UBC TREK Program Centre

Transportation Status Report

Fall 1997 to Fall 2003

Prepared for the UBC TREK Program Centre By Urban Systems Ltd. Vancouver, BC March 2004



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SUMMARY

Since 1997, UBC has been working to change travel patterns for trips to and from campus. Through the TREK Program Centre and in co-operation with many partners, UBC has developed and implemented a range of transportation facilities and programs intended to reduce single-occupant vehicle travel and encourage use of more sustainable modes of transportation. UBC's efforts culminated in the introduction of the student U-Pass in Fall 2003.

This status report provides a snapshot of transportation conditions at UBC following introduction of the U-Pass, and identifies changes in travel patterns which have occurred since 1997. Each year, counts are undertaken of trips to and from UBC by all modes of transportation. The first counts were undertaken in 1997, and established benchmark conditions. The most recent counts were undertaken in October 2003.

Throughout this report, changes in travel patterns are measured in two ways — as total numbers, and as a ratio of trips per person. In the first case, total numbers of person trips and numbers of vehicles travelling to and from UBC are compared from year to year, and for each mode of travel. In the second case, numbers of person trips have been divided by the number of persons on campus during the daytime, to provide a measure of the *trip rate* per person. Considering trip rates is useful as it negates the effects of growth, and provides an apples-to-apples comparison from year to year.

Highlights of the changes in travel patterns at UBC from 1997 to 2003 include:

- **Transit use has doubled in six years.** Since 1997, the number of daily transit trips per person at UBC has increased 99%, effectively doubling. In the last year alone, due to the introduction of U-Pass, the number of daily transit trips per person increased 48%.
- Single-occupant vehicle (SOV) travel has decreased by almost 20%. Since 1997, the number of daily SOV trips per person at UBC has decreased 18.5%. The total number of SOV trips in Fall 2003 is 1,000 trips per day less than in Fall 1997.
- Daily traffic volumes are lower than in previous years. The daily traffic volume to and from UBC in Fall 2003 is 59,800 vehicles a reduction of 4,800 vehicles or 7.4% from Fall 1997 levels.



Table S.1 provides a summary of travel patterns in Fall 1997, Fall 2002 and Fall 2003. The Fall 2003 figures reflect the effects of the student U-Pass introduced in September 2003.

	Fall	Fall	Fall 2003		% Change
Person Trips	1997	2002			Since 1997
Single-occupant vehicles	46,000	48,400	45,000	38%	-2.2%
Carpools and vanpools	36,100	29,100	21,700	18%	-40%
Transit	19,000	29,700	45,400	39%	+139%
Bicycles	2,700	3,300	2,800	2%	+3.7%
Pedestrians	1,400	1,600	1,500	1%	+7.1%
Other	900	1,400	1,400	1%	+56%
Total daily person trips	106,100	113,500	117,800	100%	+11.0%

Table S.1 – 1997, 2002 and 2003 Daily Trips To/From UBC

The most significant change since 1997 is a 139% increase in the total number of daily transit trips. The other significant change is a 40% reduction in the total number of daily carpool and vanpool trips. For other modes of travel, the numbers of daily trips have remained relatively constant since 1997.

Improvements to transit service and introduction of the student U-Pass significantly increased the attraction of transit. As a result, many people who previously commuted to and from UBC by carpool and vanpool switched to transit. Over 14,000 daily trips have shifted to transit from carpools and vanpools since 1997.

It is important to recognize that total numbers of trips include new trips generated by growth in the campus population. Since 1997, the daytime population at UBC has grown 20%. As **Table S.1** indicates, all of the additional travel generated by this extra 20% population has been accommodated on transit — total numbers of trips by other modes have remained constant or decreased.

Table S.2 provides a similar summary of travel patterns by mode for 1997, 2002 and 2003, but in this case, trip rates (trips per person) are indicated. Trip rates for transit have doubled since 1997, while trip rates for all other modes have decreased.



	Fall 1997	Fall 2002	Fall 2003		
Mode	Trip Rates	Trip Rates	Trip Rates	% Change since 1997	
Single occupant vehicles	1.09	0.99	0.89	-18.5%	
Carpools and vanpools	0.85	0.59	0.43	-50%	
Transit	0.45	0.61	0.89	99%	
Bicycles	0.06	0.07	0.06	-13.6%	
Pedestrians	0.03	0.03	0.03	-10.8%	
Heavy trucks	0.01	0.01	0.01	-16.7%	
Motorcycle, other	0.01	0.02	0.02	53%	

Table S.2 – 1997, 2002 and 2003 Daily Trip Rates

Most significant is the change in the SOV trip rate. Since 1997, SOV trips per person have decreased 18.5%, from 1.09 trips per person in Fall 1997 to 0.89 trips per person in Fall 2003. More than half of this decrease occurred in the past year, as a result of the introduction of the student U-Pass.

In Fall 1997, there were on average 2.4 times as many SOV trips per person as transit trips. By Fall 2003, the number of SOV trips decreased and the number of transit trips increased to the point that on average there is the same number of transit trips per person as SOV trips.

Reductions in SOV trips and carpool and vanpool trips mean that daily traffic volumes to and from UBC are lower than in previous years. **Table S.3** provides a summary of daily traffic volumes by corridor.

	Fall 1997	Fall 2002	Fall 2003		
Route	Daily Traffic	Daily Traffic	Daily Traffic	Percent	
NW Marine Drive	2,000	1,600	2,020	3.4%	
Chancellor Boulevard	11,700	11,500	10,670	17.8%	
University Boulevard	14,600	13,400	11,770	19.7%	
16th Avenue	12,900	13,500	12,750	21.3%	
41st Avenue	22,400	10,100	9,000	15.0%	
SW Marine Drive	23,400	15,100	13,600	22.7%	
Total daily traffic	64,600	65,200	59,810	100%	

Table S.3 – 1997, 2002 and 2003 Daily Traffic Volumes

Daily traffic volumes to and from UBC decreased from Fall 1997 to Fall 2003, due to reductions in SOV trips and particularly carpool trips. From 1997 to 2003, daily traffic volumes decreased 7.4%. Because of typical fluctuations in traffic numbers from year to year, the decrease from 2002 to 2003 was slightly higher — 8.3%.



