

SUBJECT	UBC LAND USE PLAN, TRANSPORTATION AND ENGAGEMENT ANNUAL MONITORING REPORT
MEETING DATE	APRIL 19, 2018

Forwarded to the Board of Governors on the Recommendation of the President

APPROVED FOR SUBMISSION



Santa J. Ono, President and Vice-Chancellor

FOR INFORMATION	<ul style="list-style-type: none"> • Annual UBC Land Use Plan Implementation Monitoring Report • Annual Transportation Status Report • Annual Campus + Community Planning Engagement Report
Report Date	March 12, 2018
Presented By	Philip Steenkamp, Vice-President External Relations Michael White, Associate Vice-President, Campus + Community Planning

EXECUTIVE SUMMARY

This annual monitoring report provides an update on the implementation of UBC Vancouver’s Land Use Plan, a summary of the 2017 Transportation Status Report (full report in Attachment B), and the annual C+CP Engagement Charter Monitoring Report (full report in Attachment C).

Together, these monitoring reports provide the Board of Governors with the information needed to assess the compliance of planning and development activity with UBC’s land use policy targets and commitments.

In 2017, the campus added both institutional and market development housing units, including 762 student housing units (Tallwood and c̄asnaʔəm Houses), 90 market rental residential units in Wesbrook Place (Village Square); 36 faculty/staff rental residential units in Wesbrook Place (Webber House) and 98 market rental university housing units in University Boulevard (Central). The residential development was accompanied by the delivery of complementary social and recreational facilities, with the opening of the National Soccer Development Centre in Thunderbird Park and the and the Chan Gunn Pavilion sports medicine facility adjacent to the Doug Mitchell Centre. All campus developments in 2017 were in compliance with approved neighbourhood plans and UBC’s Land Use Plan.

The University continued its regional leadership role in sustainable transportation in 2017, with 52% of trips to and from the Vancouver campus made by transit, and a jump to almost 5,000 walking and cycling trips compared to 2016 values of 2,300 trips. While there was a spike in HOV trips, there is a lot more opportunity and interest to grow this mode share and reducing the amount of vehicles travelling to and from campus each day.

This report also includes the annual C+CP's Engagement review which summarizes 2017 consultation activities undertaken by the department. During 2017, C+CP delivered close to fifteen engagement initiatives, which included a range of one-off project-oriented processes, collaborative partnership programs, and ongoing work with key organizations.

INSTITUTIONAL STRATEGIC PRIORITIES SUPPORTED
 Learning

 Research

 Innovation

 Engagement
(Internal / External)

 International

 or Operational

DESCRIPTION & RATIONALE
UBC Vancouver Land Use Plan Annual Implementation Monitoring Report

Each year, the Board of Governors receives a monitoring report on the compliance of development approvals with the UBC Land Use Plan. That Plan is the overall regulatory document that governs campus land use. It is approved by the Minister of Community, Sport and Cultural Development in consultation with the Minister of Advanced Education under the *Municipalities Enabling and Validating Act (No. 3) Part 10-2010* (MEVA). The planning authorizations for development must not be inconsistent with the Land Use Plan.

Land Use Plan Targets

In 2017, neighbourhood developments were approved (Lots 7&8 and Lot 11 in Wesbrook Place) which both complied with the Board-approved neighbourhood plans and planning policies.

Assessment against the Land Use Plan targets and commitments:

1. Section 4.1.5(a) Student Housing Target. Maintain not less than a 25% ratio of housing specifically for full-time undergraduate students:
 - At the end of 2017, there were 12,198 student beds on the Vancouver campus where the FTE enrolment for undergraduates is 39,461, which produces a ratio of 30.9%.
2. Section 4.1.5(b) Goal of 50% of new market and non-market housing serves households where one or more members work or attend university on the UBC campus.
 - An initial assessment of faculty, staff and student postal codes suggest approximately one-third of campus neighbourhood households include someone who works at or attends UBC. Future neighbourhood surveys and Census data will provide additional information to evaluate this goal.
3. Section 4.1.6.1(b) Requirement that 20% of new neighbourhood housing units be rental, not less than half to be non-market housing:
 - 224 rental units were added in 2017. Two non-market rental projects with 175 units are expected to be complete in 2018.
 - Total rental units are 28.4% of all neighbourhood housing.

- Two faculty/staff non-market rental housing projects are expected to be completed in 2018. Non-market rental units are 64% of all rental units.
4. Section 4.1.6.1(c) The maximum average floor space ratio (FSR) will be 2.5 net area. For clarity, this average density may be achieved through variable allocation across neighbourhood housing areas.
- The current overall average FSR, for all projects built or with Development Permit approval is 2.05. This is based on a gross buildable area of 7,612,204 square feet and net site areas totalling 3,711,936 square feet.
5. Section 4.3.2 Social and Community Services:
- Development of a new 2.5 acre park in Wesbrook Place was approved in 2017, which will complement the five existing parks, completing a system of green spaces for that neighbourhood.

Annual Construction and Development Update

1. Academic Campus Construction

In 2017 six projects were completed on the academic campus, including:

- Totem Park Residence Infill Phase 2 (čāsnaʔəm House) includes 354 beds (340 single resident rooms + 12 resident advisor Rooms + 2 resident coordinator suites). In the summer session, the facility will operate as accommodation for conference attendees.
- Brock Commons Phase 1 (Tallwood House) includes 408 beds (272 single studio dwelling units and 34 quad dwelling units). These additional student housing units, along with čāsnaʔəm House, help UBC fulfil its student housing commitments in the Land Use Plan and the aspirations in the Vancouver Campus Plan.
- Stewart Blusson Quantum Matter Institute (SBQMI) is an addition to the Advanced Materials and Process Engineering Laboratory (AMPEL) that will provide 5 storeys of research and support space including a below grade basement level. The SBQMI is an interdisciplinary initiative comprised of researchers, supporting labs and offices currently located in several buildings around the campus.
- National Soccer Development Centre, is a joint initiative between the University and the Vancouver Whitecaps Football Club to construct and operate a shared use soccer training facility. Alongside UBC Varsity Soccer and the Whitecaps Football Club, the new facility will also provide access to a number of community and recreation organizations.

- Indian Residential Schools History and Dialogue Centre (IRSHDC) is an addition to the Sedgewick Library. This two-level facility will provide exhibitory and program space to promote learning and dialogue concerning Indian Residential Schools and their place in Canadian History.
- Chan Gunn Pavilion, a 1,736m² 2-storey sports medicine facility that includes offices, clinical facilities and support space. The Chan Gunn Pavilion houses the Centre for Physical Activity & Exercise Medicine.

2. Neighbourhood Construction and Development Projects

The Land Use Plan designates seven residential/mixed use neighbourhoods and two special plan areas distinguished from the purely academic areas of the campus (see map in Attachment A). In 2017 there were approximately 12,000 residents living in campus neighbourhood areas. The Land Use Plan projects up to 24,000 residents through 2041.

Projects completed in the neighbourhood areas in 2017 include:

- Wesbrook Lot E (Village Square), a mixed use commercial and market rental development with 90 units.
- Wesbrook Lot 45 (Webber House), a faculty/staff rental residential development with 36 units.
- University Boulevard Site B (Central), a mixed use commercial and market rental development with 98 units.

Highlights of the 2017 Transportation Status Report

UBC's goal is to reduce automobile trips to and from the UBC Vancouver campus by encouraging and supporting the more sustainable modes of transportation including transit, biking, walking and carpooling through a comprehensive and integrated transportation management strategy. Every fall since 1997 UBC monitors travel patterns to and from campus. Data for all modes of transportation is collected and analyzed to assess changes year over year and to measure UBC's progress in achieving its transportation targets. These targets and the corresponding results from 2017 data collection are summarized below:

Target 1: By 2040 at least two-thirds of all trips to and from UBC will be made by walking, cycling or transit and maintain at least 50% of all trips to and from the campus on public transit.

- 55% of all trips were made by transit, walking and cycling
- 52% of all trips to and from the campus were made by transit

Target 2: Reduce single occupant vehicle trips to and from UBC by 20% from 1997 levels and reduce single occupancy vehicle trips per person to and from UBC by 30% from 1997 levels.

- 46,300 SOV vehicle trips, which is a 0.7% increase from 1997 values
- 0.67 SOV trips per person, which is a 38.6% reduction from 1997 values

Target 3: Maintain daily private automobile traffic at or less than 1997 levels.

- 56,700 private vehicles per day, which is a 9.1% reduction from 1997 values

In 2017 UBC did not achieve the target of a 20% reduction in SOV trips to and from UBC from 1997. As a result, more effort will be made to convert SOV trips to other more sustainable modes of travel, such as HOV and transit, to achieve this target.

As shown in **Figure A**, significant improvements have been made since 1997 in terms of shifting to more sustainable transportation modes largely resulting from successful implementation of UBC’s land use and transportation plans.

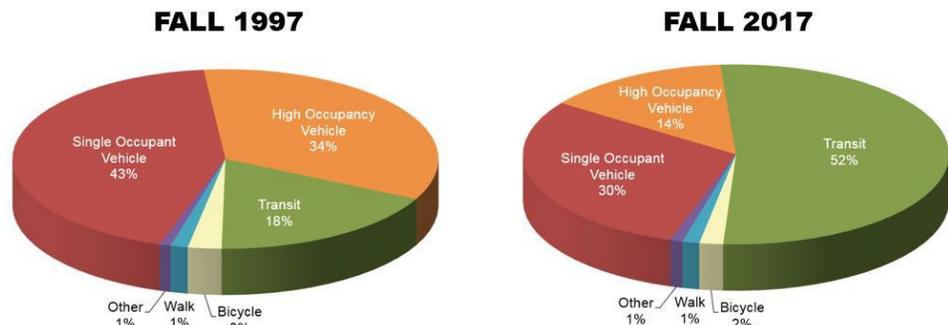


Figure A: Average Weekday Trips by Mode to / from UBC, 1997 and 2017

In 2017 transit accounted for 52% of all trips made to and from campus, which is the same as 2016 and a significant increase compared to 1997. The increase is predominantly the result of a decrease in single occupant and high occupant vehicle trips.

Transit trips levelled off over the past few years as shown below in **Figure B** and there was also a correlated mode share decrease. Possible reasons for this decrease is overcapacity bus services to and from campus, increased transit fares, and reduced customer experience. An increase in the number of trips was observed in 2017, however, the mode share distribution remained constant. The growth in transit trips in 2017 is attributable to the overall increase in the number of trips to and from campus. This trend will be closely observed over the coming years, but is anticipated to increase as investments in transit are made by TransLink as part of the Mayor’s 10-Year Plan.

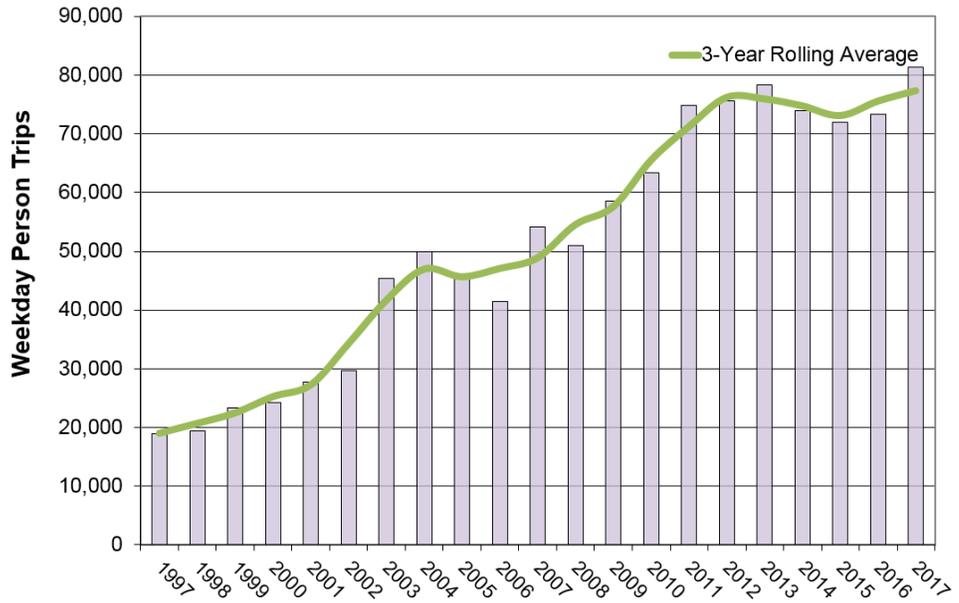


Figure B: Average Weekday Transit Trips to / From UBC, 1997 - 2017

Both single occupant (SOV) and high occupant vehicle (HOV) trips to and from campus have generally been decreasing year over year with the exception of 2016 where an increase in SOV person trips was observed, as shown in **Figure C**. It is important to note here that a majority of the data presented in the following report is collected over a single day or a week, depending on the dataset, so fluctuations year to year are realistic. Travel choices are also highly susceptible to weather conditions, which further adds variability to the data. As a result, three year rolling averages are a more meaningful set of data to use to identify travel patterns. For SOV trips, the three-year rolling average, represented by the green line, smooths the trend line.

The number of SOV trips in 2017 compared to 1997 are approximately equal, the total number of vehicle trips, which is the sum of single occupant and high occupant vehicles, is down even despite the 64% increase in campus population. For 2017, the traffic volumes decreased by 5,700 to 56,700 vehicles compared to 62,400 vehicles in 1997.

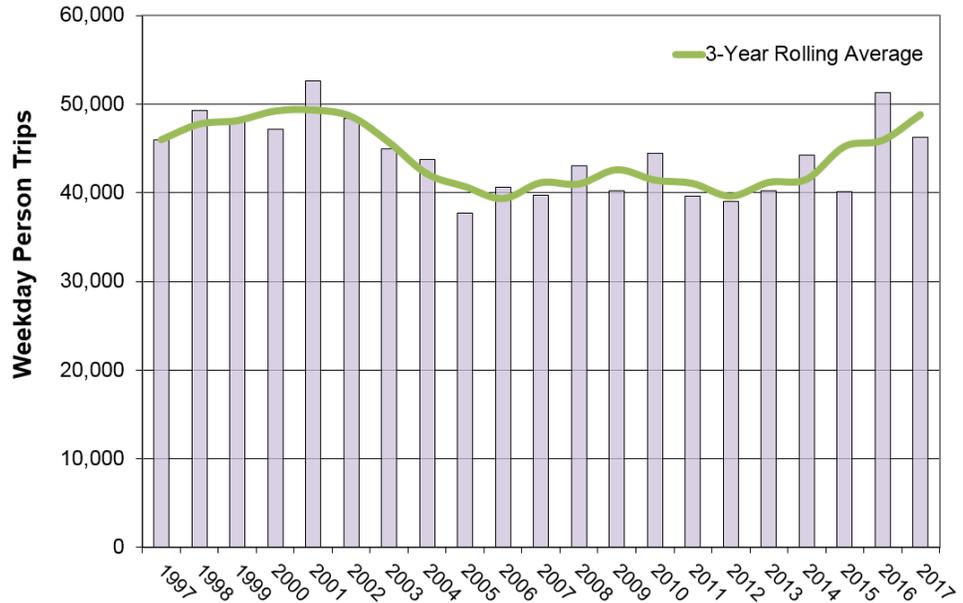


Figure C: Average Weekday Single Occupant Vehicle (SOV) Trips to / from UBC, 1997-2017

Biking and walking to and from UBC do not account for very high mode shares; however, there are still an impressive number of people biking to and from campus. In 2017 there was a jump to almost 5,000 walking and cycling trips compared to 2016 values of 2,300 trips. There is a lot of anticipation that the number of bicycle trips to and from campus will continue to increase, but the mode share is not expected to significantly change as a result of the location of the campus and the distance to where a majority of the campus population is living.

In general, the results from the 2017 data collection efforts are in line with results from previous years and showed an improvement over the 2016 values where some data irregularities were observed. In 2017 there was a spike in HOV trips, but there is a lot more opportunity and interest to grow this mode share and reduce the SOV mode share and in general reduce the amount of vehicles travelling to and from campus each day.

Highlights from C+CP’s Engagement Review

C+CP’s annual review provides an important opportunity to reflect on the engagement that has taken place since the Board’s adoption of the Engagement Charter in September 2014. The Engagement Charter outlines C+CP’s commitment to public engagement and establishes how C+CP defines, designs, implements and concludes public engagement for planning processes.

In 2017, C+CP engagement included diverse processes including support for the Office of the President with the new UBC Strategic Plan and the planning of UBC’s next neighbourhood near Thunderbird Stadium.

UBC Strategic Plan consultation engaged 7,500 people who provided input online, in addition to over 500 attendees across many open houses and pop up information booths on both the Vancouver and Okanagan campuses, with participants largely endorsing the eight draft priorities.

C+CP consults with representatives from the Musqueam Indian Band on a regular basis to generate discussion on campus projects and initiatives including a partnership resulting in the creation of new street signs to acknowledge and respect the traditional territory of the Musqueam people. The bilingual street signs will be installed along nine routes in the academic core of UBC Vancouver. A more detailed report of what we heard in this year’s annual review is provided in Attachment C.

<p>BENEFITS Learning, Research, Financial, Sustainability & Reputational</p>	<p>The Land Use Plan provides the overall framework for the development of UBC’s Vancouver campus. The plan supports sustainability and provides the foundation for the physical development of the campus in keeping with the strategic plan, Place and Promise. The Land Use Plan is an important guidance document for UBC’s Land Use Rules (Policy #92) and Development and Building Regulations.</p>
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Similarly the annual monitoring of transportation to/from the campus provides consistent longitudinal data to measure the success of the transportation demand management provisions of the Land Use Plan (section 4.2.2).

The C+CP Engagement Charter articulates C+CP’s commitment to public engagement in planning processes and to engaging in a way that is open, transparent, and inclusive. It supports two-way communication, informed participation, and a culture of collaboration from when the process is defined and designed through implementation and conclusion.

<p>RISKS Financial, Operational & Reputational</p>	<p>There are legislative obligations and provincial oversight of UBC’s development and land use planning. The absence of annual monitoring could result in greater intervention in UBC’s development objectives.</p>
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Poor public engagement and public process on planning decisions could jeopardize planning decisions and the current governance arrangement.

<p>CONSULTATION Relevant Units, Internal & External Constituencies</p>	<p>The approval and subsequent amendments to the Land Use Plan has had extensive campus community consultation when the plan existed as the Official Community Plan (OCP from 1997 through 2010) and since the conversion of the OCP to the Land Use Plan adopted by the Minister of Community Sport and Cultural Development.</p>
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Since MEVA transferred responsibility to UBC and the Minister, there have been formal public hearings to meet legislative requirements. The most recent public hearing was in advance of the referral of the Regional Context Statement (RCS) to the Minister in 2014. The Minister approved the RCS in June 2015.

