



2012 Campus Traffic Survey University of Victoria

Final Report

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EXECUTIVE SUMMARY

Bunt & Associates was retained by the Office of Campus Planning & Sustainability, University of Victoria in the Fall of 2012 to conduct a comprehensive survey of current traffic access patterns to and from the University for a typical weekday. The structure of the following report on the 2012 survey results is consistent with the previous traffic surveys conducted for the University since the early 1990's.

The 2012 campus traffic survey considers three forms of traffic counts:

- Driveway Counts – 5 locations for 24-Hour Automatic Tube Counts (ATC) from October 15 to November 4, 2012 by Transtech Data Services;
- Transit Counts - Arriving / Departing Passenger Counts recorded through automatic counters on a sample of the bus fleet; and
- Manual Counts – 21 locations for Peak Period Manual Observations including vehicles, vehicle passengers, cyclists, pedestrians, and skateboarders and rollerbladers. These manual surveys were conducted on October 24th and 25th, 2012 during the morning and afternoon peak periods on both days.

The findings of this survey detail the results of the University's Transportation Demand Management Strategy. The initial traffic survey was conducted in 1992 and the shifts in travel modes over the past 20 years have been very encouraging. The following table provides a summary of the modal split for 2012 and a comparison to previous year's survey results.

Travel Mode	1996 Survey	2000 Survey	2004 Survey	2006 Survey	2008 Survey	2010 Survey	2012 Survey
Auto Drivers	57.5%	54.4%	47.1%	44.1%	37.5%	38.8%	39.8%
Auto Passengers	15.6%	11.0%	11.8%	11.9%	12.8%	10.0%	10.1%
Transit Passengers	11.3%	17.8%	26.2%	27.4%	31.0%	26.0%	27.7%
Cyclists	6.9%	5.5%	6.0%	5.3%	7.1%	8.9%	7.9%
Pedestrians	8.7%	11.3%	8.7%	11.2%	11.2%	15.9%	14.5%
Skateboards/ rollerbladers	0.0%	0.0%	0.2%	0.1%	0.3%	0.4%	0.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

The mode split has stabilized over the last two surveys and changes for the most part were minor. Highlights from this survey are:

- The percentage of automobiles drivers in 2012 (39.8%) is comparable to that recorded in 2010 (38.8%) and the total automobile-related trips was again below 50%.
- The total number of automobile passengers results in a higher percentage of 10.1% for 2012 as compared to 10.0% for 2010.

- The total number of transit passengers shows an increase in overall mode split percentage from 26% in 2010 to 27.7% for 2012.
- There were fewer pedestrians reported with a mode split share of 14.5%, down from the 15.9% reported for 2010.
- The mode share for cyclists is 7.9% in 2012, down 1% from 2010.
- Skateboarders and rollerbladers mode split share is down 0.3% from 2010, when there was a 0.4% mode split.

The trends are essentially no different from the 2010 survey and are consistent with those in the region. Fluctuations from year to year are to be expected depending on weather conditions, campus activities and transit service issues. The overall conclusion from the 2012 results is that there have been no significant changes in the modal share results for travel to and from campus.

As with the results from the 2010 survey, there were positive signs in 2012 with regard to TDM programs. The combined percentages of transit, pedestrian, bicycle and skateboarders and rollerbladers account for over 50% of the trips made to UVic.

In the fall of 2012, Bunt & Associates Engineering Ltd. was retained by The Office of Campus Planning & Sustainability, University of Victoria (UVic) to conduct a comprehensive survey of current traffic accessing the University on an typical weekday. The reporting structure of the 2012 survey was closely modeled upon previous traffic surveys conducted for the University since the early 1990's.

1. INTRODUCTION

The University of Victoria has been monitoring the travel demand to and from their campus since the first survey conducted in 1992 by BA Consulting. Similar surveys were also conducted in 1996, 2000, 2004, 2006, 2008 and 2010 by Bunt & Associates. These surveys were initiated by UVic to monitor transportation activity patterns at the university and use the results to measure the effectiveness of various UVic initiatives as outlined below.

In May 2003, UVic's Board of Governors unanimously adopted its Campus Plan¹. This plan responds to one of the objectives in the University's Strategic Plan adopted in February 2002 which is:

"to develop a campus plan that:

- integrates our physical facilities into our unique natural setting;
- promotes sustainability in planning and operations; and
- is driven by academic priorities"

It does so by articulating a long-term vision for physical changes at UVic which is described and defined in more detail through three main policy goals, a series of nine foundation principles, 62 policy directions and 30 actions.

The Travel and Parking goal is:

"to reduce motor vehicle traffic to the campus and to encourage increased use of public transit, cycling and walking"

¹ "Campus Plan 2003", University of Victoria, May 2003

This in turn relates to five of the foundation principles which are listed below.

- Principle 5 Smart Growth:** The University will manage development carefully, respecting “smart growth” principles and practices as they may be adapted to the university context.
- Principle 6 Sustainable Building and Facilities:** The University commits to incorporate sustainable practices in the planning, construction and operation of buildings and facilities.
- Principle 7 Spirit of Place:** The University will continue to plan and design in a way that enhances social interaction on a human scale.
- Principle 8 Traffic:** The University is committed to open and universal access to its facilities while reducing dependence on single-occupant vehicles.
- Principle 9 Parking:** The University recognizes the need to minimize surface parking and pursue alternatives.

A major step in addressing the Traffic and Parking goal as well as the Traffic principle was the Transportation Demand Management (TDM) Study completed for the University in September 2003², which examined ways in which the University could promote the use of alternative modes of transport to and from the campus and reduce reliance on single occupant automobiles. Many of the study recommendations have now been implemented and include a broad range of initiatives such as parking pricing strategies, cycling infrastructure improvements, transit subsidies, crosswalk improvements, rideshare programs, and educational activities.

More recently, the University of Victoria completed a Traffic and Parking Management Study³ in October 2008, to support the university’s aim of increasing sustainable transportation choices by reducing single-occupant vehicle trips, encouraging non-private auto trips, and reducing impacts on climate change.

The two key objectives of this study were to:

- Establish a parking supply and management strategy that supports sustainability objectives, is cost-effective, and is sensitive to the needs of all stakeholders; and,
- Establish a multi-modal on-site traffic management strategy that minimizes conflicts while promoting safe and efficient movement within the campus for all campus users.

A complete copy of this report can be found through the Office of Campus Planning and Sustainability. (<http://web.uvic.ca/sustainability/index.php>)

² “Transportation Demand Management Study”, Boulevard Transportation Group for University of Victoria, September 24, 2003

³ “Traffic and Parking Management Study: Final Report”, Opus International Consultants (BC) Ltd for University of Victoria, October 31, 2008

In addition to the documentation cited above, the University's transportation vision for a sustainable campus⁴ is:

“a campus that has sustainable travel options for every campus community member and acts as a hub in a regional sustainable transportation network”

With UVic's ongoing commitment to sustainability, the biannual surveys are used to establish a current picture of the traffic and transportation patterns on campus. These survey results are performance measurements to be utilized in the evaluation of the effectiveness of the University's TDM program initiatives over the past two years.

The 2012 campus traffic surveys consider the following modes of traffic:

- Automobile driver;
- Automobile passenger;
- Transit passenger;
- Cyclist;
- Pedestrian;
- Skateboarder and Rollerblader.

As with the 2010 survey, Bunt & Associates were assisted by TransTech Data Services for the collection of traffic volume data and BC Transit for the provision of transit passenger data.

⁴ “Sustainability Action Plan: Campus Operations 2009 – 2014”, University of Victoria, 2009

2. SURVEY METHOD

To ensure consistency with previous traffic surveys and continuation of the time series of transportation data on travel modes used to access the UVic campus, the study methodology used in previous studies has been replicated for 2012 where possible. As was the case in 2006, 2008 and 2010, the basic design of the travel mode survey was to establish a cordon around the periphery of the campus across which all trips entering and exiting the University could be systematically recorded.

Three different forms of traffic counts were used for the 2012 survey:

- Driveway Counts - 24-Hour Automatic Tube Counts (ATC);
- Driveway Counts - Peak Period Manual Observations including vehicles, vehicle passengers, cyclists, pedestrians, skateboarders, and rollerbladers;
- Transit Counts - Arriving / Departing Passenger Counts recorded through automatic counters on a sample of the bus fleet.

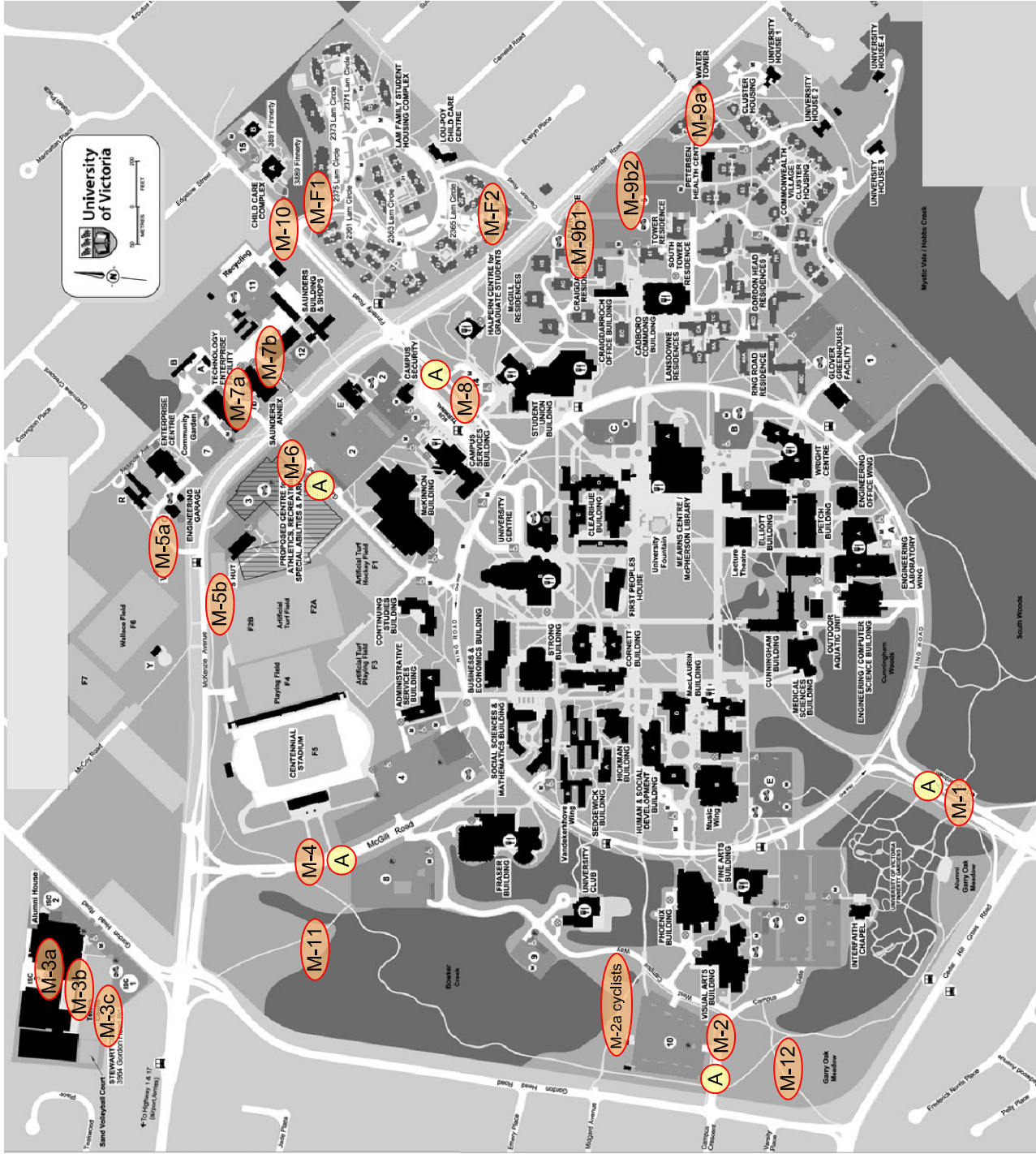
The traffic survey locations used for the 2012 survey are summarized in **Exhibit 1**. The transit count locations are summarized in **Exhibit 2**, as provided by BC Transit. As with the 2010 survey, results from the M-10 location are not included in the general results (consistent with previous reports) and are covered in a separate section of the report. Additional survey details are described below.

2.1 Driveway Counts: 24-Hour Automatic Tube Counts (ATCs)

TransTech Data Services established ATC stations on the same five (5) driveways surveyed in 2010, i.e.: University Drive, McGill Road, West Campus Gate Road, Finnerty Road and Gabriola Road to complete a cordon of the main vehicular routes accessing the campus as shown in Exhibit 1. For the 2012 report, results from the Gabriola Road station have been included in the general results. In the 2010 report, the Gabriola Road station results were covered in a separate section of the report as there was no 2008 (or previous) data to compare it with. The automatic tube counts provided continuous 15 minute vehicle traffic counts by direction for a three week period. This data is summarized into hourly traffic volumes of all inbound and outbound vehicle traffic on these five (5) access routes.

The 2012 surveys were conducted between Monday, October 15 and Sunday, November 4. The primary purpose of the ATCs was to provide some indication of the daily variation in total vehicle traffic activity at the University, as well as to develop profiles of vehicle traffic activity over a 24 hour period. The manual counts were conducted on October 24th and 25, 2012, and therefore the ATC data collected during the week of October 22nd to 28th would be used for the profiles.

A complete record of the ATC data for the week of October 22nd - 28th is provided in **Appendix A**.



- M Manual Count Stations (21)
- A Automatic Vehicle Counts (5)

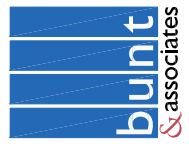


Exhibit 1 Location Plan and Manual Count Stations

University of Victoria - 2012 Traffic Survey
5070.04 December 2012 Scale NTS

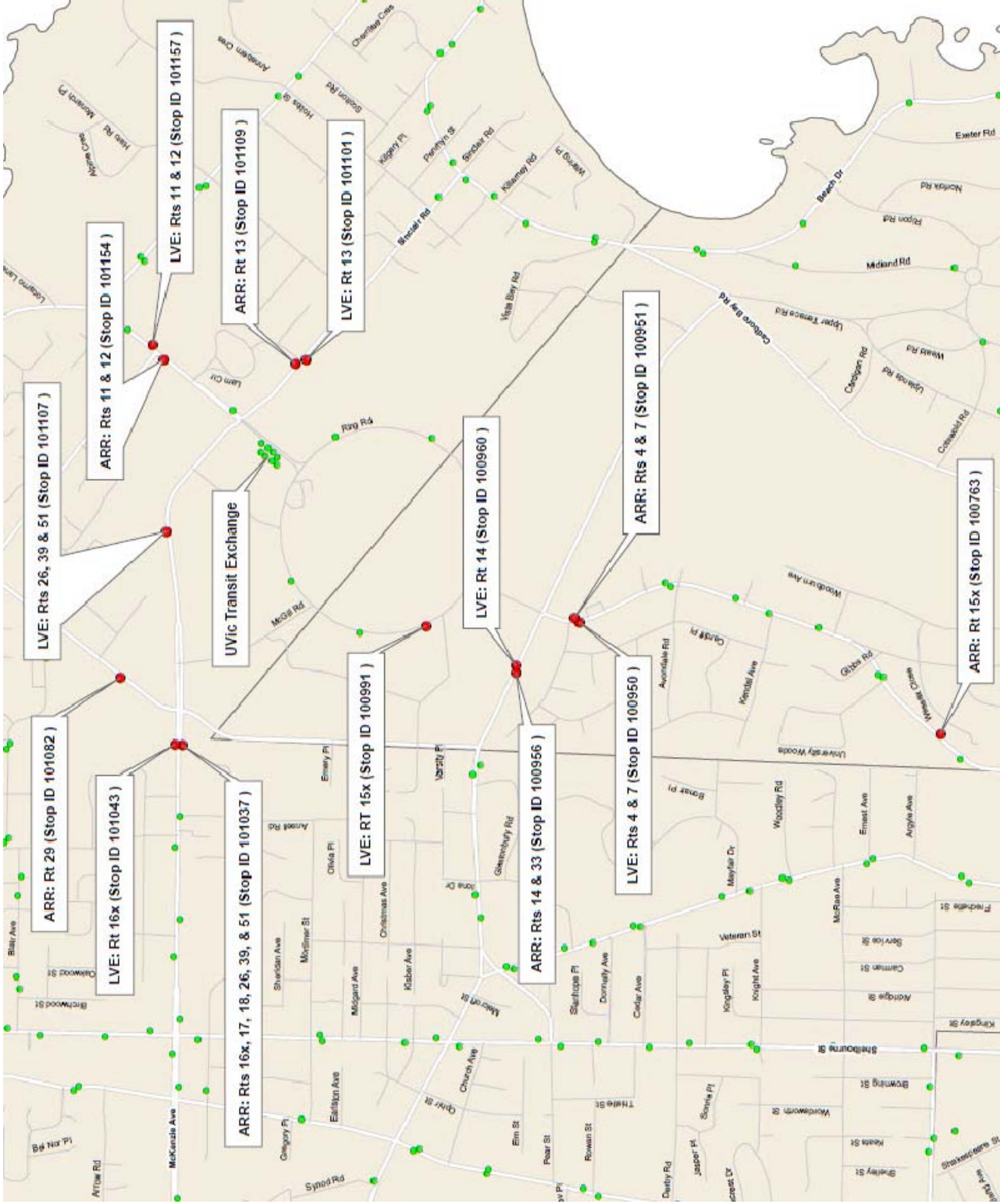


Exhibit 2 BC Transit Count Stop Locations

2.2 Driveway Counts: Peak Period Manual Counts

As shown in Exhibit 2, a total of 21 manual traffic count locations were established at key driveway and parking lot entrances to the University. Two count locations were established for the David and Dorothy Lam Family Student Housing Complex – M - F1 at the Finnerty Road access and M - F2 at the Clarndon Road access. As was noted earlier, while M-10 is a survey location, it is an access to the Saunders Building which houses UVic Facilities Management and is discussed separately in this report.