Traffic volumes have decreased on all roadways leading to UBC since 1997. Traffic volumes decreased the greatest amount on University Boulevard, likely as a result of the reduction in the number of traffic lanes from four to two, as part of the implementation of bicycle lanes on University Boulevard in 1999.

Figure S.1 provides a summary of daily "heavy truck" traffic to and from UBC. Heavy trucks are those with three or more axles — a definition which is consistent with the City of Vancouver's bylaws regulating truck traffic.



Figure S.1 – 1997 to 2003 Daily Heavy Truck Trips (3+ Axles)

UBC is pursuing a target of an average of 300 truck trips per day or less to and from UBC. This target was established in the Strategic Transportation Plan, based on historic levels of truck traffic. With the exception of Fall 2002, UBC has achieved this target each year. The number of truck trips exceeded the target in Fall 2002 due to a high level of construction activity on campus, particularly excavation of the new Life Sciences building.

UBC has implemented a Truck Management Program which is intended to reduce numbers of truck trips to and from campus. As a result of this program, the daily number of truck trips in Fall 2003 is similar to the number of truck trips in Fall 1997, despite

significantly more construction activity on campus in 2003 than in 1997. Ways in which truck trips have been reduced include on-campus storage of excavated material, use of pup trailers, and scheduling of construction activities to "even out" truck volumes from day to day.

Introduction of the student U-Pass has reduced the demand for parking on campus by more than 10%. Average parking utilization in surface lots and parkades decreased 21% and 10% respectively. The average daily parking demand in the B-Lots creased 12%, and 8% fewer parking permits were sold in Fall 2003 than in Fall 2002.

Introduction of the student U-Pass has also had an effect on parking off-campus in the Point Grey neighbourhood. Some students drive and park in Point Grey, and use their U-Passes to ride transit the rest of the way to UBC, thereby avoiding paying for parking at UBC. On a typical weekday, observations indicate that approximately 100 vehicles are parked on streets in Point Grey by students and others travelling to UBC. Locations where this is particularly noticeable include the 4500 blocks of West 9th and West 11th Avenues, as well as Blanca Street at 10th Avenue. The City of Vancouver is currently considering ways in which resident parking only zones can be implemented on streets where parking is an issue.



1.0 INTRODUCTION

As one of UBC's commitments made in the joint GVRD/UBC Memorandum of Understanding (MoU) regarding the GVRD's Official Community Plan (OCP) bylaw for the UBC area, UBC has undertaken a comprehensive transportation data collection and monitoring program. This program was implemented as part of the plan outlined in UBC's Strategic Transportation Plan (STP) that was created to help the University pursue the transportation targets laid out in the OCP.

The data collection program officially began in 1997 when the UBC TREK Program Centre was created. The data collected through this program are used to assess the effectiveness of the UBC TREK Program Centre in pursuing its goals of reducing single-occupant travel by 20%, increasing transit ridership, implementing a U-PASS program, and managing heavy truck traffic to and from UBC.

Each year, screenline, on-campus intersection, speed, volume, classification and bicycle and pedestrian counts are undertaken at and adjacent to the University. These data are summarised and compared with data from previous years to determine how the UBC TREK Program is progressing with its plans.

2.0 ANNUAL MONITORING PROGRAM

A number of different methods are used to collect travel data at UBC, as part of a comprehensive annual program. The majority of the data are collected during the Fall, providing a consistent basis for year-by-year comparison of traffic volumes, travel patterns, and mode split. Additional specialized data collection activities, such as travel surveys, are also conducted throughout the year and are used to obtain information regarding commuters' attitudes and needs. Localized traffic counts are also conducted, as required for other projects, to study additional issues that may not be adequately addressed by the annual count program.

The information presented in this report is based primarily on data collected through the annual transportation monitoring program from 1997 to present. Because the program was initiated in Fall 1997, the data results from that year have served as the benchmark against which progress has been measured. The results of any additional data collection programs throughout this period have typically been published at the conclusion of each program.



2.1 Count Program Methodology

The following section of this document describes the various types of counts that have been conducted annually at UBC's Point Grey Campus. The number of and types of counts have changed slightly over the years as new locations and/or types of data have been required. For example, screenline data are more commonly being collected in the Spring as well as the Fall – where available, this Spring count data are included.

Table 2.1 provides a summary of the typical fall count program and Figure 2.1 illustratesall count locations.