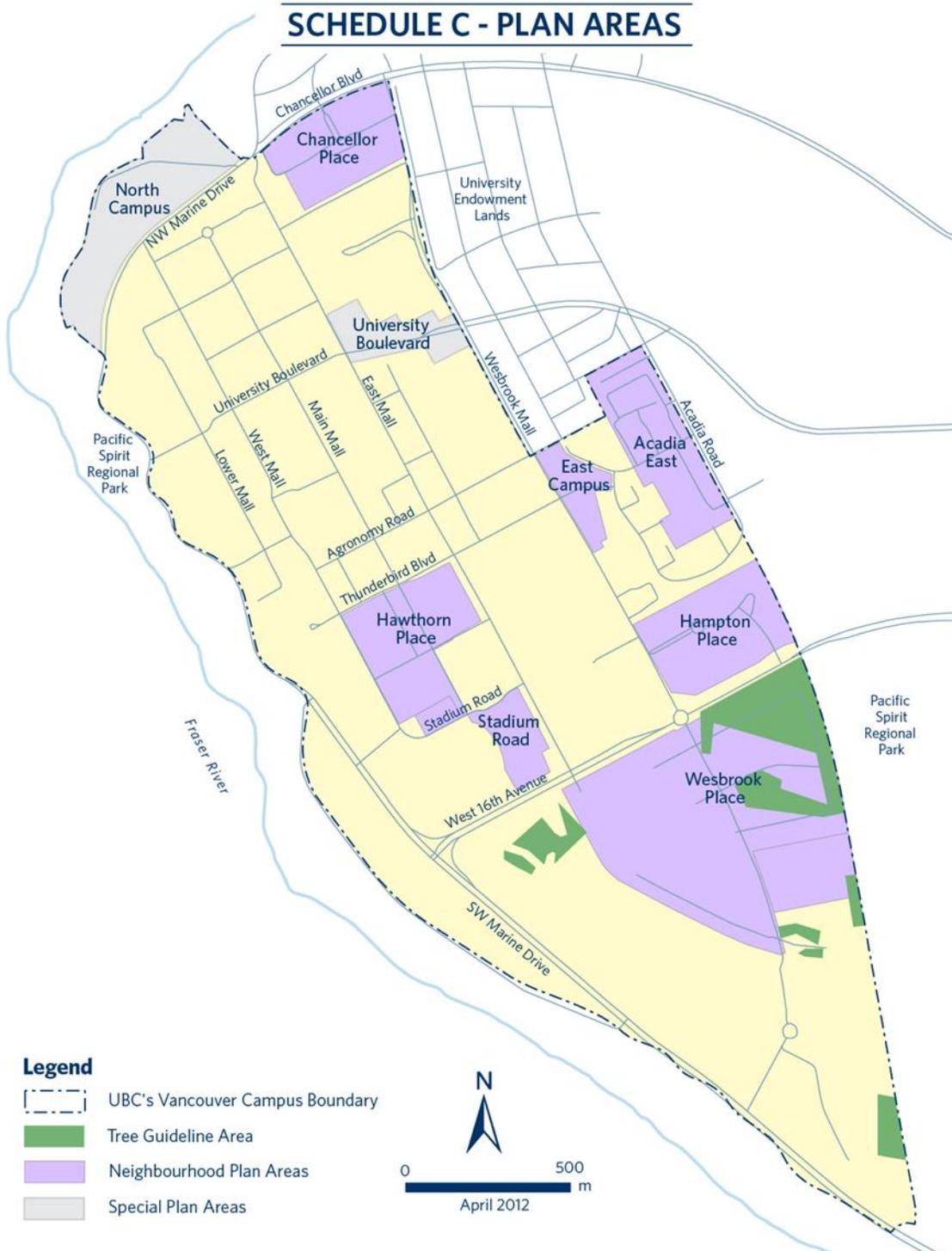
There was a comprehensive consultation process leading to the update of the UBC Transportation Plan (2014).

The C+CP Engagement Charter (Principles and Guiding Practices) was developed with input from a broad range of on- and off-campus stakeholders.

UBCPT COMMENTS Complete for all reports that include a property component	Date of Review:	March 14, 2018	Signed off by:	Aubrey Kelly, Pres.& CEO
	UBC Properties Trust agrees that this report correctly summarizes the results of our activities and those of the University in achieving this broad range of community-building goals.			

Previous Report Date	April 13, 2017
Decision	Annual update on Land Use Plan compliance, the annual transportation status report, and the annual C+CP engagement monitoring report, received for information
Action / Follow Up	
Previous Report Date	April 14, 2016
Decision	Annual update on Land Use Plan compliance, the annual transportation status report, and the annual C+CP engagement monitoring report, received for information
Action / Follow Up	
Previous Report Date	April 14, 2015
Decision	Annual update on Land Use Plan compliance, the annual transportation status report, and the annual C+CP engagement monitoring report, received for information
Action / Follow Up	
Previous Report Date	September 30, 2014
Decision	Annual update on Land Use Plan compliance and the annual transportation status report, received for information; and Adoption of the C+CP Engagement Charter (formal title: C+CP Engagement Principles and Guiding Practices).
Action / Follow Up	

Attachment A





UBC Vancouver Transportation Status Report Fall 2017

March 2018

campus + community planning
transportation planning

- 1. Introduction 1**
 - 1.1. Context..... 1
 - 1.2. Transportation Monitoring Program 2
 - 1.3. Changes at UBC Affecting Travel Patterns 5
 - 1.4. Understanding the Data 7
 - 1.5. More Information 8
- 2. Summary of Transportation at UBC 9**
 - 2.1. Person Trips 9
 - 2.2. Mode Share Summary..... 12
 - 2.3. Traffic Patterns and Vehicle Occupancy 15
- 3. Transportation To and From UBC 18**
 - 3.1. Transit 18
 - 3.2. Motor Vehicles 23
 - 3.3. Bicycles and Pedestrians..... 28
 - 3.4. Heavy Trucks..... 32
- 4. Traffic Conditions At UBC..... 34**
 - 4.1. Traffic Speeds..... 34
 - 4.2. Traffic Volumes 35

1. Introduction

Consistent with its sustainability goals, UBC wishes to reduce automobile trips to and from the UBC Vancouver campus, and encourage the use of other modes of transportation, including transit, carpooling, cycling and walking. To date, UBC has implemented several initiatives in support of non-automobile modes of transportation, including a student U-Pass program, bicycle infrastructure parking facilities, carshare parking and is exploring carpooling incentives. In addition TransLink has made ongoing efforts to improve transit service and increase transit capacity to UBC.

Since 1997, UBC has collected data each fall regarding travel patterns to and from the Point Grey campus. A year-to-year comparison of this information provides a measure of UBC's progress in achieving its transportation targets identified in the following section.

This fall 2017 Transportation Status Report presents the most recent data that UBC has collected. This report provides a picture of overall travel trends, and details of travel patterns for each mode of transportation to and from UBC as well as an overview of transportation at UBC.

1.1. Context

Transportation planning at UBC is undertaken within the direction and context provided by several plans and policies, including:

- **The UBC Plan** is the strategic vision for the kind of university that UBC aspires to be. Prepared through widespread community consultation, the UBC Plan establishes UBC's vision to be one of the world's leading universities, creating an exceptional learning environment that fosters global citizenship, advances a civil and sustainable society, and supports outstanding research to serve the people of British Columbia, Canada and the world. Place and Promise is focused around six core values — academic freedom, advancing and sharing knowledge, excellence, integrity, mutual respect and equity, and public interest — which are supported by specific commitments goals and actions.
- **The UBC Land Use Plan.** In June 2010, the Minister of Community and Rural Development enacted legislation that realigned the responsibility for this plan, previously known as the Official Community Plan. The OCP is no longer a regional district bylaw. The University is responsible for the Land Use Plan with direct oversight by the Minister. The Land Use Plan retains a number of transportation demand management objectives aimed at increasing walking, cycling and transit in preference to trips by single-occupant vehicles. The Land Use Plan establishes goals toward building complete communities thereby helping to reduce demands placed on transportation infrastructure.
- **The Vancouver Campus Plan.** In 2010, UBC adopted a new Vancouver Campus Plan, which covers the academic lands of UBC's Vancouver campus. This plan guides the institutional capital investment in facilities for teaching and research, student housing and campus infrastructure and services.
- **Neighbourhood Plans.** For each of the non-institutional neighbourhoods on campus, there is a

neighbourhood plan describing site-specific land uses, development controls, design guidelines, and servicing and transportation strategies consistent with UBC's Land Use Plan. Each neighbourhood is designed to support the University's academic core, while providing the amenities and services required to achieve a compact, transit-oriented, pedestrian friendly community.

- **The UBC Transportation Plan.** UBC has committed to implement a comprehensive and integrated transportation management strategy. The Transportation Plan is the result of that commitment, and was approved by UBC's Board of Governors in November 1999 and renewed in 2014. The Plan includes targets to ensure accountability, shape decision making and inspire the community to act in ways to achieve UBC's campus vision. The targets identified in The Plan include:
 - **TARGET 1:** By 2040 at least two-thirds of all trips to and from UBC will be made by walking, cycling or transit and maintain at least 50% of all trips to and from the campus on public transit.
 - **TARGET 2:** Reduce single occupant vehicle trips to and from UBC by 20% from 1997 levels and reduce single occupancy vehicle trips per person to and from UBC by 30% from 1997 levels.
 - **TARGET 3:** Maintain daily private automobile traffic at or less than 1997 levels.

1.2. Transportation Monitoring Program

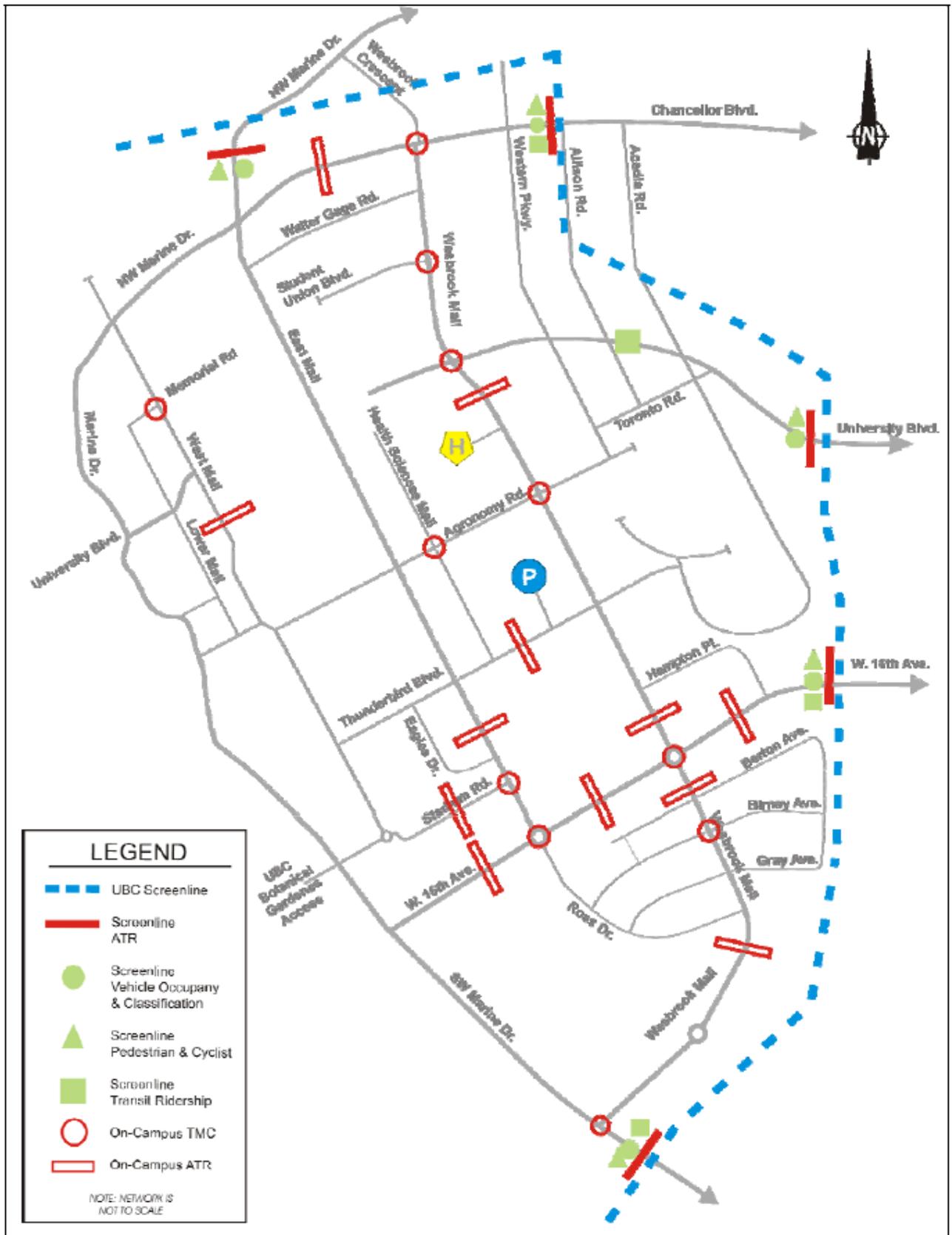
Travel patterns to and from UBC are monitored on an on-going basis through a variety of different data collection methods. Data is collected each fall to enable consistent year to year comparisons of travel patterns, mode shares, and traffic volumes. Additional data collection activities may be undertaken at other times of the year to obtain information regarding specific modes of travel, seasonal variations and localized traffic volumes. The annual monitoring results are used to assess progress towards meeting the 2005 Strategic Transportation Plan (STP) goals and also help guide future implementation priorities.

Data collection activities for 2017 are summarized in **Table 1.1**, and data collection locations are illustrated in **Figure 1.1**.

Table 1.1: Summary of 2017 Transportation Data Collection

Data Collection Activity	Locations	Description
Intersection Counts	At intersections throughout campus.	Manual observation for 8 hours (3hrs in AM, 2hrs in Midday, 3hrs in PM) for one day.
Campus Traffic / Speed Counts	Roads throughout campus.	Automatic tube counters on roads for 7 days (24 hours / day).
Screenline Traffic Counts	Screenlines	Automatic tube counters on roads for 7 days (24 hours / day).
Transit Ridership	Screenlines	Manual observation from 6:00AM to 4:30AM for one day.
Vehicle Occupancy & Classification	Screenlines	Manual observation for 8 hours (3hrs in AM, 2hrs in Midday, 3hrs in PM) for one day.
Bicycle and Pedestrian Counts	Screenlines	Manual observation for 15 hours over one day.
Heavy Trucks	Screenlines	Manual observation for 13 hours (6:00AM to 7:00PM) for one day each quarter.
Licence Plate Surveys	South Campus / Wesbrook Village	Licence plate surveys are conducted to understand travel patterns. Every other year.

Figure 1.1: Data Collection Locations



1.3. Changes at UBC Affecting Travel Patterns

There have been a number of changes at UBC that have affected travel patterns among students, staff, faculty and others at UBC. This section of the report identifies key changes that have occurred at UBC since 1997.

- Population.** The daytime population at UBC has increased 64% since 1997. This includes increased student enrolment and associated increases in faculty and staff. For the purposes of monitoring trends in travel to and from UBC, the daytime population comprised of students, staff and faculty is used to calculate person trips. **Table 1.2** summarizes population figures for fall 1997 and fall 2017.

It is important to also note that the estimate of campus population is challenging. It is dependent on the means by which the data is collected and grouped and is impacted by the increasing trend in online courses and expanding residential campus community. However, efforts are made to allow for consistent cross comparison in the status reports.

Table 1.2: Daytime Population at UBC, 2017 vs. 1997

Group	Fall 1997	Fall 2017	Increase (count / percentage)	
Students	33,200	54,350	+21,150	+63.7%
Staff	7,250	11,350	+4,100	+56.6%
Faculty	1,850	3,600	+1,770	+96.7%
Totals	42,300	69,300	+27,030	+63.9%

Source: UBC Planning and Institutional Research Department

- Compass Card (U-Pass).** One of the most significant changes affecting travel patterns at UBC has been the student U-Pass, which was introduced in September 2003. The U-Pass is a universal transportation pass that is mandatory for students at a cost to students of \$35 per month. The U-Pass offers students unlimited access to TransLink Bus, SkyTrain and SeaBus services (all zones), and discounted West Coast Express fares. The Compass Card came into effect for the 2016 data collection period, which replaced the U-Pass card, but the U-Pass program continues.
- Increased transit service.** In conjunction with introduction of the student U-Pass, TransLink has substantially increased the level of transit service provided to UBC and continues to make service improvements annually. The majority of the increase has been on the Route 99 B-Line. Other improvements since 1997 include new Route 33 on 16th Avenue, and several express routes, including Route 43 on 41st Avenue, Route 44 from downtown, Route 84 from the VCC-Clark SkyTrain station, and Route 480 from Richmond Centre. Recent TransLink ridership data suggests routes to UBC carry the highest passenger volumes in the region.
- Class start times were changed in September 2001.** In an effort to spread the transit demand in the morning peak period, UBC adjusted morning class start times. Previously, the first classes in the morning all began at 8:30 a.m. This was changed so that some students begin classes at 8:00

a.m., some at 8:30 a.m., and others at 9:00 a.m. Subsequent analysis showed that the desired spreading of morning peak demands was achieved, and that as a result, 12% more transit trips per day were accommodated on the same number of buses. In 2017 another meeting was held with Scheduling Services to discuss the importance of spreading out the class start times. Although there are limitations they will make efforts to spread the class start times out more.

- **Parking supply and costs.** UBC has eliminated approximately 3,500 commuter parking stalls on campus since 1997 — a reduction in the commuter parking supply of over 25%. At the same time, the price of parking on campus has increased (UBC does not provide any free parking spaces on campus for commuters). Daily parking rates have increased from \$2.00 in 1997 to \$16.00 in 2016, and prices for parking permits and short term parking have also increased. As a result of the growth in Electric Vehicle (EV) ownership in the Lower Mainland, UBC has been adding EV charging stations in the parkades across campus. Currently UBC Parking provides 22 public charging stations and the intent is to add to this supply by up to 40 stations in 2018.
- **Bicycle facilities.** Since 1997, new bicycle lanes have been implemented on several roadways on campus and to / from campus. Most notable was the conversion of University Boulevard west of Blanca, from two lanes in each direction to one travel lane and one bicycle lane in each direction. Bicycle lanes were also added on SW Marine Drive, Wesbrook Mall, East Mall, Thunderbird Boulevard and 16th Avenue. Similarly, the City of Vancouver has made significant progress on bike facilities that connect to the five key routes to and from UBC. All unrestricted roads on campus function as shared roadways that accommodate cyclists as well as motor vehicles. Bicycle racks are provided at every building on campus in addition to secure bike lockers, bike cages and numerous end of trip facilities.
- **Alternative modes of travel.** UBC has encouraged the use of non-single occupancy vehicle (SOV) modes of travel through a range of programs, including a comprehensive transportation demand management strategy that includes transit discount programs, carpooling, car sharing, cycling, on campus shuttles, an emergency ride home program, and other sustainable transportation initiatives.
- **Campus development and land use.** UBC has developed and is continuing to develop additional housing for students, staff, and faculty on-campus as a means of reducing the proportion of persons who travel to UBC from off-campus. At the same time, an increased number and range of commercial services and amenities are now available on campus and in the University Endowment Lands adjacent to campus to reduce the need to travel off campus.

1.4. Understanding the Data

The following terms and measures are used throughout this report to describe various characteristics of travel patterns and trends at UBC:

- A **screenline** is an imaginary line across which trips are recorded. At UBC, the screenline around the campus illustrated by the dotted blue line in **Figure 1.1**. As shown, there are approximately five different entry and exit options.
- **Mode share** (also called “mode split”) refers to the relative proportions of trips by various travel modes during a particular time period. Mode shares are generally reported for single occupant vehicles (SOVs), carpool and vanpools (also called high occupancy vehicles or HOV’s), transit, bicycle, pedestrians and other modes such as motorcycles and trucks.
- The data presented in the Transportation Status Report include **traffic volumes** and **person trips**. Traffic volumes are simply the number of vehicles passing a point, whereas person trips are the number of people passing a point by all modes of transportation. A person trip is a one-way trip made by one person. For example, in one hour there might be 500 vehicles travelling along a section of road (traffic volumes generally reflect vehicles travelling in both directions). These 500 vehicles might include 450 automobiles with a total of 600 persons in them, 30 buses with a total of 1,000 persons in them, and 20 light and heavy trucks with 25 persons in them. The total number of person trips associated with these 500 vehicles is 1,625 person trips.

*Throughout this report, unless otherwise stated all reported trips are in **person trips**.*

- The population at UBC — students, staff, faculty and residents — has increased every year from 1997. This means that when comparing absolute numbers of person trips and traffic volumes, and changes from one year to another reflect the effects of two different factors — changes in travel patterns and increases in population growth. To distinguish changes in travel patterns from changes due to population increase, a different measure is used — **trips per person**. This provides a consistent basis for monitoring travel trends regardless of how much or how little population growth occurs. Trips per person are calculated as the number of person trips divided by the number of persons at UBC during the weekday daytime. The number of persons is calculated as the student enrolment plus the number of staff and faculty (full and part time), as reported by UBC’s Planning and Institutional Research department. Numbers of on-campus residents are not included in the population count, in many cases it could be a double count as a result of many staff, faculty and students living on campus.
- Substantial effort and cost are required to collect travel data at UBC. Consequently, it is neither reasonable nor necessary to collect all data in all locations at all hours of the day and night. Instead, some data are collected during selected **time periods** only (**Table 1.1** indicates the time periods for each type of data collection activity). Traffic data on all routes leading to and from UBC are collected over a period of one week using automatic counters placed on the roadway. On the other hand, vehicle occupancy and classification counts are done manually, and as a result are relatively expensive. These counts are undertaken for a total of 8 hours from the morning peak through the afternoon peak periods. Daily totals can be estimated by combining occupancy and classification data with the average daily traffic data.

