

Langara.

THE COLLEGE OF HIGHER LEARNING.

Transportation Survey Report 2019

TABLE OF CONTENTS

EXECUTIVE SUMMARY 2

BACKGROUND 3

SURVEY RESULTS 5

 Respondent Profiles 5

 Driving to Langara 11

 Travelling Without a Car 17

 Taking Transit to Langara 20

 Cycling to Langara 27

 Walking to and around Langara 31

 Langara Services 34

 Overall Level of Satisfaction and Future Priorities 35

CONCLUSIONS 38

EXECUTIVE SUMMARY

This report summarizes the results of Langara College's second biannual Transportation Survey conducted in 2019. Between September 23 and October 4, 2019, the online survey collected 3,931 responses from 1,937 domestic students, 1,512 international students, 291 staff, and 191 faculty members.

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

- **Langara students continue to move away from Vancouver:** While Vancouver remains the city where the largest number of our students live in, the proportion that lives in Vancouver has continued to decrease over the last seven years. In contrast, the proportion of our student population living in Surrey has increased dramatically. This may have an impact on their commuting patterns and experiences.
- **Decrease in Driving to Langara:** The 2019 survey showed that 34% of respondents drove to Langara (including driving alone, carpool/vanpool/dropped off, car share, or motorcycle/moped), compared to 38% in the 2017 survey. The decline was especially significant among faculty members (75% in 2017 to 66% in 2019).
- **More Commuters Getting Passed Up by Over-Capacity Bus or Train:** Transit is very important to commuters with 85% of respondents having used it to travel to Langara, but overcrowding continues to be a major issue. As many as 81% of respondents said that they had been passed up by a bus or a train when travelling to Langara (compared to 73% in the 2017 survey).
- **Satisfaction with Langara Services Increases among Cyclists:** Cycling to Langara is convenient with a number of bikeways nearby, and 11% of respondents have biked to Langara. Their level of satisfaction with various Langara services for cyclists including exterior bicycle parking, on-campus security of bicycles, and showers improved from 2017 to 2019.
- **Many Taking Transit and Walking Part of the Way:** While 20% of respondents said they walked to Langara, additional 41% said they walked part of the way (at least 2 blocks). 99% of the respondents who walk part-way also use transit (bus and/or train) to get to Langara.
- **Better Communication Needed about Travel-Related Services:** The 2019 survey introduced a new question about the location of showers on campus, and only 18% of respondents were aware of it. Also, less than 30% of respondents were aware of the locations of electric vehicle charging stations and carpool reserved parking.
- **Creating an Employee U-Pass Program would Encourage Transit Use:** While 88% of our students transit to Langara, only 64% of faculty and staff use transit to commute to Langara. Among those employees who always travel to Langara by car, 47% said that an employee U-Pass program would encourage them to take transit.
- **The Majority of Langara Commuters are Satisfied:** Overall, 9% of the respondents are very satisfied and 42% are satisfied with their commute to Langara. The level of satisfaction is higher among those who bike or walk to Langara.

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 travel characteristics of the Langara community as well as impacts of our transportation-related initiatives.

BACKGROUND

The number of students and employees commuting to Langara College has increased over the last five years, and it is important for us to study their travel behaviour and patterns. The 2019 Transportation Survey follows up on the same survey from two years earlier. Starting in 2017, we are committed to conducting our Transportation Survey every two years in order to better understand how transportation services may be improved at Langara and/or within the Metro Vancouver transportation network.

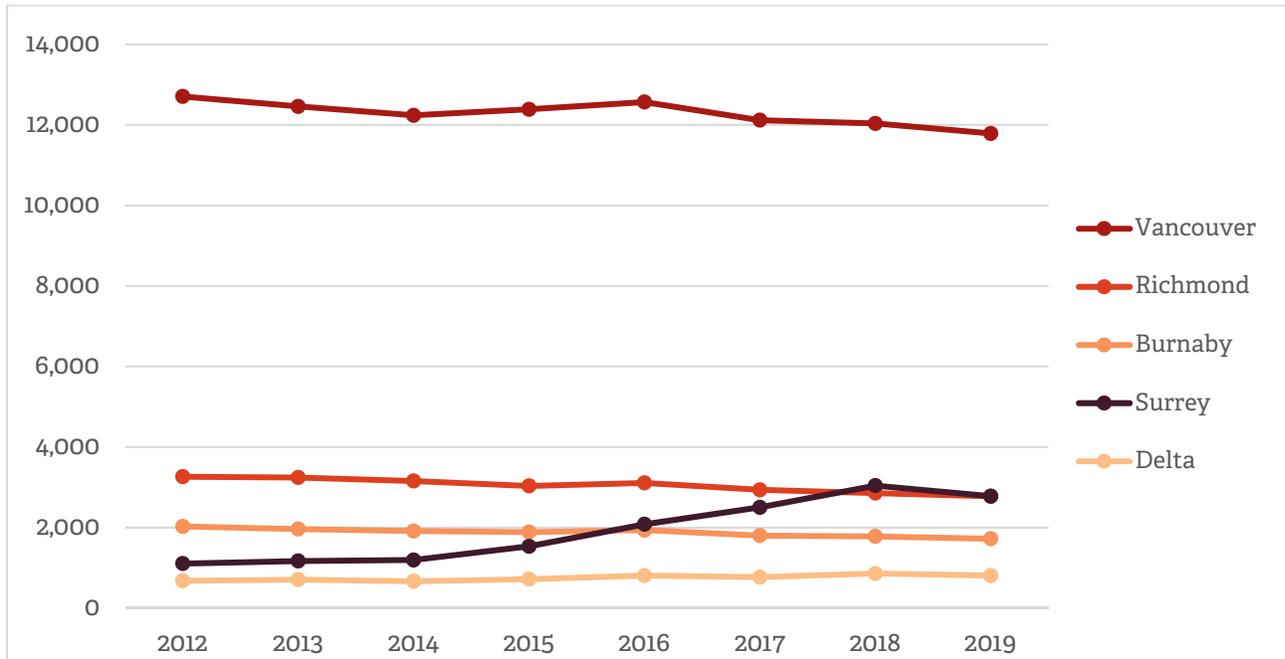
Our data shows that Langara's student population is increasingly moving away from Vancouver and into neighbouring cities – especially Surrey. Table 1 and Figure 1 show which cities our students have lived in over the last seven years. The number of students living in Vancouver has decreased by 7% over the last seven years. Over the same period, the number of those living in Richmond and Burnaby has also decreased by 15%. In contrast, the number of students who commute to Langara from Surrey has increased by 151% from 2012 to 2019.

Table 1: Number of Langara Students by City of Residence, 2012-2019

	2012	2013	2014	2015	2016	2017	2018	2019	% Change 2012-2019
Vancouver	12,705	12,459	12,237	12,387	12,567	12,117	12,037	11,787	-7%
Richmond	3,263	3,244	3,157	3,035	3,109	2,938	2,856	2,777	-15%
Surrey	1,106	1,170	1,195	1,535	2,082	2,503	3,042	2,780	151%
Burnaby	2,030	1,963	1,914	1,888	1,939	1,801	1,782	1,722	-15%
Delta	680	707	667	720	809	768	860	808	19%
Coquitlam/PoCo/Pt.Moody	604	624	578	620	599	541	530	556	-8%
North Vancouver	485	482	478	527	502	501	431	431	-11%
New Westminster	371	385	406	394	450	392	411	394	6%
West Vancouver	173	159	155	142	156	136	130	135	-22%
Langley/Aldergrove	117	128	135	158	170	146	125	109	-7%
Mission/Abbotsford	74	99	79	89	127	121	126	110	49%
Maple Ridge/Pitt Meadows	99	109	99	113	120	88	100	101	2%
White Rock	70	55	48	49	53	44	43	40	-43%
Other B.C.	540	522	471	505	586	471	391	361	-33%
Other Provinces	298	269	263	277	230	224	263	212	-29%
Unknown	403	422	496	663	979	1,651	1,261	2,102	422%
Total	23,018	22,797	22,378	23,102	24,478	24,442	24,388	24,425	6%

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, 2012-2019



As Langara College is located in a residential neighbourhood with limited parking, commuters are encouraged to travel without a car. However, if more commuters are travelling longer distances to get to our campus, travel by car may increase. One of the purposes of this study is to investigate Langara commuters' travel characteristics and find ways to encourage them to carpool, take transit, ride their bikes, or walk to Langara.

SURVEY RESULTS

Respondent Profiles

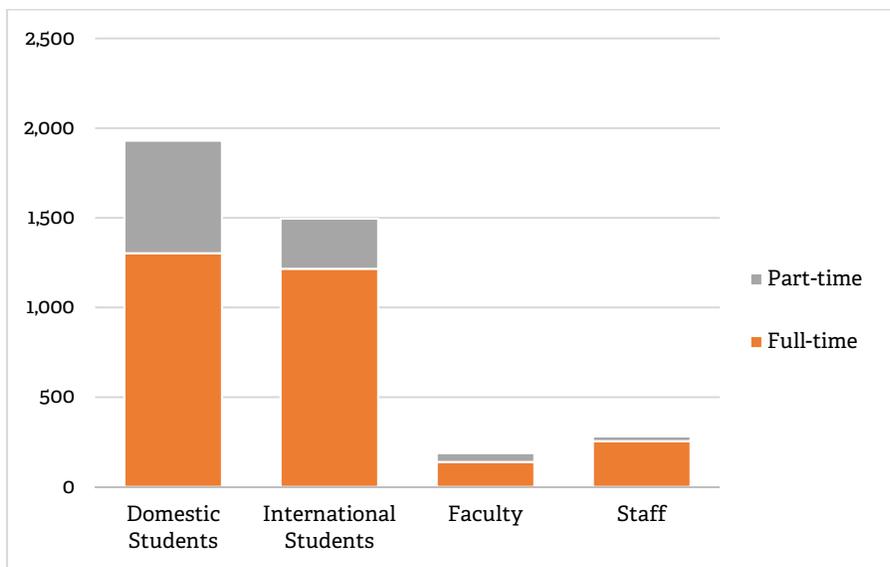
The 2019 Langara College Transportation Survey was implemented from September 23 to October 4, 2019. The link to the survey was sent out to the College community via email and also posted on the College website. All respondents used the link to respond to the survey online. The response rate was 21% among students and 28% among faculty and staff.

In total, the survey received responses from 3,931 people (compared to 3,067 in the 2017 survey). As Table 2 shows, over 85% of the respondents were students. Staff and faculty accounted for 7% and 5% 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	1,937	49%
International Students	1,512	38%
Staff	291	7%
Faculty	191	5%
Total	3,931	100%

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



Langara has seen a decrease in students and employees living in Vancouver, Richmond and Burnaby, and an increase in those living in Surrey over the last decade. Our previous transportation survey conducted in 2017 showed that 51.0% of respondents lived in Vancouver and 16.3% in Surrey. The 2019 survey showed that the proportion of respondents living in Vancouver decreased by 2.56 percentage points to 48.4%, and the proportion of those in Surrey increased by 3.72 percentage points to 20.0% (See Table 3).

Table 3: Number of Survey Respondents by City of Residence (2019 vs. 2017)

City	Number of Respondents (2019)	Percent (2019)	Number of Respondents (2017)	Percent (2017)	Change 2017-2019 (pp)
Vancouver	1,904	48.4%	1,564	51.0%	-2.56
Surrey	786	20.0%	499	16.3%	3.72
Richmond	371	9.4%	278	9.1%	0.37
Burnaby	269	6.8%	214	7.0%	-0.13
Delta	185	4.7%	132	4.3%	0.40
Coquitlam/PoCo/Pt.Moody	104	2.6%	77	2.5%	0.14
New Westminister	87	2.2%	67	2.2%	0.03
North Vancouver	61	1.6%	53	1.7%	-0.18
Mission/Abbotsford	30	0.8%	20	0.7%	0.11
Langley/Aldergrove	22	0.6%	16	0.5%	0.04
Maple Ridge/Pitt Meadows	21	0.5%	11	0.4%	0.18
West Vancouver	19	0.5%	10	0.3%	0.16
White Rock	14	0.4%	4	0.1%	0.23
Other B.C.	18	0.5%	12	0.4%	0.07
Unknown	40	1.0%	110	3.6%	-2.57
Total	3,931	100%	3,067	100%	-

Figure 3 shows where the survey respondents live by Forward Sortation Area (FSA). The darker colour gradients on the map reveal that there are a larger number of respondents in FSA V5X, Vancouver (SE Oakridge / East Marpole / South Sunset). There are also a large number of respondents in FSA V3W, Surrey Upper West. For the actual number of respondents by FSA, see Table 4.

Figure 3: Map of Respondents by FSA

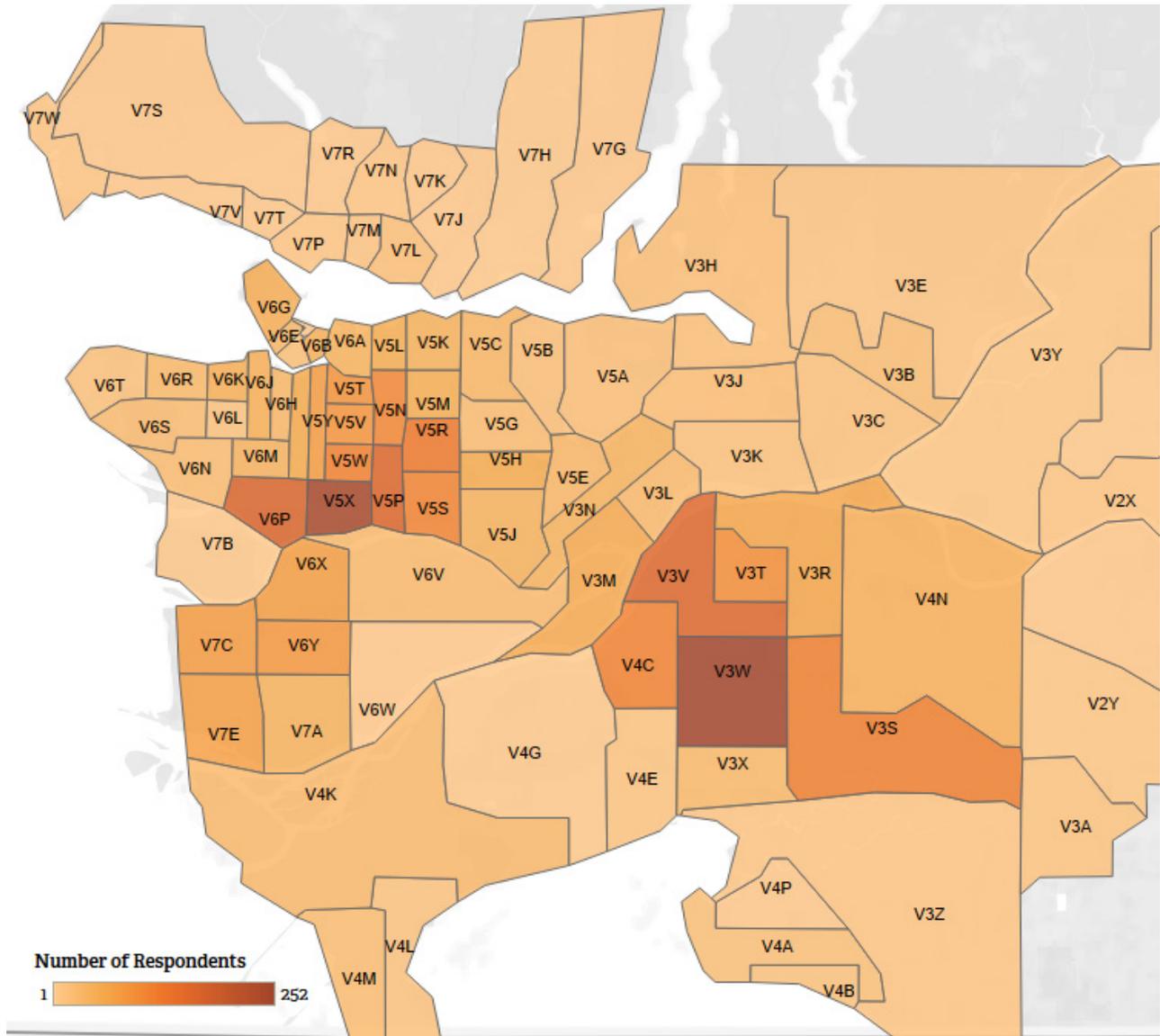


Table 4: Number of Respondents by FSA

City	FSA	Area	# of resp.	%
Vancouver	V5X	Vancouver (SE Oakridge / East Marpole / South Sunset)	241	6.1%
	V6P	Vancouver (SE Kerrisdale / West Marpole)	165	4.2%
	V5P	Vancouver (Victoria Fraserview)	161	4.1%
	V5R	Vancouver (South Renfrew Collingwood)	125	3.2%
	V5W	Vancouver (SE Riley Park Little Mountain / North Sunset)	109	2.8%
	V5S	Vancouver (Killarney)	108	2.7%
	V5N	Vancouver (South Grandview Woodland)	103	2.6%
	V5T	Vancouver (East Mount Pleasant)	85	2.2%

