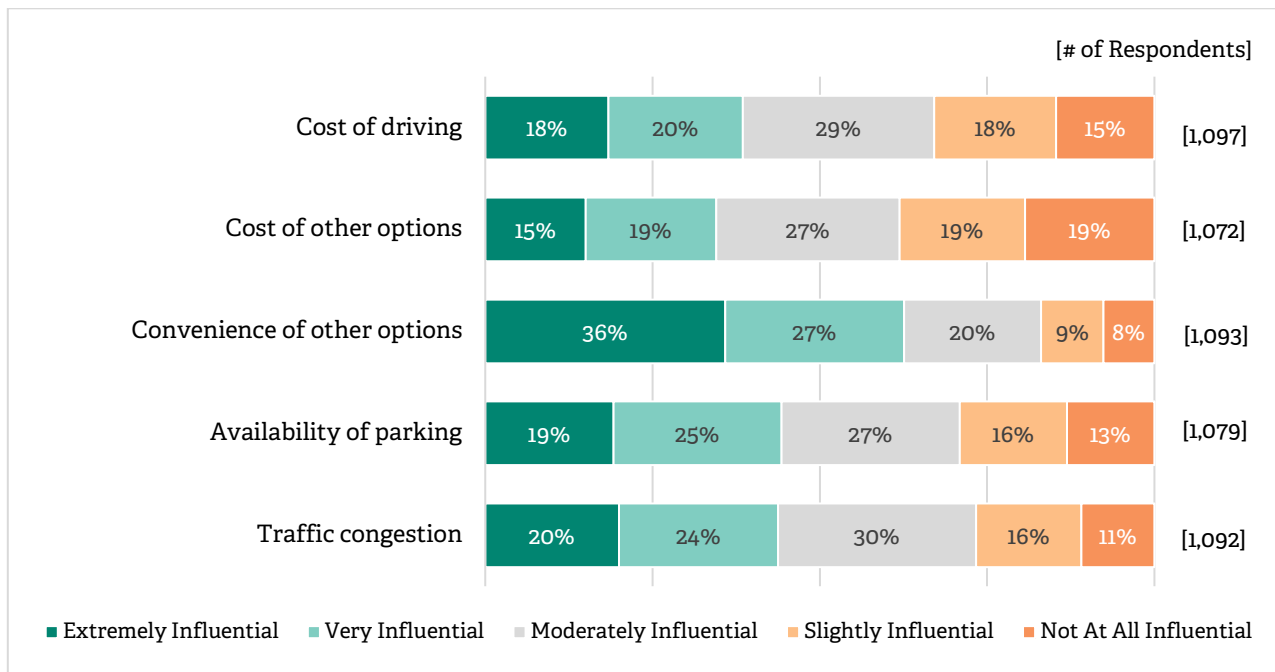
As many as 75% of the respondents are satisfied or very satisfied with the cleanliness and upkeep of the Langara parking lots. The level of satisfaction with parking lot security slightly increased over the last two years, with 59% of respondents selecting either satisfied or very satisfied. Regarding the cost of parking at Langara, 33% are satisfied or very satisfied, a slight increase from 30% in the previous survey, and 40% are dissatisfied or very dissatisfied, down from 44% in the last survey (See Figure 16).

Figure 16: Satisfaction with Parking at Langara



The factor that has the most influence on the respondents’ decision to drive to Langara is “convenience of other options” with 63% of them reporting that this was extremely influential or very influential (See Figure 17). A majority of the respondents also considered cost of driving, cost of other options, availability of parking, and traffic congestion to be at least moderately influential.

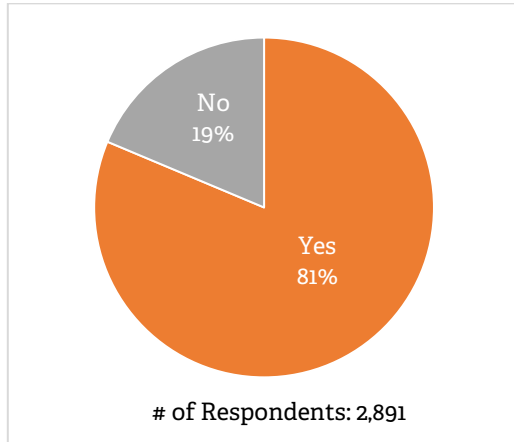
Figure 17: Factors that Influence Driving Behaviour to Langara



Travelling Without a Car

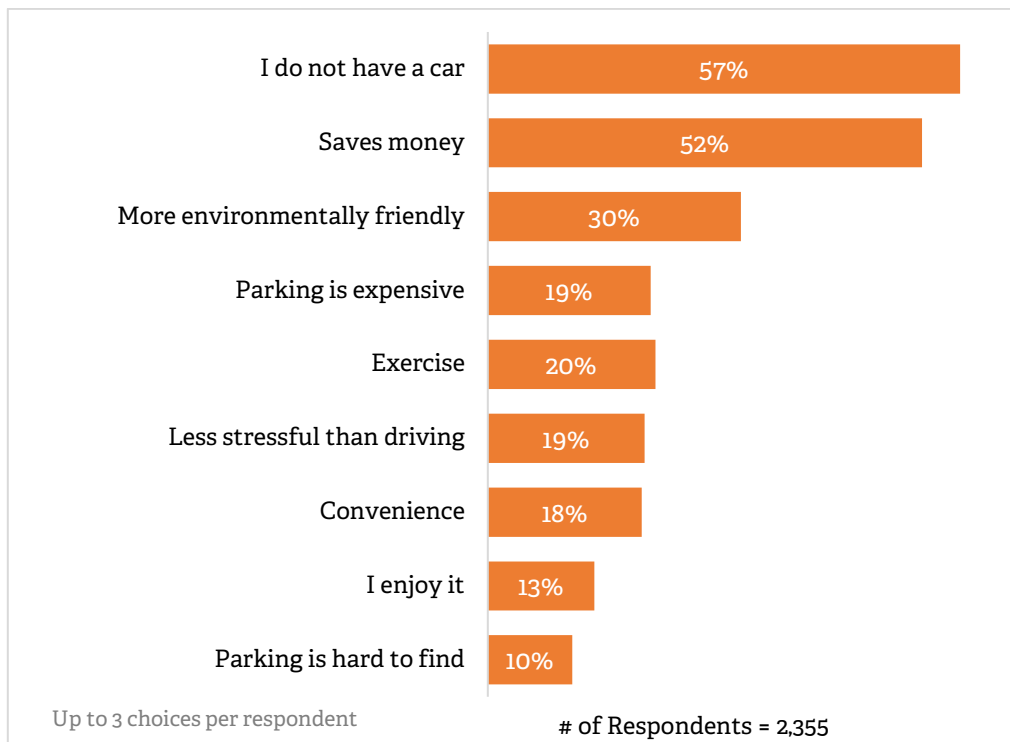
Figure 18 shows that 81% of the respondents said yes to the question “Do you ever travel without a car (i.e. use transit, bike, or walk) to Langara?”

Figure 18: Percentage of Respondents that Use Transit/Bike/Walk to Langara



The most common reason for travelling to Langara without a car is not having one. In the 2023 survey, 57% of the respondents selected “I do not have a car” as their reason for travelling without a car, slightly down from 58% in the 2021 survey. The other reasons that motivate respondents to travel without a car are: “Saves money” (52%) and “More environmentally friendly” (30%) (See Figure 19).

Figure 19: Reasons for Travelling without a Car to Langara



Among those respondents who drive to Langara, 44% said better transit service/connections would encourage them to travel without a car in the 2023 survey (up from 41% in the 2021 survey). Also, 20% of the respondents (31% of faculty and staff) said that the addition of an “Employee U-Pass” would encourage them to travel without a car (See Figure 20 & Figure 21).

Figure 20: Programs/Incentives that would Encourage Carpool/Transit/Bike/Walk

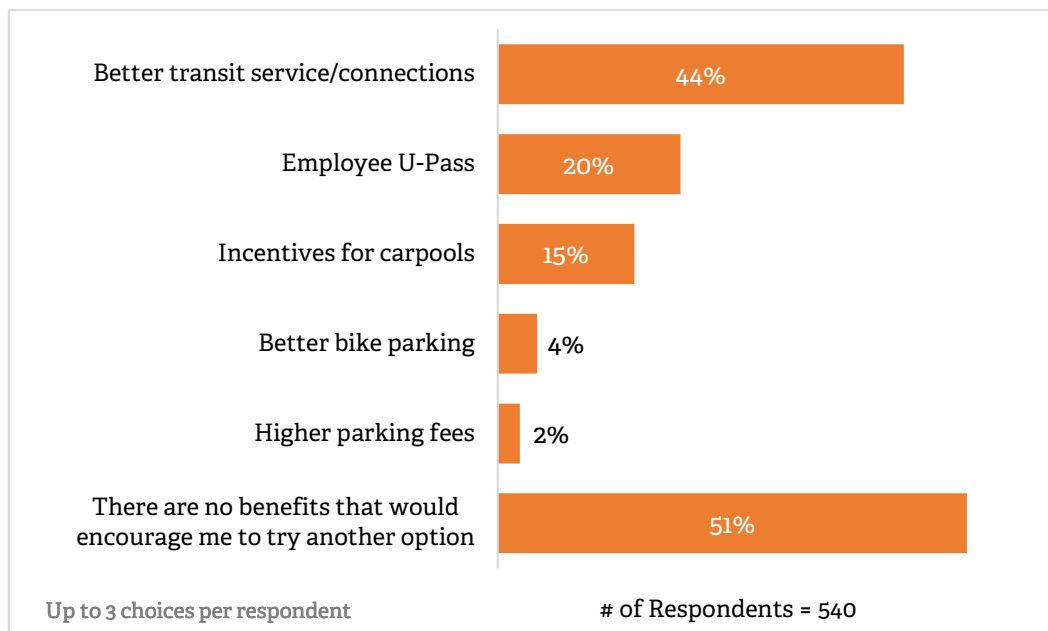
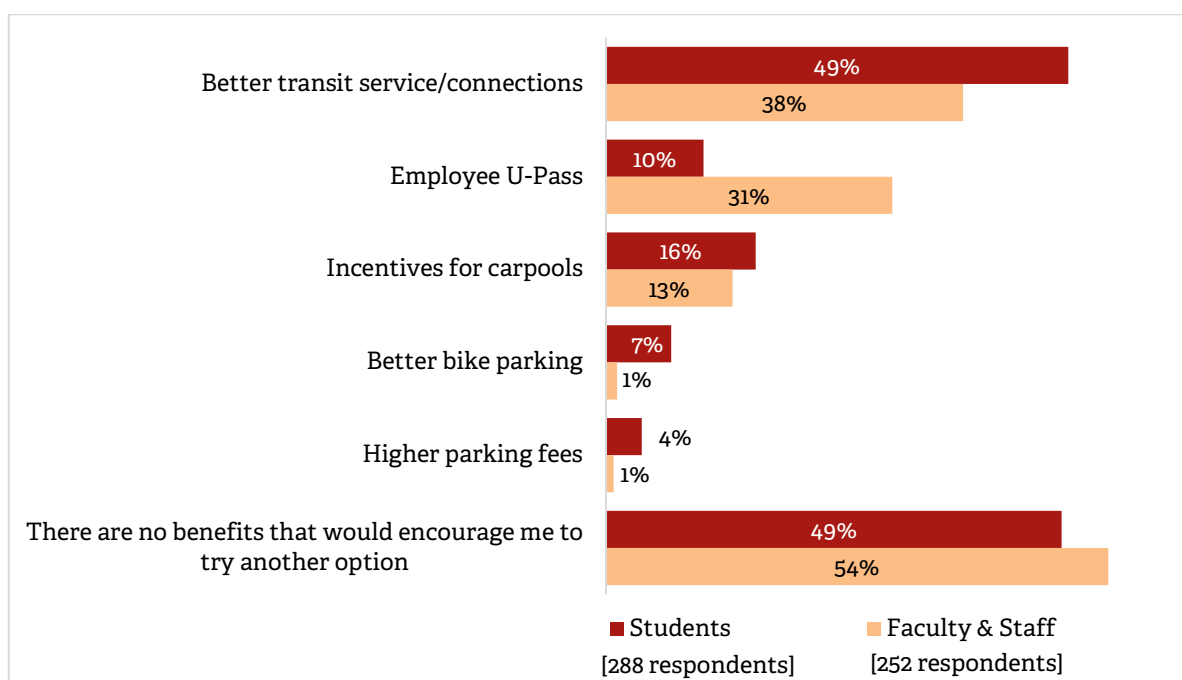