As with the 2004 to 2010 surveys, the manual counts were conducted over two consecutive weekdays (Wednesday, October 24, 2012 and Thursday, October 25, 2012), during both the morning (7:00 AM – 10:00 AM) and afternoon (2:30 PM – 6:30 PM on Wednesday and 2:00 PM – 6:00 PM on Thursday) peak traffic periods at the University. The counts began a half hour later on Wednesday to coincide with the time class starts and finishes on this day. Data collected from the manual traffic counts included:

- Peak period inbound and outbound vehicle traffic in 15 minute intervals;
- Number of occupants in inbound vehicles during the AM peak and in outbound vehicles during the PM peak; and
- Peak period inbound and outbound pedestrian, cycling, rollerblading and skateboarding activity.

To ensure that the manual counts did not record the travel patterns of the same group of people, they were executed on two different class scheduling days (Wednesday and Thursday). A complete record of the average weekday peak period manual traffic count data is provided in **Appendix B**.

Factoring was used to estimate cyclist and pedestrian movements and on-site bicycle accumulation outside of the manual count periods. These factors are based on the weekday traffic profiles derived from the ATC data.

2.3 BC Transit Passenger Counts

As with the 2004 to 2010 surveys, BC Transit conducted inbound and outbound transit passenger counts for the routes serving the University. The “arrival load count” numbers represent total transit arrivals when the bus reached the Ring Road entrance. The “leave load count” numbers represent total transit departures when the bus exited Ring Road. The “arrive” and “leave count numbers” were collected at the locations shown on Exhibit 2. A summary of the provided BC Transit passenger data is provided in **Appendix C**. A total of 17 bus routes serve the UVic Transit Exchange located on the Gordon Head campus at Finnerty Road, but the data from route #76 (formerly route #80 (UVic / Swartz Bay) which is a special service route has not been included, consistent with previous years studies.

In 2010, BC Transit-Victoria fleet grew drastically and over 50% of the new buses purchased came with factory installed automated passenger counters (APC) to record running time and passenger count information. APCs consist of directional infra-red sensors, a GPS antenna, and an on-board computer.

The sensors are positioned either above the doors or side mounted (depending on the interior configuration), where they can detect people boarding or alighting the bus. The sensors' signals are sent to the on-board GPS antenna, which transmits the passenger information to the computer.

The new APC additions help BC Transit sample more trips in a shorter time. In relation to the UVic Transit Study, as a standard, BC Transit had been using 16 week averages spanning a full September to December period up until this time. This was mainly due to limited resources at BC Transit and it took them longer to sample their trips. For the 2012 study, we have opted to shorten the 16 weeks sampling period to 8 weeks because Transit have more APC buses in the fleet.

For this survey, the data relating to the average number of people arriving and departing the UVic campus during weekdays on the bus routes that service the site covered the period from September 4 to November 23, 2012 and is an average of weekday ridership.

Service Cancellations Due to CAW 333 Labour Dispute

During the 2012 survey period, the BC Transit Victoria union representing operators and mechanics (CAW 333) were locked in a labour dispute as part of collective agreement renewal process. Related job action by the union included a ban on overtime effective October 22, 2012.

The overtime ban resulted in daily service cancellations and raised some service reliability concerns among transit users. Between October 22 - 31, an average of 49 trips were cancelled daily and between November 1 - 23, an average of 56 trips were cancelled daily including UVic bound service.

3. TRAVEL MODE SURVEY RESULTS

3.1 Automobile Drivers

The volume of automobile traffic (automobile drivers) was recorded using both automatic tube counts (ATC) and manual observations during the morning and afternoon peak periods on all key driveways and parking lot entrances. As previously mentioned, the ATC station at Gabriola Road is included in this analysis and not discussed in a separate section as was done in the 2010 report. A summary of the combined 2012 daily traffic (24-hour inbound and outbound total) for all five ATC stations is provided in **Table 1**.

TABLE 1: Entering, Exiting and Total Traffic Volumes for Finnerly, Gabriola, McGill, University and West Gate Accesses

COUNT LOCATION	MONDAY						TUESDAY						WEDNESDAY						THURSDAY						FRIDAY						AVERAGE WEEKDAY					
	2004	2006	2008	2010	2012		2004	2006	2008	2010	2012		2004	2006	2008	2010	2012		2004	2006	2008	2010	2012		2004	2006	2008	2010	2012		2004	2006	2008	2010	2012	
	2004	2006	2008	2010	2012		2004	2006	2008	2010	2012		2004	2006	2008	2010	2012		2004	2006	2008	2010	2012		2004	2006	2008	2010	2012		2004	2006	2008	2010	2012	
Finnerly Road																																				
IN			1,347	1,464	1,587				1,524	1,601	1,774				1,642	1,601	1,774				1,809	1,622	1,660				1,729	1,677	1,768							
OUT			2,154	2,781	2,628				2,809	2,848	2,689				2,849	2,957	2,760				3,108	2,852	2,716				2,894	2,842	2,788							
TOTAL			3,501	4,245	4,215				4,333	4,415	4,284				4,491	4,558	4,534				4,917	4,474	4,376				4,563	4,519	4,556							
Gabriola Road																																				
IN				1,971	1,497					1,925	1,680					1,938	1,734					2,272	1,565					2,428	1,298							
OUT				1,346	1,646					1,463	1,925					1,405	1,756					1,243	1,685					1,602	1,566							
TOTAL				3,317	3,143					3,388	3,605					3,343	3,490					3,515	3,250					4,030	2,864							
McGill Road																																				
IN	3,410	3,537	2,950	3,027	3,079	3,590	3,590	3,671	3,065	3,069	3,131	3,536	3,730	3,103	3,149	3,214	3,489	3,546	3,195	3,081	3,190	3,190	3,102	3,082	2,875	2,699	2,880	3,425	3,513	3,038	3,439	4,351	3,933	4,033	3,912	
OUT	2,286	2,301	1,856	2,137	2,240	2,286	2,340	1,985	2,283	2,258	2,258	2,450	2,388	1,944	2,257	2,357	2,348	2,270	1,991	2,279	2,347	2,347	2,029	1,936	1,716	1,975	2,067	2,280	2,247	1,898	2,280	2,247	1,898	2,186	2,254	
TOTAL	5,696	5,838	4,806	5,164	5,319	5,876	6,011	5,050	5,352	5,389	5,389	5,986	6,118	5,047	5,406	5,571	5,837	5,816	5,186	5,466	5,560	5,537	5,131	5,018	4,591	4,674	4,947	5,705	5,760	4,936	5,705	5,760	4,936	5,191	5,353	
University Drive																																				
IN	4,353	4,172	3,728	3,996	3,923	4,533	4,276	4,244	4,244	4,090	3,964	4,567	4,542	4,010	4,100	3,995	4,594	4,644	3,995	4,086	3,923	4,147	4,120	4,120	3,690	3,891	3,756	4,439	4,351	3,933	4,439	4,351	3,933	4,033	3,912	
OUT	4,570	4,752	3,997	4,815	4,271	4,515	4,861	4,340	4,340	5,091	4,386	4,645	5,040	4,176	5,078	4,523	4,803	5,017	4,200	5,037	4,421	4,306	4,483	4,483	3,736	4,649	4,013	4,568	4,831	4,090	4,568	4,831	4,090	4,934	4,323	
TOTAL	8,923	8,924	7,725	8,811	8,194	9,048	9,137	8,584	8,584	9,181	8,350	9,212	9,582	8,186	9,178	8,518	9,397	9,661	8,195	9,123	8,344	8,453	8,603	8,603	7,426	8,540	7,769	9,007	9,181	8,023	9,007	9,181	8,023	8,967	8,235	
West Campus Gate																																				
IN	1,448	1,290	1,293	1,253	1,171	1,460	1,368	1,301	1,301	1,335	1,221	1,423	1,435	1,346	1,285	1,302	1,384	1,346	1,334	1,334	1,392	1,059	1,084	1,084	1,052	1,138	1,018	1,355	1,305	1,265	1,355	1,305	1,265	1,273	1,221	
OUT	1,304	1,178	1,132	1,083	916	1,329	1,299	1,209	1,209	1,237	996	1,267	1,335	1,142	1,172	1,080	1,197	1,261	1,160	1,200	1,167	981	981	981	949	1,024	998	1,216	1,211	1,118	1,216	1,211	1,118	1,143	1,031	
TOTAL	2,752	2,468	2,425	2,336	2,087	2,789	2,667	2,510	2,510	2,572	2,217	2,690	2,770	2,488	2,457	2,382	2,581	2,607	2,494	2,533	2,559	2,040	2,065	2,065	2,001	2,162	2,016	2,570	2,515	2,384	2,570	2,515	2,384	2,416	2,252	
Totals																																				
IN	9,211	8,999	9,318	11,711	11,257	9,583	9,315	10,134	11,986	11,591	9,526	9,707	10,101	12,073	12,019	9,487	9,487	9,536	10,333	12,414	11,730	8,308	8,286	9,346	11,833	10,720	9,219	9,169	9,846	9,219	9,169	9,846	12,003	11,463		
OUT	8,160	8,231	9,139	12,162	11,701	8,130	8,500	10,343	12,922	12,254	8,362	8,763	10,111	12,869	12,476	8,348	8,348	8,548	10,459	12,611	12,336	7,316	7,400	9,235	12,092	11,432	8,063	8,288	9,857	8,063	8,288	9,857	12,531	12,040		
TOTAL	17,371	17,230	18,457	23,873	22,958	17,713	17,815	20,477	24,908	23,845	17,888	18,470	20,212	24,942	24,495	17,815	17,815	18,084	20,792	25,025	24,066	15,624	15,686	18,581	23,925	22,152	17,282	17,457	19,704	17,282	17,457	19,704	24,535	23,503		
% of Average Weekday	100.5	98.7	93.7	97.3	97.7	102.5	102.1	103.9	101.5	101.5	103.5	105.8	102.6	101.7	104.2	103.1	103.6	105.5	102.0	102.4	90.4	89.9	94.3	94.3	97.5	94.3	94.3	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	

In 2010 the average total weekday traffic on McGill Road, University Drive and West Campus Gate was 16,574 vehicles per day (vpd). On Finnerty Road 4,442 vpd was recorded and on Gabriola Road, 3,519 vpd was recorded. In 2010, the combined ATC total weekday traffic on all five driveways was 24,535 vpd.

The average total weekday traffic (24 hour) recorded on the five driveways in 2012 was 23,503 vehicles / day (vpd), which is approximately 4% lower than in 2010.

A comparison between the manually counted 2000 to 2012 traffic volumes (a combined total of the AM and PM periods for all driveways) is included in **Table 2**.

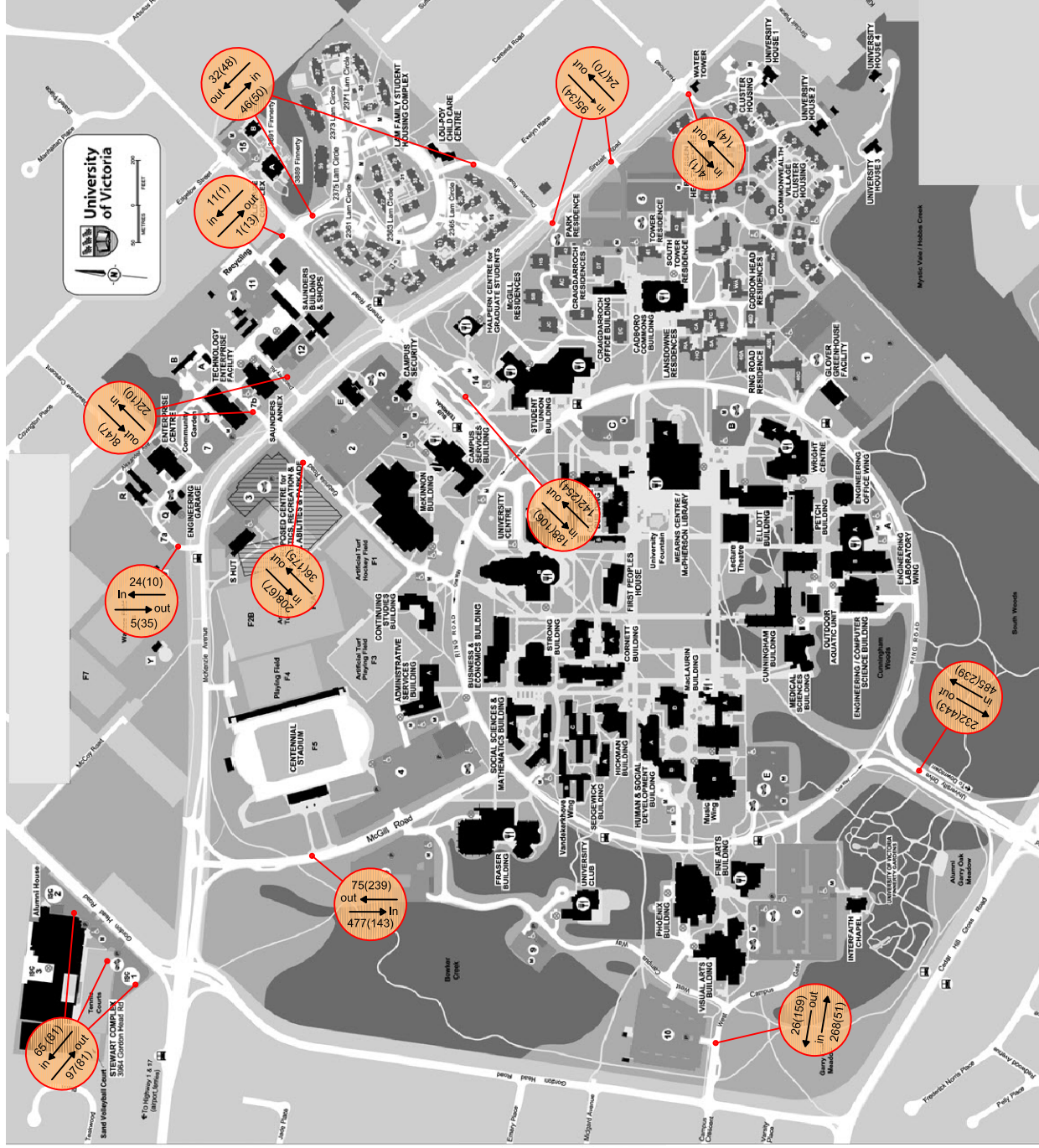
Table 2: Observed Driveway Traffic Volumes (Peak 7 Hours)

Travel Direction	Survey Year					
	2000	2004	2006	2008	2010	2012
Inbound	8,010	6,598	6,197	6,683	7,187	7,197
Outbound	7,006	6,732	6,534	6,087	6,702	6,492
Total	15,016	13,330	12,731	12,770	13,889	13,689

Note: Volumes are averaged over the two days counted for each year.

Table 2 also reflects the decrease in the average driveway volumes recorded during the manual surveys as was exhibited in the ATC counts contained in Table 1. For the observed traffic counts, the overall decrease from 2010 to 2012 is approximately 200 vehicles or 1.5%. Inbound traffic remains relatively stable since 2010, while outbound traffic decreased by approximately 3%.

A summary of the AM and PM peak hours, averages of the October 24th and 25st counts, is illustrated in **Exhibit 3**. The AM peak hour occurs from 8:00 to 9:00 AM and during that period the heaviest two-way volumes are on University Drive (M-1), McGill Road (M-4) and Finnerty Road (M-8) at 28%, 22% and 13% respectively. The pattern is the same during the PM peak hour from 4:00 to 5:00 PM with those routes servicing 29%, 16% and 15% respectively of all vehicular traffic entering or leaving the campus. These three roads carry approximately 60% to 63% of all traffic during these peak periods. If the West Campus Gate ((M-2) and Gabriola Road (M-6) vehicular volumes are included, these five roads carry from 84% to 79% of all vehicular traffic during the AM and PM peak hour periods respectively. The 2012 total AM peak hour inbound and outbound traffic volumes are quite comparable to those from 2010. The 2012 total PM peak hour inbound and outbound traffic volumes are lower at 788 inbound vehicles compared to the 915 vehicles in 2010, and 1,555 outbound vehicles compared to 1,728 in 2010.



AM peak hour 08:00 - 09:00
 Total inbound traffic = 1865 vehicles
 Total outbound traffic = 690 vehicles

PM peak hour 16:00 - 17:00
 Total inbound traffic = 788 vehicles
 Total outbound traffic = 1555 vehicles

Note: Totals exclude M10

Exhibit 3
Peak Hour Vehicle Traffic
 University of Victoria - 2012 Traffic Survey
 5070.04 December 2012 Scale NTS



Using the daily traffic profile derived from the 24-hour ATC stations, estimates of the inbound and outbound vehicle trip profiles were developed for the 7:00 AM to 10:00 PM period. Over this period, which is presumed to account for the majority of the total daily traffic at the University, the inbound vehicle traffic estimate is 12,092 vehicles while the outbound traffic estimate is 11,571 vehicles. This overall average weekday trip volume of 23,663 vehicles is approximately 927 vehicles less than in 2010 or a decrease of approximately 4%.

The inbound and outbound imbalance and decrease in vehicle trips in 2012 over 2010, could be the variety, number, timing and type of events hosted by UVic over the survey dates, and 2012 events may not have been as well attended as those hosted in 2010.

ATC data is only available for five main access roads, so the above calculation method has been used to forecast volumes for the other survey locations for the 7:00 AM to 10:00 PM period. It is also used to provide a consistent methodology that can be applied to vehicle passengers, cycling, pedestrian, rollerblade, and skateboard modes of transport.

3.2 Automobile Passengers

As described previously, the manual driveway counts included observations of the number of total occupants (i.e., driver plus passengers) in vehicles arriving to the University during the morning count period and leaving the University during the afternoon count period. An hourly summary of the vehicle occupancy at each count station is provided in **Table 3**.