City	FSA	Area	# of resp.	%
Vancouver (cont.)	V5V	Vancouver (West Kensington Cedar Cottage)	84	2.1%
	V5Y	Vancouver (West Mount Pleasant)	73	1.9%
	V5Z	Vancouver (East Fairview / South Cambie)	53	1.3%
	V5L	Vancouver (North Grandview Woodland)	51	1.3%
	V5M	Vancouver (South Hastings Sunrise)	50	1.3%
	V6G	Vancouver (NW West End / Stanley Park)	47	1.2%
	V6K	Vancouver (Central Kitsilano / Greektown)	46	1.2%
	V6J	Vancouver (NW Shaughnessy / East Kitsilano)	46	1.2%
	V6B	Vancouver (NE Downtown / Yaletown)	43	1.1%
	V5K	Vancouver (North Hastings Sunrise)	42	1.1%
	V6A	Vancouver (Strathcona / Downtown Eastside)	41	1.0%
	V6M	Vancouver (South Shaughnessy / SE Arbutus Ridge)	38	1.0%
	V6H	Vancouver (West Fairview / Granville Island)	33	0.8%
	V6E	Vancouver (SE West End / Davie Village)	32	0.8%
	V6R	Vancouver (West Kitsilano / West Point Grey / Jericho)	31	0.8%
	V6N	Vancouver (West Kerrisdale / Musqueam)	26	0.7%
	V6S	Vancouver (NW Dunbar Southlands / Chaldecutt)	25	0.6%
	V6Z	Vancouver (SW Downtown)	17	0.4%
	V6T	Vancouver (UBC)	15	0.4%
	V6L	Vancouver (NW Arbutus Ridge / NE Dunbar Southlands)	12	0.3%
V6C	Vancouver (Waterfront / Coal Harbour / Canada Place)	2	0.1%	
Surrey	V3W	Surrey Upper West	252	6.4%
	V3V	Surrey Outer Northwest	159	4.0%
	V3S	Surrey East	114	2.9%
	V3T	Surrey Inner Northwest	94	2.4%
	V3R	Surrey North	61	1.6%
	V4N	Surrey Northeast	45	1.1%
	V3X	Surrey Lower West	31	0.8%
	V4A	Surrey Southwest	17	0.4%
	V3Z	Surrey Lower East	9	0.2%
	V4P	Surrey South	4	0.1%
Richmond	V6Y	Richmond Central	79	2.0%
	V7C	Richmond Northwest	76	1.9%
	V6X	Richmond North	72	1.8%
	V7E	Richmond Southwest	70	1.8%
	V7A	Richmond South	42	1.1%
	V6V	Richmond Northeast	28	0.7%
	V6W	Richmond Southeast	3	0.1%
	V7B	Richmond (Sea Island / YVR)	1	0.0%
Burnaby	V5H	Burnaby (Maywood / Windsor)	53	1.3%

City	FSA	Area	# of resp.	%
Burnaby (cont.)	V5J	Burnaby (Suncrest / West Big Bend)	42	1.1%
	V3N	Burnaby (East Big Bend / Edmonds)	41	1.0%
	V5C	Burnaby (Burnaby Heights / Willingdon Heights)	34	0.9%
	V5E	Burnaby (Kingsway Beresford)	33	0.8%
	V5G	Burnaby (Cascade Schou / Douglas Gilpin)	26	0.7%
	V5A	Burnaby (Lake City / Burnaby Mountain)	20	0.5%
	V5B	Burnaby (Parkcrest Aubrey / Ardingley Sprott)	20	0.5%
Delta	V4C	Delta Northeast	109	2.8%
	V4K	Delta Northwest	28	0.7%
	V4M	Delta Southwest	24	0.6%
	V4L	Delta Southeast	12	0.3%
	V4E	Delta East	11	0.3%
	V4G	Delta East Central	1	0.0%
Coquitlam/PoCo/Pt.Moody	V3B	Port Coquitlam Central	22	0.6%
	V3J	Coquitlam North	21	0.5%
	V3H	Port Moody	19	0.5%
	V3C	Port Coquitlam South	16	0.4%
	V3K	Coquitlam South	16	0.4%
	V3E	Coquitlam North	10	0.3%
New Westminister	V3M	New Westminister Southwest	57	1.5%
	V3L	New Westminister Northeast	30	0.8%
North Vancouver	V7L	North Vancouver South Central	19	0.5%
	V7M	North Vancouver Southwest Central	10	0.3%
	V7P	North Vancouver Southwest	8	0.2%
	V7N	North Vancouver Northwest Central	8	0.2%
	V7K	North Vancouver North Central	4	0.1%
	V7R	North Vancouver Northwest	4	0.1%
	V7G	North Vancouver Outer East	4	0.1%
	V7J	North Vancouver East Central	3	0.1%
	V7H	North Vancouver Inner East	1	0.0%
Mission/Abbotsford	V2T	Abbotsford Southwest	13	0.3%
	V2S	Abbotsford Southeast	6	0.2%
	V2V	Mission East	5	0.1%
	V4X	Abbotsford West	3	0.1%
	V3G	Abbotsford East	2	0.1%
	V4S	Mission West	1	0.0%
Langley/Aldergrove	V3A	Langley City	11	0.3%
	V2Y	Langley Township Northwest	7	0.2%
	V1M	Langley Township North	3	0.1%
	V4W	Langley Township East	1	0.0%

City	FSA	Area	# of resp.	%
Maple Ridge/Pitt Meadows	V2X	Maple Ridge West	9	0.2%
	V3Y	Pitt Meadows	7	0.2%
	V2W	Maple Ridge East	3	0.1%
	V4R	Maple Ridge Northwest	2	0.1%
West Vancouver	V7W	West Vancouver West	8	0.2%
	V7V	West Vancouver South	4	0.1%
	V7T	West Vancouver Southeast	4	0.1%
	V7S	West Vancouver North	3	0.1%
White Rock	V4B	White Rock	14	0.4%
Others			58	1.5%
Total			3,931	100%

The Main Campus of Langara College is located at 100 West 49th Avenue, and 98.4% of respondents said they primarily traveled to this location (See **Table 5**). The other locations are the West Broadway campus (1.0%) and the Centre for Entertainment Arts (0.6%). The Centre for Entertainment Arts was launched in 2019, and we expect to see the number of students commuting to this location to increase in the future. In this survey report, the analysis of transportation-related questions focuses mostly on the 3,868 respondents that commute to the Main Campus.

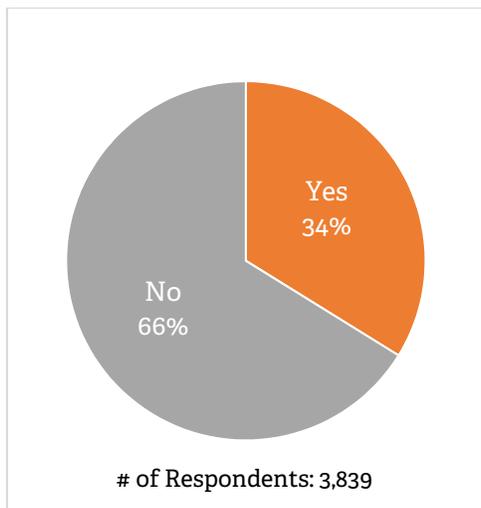
Table 5: Number of Respondents by Campus

Campus	Number of Respondents	Percent
Main Campus (100 West 49th Avenue)	3,868	98.4%
West Broadway Campus (601 West Broadway)	38	1.0%
Centre for Entertainment Arts (565 Great Northern Way)	25	0.6%
Total	3,931	100%

Driving to Langara

Of the 3,839 respondents who responded to the survey question, 34% said they drove to Langara, including driving alone, carpool/vanpool/dropped off, car share, and motorcycle/moped (See Figure 4). The proportion declined from 38% in the 2017 survey.

Figure 4: Percentage of Respondents that Drive to Langara



Among the four respondent groups, 41% of domestic students, 15% of international students, 66% of faculty, and 62% of staff said they drove to Langara (See Figure 5). For the faculty group, the proportion that drove to Langara fell significantly from 75% in the 2017 survey to 66% in the 2019 survey.

Figure 5: Percentage of Respondents that Drive to Langara by Primary Role

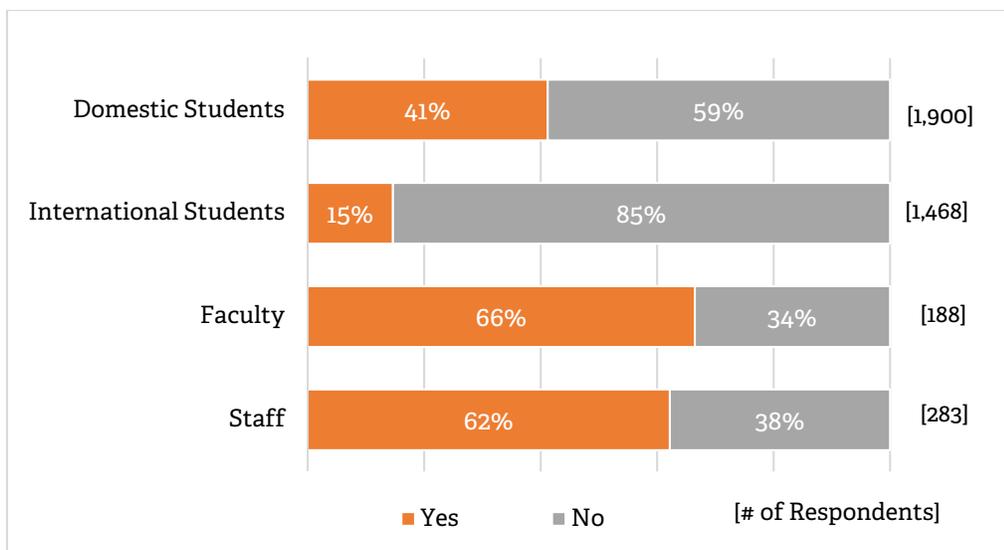
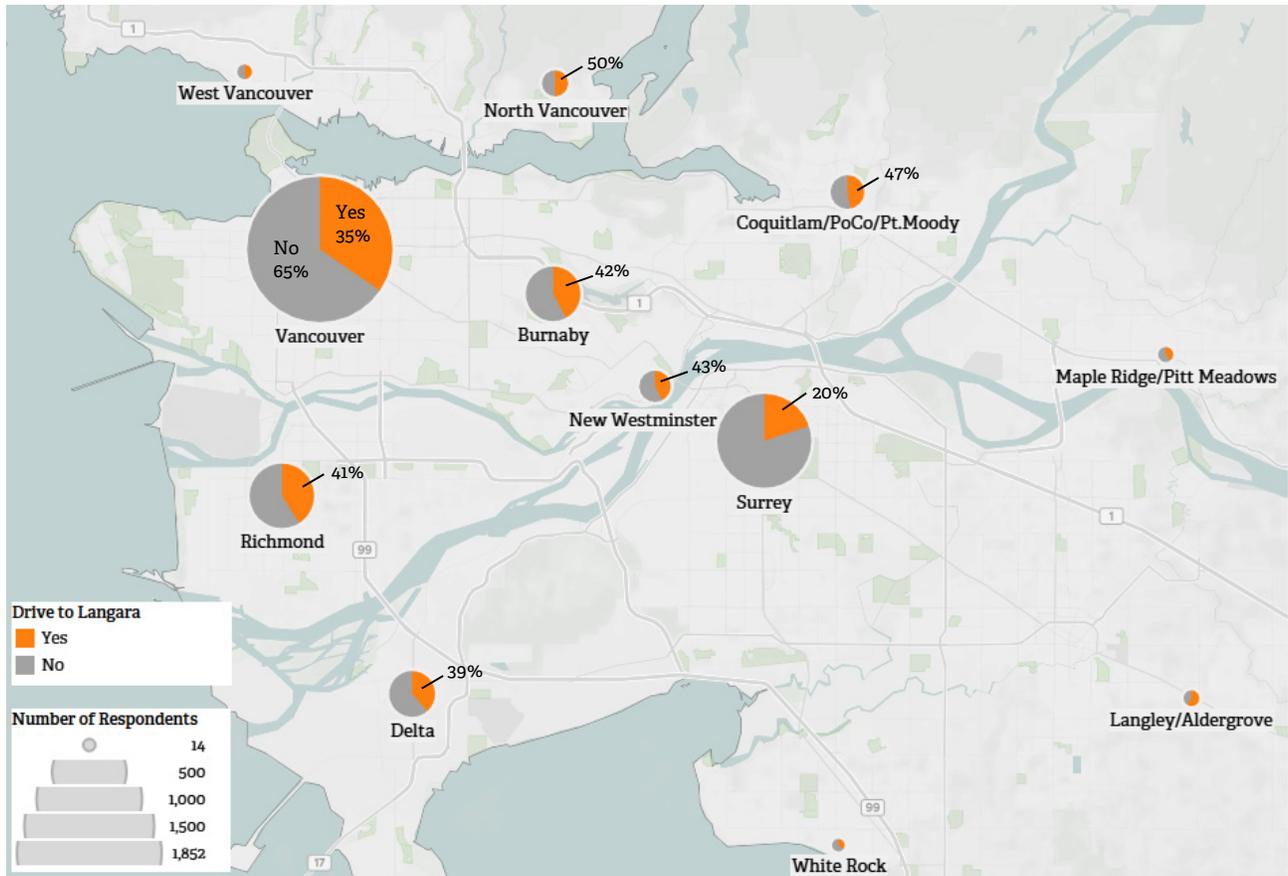


Table 6 and Figure 6 show the percentage of respondents that drive to Langara by their city of residence. 35% of respondents living in Vancouver, 41% of respondents living in Richmond, and 42% of respondents living in Burnaby said they drove to Langara.