Figure 21: Programs/Incentives that would Encourage Carpool/Transit/Bike/Walk – Students vs. Faculty & Staff



Taking Transit to Langara

Langara is easily accessible by transit, and 94% of respondents have taken the bus and/or train to commute to our campus (Figure 22). The proportion of respondents that yes to the question “Do you ever transit (by bus or train) to Langara?” is higher among domestic and international students (95%) than among faculty (79%) and staff (91%) (Figure 23).

Figure 22: Percentage of Respondents that Transit (by Bus or Train) to Langara

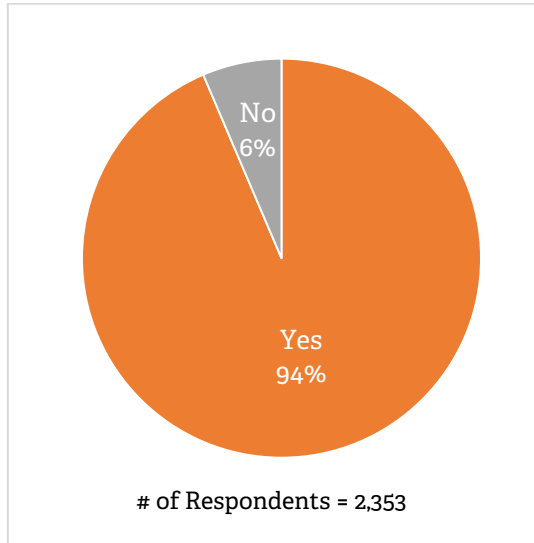
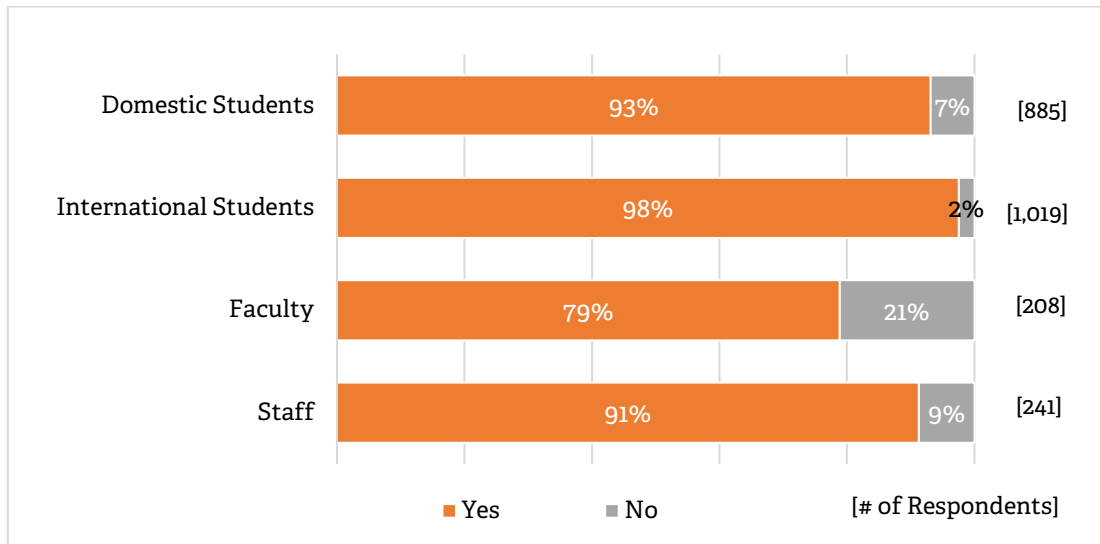


Figure 23: Percentage of Respondents that Transit to Langara by Primary Role



Among the respondents who live in Vancouver, 89% said they took transit to commute to Langara. Although Surrey is farther away, 100% of respondents who live in Surrey said they used transit to travel to Langara. (See Table 8 and Figure 24).

Table 8: Respondents that Transit to Langara by City of Residence

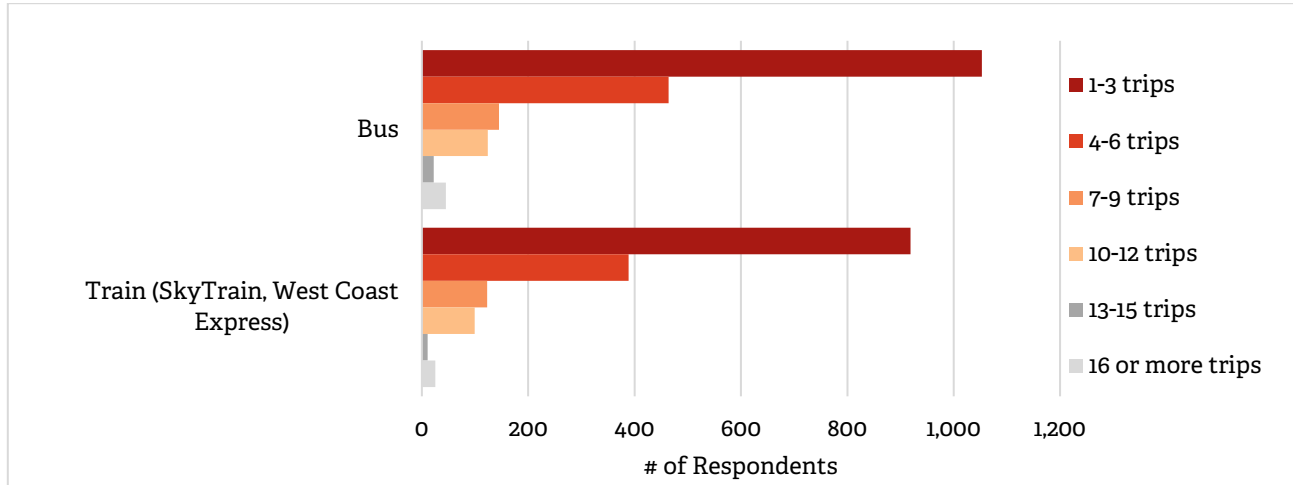
	Transit	Do not Transit	% Transit	% Do not Transit	Total
Vancouver	980	124	89%	11%	1,104
Surrey	479	0	100%	0%	479
Richmond	237	9	96%	4%	246
Burnaby	180	5	97%	3%	185
Delta	81	0	100%	0%	81
Coquitlam/PoCo/Pt.Moody	54	4	93%	7%	58
North Vancouver	43	3	93%	7%	46
New Westminster	58	2	97%	3%	60
Mission/Abbotsford	13	0	100%	0%	13
Langley/Aldergrove	13	0	100%	0%	13
Maple Ridge/Pitt Meadows	12	0	100%	0%	12
West Vancouver	10	0	100%	0%	10
White Rock	2	0	100%	0%	2
Other B.C.	11	2	85%	15%	13
Unknown	29	2	94%	6%	31
Total	2,202	151	94%	6%	2,353

Figure 24: Percentage of Respondents that Transit to Langara by City of Residence



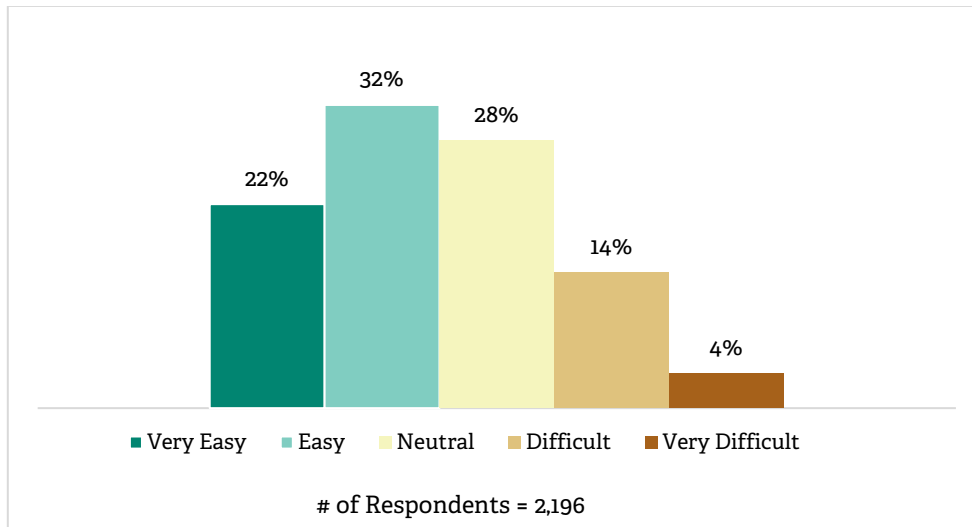
A total of 2,015 respondents reported taking a bus to commute to Langara in a normal week. A majority of these respondents (57%) make 1-3 one-way bus trips to or from Langara per week. On the other hand, 1,815 respondents said they took a train (SkyTrain/West Coast Express) to Langara, and 59% of them made 1-3 one-way train trips to or from Langara in normal week (See Figure 25).