Table 3: Vehicle Occupancy

Direction Location	ENTERING				EXITING					TWO-WAY
	7 - 8am	8 - 9am	9 - 10am	Average (AM)	2 - 3pm	3 - 4pm	4 - 5pm	5 - 6pm	Average (PM)	Average (day)
M1 - University Drive	1.27	1.37	1.31	1.33	1.22	1.21	1.23	1.28	1.24	1.28
M2 - West Campus Gate	1.09	1.17	1.15	1.15	1.20	1.19	1.21	1.25	1.21	1.18
M3 - Stewart Complex	1.38	1.43	1.48	1.43	1.39	1.57	1.47	1.42	1.46	1.45
M4 - McGill Road	1.07	1.16	1.18	1.16	1.28	1.32	1.28	1.26	1.29	1.21
M5a - R Hut	1.17	1.04	1.10	1.08	1.19	1.23	1.07	1.25	1.15	1.13
M5b - McKenzie Avenue										
M6 - Gabriola Road	1.22	1.17	1.16	1.18	1.19	1.22	1.25	1.29	1.24	1.21
M7 - Saunders Annex	1.03	1.21	1.04	1.07	1.19	1.12	1.14	1.12	1.14	1.11
M8 - Finnerty Road	1.39	1.40	1.38	1.39	1.30	1.35	1.37	1.35	1.35	1.36
M9a - Haro Road	1.25	1.00	1.27	1.18	1.14	1.25	1.13	1.13	1.15	1.16
M9b - Clarndon Road	1.15	1.12	1.10	1.12	1.26	1.22	1.26	1.33	1.26	1.20
MF - Lam Circle	1.20	1.13	1.14	1.14	1.28	1.37	1.47	1.63	1.44	1.36
Overall Average				1.23					1.28	1.26

As with the previous surveys, the vehicle occupancy varies considerably at the different count stations. For the morning and afternoon periods combined, the highest average occupancy of 1.45 persons per

vehicle occurs at the driveway to the Stewart Complex (Station M-3a to M-3c) on Gordon Head Road. The lowest average occupancy of 1.11 persons per vehicle occurs at the driveway to the Saunders Annex (Station M-7) which contains the offices for the UVic Facilities Management. The overall average occupancy for vehicles arriving at the University is 1.23 persons per vehicle, which is slightly lower than the 1.25 in 2010. The overall average occupancy for vehicles departing the University is 1.28, down slightly from the 1.29 persons per vehicle in 2010. The outbound vehicle occupancy was found to be higher than the inbound occupancy, which may be attributable to drivers offering friends and colleagues a ride home.

Similar to the previous surveys, vehicles were grouped into one of six classes depending on the number of occupants per vehicle. The categories ranged from one person (driver only) up to six or more persons. A comparison of the 2000 to 2012 survey results is provided in **Table 4**.

Table 4: Occupants per Vehicle – Combined AM and PM Peak Periods

Year	Vehicle Variables	Vehicle Occupancy						Totals
		1 person	2 persons	3 persons	4 persons	5 persons	6+ persons	
2012	Vehicles	6,749	1,840	158	30	2	1	8,780
	%	76.9%	21.0%	1.8%	0.3%	0.0%	0.0%	100.0%
2010	Vehicles	6,802	1,933	172	55	6	1	8,969
	%	75.8%	21.6%	1.9%	0.6%	0.1%	0.0%	100.0%
2008	Vehicles	6,148	1,909	195	47	6	2	8,307
	%	74.0%	23.0%	2.3%	0.6%	0.1%	0.0%	100.0%
2006	Vehicles	7,018	2,033	183	44	10	3	9,291
	%	75.5%	21.9%	2.0%	0.5%	0.1%	0.0%	100.0%
2004	Vehicles	7,523	2,069	187	49	4	3	9,835
	%	76.5%	21.0%	1.9%	0.5%	0.0%	0.0%	100.0%
2000	Vehicles	6,005	1,588	183	52	9	4	7,841
	%	76.6%	20.3%	2.3%	0.7%	0.1%	0.1%	100.0%

For 2000, inbound occupancy was recorded in both the AM and PM peak. In 2004, 2006, 2008 and 2010, inbound occupancy was recorded in the 7:00 – 10:00 AM survey period and outbound occupancy in the 2:30 PM – 6:30PM / 2:00 PM – 6:00 PM survey periods.

As indicated in Table 4, the following notes compare the 2004, 2006, 2008, 2010 and 2012 survey results:

- In 2012, single-occupant vehicles, i.e., driver only, accounted for 76.9% of all inbound AM trips and outbound PM trips which is an increase 1.1% from 2010 and the highest percentage recorded of all surveys since 2000;
- In 2012 there was an overall decrease of 53 vehicles in the total vehicle count from 2010;
- In 2012, two person vehicle trips accounted for 21% of all measured trips, down from 21.6% in 2010 and the same as in 2004;

- In 2012, three person vehicle trips accounted for 1.8% of all measured trips , this is the lowest recorded percentage of all surveys since 2000;
- Little change occurred between 2004, 2006, 2008 and 2010 for trips with five or more persons per vehicle, accounting collectively for less than 1% of all vehicle trips to the University.

Using the daily traffic profile derived from the 24-hour ATC stations, estimates of the inbound and outbound vehicle trip profiles were developed for the 7:00 AM to 10:00 PM period. Over this period, which is presumed to account for the majority of the total daily traffic at the University, the inbound automobile passengers are estimated at 2,696 while the outbound estimate is 3,300. This overall average weekday trip volume of 5,996 is approximately 206 passengers less than in 2010.

3.3 Transit Passengers

BC Transit's complete summary of the transit passenger survey conducted between September and November 2012 is presented in Appendix C and summarized in **Table 5** in terms of average weekday ridership.

Table 5: Transit Passenger Summary 2004 – 2012

Travel Direction	Survey Year				
	2004	2006	2008	2010	2012
Inbound	8,194	7,885	9,426	8,805	9,569
Outbound	6,694	7,550	8,546	8,314	7,628
Total	14,888	15,435	17,972	17,119	17,197

Highlights of the data displayed in Table 5 and the information provided in Appendix C include:

- For a typical weekday in the Fall of 2012, 9,569 transit passengers arrive at the University which is an increase of approximately 8% from 2010, and the highest ridership for inbound passengers over all surveys since 2004. For inbound trips the busiest hour is between 08:00 AM and 09:00 AM with a total of 1,275 passengers which represents 7.5% of arrivals during the day and is an increase from the 1,525 passengers arriving during the peak hour in 2010;
- 7,628 passengers depart during an average Fall weekday in 2012 which is a decrease of approximately 9% from 2010 but still higher than the 2006 and 2004 average departures. The peak hour for outbound trips is 4:00 PM– 5:00 PM when 957 passengers depart. This represents 8.0% of all departures during the day , however is a decrease from the 1,193 passengers leaving during the peak hour in 2010;

- The combined total transit ridership for a typical weekday in the Fall of 2012 is 17,197 passengers and is similar to the results from 2010. In terms of bus frequency, an average of 1,075 inbound and outbound bus trips are made throughout the typical weekday with 181 trips made during the AM and PM peak hours. Despite the transit job action, which resulted in cancelled trips, this is an increase in ridership from 2010 when there were a total of 1,038 inbound and outbound bus trips during the average weekday and a total of 176 trips during the peak hours.

Overall, transit ridership at UVic has remained fairly consistent over the 2010 and 2012 survey years.

Of the routes serving the University, the most heavily used route is the #14 (Vic General / UVic via Richmond) route, accounting for 25% of all trips to and from the campus. The next most popular route is the #4 (UVic / Downtown via Hillside) with 20% of all trips, followed by #26 (Dockyard / UVic via McKenzie) with 13% of all trips. These top three routes are the same as in previous surveys since 2000. In 2012 these three routes carried 58% of all trips to and from the campus during an average Fall weekday, which is less than the 69% carried in 2010.

The approximate distribution of transit trips at UVic is shown in **Exhibit 4**. As in 2004, 2006, 2008, and 2010 the predominant transit trip-orientation is to the south / southwest, primarily involving the #4, #7, and #14 routes accessing the UVic campus along University Drive. These three routes plus the #15 and #33, which heads in the same direction, account for 62% of all trips. Including the 27.4% of transit trips using McKenzie Avenue, over 89% of all transit trips use either McKenzie Avenue or University Drive for access to and from the campus.

3.3.1 Cancelled Bus Trips

As discussed earlier in the report, some bus cancellations occurred on various routes including those servicing UVic. For instance, during the manual survey on October 24, a total of 10 trips were cancelled including Routes 11 (9 cancelled trips) and 33 (1 cancelled trip). On October 25, a total of 31 trips were cancelled on Routes 7 (10 cancelled trips), 14 (8 cancelled trips), 15 (9 cancelled trips), 16 (1 cancelled trip), 26 (2 cancelled trips) and 29 (1 cancelled trip). During the two manual survey dates (October 24th and 25th) a total of 41 bus trips were cancelled at various times throughout the day on routes serving UVic. These 41 cancelled bus trips do not include any other routes that may connect with those routes serving UVic. In total over these two manual survey days, 78 bus trips were cancelled throughout the region.

Transit passengers who rely on this mode of transportation to get to and from UVic would have been affected by the cancelled trips and rather than wait for the next bus, some would have found it necessary to find other means to get to / from UVic. This would have some effect on the mode split data, but this is difficult to predict or quantify and therefore was not factored into the overall analysis.

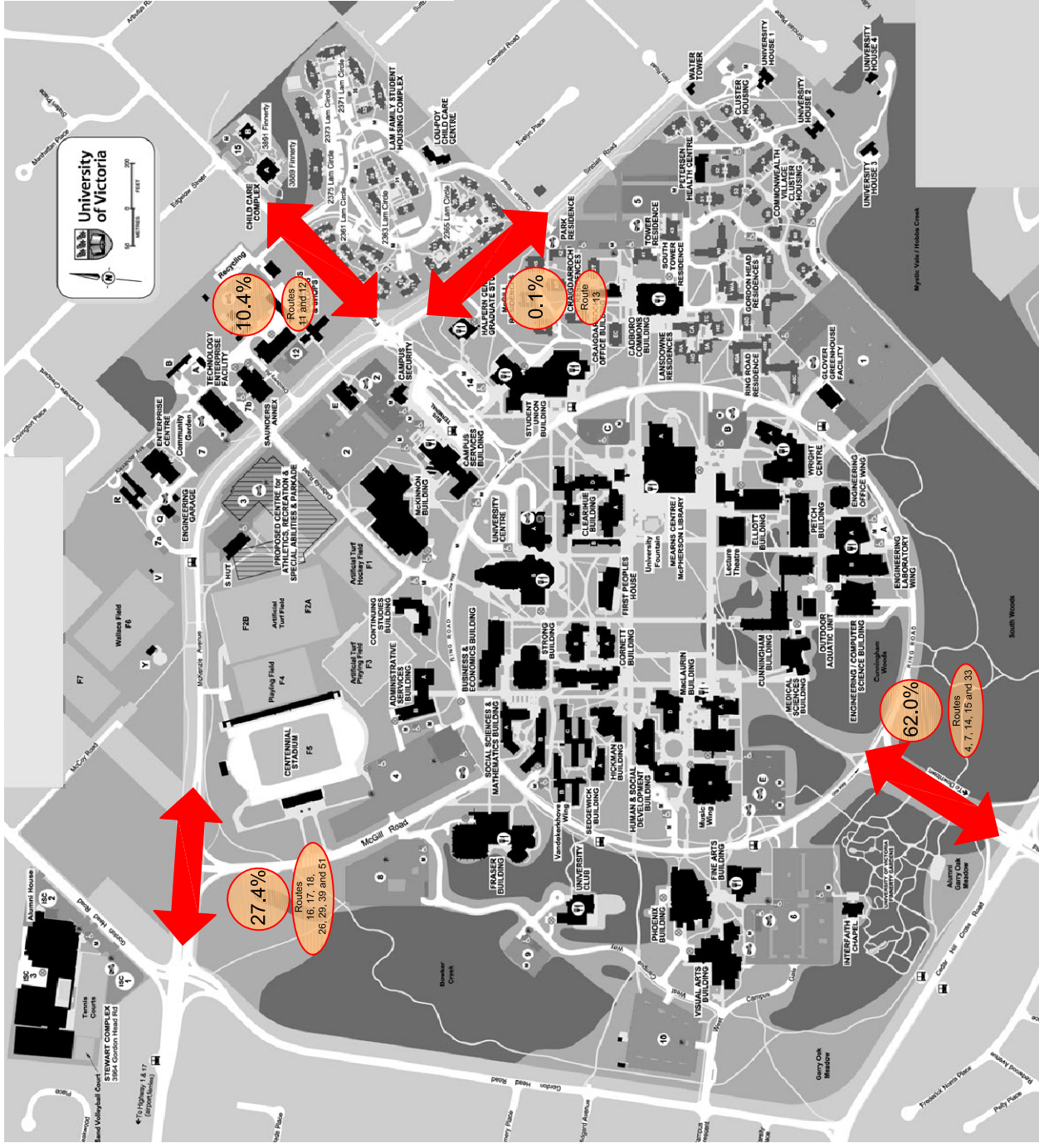


Exhibit 4 Transit Passenger Directional Distribution

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3.4 Cyclists

Using the procedure as described in Section 2.2, the observed peak period cycling trips were expanded into daily inbound and outbound trip profiles. A summary of the total inbound and outbound cycling trips at the University for the 7:00 AM to 10:00 PM period is summarized in **Exhibit 5**.

The most heavily used driveway for cycling trips is University Drive accounting for approximately 26.5%, followed by West Campus gate at 15.5% and the McKenzie Avenue multi-use pathway at 12.6%. These percentages are similar to those observed in 2010, however at that time the McKenzie Avenue pathway was more heavily used than the West Campus Gate. This directional shift in usage could be a result of the cancelled bus trips but this is difficult to predict. It is calculated that during an average Fall weekday approximately 4,675 bicycle trips were made between 7:00 AM and 10:00 PM. This is a decrease of approximately 16% from the 5,558 trips made in 2010, but an increase over the 3,964 bicycle trips calculated in 2008 when the weather conditions were poor.

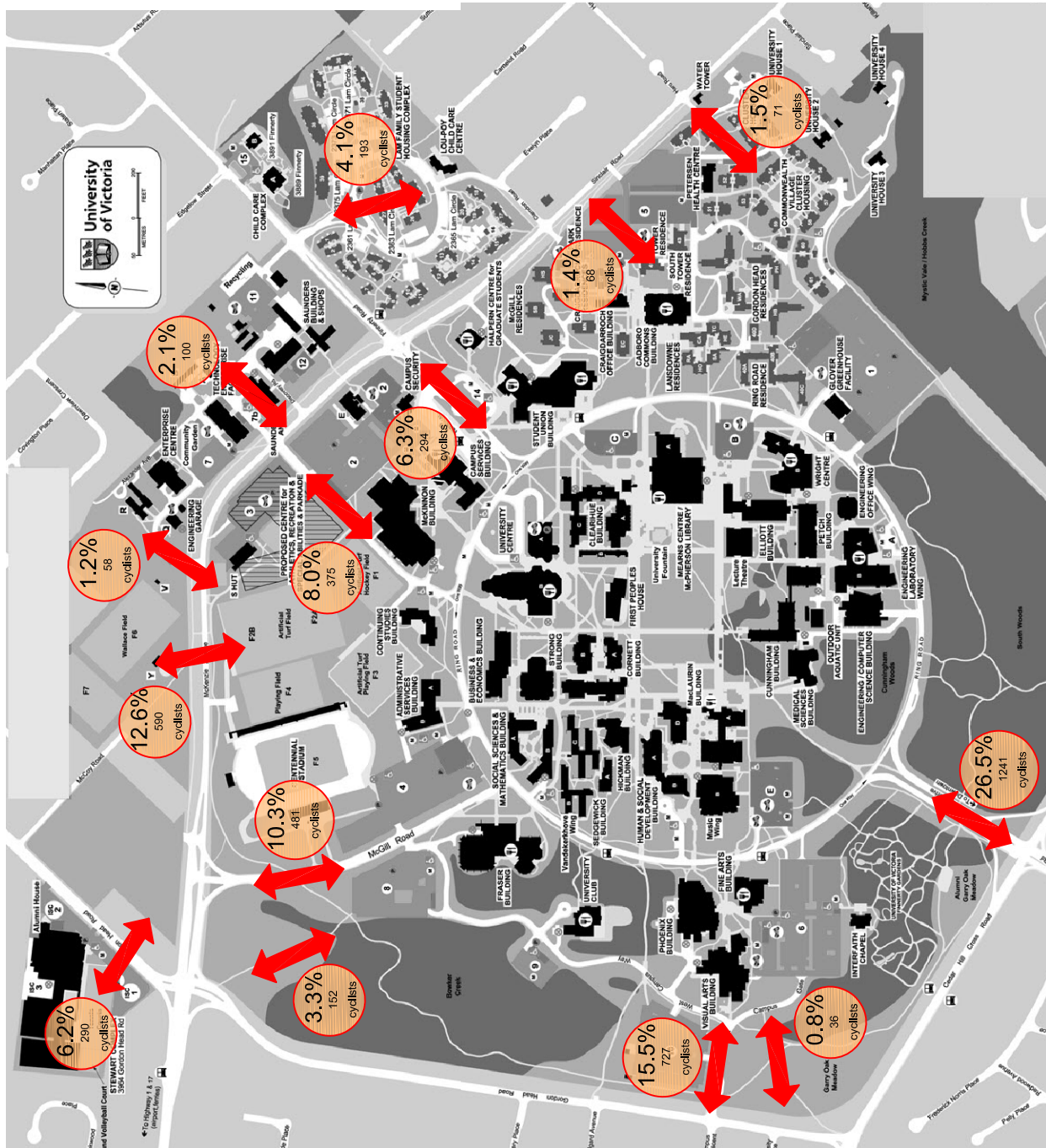
It should be noted that for the 2010 survey, two new manual count stations (M-11 and M-12) along pathways from adjacent roadways to the University accounted for 4.7% of the total daily cycling trips in 2010 and for 4.1% of the total daily cycling trips in 2012. The trips made along these pathways were not counted in previous surveys.

During the 2010 survey, temperatures reached a high of 13-17° C and there was no rain and approximately 5 km/hr winds. During the 2012 survey, a high between 10-11° C was recorded with no rain and approximately 9 km/hr winds. The cooler temperatures and stronger winds experienced during this survey year may have had an effect on commuters choosing cycling as their mode of transportation compared to the better weather conditions in 2010.