Table 6: Respondents that Drive to Langara by City of Residence

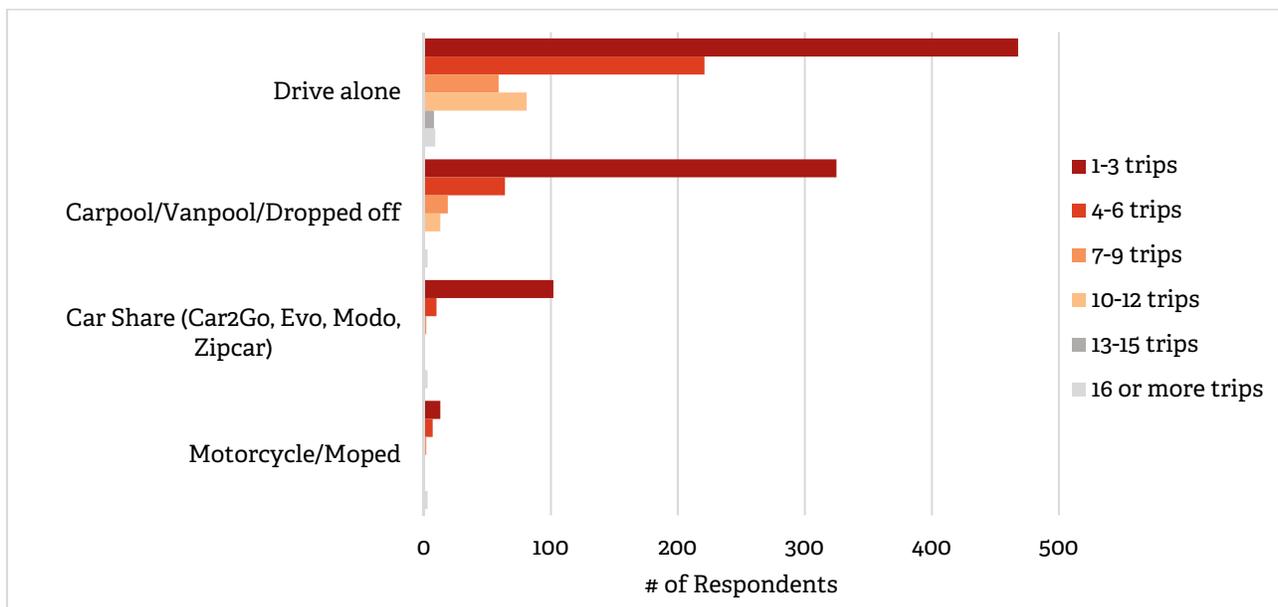
	Drive	Do not Drive	% Drive	% Do not Drive	Total
Vancouver	640	1,212	35%	65%	1,852
Surrey	154	620	20%	80%	774
Richmond	149	215	41%	59%	364
Burnaby	110	151	42%	58%	261
Delta	71	113	39%	61%	184
Coquitlam/PoCo/Pt.Moody	47	53	47%	53%	100
New Westminster	37	50	43%	57%	87
North Vancouver	30	30	50%	50%	60
Mission/Abbotsford	11	19	37%	63%	30
Langley/Aldergrove	13	9	59%	41%	22
Maple Ridge/Pitt Meadows	8	12	40%	60%	20
West Vancouver	9	10	47%	53%	19
White Rock	5	9	36%	64%	14
Other B.C.	7	11	39%	61%	18
Unknown	8	26	24%	76%	34
Total	1,299	2,540	34%	66%	3,839

Figure 6: Percentage of Respondents that Drive to Langara by City of Residence



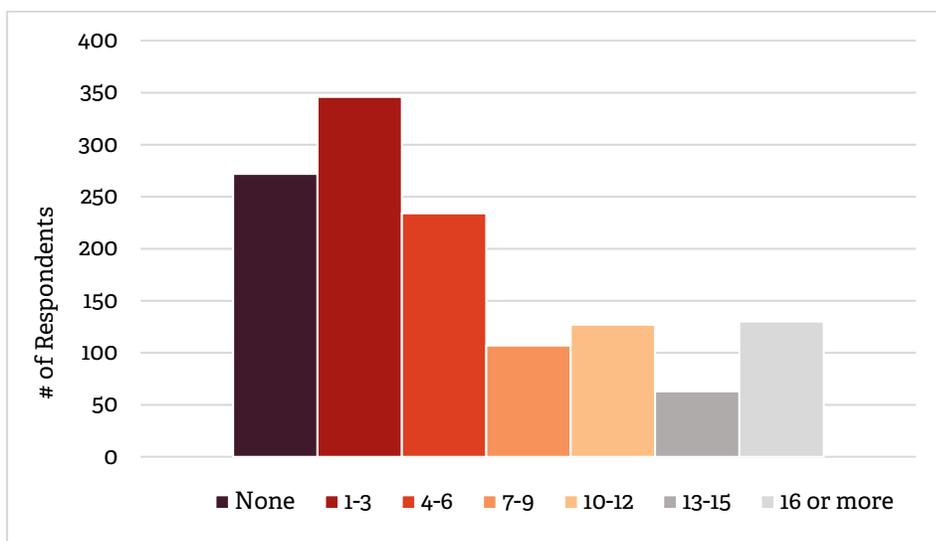
A total of 846 respondents said they drove alone to Langara as opposed to carpool/vanpool/dropped off (425 respondents), car share (117 respondents), and motorcycle/moped (25 respondents). About half of those who drive alone to Langara make only 1-3 one-way trips to and from Langara in a normal week (See Figure 7).

Figure 7: Number of One-Way Driving Trips to or from Langara during a Normal Week by Mode



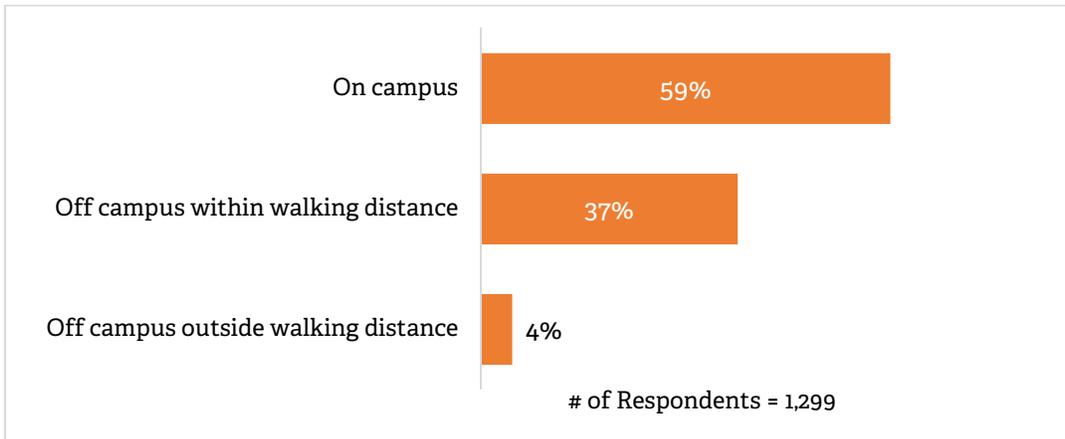
Most of the respondents do not drive every day. Among the 1,279 people who responded to the question about one-way driving trips to all destinations in a normal week, 346 (27%) selected 1-3 trips and 234 (18%) selected 4-6 trips (See Figure 8).

Figure 8: 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 59% of respondents said they parked on campus after driving to Langara. On the other hand, 37% said they parked off campus within walking distance, and 4% said they parked off campus outside walking distance (See Figure 9).

Figure 9: Parking Used after Driving to Langara



The top reasons for driving alone to Langara are: time (60% of the respondents), convenience (58%), and need for car for errands/appointments (34%) (See Figure 10).

Figure 10: Reasons for Driving Alone to Langara

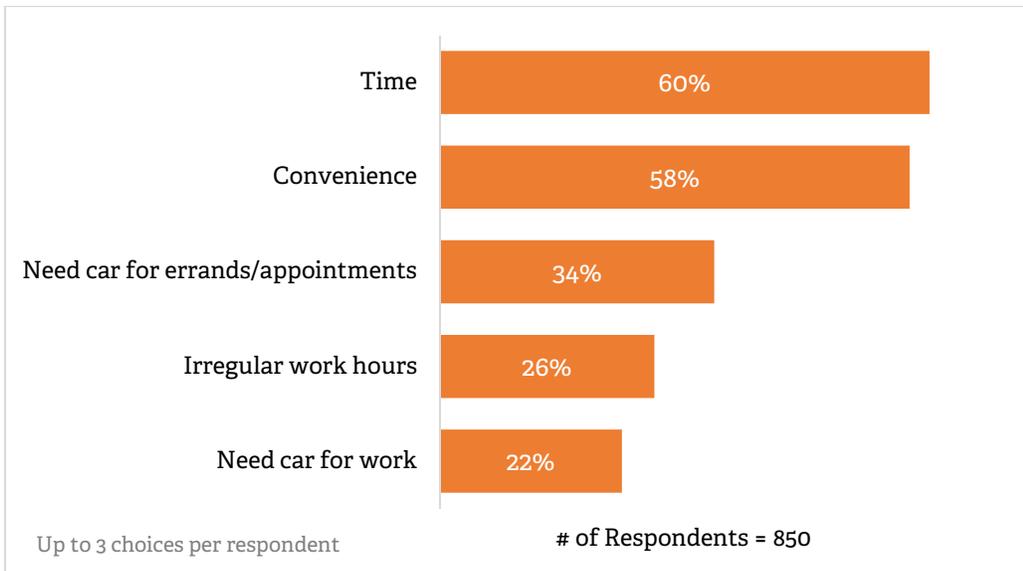
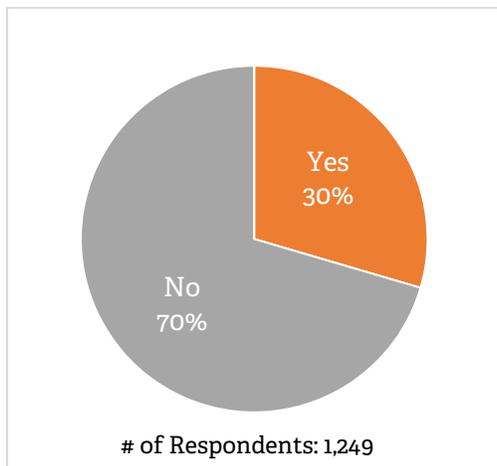


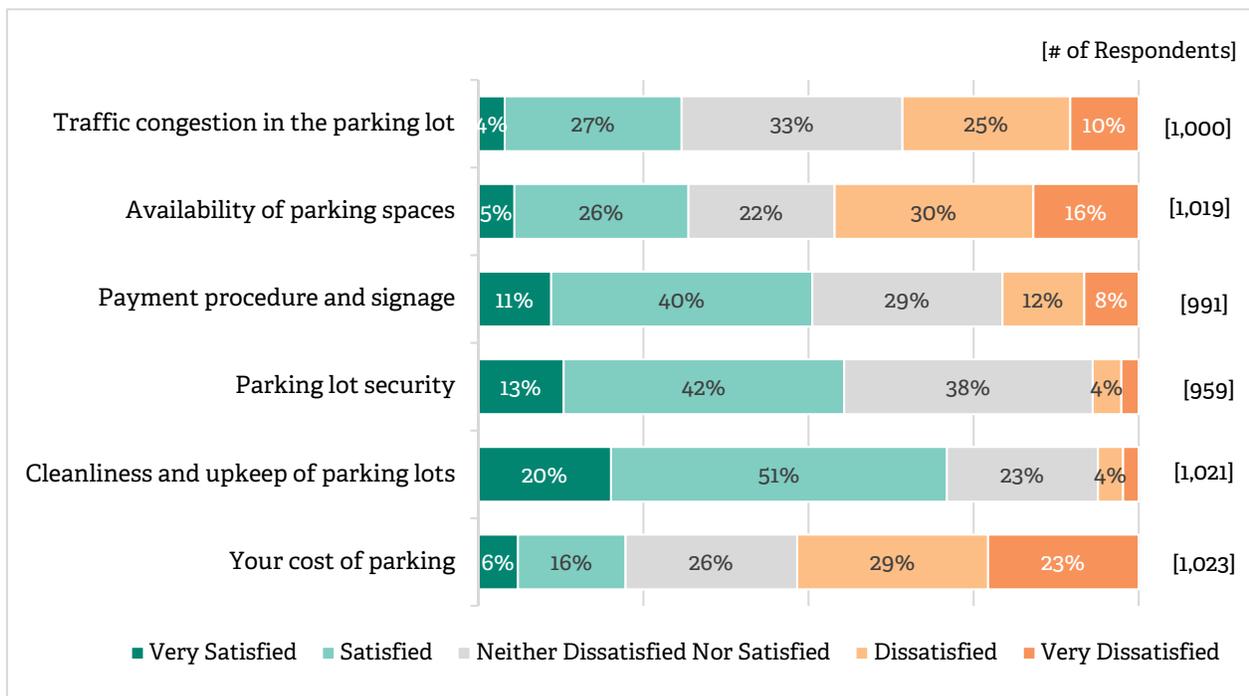
Figure 11 shows that 30% of the respondents said carpooling/vanpooling was a viable option for them. However, among these respondents, only 67% actually reported commuting to Langara by carpooling/vanpooling in a normal week.

Figure 11: Carpooling/Vanpooling Is a Viable Option to Commute to Langara



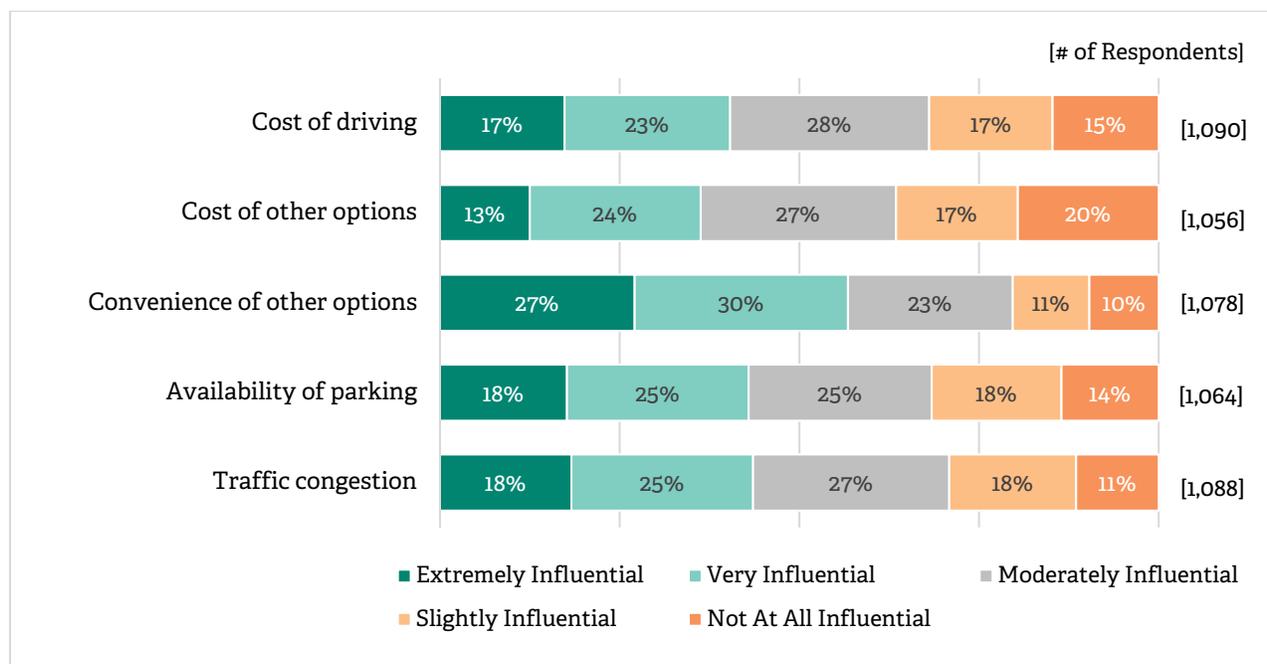
As many as 71% of the respondents are satisfied or very satisfied with the cleanliness and upkeep of the Langara parking lots. On the other hand, the level of satisfaction with parking lot security declined over the last two years with the proportion of those satisfied or very satisfied falling from 62% in 2017 to 55% in 2019. With regard to cost of parking at Langara, only 22% are satisfied or very satisfied and 52% are dissatisfied or very dissatisfied (See Figure 12).