- **Rolling average.** Much of the data presented in this report is from a single day to a week and observed travel patterns fluctuate from year to year and are heavily influenced by weather. Consequently the results for any particular year should not be considered in isolation. A more meaningful picture of travel patterns is obtained by considering trends over time. To better illustrate trends and minimize the apparent variability from year to year, charts illustrating trips by mode for each year since 1997 include a trend line based on a three-year rolling average. Rolling averages are calculated as the average of a particular year plus the years before and after. This means that for 2006, for example, the rolling average is calculated as the average number of trips in 2005, 2006 and 2007.

1.5. More Information

The following resources provide additional information regarding travel patterns and trends at UBC, as well as transportation services and facilities. All this information can be found at UBC's Campus and Community Planning website:

- This Fall 2017 Transportation Status Report, along with previous Transportation Status Reports.
- 2017 Transportation Survey
- The 2005 Strategic Transportation Plan.
- A review of the first 18 months of the student U-Pass program and the results of the Community Transportation Pass (ComPASS) demonstration project.
- Information on other transportation facilities and services on campus.
- Information regarding campus plans and neighbourhood plans.

2. Summary of Transportation at UBC

The following sections present a general summary of transportation to and from UBC including person trips, trips per person, mode share, and vehicle occupancy. Details for each different mode of transportation are presented in **Section 3**.

2.1. Person Trips

The average weekday person trips to and from UBC in fall 2017 was 156,100. A summary and comparison of daily person trips by mode for 1997 and 2017 are provided in **Table 2.1** and **Figure 2.1**.

Table 2.1: Weekday Person Trips to / from UBC Vancouver, 1997 vs. 2017

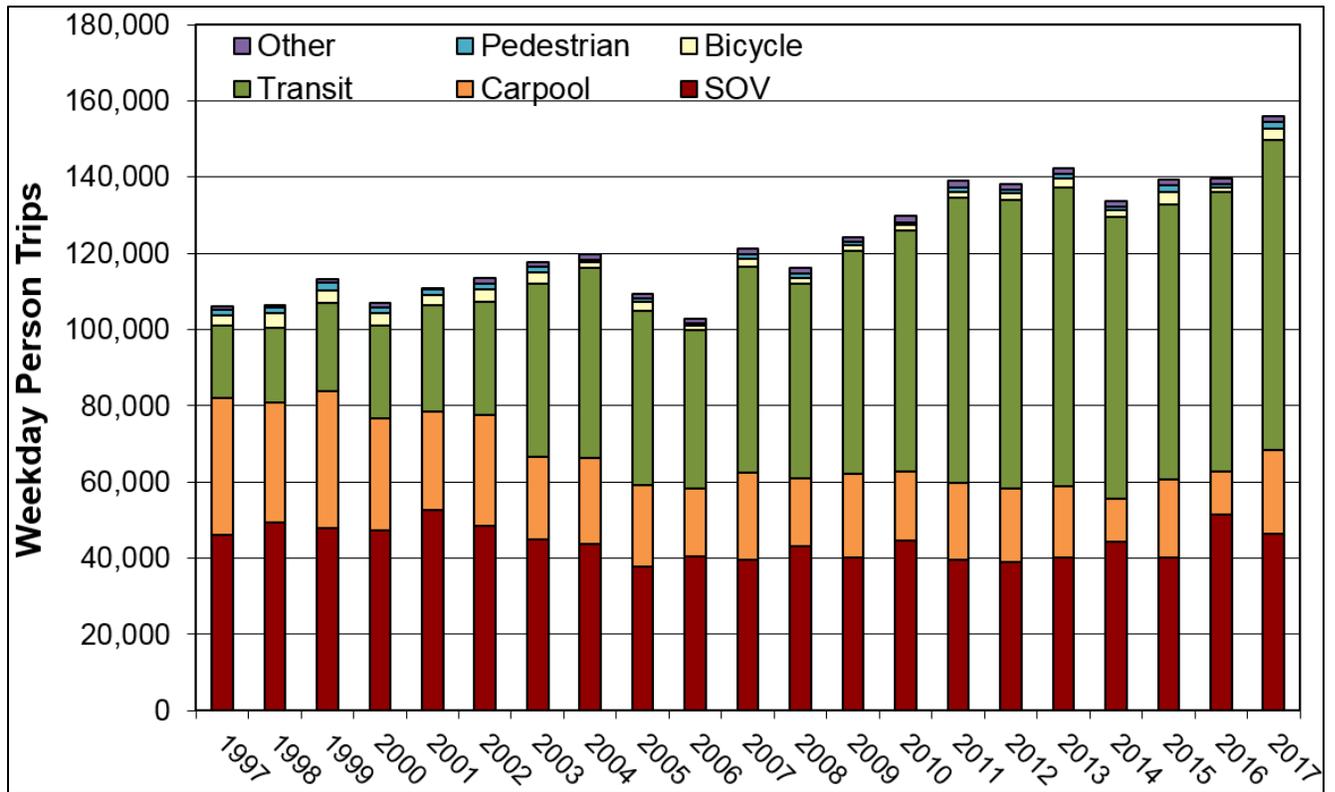
Travel Mode Classification	Person Trips			
	Fall 1997	Fall 2017	Change (count / percentage)	
Single Occupant Vehicle (SOV)	46,000	46,300	+300	+0.7%
Carpool / Vanpool (HOV)	36,100	22,100	-14,000	-38.8%
Transit	19,000	81,400	+62,400	+328.4%
Bicycle	2,700	2,800	+100	+3.7%
Pedestrian	1,400	2,000	+600	+42.9%
Truck & Motorcycle	900	1,500	+600	+66.7%
Totals	106,100	156,100	+50,000	+47.1%

Key observations regarding modes of travel to and from UBC include:

- The proportion of SOV trips is approximately level with the values from 1997.
- The proportion of HOV trips has decreased by almost 40% from 1997.
- Trips by transit have more than quadrupled since 1997.
- Bicycle and pedestrian trips do not represent a significant portion of the trips to and from campus. The numbers dropped significantly after the student u-pass program was implemented in 2003.

There is a lot of variability in trips by mode year over year, highlighting the importance of referencing a three year rolling average. This rolling average is shown for all modes of travel in Section 3.0.

Figure 2.1: Weekday Person Trips to / from UBC, 1997 – 2017



As shown in **Figure 2.1**, the number of person trips leveled off from 2011 to 2016 though the mode share proportions varied. However, in 2017 an increase in overall person trips was observed. The increase was predominantly in HOV and transit trips as well as in bike and pedestrian trips.

In order to compare travel patterns from year to year on a consistent basis, it is important to negate the effects of population / enrolment growth. To compare the trips per person by mode the average weekday person trips by each mode is divided by the average weekday campus population. The average weekday campus population values include all full and part time students, staff and faculty.

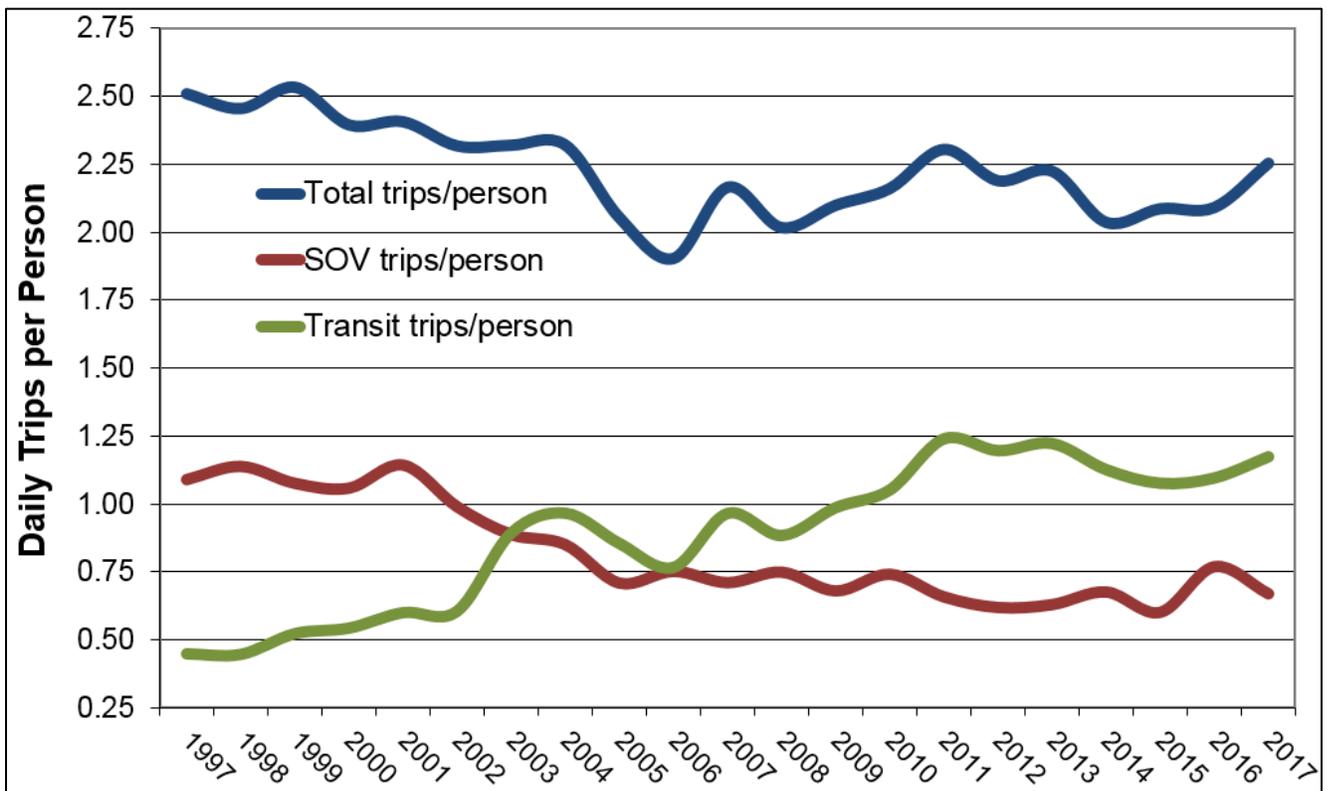
The campus population and trips per person to and from UBC from fall 1997 to fall 2017 are presented in **Table 2.2** and **Figure 2.2**, respectively.

Table 2.2: Weekday Trips Per Person to / from UBC, 1997 – 2017

Travel Mode Classification	Trips Per Person		
	Fall 1997	Fall 2017	Change (count / percentage)
Single Occupant Vehicle (SOV)	1.09	0.67	-0.42 / -38.6%
Carpool / Vanpool	0.86	0.32	-0.53 / -62.6%
Transit	0.45	1.17	+0.73 / +161.5%
Bicycle	0.06	0.04	-0.02 / -36.7%
Pedestrian	0.03	0.03	-0.00 / -12.8%
Truck & Motorcycle	0.02	0.02	+0.00 / +1.7%
Totals	2.51	2.25	-0.26 / -10.2%
CAMPUS POPULATION*	42,300	69,300	+27,030 / +63.9%

*Population reported from fall attendance values.

Figure 2.2: Weekday Trips Per Person to / From UBC, 1997 – 2017



The average number of trips per person in 2017 was 2.25 trips per day, which is a 10% decrease from 1997 and an increase from the 2.09 trips per person in 2016. Since 1997 the number of trips made by transit has generally increased while the number of trips by single occupant and high occupant vehicles has generally decreased.

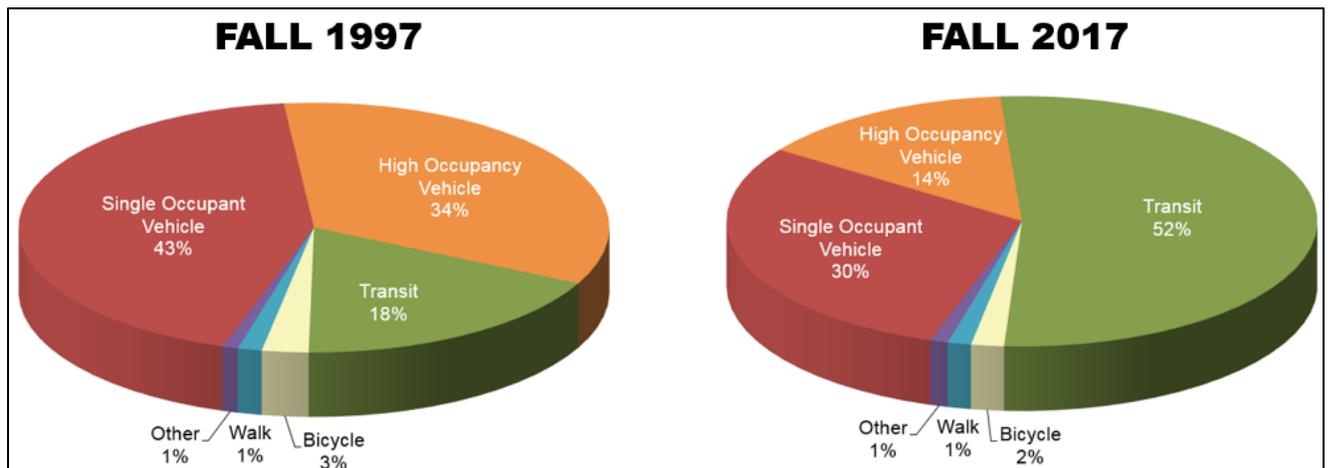
Possible reasons for the decrease in trips per person to and from campus overall since 1997 include:

- More people are living, working and studying on campus.
- More services are available on campus, reducing the need for people to travel off campus for shopping and services.
- Distance education, telecommuting and internet access has reduced the need for some students and faculty to travel to campus each day.

2.2. Mode Share Summary

The mode share comparison for 1997 and 2017 are shown in **Figure 2.3**. The significant change since 1997 has been the increase in the transit mode share, with trips by transit accounting for over half of all trips to and from UBC, and the decrease in high and single occupancy vehicle mode share.

Figure 2.3: Average Weekday Trips by Mode to / From UBC, 1997 vs. 2017



TARGET 1: By 2040 at least two-thirds of all trips to and from UBC will be made by walking, cycling or transit and maintain at least 50% of all trips to and from the campus on public transit.

- In 2017 55% of all trips were made by transit, walking and cycling.
- In 2017 52% of all trips to and from the campus were made by transit.

The distribution of weekday person trips throughout the day compared to 1997 is shown in **Figure 2.5**. In general a wave profile can be seen to match the standard work and study hours with rounded peaks around 9am and 5pm.

The peak hour summary of trips by mode is summarized in **Table 2.3**. Significant observations in the data include:

- The number of trips to campus during the morning peak and from campus during the afternoon peak increased 27% and 65% in 2017 compared to 1997, respectively. For comparison, campus population has increased 64% over the same period.
- The peak travel periods have spread out resulting in more trips throughout the day. However, a sharper peak is visible in the 2017 data. This puts significant strain on the public transit system and creates overcrowding and poor service / experience to riders, which could result in people switching travel modes, likely to less sustainable travel modes.

Figure 2.5: Distribution of Average Weekday Person Trips to / from UBC, 1997 vs. 2017

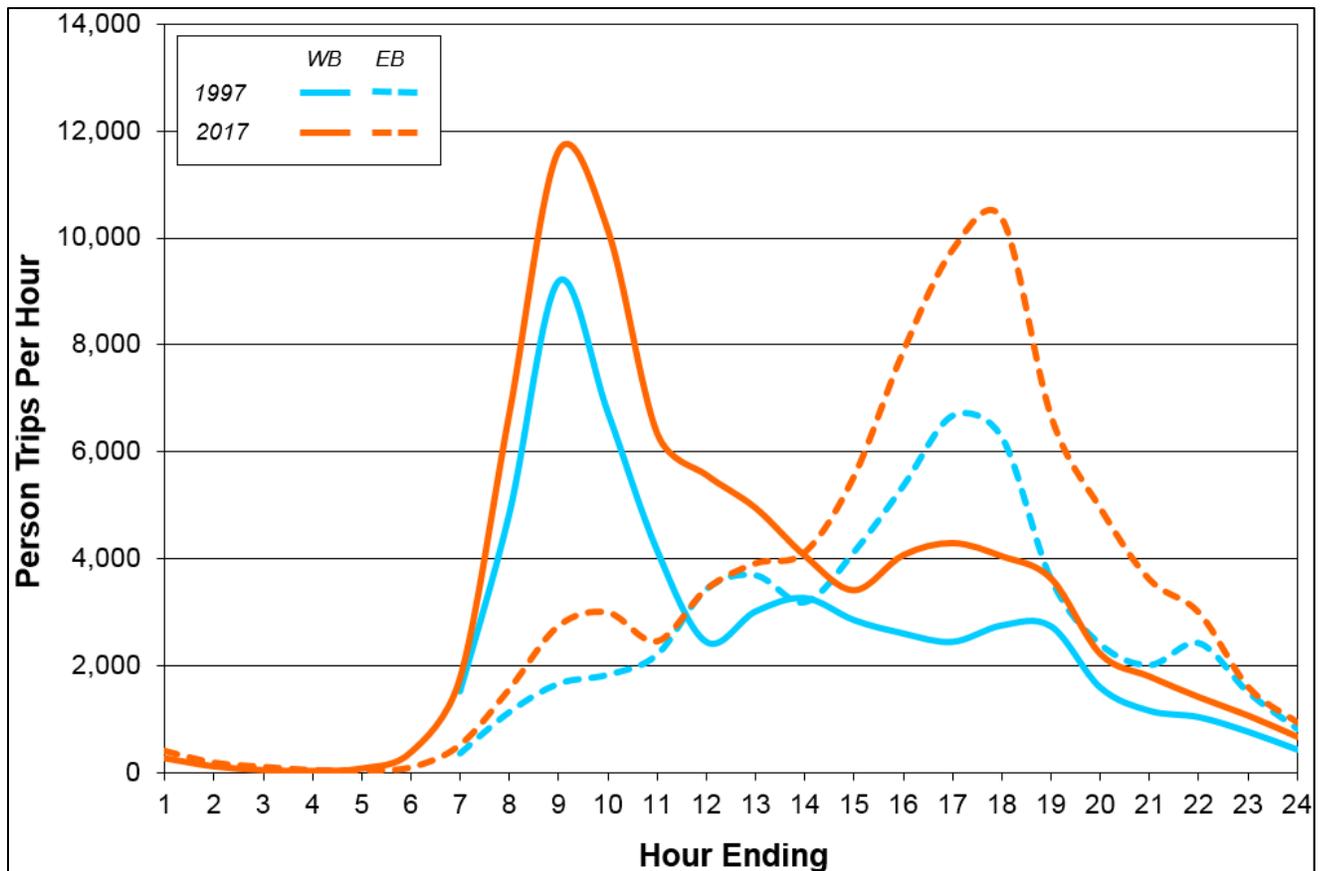


Table 2.3: Average Peak Hour Person Trips by Mode to/from UBC, 2017

Travel Mode Classification	AM Peak Hour 9:00am – 10:00am		PM Peak Hour 5:00pm – 6:00pm	
	Westbound	Eastbound	Westbound	Eastbound
Single Occupant Vehicle (SOV)	2,741	1,204	1,404	2,436
High Occupancy Vehicle	669	488	628	1,332
Transit	7,777	938	1,783	6,116
Bicycle	265	22	65	300
Pedestrian	102	54	159	140
Truck & Motorcycle	78	43	17	38
Totals	11,632	2,749	4,056	10,362

2.3. Traffic Patterns and Vehicle Occupancy

Automobile traffic (single occupant and high occupant vehicles only) to and from UBC has decreased substantially from 62,400 automobiles per weekday in fall 1997 to 56,700 automobiles per weekday in fall 2017 despite a 64% increase in daytime population, as shown in **Table 2.4**.

Table 2.4: Average Weekday SOV and HOV Traffic Volume to/from UBC, 1997 vs. 2017

Travel Mode Classification	Fall 1997	Fall 2017	Change (count / percentage)	
Single Occupant Vehicle (SOV)	46,000	46,300	+300	+0.7%
High Occupant Vehicle (HOV)	16,400	10,400	-6,000	-36.6%
Totals	62,400	56,700	-5,700	-9.1%

The average weekday traffic volumes to / from UBC in a 24-hour period for both fall 1997 and fall 2017 are shown in **Figure 2.6**. As shown, the traffic volumes have reduced through most of the day, not just at peak periods. The exception is the morning eastbound movement where an increase in traffic was observed, likely a result of the growth in the on campus residential population that travel into Vancouver for work.