The average number of observed bicycle trips was 2,766 or a decrease of 360 bicycle trips over the 3,126 trips recorded in 2010. As discussed previously, these observed trips are factored to forecast the total bicycle trips between 7:00 AM to 10:00 PM of an average Fall weekday.

The 2012 cycling trip total includes 2,457 inbound and 2,217 outbound cycling trips. As with previous years, there is a slight inbound / outbound imbalance that may be due to cyclists still being on campus at 10:00 PM or cyclists using transit or other means for their outbound trip.

The cumulative inbound and outbound cycle trip estimates were used to estimate on-site bicycle accumulation for each hour, as summarized in **Table 6**.



Daily Cyclist Traffic (07:00 - 22:00)
 Inbound: 2,457
 Outbound: 2,217
 Total: 4,674

Note: totals exclude M10

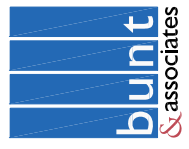


Exhibit 5
Cyclist Access Patterns
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Table 6: On-Site Bicycle Parking Estimate

Hour beginning	Cumulative bicycle arrivals	Cumulative bicycle departures	On-site bicycle accumulation
7:00	102	31	70
8:00	550	118	432
9:00	926	171	756
10:00	1125	233	892
11:00	1337	318	1020
12:00	1564	411	1153
13:00	1747	504	1243
14:00	1866	719	1147
15:00	1980	977	1003
16:00	2105	1343	762
17:00	2202	1629	573
18:00	2311	1814	497
19:00	2382	1948	433
20:00	2423	2068	356
21:00	2458	2217	242

Based on this method, the peak accumulation of bicycles parked at the University is approximately 1243 bicycles between 1:00 PM and 2:00 PM. This is down from 1,460 in 2010 and appears to coincide with the overall decrease in cycling trips to and from the campus. A more accurate estimate of on-campus bicycle accumulation could be achieved through surveys of bike parking facilities throughout the day.

3.5 Pedestrians

Using the same procedure as in the 'Cyclists' section, estimated daily inbound / outbound pedestrian trip profiles were developed for the 7:00 AM to 10:00 PM period and are summarized in **Exhibit 6**. The number of daily pedestrian trips to / from the University is estimated at approximately 8,624 consisting of 4555 inbound and 4070 outbound trips. This represents a 13% decrease over the 9,906 daily trips in 2010.

The highest percentage of pedestrians was recorded at the McKenzie Avenue multi-use pathway with 13.4% followed by the West Campus Gate at 12.7% and the Stewart Complex at 10.7%. As with the cycling results, this represents a shift in the direction by which pedestrians are walking to and from UVic. In 2010, the McKenzie Avenue pathway was more heavily used than the West Campus Gate. This directional shift in usage could also be a result of the cancelled bus trips or less desirable weather conditions but this is difficult to predict.

Daily Pedestrian Traffic (07:00 - 22:00)
 Inbound: 4,555
 Outbound: 4,070
 Total: 8,624

Note: totals exclude M10

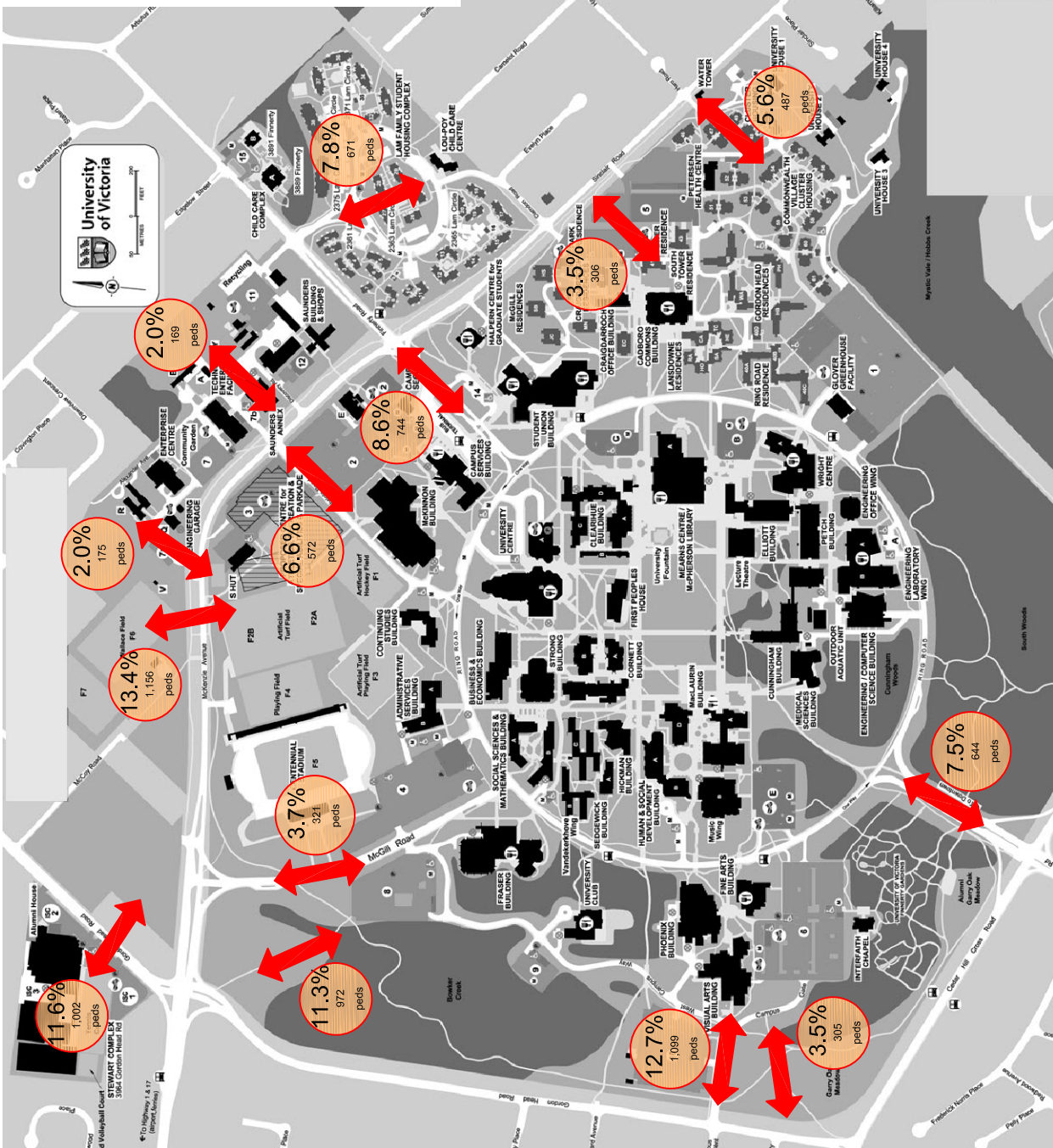
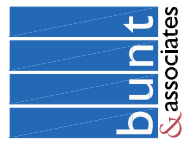


Exhibit 6
Pedestrian Access Patterns
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During the manual count dates on October 24th and 25th, a total of 5,124 pedestrian trips were observed, which is 709 trips less than the 5,833 pedestrian trips observed in 2010. In 2012, during the AM peak hour 630 of these trips were inbound and 187 trips were outbound while during the PM Peak, 360 trips were inbound, and 566 trips were outbound.

3.6 Modal Split Summary

For a typical weekday condition, the estimated daily profiles of inbound and outbound trips to / from the University are summarized in **Table 7** (Inbound) and **Table 8** (Outbound) for all the major modes considered, i.e., vehicles, automobile passengers, transit passengers, cyclists, pedestrian, and rollerblade / skateboards. **Table 9** summarizes the overall mode split for 2012. The corresponding profiles for inbound and outbound trips by all modes are presented in **Exhibits 7** and **8** respectively.

Overall in 2012, there is a forecast decrease of 4.4% in total trips (all modes). A total of 62,251 trips were forecast for 2010, and for 2012 a total of 59,512 trips are calculated to travel to and from the campus from 7:00 AM to 22:00 PM. There were no changes to the survey methodology or approach for the 2012 survey compared to the 2010 survey that would account for the decrease in total trips. However, it should be noted, that based on the information available with respect to the ATC traffic volumes, there are fluctuations in traffic volumes week by week at UVic. For instance, of the three weeks of data collected by this method, the second week was shown to have the lowest traffic volumes over the ATC data collection period, and this week coincided with the collection of manual data. As stated within the report, estimates of the inbound and outbound vehicle trip profiles were developed for the 7:00 AM to 10:00 PM period, and factoring used to estimate cyclist and pedestrian movements and on-site bicycle accumulation outside of the manual count periods, are based on the weekday traffic profiles derived from the ATC data. Had the 'week 3' ATC data collection (the week with the highest traffic volumes and very similar to those reported during the 2010 report) coincided with the week the manual count data was collected, this may have showed different results for mode split, however this is difficult to predict as there was no manual data collected during week 3 to compare.

The reduced number of vehicle trips could also in part be due to less construction traffic during the 2012 survey period. In 2010, there was extensive construction activity on campus at six different building with funding provided under the \$42.5 million Canada – British Columbia Knowledge Infrastructure Program (KIP). The work included seismic upgrades, safety improvements, mechanical upgrades to water and heating systems and electrical improvements. In addition, the construction of the South Tower student residence was completed in December 2010. In the 2012 survey period, construction activity on campus was largely limited to two minor building renovation projects. Another factor potentially affecting total trips could be the variety, number and type of events hosted by UVic over the survey dates, which may have had different attendance levels to those hosted in 2010.

As noted in the earlier sections, there has been a decrease in the total number automobile drivers since 2010 with 24,169 drivers, compared with 23,663 for 2012, however with respect to overall mode splits, the percentage of automobile drivers is 39.8%, which is an increase of 1% over 2010.

The total number of automobile passengers has decreased from 6,202 in 2010 to 5,996 for 2012. However, with respect to the overall mode split, this results in a higher percentage of 10.1% for 2012 as compared to 10.0% for 2010.

The total number of transit passengers has increased with 16,470 in 2012 over 16,192 in 2010, which reflects an increase in overall mode split percentage from 26% in 2010 to 27.7% for 2012.

The active modes of transportation have not shown growth since 2010 when the total number of cyclists was 5,544 (8.9%) and the total number of pedestrians was 9,903 (15.9%). This compares to 4,675 cyclists or 7.9% and 8,624 pedestrians or 14.5% in 2012. Skateboarders and rollerbladers have remained relatively constant based on percentage changes but these numbers are also down from 2010 when there were 241 trips and a 0.4% modes split compared to 84 trips and a 0.1% mod split for 2012.

Another factor that could have affected the active modes of transportation for the 2012 survey is the less desirable weather conditions with cooler temperatures and stronger winds. The weather conditions may also account for the increase in single occupant vehicles, vehicle passengers and transit riders as these modes reduce the exposure to weather elements.

Table 7: Inbound Modal Trip Split by Hour

Hour beginning	Automobile drivers	Automobile passengers	Transit passengers	Cyclists	Pedestrians	Skateboards/rollerbladers	Total
7:00	601	109	492	102	135	0	1,439
8:00	1,805	439	1,239	448	610	2	4,544
9:00	1,316	290	1,275	377	594	2	3,854
10:00	797	180	676	198	286	1	2,138
11:00	855	193	601	213	307	1	2,170
12:00	911	205	663	227	328	1	2,336
13:00	733	164	609	182	262	1	1,953
14:00	802	180	580	120	365	6	2,052
15:00	846	183	609	114	348	8	2,108
16:00	763	178	603	125	329	4	2,001
17:00	834	173	562	97	258	3	1,928
18:00	780	171	564	109	312	5	1,942
19:00	504	111	224	71	202	3	1,116
20:00	294	65	198	41	118	2	718
21:00	250	55	232	35	100	1	674
Total	12,092	2,696	9,129	2,458	4,555	42	30,971
Modal split	39.0%	8.7%	29.5%	7.9%	14.7%	0.1%	100.0%

Table 8: Outbound Modal Trip Split by Hour

Hour beginning	Automobile drivers	Automobile passengers	Transit passengers	Cyclists	Pedestrians	Skateboards/rollerbladers	Total
7:00	222	70	129	31	57	0	510
8:00	668	187	242	87	181	0	1,365
9:00	512	166	201	53	137	1	1,071
10:00	507	153	256	62	136	1	1,114
11:00	699	211	417	85	187	1	1,600
12:00	765	231	491	93	204	1	1,785
13:00	766	231	599	93	204	1	1,894
14:00	1,033	253	859	215	469	5	2,834
15:00	1,173	318	893	258	485	6	3,133
16:00	1,505	413	957	366	547	8	3,797
17:00	1,171	362	897	286	445	5	3,166
18:00	802	221	574	185	320	4	2,105
19:00	585	161	274	135	233	3	1,391
20:00	517	143	297	119	206	3	1,285
21:00	647	178	256	149	258	3	1,492
Total	11,571	3,300	7,341	2,217	4,070	42	28,541
Modal split	40.5%	11.6%	25.7%	7.8%	14.3%	0.1%	100.0%

Table 9: Total 2012 Inbound and Outbound Trips (Overall Mode Split)

Hour beginning	Automobile drivers	Automobile passengers	Transit passengers	Cyclists	Pedestrians	Skateboards/rollerbladers	Total
Total	23,663	5,996	16,470	4,675	8,624	84	59,512
Modal split	39.8%	10.1%	27.7%	7.9%	14.5%	0.1%	100.0%

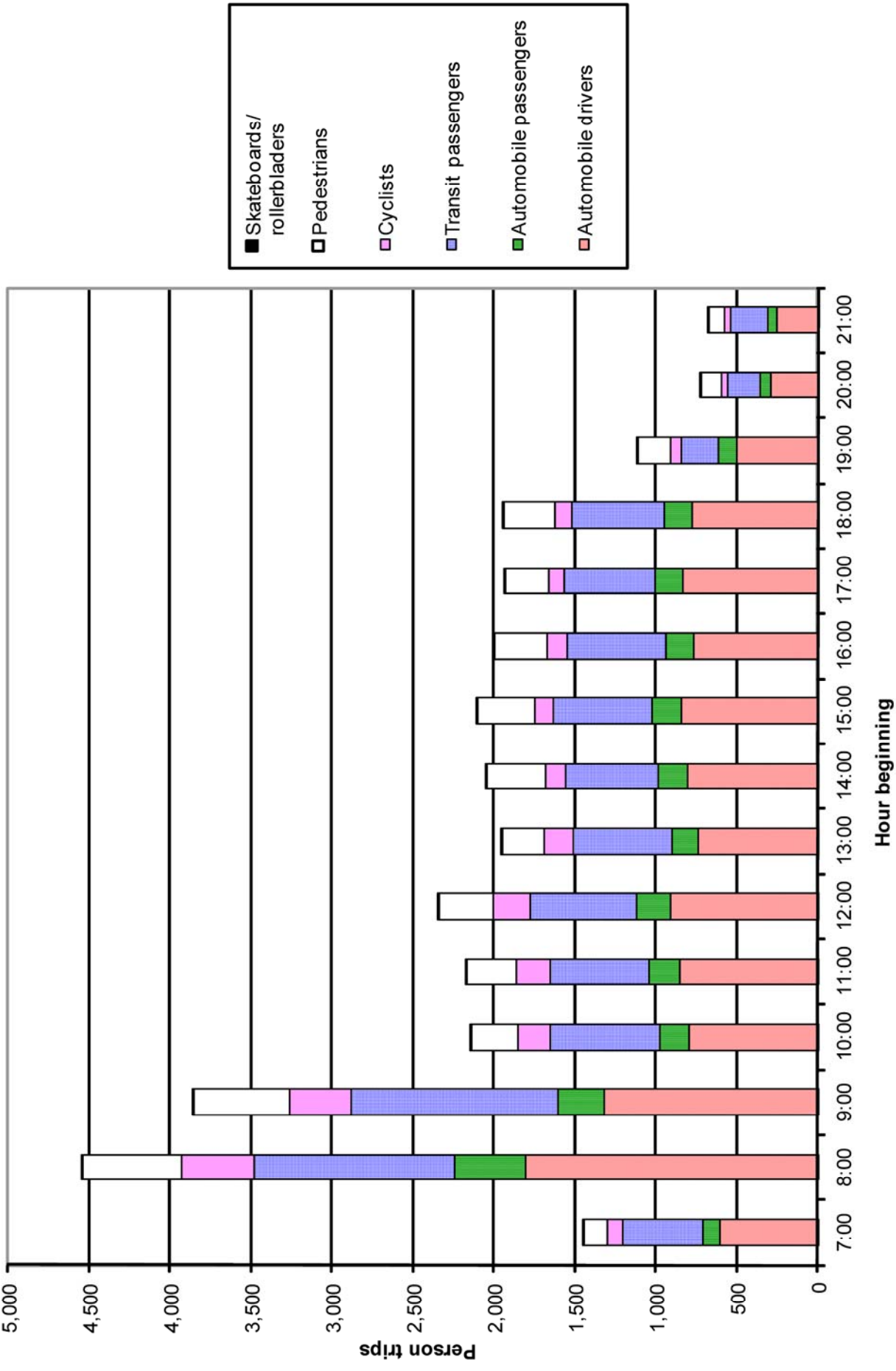
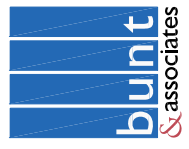


Exhibit 7 Inbound Traffic Profile (all travel modes)