Type of Count	Location(s)	Duration	Timing
Automatic Screenline Counts	 SW Marine Drive University Boulevard Chancellor Boulevard 16th Avenue NW Marine Drive 	24-hrs for 7 days per location	Annually (typ. in Oct/Nov)
Vehicle Occupancy and Classification Counts	Same as above	8-hrs for 1 day per location	Annually (typ. in Oct/Nov)
Bicycle and Pedestrian Counts	Same as above	8-hrs for 1 day per location	Annually (typ. in Oct/Nov)
Heavy Truck Counts	Same as above	8 hrs to 15 hrs for 1 day per location	Annually (typ. in Oct/Nov)
Transit Ridership Counts	 SW Marine Dr near Tamath W. 16th Ave near Hampton University Blvd near Allison 4th Avenue at Blanca Chancellor near Allison 	6:00 AM – Midnight (4:30 AM on Univ. Blvd.)	Annually (typ. in Oct/Nov)
On-Campus Speed and Volume Studies	On alternating years: University Blvd e/o Wesbrook University Blvd w/o Wesbrook East Mall s/o Crescent Road West Mall s/o Thunderbird Thunderbird Blvd e/o West Mall Agronomy e/o West Mall Crescent Road e/o West Mall East Mall n/o 16 th Avenue West Mall s/o Crescent Road West Mall s/o University Blvd Wesbrook Mall n/o Hampton Rd Wesbrook Mall s/o SUB Blvd Osoyoos Crescent w/o Revelstoke	48-hrs per location	Bi-Annually (typically in Oct/Nov)
Manual On-Campus Intersection Counts	On Alternating Years: University Blvd/Wesbrook Mall Thunderbird/Wesbrook Mall University Blvd/East Mall Thunderbird/East Mall W. 16 th Ave/East Mall Wesbrook Mall/Fairview Crescent Chancellor/Wesbrook Mall Sub Blvd/Wesbrook Mall W. 16 th Ave/Wesbrook Mall Agronomy Rd/SW Marine Drive W. 16 th Ave/SW Marine Drive West Mall/Marine Dr North(Gate 4)	48-hrs per location	Bi-Annually (typically in Oct/Nov)
University Gate Counts	 West Mall/Marine Dr South (Gate 8) East Mall/Marine Dr (Gate 3) University Blvd/Marine Dr (Gate 6) Westbrook Mall/ SUB Blvd (Gate 2) Agronomy Rd/marine Dr (Gate 7) 	8-hrs for 1 day per location	Bi-Annually (typically in Oct/Nov)
Bi-Annual Campus Wide	Campus wide survey of staff, faculty, and students	to monitor travel	Bi- Annually (typically
Parking Utilization Data	All commuter parking stalls managed by URC Park	cing Services	In February) Throughout the year

Table 2.1 – Summary of Typical Fall Data Collection Program



2.1.1 Screenline Counts

In November 1997, screenline traffic counts were conducted in six locations along the Vancouver City and University Endowment Land (UEL) boundary. These counts collected travel data for all SOV, transit, HOV, bicycle, and pedestrian trips made across this boundary. However, the data collected along this screenline included vehicles travelling to the Endowment Lands and adjacent areas and did not represent the number of trips being made to and from UBC alone. The 1997 data were extrapolated to estimate the number of trips made to and from UBC, but in subsequent years the count locations were adjusted to capture only UBC commuters.

In 1998, counts were conducted at locations the boundary between UBC and the UEL, as illustrated in **Figure 2.1**. These counts accurately capture only those trips being made to and from UBC. It should be noted however, that although the screenlines have been adjusted to capture only traffic that is related to UBC, the volumes recorded invariably include a small number of non-UBC trips to destinations such as Wreck Beach. As well, counts of vehicles crossing the UBC screenline include ":through traffic" — vehicles travelling from the UEL and Point Grey to other regional destinations via UBC, and vice versa. the annual counts are conducted in October and November, it is estimated that very few trips to this destination are still occurring, and therefore have little effect on the overall volumes recorded.

2.1.2 On-Campus Counts

Also in 1998, six on-campus count locations were added to collect traffic volume data along major internal roads on campus. Vehicle occupancy, detailed vehicle classification, bicycle, and pedestrian counts were conducted each year as part of the program in these same locations. Manual intersection counts were also conducted starting that year to monitor the performance of on-campus intersections.

Since 1998, the number of on-campus count locations (for both manual intersection counts and speed/volume studies) has changed and increased to approximately 25 locations. To better manage this aspect of the program, starting in Fall 2001 a bi-annual count schedule was introduced for on-campus locations. This schedule allows for about half of the locations to be counted in alternating years, and is outlined in the following table. Additional counts are continually conducted on-campus, as-needed, throughout the year.

2.1.3 Spring Bicycle Counts

Beginning in 1999, spring bicycle counts were added to the program. The spring counts were added to identify whether the warmer temperatures and improved weather

conditions, which can generally be expected in the spring, affect bicycle travel patterns. As they coincide with the end of the school year, these counts also provide a basis to compare whether the bicycle mode share changes at all throughout the school year.

2.1.4 Transit Ridership Counts

In past years, transit ridership counts have been conducted annually by BC Transit, and subsequently the Coast Mountain Bus Company (CMBC). In Fall 2001 however, due to constraint issues, the Coast Mountain Bus Company was not able to conduct their annual transit load counts. As these data are important to TREK's annual monitoring program, independent transit ridership counts were organized and conducted to provide the data that were required.

Typically CMBC conducted their counts over 14 and 16-hour periods, but increased in 1998 to 18-hour count periods to reflect the changing spread of transit service. Transit ridership counts are now conducted from 6:00 a.m. until midnight, with additional counting on University Boulevard to record the last run of the Night Bus at approximately 4:30 a.m.

2.1.5 Bi-Annual Campus-Wide Transportation Survey

An integral part of the transportation monitoring program at UBC is the bi-annual transportation survey conducted campus-wide via the web, email and hard-copy. This transportation survey began in 1998 and has evolved into a comprehensive questionnaire to gather information regarding the attitudes and behaviours of UBC commuters.

In past years the survey has provided valuable information about attitudes towards parking, the proposed U-TREK Card, cycling behaviours and transit. For 2004, the survey was tailored to gather feedback on a variety of existing and proposed programs and issues relating to transportation at UBC, in particular the potential for faculty/staff U-Pass programs or student summer U-Pass programs. A summary of the 2004 campus-wide transportation survey is included in Appendix A. The results of the survey are anticipated to be available later in 2004.

2.1.6 Parking at UBC

Parking data have typically not been included in the annual transportation monitoring program at UBC and have instead been examined through a number of separate reviews. This year, because of the significant effect which the student U-pass has had on parking, data regarding the commuter parking supply and demand on campus are included in this report.