Figure 12: 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 57% of them reporting that this was extremely influential or very influential (See Figure 13). 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.

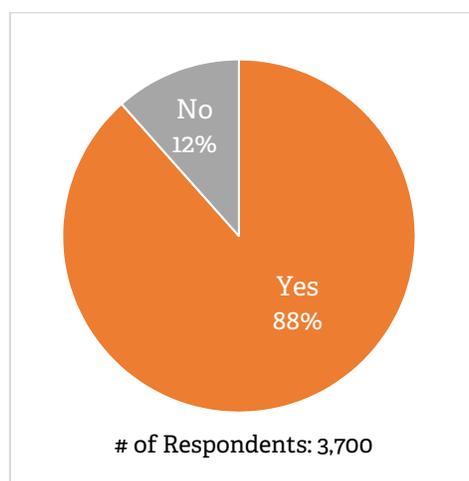
Figure 13: Factors that Influence Driving Behaviour to Langara



Travelling Without a Car

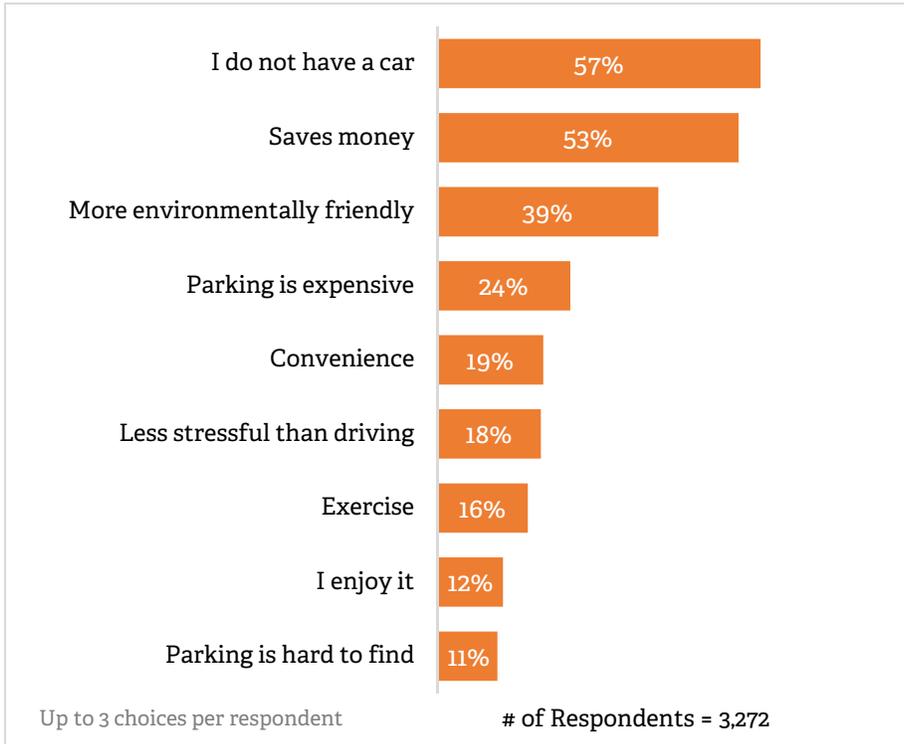
Figure 14 shows that 88% of the respondents said yes to the question "Do you ever travel without a car (i.e. use transit, bike, or walk) to Langara?"

Figure 14: 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 2019 survey, 57% of the respondents selected “I do not have a car” as their reason for travelling without a car, up from 51% in the 2017 survey. The other reasons that motivate respondents to travel without a car are: “Saves money” (53%) and “More environmentally friendly” (39%) (See Figure 15).

Figure 15: Reasons for Travelling without a Car to Langara



Among those respondents who drive to Langara, 50% said better transit service/connections would encourage them to travel without a car (See Figure 16). Also, 22% of the respondents (47% of faculty and staff) said that the addition of an “Employee U-Pass” would encourage them to travel without a car (See Figure 16 & Figure 17).

Figure 16: Programs/Incentives that would Encourage Carpool/Transit/Bike/Walk

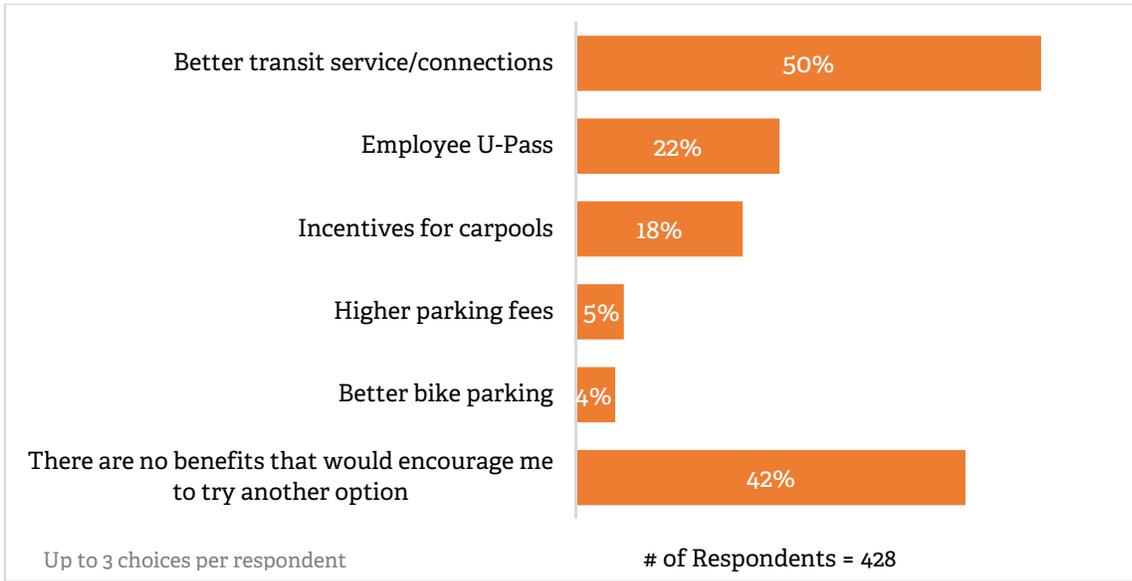
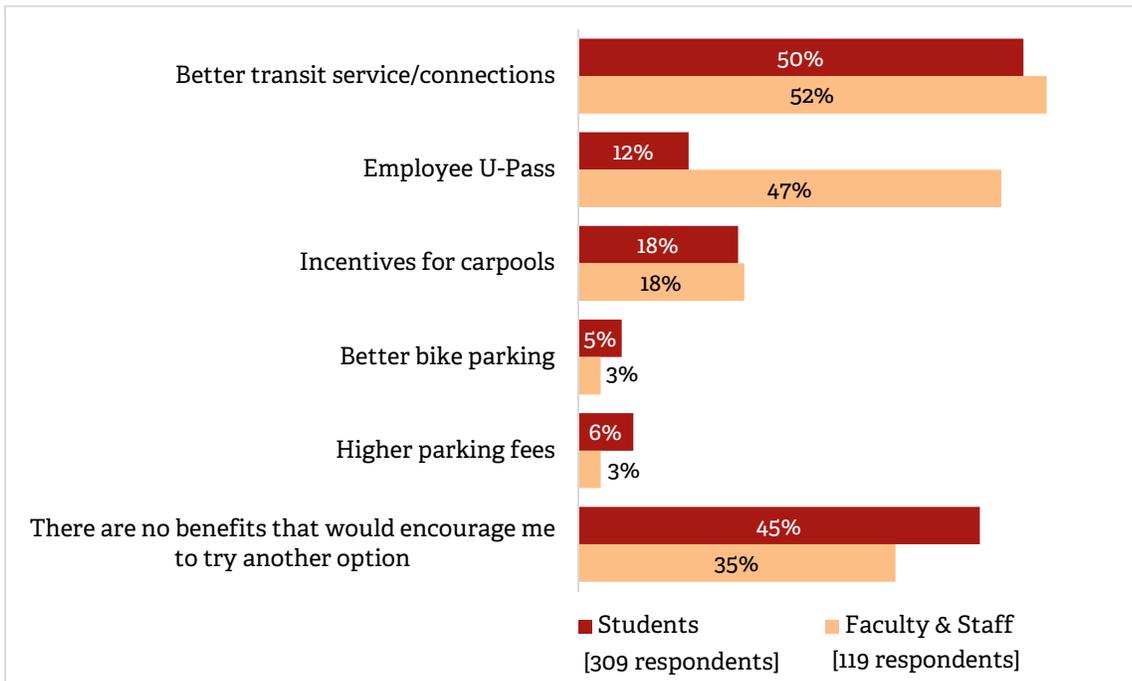


Figure 17: Programs/Incentives that would Encourage Carpool/Transit/Bike/Walk – Students vs. Faculty & Staff



Taking Transit to Langara

Langara is easily accessible by transit, and 85% of the respondents have taken the bus and/or train to commute to our campus (Figure 18). The proportion of respondents that take transit is higher among students (84% of domestic students and 93% of international students) than among faculty (60%) and staff (67%) (Figure 19).

Figure 18: Percentage of Respondents that Transit (by Bus or Train) to Langara

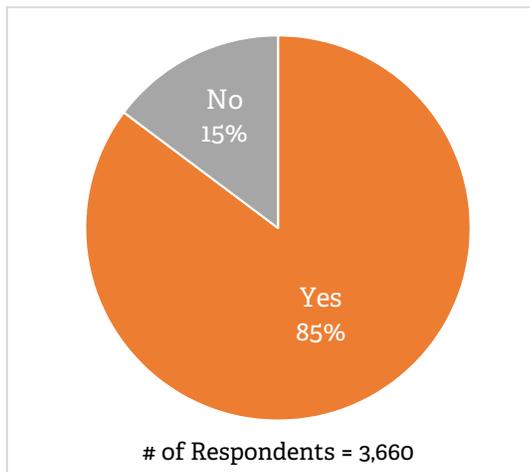
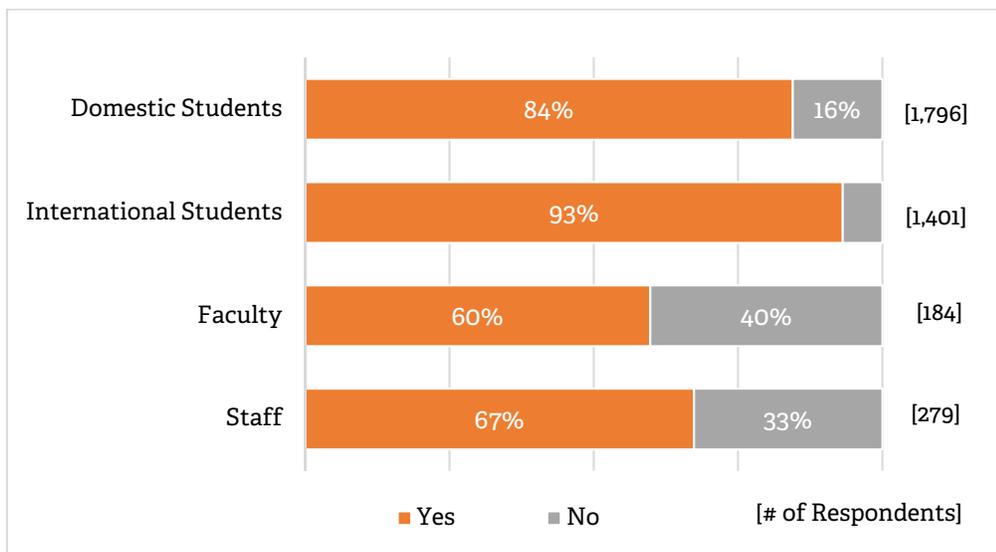


Figure 19: Percentage of Respondents that Transit to Langara by Primary Role

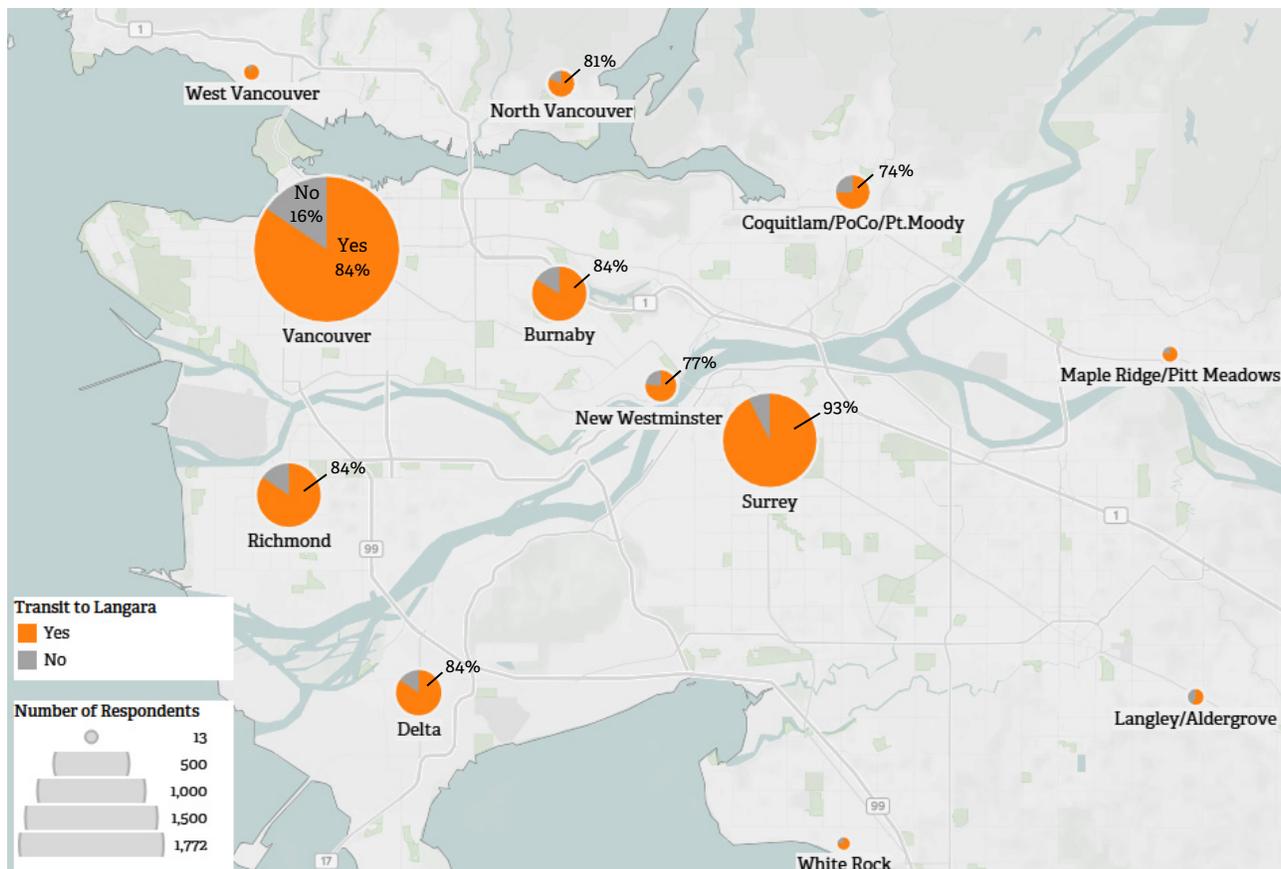


Among the respondents who live in Vancouver, Richmond and Burnaby, 84% take transit to commute to Langara. Although Surrey is farther away, 93% of respondents who live in Surrey transit to Langara (See Table 7 and Figure 20).