Figure 25: Number of One-Way Trips to or from Langara during a Normal Week by Transit Mode



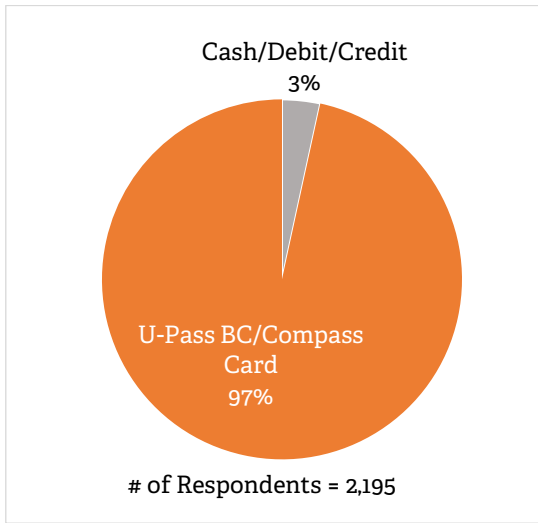
A majority of the respondents said taking transit to Langara was very easy (22%) or easy (32%) (See Figure 26).

Figure 26: How Easy Is Taking Transit to Langara



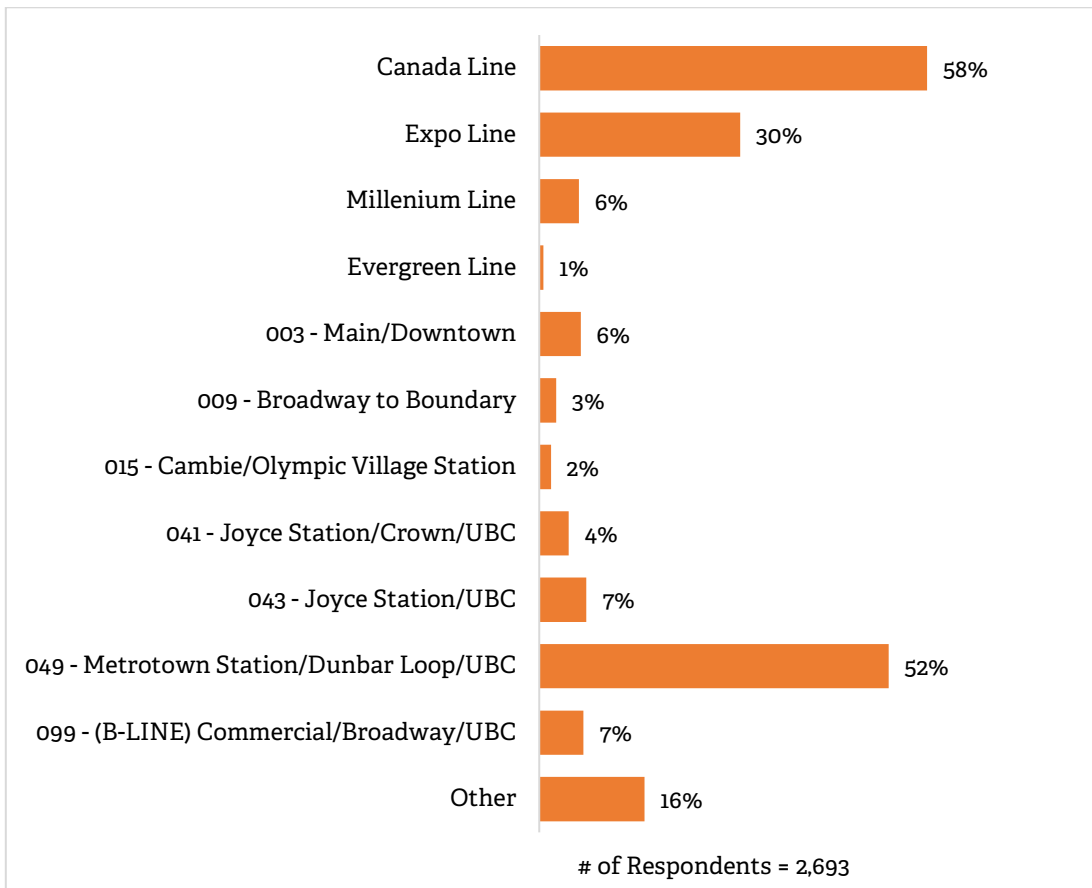
Langara participates in the U-Pass BC Program which provides eligible students with unlimited all-zone access to TransLink bus, SkyTrain and SeaBus services and discounts on the West Coast Express. Among the survey respondents, 97% said they used either U-Pass BC or Compass Card to pay for transit (See Figure 27).

Figure 27: Primary Payment Method for Transit



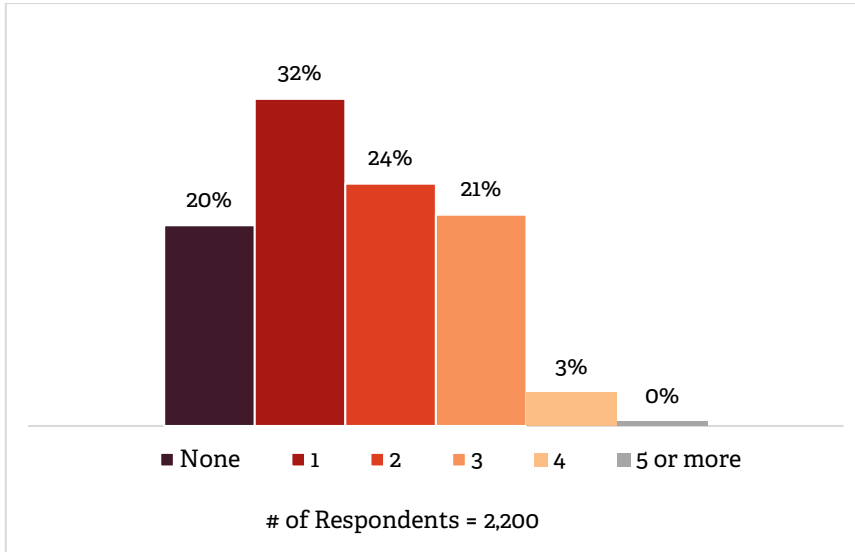
Langara is within walking distance of the Langara–49th Station of the Canada Line, and 58% of the respondents who transit to Langara use the Canada Line. Also, 52% use TransLink Bus #49 which runs on the 49th Avenue with two stops adjacent to the campus. In addition, 30% of the respondents take the Expo Line, and 6% take Bus #3 (See Figure 28).

Figure 28: Transit Routes Used to Commute to Langara



With regard to transfers, 20% of respondents who take transit to Langara do not need to transfer, and 32% need to transfer once (Figure 29).

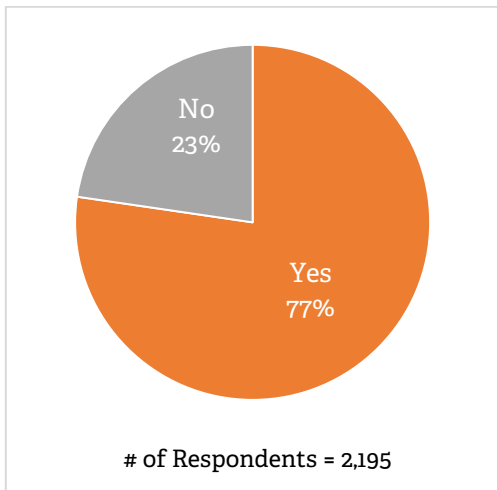
Figure 29: Number of Transfers Needed to Reach Langara



Percentages may not add up to 100% due to rounding.

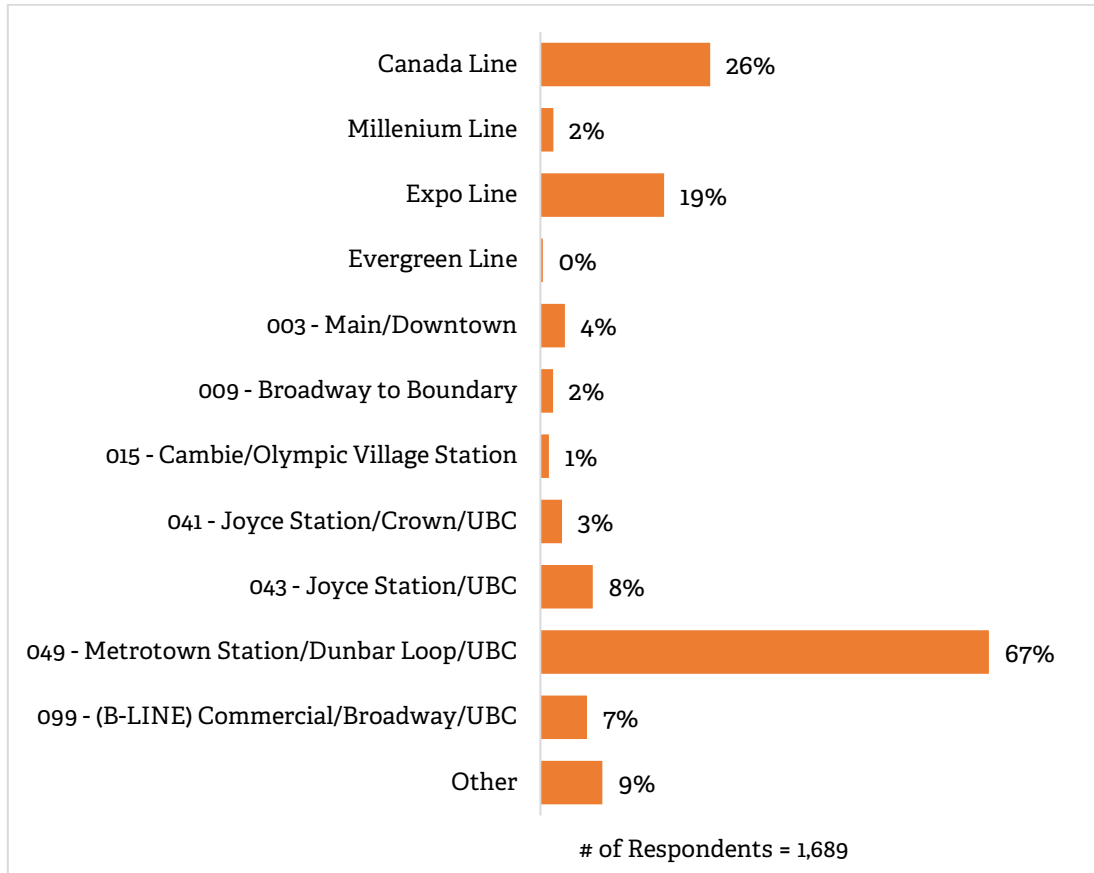
Overcrowding on public transportation has been a major issue, and many continue to report being “passed up” which refers to a situation where a bus or a train is full and does not accept passengers. The percentage of respondents who said they had been passed up by a bus or a train when travelling to Langara increased significantly from 58% in the 2021 survey to 77% in the 2023 survey (Figure 30).