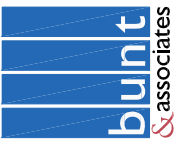
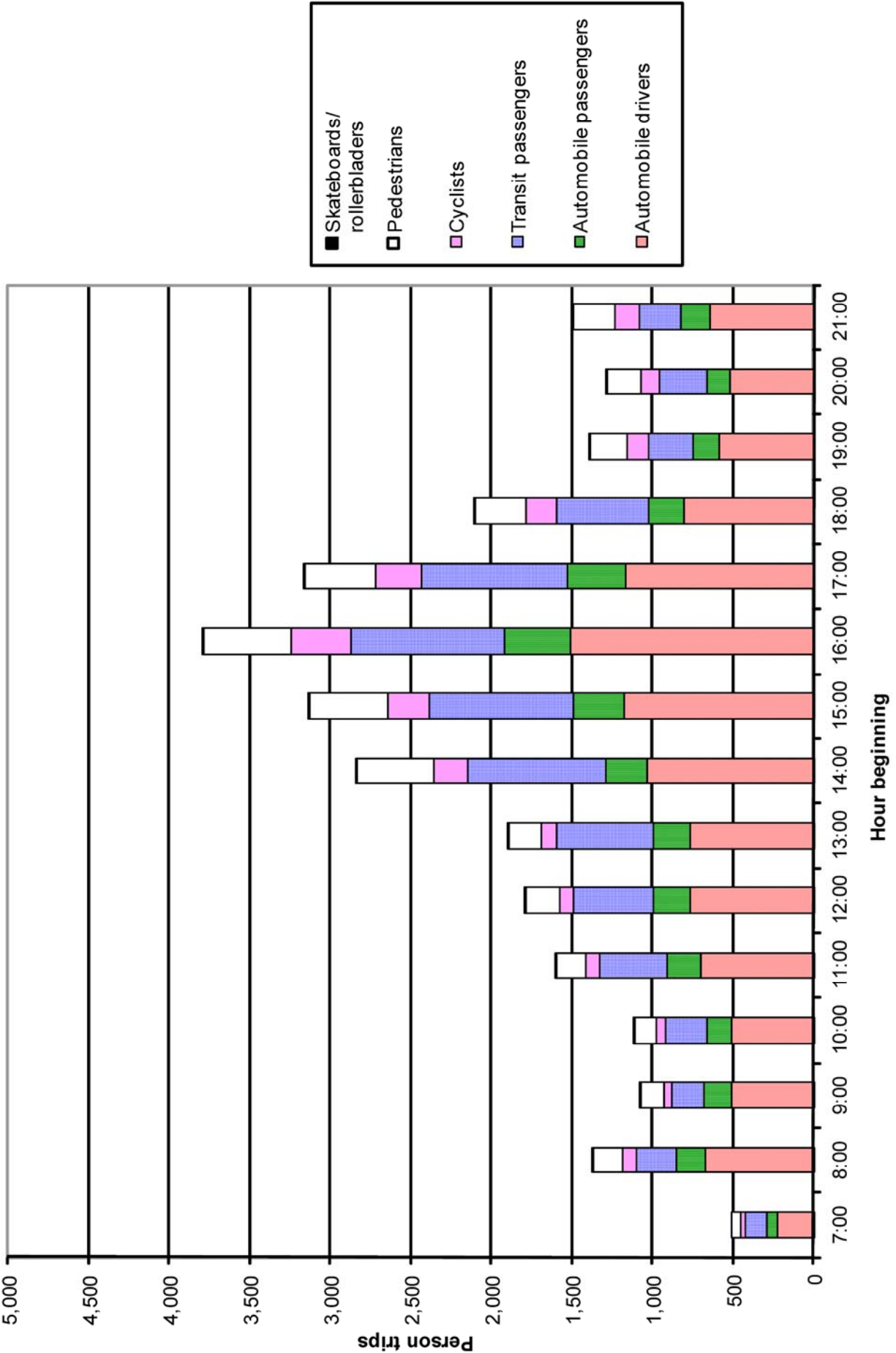


Exhibit 8 Outbound Traffic Profile (all travel modes)

3.7 M-10 Finnerty Road Parking Lot

In 2006, the University of Victoria requested that a new manual count location be set up at the entrance / exit to the Finnerty Road parking lot at the entrance to Facilities Management to determine how this parking lot was being used. As with the 2006, 2008 and 2010 traffic study, this count station's data was not included in the general analysis as it would be inconsistent with the survey methodology of previous years.

During the observed peak hours (07:00 AM – 10:00 AM and 2:00 PM – 6:00 PM) of the 2012 survey, a total of 28 vehicles entered the parking lot and 37 exited. In 2010, 37 vehicles entered the parking lot and 33 exited the lot while in 2008, 44 vehicles entered and 50 vehicles exited and 49 entered and 50 exited in 2006. This decrease in vehicular volumes since 2008, is presumably due to the current procedure to record vehicular movements of non-UVic vehicles only as the intent is to collect traffic volume data related to use of private vehicles.

The peak inbound hour occurred at 8:00 AM - 09:00 AM when 11 vehicles (excluding trucks) entered the parking lot. The peak outbound hour was between 4:00 PM - 5:00 PM when 13 vehicles exited the parking lot (averaged over the two survey days).

As was done with the 2006, 2008 and 2010 studies, field reconnaissance was conducted to determine the utilization of the parking lot available for facilities management staff. Observations confirmed that the lot is typically occupied from 85 – 100% during periods of an average weekday which is consistent with the finds of the previous studies.

The average vehicle occupancy observed at the lot was 1.18 for the inbound vehicles between 7:00 AM – 10:00 AM on October 24th and 25th, 2012. This is comparable to the average vehicle occupancy for the remainder of the campus which is 1.23. This is slightly less than the 1.26 average occupancy observed at his location during the 2010 survey.

3.8 Bikes on Buses

According to information provided by BC Transit, the entire Victoria fleet is bike rack equipped (including the shuttle buses) and each bus is capable of carrying two bikes at a time.

During the 2010 survey, the methodology was expanded to record the number of buses carrying bikes. Of the survey stations on roads University Drive (M-1), Finnerty Road (M-8), McGill Road (M-4), West Campus Gate Road (M-2), and Gabriola Road (M-6) – only the first three have bus routes to and from the campus.

During the 2010 survey, this data was collected manually for the first time. For the 7 hour survey period there was an average of 29 bikes on inbound buses and 14 on outbound buses which is an average of 0.11 per bus inbound and 0.04 per bus outbound respectively. Considering the number of buses accessing the campus, this is quite low utilization of the available bus racks on the buses. BC Transit has

commented that the University bound service routes experience heavy bike rack usage however the data collected to date may not necessarily reflect this.

The disruption to the bus schedules due to job action in combination with the low number of bicycles on buses recorded during the 2010 survey made the collection of this information in 2012 of limited utility and therefore this information was not collected during the 2012 survey. This information was originally collected to address what now appears to have been an anomaly in the bicycle accumulation figures in the 2008 survey which has not reoccurred in either the 2010 or 2012 surveys.

If it is decided that this information should be collected for the next campus survey (presumably in 2014), consideration could be given to providing one additional counter at the bus terminal, who would be dedicated to tracking transit and bikes on racks to ensure accurate data collection and to validate the data collected in 2010.

4. MODAL SPLIT COMPARISON

A comparison of modal split results between 1996 and 2012 is shown in Table 10 and visually in **Exhibit 9**. Most of the changes were minor and for the most part, the modal split has stabilized over the last two surveys.

Table 10: Modal Split Comparison with Previous Years

Travel Mode	1996 Survey	2000 Survey	2004 Survey	2006 Survey	2008 Survey	2010 Survey	2012 Survey
Auto Drivers	57.5%	54.4%	47.1%	44.1%	37.5%	38.8%	39.8%
Auto Passengers	15.6%	11.0%	11.8%	11.9%	12.8%	10.0%	10.1%
Transit Passengers	11.3%	17.8%	26.2%	27.4%	31.0%	26.0%	27.7%
Cyclists	6.9%	5.5%	6.0%	5.3%	7.1%	8.9%	7.9%
Pedestrians	8.7%	11.3%	8.7%	11.2%	11.2%	15.9%	14.5%
Skateboards/ rollerbladers	0.0%	0.0%	0.2%	0.1%	0.3%	0.4%	0.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

As previously discussed, overall in 2012 there is a forecast decrease of 4.4% in total trips (all modes). A total of 62,251 trips were forecast for 2010, and for 2012 a total of 59,512 trips are calculated to travel to and from the campus from 7:00 AM to 22:00 PM. The reduced trips could in part be due to less construction traffic during the 2012 survey period. In 2010, multiple buildings were under construction including the South Tower Student Residence, which opened in January 2011. Another factor affecting total trips could be the variety, number and type of events hosted by UVic over the survey dates, which may have had different attendance levels compared to those hosted in 2010.

As noted in the earlier sections, there has actually been a decrease in the total number automobile drivers since 2010 with 24,169 drivers, compared with 23,663 for 2012, however with respect to overall mode splits, the percentage of auto drivers is at 39.8%, an increase of 1% from 2010.

The total number of automobile passengers has decreased from 6,202 in 2010 to 5,996 for 2012. However, with respect to the overall mode split, this results in a higher percentage of 10.1% for 2012 as compared to 10.0% for 2010.

The total number of transit passengers has increased with 16,470 in 2012 over 16,192 in 2010, which reflects an increase in overall mode split percentage from 26% in 2010 to 27.7% for 2012. This reflects an increase in this mode share despite the bus trip cancellations as a result of BC Transit bus driver job action.

The active modes of transportation have not shown growth since 2010. The total number of cyclists in 2010 was 5,544 (8.9%) and the total number of pedestrians was 9,903 (15.9%). This compares to 4,675 cyclists or 7.9% and 8,624 pedestrians or 14.5% in 2012.

Skateboarder and rollerblader figures have remained relatively constant between based on percentage changes but these numbers are also down from 2010 when there were 241 trips and a 0.4% modes split compared to 84 trips and a 0.1% mod split for 2012.

The increase in the percentages of mode split results for single occupant vehicles automobile passengers may be a result of cancelled bus trips. Those who intended on taking the bus may have experienced a cancelled bus trip and chose to take a vehicle rather than wait for the next bus. These cancellations were posted on the BC Transit website and transit riders were encouraged to check for cancellations, however if the decision to take a vehicle was not planned ahead of time, there would be little opportunity to offer a ride to others. However the percentage of automobile passengers has increased by 0.1% over the result for 2010.

As previously discussed within the report, a factor that could also have affected the active modes of transportation for the 2012 survey is the less desirable weather conditions with cooler temperatures and stronger winds. The weather conditions may also account for the increase in single occupant vehicles, vehicle passengers and transit riders as these modes reduce the exposure to weather elements.

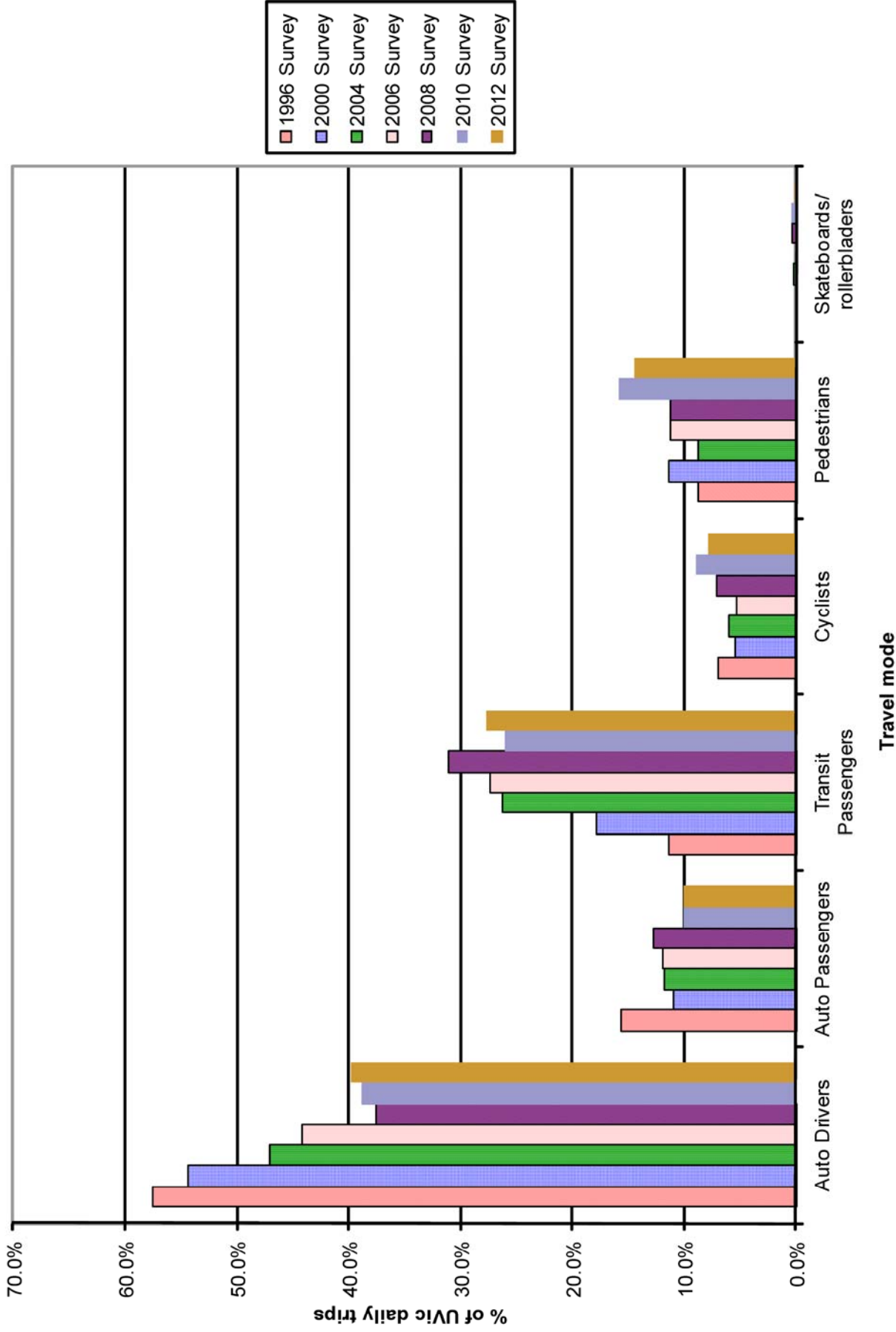


Exhibit 9 1996 / 2000 / 2004 / 2006 / 2008 / 2010 / 2012 Travel Mode Split Summary

5. SUMMARY

As with the previous traffic audits conducted for UVic, the findings documented in this report will help gauge the impact of the campus' Transportation Demand Management (TDM) Strategy. It was noted in the 2008 that overall modal splits at the UVic campus had changed dramatically since 1992 and there were significant changes in 2004 when large reductions in vehicular use was observed as well as a large increases transit ridership. In 2008 trips by cyclists started to show an increase for this mode of transportation. In 2010, pedestrians were, for the first time, in the top three with respect to highest mode split percentages. There were more positive signs in 2010 with regard to TDM programs as the combined percentages of transit, pedestrian, bicycle and skateboards and rollerbladers increased to over 50% of the trips made to UVic. The total of automobile related trips was 48.8%, the first time that these trips have accounted for less than 50% of the trips to and from the UVic campus. This positive change has continued to be the trend for 2012 despite the BC Transit bus driver job action, which resulted in cancelled bus trips throughout the region including trips to and from UVic. The analysis of the 2012 Campus Survey showed the following trends since 2010:

- While single occupant vehicles are still below 40% of all trips, a threshold noted in the 2008 report, in 2012 they increased slightly to 39.8% from the low of 2008 at 37.5%. However, there has been a decrease of almost 18% from the 1996 study;
- Automatic tube counts reveal that over a 24-hour period, vehicular traffic volumes at the combined five stations (Gabriola, University Drive, West Campus Gate, McGill and Finnerty) showed an overall average weekday decrease of approximately 4% since 2010. However with respect to overall mode splits, the percentage of automobile drivers is 1.0% higher than in 2010.
- Transit ridership increased by 1.7% from 2010 levels in spite of the cancelled bus trips as a result of BC Transit bus driver job action. When compared to earlier transit ridership figures, the 2012 totals are comparable to those reported for the 2004, 2006 and 2010 studies;
- There was a decrease in pedestrian trips reported as they represented 14.5% of all trips, down from the 15.9% reported for 2010. This may be due to the better weather experienced in 2010;
- Cycling trips also had a decrease, perhaps for similar reasons as the pedestrian trips, accounting for 7.9% of all trips in 2012, a decrease of 1% from 8.9% reported in 2010.

While the methodology has remained consistent over the past surveys to ensure that results could be compared, the campus landscape continues to change by the construction activities. This means that the ATC and manual survey stations may be recording internal trips between various facilities on campus. The addition of the new M-11 manual survey station on the path between the campus and the Gordon Head Road / McKenzie Avenue intersection means that trips to and from the Ian Stewart complex could

also be recorded as trips to and from the main campus via this path. This potential double counting of trips could skew results. Whether the cordon line around the campus should be expanded or whether some of these facilities should be monitored as discrete activity nodes should be discussed to provide direction for future studies in the context of maintaining the relevance of the historical data base from 1992 to the present 2012 survey results.

If required for future surveys, the method by which the bikes on busses are to be counted should be reviewed to determine the best way in which these counts should be conducted. With many modes of transportation to track, bikes on busses would be easily missed as once the bus travels past the screenline, the bike racks are no longer visible. Perhaps rather than have counters track bikes on busses, a single counter could be assigned to the bus terminal and bikes on bus rack counts could be conducted from only this station.

Consideration could also be given to incorporating the skateboarder / rollerblader category into the pedestrian group for future surveys given the limited numbers.

Additionally, the M-10 Finnerty Road Parking Lot section should be reviewed as to whether this data is still relevant information for the University as little has changed at this location over the last 3 surveys.

6. CONCLUSIONS

The results from the 2012 survey document the continued positive gains resulting from UVic's TDM program with decreases in total automobile-related trips and increased to non-automobile modes. Most of the changes with respect to modal split were minor and for the most part, the modal split has stabilized over the last two surveys.

As stated earlier in the report, overall in 2012, there is a forecast decrease of in total trips (all modes). There were no changes to the survey methodology or approach for the 2012 survey compared to the 2010 survey that would account for the decrease in total trips. However, there are fluctuations in traffic volumes week by week at UVic. For instance, of the three weeks of ATC data collected, the manual survey week coincided with the week that was shown to have the lowest traffic volumes. Estimates of the inbound and outbound vehicle trip profiles were developed for the 7:00 AM to 10:00 PM period, and factoring used to estimate cyclist and pedestrian movements and on-site bicycle accumulation outside of the manual count periods, are based on the weekday traffic profiles derived from the ATC data. Had the week with the highest traffic volumes (with volumes very similar to those reported during the 2010 report) coincided with the week the manual count data was collected, this may have showed different results for mode split.