Figure 2.6: Distribution of Average Weekday Traffic Volumes to / from UBC, 1997 vs. 2017

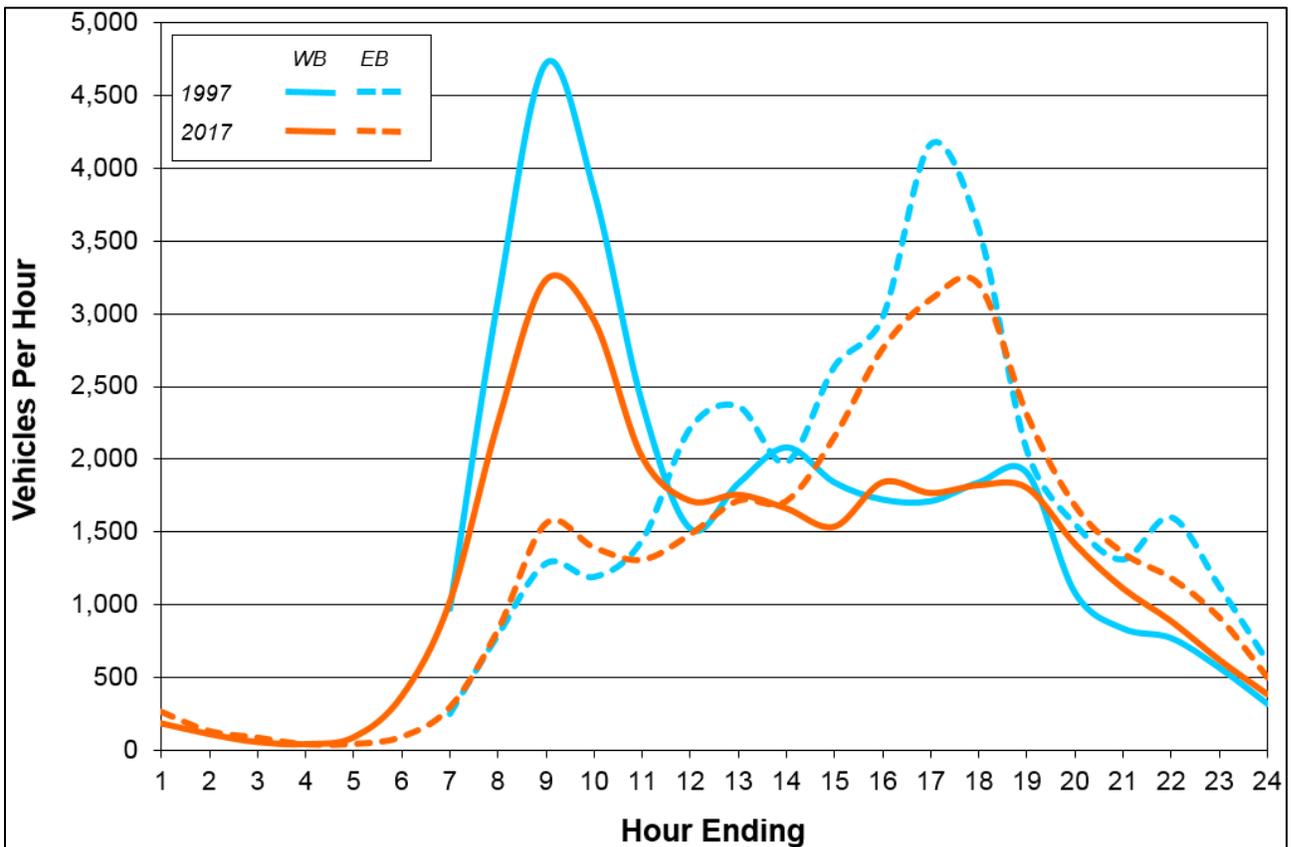


Table 2.5 summarizes the daily traffic volumes at each screenline location. It is important to note that these figures include trucks, buses and motorcycles, in addition to SOV's and HOV's so the numbers in the tables below won't match those presented in **Table 2.4**.

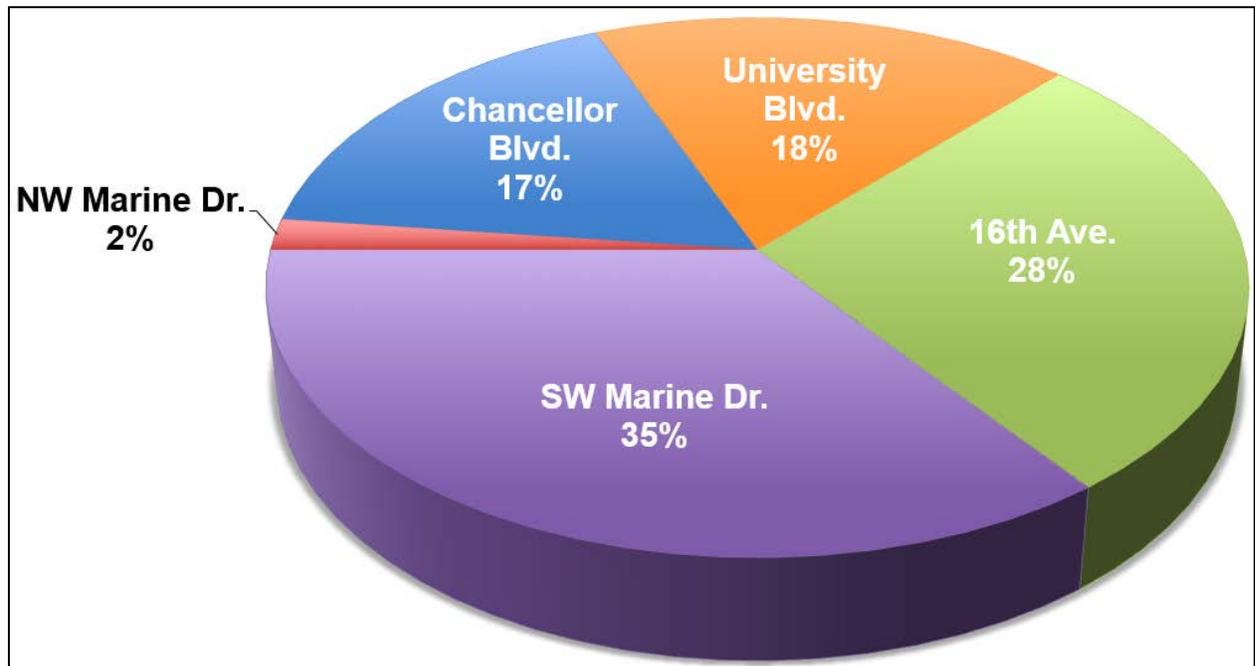
Overall, traffic volumes were 6.5% lower in fall 2017 than in 1997 with a general decrease observed at all screenline locations with the exception of 16th Avenue where there has been an increase of 20%. The increase on 16th Avenue is mostly attributed to the population growth in Wesbrook Village.

Table 2.5: Summary of Average Weekday Traffic Volumes at Screenlines, 1997 vs. 2017

Screenline	Average Daily Traffic Volume			
	Fall 1997	Fall 2017	Change (count / percentage)	
NW Marine Drive	2,040	1,040	-1,000	-49.0%
Chancellor Boulevard	11,660	10,320	-1,340	-11.5%
University Boulevard	14,610	11,390	-3,220	-22.0%
16th Avenue	12,880	15,510	+2,630	+20.4%
SW Marine Drive	23,410	22,170	-1,240	-5.3%
Totals	64,600	60,430	-4,200	-6.5%

The distribution of all traffic volumes to / from UBC by screenline is shown in **Figure 2.7**. As shown, the majority of traffic uses SW Marine Drive followed by 16th Avenue and University Boulevard.

Figure 2.7: Distribution of Average Weekday Traffic to / from UBC by Screenline, 2017



Vehicle occupancy is a measure of the average number of people travelling per vehicle during a certain period of time. As shown in **Table 2.6**, the average vehicle occupancy of all vehicles in 2017 was 1.21 persons per vehicle, down from 1.32 persons per vehicle in 1997 and up from 1.11 persons per vehicle in 2016. The average occupancy for high occupancy vehicles decreased slightly from 2.20 in 1997 to 2.12 in 2017. In 2017 87% of recorded HOV trips were two person trips with three and four person trips at 9% and 3.6%, respectively.

Table 2.6: Average Daily Vehicle Occupancy to / from UBC

Travel Mode Classification	Fall 1997	Fall 2015	Fall 2016	Fall 2017
Vehicles (SOV's + HOV's)	1.32	1.22	1.11	1.21
HOV's (Carpools / Vanpools)	2.20	2.10	2.18	2.12

Table 2.7 provides a summary of average automobile occupancies from 7:00 a.m. to 6:00 p.m. Overall there is very little variation in the vehicle occupancies, but they appear to be higher for afternoon and off peak period trips from campus.

Table 2.7: Hourly Vehicle Occupancies to / from UBC, 2017

Hour Beginning	Westbound	Eastbound	Both Directions
7:00 a.m.	1.10	1.18	1.12
8:00 a.m.	1.12	1.18	1.14
9:00 a.m.	1.15	1.18	1.16
11:00 a.m.	1.17	1.26	1.22
12:00 p.m.	1.19	1.28	1.24
3:00 p.m.	1.26	1.26	1.26
4:00 p.m.	1.22	1.23	1.22
5:00 p.m.	1.20	1.23	1.22
8-Hour Average	1.16	1.23	1.20

3. Transportation To and From UBC

This section of the Transportation Status Report describes travel patterns and trends for trips to and from the UBC Vancouver campus for each mode of travel. Information regarding transportation conditions on campus is presented in **Section 4**.

3.1. Transit

Transit ridership at UBC has quadrupled since 1997, increasing 328%, which equates to 81,400 weekday transit trips and 52% of all trips to and from UBC each day.

This ridership increase has been the result of the student U-Pass program, continued improvements in transit service, a reduced supply of commuter parking, and higher parking costs on campus. **Table 3.1** provides a summary of the increase in transit trips and the transit mode share from fall 1997 to fall 2017, highlighting the change from 2002 to 2003 when the student U-Pass was introduced.

Table 3.1: Summary of Average Weekday Transit Trips to / from UBC, 1997 – 2017

Transit Trips	Before U-Pass		After U-Pass		Change 1997-2017 (count / percentage)	
	Fall 1997	Fall 2002	Fall 2003	Fall 2017		
Person Trips	19,000	29,700	45,400	81,400	+62,400	+328%
Trips Per Person	0.45	0.61	0.89	1.17	+0.73	+161%
Transit Mode Share	18%	26%	39%	52%	+34%	+188%

Figure 3.1 illustrates transit ridership from year to year and includes the three year rolling average that balances out the variation year over year. A sharp peak was observed in 2003 when the u-pass was introduced, which was followed by a steady increase and a levelling off in 2013.

Table 3.2 provides a summary of transit trips by corridor, **Table 3.3** provides a summary of transit trips by route and by time period, and **Table 3.4** provides a summary of peak hour trips by route.

Table 3.2: Average Weekday Transit Trips to / from UBC by Corridor, 2017

Corridor	AM Peak	Midday	PM Peak	Evening	Night	Totals	
	6am to 9am	9am to 3pm	3pm to 6pm	6pm to Midnight	Midnight to 4:30am		
Chancellor Blvd.	2,191	4,331	2,453	865	0	9,840	12.1%
University Blvd.	5,322	13,455	9,935	8,071	262	37,045	45.5%
16th Avenue	2,098	2,844	2,731	2,163	21	9,857	12.1%
SW Marine Drive	4,752	9,888	6,481	3,507	16	24,644	30.3%
Totals	14,363	30,518	21,600	14,606	299	81,386	100%
	17.6%	37.5%	26.5%	17.9%	0.4%		

Figure 3.1: Average Weekday Transit Trips to / from UBC, 1997 – 2017

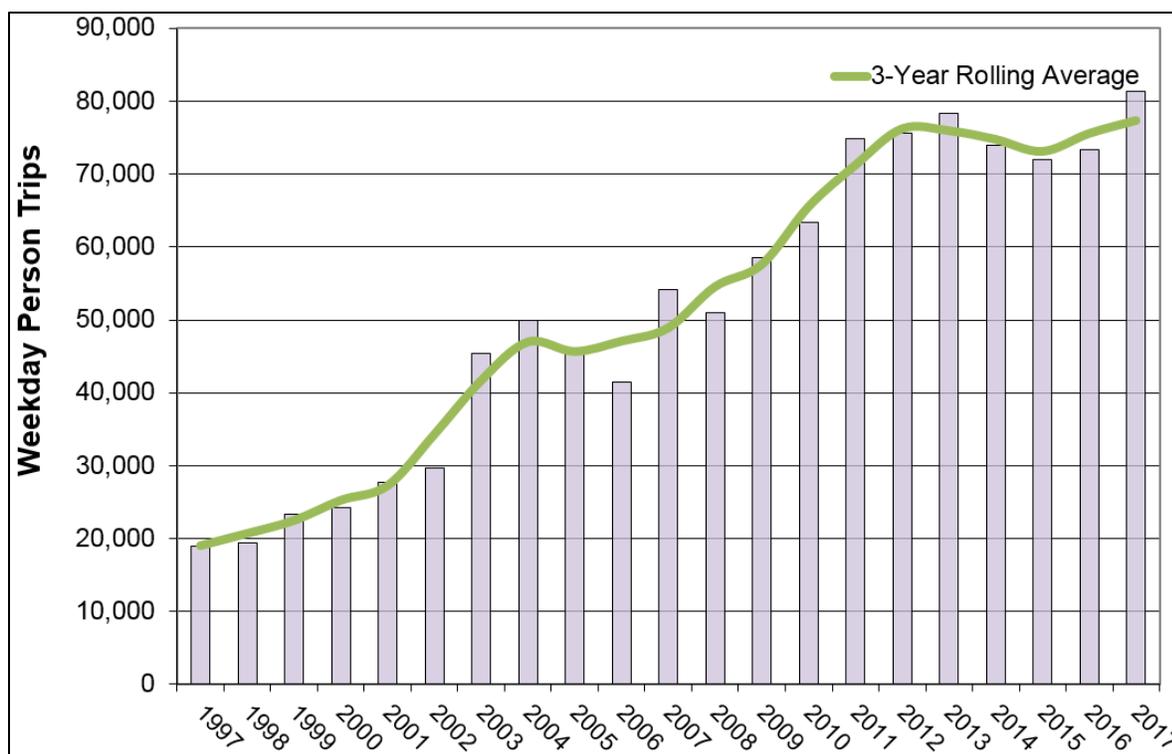


Table 3.3: Average Weekday Transit Trips to / from UBC by Route, 2017

Route	AM	Midday	PM Peak	Evening	Night	Totals		
	6am to 9am	9am to 3pm	3pm to 6pm	6pm to Midnight	Midnight to 4:30am			
4	4th Avenue	358	1,394	1,065	1,054	-	3,871	4.8%
9	Broadway	502	631	833	216	-	2,182	2.7%
14/N17	Broadway	638	2,078	1,162	1,442	121	5,441	6.7%
25	King Edward	1,316	1,910	1,615	1,221	21	6,083	7.5%
33	16th Avenue	782	934	1,116	942	-	3,774	4.6%
41	41st Avenue	1,265	2,401	1,337	1,389	16	6,408	7.9%
43	41st Ave Express	1,193	1,721	1,463	922	-	5,299	6.5%
44	4th Ave. Express	1,003	2,003	994	290	-	4,290	5.3%
49	49th Avenue	1,122	3,783	2,284	614	-	7,803	9.6%
84	4th Ave. Express	961	2,208	1,454	575	-	5,198	6.4%
99	Broadway B-Line	3,819	9,347	6,690	5,311	141	25,308	31.1%
258	North Shore	212	110	185	-	-	507	0.6%
480	Richmond Express	1,172	1,754	1,397	572	-	4,895	6.0%
NIS	Not In Service	20	244	5	58	-	327	0.4%
Totals		14,363	30,518	21,600	14,606	299	81,386	100%
		17.6%	37.5%	26.5%	17.9%	0.4%		

Table 3.4: Average Peak Hour Weekday Transit Trips to / from UBC by Route, 2017

Route		AM Peak Hour Westbound 8:0am – 9:00am		PM Peak Hour Eastbound 4:45pm – 5:45pm	
4	4th Avenue	280	3.6%	375	5.8%
9	Broadway	240	3.1%	307	4.8%
14/N17	Broadway	354	4.6%	331	5.2%
25	King Edward	697	9.0%	453	7.1%
33	16th Avenue	375	4.8%	335	5.2%
41	41st Avenue	792	10.2%	354	5.5%
43	41st Ave. (limited stops)	636	8.2%	578	9.0%
44	4th Ave. (limited stops)	528	6.8%	148	2.3%
49	49th Avenue	566	7.3%	704	11.0%
84	4th Ave. (limited stops)	459	5.9%	400	6.2%
99	Broadway B-Line	2030	26.1%	1986	31.0%
258	North Shore Express	165	2.1%	75	1.2%
480	Richmond Express	655	8.4%	369	5.8%
NIS	Not In Service	0	0.0%	0	0.0%
Totals		7,777	100%	6,415	100%

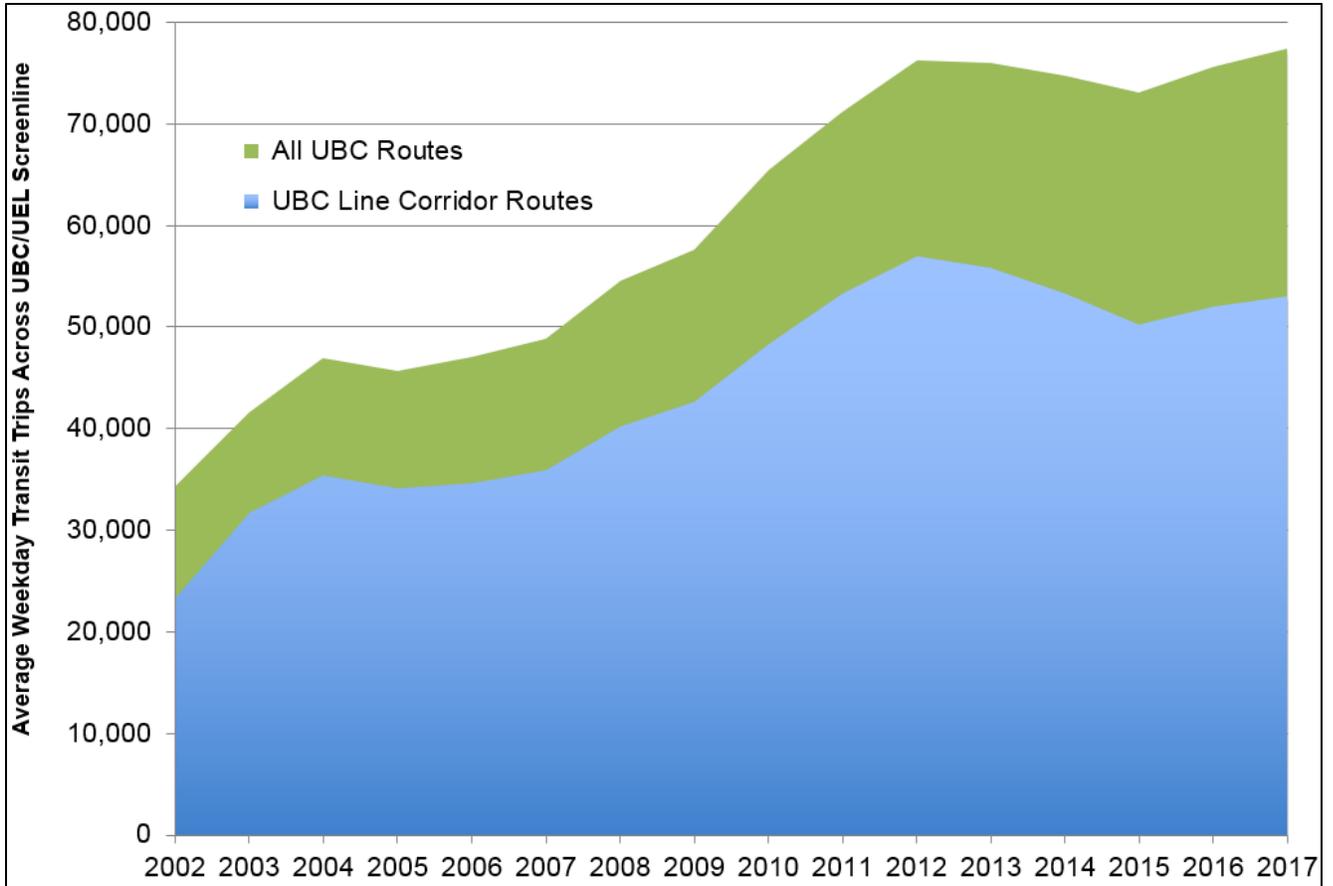
Significant observations about transit trips to and from UBC include:

- The number of transit trips has been decreasing the past three years, but in 2017 we saw a noticeable increase, which is attributable to the increase in the number of trips to and from campus in general. Nonetheless, transit mode share is still very high at almost 53%.
- Bus routes via University Boulevard (which includes routes 4, 9, 14, 99, and 258) account for 45% of all transit trips to and from UBC. Bus routes via 16th Avenue and Chancellor Boulevard both account for 12%. When combined, ridership in the “UBC Line”¹ corridor amounts to 70% of all transit trips to and from UBC. Bus routes via SW Marine Drive (the majority of which use 41st Avenue in the City of Vancouver) account for the remaining 30% of all transit trips.
- The 99 B-Line accounts for 31% of all transit trips. Which is a 7% increase from 2016 values.
- The other express bus services (Routes 43, 44, 84, 258 and 480) account for 25% of all transit trips to and from UBC. Adding the Route 99 B-Line increases this to 56% of all transit trips, indicating popularity for faster transit service options to / from UBC.
- Trolley bus Routes 4, 9 and 14/17 account for 14% of all transit trips.