Figure 30: Have Been Passed Up by Bus or Train while Commuting to Langara



In total, 1,697 respondents, or 77% of the respondents reported being passed up while commuting to Langara. Out of these respondents, 67% of them (1,139 respondents) were passed up by Bus #49 (See Figure 31). The number of complaints about bus #49 declined from 2019 to 2021 partly due to reduced transit use during the COVID-19 pandemic. In the 2023 survey, the percentage of respondents that reported being passed up by bus #49 was about the same as in the 2019 survey at 67%.

Figure 31: Have Been Passed Up while Commuting to Langara by Route



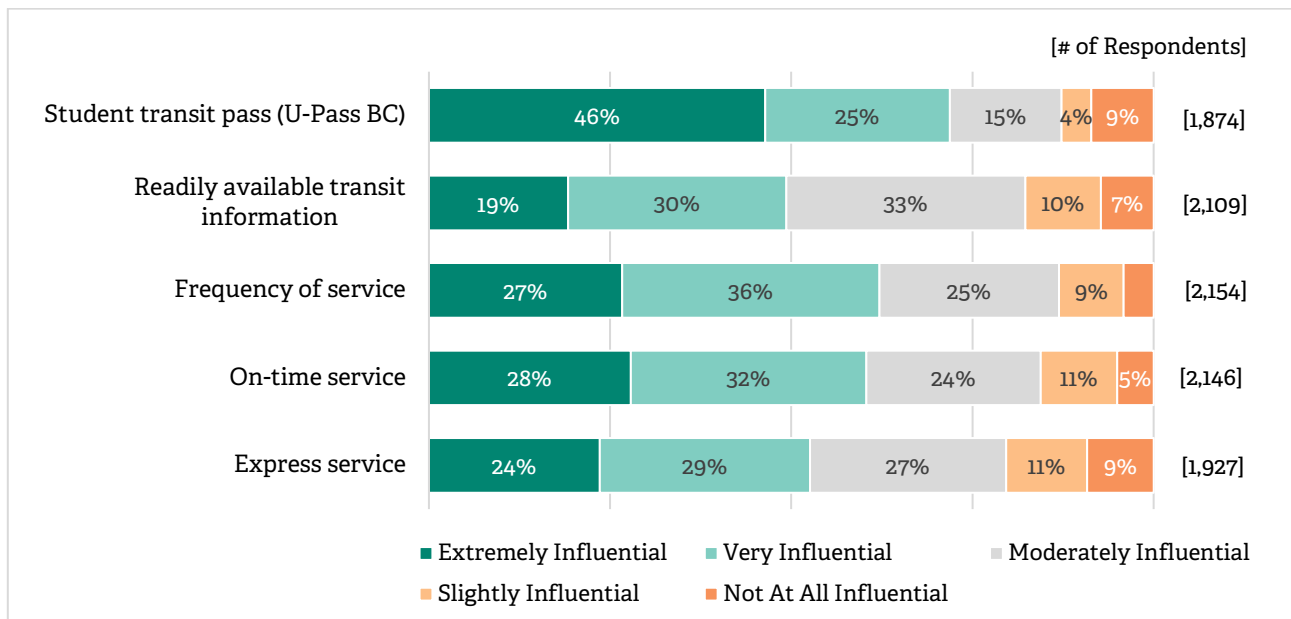
Overall, satisfaction among transit users decreased in the last two years. The percentage of respondents that are either satisfied or very satisfied decreased in 4 out of 5 areas from 2021 to 2023 including frequency of service (53% in 2023, down from 65% in 2021), on-time service (50% in 2023, down from 62% in 2021), crowding (18% in 2023, down from 29% in 2021). Crowding continues to be a key area for improvement, which has consistently ranked as the lowest satisfaction since the survey started in 2010. Contrary to the negative trend, the percentage of respondents that are satisfied or very satisfied with the cost of transit services increased from 44% in 2021 to 48% in 2023 (See Figure 32).

Figure 32: Satisfaction with Transit Services



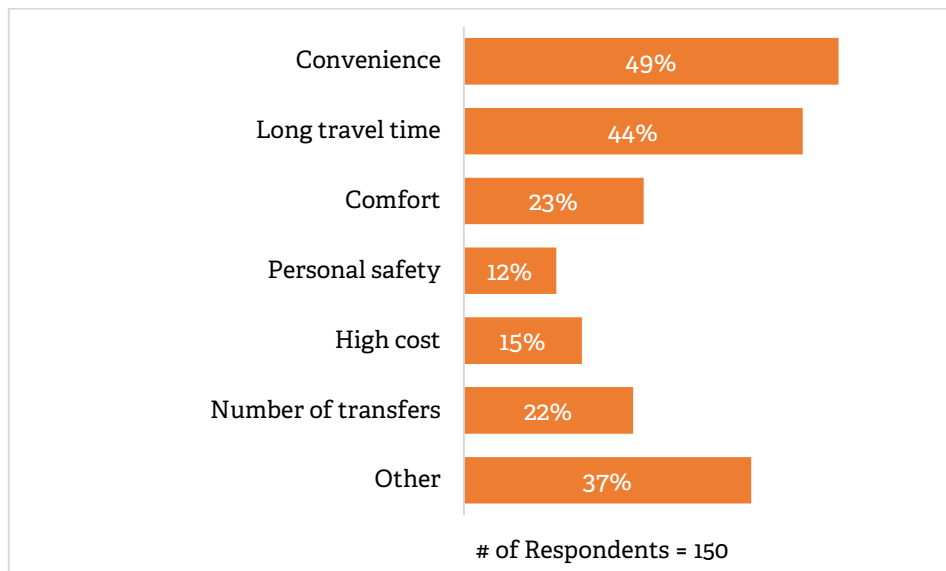
The service that has the most influence on the respondents’ transit use is the student transit pass (U-Pass BC), with 71% of them reporting that it was either extremely influential or very influential, up from 69% in the 2021 report. Many respondents provided comments related to the U-Pass BC program, and some of them said that the LEAP students should also be eligible for a U-Pass BC; others, however, would like the ability to opt out of U-Pass despite it being the most influential factor of transit use. Frequency of service and on-time service are also either very influential or extremely influential for over 60% of the respondents; this is a similar trend to previous years (Figure 33).

Figure 33: Factors that Influence Transit Use



Among the respondents who do not take transit to Langara, the most common reasons are convenience (49% of respondents) and long travel time (44% of respondents). Both these options were the most popular reasons in the previous report in 2021 as well (See Figure 34).

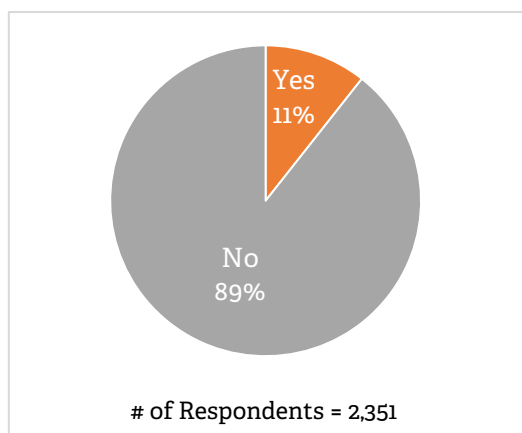
Figure 34: Reasons for Not Taking Transit to Langara



Cycling to Langara

Cycling to the Main Campus of Langara College is convenient as there are bikeways nearby that are part of the extensive Vancouver cycling routes. It is a popular destination for bike commuters, and 11% of respondents have biked to Langara (Figure 35). It is the same percentage as in the previous report.