Other factors to consider regarding the reduced number of vehicle trips could also in part be due to less construction traffic during the 2012 survey period and / or the variety, number and type of events hosted by UVic over the survey dates, which may have had different attendance levels to those hosted in 2010.

It should also be noted that during the 2012 survey period, a factor which would influence overall results is the cancelled bus trips as a result of the BC Transit bus driver job action. During the two manual survey dates (October 24th and 25th) a total of 41 bus trips were cancelled at various times throughout the day on routes serving UVic. These 41 cancelled bus trips do not include any other routes that may connect with those routes serving UVic. In total over these two manual survey days, 78 bus trips were cancelled throughout the region.

The increase in the percentages of mode split results for single occupant vehicles may be a result of cancelled bus trips. Those who intended on taking the bus may have experienced a cancelled bus trip and chose to take a vehicle rather than wait for the next bus. These cancellations were posted on the BC Transit website and transit riders were encouraged to check for cancellations, however If the decision to take a vehicle was not planned ahead of time, there would be little opportunity to offer a ride to others. However the percentage of automobile passengers has increased by 0.1% over the result for 2010.

With the uncertainty and potential of not being able to get to and from UVic as a result of cancelled bus trips, some potential transit riders may have chosen to stay home to study and / or found an alternate method of commuting, and therefore in all likelihood the transit ridership would likely have been higher had the job action resulting in cancelled bus trips not occurred.

The bus trips that were cancelled may also have affected the modal split results as well as the travel patterns and routes of cyclists and pedestrians. Some cyclists and pedestrians combine this mode of transportation with transit. Due to cancelled trips on some routes, another bus route or alternate mode of transportation, including a single occupant vehicle, may have been chosen to get to and from UVic.

As previously discussed in the report, a factor that could also have affected the active modes of transportation for the 2012 survey is the less desirable weather conditions with cooler temperatures and stronger winds. The weather conditions may also account for the increase in single occupant vehicles, vehicle passengers and transit riders as these modes reduce the exposure to weather elements.

With this comprehensive traffic survey, the results observed or forecast for 2012, similar to those in 2010, are an improvement over past survey results and do indicate a positive trend consistent with TDM goals and objectives.

APPENDIX A

Automatic Traffic Count Data
TransTech Data Services

FINNERTY ROAD (south of McKenzie Avenue / Sinclair Road)

ENTERING - SOUTHBOUND (from McKenzie Avenue / Sinclair Road)

Time Period	Monday 22-Oct-12	Tuesday 23-Oct-12	Wednesday 24-Oct-12	Thursday 25-Oct-12	Friday 26-Oct-12	Saturday 27-Oct-12	Sunday 28-Oct-12	Week Total	Week Average	Weekday Total	Weekday Average
0 - 1	4	4	3	2	18	17	23	71	10	31	6
1 - 2	1	1	2	0	5	20	11	40	6	9	2
2 - 3	0	3	1	2	5	12	8	31	4	11	2
3 - 4	1	3	1	2	4	4	16	31	4	11	2
4 - 5	2	1	1	3	2	4	4	17	2	9	2
5 - 6	6	9	12	7	8	4	4	50	7	42	8
6 - 7	41	26	35	26	31	5	6	170	24	159	32
7 - 8	65	73	81	64	68	12	15	378	54	351	70
8 - 9	207	192	208	216	193	36	19	1,071	153	1,016	203
9 - 10	124	122	140	122	133	55	33	729	104	641	128
10 - 11	80	93	106	89	107	63	68	606	87	475	95
11 - 12	122	102	98	107	131	67	50	677	97	560	112
12 - 13	123	112	126	127	112	68	62	730	104	600	120
13 - 14	96	101	120	101	141	57	65	681	97	559	112
14 - 15	120	132	120	142	132	73	90	809	116	646	129
15 - 16	144	140	159	158	130	62	70	863	123	731	146
16 - 17	124	121	142	124	124	85	65	785	112	635	127
17 - 18	97	100	119	103	107	46	50	622	89	526	105
18 - 19	67	110	87	83	82	58	49	536	77	429	86
19 - 20	56	49	94	56	67	36	25	383	55	322	64
20 - 21	45	44	41	39	52	39	32	292	42	221	44
21 - 22	32	34	41	36	49	34	18	244	35	192	38
22 - 23	18	13	24	30	34	26	17	162	23	119	24
23 - 24	12	10	13	21	33	25	11	125	18	89	18
24 hr total	1587	1595	1774	1660	1768	908	811	10,103	1,443	8,384	1,677
7:00 - 19:00 total	1369	1188	1300	1250	1271	578	537	7,493	1,070	6,378	1,276
7:00 - 22:00 total	1502	1525	1682	1567	1628	791	711	9,406	1,344	7,904	1,581

Average Weekday Peak Hour:

8:00 - 9:00

FINNERTY ROAD (south of McKenzie Avenue / Sinclair Road)

EXITING - NORTHBOUND (towards McKenzie Avenue / Sinclair Road)

Time Period	Monday 22-Oct-12	Tuesday 23-Oct-12	Wednesday 24-Oct-12	Thursday 25-Oct-12	Friday 26-Oct-12	Saturday 27-Oct-12	Sunday 28-Oct-12	Week Total	Week Average	Weekday Total	Weekday Average
0 - 1	10	15	17	21	29	48	36	176	25	92	18
1 - 2	8	10	4	8	21	42	40	133	19	51	10
2 - 3	2	5	0	5	5	21	15	53	8	17	3
3 - 4	0	3	3	4	4	11	15	40	6	14	3
4 - 5	6	4	2	3	5	3	5	28	4	20	4
5 - 6	4	5	9	5	14	6	5	48	7	37	7
6 - 7	14	14	28	20	15	7	7	105	15	91	18
7 - 8	84	84	91	76	77	11	8	431	62	412	82
8 - 9	211	183	182	191	171	26	24	988	141	938	188
9 - 10	156	167	154	156	161	51	33	878	125	794	159
10 - 11	115	151	136	113	166	80	68	829	118	681	136
11 - 12	168	147	153	172	202	94	87	1,023	146	842	168
12 - 13	159	184	169	176	194	115	97	1,094	156	882	176
13 - 14	173	190	160	177	213	127	87	1,127	161	913	183
14 - 15	223	234	211	227	251	114	150	1,410	201	1,146	229
15 - 16	251	214	289	251	253	135	100	1,493	213	1,258	252
16 - 17	283	274	286	261	269	137	127	1,637	234	1,373	275
17 - 18	221	239	250	255	216	107	109	1,397	200	1,181	236
18 - 19	142	188	166	194	163	97	114	1,064	152	853	171
19 - 20	111	117	132	77	84	73	87	681	97	521	104
20 - 21	105	84	102	105	77	78	69	620	89	473	95
21 - 22	87	91	108	104	75	56	50	571	82	465	93
22 - 23	60	56	71	65	71	48	57	428	61	323	65
23 - 24	35	30	37	50	52	34	34	272	39	204	41
24 hr total	2628	2689	2760	2716	2788	1521	1424	16,526	2,361	13,581	2,716
7:00 - 19:00 total	2186	1828	1831	1800	1957	890	781	11,273	1,610	9,602	1,920
7:00 - 22:00 total	2489	2547	2589	2535	2572	1301	1210	15,243	2,178	12,732	2,546

Average Weekday Peak Hour: **16:00 - 17:00**

GABRIOLA ROAD (south of McKenzie Avenue)

ENTERING - SOUTHBOUND (from McKenzie Avenue)

Time Period	Monday 22-Oct-12	Tuesday 23-Oct-12	Wednesday 24-Oct-12	Thursday 25-Oct-12	Friday 26-Oct-12	Saturday 27-Oct-12	Sunday 28-Oct-12	Week Total	Week Average	Weekday Total	Weekday Average
0 - 1	2	0	1	5	1	0	5	14	2	9	2
1 - 2	2	2	2	2	0	1	2	11	2	8	2
2 - 3	1	2	3	4	2	0	2	14	2	12	2
3 - 4	2	0	2	0	1	0	0	5	1	5	1
4 - 5	1	3	2	3	1	1	2	13	2	10	2
5 - 6	3	6	10	6	7	1	3	36	5	32	6
6 - 7	19	24	21	22	23	4	4	117	17	109	22
7 - 8	70	128	79	125	58	17	2	479	68	460	92
8 - 9	228	226	216	225	175	59	33	1,162	166	1,070	214
9 - 10	155	137	176	167	151	100	57	943	135	786	157
10 - 11	69	148	137	86	92	77	61	670	96	532	106
11 - 12	111	110	113	130	100	73	63	700	100	564	113
12 - 13	108	115	115	116	72	55	71	652	93	526	105
13 - 14	79	95	107	68	111	56	65	581	83	460	92
14 - 15	86	86	110	103	82	54	120	641	92	467	93
15 - 16	100	57	122	88	74	81	92	614	88	441	88
16 - 17	102	78	102	80	75	58	63	558	80	437	87
17 - 18	79	94	108	89	117	30	41	558	80	487	97
18 - 19	126	146	145	119	49	32	98	715	102	585	117
19 - 20	57	103	76	67	65	25	36	429	61	368	74
20 - 21	57	73	43	25	14	16	20	248	35	212	42
21 - 22	26	30	30	28	12	10	4	140	20	126	25
22 - 23	8	11	10	4	16	6	2	57	8	49	10
23 - 24	6	6	4	3	0	4	2	25	4	19	4
24 hr total	1497	1680	1734	1565	1298	760	848	9,382	1,340	7,774	1,555
7:00 - 19:00 total	1313	1180	1277	1188	990	630	627	7,205	1,029	5,948	1,190
7:00 - 22:00 total	1453	1626	1679	1516	1247	743	826	9,090	1,299	7,521	1,504

Average Weekday Peak Hour:

8:00 - 9:00

GABRIOLA ROAD (south of McKenzie Avenue)

EXITING - NORTHBOUND (towards McKenzie Avenue)

Time Period	Monday 22-Oct-12	Tuesday 23-Oct-12	Wednesday 24-Oct-12	Thursday 25-Oct-12	Friday 26-Oct-12	Saturday 27-Oct-12	Sunday 28-Oct-12	Week Total	Week Average	Weekday Total	Weekday Average
0 - 1	1	3	3	10	4	7	8	36	5	21	4
1 - 2	2	5	2	5	4	22	4	44	6	18	4
2 - 3	0	0	3	2	3	2	2	12	2	8	2
3 - 4	3	1	1	1	1	0	3	10	1	7	1
4 - 5	0	0	4	6	0	2	1	13	2	10	2
5 - 6	3	2	3	6	5	2	1	22	3	19	4
6 - 7	15	15	23	15	19	8	5	100	14	87	17
7 - 8	21	26	16	46	26	19	2	156	22	135	27
8 - 9	53	58	39	71	58	25	18	322	46	279	56
9 - 10	69	136	66	80	76	71	36	534	76	427	85
10 - 11	85	84	92	63	88	56	67	535	76	412	82
11 - 12	100	117	110	106	103	100	42	678	97	536	107
12 - 13	78	145	126	82	132	62	85	710	101	563	113
13 - 14	102	136	111	106	132	57	58	702	100	587	117
14 - 15	157	168	144	162	159	68	62	920	131	790	158
15 - 16	175	134	150	152	111	80	100	902	129	722	144
16 - 17	198	194	209	178	157	84	122	1,142	163	936	187
17 - 18	157	143	167	153	135	55	86	896	128	755	151
18 - 19	77	136	113	100	97	57	81	661	94	523	105
19 - 20	76	101	117	103	114	12	46	569	81	511	102
20 - 21	75	105	96	95	51	42	75	539	77	422	84
21 - 22	124	115	84	86	31	11	19	470	67	440	88
22 - 23	60	57	57	50	50	9	9	292	42	274	55
23 - 24	15	44	20	7	10	10	4	110	16	96	19
24 hr total	1646	1925	1756	1685	1566	861	936	10,375	1,482	8,578	1,716
7:00 - 19:00 total	1272	1198	1063	1046	1042	622	592	6,835	976	5,621	1,124
7:00 - 22:00 total	1547	1798	1640	1583	1470	799	899	9,736	1,391	8,038	1,608

Average Weekday Peak Hour: **16:00 - 17:00**

McGILL ROAD (south of McKenzie Avenue)

ENTERING - SOUTHBOUND (from McKenzie Avenue)

Time Period	Monday 22-Oct-12	Tuesday 23-Oct-12	Wednesday 24-Oct-12	Thursday 25-Oct-12	Friday 26-Oct-12	Saturday 27-Oct-12	Sunday 28-Oct-12	Week Total	Week Average	Weekday Total	Weekday Average
0 - 1	3	4	4	5	10	10	19	55	8	26	5
1 - 2	3	3	7	2	6	8	13	42	6	21	4
2 - 3	3	0	0	2	5	9	4	23	3	10	2
3 - 4	1	2	2	1	1	2	7	16	2	7	1
4 - 5	14	13	13	14	13	4	7	78	11	67	13
5 - 6	2	2	3	7	2	1	2	19	3	16	3
6 - 7	15	16	18	15	13	0	4	81	12	77	15
7 - 8	125	118	115	131	108	6	3	606	87	597	119
8 - 9	530	502	464	547	454	53	31	2,581	369	2,497	499
9 - 10	411	449	445	421	398	85	69	2,278	325	2,124	425
10 - 11	160	262	254	176	244	77	97	1,270	181	1,096	219
11 - 12	235	214	207	241	279	88	75	1,339	191	1,176	235
12 - 13	215	235	220	252	229	103	82	1,336	191	1,151	230
13 - 14	166	189	187	150	220	106	100	1,118	160	912	182
14 - 15	187	164	199	210	204	96	109	1,169	167	964	193
15 - 16	186	165	188	174	116	120	89	1,038	148	829	166
16 - 17	189	196	188	181	147	107	85	1,093	156	901	180
17 - 18	184	163	175	198	108	87	81	996	142	828	166
18 - 19	216	198	187	208	94	81	68	1,052	150	903	181
19 - 20	104	100	165	72	102	67	60	670	96	543	109
20 - 21	61	63	83	68	43	41	42	401	57	318	64
21 - 22	37	42	58	62	39	27	37	302	43	238	48
22 - 23	20	18	25	31	25	21	16	156	22	119	24
23 - 24	12	13	7	22	20	26	12	112	16	74	15
24 hr total	3079	3131	3214	3190	2880	1225	1112	17,831	2,547	15,494	3,099
7:00 - 19:00 total	2804	2494	2467	2483	2399	841	740	14,228	2,033	12,647	2,529
7:00 - 22:00 total	3006	3060	3135	3091	2785	1144	1028	17,249	2,464	15,077	3,015

Average Weekday Peak Hour:

8:00 - 9:00

McGILL ROAD (south of McKenzie Avenue)

EXITING - NORTHBOUND (towards McKenzie Avenue)

Time Period	Monday 22-Oct-12	Tuesday 23-Oct-12	Wednesday 24-Oct-12	Thursday 25-Oct-12	Friday 26-Oct-12	Saturday 27-Oct-12	Sunday 28-Oct-12	Week Total	Week Average	Weekday Total	Weekday Average
0 - 1	11	8	10	7	12	6	8	62	9	48	10
1 - 2	6	1	4	2	17	10	15	55	8	30	6
2 - 3	2	5	0	8	16	7	9	47	7	31	6
3 - 4	0	1	5	0	2	3	5	16	2	8	2
4 - 5	3	3	2	3	1	0	1	13	2	12	2
5 - 6	0	1	4	0	2	1	2	10	1	7	1
6 - 7	5	8	8	5	1	1	0	28	4	27	5
7 - 8	27	24	31	19	23	0	1	125	18	124	25
8 - 9	112	98	112	130	85	11	3	551	79	537	107
9 - 10	94	116	116	101	101	53	27	608	87	528	106
10 - 11	80	109	137	85	136	27	40	614	88	547	109
11 - 12	141	134	126	171	170	51	44	837	120	742	148
12 - 13	120	154	152	152	169	29	31	807	115	747	149
13 - 14	123	201	168	152	194	54	38	930	133	838	168
14 - 15	219	194	161	220	241	48	43	1,126	161	1,035	207
15 - 16	210	177	204	197	147	74	67	1,076	154	935	187
16 - 17	267	300	301	280	227	72	56	1,503	215	1,375	275
17 - 18	200	209	179	247	162	61	66	1,124	161	997	199
18 - 19	164	143	166	153	90	62	53	831	119	716	143
19 - 20	119	94	129	105	72	74	42	635	91	519	104
20 - 21	144	93	127	80	48	32	44	568	81	492	98
21 - 22	124	113	114	145	104	76	34	710	101	600	120
22 - 23	42	49	70	48	33	17	23	282	40	242	48
23 - 24	27	23	31	37	14	14	25	171	24	132	26
24 hr total	2240	2258	2357	2347	2067	783	677	12,729	1,818	11,269	2,254
7:00 - 19:00 total	1757	1507	1508	1507	1493	419	350	8,541	1,220	7,772	1,554
7:00 - 22:00 total	2144	2159	2223	2237	1969	724	589	12,045	1,721	10,732	2,146

Average Weekday Peak Hour:

16:00 - 17:00

UNIVERSITY DRIVE (north of Cedar Hill Cross Road)

ENTERING - NORTHBOUND (from Cedar Hill Cross Road)