¹ UBC Line refers to the future rapid transit line to UBC that is expected to be used by people currently taking transit to / from UBC via Chancellor Boulevard, University Boulevard and 16th Avenue.

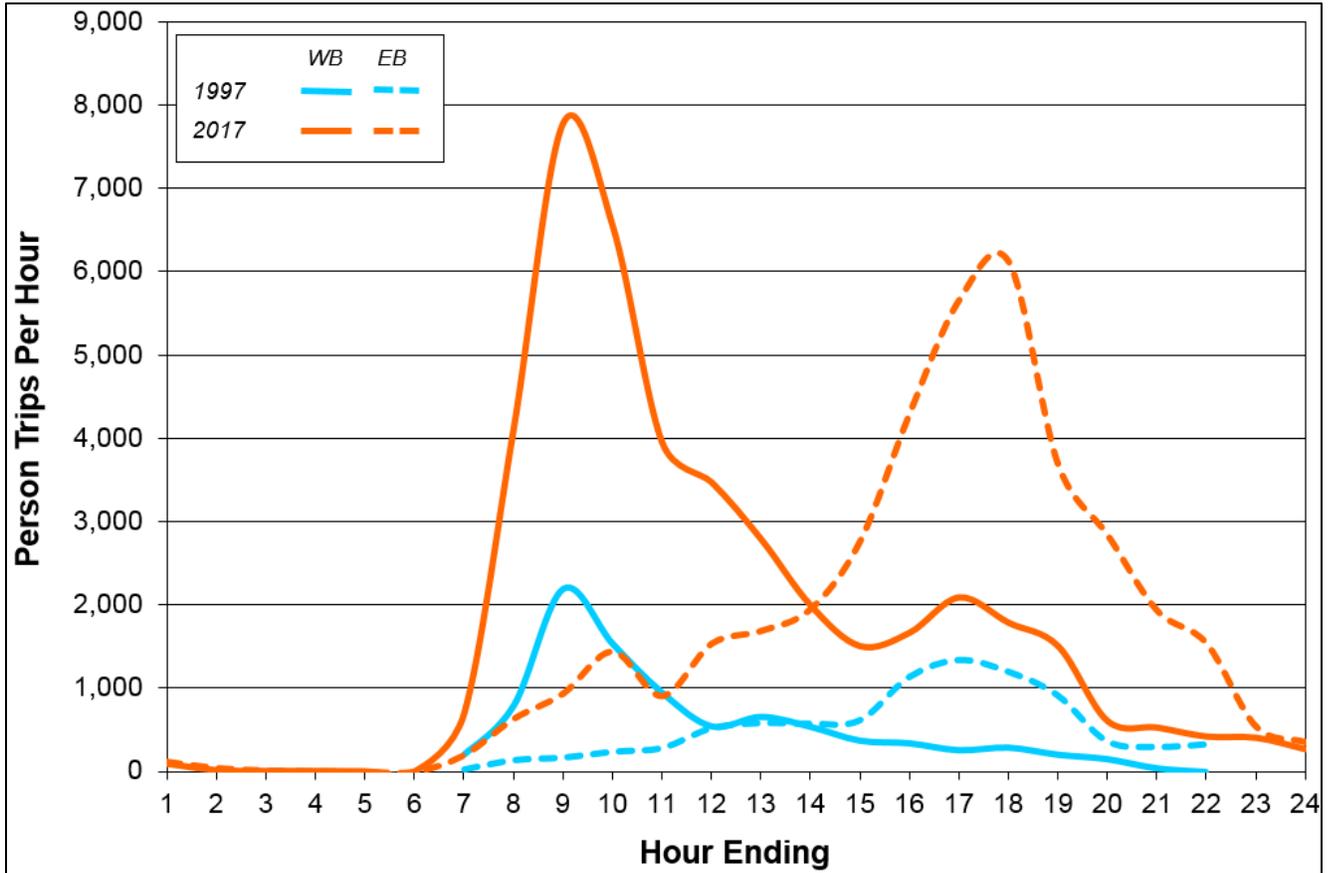
Figure 3.2 compares the three year rolling average of ridership on bus routes in the UBC Line corridor with total ridership on all routes.

Figure 3.2: Average Weekday Transit Trips to / from UBC by Route, 2017



The daily distribution of transit trips to and from UBC in 2017 is shown in **Figure 3.3** including a comparison with fall 1997 transit trips. Not only does this illustrate the significant increase in transit ridership since 1997, but it also illustrates there are significant peak periods of transit demand, particularly during the morning peak period.

Figure 3.3: Distribution of Average Weekday Transit Trips to / from UBC, 1997 vs. 2017



In 2017, UBC carried out a transportation survey of the campus community to gather more detailed information about travel to / from and around campus. Their top three responses to a question about what would increase the likelihood of travelling to campus by public transit more often were shorter travel times, less overcrowding of buses, and increased frequency of service. Of people that currently do take transit to travel to / from UBC the average travel time from respondents was 50.5 minutes, one way. Given this information it suggests strong support for rapid transit and a high likelihood that vehicle trips would be replaced by rapid transit trips if there was a rapid transit connection to UBC. In the meantime, TransLink is rolling out a number of B-Line improvements to meet the demand for express transit connections to UBC.

3.2. Motor Vehicles

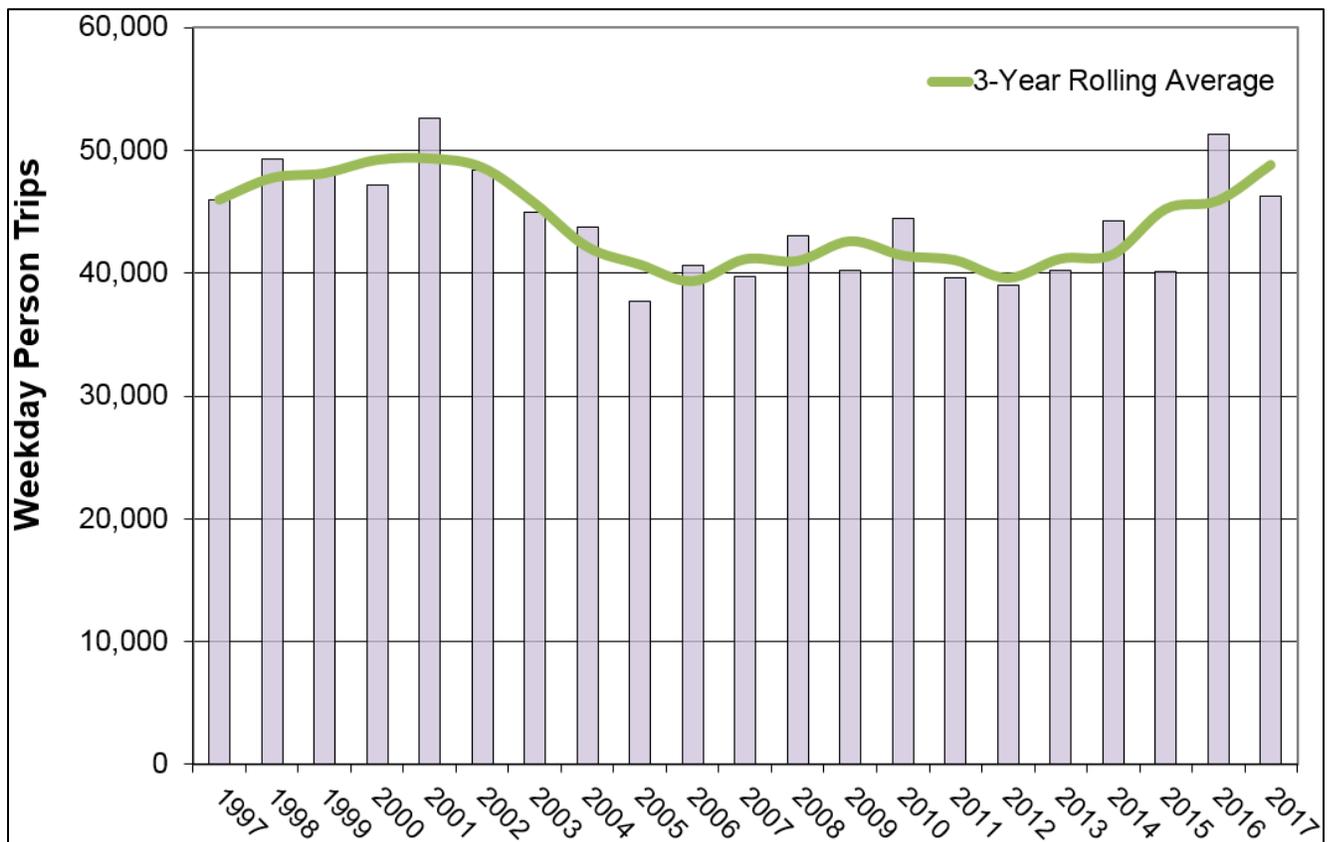
UBC is determined to reduce the amount of vehicle traffic travelling to and from UBC each day as represented in two of the three targets identified in the Transportation Plan.

Table 3.5 provides a comparison of SOV travel in fall 1997 and fall 2017, and **Figure 3.4** provides a summary of year-by-year changes and the three year rolling averages.

Table 3.5: Summary of SOV Trips to / from UBC, 1997 vs. 2017

Average Weekday SOV Trips	Fall 1997	Fall 2017	Change 1997-2017 (count / percentage)	
Person Trips	46,000	46,300	300	0.7%
Trips Per Person	1.09	0.67	-0.42	-38.6%
SOV Mode Share	43%	29.7%	-13.3	-31%

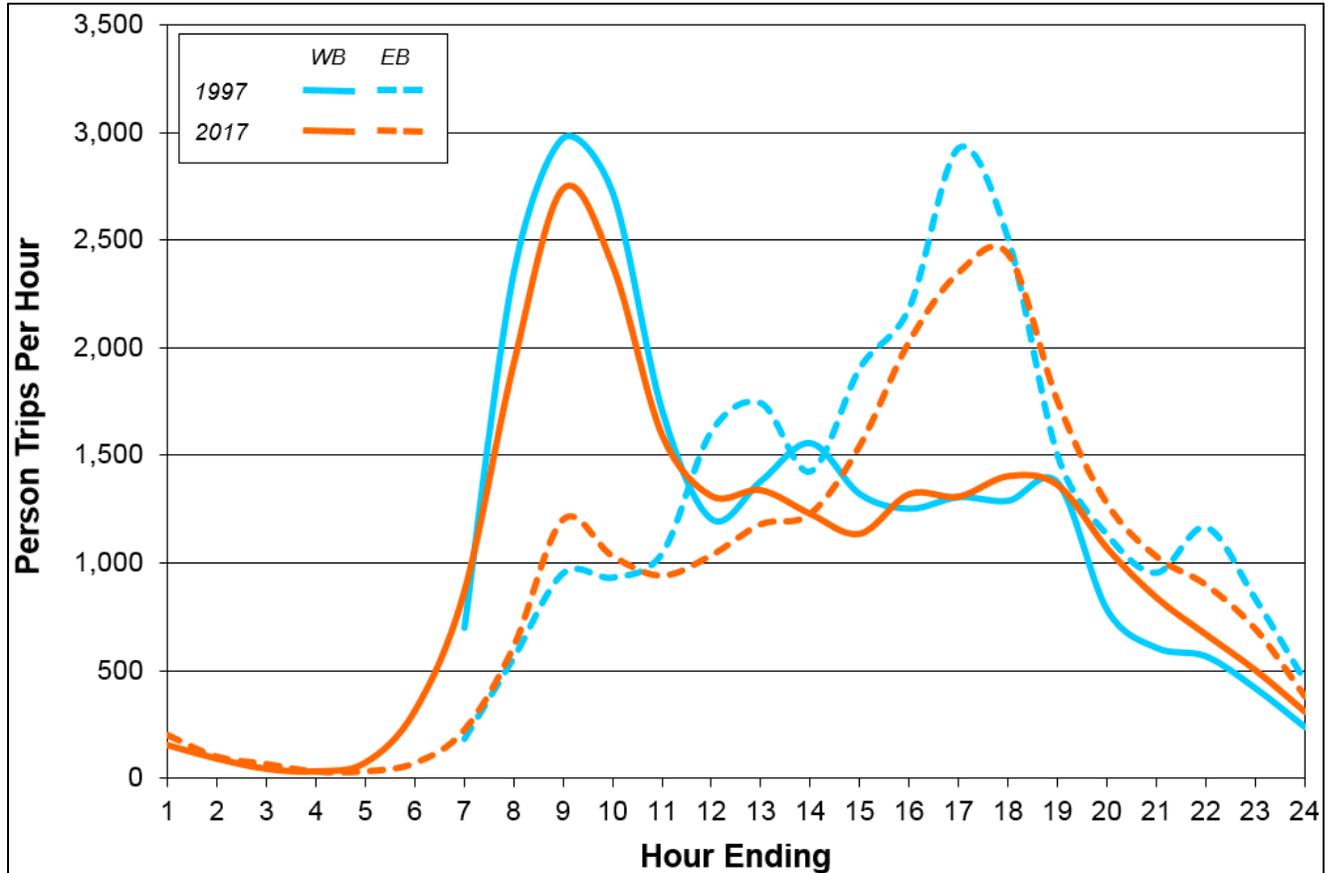
Figure 3.4: Average Weekday SOV Trips to / from UBC, 1997 - 2017



As suspected, the spike in 2016 was another anomaly similar to the spike in 2014, which is most likely attributable to the single day data collection efforts. The 2017 values are back on trend with the past seven years that shows a gradual increase year over year.

Figure 3.5 illustrates the arrival and departure patterns of SOV trips to and from UBC throughout the day, including a comparison with fall 1997 SOV trips. SOV trips observed in 2017 are overall less than the 1997 values, but sharp peaks are still observed between 8am and 9am.

Figure 3.5: Distribution of Average Weekday SOV Trips to / from UBC, 1997 vs. 2017



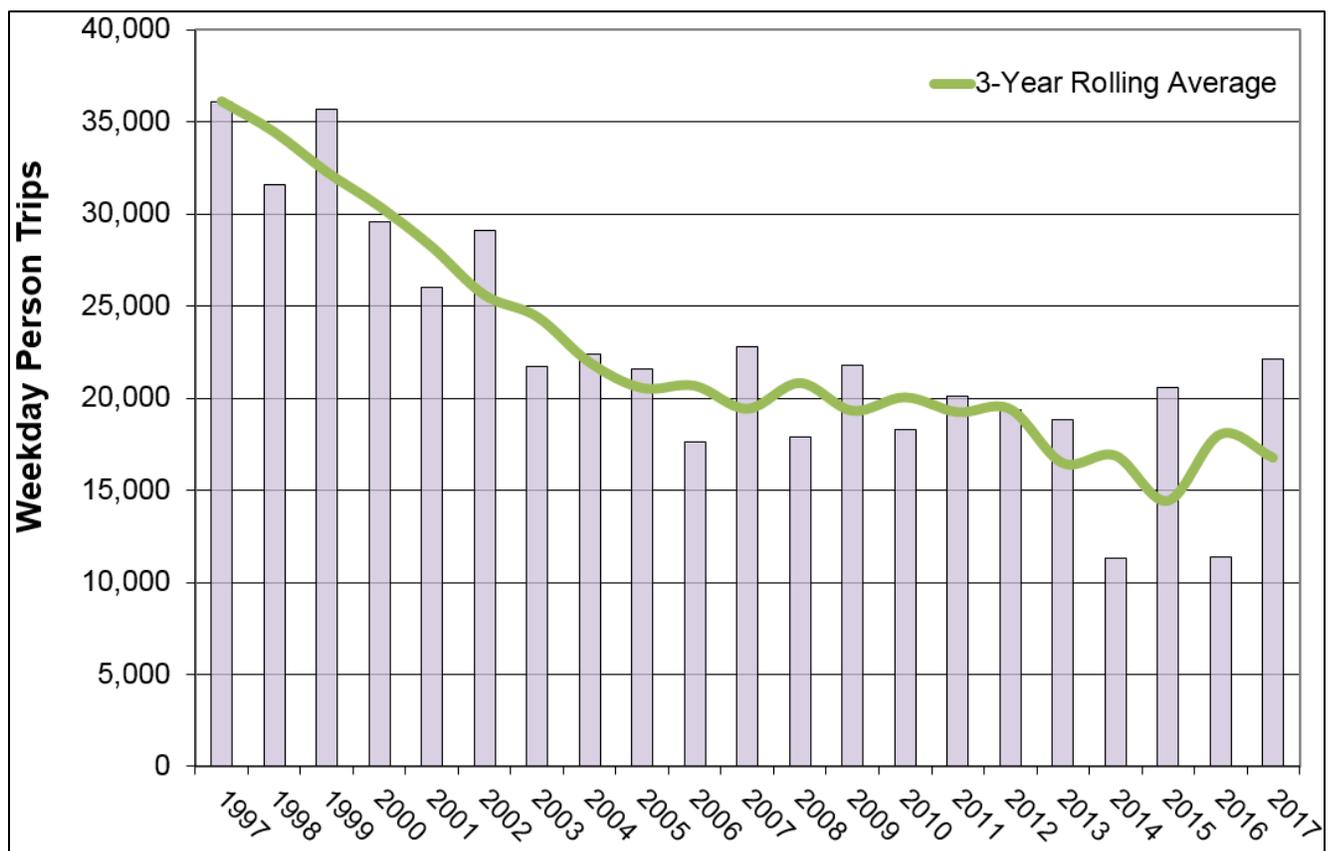
From the 2017 Transportation Survey the campus community was asked why they chose to drive alone. Their top three responses were to pick-up children from daycare and schools, public transit is not an option because they live too far away, and they do not like to take public transit in general. Of the respondents that identified they travelled alone, 75% of them said they would take transit if there was a rapid transit connection to UBC.

Carpooling, or high occupancy vehicle travel (HOV), has decreased substantially since 1997. Daily HOV trips declined from 36,100 in fall 1997 to 22,100 in fall 2017, and the equivalent mode share decrease was from 34% to 14%. A summary of the trend in HOV travel from fall 1997 to fall 2017 is provided in **Table 3.6**, and a summary of year-by-year changes and three year rolling average is provided in **Figure 3.6**.