Figure 35: Percentage of Respondents that Bicycle to Langara

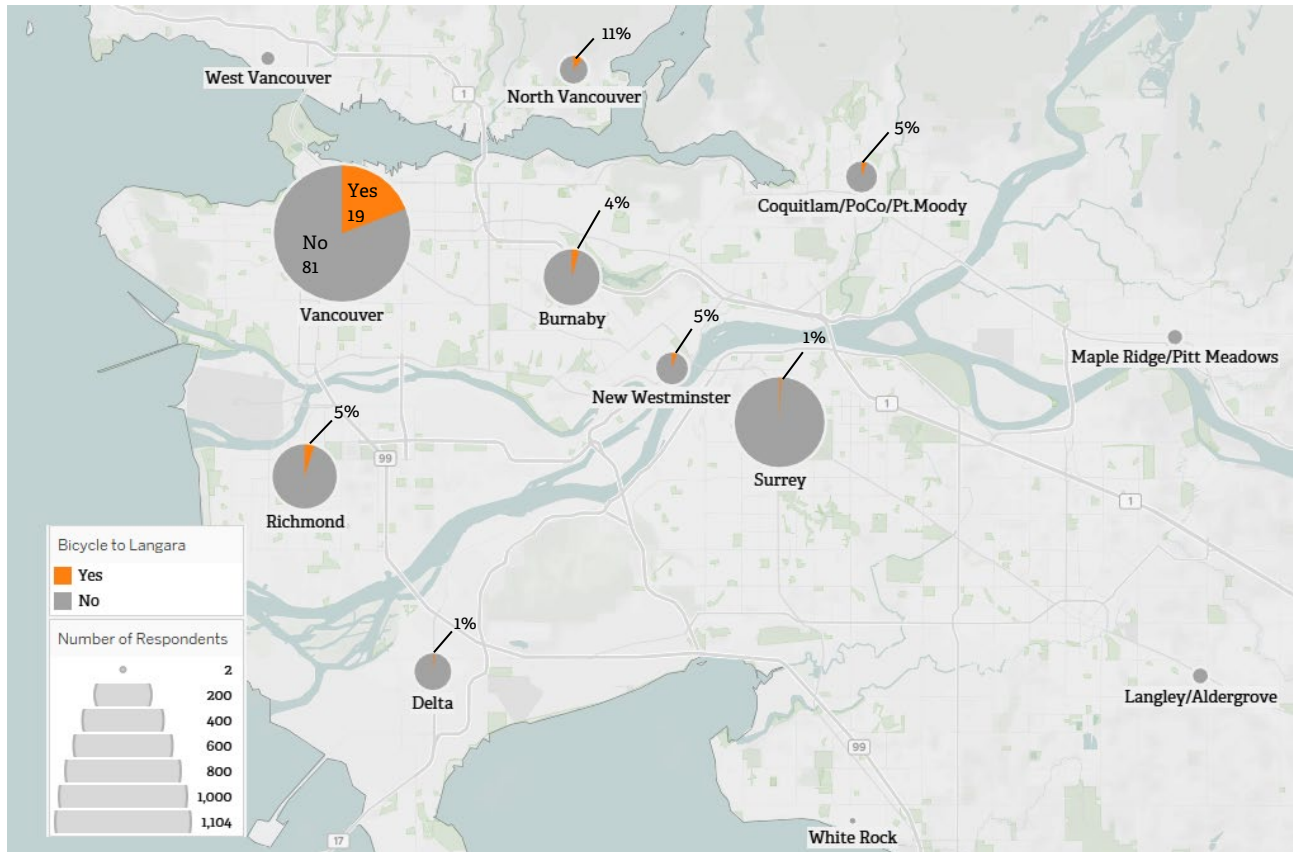


Among the respondents who live in Vancouver, 19% have biked to Langara. The percentage is lower for those who live in the other cities (See Table 9 and Figure 36).

Table 9: Respondents that Bike to Langara by City of Residence

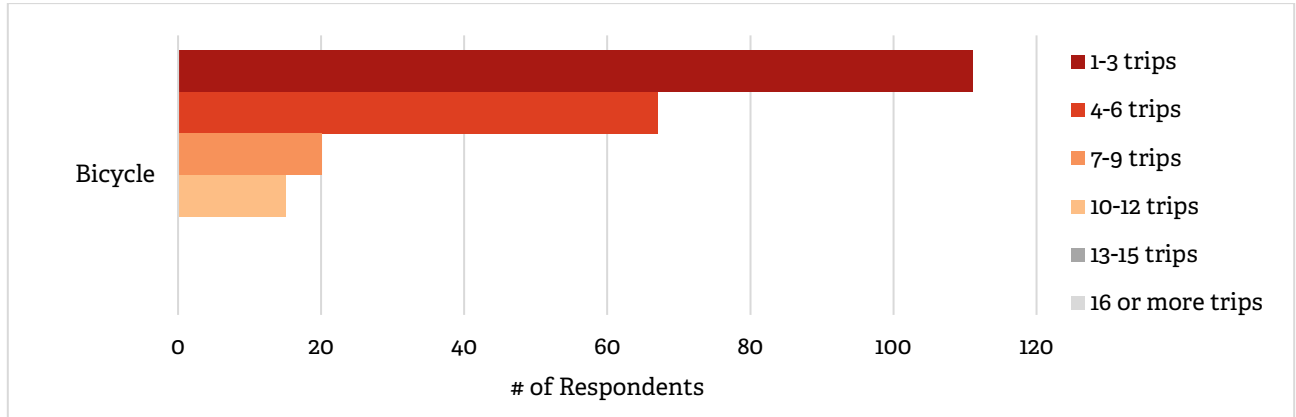
	Bicycle	Do not Bicycle	% Bicycle	% Do not Bicycle	Total
Vancouver	211	893	19%	81%	1,104
Surrey	3	476	1%	99%	479
Richmond	12	233	5%	95%	245
Burnaby	8	177	4%	96%	185
Delta	1	80	1%	99%	81
Coquitlam/PoCo/Pt.Moody	3	54	5%	95%	57
North Vancouver	5	41	11%	89%	46
New Westminster	3	57	5%	95%	60
Mission/Abbotsford	-	13	0%	100%	13
Langley/Aldergrove	-	13	0%	100%	13
Maple Ridge/Pitt Meadows	-	12	0%	100%	12
West Vancouver	-	10	0%	100%	10
White Rock	-	2	0%	100%	2
Other B.C.	1	12	8%	92%	13
Unknown	3	28	10%	90%	31
Total	250	2,101	11%	89%	2,351

Figure 36: Percentage of Respondents that Bike to Langara by City of Residence



Among the respondents who reported biking to Langara, 45% (111 respondents) said they made 1-3 one-way trips to or from Langara per week (Figure 37).

Figure 37: Number of One-Way Cycling Trips to or from Langara during a Normal Week



The Ontario Street bikeway is the most popular bike route among Langara commuters with 223 respondents (66% of those who bike to Langara) selecting it as their route. Another key route is the Cambie Street bike route which is used by 13% of the respondents. Other bike routes include 45th Avenue (8% of the respondents), Prince Edward Street (2%) and 37th Avenue (Midtown/Ridgeway) (2%) (See Figure 38).

Figure 38: Bike Routes Used to Access Langara College

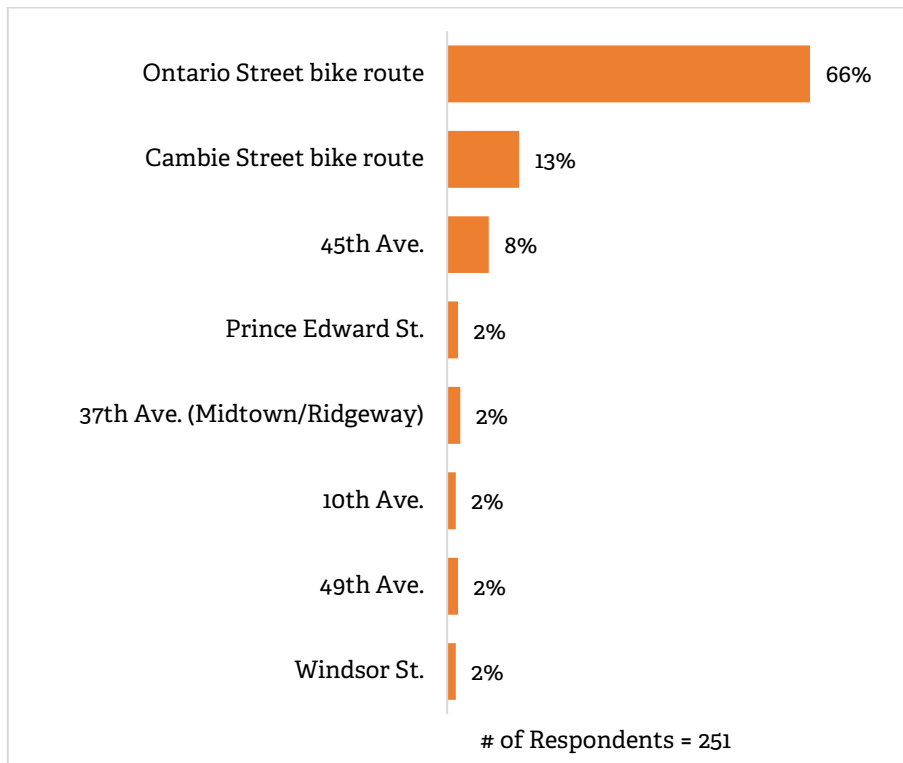
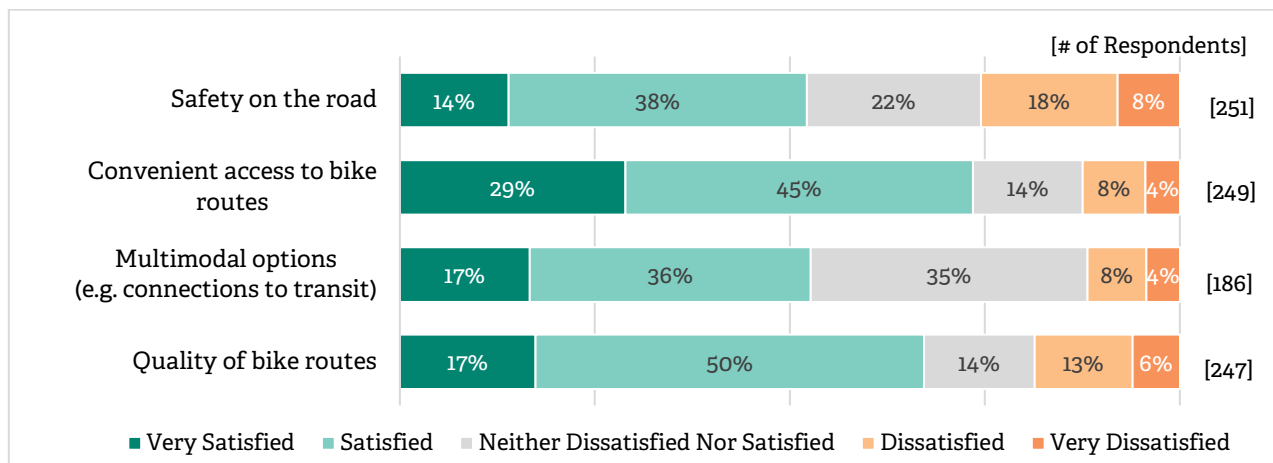