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

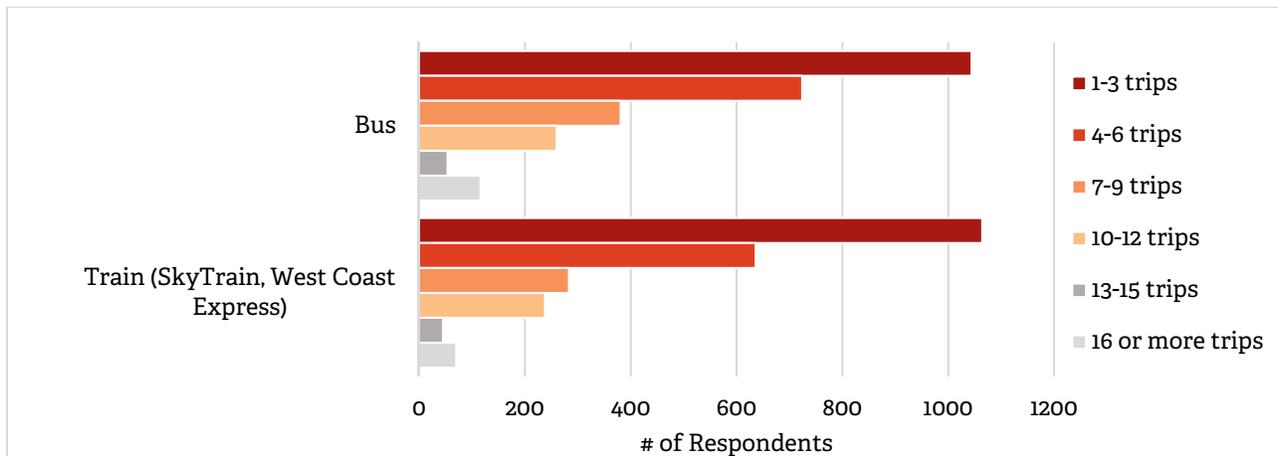
	Transit	Do not Transit	% Transit	% Do not Transit	Total
Vancouver	1,497	275	84%	16%	1,772
Surrey	682	55	93%	7%	737
Richmond	288	53	84%	16%	341
Burnaby	208	40	84%	16%	248
Delta	146	27	84%	16%	173
Coquitlam/PoCo/Pt.Moody	72	25	74%	26%	97
New Westminster	63	19	77%	23%	82
North Vancouver	47	11	81%	19%	58
Mission/Abbotsford	17	11	61%	39%	28
Langley/Aldergrove	12	9	57%	43%	21
Maple Ridge/Pitt Meadows	15	4	79%	21%	19
West Vancouver	17	2	89%	11%	19
White Rock	10	3	77%	23%	13
Other B.C.	16	2	89%	11%	18
Unknown	30	4	88%	12%	34
Total	3,120	540	85%	15%	3,660

Figure 20: Percentage of Respondents that Transit to Langara by City of Residence



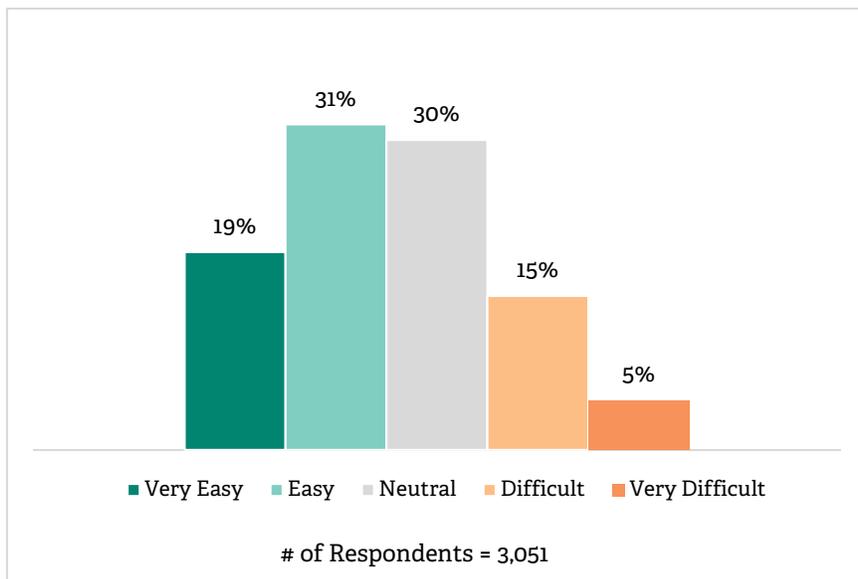
A total of 2,827 respondents reported taking a bus to commute to Langara in a normal week. Over a third (37%) of these respondents make 1-3 one-way bus trips to or from Langara per week. On the other hand, 2,822 respondents said they took a train (SkyTrain/West Coast Express) to Langara, and 38% of them made 1-3 one-way train trips to or from Langara in normal week (See Figure 21).

Figure 21: Number of One-Way Trips to or from Langara during a Normal Week by Transit Mode



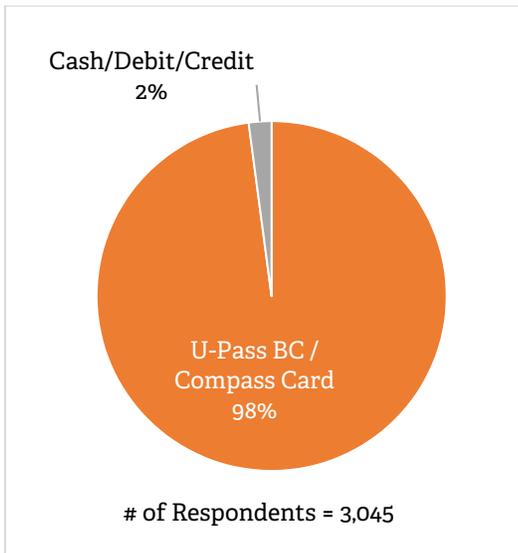
A majority of the respondents said taking transit to Langara was very easy (19%) or easy (31%) (See Figure 22).

Figure 22: How Easy Is Taking Transit to Langara



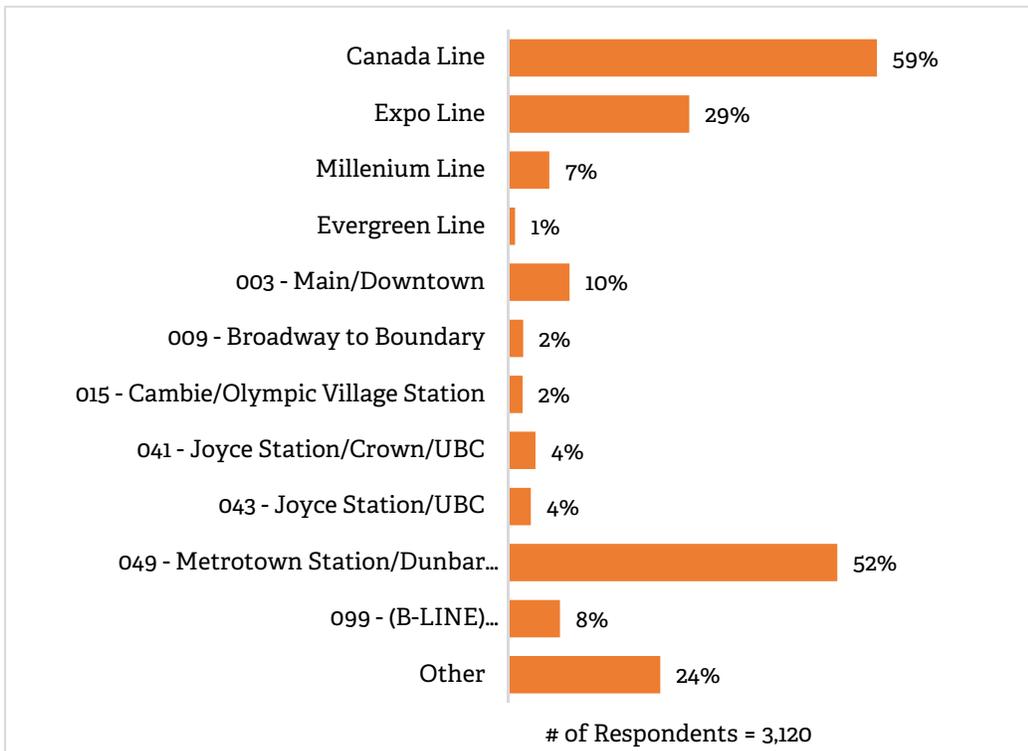
Langara participates in the U-Pass BC Program which provides eligible students with unlimited all-zone access to TransLink bus, SkyTrain and SeaBus services and discounts on the West Coast Express. Among the survey respondents, 98% said they used either U-Pass BC or Compass Card to pay for transit (See Figure 23).

Figure 23: Primary Payment Method for Transit



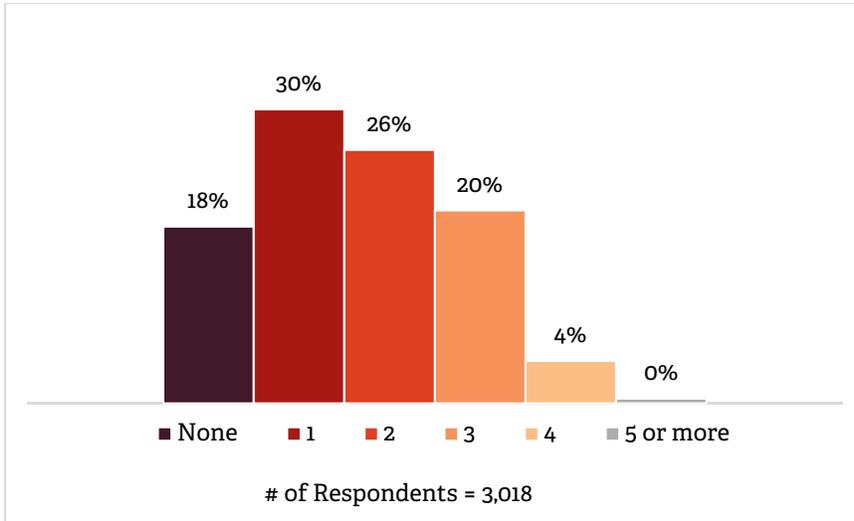
Langara is within walking distance of the Langara–49th Station of the Canada Line, and 59% of the respondents who transit to Langara use the Canada Line. Also, 52% use TransLink Bus #49 which runs on the 49th Avenue with two stops adjacent to the campus. In addition, 29% of the respondents take the Expo Line, and 10% take Bus #3 (See Figure 24).

Figure 24: Transit Routes Used to Commute to Langara



With regard to transfers, 18% of respondents who take transit to Langara do not need to transfer, and 30% need to transfer once (Figure 25).

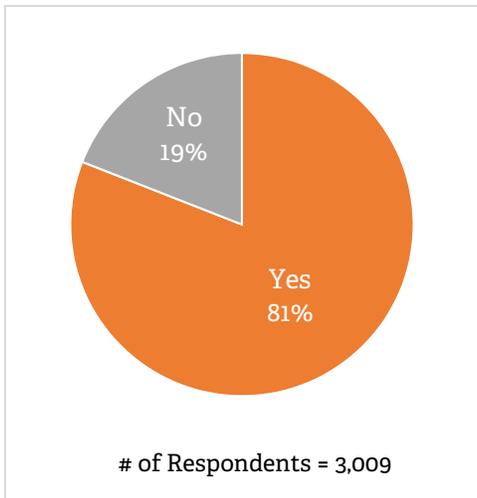
Figure 25: Number of Transfers Needed to Reach Langara



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

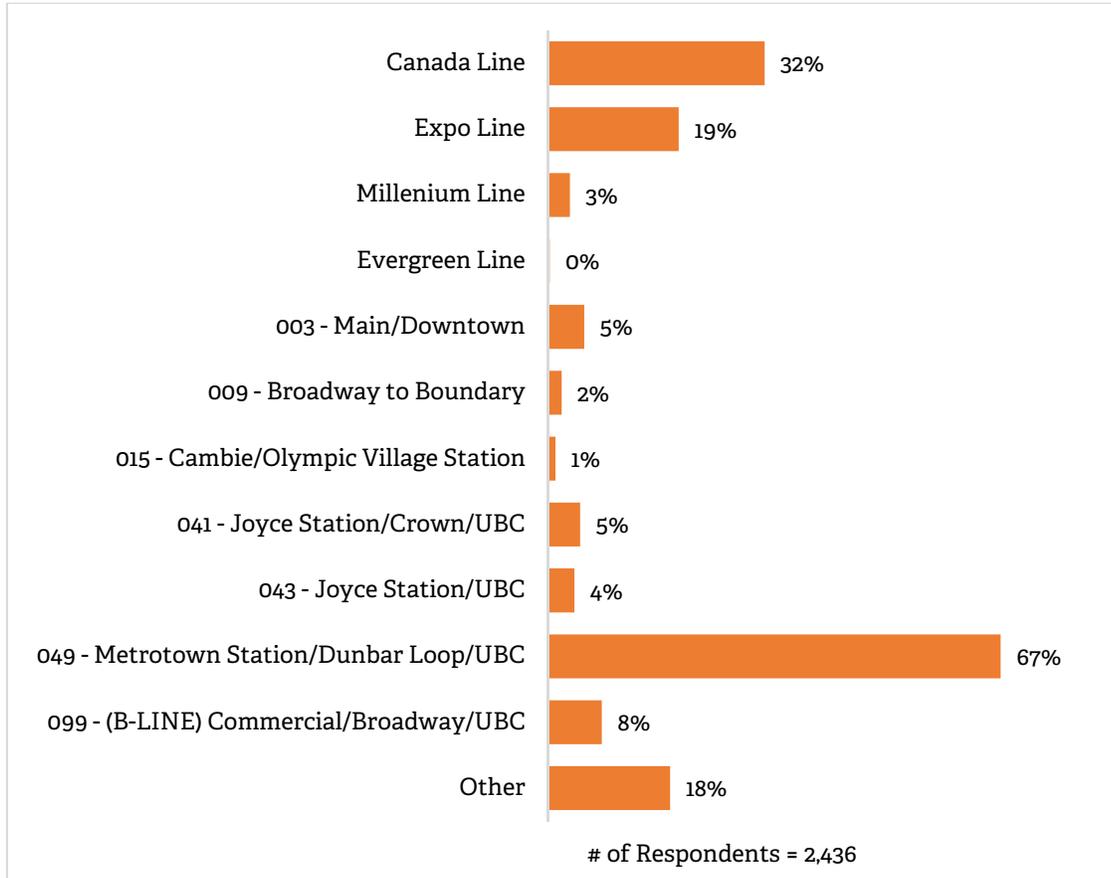
Overcrowding on public transportation continues to be a major issue. “Passed up” refers to a situation where a bus or a train is full and does not accept passengers, and 81% of respondents said they had been passed up by a bus or a train when travelling to Langara in the 2019 survey (See Figure 26). This is significantly higher than 73% reported in the 2017 survey.