Time Period	Monday 22-Oct-12	Tuesday 23-Oct-12	Wednesday 24-Oct-12	Thursday 25-Oct-12	Friday 26-Oct-12	Saturday 27-Oct-12	Sunday 28-Oct-12	Week Total	Week Average	Weekday Total	Weekday Average
0 - 1	10	21	12	15	29	44	33	164	23	87	17
1 - 2	9	7	4	9	22	29	30	110	16	51	10
2 - 3	1	3	1	6	6	18	16	51	7	17	3
3 - 4	1	1	1	3	3	5	14	28	4	9	2
4 - 5	1	2	0	2	3	5	7	20	3	8	2
5 - 6	8	6	11	13	10	5	3	56	8	48	10
6 - 7	31	31	40	37	28	11	7	185	26	167	33
7 - 8	162	165	158	157	132	18	13	805	115	774	155
8 - 9	549	530	531	516	467	122	35	2,750	393	2,593	519
9 - 10	410	390	378	424	428	184	80	2,294	328	2,030	406
10 - 11	203	308	283	208	312	121	128	1,563	223	1,314	263
11 - 12	241	235	225	260	292	139	134	1,526	218	1,253	251
12 - 13	292	264	252	277	251	165	173	1,674	239	1,336	267
13 - 14	220	255	257	221	278	163	158	1,552	222	1,231	246
14 - 15	260	245	246	253	252	127	203	1,586	227	1,256	251
15 - 16	269	226	283	256	223	172	138	1,567	224	1,257	251
16 - 17	319	288	287	283	238	132	134	1,681	240	1,415	283
17 - 18	251	271	292	264	217	110	141	1,546	221	1,295	259
18 - 19	265	285	244	279	163	106	141	1,483	212	1,236	247
19 - 20	146	166	211	130	129	72	84	938	134	782	156
20 - 21	118	95	108	116	74	67	52	630	90	511	102
21 - 22	87	99	85	100	68	55	48	542	77	439	88
22 - 23	45	53	52	60	74	44	34	362	52	284	57
23 - 24	25	18	34	34	57	30	28	226	32	168	34
24 hr total	3923	3964	3995	3923	3756	1944	1834	23,339	3,334	19,561	3,912
7:00 - 19:00 total	3441	2906	2900	2855	2873	1343	1196	17,514	2,502	14,975	2,995
7:00 - 22:00 total	3792	3822	3840	3744	3524	1753	1662	22,137	3,162	18,722	3,744

Average Weekday Peak Hour:

8:00 - 9:00

UNIVERSITY DRIVE (north of Cedar Hill Cross Road)

EXITING - SOUTHBOUND (towards Cedar Hill Cross Road)

Time Period	Monday 22-Oct-12	Tuesday 23-Oct-12	Wednesday 24-Oct-12	Thursday 25-Oct-12	Friday 26-Oct-12	Saturday 27-Oct-12	Sunday 28-Oct-12	Week Total	Week Average	Weekday Total	Weekday Average
0 - 1	13	17	22	32	45	31	44	204	29	129	26
1 - 2	7	11	11	8	22	41	34	134	19	59	12
2 - 3	7	4	5	8	9	18	14	65	9	33	7
3 - 4	2	2	1	1	7	5	18	36	5	13	3
4 - 5	2	2	3	2	3	4	7	23	3	12	2
5 - 6	6	5	8	6	5	2	4	36	5	30	6
6 - 7	31	31	28	26	27	9	12	164	23	143	29
7 - 8	93	101	109	90	98	25	19	535	76	491	98
8 - 9	278	284	262	283	247	55	32	1,441	206	1,354	271
9 - 10	218	223	242	192	239	143	60	1,317	188	1,114	223
10 - 11	191	226	201	194	232	114	102	1,260	180	1,044	209
11 - 12	259	251	231	273	291	209	104	1,618	231	1,305	261
12 - 13	284	327	302	298	343	147	150	1,851	264	1,554	311
13 - 14	269	295	293	276	354	170	123	1,780	254	1,487	297
14 - 15	326	304	303	380	374	137	124	1,948	278	1,687	337
15 - 16	337	364	389	378	321	168	171	2,128	304	1,789	358
16 - 17	542	507	546	534	422	153	218	2,922	417	2,551	510
17 - 18	400	364	407	458	319	139	172	2,259	323	1,948	390
18 - 19	292	318	282	251	185	118	115	1,561	223	1,328	266
19 - 20	193	175	204	184	117	90	104	1,067	152	873	175
20 - 21	165	165	209	142	98	69	99	947	135	779	156
21 - 22	219	251	272	231	100	82	74	1,229	176	1,073	215
22 - 23	85	106	130	99	105	49	60	634	91	525	105
23 - 24	52	53	63	75	50	44	53	390	56	293	59
24 hr total	4271	4386	4523	4421	4013	2022	1913	25,549	3,650	21,614	4,323
7:00 - 19:00 total	3489	2882	2878	2898	2921	1321	1103	17,492	2,499	15,068	3,014
7:00 - 22:00 total	4066	4155	4252	4164	3740	1819	1667	23,863	3,409	20,377	4,075

Average Weekday Peak Hour:

16:00 - 17:00

WEST CAMPUS GATE (east of Gordon Head Road)

ENTERING - EASTBOUND (from Gordon Head Road)

Time Period	Monday 22-Oct-12	Tuesday 23-Oct-12	Wednesday 24-Oct-12	Thursday 25-Oct-12	Friday 26-Oct-12	Saturday 27-Oct-12	Sunday 28-Oct-12	Week Total	Week Average	Weekday Total	Weekday Average
0 - 1	0	0	0	0	22	1	2	25	4	22	4
1 - 2	0	2	0	0	10	4	1	17	2	12	2
2 - 3	0	0	1	1	1	1	0	4	1	3	1
3 - 4	0	0	1	0	2	1	1	5	1	3	1
4 - 5	8	8	7	8	8	0	0	39	6	39	8
5 - 6	0	0	4	0	0	0	0	4	1	4	1
6 - 7	8	6	11	4	5	0	0	34	5	34	7
7 - 8	48	46	68	49	62	2	2	277	40	273	55
8 - 9	253	256	254	277	218	5	11	1,274	182	1,258	252
9 - 10	153	166	197	168	140	24	27	875	125	824	165
10 - 11	63	99	102	83	95	19	20	481	69	442	88
11 - 12	129	79	99	155	72	41	17	592	85	534	107
12 - 13	96	110	106	152	85	38	25	612	87	549	110
13 - 14	71	91	96	88	70	24	33	473	68	416	83
14 - 15	76	62	65	76	74	21	26	400	57	353	71
15 - 16	51	43	61	63	23	12	23	276	39	241	48
16 - 17	57	51	57	66	48	11	21	311	44	279	56
17 - 18	62	53	53	66	34	19	23	310	44	268	54
18 - 19	46	53	65	38	23	7	13	245	35	225	45
19 - 20	21	40	40	30	13	15	8	167	24	144	29
20 - 21	9	14	5	21	4	5	2	60	9	53	11
21 - 22	16	31	7	20	5	2	4	85	12	79	16
22 - 23	4	10	3	18	3	0	4	42	6	38	8
23 - 24	0	1	0	9	1	1	3	15	2	11	2
24 hr total	1171	1221	1302	1392	1018	253	266	6,623	946	6,104	1,221
7:00 - 19:00 total	1105	1003	1105	1177	887	197	205	5,679	811	5,277	1,055
7:00 - 22:00 total	1151	1194	1275	1352	966	245	255	6,438	920	5,938	1,188

Average Weekday Peak Hour:

8:00 - 9:00

WEST CAMPUS GATE (east of Gordon Head Road)

EXITING - WESTBOUND (towards Gordon Head Road)

Time Period	Monday 22-Oct-12	Tuesday 23-Oct-12	Wednesday 24-Oct-12	Thursday 25-Oct-12	Friday 26-Oct-12	Saturday 27-Oct-12	Sunday 28-Oct-12	Week Total	Week Average	Weekday Total	Weekday Average
0 - 1	2	5	5	4	43	5	0	64	9	59	12
1 - 2	0	1	3	2	34	3	0	43	6	40	8
2 - 3	1	1	2	0	10	1	0	15	2	14	3
3 - 4	0	0	1	0	7	0	0	8	1	8	2
4 - 5	1	0	0	1	1	1	1	5	1	3	1
5 - 6	0	0	2	2	0	0	0	4	1	4	1
6 - 7	4	1	3	2	0	0	0	10	1	10	2
7 - 8	7	7	12	6	5	0	1	38	5	37	7
8 - 9	31	13	23	26	15	4	4	116	17	108	22
9 - 10	32	32	33	33	37	2	6	175	25	167	33
10 - 11	27	34	31	29	48	7	10	186	27	169	34
11 - 12	63	64	58	90	93	12	25	405	58	368	74
12 - 13	70	85	85	88	84	19	13	444	63	412	82
13 - 14	70	94	96	87	108	55	21	531	76	455	91
14 - 15	102	115	86	109	146	19	17	594	85	558	112
15 - 16	104	89	107	123	72	11	20	526	75	495	99
16 - 17	148	158	180	169	122	19	16	812	116	777	155
17 - 18	88	82	83	106	57	11	24	451	64	416	83
18 - 19	35	62	67	67	42	16	13	302	43	273	55
19 - 20	50	52	50	36	23	9	11	231	33	211	42
20 - 21	40	27	19	31	21	13	11	162	23	138	28
21 - 22	33	52	58	56	10	7	9	225	32	209	42
22 - 23	7	20	67	38	15	5	7	159	23	147	29
23 - 24	1	2	9	62	5	3	4	86	12	79	16
24 hr total	916	996	1080	1167	998	222	213	5,592	799	5,157	1,031
7:00 - 19:00 total	777	691	711	760	730	148	133	3,950	564	3,669	734
7:00 - 22:00 total	900	966	988	1056	883	204	201	5,198	743	4,793	959

Average Weekday Peak Hour:

16:00 - 17:00

APPENDIX B

Peak Period Manual Traffic Count Data

PEDESTRIAN SUMMARY

INBOUND PEDESTRIANS (excluding M-10)

Peak Hours

HOUR	M1	M2	M3	M4	M5a	M5b	M6	M7	M8	M9a	M9b	M10	M11	M12	MF	TOTALS
7:00 - 8:00 AM	12	15	23	3	4	14	8	3	21	7	11	0	9	4	10	139
8:00 - 9:00 AM	76	114	37	24	4	72	37	9	66	41	21	3	87	33	11	630
9:00 - 10:00 AM	45	99	24	19	2	70	44	13	70	42	25	0	113	45	6	614
AM Sub-Totals	133	228	84	45	10	156	89	24	157	89	56	3	208	81	27	1,383
2:00 - 3:00 PM (W) 2:30 - 3:30 PM (T)	22	32	52	13	4	79.5	20	10	16	18	13	0	35	13	53	377
3:00 - 4:00 PM (W) 3:30 - 4:30 PM (T)	20	31	67	12	2	72	22	8	31	14	14	0	34	7	28	360
4:00 - 5:00 PM (W) 4:30 - 5:30 PM (T)	17	33	90	11	3	35	32	5	12	23	12	0	22	7	42	340
5:00 - 6:00 PM (W) 5:30 - 6:30 PM (T)	17	24	69	15	7	34	12	0	17	14	13	0	16	7	26	267
PM Sub-Totals	75	119	277	50	15	220	86	22	76	68	52	0	106	34	148	1,343
TOTALS	208	347	360	94	24	376	174	46	232	157	108	3	313	114	175	2,726

OUTBOUND PEDESTRIANS (excluding M-10)

HOUR	M1	M2	M3	M4	M5a	M5b	M6	M7	M8	M9a	M9b	M10	M11	M12	MF	TOTALS
7:00 - 8:00 AM	2	1	13	2	6	5	4	1	4	3	2	0	2	1	17	59
8:00 - 9:00 AM	4	14	24	8	13	35	15	6	6	8	4	2	5	1	47	187
9:00 - 10:00 AM	9	8	20	11	7	16	15	7	4	8	3	0	8	1	28	142
AM Sub-Totals	14	23	56	20	26	56	33	13	14	18	9	2	14	2	92	387
2:00 - 3:00 PM (W) 2:30 - 3:30 PM (T)	41	71	32	21	18	48	38	12	41	32	15	0	70	22	28	485
3:00 - 4:00 PM (W) 3:30 - 4:30 PM (T)	41	75	45	17	9	63	23	11	64	32	15	3	62	17	32	501
4:00 - 5:00 PM (W) 4:30 - 5:30 PM (T)	41	81	49	18	9	93	42	14	52	34	22	1	79	19	17	566
5:00 - 6:00 PM (W) 5:30 - 6:30 PM (T)	48	71	59	18	8	56	24	2	52	20	18	2	58	13	17	460
PM Sub-Totals	169	297	184	73	43	258	127	38	208	117	69	5	268	69	94	2,012
TOTALS	183	320	240	93	69	314	160	51	221	135	78	7	282	71	185	2,399
7 HOUR TOTALS	391	667	600	187	93	690	334	96	453	291	185	9	595	185	360	5,124

AM and PM PEAK HOURS at manual stations

(excluding M-10 volumes)

INBOUND	M1	M2	M3	M4	M5a	M5b	M6	M7	M8	M9a	M9b	M10	M11	M12	MF	TOTAL
AM	76	114	37	24	4	72	37	9	66	41	21	3	87	33	11	630
PM	20	31	67	12	2	72	22	8	31	14	14	0	34	7	28	360
OUTBOUND	M1	M2	M3	M4	M5a	M5b	M6	M7	M8	M9a	M9b	M10	M11	M12	MF	TOTAL
AM	4	14	24	8	13	35	15	6	6	8	4	2	5	1	47	187
PM	41	81	49	18	9	93	42	14	52	34	22	1	79	19	17	566

BICYCLE SUMMARY

INBOUND BICYCLES (excluding M-10)

Peak Hours

HOUR	M1	M2	M3	M4	M5a	M5b	M6	M7	M8	M9a	M9b	M10	M11	M12	MF	TOTALS
7:00 - 8:00 AM	34	18	9	11	1	9	5	3	8	1	2	1	5	0	1	105
8:00 - 9:00 AM	127	86	15	63	7	61	35	5	33	8	8	5	10	3	6	463
9:00 - 10:00 AM	121	65	9	43	1	69	30	6	21	5	3	0	14	4	1	389
AM Sub-Totals	282	169	32	116	8	139	70	14	61	13	13	5	29	7	7	957
2:00 - 3:00 PM (W) 2:30 - 3:30 PM (T)	21	18	14	12	1	20	9	2	8	3	3	1	5.5	1.5	9	124
3:00 - 4:00 PM (W) 3:30 - 4:30 PM (T)	21	17	11	13	1	15	7	6	9	3	3	1	3	1.5	10	118
4:00 - 5:00 PM (W) 4:30 - 5:30 PM (T)	28	17	23	10	2	13	12	3	6	2	3	1	6	0	6	129
5:00 - 6:00 PM (W) 5:30 - 6:30 PM (T)	16	14	16	11	2	16	2	3	6	2	4	0	4	1.5	4	100
PM Sub-Totals	85	66	63	46	5	64	30	13	28	10	13	2	19	5	28	470
TOTALS	367	235	95	162	13	202	99	27	89	23	25	7	48	11	35	1,427

OUTBOUND BICYCLES (excluding M-10)

HOUR	M1	M2	M3	M4	M5a	M5b	M6	M7	M8	M9a	M9b	M10	M11	M12	MF	TOTALS
7:00 - 8:00 AM	7	1	6	1	1	2.5	5	1	5	1	0	0	0.5	0	6	33
8:00 - 9:00 AM	15	4	10	2	4	7	11	5	2	1	0	0	1	0	30	90
9:00 - 10:00 AM	11	3	6	6	3	4	6	7	4	1	0	0	2	0	4	55
AM Sub-Totals	32	8	22	9	8	14	21	12	10	2	0	0	4	0	39	177
2:00 - 3:00 PM (W) 2:30 - 3:30 PM (T)	59	48	9	25	5	23.5	18	2	12	5	2	0	9.5	3.5	4	222
3:00 - 4:00 PM (W) 3:30 - 4:30 PM (T)	77	45	9	25	3	34.5	24	6	14	2	10	1	10.5	1.5	9	267
4:00 - 5:00 PM (W) 4:30 - 5:30 PM (T)	118	66	18	44	2	44	30	6	25	6	5	1	11	4	4	379
5:00 - 6:00 PM (W) 5:30 - 6:30 PM (T)	91	44	17	26	1	35.5	26	2	28	7	2	1	11	3	3	295
PM Sub-Totals	344	202	52	120	10	138	98	16	77	19	18	3	42	12	19	1,162
TOTALS	376	210	73	128	17	151	119	27	87	21	18	3	45	12	58	1,339
7 HOUR TOTALS	743	444	168	290	30	353	218	54	175	43	43	10	93	23	93	2,766

AM and PM PEAK HOURS at manual stations

(excluding M-10 volumes)

INBOUND	M1	M2	M3	M4	M5a	M5b	M6	M7	M8	M9a	M9b	M10	M11	M12	MF	TOTAL
AM	127	86	15	63	7	61	35	5	33	8	8	5	10	3	6	463
PM	28	17	23	10	2	13	12	3	6	2	3	1	6	0	6	129
OUTBOUND	M1	M2	M3	M4	M5a	M5b	M6	M7	M8	M9a	M9b	M10	M11	M12	MF	TOTAL
AM	15	4	10	2	4	7	11	5	2	1	0	0	1	0	30	90
PM	118	66	18	44	2	44	30	6	25	6	5	1	11	4	4	379

SKATEBOARD / ROLLERBLADE SUMMARY

INBOUND SKATEBOARDERS / ROLLERBLADERS (excluding M-10)

Peak Hours of Vehicles

HOURL	M1	M2	M3	M4	M5a	M5b	M6	M7	M8	M9a	M9b	M10	M11	M12	MF	TOTALS
7:00 - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:00 - 9:00 AM	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	3
9:00 - 10:00 AM	1	0	1	1	0	0	0	0	0	0	0	0	1	0	0	3
AM Sub-Totals	1	1	2	1	1	0	0	0	0	0	0	0	1	0	0	6
2:00 - 3:00 PM (W) 2:30 - 3:30 PM (T)	1	1	2	0	0	0	1	0	0	0	1	0	0.5	0	1	6
3:00 - 4:00 PM (W) 3:30 - 4:30 PM (T)	1	2	2	2	0	0	0	0	1	0	1	0	1	0	1	9
4:00 - 5:00 PM (W) 4:30 - 5:30 PM (T)	0	0	1	0	0	0	1	0	1	0	1	0	2	0	0	4
5:00 - 6:00 PM (W) 5:30 - 6:30 PM (T)	0	0	2	0	0	0	0	0	0	0	0	0	1	1	0	3
PM Sub-Totals	2	3	6	2	0	0	2	0	1	0	2	0	4	1	2	22
TOTALS	3	3	7	3	1	0	2	0	1	0	2	0	5	1	2	27