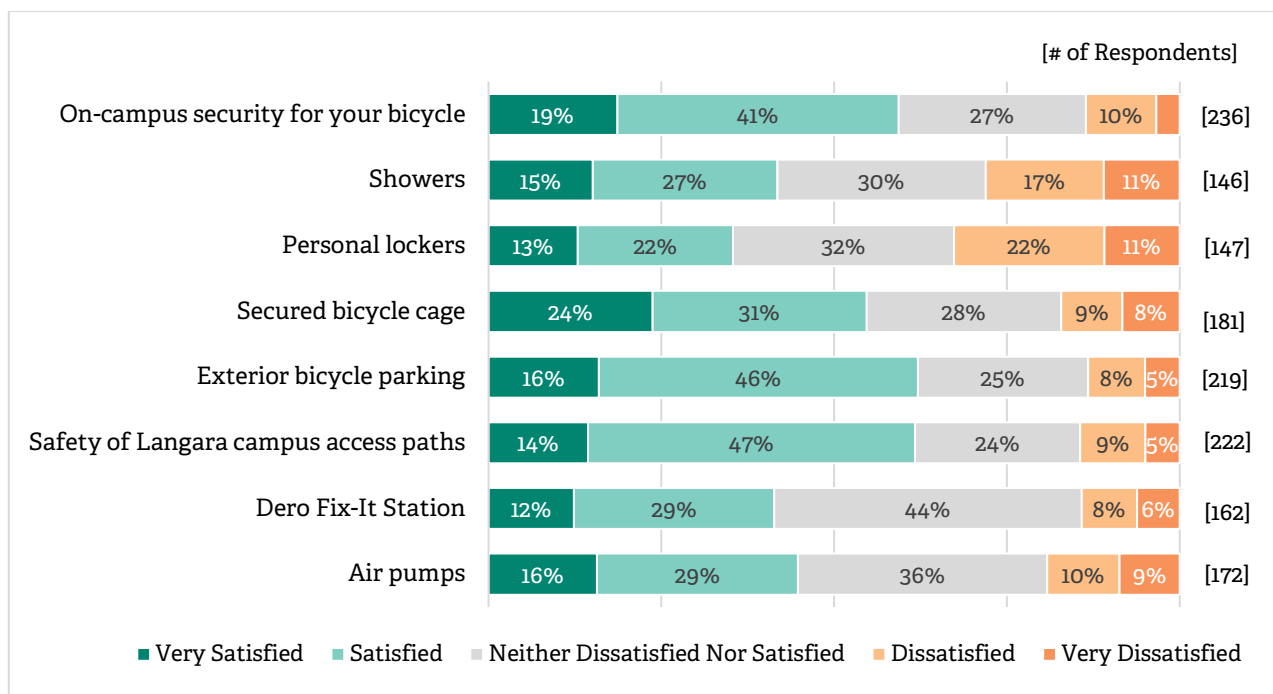
Figure 39 shows that most of the respondents are either very satisfied (29%) or satisfied (45%) with convenient access to bike routes. They also expressed a high level of satisfaction with the quality of bike routes.

Figure 39: Satisfaction with Bicycle Ride to Langara



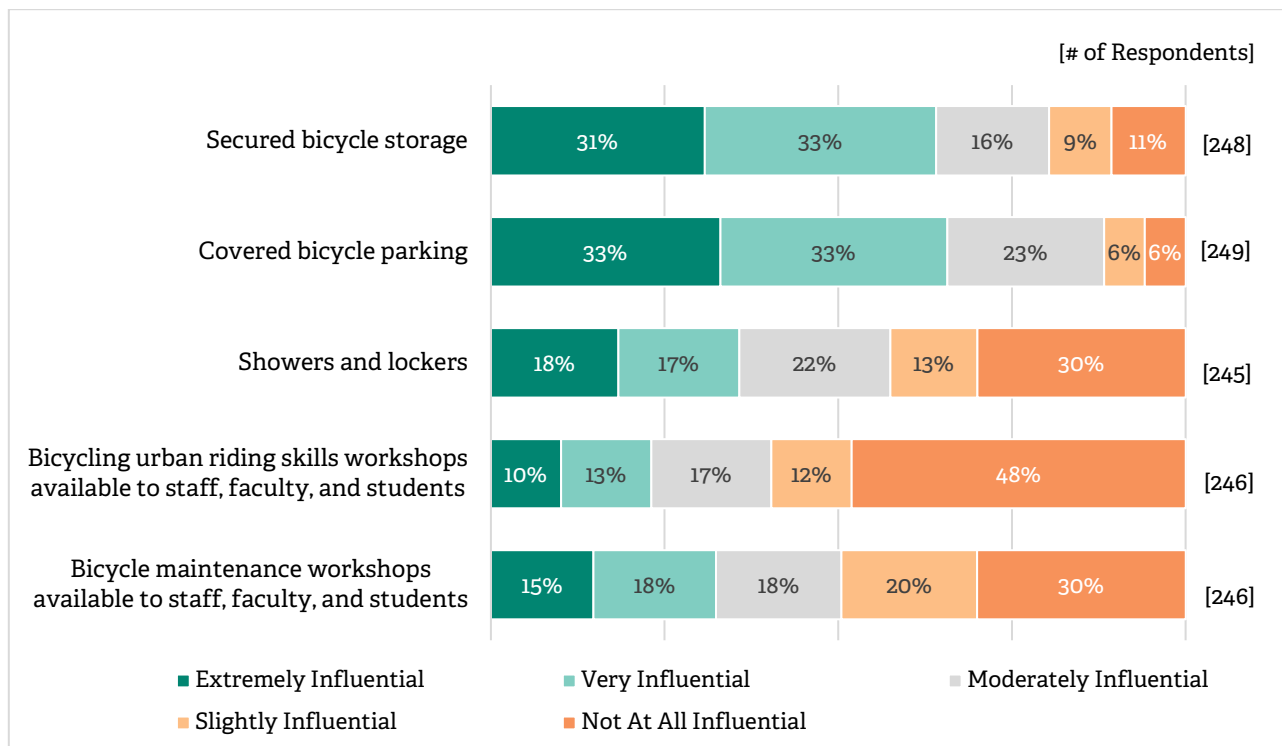
The level of satisfaction with various Langara services for cyclists was comparable to the previous report. In the 2023 survey, 55% of respondents were either satisfied or very satisfied with secured bike cage (slightly down from 57% in 2021). The percentage of respondents who are satisfied or very satisfied with on-campus security for their bicycle was 60% in 2023 (the same percentage as in 2021) (See Figure 40).

Figure 40: Satisfaction with Langara College Services for Cyclists



Over 90% of respondents said that covered bicycle parking had at least some influence on their decision to ride their bicycles with both “extremely influential” and “very influential” selected by 33% of respondents respectively. Bicycle-related workshops are not considered as influential as bicycle storage, showers and lockers on cyclists’ behaviour (See Figure 41).

Figure 41: Factors that Influence Cycling Behaviour



Walking to and around Langara

In the 2023 survey, 18% of respondents said they walked to Langara while 38% said they walked part of the way (at least 2 blocks) (See Figure 42). Among those that walk part of the way, 99% also used transit. Note that commuters often walk 2-3 blocks between the Langara–49th Canada Line station and the Main Campus of Langara College.

Figure 42: Percentage of Respondents that Walk to Langara

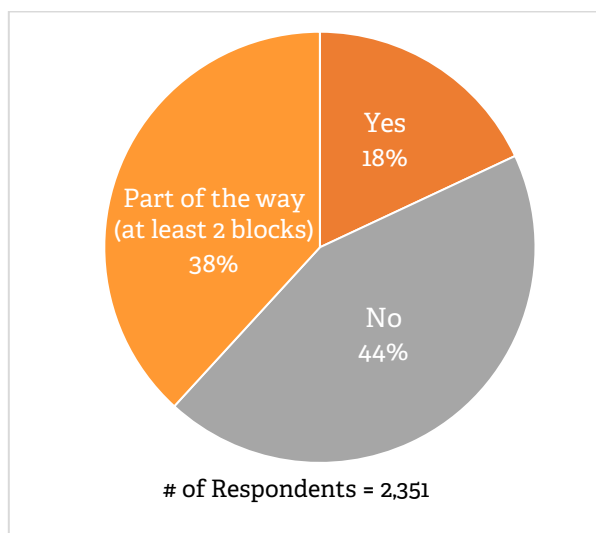
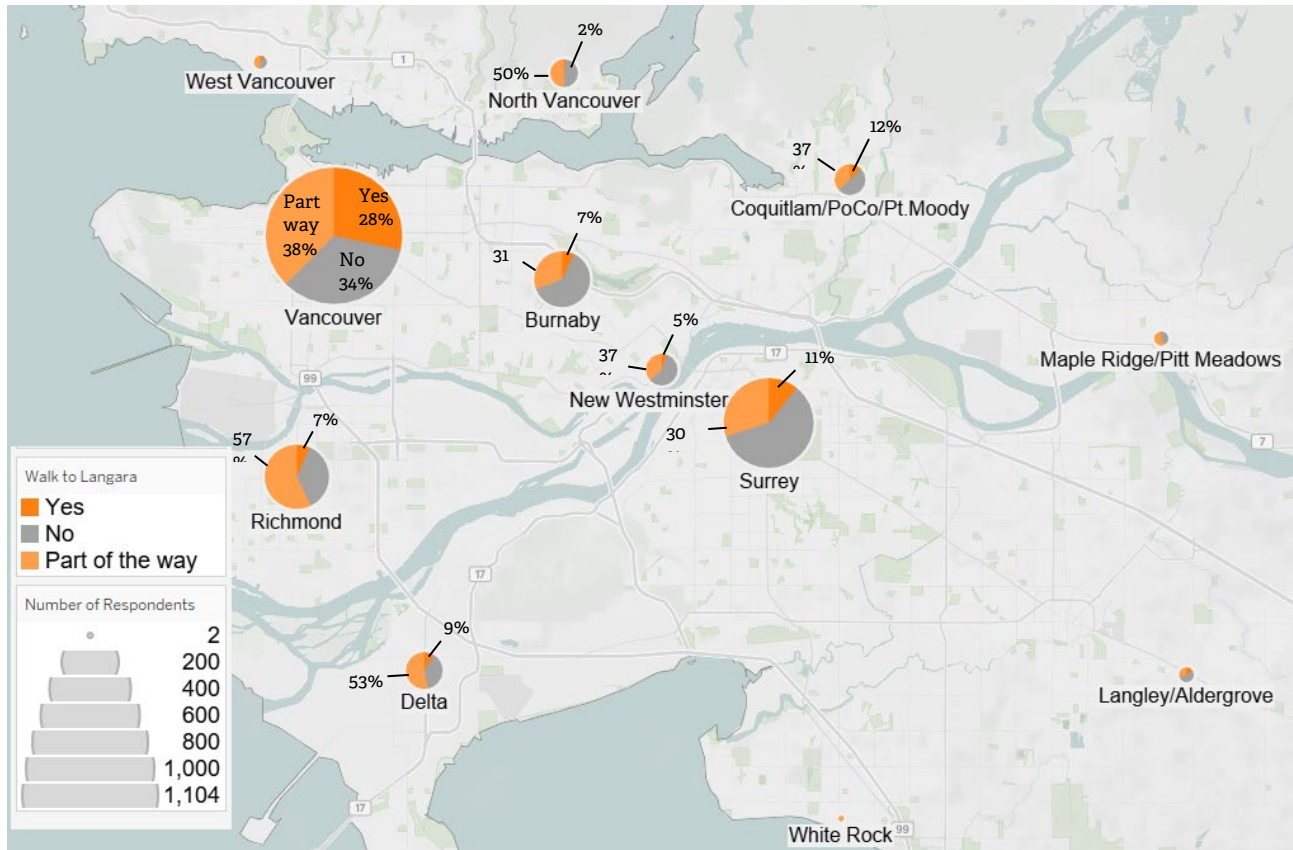


Table 10 and Figure 43 show that, among the respondents who live in Vancouver, 28% walk to Langara, 38% walk part of the way, and 34% do not walk at all when they commute to Langara. The percentage of respondents that do not walk at all when commuting to Langara was 36% for Richmond, 62% for Burnaby, and 59% for Surrey.