Table 3.6: Summary of HOV Trips to / from UBC, 1997 vs. 2017

Average Weekday HOV Trips	Fall 1997	Fall 2017	Change 1997-2017 (count / percentage)	
Person Trips	36,100	22,100	-14,000	-38.8%
Trips Per Person	0.85	0.32	-0.53	-62.6%
HOV Mode Share	34%	14.2%	-19.8	-58%

Figure 3.6: Average Weekday HOV Trips to / from UBC, 1997 – 2017

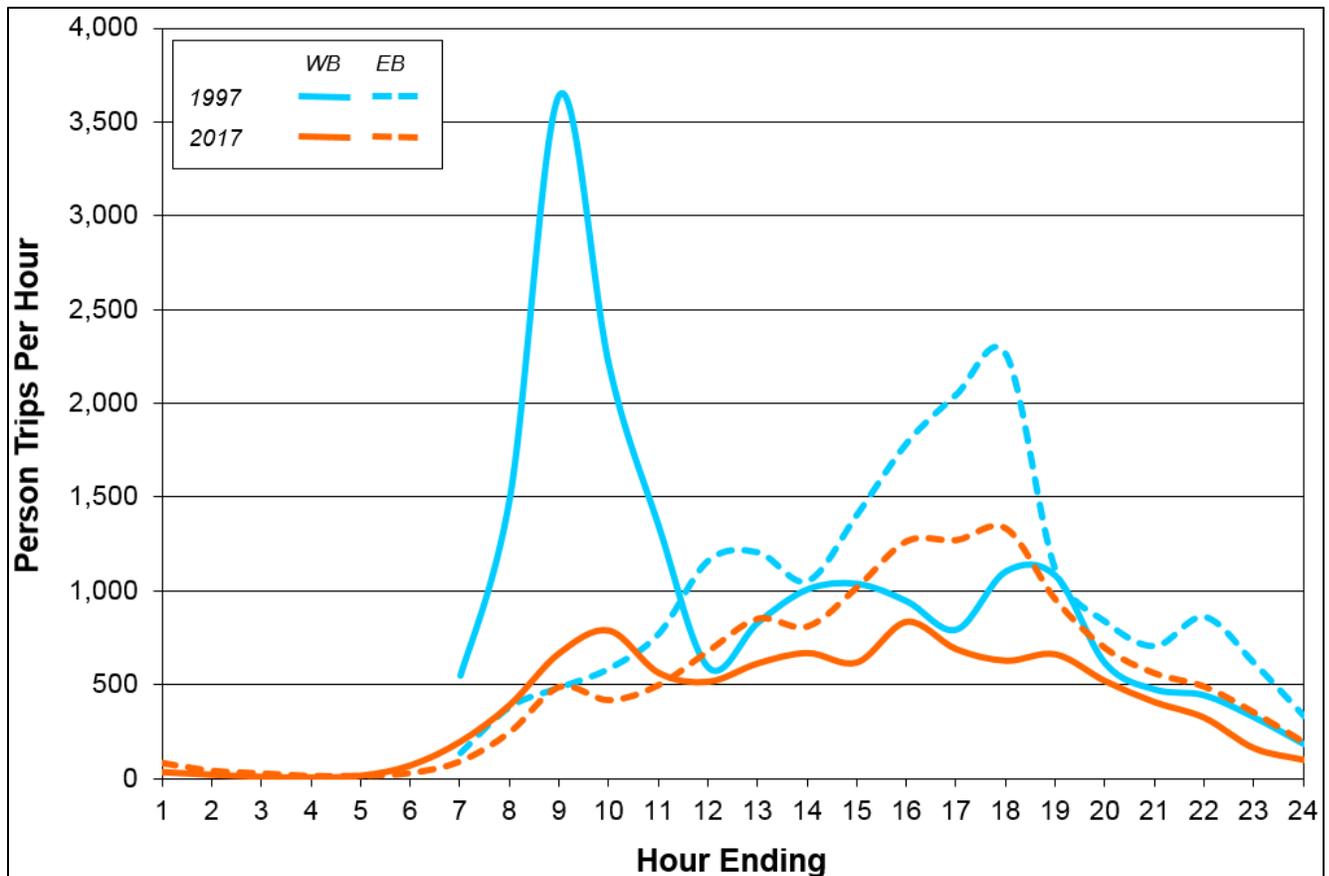


As shown in **Figure 3.6**, HOV trips fluctuate year over year and in general have been declining since 1997. The HOV trips recovered from the drop in 2016, but UBC is still aiming to increase the HOV mode share with advances in technology and by partnering with UBC Parking to investigate incentives for HOV or carpoolers to UBC.

Figure 3.7 illustrates the arrival and departure patterns of HOV trips to and from UBC throughout the day, including a comparison with fall 1997 HOV trips. One observation is the increase in HOV trips departing campus during the afternoon peak period. Suggesting it may be easier to coordinate rides while at work as opposed to early in the morning or people are less rushed to return home compared to having to arrive to work on time.

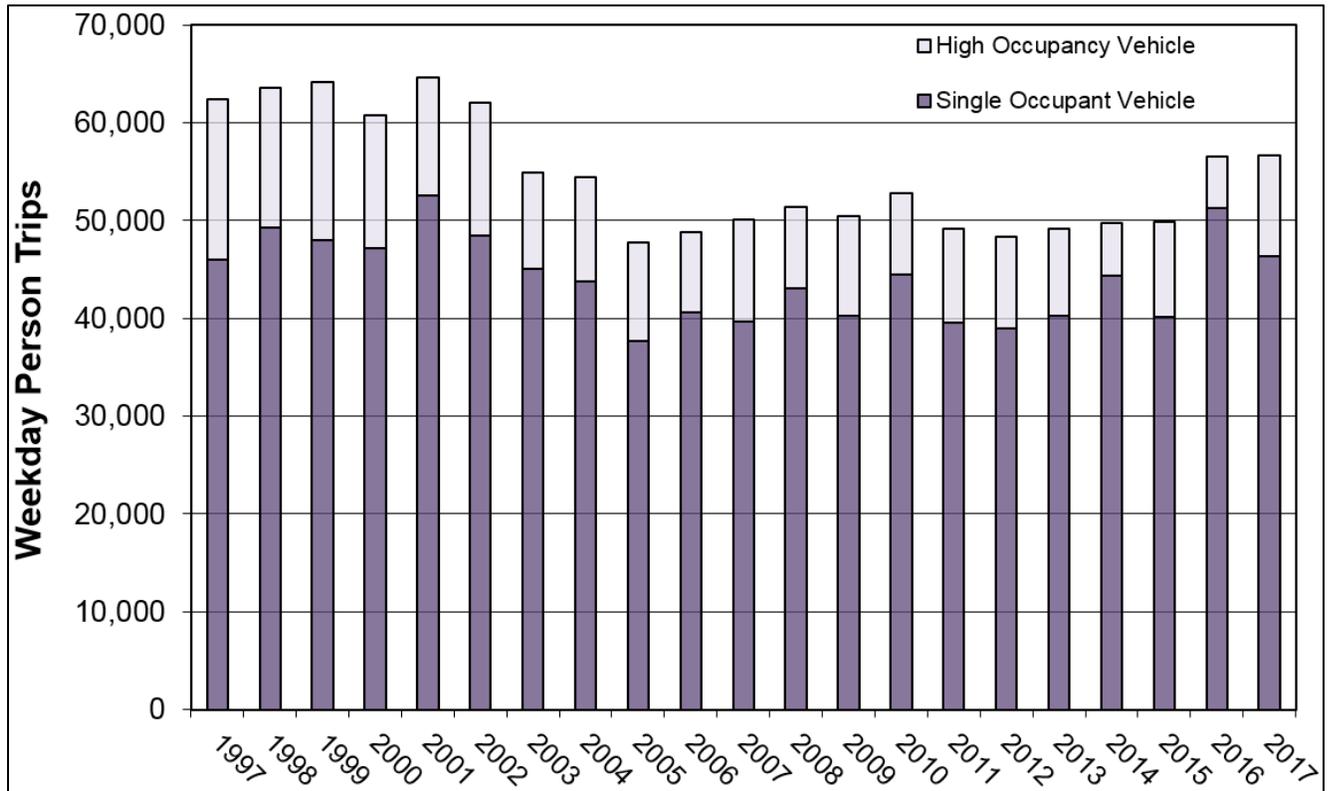
The 2017 Transportation Survey asked the campus community why they drive alone and what would make them choose to travel by more sustainable options such as carpooling. The primary response was the need to carry out other errands such as picking children up from daycare / school. This identifies that flexibility is a requirement when exploring carpooling programs. Respondents also identified that more carpool incentives would increase the likelihood of them carpooling over travelling alone.

Figure 3.7: Distribution of Average Weekday HOV Trips to / from UBC, 1997 vs. 2017



In fall 2017, daily motor vehicle traffic was 56,700 vehicles per day, which is 5,700 less than the 1997 level. **Figure 3.8** provides a summary of the trend in daily motor vehicle traffic volumes from 1997 to 2017. The automobile trips are much less than 2016, but are still higher on average compared to the previous decade.

Figure 3.8: Average Weekday Motor Vehicle Trips to / from UBC, 1997 – 2017



TARGET 2: Reduce single occupant vehicle trips to and from UBC by 20% from 1997 levels and reduce single occupancy vehicle trips per person to and from UBC by 30% from 1997 levels.

- In 2017 there were 46,300 SOV vehicle trips, which is a 0.7% increase from 1997 values.
- In 2017 there were 0.67 SOV trips per person, which is a 38.6% reduction from 1997 values.

TARGET 3: Maintain daily private automobile traffic at or less than 1997 levels. Private automobiles include single occupant vehicles and carpools / vanpools, but do not include buses, motorcycles and trucks.

- In 2017 there were 56,700 private vehicles per day, which is a 9.1% reduction from 1997 values.

In 2017 UBC did not achieve the target of a 20% reduction in SOV trips to / from UBC from 1997. UBC will explore options to convert SOV trips to other more sustainable modes of travel to achieve this target. The greatest opportunity is to convert the SOV trips to public transit or HOV trips.

As a result of the significant uptake of car sharing in Vancouver, there is interest in tracking the number of car share trips to and from campus. Car share vehicles were counted at screenline locations over an eight hour period, which is presented below in **Table 3.6b**. UBC provides 157 dedicated parking stalls to multiple car share providers and also provides overflow parking on the roof level of the parkades.

Table 3.6b: Summary Car Share Trips to and from UBC

Car-Share Vehicle Trips	Fall 2015	Fall 2016	Fall 2017
1-Person Trips	299	388	408
2-Person Trips	45	41	73
3+ Person Trips	5	7	39
Totals	349	436	520

As shown, there has been a significant increase in car share trips to / from UBC with nearly a 50% increase in just two years. Results from the 2017 Transportation Survey of the campus community identified Car2Go and Evo as the top two car share providers that respondents had memberships to. Respondents also identified the top three reasons they use car share vehicles are to run errands / shopping, when the weather is poor, and for commuting to school / work.

More research is required to determine the overall benefits of car share at UBC. For example, what mode share is being replaced by car share and how many times do the vehicles that are driven to campus move each day.

3.3. Bicycles and Pedestrians

Table 3.7 and **Figure 3.9** provide summaries of the trend in bicycle trips from fall 1997 to fall 2017. As shown, there was a significant decrease in trips by bike after the U-Pass program was introduced. However, with the exception of 2014 and 2016 there has been a steady increase in the number of bicycle trips since 2010, which is likely correlated with continued improvements to bike infrastructure at UBC and in the City of Vancouver as well as the general popularity of biking in the region.

Table 3.7: Summary of Average Weekday Bicycle Trips to / from UBC, 1997 vs. 2017

Average Weekday Bicycle Trips	Before U-Pass		After U-Pass		Change 1997-2017 (count / percentage)	
	Fall 1997	Fall 2002	Fall 2004	Fall 2017		
Person Trips	2,700	3,300	1,600	2,800	+100	+3.7%
Trips Per Person	0.06	0.07	0.03	0.04	-0.02	-36.7%
Bicycle Mode Share	2.5%	2.9%	1.3%	1.8%	-0.70	-28%

Figure 3.9: Average Weekday Bicycle Trips to / from UBC, 1997 – 2017

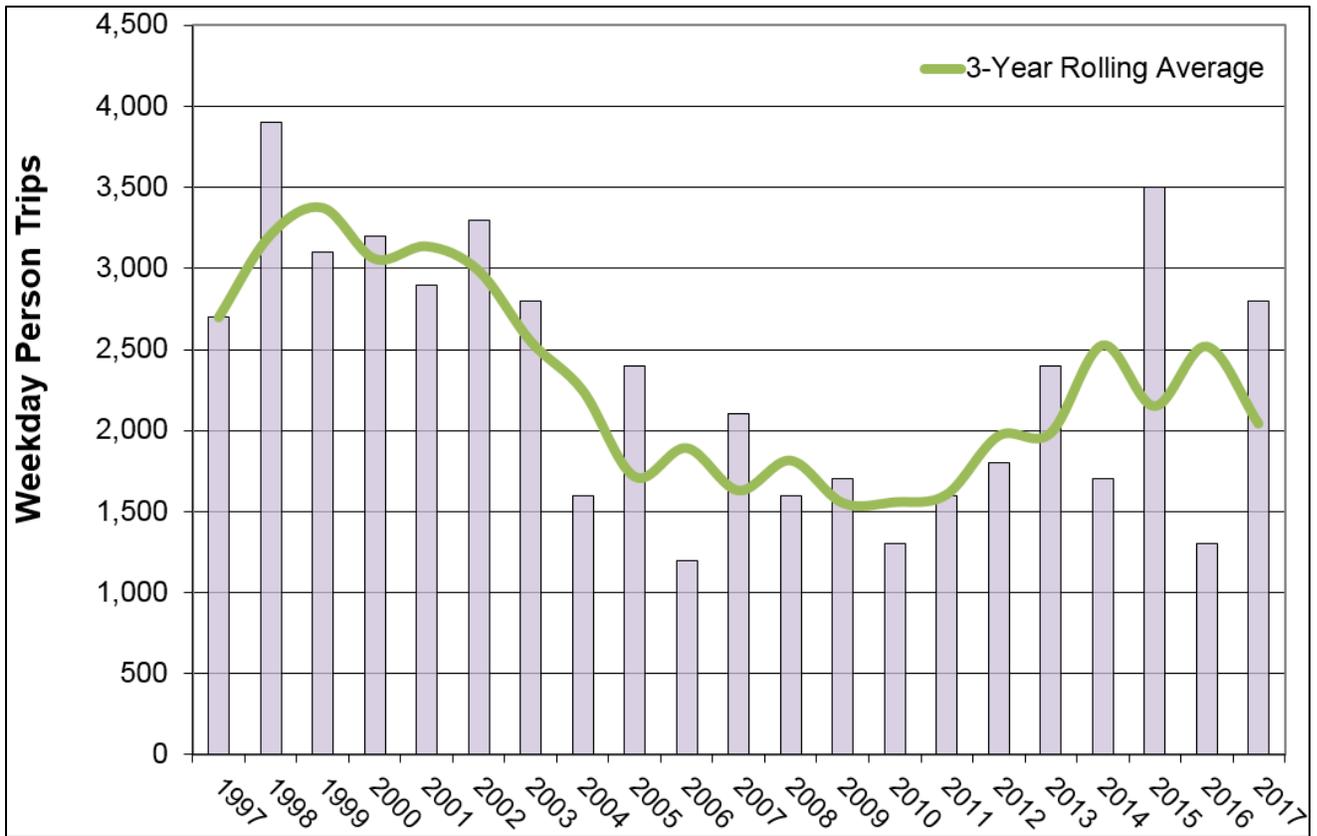
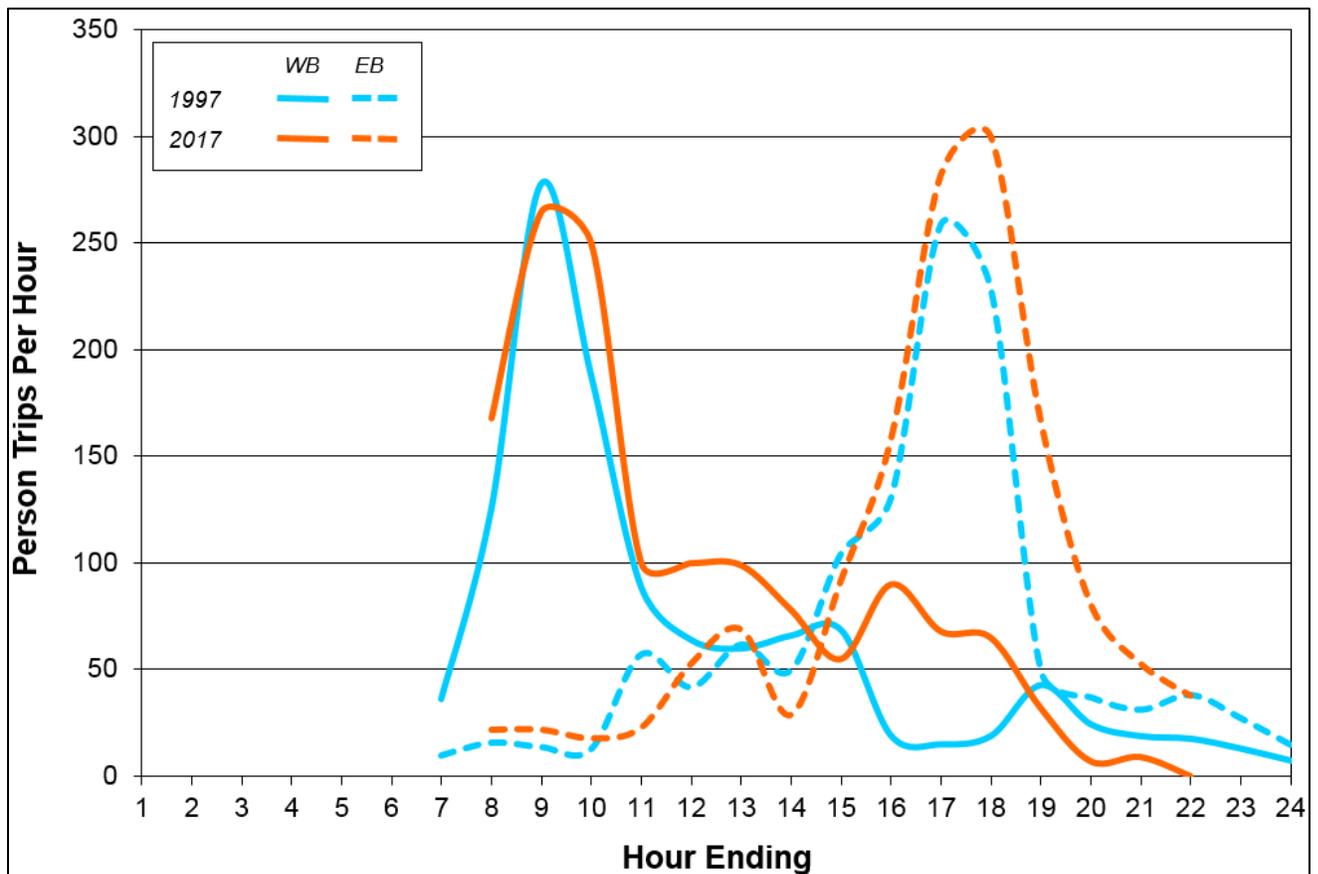


Figure 3.10 illustrates the arrival and departure patterns of bicycle trips to and from UBC throughout the day, for 2017 and 1997 bicycle trips. The results in 2017 are a significant improvement over 2016 values.

As can be seen the trend of bike trips matches peak morning (westbound) and evening (eastbound) travel patterns, and this is the first year in a long time where values are at or higher than 1997 counts.

Figure 3.10: Distribution of Average Weekday Bicycle Trips to / from UBC, 1997 vs. 2017



All buses operating on transit routes serving UBC are equipped with bicycle racks, each of which has space for two bicycles. Below is a summary of the usage of racks over the past three years:

- In 2017, total of 192 bicycles were on buses at a 4.2% usage rate.
- In 2016, total of 180 bicycles were on buses at a 4.1% usage rate.
- In 2015, total of 245 bicycles were on buses at a 5.9% usage rate.

In addition, cyclists more commonly bring their bikes on buses westbound to campus and the most popular transit route for cyclists to travel with their bicycles is the 99 B-Line.

Table 3.8 provides a summary of the trend in pedestrian trips from fall 1997 to fall 2017, and **Figure 3.11** illustrates year-by-year changes. Similar to bicycle trips, pedestrian trips decreased significantly after U-Pass was introduced, but in general have been following an increasing trend since. Alike to the results observed for bicycle trips, the number of pedestrian trips have been fluctuating over the past few years, but in general have followed an upward trend as shown by the three year rolling average. Over the long term, UBC doesn't anticipate to see a significant increase in pedestrian trips or pedestrian mode share to and from campus as a result of the location of the campus and the distance to where a majority of the campus population is living, but will continue to make improvements and work with the Ministry on making improvements to bike connections to the campus.