Figure 26: Have Been Passed Up by Bus or Train while Commuting to Langara



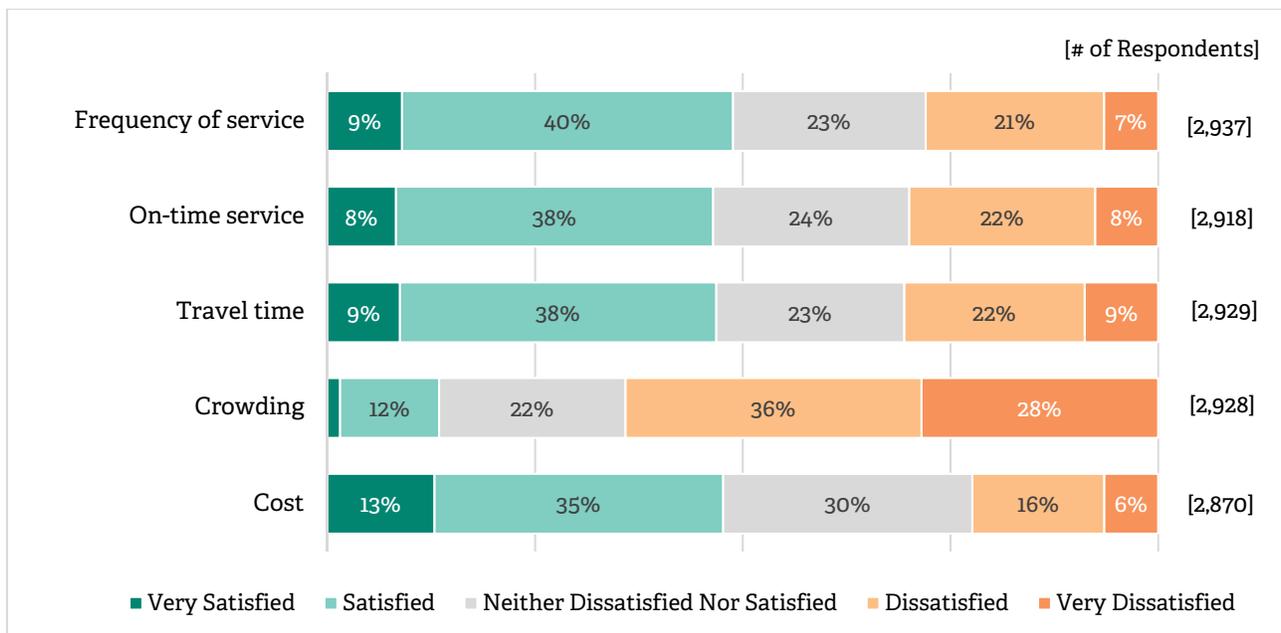
As many as 1,630 respondents, or 67% of the respondents who reported being passed up while commuting to Langara, were passed up by Bus #49 (See Figure 27). Over 100 respondents provided detailed comments regarding Bus #49, and many reported being passed up by not just one but several buses before they could board one to commute to Langara.

Figure 27: Have Been Passed Up while Commuting to Langara by Route



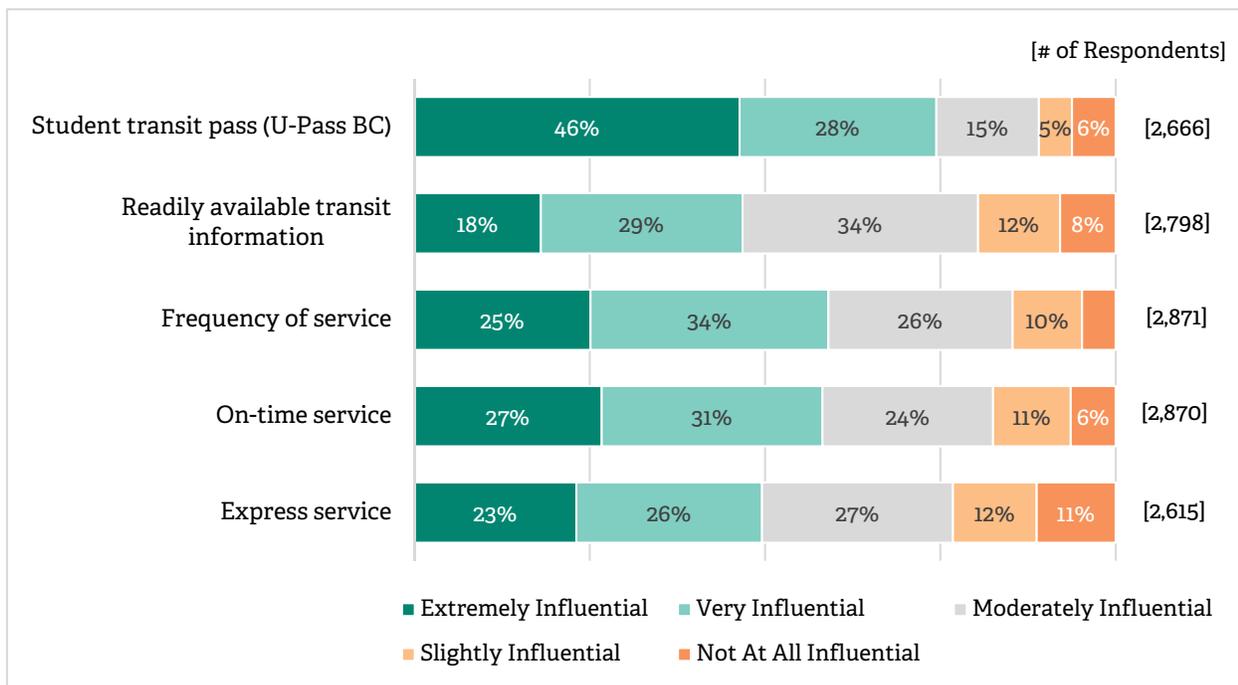
Close to 50% of respondents that take transit to Langara are either satisfied or very satisfied with the frequency of service and cost. However, only 14% of the respondents are satisfied or very satisfied in terms of crowding. A majority of them are either dissatisfied (36%) or very dissatisfied (28%) with how crowded the buses/trains are when they commute to Langara (See Figure 28).

Figure 28: Satisfaction with Transit Services



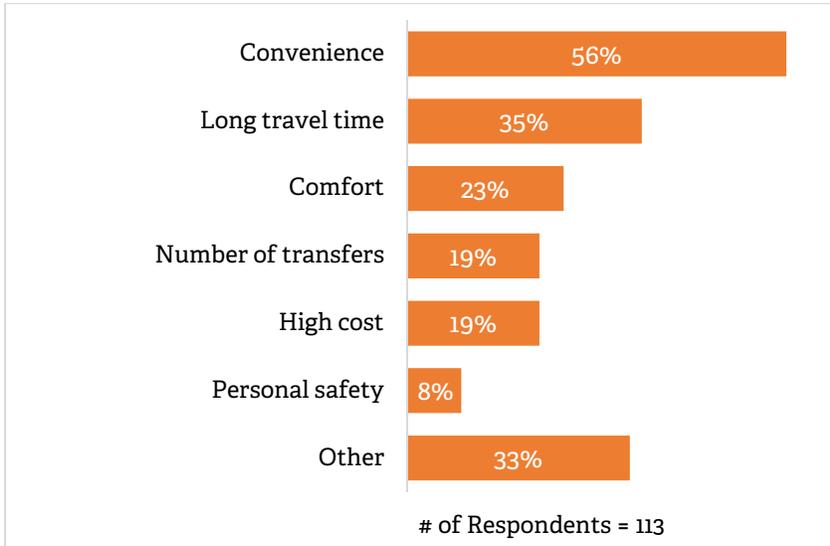
The service that has the most influence on the respondents' transit use is the student transit pass (U-Pass BC) with 74% of them reporting that it was either extremely influential or very influential. In addition, frequency of service and on-time service are either very influential or extremely influential for over half of the respondents (Figure 29).

Figure 29: Factors that Influence Transit Use



Among the respondents who do not take transit to Langara, the most common reasons are: convenience (56% of the respondents) and long travel time (35%) (See Figure 30).

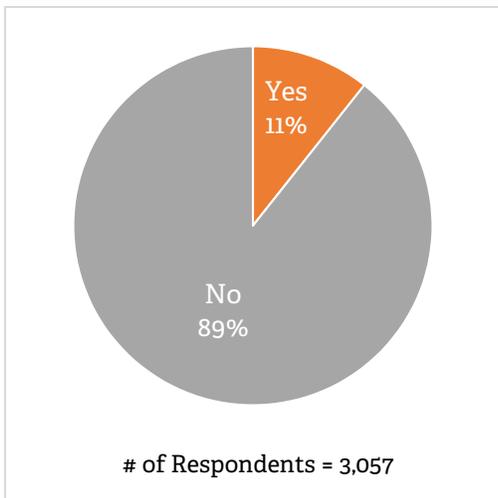
Figure 30: Reasons for Not Taking Transit to Langara



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 31).

Figure 31: Percentage of Respondents that Bicycle to Langara

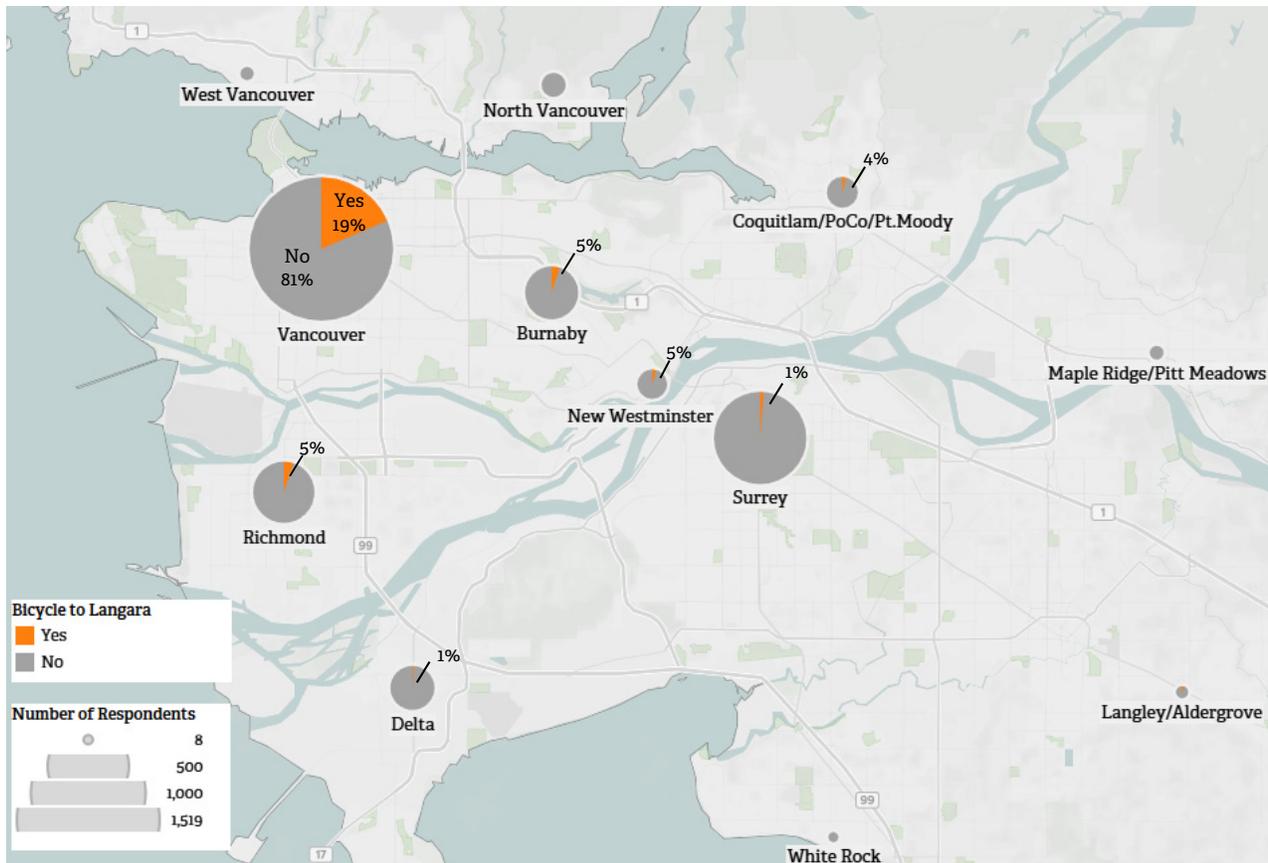


Among the respondents who live in Vancouver, 19% have biked to Langara. The percentage is lower for those who live in the other cities (See Table 8 and Figure 32).

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

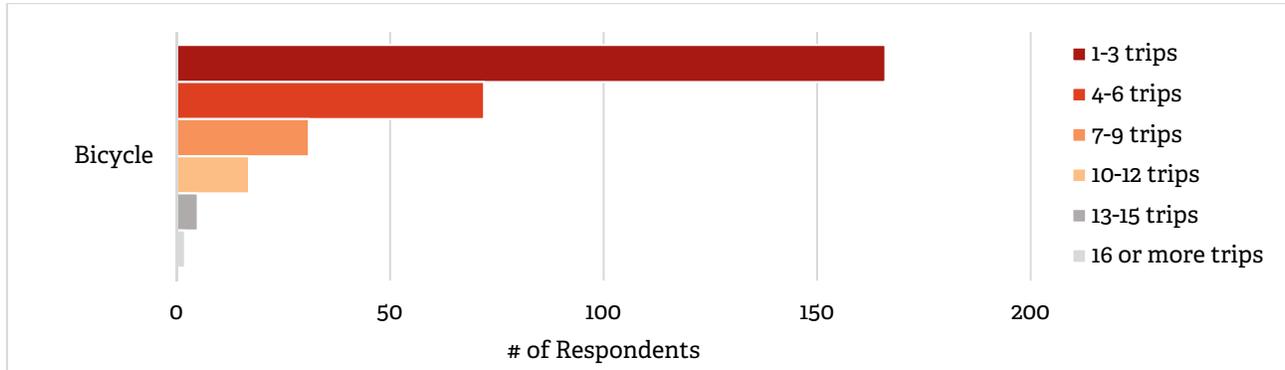
	Bicycle	Do not Bicycle	% Bicycle	% Do not Bicycle	Total
Vancouver	282	1,237	19%	81%	1,519
Surrey	8	622	1%	99%	630
Richmond	14	263	5%	95%	277
Burnaby	10	197	5%	95%	207
Delta	1	142	1%	99%	143
Coquitlam/PoCo/Pt.Moody	3	68	4%	96%	71
New Westminster	3	62	5%	95%	65
North Vancouver	–	43	0%	100%	43
Mission/Abbotsford	–	14	0%	100%	14
Langley/Aldergrove	1	10	9%	91%	11
Maple Ridge/Pitt Meadows	–	14	0%	100%	14
West Vancouver	–	13	0%	100%	13
White Rock	–	8	0%	100%	8
Other B.C.	–	15	0%	100%	15
Unknown	4	23	15%	85%	27
Total	326	2,731	11%	89%	3,057

Figure 32: Percentage of Respondents that Bicycle to Langara by City of Residence



Among the respondents who reported biking to Langara, 166 respondents (52%) said they made 1-3 one-way trips to or from Langara per week (Figure 33).