Table 10: Respondents that Walk to Langara by City of Residence

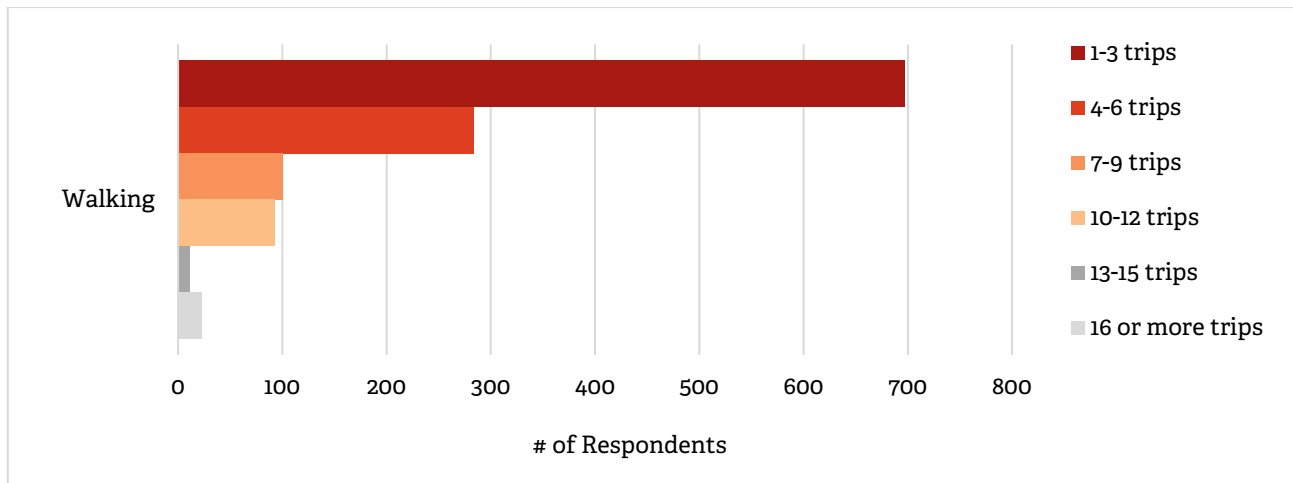
	Walk	Walk Part of the way	Do not Walk	% Walk	% Walk Part of the way	% Do not Walk	Total
Vancouver	313	415	376	28%	38%	34%	1,104
Surrey	52	143	284	11%	30%	59%	479
Richmond	16	140	89	7%	57%	36%	245
Burnaby	13	57	115	7%	31%	62%	185
Coquitlam/PoCo/Pt.Moody	7	21	29	12%	37%	51%	57
Delta	7	43	31	9%	53%	38%	81
New Westminster	3	22	35	5%	37%	58%	60
Langley/Aldergrove	2	4	7	15%	31%	54%	13
North Vancouver	1	23	22	2%	50%	48%	46
West Vancouver	1	5	4	10%	50%	40%	10
Maple Ridge/Pitt Meadows	-	7	5	0%	58%	42%	12
Mission/Abbotsford	-	2	11	0%	15%	85%	13
White Rock	-	2	-	0%	100%	0%	2
Other B.C.	2	6	5	15%	46%	38%	13
Unknown	7	8	16	23%	26%	52%	31
Total	424	898	1,029	18%	38%	44%	2,351

Figure 43: Percentage of Respondents that Walk to Langara by City of Residence



Among the respondents who reported walking at least part of the way to Langara, 53% (697 respondents) said they made 1-3 one-way walking trips, and 22% (284 respondents) said they made 4-6 one-way walking trips per week (See Figure 44).

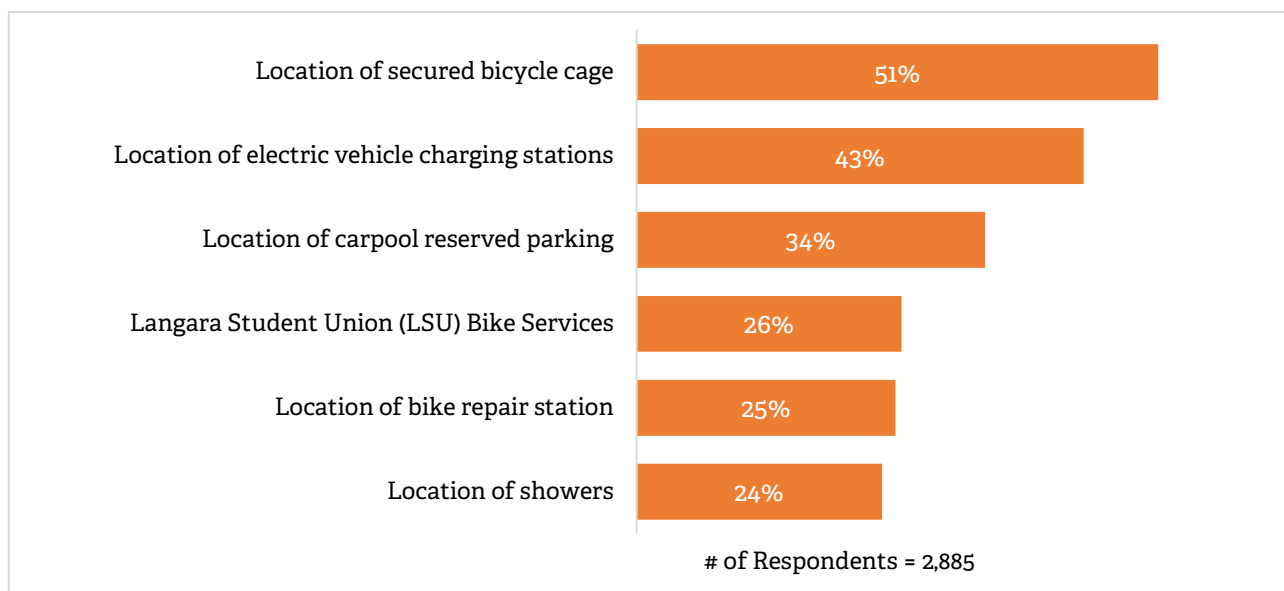
Figure 44: Number of One-Way Walking Trips to or from Langara during a Normal Week



Langara Services

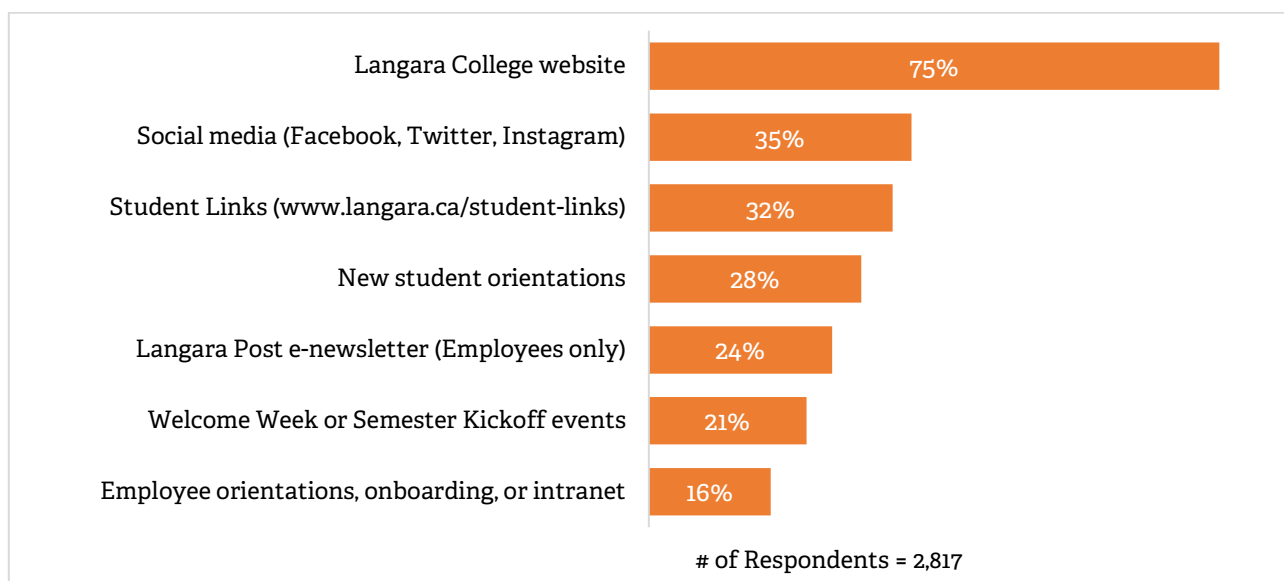
All respondents that commute to the Main Campus, regardless of their commuting behaviour, were asked about Langara’s travel-related services. The percentage of respondents that said they were aware of the location of secured bicycle cage increased significantly from 38% in 2021 to 51% in 2023. The percentage of respondents that were aware of the location of electric vehicle charging stations also increased from 33% in 2021 to 43% in 2023 (See Figure 45).

Figure 45: Percentage of Respondents that are Aware of Langara’s Travel-related Services



Most of the respondents (75%) prefer to receive information on Langara’s travel-related services through the Langara College website (Figure 46).