2.1.7 Data Collection Summary Table

A detailed data summary of all counts has been maintained since 1997. This table includes the results for each year of the monitoring program, in both person trips and traffic volumes, and has been organised by time period and route. The data summary table for Fall 1997 through Fall 2003 is included in the **Appendix**.

2.2 Assumptions

Due to the magnitude of UBC and the number of commuters travelling to and from the campus each day, a number of assumptions are required as the data are tabulated and summarised. This section of the report describes some of the basic assumptions made in compiling this information, in order to make the results more easily understood by the average reader.

2.2.1 Mode Split

Mode split, or *modal share*, refers to the relative proportions of each travel mode used in a particular time period. It is a way of representing the percentage of total travellers using each type of travel mode — for UBC mode splits are generally shown for SOV, HOV, transit, bicycle, pedestrian, trucks and sometimes motorcycle. Modal shares for UBC are monitored from year to year as they provide an important indication of how people are getting to UBC, and whether the trend changes over time.

In their regional travel surveys, the GVRD reports their mode shares in the following

categories: automobile driver, automobile passenger, transit passenger, walking and bicycle trips and other trips (including taxi, school buses and other buses). These categories are also used by the City of Vancouver to report their mode share data. While the GVRD would

Mode shares are a way of expressing the proportion of travellers using each mode of travel

make a logical 'standard' for way of reporting mode shares, UBC maintains their slightly different mode share categories as they are more easily understood by the average reader. The UBC categories also explicitly report the number of single occupant vehicles and carpools — both of which are of key indicators related to UBC's MoU commitments.

It should be noted that while the categories are slightly different, reasonable comparisons can still be made between the GVRD regional data, the City of Vancouver and UBC mode shares. Throughout this report, data and trends reported from the most recent Greater Vancouver Trip Diary Survey have been included as a basis for comparison between UBC and the rest of the region.



2.2.2 Duration of Counts and Time Periods Reported

Due to the magnitude of the effort and cost required to collect data at the University, it is not reasonable to collect all types of data for the same duration. **Table 2.2** lists the type of count program conducted and the typical duration for each.

Type of Count Program	Typical Duration
Screenline Counts	24 hours per day for 7 days per location
Vehicle Occupancy/Classification Counts	8 hours per day, 1 day per location
On-Campus Intersection Movement Counts	8 hours per day, 1 day per location
On-Campus Speed and Volume	48 hours per location
Transit Ridership Counts	18 - 22 hours per day, 1 day per location

 Table 2.2 – Type and Duration of Annual Traffic Counts

It should be noted that volume data on all routes leading to and from UBC (screenline counts) are collected over a period of one week. These data are easy to collect and provide a reasonable amount of data to summarise the total vehicle volumes travelling to and from UBC on a daily basis. The occupancy counts however, are done manually so they are limited to an 8-hour period that captures the peak AM, midday and PM periods. These data are what provides the mode share, and are assumed to be representative for all days. Occupancy data for early morning and late night periods are estimated, if required.

Limiting the hours for which data are collected is a reasonable method when you consider the fact that the peak hours are typically of most importance. Historically for UBC, the peak hours have been 8:00 to 9:00 AM and 4:00 to 5:00 PM. Other time periods reported include the AM peak period (7:00 to 10:00 AM), midday (11:30 AM to 1:30 PM) and the PM peak period (3:00 to 6:00 PM). It has been found that most indicators of changing trends are noticed in the peak periods; however, the 24-hour period is also examined and presented.

2.2.3 Person Trips vs. Vehicle Trips

The screenline counts provide the average number of vehicles travelling to and from the University on a daily basis. This information is valuable in that it monitors the number of vehicle trips being made and reflects any changes to which routes people are using. However, the vehicle volumes alone do not provide enough information to draw any conclusions regarding the mode choices made by UBC commuters. And it is this information that is critical to the UBC TREK Program Centre.

In order to monitor how people are getting to UBC, i.e. by bus, automobile, bike etc., count data are reported in terms of the number of *person trips*. A person trip is a one-way trip, either

A person trip is a one-way trip, to or from the University, made by a single person.



to or from the University, made by a single person. For example, an automobile with three people in it represents one vehicle trip, but it also represents three one-way person trips. It has been found that this measure of travel most accurately reflects the number of commuters travelling to and from UBC and also which mode they are using.

In this report, unless otherwise stated, all data are presented in terms of the number of person trips, typically by mode.

2.2.4 Yearly Fluctuations of Data

Traffic volumes can be expected to fluctuate from day to day by as much as 10%, and can also be expected to fluctuate on a seasonal basis. The effects of seasonal fluctuations are avoided in the annual count program by conducting counts at the same time of the year from year to year. Although daily fluctuations are reduced by conducting some counts over a one-week period, daily fluctuations cannot be avoided entirely, particularly for labour-intensive counts which are only conducted on a single day. Although this approach is sufficient to reliably estimate changes in travel patterns over time, the inherent variability in the data limits its usefulness for detailed analysis of localized traffic conditions. What is needed for more detailed analysis is traffic data collected over lengthier periods of time.

The most cost-effective way to collect traffic data over long periods of time is to use a permanent automatic counter. UBC may wish to consider installing one or more permanent count stations in key locations on campus. A permanent count station is a traffic data recorder connected to a detector loop placed permanently within the pavement of each lane on a roadway. Permanent count stations can be incorporated into actuated traffic signals at little additional cost. Permanent count stations are used by several municipalities and are used throughout BC on provincial highways.

Data collected from one or more permanent count stations at UBC could be used to calibrate and expand traffic data collected through the annual data collection program to represent a full year's worth of data. To accomplish this, the following locations have been identified as potential locations for permanent count stations, because they are located on or close to the cordon around UBC:

- Signalized intersections along Wesbrook Mall (16th Avenue, Thunderbird Boulevard and University Boulevard)
- 16th Avenue and SW Marine Drive
- Chancellor Boulevard at Wesbrook Mall

These locations are illustrated in **Figure 2.2**.