Figure 33: 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 216 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 16% of the respondents. Other bike routes include 45th Avenue (10% of the respondents), 49th Avenue (5%) and 10th Avenue (5%) (See Figure 34).

Figure 34: Bike Routes Used to Access Langara College

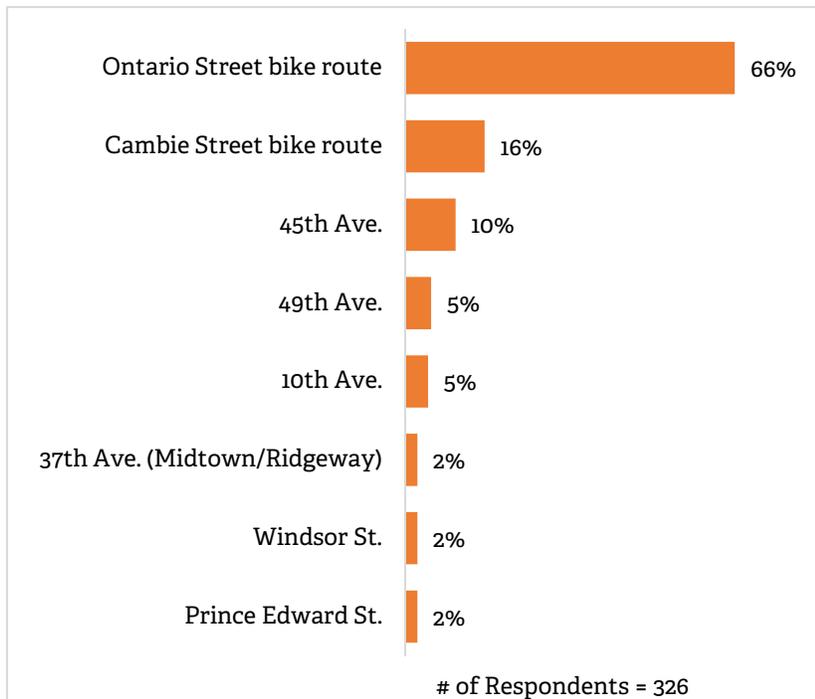
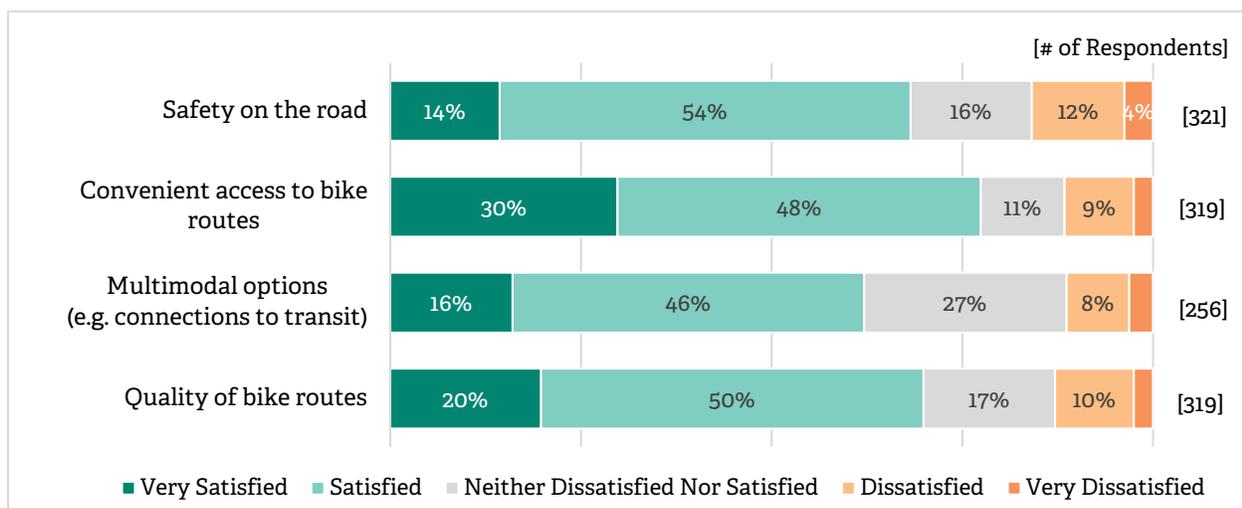


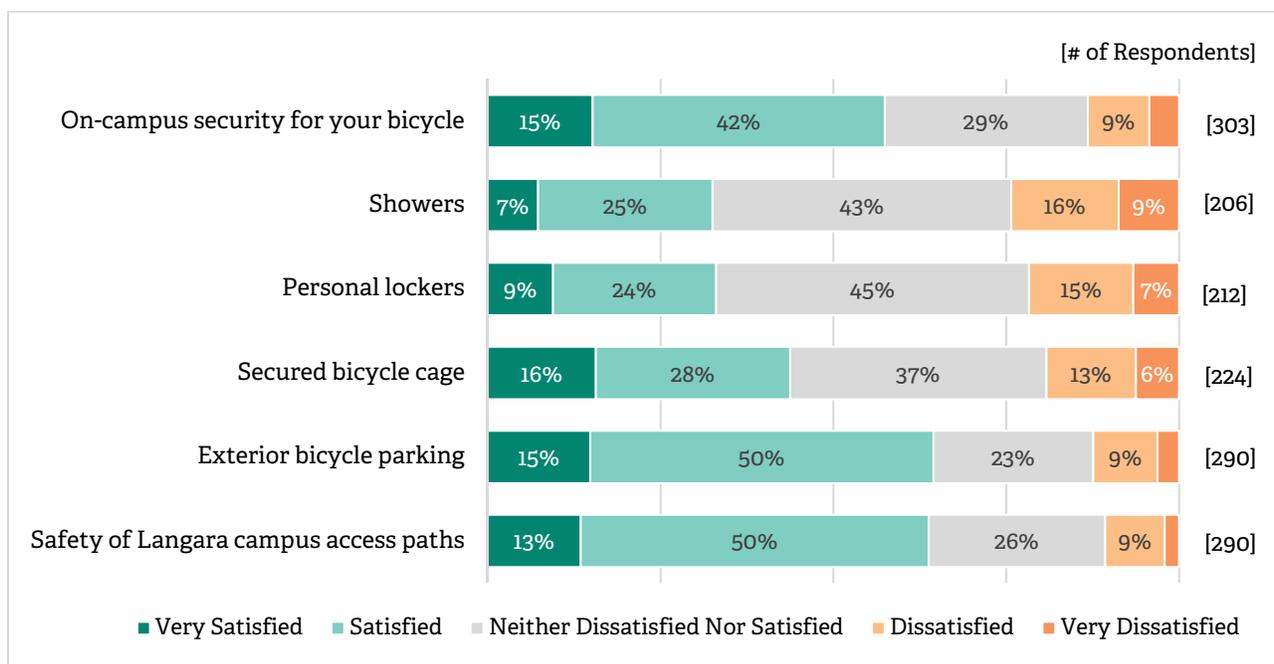
Figure 35 shows that most of the respondents are either very satisfied (30%) or satisfied (48%) with convenient access to bike routes. They also expressed a high level of satisfaction with the quality of bike routes. Although 26% of respondents to the 2017 survey were either dissatisfied or very dissatisfied with safety on the road, the percentage decreased to 16% in 2019, indicating a significant improvement.

Figure 35: Satisfaction with Bicycle Ride to Langara



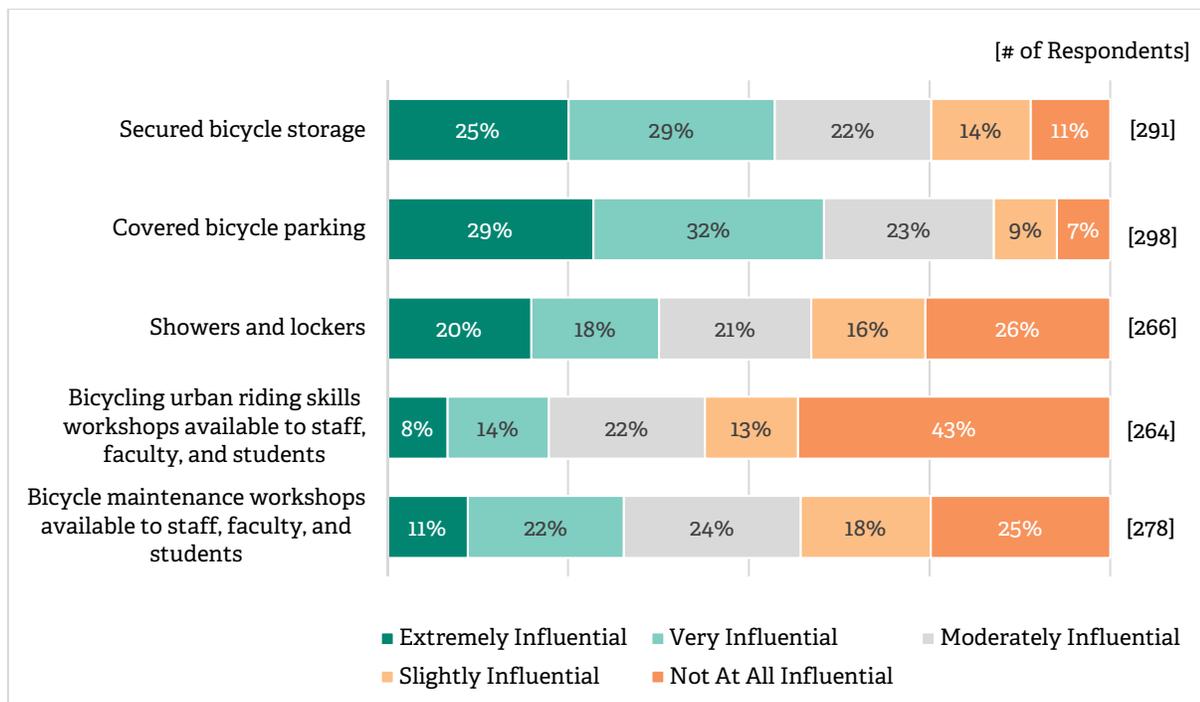
The level of satisfaction with various Langara services for cyclists has increased over the last two years. With regard to the exterior bicycle parking at Langara, 65% of the 2019 survey respondents said they were satisfied or very satisfied (up from 55% in 2017). Also, 44% of the respondents are satisfied or very satisfied with Langara’s secured bicycle cage (up from 31% in 2017). (Figure 36).

Figure 36: 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 29% selecting “extremely influential” and 32% selecting “very influential.” Bicycle-related workshops are not considered as influential as bicycle storage, showers and lockers on cyclists’ behaviour (See Figure 37).

Figure 37: Factors that Influence Cycling Behaviour



Walking to and around Langara

In the 2019 survey, 20% of respondents said they walked to Langara while 41% said they walked part of the way (at least 2 blocks) (See Figure 38). 99% of the respondents who walk part-way 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.

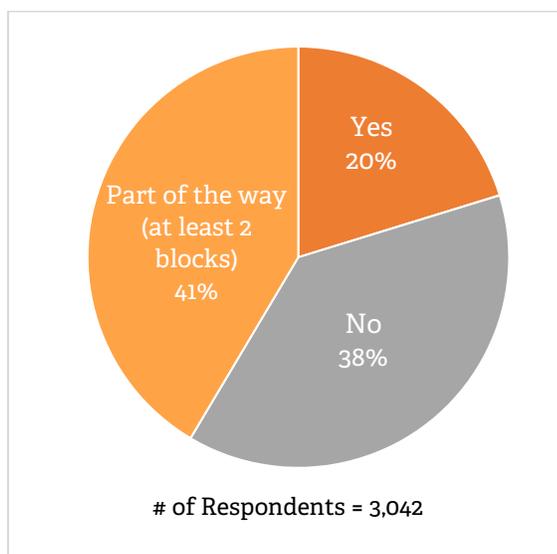
Figure 38: Percentage of Respondents that Walk to Langara


Table 9 and Figure 39 show that, among the respondents who live in Vancouver, 30% walk to Langara, 40% walk part of the way, and 30% 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 35% for Richmond, 56% for Burnaby, and 57% for Surrey.

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

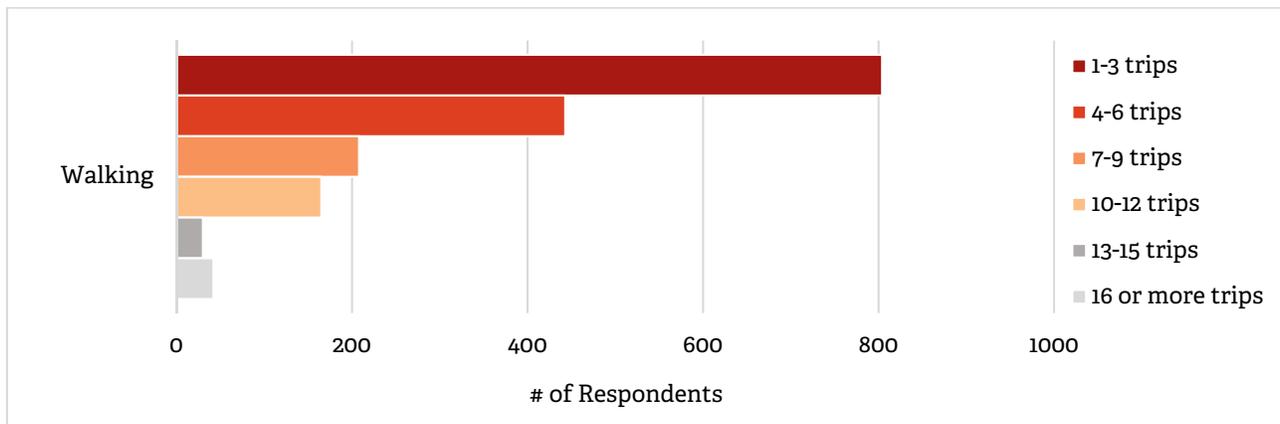
	Walk	Walk Part of the way	Do not Walk	% Walk	% Walk Part of the way	% Do not Walk	Total
Vancouver	455	606	447	30%	40%	30%	1,508
Surrey	79	193	356	13%	31%	57%	628
Richmond	26	154	96	9%	56%	35%	276
Burnaby	13	79	115	6%	38%	56%	207
Delta	13	80	49	9%	56%	35%	142
Coquitlam/PoCo/Pt.Moody	4	43	24	6%	61%	34%	71
New Westminster	5	31	29	8%	48%	45%	65
North Vancouver	3	27	13	7%	63%	30%	43
Mission/Abbotsford	5	3	6	36%	21%	43%	14
Langley/Aldergrove	–	5	6	0%	45%	55%	11
Maple Ridge/Pitt Meadows	1	8	5	7%	57%	36%	14
West Vancouver	–	11	2	0%	85%	15%	13
White Rock	–	8	–	0%	100%	0%	8
Other B.C.	2	5	8	13%	33%	53%	15
Unknown	10	8	9	37%	30%	33%	27
Total	616	1,261	1,165	20%	41%	38%	3,042

Figure 39: 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, 43% (804 respondents) said they made 1-3 one-way walking trips, and 24% (443 respondents) said they made 4-6 one-way walking trips per week (See Figure 40).