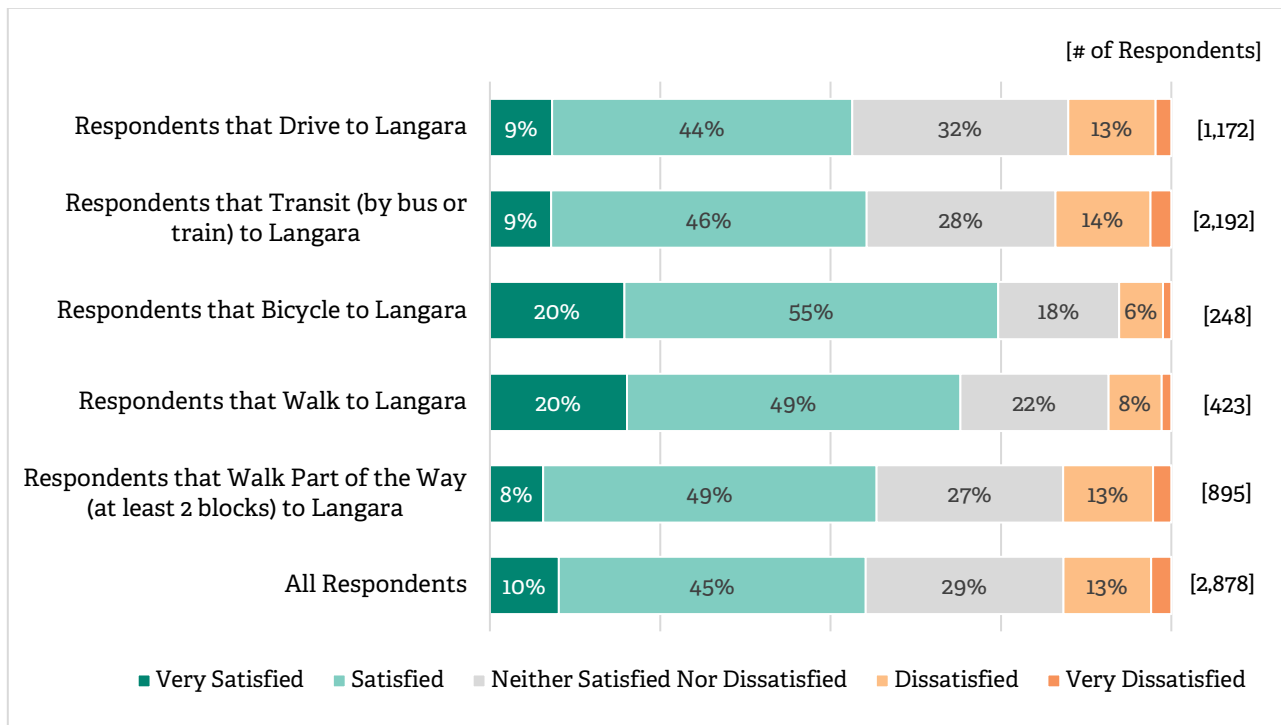
Figure 46: Preferred Method of Communication Regarding Langara’s Travel-related Services



Overall Level of Satisfaction and Future Priorities

Overall, a majority of the respondents are either very satisfied (10%) or satisfied (45%) with their commute to Langara. Respondents that bike to Langara reported the highest level of satisfaction with their commute – 20% are very satisfied and 55% are satisfied (See Figure 47).

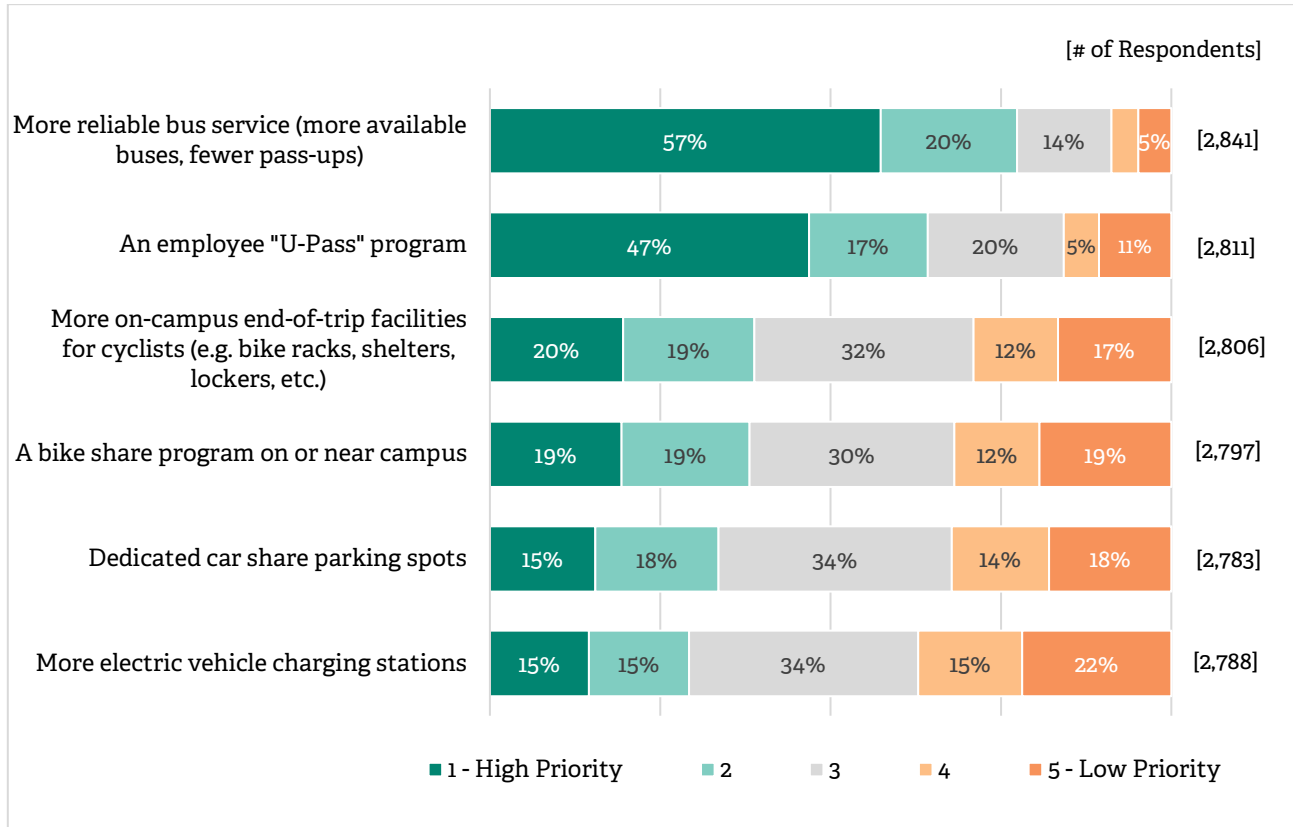
Figure 47: Overall Satisfaction with Commute to and from Langara by Transit Mode



The survey also asked respondents to help Langara prioritize initiatives as part of our campus travel planning efforts. Figure 48 shows that, among the six initiatives listed in the survey, “more reliable bus service” received the highest priority rating from the respondents, with 57% rating it as “1 – High Priority”. This was significantly higher than 47% of respondents in the 2021 survey. An employee “U-Pass” program is also considered to be an important initiative with 47% of the respondents selecting “1 – High Priority”, compared to 45% in the previous report in 2021.

The other initiatives, including more on-campus end-of-trip facilities for cyclists and a bike share program on or near campus, also attracted interest from many commuters, with approximately 40% of the respondents selecting “1” or “2” in terms of priority. These are similar percentages as in 2021.

Figure 48: Priority Levels of Langara’s Travel-related Initiatives



CONCLUSIONS

Langara College's fourth biannual Transportation Survey was conducted from October 23 to November 14, 2023. Our analysis of the survey results builds on the data collected from the previous Transportation Surveys conducted in 2017, 2019, and 2021. They enable us to better understand how transportation services may be improved at Langara and/or within the Metro Vancouver transportation network.

The 2023 survey was conducted following the ease of restrictions and subsequent return to various activities since the global COVID-19 pandemic. Despite these major lifestyle changes, the percentage of respondents who travel without a car to Langara is 81%, only a slight increase from the previous report in 2021 (80%) and a decline from the 2019 report (88%). This number makes sense since the average number of driving trips they make to all destinations in a normal week is similar to the 2021 report.

The previous report introduced a question to determine the respondents' primary mode of transportation to Langara. In this year's report, the answer options added further granularity to identify specific types of transit and driving choices. While 57% of respondents selected transit as their primary mode of transportation, 19% said it was a car. The survey also asked respondents to indicate the number of one-way trips they make to or from Langara in a normal week. In total, 2,891 respondents reported making 24,332 one-way trips per week. Regarding the modal split, 81% of them were by sustainable modes (57% transit, 21% walking, and 3% cycling), and 19% were by car.

As many as 94% of respondents have taken transit to Langara, and of those respondents who use transit, most use the Canada Line or Bus #49. Although the percentage of people who take transit to Langara has remained consistent over the previous reports, the number of respondents who said they had been passed up by a bus or a train when travelling to Langara increased from 58% in the 2021 survey to 77% in the 2023 survey. This number is more like the 2019 report of 81%. This issue was also present in the comments reported in the qualitative analysis of this survey. Overall, the survey respondents' level of satisfaction with overall transit decreased slightly. In 2021, the percentage of respondents who were very satisfied or satisfied with their overall commute was 58%, that percentage was 55% in 2023.

Those who live in Vancouver are more likely to ride their bicycles to Langara than those living in other cities. Overall, 11% of the respondents have biked to Langara, and 66% of the bicycle commuters use the Ontario Street bikeway. The level of satisfaction with various Langara services for cyclists was comparable to the previous report.

Except for cost, the level of satisfaction with the transit service decreased over the last two years. With an increase in the number of people who take transit since the last survey, problems like overcrowding and being passed up are back. Providing more reliable bus service continues to be a high-priority initiative. In 2021, 47% of respondents stated that reliable bus service was their top priority; in 2023, that percentage increased to 57%.

Regarding awareness of Langara's travel-related services, there was a significant improvement over the last two years. The percentage of respondents that said they were aware of the location of secured bicycle cage increased from 38% in 2021 to 51% in 2023. However, the majority of respondents were still not aware of services such as the Langara Student Union Bike Services.

Overall, 10% of the 2023 survey respondents were very satisfied, and 45% were satisfied with their commute to Langara. We will continue to conduct the Transportation Survey every two years. Changes in the survey results will be tracked over the coming years to understand changes in the commuting patterns of the Langara Community and the impacts of our campus travel planning efforts.