Figure 2.2 – Proposed Locations for Permanent Count Stations at UBC

3.0 CHANGES AT UBC AFFECTING TRAVEL

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

3.1 UBC Population and Growth

One of the most obvious changes at the University since 1997 is the ever-changing population made up of students, campus residents, employees, faculty and staff members. The UBC Planning and Institutional Research department (PAIR) provides statistics regarding the size of UBC's daytime population based on full- and part-time enrolment figures, faculty and staff. Between 1997 and 2003, there has been a 20% increase overall of the UBC population.

Table 3.1 – Annual Daytime Population Growth at UBC

	1997	1998	1999	2000	2001	2002	2003
Total Population at UBC (headcount)	42,300	43,430	44,750	44,700	46,100	49,000	50,800
Overall Growth				20%			

Source: UBC Planning and Institutional Research Department

In order to reflect this growth in year-to-year travel data, *trip rates* are used when comparing the number of trips between two or more years. A trip rate is the number of

person trips or vehicle trips expressed per capita (i.e. per person at UBC). This method of comparison brings the total number of trips down to a common basis that is used throughout this report to compare data among years, independent of growth effects.

A trip rate is the number of person or vehicle trips expressed per capita of the UBC population

3.2 U-Pass

One of the most significant changes affecting travel patterns at UBC is the introduction of the student U-Pass in September 2003. The U-Pass is a universal transportation pass that is mandatory for students at a cost of \$20 per month (on-campus residents receive a \$5 discount). The U-Pass offers students unlimited access to TransLink Bus, SkyTrain and SeaBus services (all zones), discounted West Coast Express fares, discounts at participating merchants, and access to a variety of other transportation programs provided by UBC's TREK Program Centre.



In conjunction with introduction of the student U-Pass, TransLink substantially increased the level of transit service provided to UBC. UBC and TransLink are now considering extending the U-Pass program to summer students, staff and faculty, as well as a similar program for residents on campus who would not otherwise receive a U-Pass.

3.3 Community Plans

UBC has adopted a number of community plans which will affect travel patterns at UBC. These include the following.

3.3.1 Memorandum of Understanding and Official Community Plan

In 1997, UBC and the GVRD established a Memorandum of Understanding (MoU), which described how UBC would develop a complete community on the Point Grey campus. In July 1997, the Official Community Plan (OCP) for UBC was adopted by the GVRD. The MoU was updated in December 2000.

A major component of the MoU relates to improving the transportation choices available for all members of the UBC community, and maintaining a transit-oriented, automobilerestrained transportation system. As part of its commitment to this goal, UBC agreed to pursue the following:

- UBC would pursue a reduction in SOV travel of 20% below the daily number of SOV trips recorded in Fall 1997.
- UBC would pursue an increase in transit ridership of 20%.
- UBC would be the lead agency in pursuing development and implementation of a U-Pass program. This would be undertaken in collaboration with other agencies such as the City of Vancouver, the GVRD, TransLink and UBC neighbours.
- UBC would also manage truck traffic to and from campus, to minimize the offcampus impacts of truck traffic.
- UBC would also develop and implement a comprehensive transportation management strategy the UBC Strategic Transportation Plan, which was adopted by UBC in 1999.

UBC has pursued and continues to pursue these objectives. To this end, UBC has undertaken additional initiatives, including creating the UBC TREK Program Centre, reducing the number of commuter parking stalls on campus, adjusting class schedules to reduce peak travel demands, improving the bicycle network, advancing opportunities for telecommuting, and incorporating traffic calming principles in both residential and academic areas on campus.

3.3.2 The UBC Strategic Transportation Plan

The STP recommends a comprehensive and integrated TDM strategy in support of the Trek 2000 Vision and the transportation-related commitments agreed to in the UBC Official Community Plan.

The Strategic Transportation Plan is a living document that contains a policy framework in support of TREK 2000 and MoU objectives. Included in the Plan are policies regarding regular reviews, ongoing policy references, and STP updates as needed to best serve the transportation needs of the UBC community.

3.3.3 Comprehensive Community Plan (CCP)

The CCP provides overall parameters for the development of the eight local areas identified in the OCP. The CCP establishes the principles for detailed neighbourhood planning in the eight areas, which are:

- North Campus
- Theological Precinct

- Thunderbird
- East Campus

- Gage South
- University Boulevard

Mid CampusSouth Campus

The principles outlined in the CCP pertain to housing types, open space, urban form, and circulation (transportation).

3.3.4 TREK 2000

TREK 2000 is UBC's strategic vision for the next millennium. Prepared through a widespread community consultation, TREK 2000 establishes the University's objectives in the next millennium. UBC's mission is to be Canada's best university, provide students with an outstanding and distinctive education, and conduct leading research to serve the people of British Columbia, Canada, and the world.

The TREK 2000 objectives focus around five pillars of a sustainable, complete community — people, learning, research, community and internationalization. Most relevant to transportation is the "community" pillar, which is exemplified in UBC's

initiative to create a complete community on campus, which will be a model of sustainable development and sustainable transportation.

3.4 The UBC TREK Program Centre

Primary responsibility for development and implementation of UBC's transportation-related MoU commitments rests with the Director of Transportation Planning at UBC and the UBC TREK Program Centre. This section outlines some of the changes that have occurred at UBC since the UBC TREK Program Centre began in 1997.