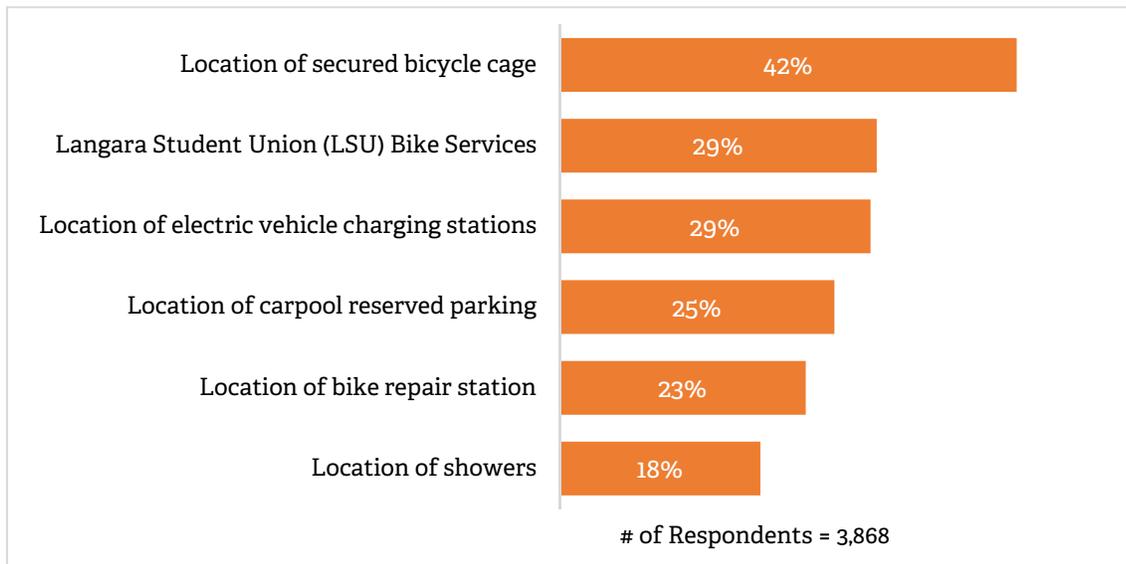
Figure 40: Number of One-Way Walking Trips to or from Langara during a Normal Week



Langara Services

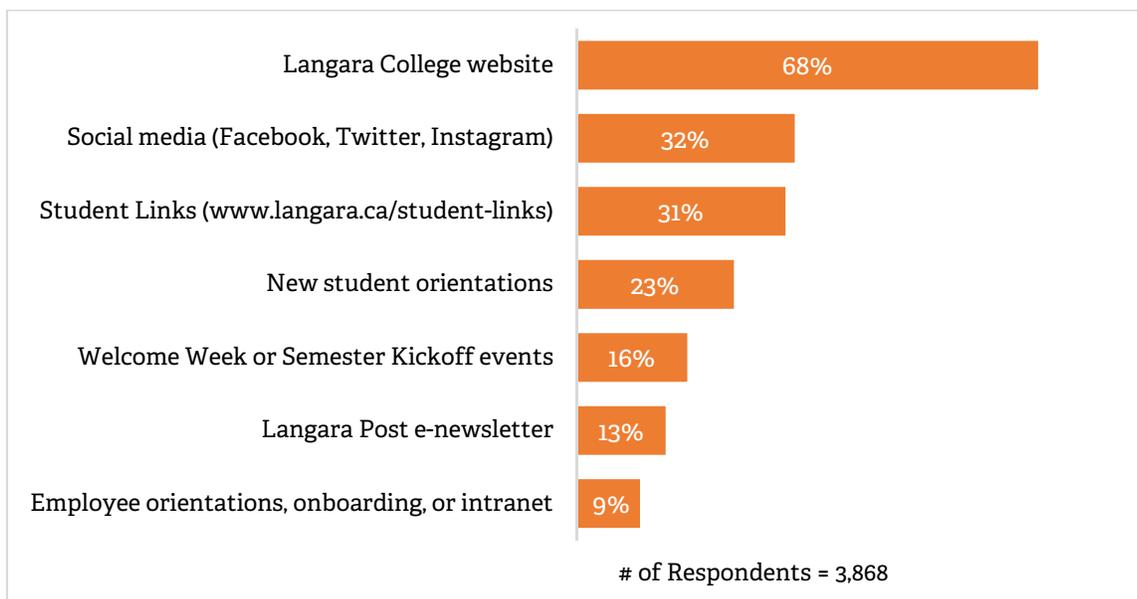
All respondents that commute to the Main Campus, regardless of their commuting behaviour, were asked about Langara’s travel-related services. While 42% of the respondents said they were aware of the location of secured bicycle cage, only 18% were aware of the location of showers, and 23% were aware of the location of bike repair station (See Figure 41).

Figure 41: Percentage of Respondents that are Aware of Langara’s Travel-related Services



Most of the respondents (68%) prefer to receive information on Langara’s travel-related services through the Langara College website (Figure 42).

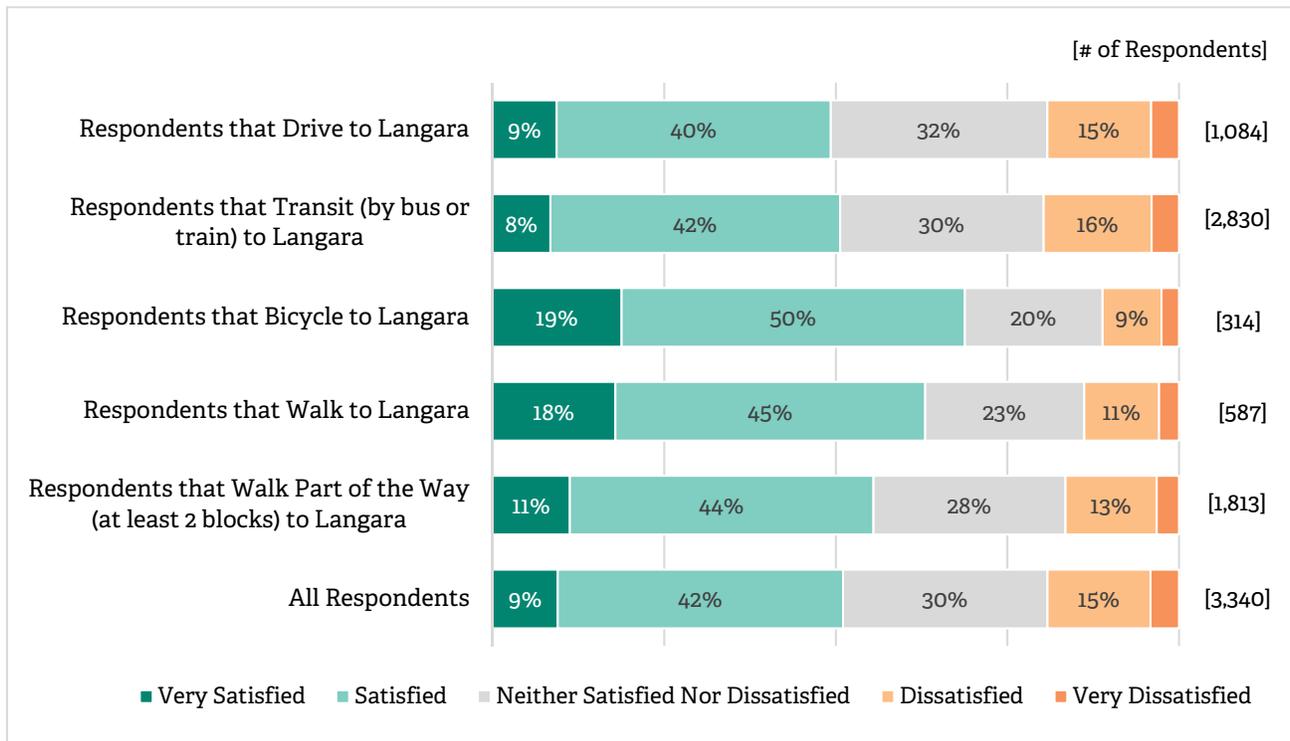
Figure 42: Preferred Method of Communication Regarding Langara’s Travel-related Services



Overall Level of Satisfaction and Future Priorities

Overall, a majority of the respondents are either very satisfied (9%) or satisfied (42%) with their commute to Langara. Respondents that bike to Langara reported the highest level of satisfaction with their commute – 19% are very satisfied and 50% are satisfied. There was no significant difference in the level of satisfaction between those who drive and those who take transit (See Figure 43).

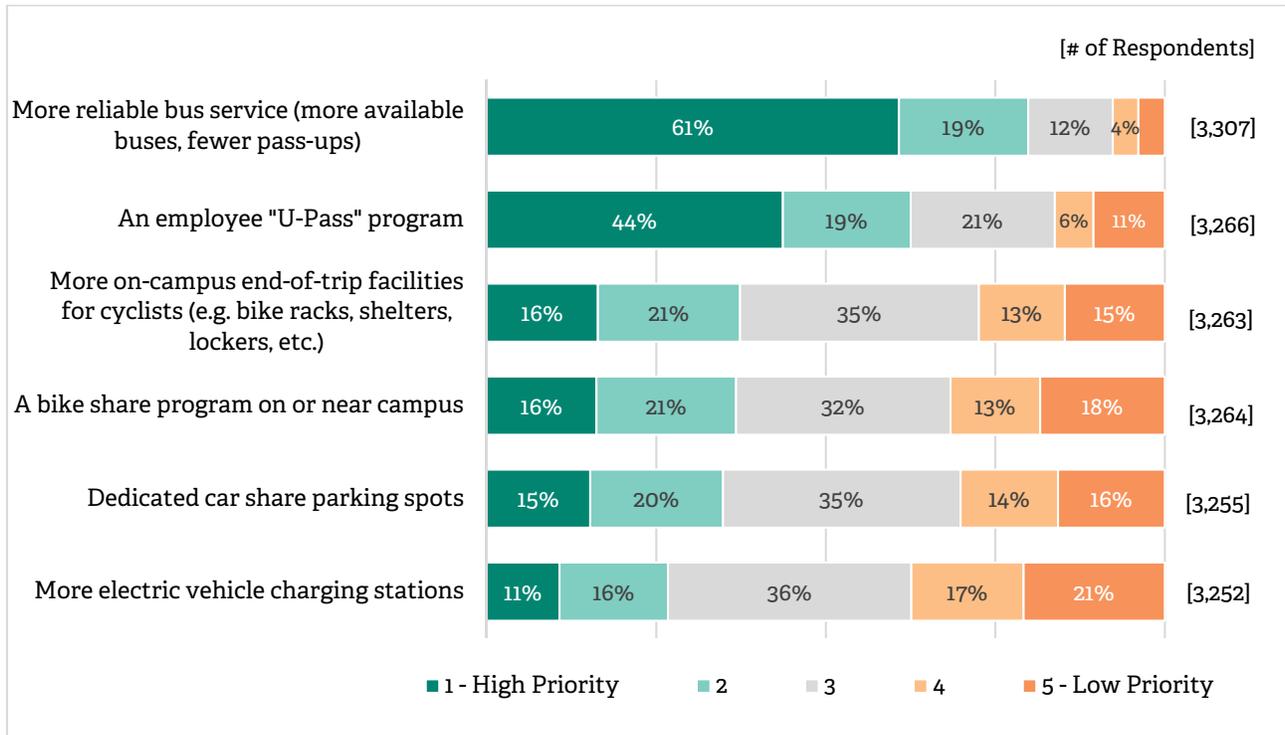
Figure 43: Overall Satisfaction with Commute to and from Langara by Transit Mode



The survey also asked respondents to help Langara prioritize initiatives as part of our campus travel planning efforts. Figure 44 shows that, among the six initiatives listed in the survey, “more reliable bus service” received the highest priority rating from the respondents with 61% rating it as “1 – High Priority.” It was followed by an employee “U-Pass” program with 44% of the respondents selecting “1 – High Priority.”

The other initiatives, such as more on-campus end-of-trip facilities for cyclists, a bike share program on or near campus, and dedicated car share parking spots, also attracted interest from many commuters, with 35%-40% of the respondents selecting “1” or “2” in terms of priority.

Figure 44: Priority Levels of Langara’s Travel-related Initiatives



CONCLUSIONS

Langara College's second biannual Transportation Survey was conducted from September 23 to October 4, 2019. Our analysis of the survey results builds up on the data collected from the first Transportation Survey in 2017. They enable us to better understand how transportation services may be improved at Langara and/or within the Metro Vancouver transportation network.

The Langara population has been moving farther away from the Main Campus over the last several years. The 2019 survey results showed a decrease in the proportion of respondents living in Vancouver (48.4% compared to 51.0% in 2017) and an increase in those living in Surrey (20.0% compared to 16.3% in 2017).

Driving to Langara has decreased in the last two years. In the 2019 survey, 34% of respondents said they drove to Langara (including driving alone, carpool/vanpool/dropped off, car share, or motorcycle/moped) compared to 38% in 2017. The decline was especially significant among faculty members (75% in 2017 to 66% in 2019). A majority of those that drive to Langara drive alone, and they do so because of time and convenience.

Langara students and employees are encouraged to choose alternative transportation options whenever possible. Among the survey respondents, 88% have travelled to Langara without a car, including taking transit, cycling and walking. Not having a car is the most common reason for travelling to Langara without a car (57% of respondents compared to 51% in 2017).

As many as 85% of respondents take transit to Langara, and most of them use the Canada Line or Bus #49. Many respondents expressed dissatisfaction with crowding in transit, and 81% of those who take transit have been passed up by a bus or train while commuting to Langara (compared to 73% in 2017).

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. Their level of satisfaction with various Langara services for cyclists improved from 2017 to 2019.

Each of Langara's travel-related services had an awareness rate below half of respondents. Only 18% of respondents said they were aware of the location of showers on campus. Less than 30% of respondents were aware of the Langara Student Union (LSU) Bike Services and the locations of electric vehicle charging stations.

Overall, the 2019 survey results showed that the bus services around Langara still need to be improved. Providing more reliable bus service is considered as a high priority initiative by the greatest number of respondents among the initiatives listed in the survey. Also, there is still a great need for better communication regarding Langara's travel-related services.

We note that there were cancellations and reductions of TransLink services due to labour dispute in November 2019. Although these may have had significant impacts on our commuters, they are not captured by the 2019 Transportation Survey which was conducted before the service disruptions occurred.

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.