OUTBOUND SKATEBOARDERS / ROLLERBLADERS (excluding M10)

HOURL	M1	M2	M3	M4	M5a	M5b	M6	M7	M8	M9a	M9b	M10	M11	M12	MF	TOTALS
7:00 - 8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 - 9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
9:00 - 10:00 AM	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2
AM Sub-Totals	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1	2
2:00 - 3:00 PM (W) 2:30 - 3:30 PM (T)	0	1	1	2	0	0	0	0	1	0	1	0	1	0	1	6
3:00 - 4:00 PM (W) 3:30 - 4:30 PM (T)	2	2	1	1	0	0	1	0	0	0	0	0	0	0	1	6
4:00 - 5:00 PM (W) 4:30 - 5:30 PM (T)	1	2	2	0	0	0	1	0	1	0	0	1	2	0	0	8
5:00 - 6:00 PM (W) 5:30 - 6:30 PM (T)	1	0	1	2	0	0	1	0	0	0	0	0	1	1	0	5
PM Sub-Totals	4	5	5	4	0	0	3	0	2	0	1	1	3	1	1	25
TOTALS	4	5	6	4	0	0	3	0	2	0	1	1	3	1	2	27
7 HOUR TOTALS	7	8	13	6	1	0	4	0	3	0	2	1	8	1	3	54

AM and PM PEAK HOURS at manual stations

EXCLUDING M10 VOLUMES

INBOUND	M1	M2	M3	M4	M5a	M5b	M6	M7	M8	M9a	M9b	M10	M11	M12	MF	TOTAL
AM	1	1	1	0	1		0	0	0	0	0	0			0	3
PM	1	2	2	2	0	0	0	0	1	0	1	0	1	0	1	9
OUTBOUND	M1	M2	M3	M4	M5a	M5b	M6	M7	M8	M9a	M9b	M10	M11	M12	MF	TOTAL
AM	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	2
PM	1	2	2	0	0	0	1	0	1	0	0	1	2	0	0	8

VEHICLE SUMMARY (All vehicles excluding buses)

INBOUND TOTAL VEHICLES (excluding M-10)

Peak Hours of Vehicles

HOUR	M1	M2	M3	M4	M5a	M5b	M6	M7	M8	M9a	M9b	M10	M11	M12	MF	TOTALS
7:00 - 8:00 AM	136	59	36	123	7		98	56	49	2	47	10			10	621
8:00 - 9:00 AM	485	268	65	477	24		208	22	188	4	95	11			32	1,865
9:00 - 10:00 AM	345	183	34	417	17		163	16	106	6	51	1			23	1,360
AM Sub-Totals	966	510	135	1,017	47		468	93	343	12	192	22			64	3,845
2:00 - 3:00 PM (W) 2:30 - 3:30 PM (T)	227	64	45	190	8		98	12	107	4	45	3			31	829
3:00 - 4:00 PM (W) 3:30 - 4:30 PM (T)	247	64	76	177	6		93	13	125	2	30	2			44	874
4:00 - 5:00 PM (W) 4:30 - 5:30 PM (T)	239	51	81	143	10		67	10	106	1	34	1			48	788
5:00 - 6:00 PM (W) 5:30 - 6:30 PM (T)	239	75	99	199	4		92	3	83	1	29	1			41	862
PM Sub-Totals	952	253	300	708	27		349	37	420	8	138	6			163	3,352
TOTALS	1,918	763	434	1,724	74		817	130	763	20	330	28			227	7,197

OUTBOUND TOTAL VEHICLES (excluding M10)

HOUR	M1	M2	M3	M4	M5a	M5b	M6	M7	M8	M9a	M9b	M10	M11	M12	MF	TOTALS
7:00 - 8:00 AM	70	8	26	16	1		19	8	47	1	14	4			22	230
8:00 - 9:00 AM	232	26	97	75	5		36	8	142	1	24	1			46	690
9:00 - 10:00 AM	170	31	40	85	4		47	8	87	4	29	2			25	529
AM Sub-Totals	472	65	162	176	10		102	23	276	6	67	6			92	1,448
2:00 - 3:00 PM (W) 2:30 - 3:30 PM (T)	308	114	39	176	9		125	14	195	4	50	6			36	1,067
3:00 - 4:00 PM (W) 3:30 - 4:30 PM (T)	324	116	62	201	11		149	39	212	2	62	12			36	1,212
4:00 - 5:00 PM (W) 4:30 - 5:30 PM (T)	443	159	81	239	35		175	47	254	4	70	13			50	1,555
5:00 - 6:00 PM (W) 5:30 - 6:30 PM (T)	358	98	99	190	18		142	7	214	4	42	1			40	1,210
PM Sub-Totals	1,433	487	280	805	73		590	107	874	14	223	31			162	5,044
TOTALS	1,904	552	441	981	83		691	130	1,150	19	290	37			254	6,492
7 HOUR TOTALS	3,822	1,314	875	2,705	156		1,508	260	1,912	39	619	65			481	13,689

AM and PM PEAK HOURS at manual stations

(excluding M-10 volumes)

INBOUND	M1	M2	M3	M4	M5a	M5b	M6	M7	M8	M9a	M9b	M10	M11	M12	MF	TOTAL
AM	485	268	65	477	24		208	22	188	4	95	11			32	1,865
PM	239	51	81	143	10		67	10	106	1	34	1			48	788
OUTBOUND	M1	M2	M3	M4	M5a	M5b	M6	M7	M8	M9a	M9b	M10	M11	M12	MF	TOTAL
AM	232	26	97	75	5		36	8	142	1	24	1			46	690
PM	443	159	81	239	35		175	47	254	4	70	13			50	1,555

AUTO PASSENGER SUMMARY

INBOUND TOTAL PASSENGERS (excluding M-10) Peak Hours of Vehicles

HOUR	M1	M2	M3	M4	M5a	M5b	M6	M7	M8	M9a	M9b	M10	M11	M12	MF	TOTALS
7:00 - 8:00 AM	36	5	13	8	1		21	2	19	1	7	10			2	113
8:00 - 9:00 AM	177	46	28	76	1		36	4	74	0	11	11			4	454
9:00 - 10:00 AM	107	28	16	74	2		26	1	40	2	5	1			3	300
AM Sub-Totals	319	78	56	157	4		82	6	133	2	22	22			9	867
2:00 - 3:00 PM (W)																0
2:30 - 3:30 PM (T)																0
3:00 - 4:00 PM (W)																0
3:30 - 4:30 PM (T)																0
4:00 - 5:00 PM (W)																0
4:30 - 5:30 PM (T)																0
5:00 - 6:00 PM (W)																0
5:30 - 6:30 PM (T)																0
PM Sub-Totals	0	0	0	0	0		0	0	0	0	0	0			0	0
TOTALS	319	78	56	157	4		82	6	133	2	22	22			9	867

OUTBOUND TOTAL PASSENGERS (excluding M10)

HOUR	M1	M2	M3	M4	M5a	M5b	M6	M7	M8	M9a	M9b	M10	M11	M12	MF	TOTALS
7:00 - 8:00 AM																0
8:00 - 9:00 AM																0
9:00 - 10:00 AM																0
AM Sub-Totals	0	0	0	0	0		0	0	0	0	0	0			0	0
2:00 - 3:00 PM (W)	67	23	15	50	2		22	3	59	1	13	6			10	262
2:30 - 3:30 PM (T)																
3:00 - 4:00 PM (W)	68	22	34	65	3		32	5	75	1	14	12			13	329
3:30 - 4:30 PM (T)																
4:00 - 5:00 PM (W)	104	33	38	68	3		43	7	92	1	18	13			24	427
4:30 - 5:30 PM (T)																
5:00 - 6:00 PM (W)	100	24	40	49	5		42	2	75	1	14	1			25	374
5:30 - 6:30 PM (T)																
PM Sub-Totals	338	102	126	231	11		138	15	300	2	58	31			72	1,391
TOTALS	338	102	126	231	11		138	15	300	2	58	31			72	1,391
7 HOUR TOTALS	657	180	182	388	15		220	21	433	4	80	53			81	2,258

AM and PM PEAK HOURS at manual stations EXCLUDING M10 VOLUMES

INBOUND	M1	M2	M3	M4	M5a	M5b	M6	M7	M8	M9a	M9b	M10	M11	M12	MF	TOTAL
AM	177	46	28	76	1		36	4	74	0	11	11			4	454
PM	0	0	0	0	0		0	0	0	0	0	0			0	0
OUTBOUND	M1	M2	M3	M4	M5a	M5b	M6	M7	M8	M9a	M9b	M10	M11	M12	MF	TOTAL
AM	0	0	0	0	0		0	0	0	0	0	0			0	0
PM	104	33	38	68	3		43	7	92	1	18	13			24	427

APPENDIX C

Transit Passenger Count Data
BC Transit

BC TRANSIT PASSENGER ACTIVITY AT THE UNIVERSITY OF VICTORIA - AVERAGE 2012 FALL WEEKDA

ARRIVE

Time	# 4 - UVic		# 7 - UVic		# 11 - UVic		# 12 - UVic		# 13 - Univer. Heights		# 14 - UVic		# 15 - UVic Express		# 16 - UVic Express		# 17 - School Special		# 18 - School Special		# 26 - UVic		# 29 - UVic		# 33 - UVic		# 39 - UVic		# 51 - UVic		TOTALS					
	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips				
500																																	0	0		
600	7	3	2	2	4	5	12	1				12	6										4	4							10	1	45	2	96	24
700	51	6	39	4	28	7	19	1				56	9	40	9	25	3						94	6							13	4	59	1	492	52
800	140	11	99	5	61	5	38	2				212	10	169	8	73	6						216	4	49	2	24	3	129	5	12	1	1,239	64		
900	241	10	77	4	51	3	60	2	2	1	249	10	156	6	155	6							160	3					105	2	18	1	1,275	48		
1000	151	6	47	4	60	3	34	2	2	1	175	7	36	2	77	3							94	2									676	30		
1100	104	6	44	4	34	4	25	2	1	1	208	6	35	3	51	2							62	3					38	2			601	33		
1200	100	5	40	4	25	3	33	2	1	1	150	6	69	4	70	3							137	2					38	3			663	33		
1300	113	7	35	4	83	3	15	2	1	1	150	6	40	4	59	2							86	3					27	2			609	34		
1400	84	6	37	4	29	4	24	2	1	1	215	7	31	5	40	3							99	2					19	2			580	36		
1500	107	6	21	4	77	6	11	2	1	1	202	6	74	9	59	2							40	3					17	2			609	41		
1600	112	6	26	4	87	6	9	2	1	1	200	6	46	6	13	3							90	2					12	2	6	2	603	40		
1700	136	6	17	3	78	3					194	6	28	4	38	2							50	3					22	1			562	28		
1800	186	4	34	4	39	3					218	4	10	2									65	3					13	1			564	21		
1900	40	4	9	3	20	3					89	4	7	2									51	1					9	1			224	18		
2000	67	4	18	3	20	3					53	4	5	2									35	2									198	18		
2100	69	4	25	2	30	3					42	4											63	2					3	1			232	16		
2200	25	2	29	2	15	2					64	3											25	1									158	10		
2300	31	2	5	2	12	2					40	1											13	2									101	9		
2400	36	1									49	1																					85	2		
2500																																	0	0		
TOTALS	1,797	99	604	62	753	68	280	20	8	8	2,578	106	745	66	661	35	10	1	7	1	1,385	48	49	2	94	5	455	29	140	7	9,569	557				

BC TRANSIT PASSENGER ACTIVITY AT THE UNIVERSITY OF VICTORIA - AVERAGE 2012 FALL WEEKDA'

LEAVE

Time	#4 - Downtown		#7 - Downtown		#11 - Tillikum Mall		#12 - University Heights		#13 - Ten Mile Point		#14 - Vic General		#15 - Downtown		#16 - Uptown Express		#26 - Dockyard		#39 - Royal Roads		#51 - Langford		TOTALS			
	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips		
500	1	1									1	1												2	2	
600	7	3	2	1	2	5					7	6					4	3			2	1		25	19	
700	22	5	14	4	11	6	6	2			15	6	13	7	11	1	10	3			19	4	8	129	39	
800	53	5	21	4	42	4	5	2			39	7	28	5	16	2	17	3			21	3		242	35	
900	29	4	26	4	12	3	6	2	2	1	44	7	9	2	23	3	26	3			24	1		201	30	
1000	48	5	27	4	13	4	6	1	1	1	43	6	20	2	36	2	58	3			4	2		256	30	
1100	83	5	57	4	26	3	20	2	3	1	91	6	32	2	56	3	43	2			6	2		417	30	
1200	108	7	51	4	37	3	9	2	2	1	116	6	37	3	57	3	48	3			26	2		491	34	
1300	137	7	57	4	36	4	29	2	1	1	145	6	61	5	54	2	58	2			21	2		599	35	
1400	164	6	72	4	63	6	28	2	2	1	160	6	121	8	101	4	113	4			34	3		859	44	
1500	175	8	84	4	58	7	27	2	1	1	144	6	112	6	131	8	58	3			71	3	31	893	50	
1600	187	5	107	4	69	6	33	2	3	1	183	6	160	6	98	5	51	3			21	2	44	957	42	
1700	190	6	69	3	60	3	14	1			223	6	88	4	72	3	103	3			54	2	23	897	32	
1800	98	4	56	3	47	3					145	5	79	2	24	1	74	3			50	2		574	23	
1900	74	4	35	3	20	3					67	4	26	2			52	2						274	18	
2000	73	4	43	2	38	3					84	4	18	2			32	1			9	1		297	17	
2100	69	4	32	3	17	3					73	4	11	1			46	2			8	1		256	18	
2200	41	2	14	2	17	3					61	3					36	2						168	12	
2300	23	2	8	1	8	1					25	2					22	1						85	7	
2400	7	1																						7	1	
2500																								0	0	
TOTALS	1,590	88	777	58	575	70	184	20	13	8	1,666	97	817	57	680	37	851	46	0	0	0	0	105	6	7,628	518

BC TRANSIT PASSENGER ACTIVITY AT THE UNIVERSITY OF VICTORIA - AVERAGE 2012 FALL WEEKKA

TOTAL

Time	# 4 - UVic #4 - Downtown		# 7 - UVic #7 - Downtown		# 11 - UVic #11 - Tillicum Mall		# 12 - UVic #12 - University Heights		# 13 - Univer. Heights #13 - Ten Mile Point		# 14 - UVic #14 - Vic General		# 15 - UVic Express #15 - Downtown		# 16 - UVic Express #16 - Uptown Express		# 17 - School Special		# 18 - School Special		# 26 - UVic #26 - Dockyard		# 29 - UVic		# 33 - UVic		# 39 - UVic #39 - Royal Roads		# 51 - UVic #51 - Langford		TOTALS		
	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	Rides	Trips	
500	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
600	14	6	4	3	7	10	12	1	0	0	18	12	0	0	0	0	0	0	0	0	0	9	7	0	0	0	0	12	2	45	2	121	43
700	73	11	52	8	39	13	24	3	0	0	72	15	53	16	36	4	0	0	0	0	0	104	9	0	0	70	2	32	8	67	2	621	91
800	192	16	120	9	103	9	44	4	0	0	252	17	197	13	89	8	10	1	7	1	233	7	49	2	24	3	149	8	12	1	1,481	99	
900	271	14	104	8	62	6	66	4	3	2	293	17	165	8	179	9	0	0	0	0	186	6	0	0	0	0	129	3	18	1	1,476	78	
1000	199	11	74	8	73	7	40	3	2	2	218	13	56	4	113	5	0	0	0	0	152	5	0	0	0	0	4	2	0	0	931	60	
1100	187	11	101	8	60	7	45	4	3	2	299	12	67	5	107	5	0	0	0	0	105	5	0	0	0	0	44	4	0	0	1,018	63	
1200	208	12	91	8	62	6	42	4	3	2	267	12	106	7	127	6	0	0	0	0	185	5	0	0	0	0	64	5	0	0	1,154	67	
1300	250	14	92	8	119	7	44	4	2	2	295	12	101	9	113	4	0	0	0	0	145	5	0	0	0	0	48	4	0	0	1,208	69	
1400	248	12	109	8	92	10	53	4	3	2	375	13	152	13	142	7	0	0	0	0	212	6	0	0	0	0	53	5	0	0	1,439	80	
1500	282	14	106	8	135	13	39	4	2	2	346	12	186	15	190	10	0	0	0	0	98	6	0	0	0	0	89	5	31	2	1,503	91	
1600	299	11	134	8	156	12	42	4	4	2	384	12	206	12	112	8	0	0	0	0	141	5	0	0	0	0	33	4	50	4	1,560	82	
1700	326	12	86	6	138	6	14	1	0	0	416	12	117	8	110	5	0	0	0	0	153	6	0	0	0	0	77	3	23	1	1,459	60	
1800	284	8	90	7	85	6	0	0	0	0	363	9	89	4	24	1	0	0	0	0	139	6	0	0	0	0	63	3	0	0	1,138	44	
1900	114	8	44	6	40	6	0	0	0	0	156	8	33	4	0	0	0	0	0	0	103	3	0	0	0	0	9	1	0	0	499	36	
2000	140	8	61	5	58	6	0	0	0	0	137	8	23	4	0	0	0	0	0	0	67	3	0	0	0	0	9	1	0	0	495	35	
2100	138	8	57	5	47	6	0	0	0	0	115	8	11	1	0	0	0	0	0	0	109	4	0	0	0	0	11	2	0	0	488	34	
2200	65	4	44	4	32	5	0	0	0	0	124	6	0	0	0	0	0	0	0	0	61	3	0	0	0	0	0	0	0	0	326	22	
2300	53	4	13	3	20	3	0	0	0	0	65	3	0	0	0	0	0	0	0	0	35	3	0	0	0	0	0	0	0	0	186	16	
2400	43	2	0	0	0	0	0	0	0	0	49	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92	3		
2500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTALS	3,387	187	1,381	120	1,328	138	465	40	22	16	4,245	203	1,562	123	1,341	72	10	1	7	1	2,236	94	49	2	94	5	825	60	245	13	17,197	1,075	