The TREK Program Centre's mission is to improve transportation choices by promoting sustainable transportation at UBC

- Class start-time changes in September 2001. In an effort to spread the transit demand in the AM peak period, UBC adjusted morning class start times from the existing campus-wide 8:30 AM start time. This change saw a portion of students begin classes at 8:00 AM, a portion of students remain at 8:30 AM and the remaining students begin classes at 9:00 AM. The desired effect was that by spreading out the start times for students, the demand on transit was also be spread out more, with the result that 12% more daily transit ridership was accommodated on the same number of buses.
- **Parking supply and costs.** UBC has eliminated over 3,000 commuter parking stalls on campus since 1997 a reduction in the commuter parking supply of more than 25%. At the same time, the price of parking on campus has increased. Daily parking rates in surface lots doubled from \$2.00 in 1997 to \$4.00 in 2003, and prices for parking permits and other parking on campus have also increased. As well, UBC has worked with the GVRD and the Ministry of Transportation to restrict parking on roadways adjacent UBC, particularly 16th Avenue and SW Marine Drive.
- More transit service. Since 1997, the level of transit service to UBC has increased substantially. The majority of the increase has been on the Route 99 B-Line, with additional improvements to the Route 43 express along 41st Avenue, increased service on the Route 44 express from downtown, and all day service on Route 480 from Richmond Centre.
- Improvements to bicycle facilities and services at and adjacent to UBC. New bicycle lanes were implemented on several roadways leading to the University. Most notable is the conversion of University Boulevard west of Blanca, from two lanes in each direction to one travel lane and one bicycle lane in each direction. Bicycle lanes were also been added on 16th Avenue.

On campus, changes include the addition of over 200 new bicycle racks bringing the on-campus total to over 500 racks, bicycle lockers at the War Memorial Gym, and new services such as the AMS Bike Co-op and the Bike Kitchen to encourage and support the UBC cycling community.

- **UBC Carpooling Program.** In an effort to promote carpooling to UBC and thereby reduce the number of single occupancy vehicles (SOV) coming to campus, the UBC TREK Program Centre implemented a comprehensive carpooling program in 2001. The program includes access to a web-based ride matching service to help commuters organise carpools, in addition to access to preferred carpool parking and a rewards program that includes transit vouchers, gift certificates and vehicle maintenance vouchers. Over 500 persons are currently registered in the ridematch database.
- **UBC Emergency Ride Home (ERH) Program.** When asked why they don't use non-automobile modes to get to or from UBC, many people respond that being without a ride home in the event of an emergency is a major consideration. The UBC Emergency Ride Home Program is run through the UBC TREK Program Centre and offers commuters who regularly use a non-automobile mode of travel (at least 3 times per week) a 90% reimbursement for costs associated with getting home by taxicab in the event of an emergency.

3.5 Campus Development

UBC has developed and is continuing to develop additional housing on-campus, as a means of reducing the proportion of persons who travel to UBC from off-campus. This housing includes student housing, housing for staff and faculty, and market housing. At the same time, an increased number and range of commercial services are now available on campus and in the University Endowment Lands adjacent campus.



4.0 TRAVEL TO AND FROM UBC

This section presents the number of trips made to and from the University's Point Grey campus each day. Details regarding mode share, occupancies and on-campus travel from Fall 1997 through Fall 2003 are also included.

4.1 How Many Trips Are Made Each Day?

4.1.1 Person Trips

On average, there were 117,800 person trips to and from UBC on a typical weekday in Fall 2003. This amounts to approximately 2% of the almost six million trips made each day in the entire GVRD.

Table 4.1 summarizes the total number of person trips each year since 1997. The total number of person trips increased 11% since 1997.

Table 4.1 – Total Person Trips at UBC by Year (24-hour period)

	Fall 1997	1998	1999	2000	2001	2002	Fall 2003
Total Daily Number of Person Trips	106,100	106,500	113,200	107,000	110,900	113,500	117,800
Overall Growth				11%			

Source: UBC Annual Data Collection Program 1997 - 2003

It is important to recognize that the total number of person trips recorded on a daily basis does not take into account the effects of population and enrollment growth at UBC. For example, if all things are considered equal, a larger population and a larger enrollment would equate to more trips. For this reason, it is important to examine travel patterns from year to year on a consistent basis where the effects of population and enrollment growth have been removed. **Table 4.2** provides such a summary, indicating daily trip rates (trips per person) for a typical weekday at UBC.

Table 4.2 – Trip Rates To/From UBC (24-hr person trips per capita)

	1997	1998	1999	2000	2001	2002	2003
Trip Rate	2.51	2.45	2.53	2.39	2.41	2.31	2.32
Change				-7.6%			

Source: UBC Annual Data Collection Program 1997 - 2003

As **Table 4.2** indicates, the number of trips per person has actually decreased by approximately 8% since 1997, even

The overall trip rate – the number of trips per capita – has decreased by 8% since 1997

though both the population and enrollment at UBC and the total number of trips have increased.

4.1.2 Travel Times

Figure 4.1 shows the average daily arrival and departure profile for all person trips made to UBC, by all modes. The overall pattern of this profile has not changed significantly, in that the peak hours are still observed during generally the same time period. What has changed, however, is the arrival and departure patterns within each of the peaks. Since class start times were adjusted in fall 2001, the morning and afternoon peak periods have spread — they have begun sooner and last longer. As a result of this spreading of the peak periods, increases in peak hour person trips and traffic have been minimized — in fact, the number of trips in the morning peak hour has not increased at all since 1997.





Figure 4.1 – Arrival and Departure Profile (All Modes)

Table 4.3 summarizes the observed AM and PM peak hour person trips, for both directions in Fall 1997 and Fall 2003.