Table 3.8: Summary of Average Weekday Pedestrian Trips to / from UBC, 1997 vs. 2017

Average Weekday Pedestrian Trips	Before U-Pass		After U-Pass		Change 1997-2017 (count / percentage)	
	Fall 1997	Fall 2002	Fall 2004	Fall 2017		
Person Trips	1,400	1,600	600	2,000	+600	+42.9%
Trips Per Person	0.03	0.03	0.01	0.03	-	-
Pedestrian Mode Share	1.3%	1.4%	0.5%	1.3	-	-

Figure 3.11: Average Weekday Pedestrian Trips to / from UBC, 1997 – 2017

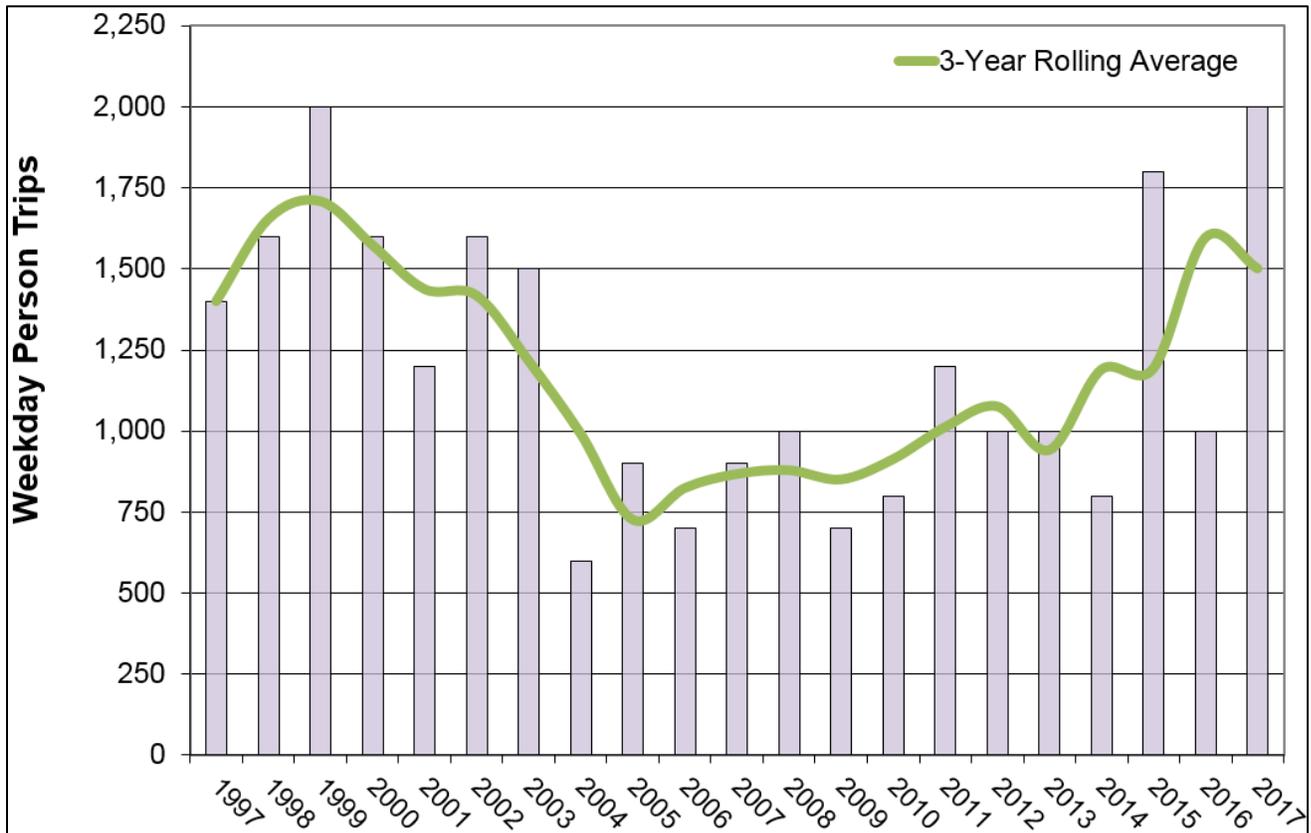
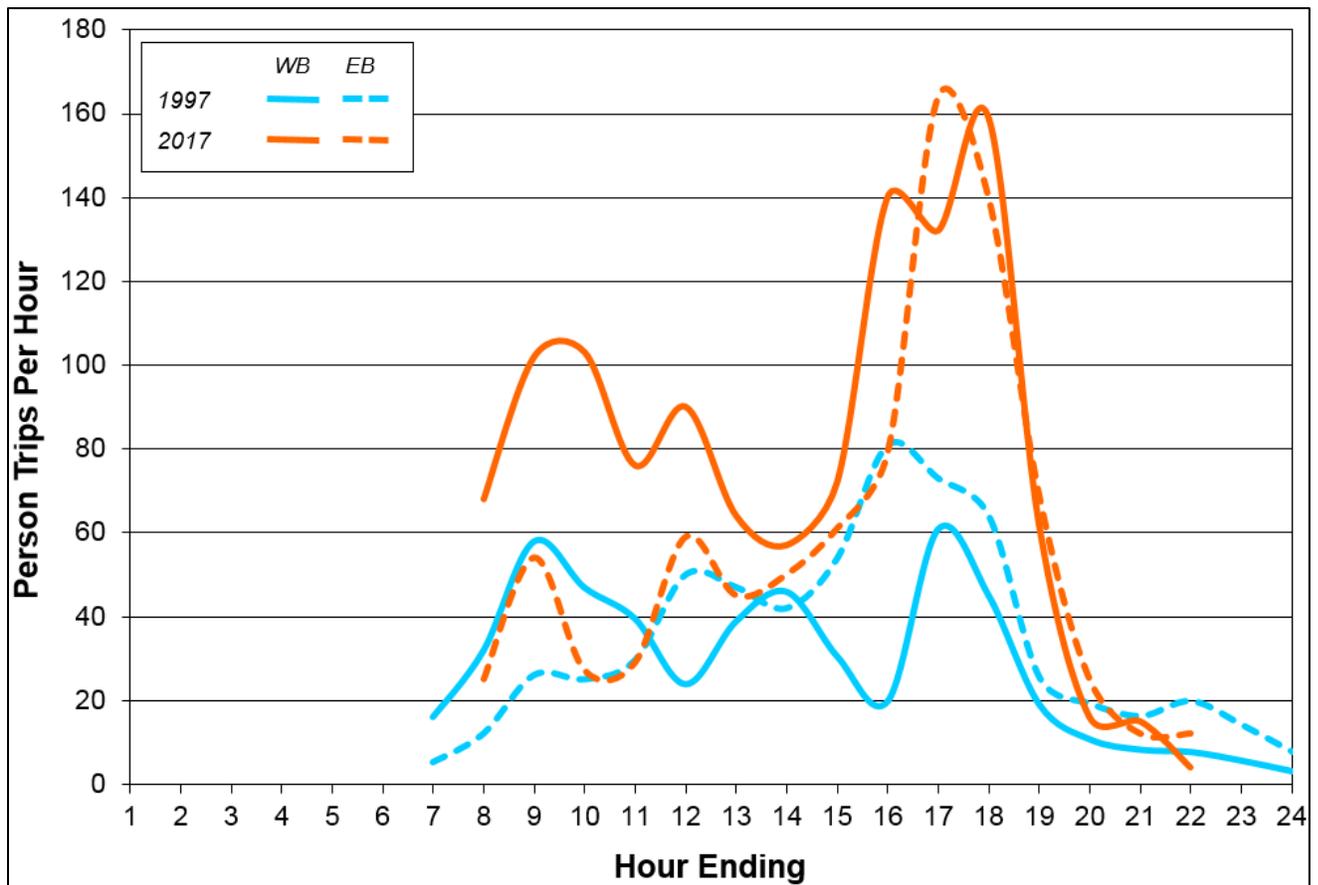


Figure 3.12 illustrates the arrival and departure patterns of pedestrian trips to and from UBC throughout the day, including a comparison with fall 1997 pedestrian trips. The arrival pattern to campus in 2017 shows four peaks compared to the three peaks in 1997, but shows the same three peak pattern for departure trips throughout the day. Overall, there were far more trips during the afternoon peak period when compared to the rest of the day.

Figure 3.12: Distribution of Average Weekday Pedestrian Trips to / from UBC, 1997 vs. 2017



3.4. Heavy Trucks

Construction activity at UBC and the day-to-day function of the university generate truck traffic. The City of Vancouver, through which all trucks must travel to reach UBC, manages heavy truck traffic through a number of bylaws and regulations, which apply to all trucks with a gross vehicle weight (GVW) of more than 10,000 kg. Trucks with three or more axles exceed the 10,000 kg specified in the City of Vancouver’s bylaws, and consequently for the purposes of monitoring travel patterns to and from UBC, heavy trucks are defined as vehicles with three or more axles. This simpler definition makes it easier to monitor heavy truck traffic, as it is only necessary to count the number of axles on a truck to determine whether it is a “heavy truck.”

Counts of heavy truck traffic were undertaken on a quarterly basis during 2017; in March, June, September and December, which are summarized in **Table 3.9**. **Figure 3.13** illustrates numbers of

trucks observed in each of the four quarterly counts.

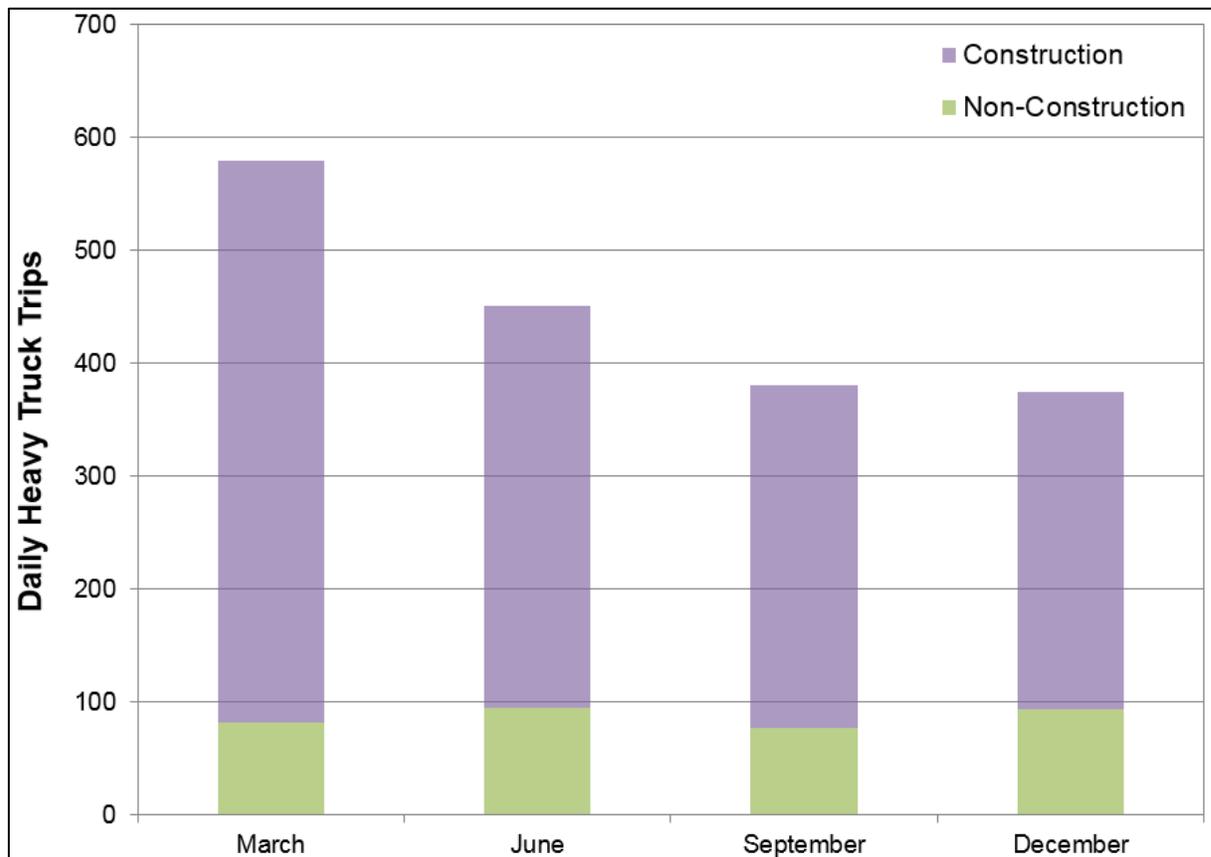
Table 3.9: Average Weekday Heavy Truck Trips to / from UBC, 2017

Route	Type of Truck		Totals
	Construction	Non-Construction	
Chancellor Boulevard	42.3	14	56.3 (12.6%)
University Boulevard	26.3	19.5	45.8 (10.2%)
16th Avenue	40.8	10	50.8 (11.4%)
SW Marine Drive and 41st Avenue	250.3	43.5	293.8 (65.8%)
Totals	359.5 (80.5%)	87 (19.5%)	446.5

As shown in the table, an average of 446 heavy truck trips per day were counted to / from UBC. Of the 446 trips, 360 (80.5%) of them were construction related trips. This is an increase from 2016 and up to previous year counts, likely attributable to the significantly sized and quantity of construction projects underway in 2017.

Of the four routes to / from UBC, SW Marine Drive carries 66% of construction related trips. The remaining three routes experiences almost an equal distribution of the remaining truck trips.

Figure 3.13: Heavy Truck Trips to / from UBC, 2017



4. Traffic Conditions At UBC

This section of the *Transportation Status Report* summarizes transportation conditions on campus, particularly traffic volumes and speeds at key locations throughout the campus.

4.1. Traffic Speeds

Traffic speeds were recorded over one week on campus using pneumatic tubes. The locations are identified in *Figure 1.1*.

The 85th percentile speed is typically used for the purposes of representing travel speeds and represents the speed below which 85% of the traffic travels. The average 85th percentile speed data from 2012 to 2017 is summarized in *Tables 4.1 and 4.2* for eastbound / northbound traffic and westbound / southbound traffic, respectively. Data highlighted in red represents locations where collected speed data is above the posted speed limit.

Table 4.1: Average 85th Percentile Traffic Speeds (km/h) Eastbound / Northbound, 2012 – 2017

Location	Speed Limit (km/h)	Eastbound / Northbound					
		Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017
Wesbrook Mall s/o Gage	50	59.0	–	–	–	55.3	55.2
Wesbrook Mall s/o University	50	55.5	47.1	49.3	51.2	48.8	49.1
Thunderbird w/o Wesbrook	30	48.3	47.1	47.1	47.0	46.6	46.6
West Mall s/o University Blvd	30	-	–	–	–	–	29.6
West Mall n/o Thunderbird	30	-	-	38.9	36.0	30.4	-
East Mall s/o Thunderbird	50	58.3	66.0	50.7	52.6	50.6	50.8
Wesbrook Mall n/of 16 th Ave	50	50.9	49.0	54.4	49.8	50.9	51.8
Wesbrook Mall s/o 16th Ave.	50	36.7	37.5	32.8	37.2	32.6	33.2
Stadium Rd at Main Mall	30	37.2	–	–	–	48.8	49.6
16th Ave w/o East Mall	60	–	78.3	72.1	69.5	60.9	71.0
16th Ave w/o Wesbrook Mall	50	–	68.6	67.0	56.3	56.6	57.5
16th Ave e/o Wesbrook Mall	50	–	74.8	72.9	72.1	69.2	66.6
Chancellor e/o Western Pkwy	50	–	56.3	57.1	55.7	58.7	55.3
University e/o Toronto Rd	50	–	77.5	59.6	58.1	57.9	59.0

Table 4.2: Average 85th Percentile Traffic Speeds (km/h) Westbound / Southbound, 2010 – 2017

Location	Speed Limit (km/h)	Westbound / Southbound					
		Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017
Wesbrook Mall s/o Gage	50	54.3	–	–	–	50	50.6
Wesbrook Mall s/o University	50	57.9	44.2	49.6	53.8	48.1	48.5
Thunderbird w/o Wesbrook	30	46.7	44.2	40.4	42.4	43.3	39.9
West Mall s/o University Blvd	30	38.5	–	–	–	–	31.4
West Mall n/o Thunderbird	30	-	-	39.1	35.6	32.6	-
East Mall s/o Thunderbird	50	65.6	56.6	50.5	55.9	53.2	53.3
Wesbrook Mall n/of 16 th Ave	50	55.7	55.5	50.1	55.5	53.3	53.1
Wesbrook Mall s/o 16th Ave.	50	39.5	38.4	31.6	36.5	31.8	32.6
Stadium Rd at Main Mall	30	37.4	–	–	–	47.7	48.2
16th Ave w/o East Mall	60	–	72.6	69.4	75.8	68.5	71.0
16th Ave w/o Wesbrook Mall	50	–	60.1	58.2	61.7	59.7	59.5
16th Ave e/o Wesbrook Mall	50	–	73.9	65.0	63.2	60.1	61.2
Chancellor e/o Western Pkwy	50	–	71.2	60.7	59.2	60.1	59.6
University e/o Toronto Rd	50	–	58.7	56.9	58.1	57.1	60.0

Key observations regarding traffic speeds on campus include:

- Traffic speeds on BC Ministry of Transportation and Infrastructure roadways to and from campus exceed the posted speed limit of 50 km/h. This includes 16th Avenue, University Boulevard, and Chancellor Boulevard. Speed limits on 16th Avenue were changed in 2016 to extend the 50 km/h speed limit further east into Pacific Spirit Park.
- According to the UBC Road and Traffic Rules internal road speed limits are 30km/h (not including Wesbrook Mall). Roads on campus with average speeds in excess of 30 km/h include East Mall, Thunderbird Blvd, and Stadium Road. Reasons for less speeding on the internal roadways include heavy pedestrian traffic and traffic calming measures.

These locations of excessive speeds will be shared with the BC Ministry of Transportation and Infrastructure to flag this issue as well as with the RCMP to inform their speed enforcement program.

4.2. Traffic Volumes

Peak hour traffic volumes collected over one day at key intersections on campus are illustrated in **Figures 4.1** and **4.2**. The turning volumes are not intended to represent average daily traffic volumes or conditions, but are intended to provide a general overview of traffic patterns to / from and on campus during the AM and PM peak hours.