		AM Pe	ak Hour		PM Peak Hour			
Mada	Fall 1997		Fall 2003		Fall 1997		Fall 2003	
wode	EB	WB	EB	WB	EB	WB	EB	WB
Single Occupant Vehicles (SOV)	950	2,980	1,010	3,110	2,930	1,310	2,755	1,340
Carpools and Vanpools	480	3,650	400	1,235	2,050	790	1,095	535
Transit	160	2,190	380	4,360	1,340	260	3,515	680
Bicycles	15	275	30	235	255	15	210	55
Pedestrians	25	55	35	75	70	60	75	60
Heavy Trucks	5	25	35	40	30	10	25	20
Motorcycles, other	5	15	20	55	15	5	50	25
Total	1,640	9,190	1,910	9,110	6,690	2,450	7,725	2,715

Table 4.3 – Peak Hour Trips By Direction (person trips)

Source: UBC Annual Data Collection Program 1997 - 2003

Table 4.3 indicates that in the AM peak hour, eastbound trips have increased slightly, while westbound trips to campus have remained relatively the same. In the PM peak hour, these results suggest that both arrivals and departures have increased slightly since 1997. What is most important to note from these results is the dramatic increase in the number of person trips by transit during both the AM and PM peak periods. Results such as these indicate that a significant number of commuters are using transit in comparison to Fall 1997, results that are most likely due implementation of the U-Pass this year.

4.1.3 Traffic Volumes

In Fall 2003, the weekday traffic volume to and from UBC was 59,800 vehicles. This is approximately 4,800 fewer vehicles than in 1997 — a reduction of 7.5%. The amount of traffic travelling to and from UBC *per capita* has decreased by approximately 20% since 1997.

Table 4.4 provides a summary of daily traffic volumes by route from 1997 through to 2003. The three most-used roadways for traffic travelling to and from UBC are SW Marine Drive, 16th Avenue and University Boulevard, each of which carries more than 20% of daily traffic to and from UBC.

	Fall	%						
	1997	1998	1999	2000	2001	2002	2003	Of Total
NW Marine Dr.	2,040	2,190	1,970	1,620	1,670	1,610	2,020	3%
Chancellor Blvd.	11,660	11,340	11,760	10,650	11,170	11,450	10,670	18%
University Blvd.	14,610	13,370	12,490	12,620	14,360	13,400	11,770	20%
16th Ave.	12,880	13,390	13,010	12,740	13,390	13,530	12,750	21%
41st Ave.	23,410	24,110	23,550	23,270	24,350	10,100	9,000	
SW Marine Dr.						15,140	13,600	
Totals	64,600	64,400	62,780	60,900	64,940	65,230	59,810	100%

 Table 4.4 – 24-Hour Screenline Volumes (Fall 1997 – Fall 2003)

Source: UBC Annual Data Collection Program, 1997 - 2003

Figure 4.2 illustrates the arrival and departure patterns of all vehicles travelling to and from UBC in a 24-hour period for both 1997 and 2003. This figure clearly shows the reduction in traffic volumes during both peak periods, as well as at other times of the day.





Figure 4.2 – Vehicle Arrival and Departure Profile (All Modes)

4.2 How Do People Get To UBC?

In studying travel patterns for UBC, it is important not only to examine the number of trips that are being made and how this changed over time, but also how people are commuting to the University. Many people view this aspect of commuting to be the more important target for transportation planners at the University. While the total number of trips will always correspond somewhat to the size of the University and the need to come and go will likely not change that significantly, influencing how people choose to travel is likely a more achievable effort.

Table 4.5 summarizes the daily number of person trips made by each mode, to and from UBC from Fall 1997 through Fall 2003.



Mode	1997	1998	1999	2000	2001	2002	2003
Single Occupant Vehicles (SOV)	46,000	49,300	48,000	47,200	52,600	48,400	45,000
Carpools and Vanpools (HOV)	36,100	31,600	35,700	28,600	26,000	29,100	21,700
Transit	19,000	19,400	23,400	24,300	27,700	29,700	45,400
Bicycles	2,700	3,900	3,100	3,200	2,900	3,300	2,800
Pedestrians	1,400	1,600	2,000	1,600	1,200	1,600	1,500
Heavy Trucks	300	85	250	250	150	400	300
Motorcycles, other	600	530	700	600	550	1000	1,100
Total	106,100	106,500	113,200	105,800	110,900	113,500	117,800

Table 4.5 – Person Trips at UBC (24-hr period, Fall 1997 – Fall 2003)

Source: UBC Annual Data Collection Program 1997 - 2003

Figure 4.3 illustrates how travel patterns in Fall 2003 compare with previous years. The trend indicated by the different colours in the bars from year to year clearly shows a significant increase in transit use and a decrease in HOV (carpools and vanpools) trips.



Figure 4.3 – Person Trips by Mode (24-hour period, Fall 1997 - Fall 2003)

Key changes from 1997 to 2003 include:

• **Transit.** Transit ridership has increased steadily since 1997, with a significant increase from Fall 2002 to Fall 2003 as a result of the student U-Pass. Average weekday transit trips are now more than 45,000, accounting for approximately 39% of all travel to and from the University each day.

- **SOV.** The absolute number of SOV person trips to/from UBC on a daily basis has decreased to less than the number in Fall 1997. The decrease is approximately 1,100 person trips, which corresponds to a decrease in the SOV trip rate of 18.5%.
- HOV. The number of person trips made by carpools and vanpools has continued to decline since 1997. In Fall 1997, HOV trips accounted for 34% of all person trips, whereas by Fall 2003 the HOV mode share dropped to only 18% of all person trips an overall decrease of almost 40%. A 25% decrease from Fall 2002 to Fall 2003 suggests that many carpoolers have shifted to transit since implementation of the student U-Pass.
- **Trucks.** Daily numbers of heavy trucks have fluctuated from year to year, but have remained at or below UBC's target of an average 300 trucks per day in each year except Fall 2002. in fall 2003, a total of 311 heavy trucks were recorded travelling to and from UBC, which represents a small increase from the 298 heavy trucks recorded in 1997. This is a significant comparison given the increase in construction activity on campus in 2003 as compared with 1997 the reason the increase from 1997 to 2003 has been so small is UBC's Truck Management Program, which is described in detail in Section 5.6.