Figure 4.1: Morning Peak Hour Traffic Volumes at UBC, 2017

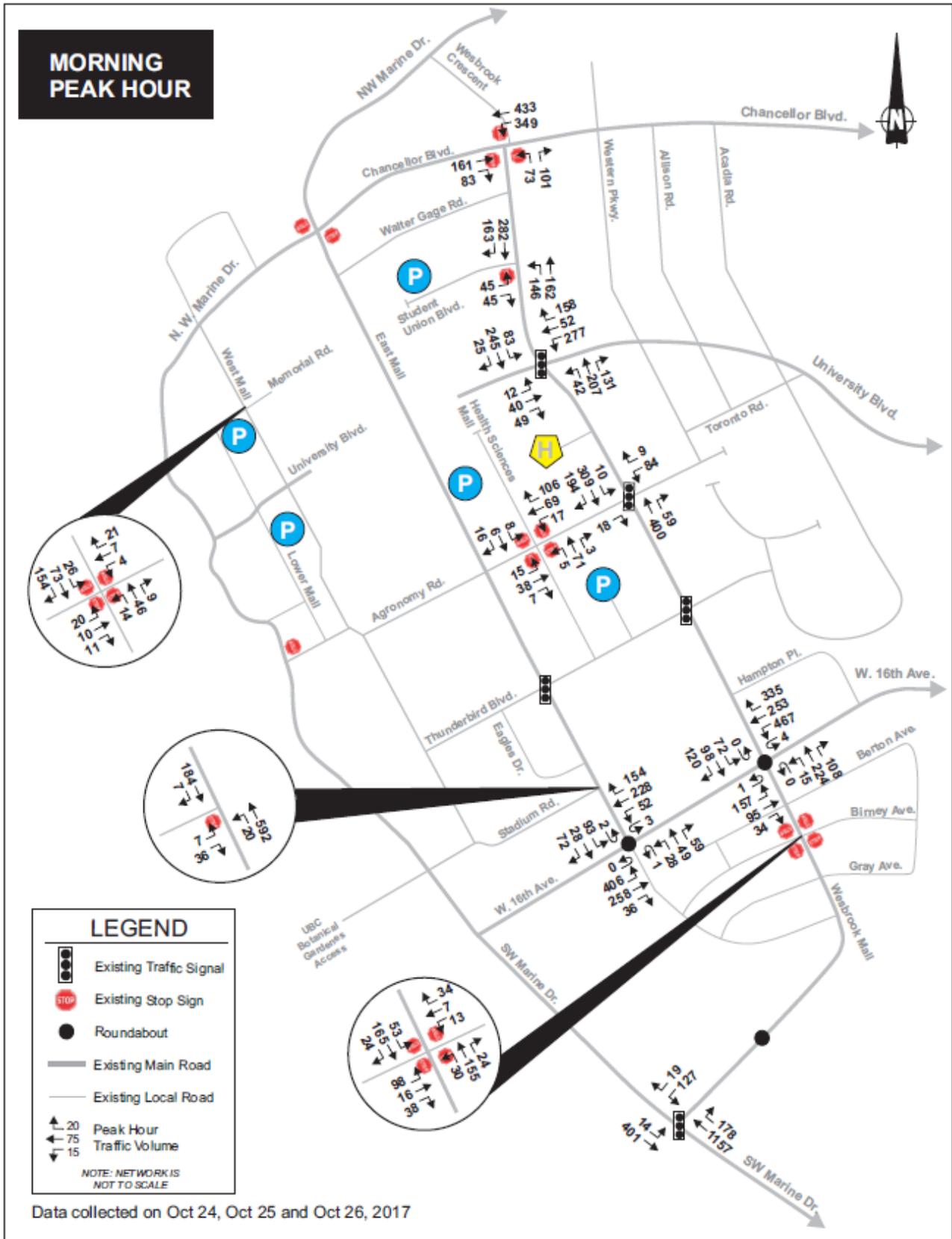
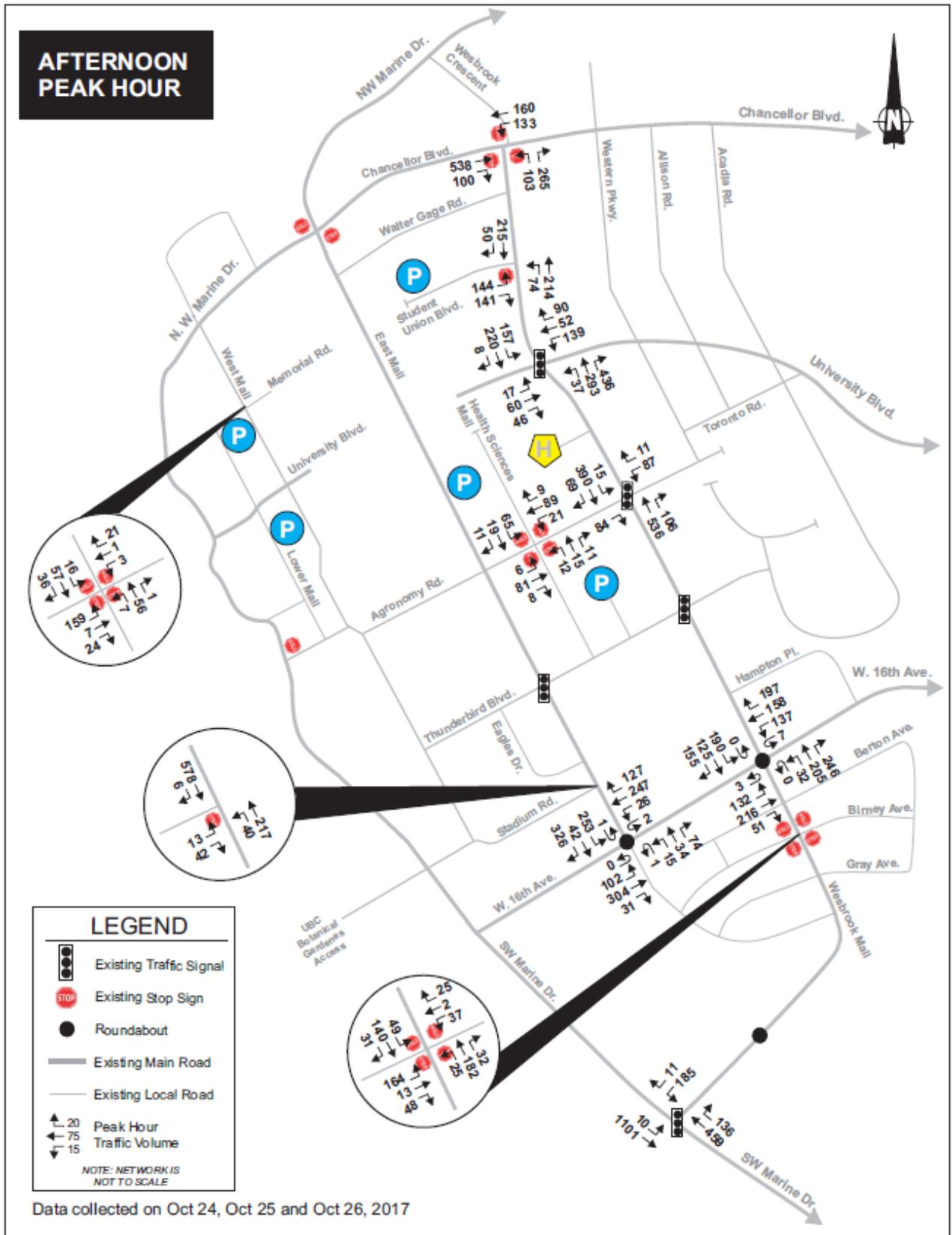


Figure 4.2: Afternoon / Evening Peak Hour Traffic Volumes at UBC, 2017



C+CP Engagement Charter Annual Review 2017

March 2018



THE UNIVERSITY OF BRITISH COLUMBIA

Executive Summary

The 2017 Annual Report of Campus and Community Planning's (C+CP) Engagement Charter summarizes 2017 consultation activities undertaken by the department. During 2017, C+CP delivered close to fifteen engagement initiatives, which included a range of one-off project-oriented processes, collaborative partnership programs, and ongoing work with key organizations.

1. Purpose and Process

Engagement is central to the University's academic mission, administration, planning and community relationships. Campus and Community Planning (C+CP) adopted the Engagement Charter in September 2014, after consultation with stakeholders, partners and First Nations organizations.¹ The Charter sets out C+CP's promise to the community on engagement by identifying core principles and guiding practices for consultation on planning and development projects.

Since 2016, C+CP has conducted an Annual Review to reinforce transparency and accountability on Charter commitments to its stakeholders and partners on and off campus, and to the UBC Board of Governors. The purpose of the 2016 review was to:

- a) summarize C+CP's 2016 engagement activities;
- b) gather stakeholder views on the degree to which 2016 engagement activities were consistent with Charter principles and guiding practices, including strengths – i.e., what went well – and areas for improvement next year; and
- c) identify engagement goals and priorities for 2017, based on stakeholder input and executive direction.

For 2017, C+CP provides a summary of engagement activities undertaken by the department. These activities include supporting the Office of the President for the UBC Strategic Plan and engagement as part of planning UBC's next neighbourhood near the Thunderbird Stadium. A more in-depth stakeholder review and summary will be conducted for the 2018 Engagement Charter Annual review.

¹ For brevity, this report uses term "stakeholders"; however, C+CP acknowledges that First Nations organizations participate in UBC initiatives as government entities and not stakeholders.

2. Summary of Engagement Activities 2017

During 2017, C+CP delivered a number of engagement initiatives, as summarized below, based on the [Engagement Principles](#), and stakeholder/partner suggestions during the 2016 Annual Review.

Area, Building and Landscape Planning Processes

Development Permit Open Houses

A public meeting may be held at the discretion of the Director of Planning for major Institutional/Public Realm/Neighbourhood development permit applications or minor projects that generate significant public interest.

In 2017, ten Public Open Houses were held, including six Institutional and four Neighbourhood projects.

Institutional/Public Realm Open Houses

- DP17003 Sports Courts and Field – Totem Park Residence
- DP17018 Gage Residence Landscape Renewal
- DP17025 MacInnes Field Parkade
- DP17030 Baseball Field Phase 2
- DP17021 Hebb Building Renovation
- DP17020 “The Shadow” Exterior Public Art

Neighbourhood Open Houses

- DP17016 Wesbrook Place Lots 7/8
- DP17007 Wesbrook Place Research Park
- DP17014T Nobel House Freedom Wireless Rooftop Antennas
- DP17028 Wesbrook Place Lot 11

A review of Development Permit notification procedures will be undertaken as part of the 2018 Engagement Charter Review.

UBC Strategic Plan Process

In 2017, C+CP supported the Office of the President to design and implement two phases of public engagement activities connected to the UBC Strategic Plan.

In Phase 3 of the planning process (March 20 to April 20, 2017), students, faculty, staff, alumni, community members and university partners were invited to provide feedback through a series of open house events and an online survey. This phase of consultation engaged 7,500 people who provided input through an online survey, in addition to 350 attendees across six open houses, resulting in a tremendous response, with participants largely endorsing the eight draft priorities.

In Phase 5 (November 23 – December 8, 2017), students, faculty, staff, and alumni were invited to engage in a dialogue on the framework of the emerging plan via open houses and an online survey. C+CP provided support for the open houses and pop-up information booths resulting in the following:

- 170 people attended three public open houses held on November 24th and 29th on the Point Grey campus and on November 30th at the Okanagan campus.
- 830 written and verbal comments were collected at the open houses from attendees across both campuses.
- 12 pop up information booths run by staff from across the university engaged approximately 160 people at multiple locations across the Point Grey campus.

Stadium Neighbourhood Planning Process

The first phase of public engagement to support the development of the Stadium Neighbourhood Plan took place from September 28 to October 22, 2017. Phase One of this 18-month, four-phase process involved multiple opportunities for the campus community to provide input into the early formation of this plan through open houses and an online survey.

- Over 160 people attended three public open houses held on September 30 at the Wesbrook Community Centre, October 3 at the Old Barn Community Centre and October 5 at the I.K. Barber Learning Centre. 344 verbatim responses were collected on the consultation questions.
- 288 respondents started the online survey on the engagement themes and draft guiding principles, with 148 people completing at least one question. 1,241 verbatim responses were received on the consultation questions.
- 16 pop up information booths engaged over 300 people. They were held across the campus and coordinated with major events including the Wesbrook Village Festival, UBC Homecoming and the UBC Recreation Free Week.
- 1,711 page views of project webpages hosted at planning.ubc.ca/stadium were tracked during the consultation period.
- Two focus groups were held; one with subject area experts and another with area residents to identify early themes, issues, and opportunities.
- 25 UTown@UBC Youth Leadership Program participants was took part in a session held by Campus and Community Planning, which ran through the same content as the public open houses.

UBC Green Buildings Plan

In 2017, extensive engagement was undertaken with the UBC community and green-building experts to understand stakeholder aspirations linked with the best thinking in green-building practices.

Fifteen initial interviews were conducted in November and December of 2016 with students, faculty, staff and members of the neighborhood community. Two workshops, one for institutional buildings and one for residential buildings, were held at the end of January 2017 to gain input and ideas for the development of the plan. Over 30 focus groups were held over the course of the year including UBC staff, academics, faculty, students and consultants with specialized knowledge in identified critical components of Green Buildings at UBC.

A Steering Committee and a Technical Advisory Group provided guidance at strategic points throughout the process. Focused Technical Advisory Group meetings were held to collaboratively develop a work plan for UBC departments.

Public Realm Plan Evaluation

The Public Realm Plan provides strategies for setting investment priorities, processes for design development, and direction for management throughout the life of these public spaces. This serves as the necessary roadmap to implement key objectives set out by the university community in the Vancouver Campus Plan process. The \$46 million plan has transformed the outdoor public spaces at UBC in the past 10 years.

In 2017, the department undertook a Public Realm Plan evaluation to assess the implementation of the plan and develop recommendations for future actions. The objective was to

1. Identify lessons learned to help inform future design, programming and maintenance.
2. Identify and prioritize gaps in the public realm network, i.e. locations, design or programming.

A targeted consultation with a qualitative approach was undertaken, including:

- Campus tours, four focus groups and seven interviews
- Consultation with 58 staff, faculty, students and residents from 22 departments
- A summary report was produced with key takeaways and implementation strategies

Programs, Partnerships and Policy Development

Community programming

UBC-UNA-SHHS Joint Programming

Each year C+CP schedules annual events in partnership with the UNA and UBC departments, including SHHS. The annual Chef's Challenge and Harvest Festival are two examples of popular events featuring food and festivities to engage the campus community.

UTown@UBC

One of the guiding objectives of UTown@UBC is to provide meaningful opportunities for community-led capacity building through programming, grants and special projects. This year there were many new community engagement initiatives with students, faculty, staff and neighbourhood residents, including:

- **Utown@UBC Community Grants**
Through a partnership with the Vancouver Foundation Neighbourhood Small Grant program, C+CP doubled funding for UTown@UBC Community Grants and expanded eligibility to include the Musqueam community. To help foster a grassroots grant-making philosophy, the community volunteer-led grant selection committee has grown.
- **Bicycle Safety with Project 529**
C+CP, the UNA and other campus partners are collaborating with Project 529, a smartphone app and community-based bike registration and recovery service, to help tackle bike theft at UBC. Building capacity within the community to support this effort has been key. In April, Project 529 and Vancouver Police Department staff trained over 40 UNA youth to help deliver this program. Since then, hundreds of bikes across campus and in residences have been registered.
- **Car Free Morning**
In May 2017, C+CP built on the highly successful Walk 'n Roll to School program, which is a collaboration with CCP, the UNA and community members, to launch Car Free Morning at Norma Rose Point School. For this, Ortona Road was transformed into a family-friendly festival where children could participate in a multitude of activities.

Transportation

UBC Transportation Survey 2017

A transportation survey was carried out with the campus community in Fall 2017 to supplement the results of the annual transportation monitoring. UBC hired a third party for the work and worked closely with them to finalize the questions and to distribute the survey. In total, it was estimated the survey reached approximately 40,000 people in the campus community to invite them to participate in the survey.

Pedestrian and Cyclist Education and Awareness Programs

In 2017, there was ongoing work to develop an annual education and awareness program targeting pedestrian and cyclist safety and etiquette on campus.

Transportation Updates for the Campus Community

Campus + Community Planning provides regular updates on transportation impacts to the campus community including impacts from construction both on and off campus and updates from TransLink. Through social media and other channels we encourage participation in the many consultation activities held by TransLink.

The Transportation.ubc.ca website is constantly updated to keep everyone apprised of transportation impacts and options on campus.

Sustainability engagement programs

SEEDS Sustainability Program

In 2017, the SEEDS Sustainability Program engaged over 1091 SEEDS participants, including 892 students, 70 faculty, and 129 operational staff clients and community partners in 131 Campus as Living Lab sustainability projects. These projects resulted in 175 reports which contributed to experiential student learning and to a body of sustainability knowledge and action retained in the [SEEDS Sustainability Library](#), while informing the development and implementation of sustainability plans and policies, such as the [Zero Waste Action Plan](#), [Climate Action Plan](#), [Green Building Plan](#), and [UBC Wellbeing](#).

Sustainability Engagement and Education Programs

C+CP's Sustainability Engagement programs delivered programming to inspire, engage, and activate campus community members to conserve resources, advance a culture of sustainability and support achieving UBC's sustainability goals and targets. UBC's sustainability engagement programs directly support the University's aspirations to lead locally and globally in sustainability across our campuses and communities.

Key outcomes include:

- UBC's **Sustainability Coordinator Program** engaged a network of 100+ staff and faculty champions to promote sustainable practices in workplaces and labs across campus.
- The **Green Labs Program**, an inter-departmental initiative, hosted 14 events, workshops, and campaigns, engaging over 4,600 UBC researchers to advance sustainability practices and resource conservation in research laboratories.
- UBC's **Green Office program** provided educational and leadership training opportunities to staff and faculty members, engaging over 8,300+ employees through 15 events, workshops, trainings, and campaigns.
- Advanced the **Sustainability in Residence Program** and strategic partnership with Student Housing and Hospitality Services (SHHS) through new Terms of Reference, which outlines key strategic objectives to enhance sustainability engagement in student housing.
- The **Zero Waste Squad** peer-led outreach team trained 40 student volunteers to promote waste reduction and recycling at campus events and in student residences, reaching 12,600 campus community members.
- UBC was recognized at the regional level for leadership in employee engagement in **sustainable transportation**, receiving two awards in regional cycling competition for 'Best in Higher Education' and 'Best Workplace with 1,000+ Employees'.

Ongoing Public and Stakeholder Engagement

With the UBC community:

University Neighbourhoods Association (UNA)

C+CP engages with the UNA on a regular basis including providing a monthly update to the UNA Board. The UNA assists C+CP to reach residents through UNA communication channels including a weekly e-newsletter. [UBC Community Conversations](#), a community event open to UBC residents, is held twice a year, in partnership with the University Neighbourhoods Association (UNA). It provides an opportunity for residents to discuss planning and programs in UBC's neighbourhoods.

University Endowment Lands (UEL)

C+CP meets regularly with the neighbouring University Endowment Lands (UEL) administration, and the UEL's Community Advisory Council. In 2017, C+CP engaged the UEL in a number of planning issues, including the Stadium Neighbourhood Planning Process and Wesbrook Mall redesign.

Alma Mater Society

Campus and Community Planning holds regular meetings with AMS leadership to discuss issues of shared interest.

With key external organizations:

C+CP holds regular meetings throughout the year with key external organizations on issues of shared interest. These organizations include the Province of British Columbia, Metro Vancouver, City of Vancouver, TransLink, BC Hydro and other agencies as opportunities arise.

Rapid Transit to UBC

UBC staff, including C+CP, have worked closely with City of Vancouver and TransLink officials to explore a rapid transit extension to the campus. This work includes technical studies and joint advocacy. It delivers on the Mayors' Council's commitment for "all stakeholders [to] work together to conclude how and when to complete the next phase of rail to the Point Grey Campus."

City of Vancouver relationship and partnership opportunities

In conjunction with Government Relations and other units, active discussions are underway with Planning, Social Planning and Engineering departments on a number of files of shared interest, including rapid transit, UBC Robson Square, UBC Wellbeing, an upcoming CityCore 2050 Plan etc. Staff have also been supporting President Ono's engagement with the City on the Strategic Plan.

Child Care Policy Update

Updates to the 2009 UBC Child Care Expansion Plan (CCEP) has been underway over the past two years. The updated CCEP includes revised child care space targets and recommendations for implementation and distribution of child care spaces on UBC's academic and neighbourhood lands.

A two-phased approach was used to update the CCEP. Phase one included a child care needs assessment. This was based on a survey that collected detailed information on child care use, needs, preferences and satisfaction from residents living in UBC neighbourhoods. In Phase 2, a technical analysis was conducted, to inform recommendations for setting child care targets. UBC's Child Care Policy is developed with input from UBC Child Care Services, University Neighbourhoods Association, UBC Properties Trust, UBC Housing Relocations Services, UBC residents and YMCA of Greater Vancouver.

Engagement with Musqueam

C+CP consults with representatives from the Musqueam Indian Band on a regular basis to generate discussion on campus projects and initiatives.

Musqueam Street Signage

C+CP, Communications and Marketing and members of Musqueam partnered in 2017 to create new street signs to acknowledge and respect the traditional territory of the Musqueam people. The bilingual street signs will be installed in April 2018 along nine routes in the academic core of UBC Vancouver. They will supplement the English names with names in hən̓q̓əmin̓əm̓, the traditional language of the Musqueam people. An unveiling ceremony is scheduled for April 4, 2018.

Stadium Neighbourhood

Prior to the launch of the 18-month planning process for the Stadium Neighbourhood in September 2018, C+CP met with Musqueam to outline the neighbourhood planning process and ask for their initial thoughts and concerns. C+CP will continue to meet with Musqueam throughout the project to share project updates and gain their input on the process.

UBC Gateway Art

In late 2017, C+CP initiated discussions with Musqueam to develop a call for Musqueam artists to develop an artistic concept for the new MacInnes Field and surrounding area. The purpose of the artwork is to enhance the arrival experience to UBC and bring cohesion and vibrancy to this highly public space.

The project is an opportunity to inform those arriving to campus that UBC is on the traditional, unceded, and ancestral territory of the Musqueam people. Campus and Community Planning is collaborating with Musqueam to select an artist(s) and work with the artist(s) to develop the concept for the area. The concept will be finalized in Summer 2018 and will be installed as part of the construction of the new MacInnes Field and surrounding public areas which is expected to be completed in 2019.