A more detailed review of the trends noted for each individual mode of transportation is provided in the following sections.

4.3 How Does UBC Compare to the Rest of the Region?

The most recent *Greater Vancouver Trip Diary Survey* and *Usage and Attitude Survey* were conducted in 1999. These surveys collected detailed information regarding the travel patterns and attitudes of residents in the Greater Vancouver Region. Comparing UBC travel data to data obtained from the GVRD surveys provides an indication of how UBC is progressing towards its transportation goals in relation to the rest of the region.

Table 4.6 shows how the daily UBC mode share compares to that of the rest of the Greater Vancouver Region. Compared to the region as a whole, more people at UBC use transit (almost twice as many), yet fewer people at UBC make use of carpools or vanpools for commuting.



Table 4.6 – GVRD Mode Shares Vs. UBC Fall 2003 Mode Shares, All Trips (person trips, 24 hours)

	GVRD (I	Fall 1999)	UBC Screenline (Fall 2003)		
Mode	de Trips Mode Share		Trips	Mode Share	
Single occupant vehicles	2,329,000	42.5%	45,000	38.2%	
Carpools and vanpools	1,735,000	31.7%	21,700	18.4%	
Transit	565,000	10.3%	45,400	38.5%	
Bicycles	91,000	1.7%	2,800	2.4%	
Pedestrians	694,000	12.7%	1,500	1.3%	
Other	62,000	1.1%	1,400	1.2%	
Totals	5,476,000	100%	117,800	100%	

Source: Greater Vancouver Trip Diary Survey, GVRD/TransLink, 1999

Table 4.7 provides a comparison of work and post-secondary school trips in the region with trips to and from UBC, which are predominantly work and school trips. The proportion of SOV trips is significantly higher for regional work and school trips than for all regional trips and for UBC trips, and carpooling is proportionately lower.

Table 4.7 – GVRD and UBC Mode Shares, Work/School Trips (person trips, 24 hours)

	GVRD (F	all 1999)	UBC Screenline (Fall 2003)
	Work/School		All Trips (predominantly
Mode	Trips	Other Trips	work/school trips)
Single occupant vehicles	57.9%	31.6%	38.2%
Carpools and vanpools	14.9%	43.4%	18.4%
Transit	17.3%	6.1%	38.5%
Bicycles	0.10/	17 60/	2.4%
Pedestrians	9.1%	17.5%	1.3%
Other	0.8%	1.4%	1.2%
Totals	100%	100%	100%

Source: Greater Vancouver Trip Diary Survey, GVRD/TransLink, 1999

4.4 Vehicle Occupancy

Vehicle occupancy is a measurement that reflects the average number of people travelling per vehicle during a certain period of time. It is calculated by dividing the total number of people travelling to or from the University by the total number of vehicles observed within the same time period.

The average 24-hour vehicle occupancy for Fall 2003 is 1.12 persons per vehicle (excluding transit buses and heavy trucks). As **Table 4.8** indicates, vehicle occupancies have decreased steadily since 1997, as carpoolers have switched to transit.

Table 4.8 – Average 24-Hr Vehicle Occupancy by Year

	Fall						
24-Hr Average Vehicle	1.30	1.26	1.35	1.27	1.22	1.20	1.12
Source: LIBC Appual Data Collection Program 1997 - 2003							

Source: UBC Annual Data Collection Program 1997 - 2003

Table 4.9 compares vehicle occupancies for trips in the AM and PM peak periods at UBC, in Vancouver and throughout the region. At UBC, the average AM and PM peak period vehicle occupancies is each 1.16 and 1.18 persons per vehicle, respectively.

Table 4.9 – UBC Occupancy Compared with the Region

	UBC	Vancouver/UEL	GVRD
AM Peak Period Occupancy	1.16	1.28	1.30
PM Peak Period Occupancy	1.18	1.30	1.31

Source: UBC Annual Data Collection Program 2003 and TransLink Strategic Planning Department



5.0 TRENDS BY MODE

This section of the report summarizes key trends that are identified in travel patterns for each mode.

5.1 SOV Travel

Trends in single-occupant vehicle travel are an important measure of how UBC is managing to influence the commuting behaviour of its staff, students and faculty. UBC is pursuing an overall reduction of 20% of average daily SOV trips per person from 1997 levels. To date, UBC has achieved a reduction of 18.5%.

Table 5.1 provides a summary of total numbers of daily SOV trips to and from UBCeach year. The number of SOV trips in Fall 2003 is lower than in 1997 or any other year.

Table 5.1 – Total SOV Trips (24-hour period, Fall 1997 – Fall 2003)

	1997	1998	1999	2000	2001	2002	2003
Total Number of Person Trips by SOV	46,000	49,300	47,800	47,200	52,570	48,400	45,000
Overall Change				-2.2%			

Source: UBC Annual Data Collection Program, 1997 - 2003

Table 5.2 provides a summary of SOV trips per person, which discounts the effects of growth and provides a consistent basis for comparing data from one year to another.

Table 5.2 – SOV Trip Rates (24-hr period, Fall 1997 – Fall 2003)

	1997	1998	1999	2000	2001	2002	2003
Total Number of SOV Person Trips per Capita	1.09	1.14	1.07	1.06	1.14	0.99	0.89
Overall Change	-18.5%						

Source: UBC Annual Data Collection Program, 1997 - 2003

Table 5.2 indicates that the number of SOV trips per person has decreased each yearsince 1997. The SOV trip rate for Fall 2003 is 18.5% lower than in 1997. This result

indicates that UBC is now close to meeting another of its MoU targets — that of reducing single-occupant vehicle travel to and from the University by 20%.

24 hour SOV trip rates to/from UBC have decreased by 18.5% since 1997

Figure 5.1 illustrates the hourly arrival and departure profile for SOV trips, in Fall 1997 and Fall 2003.





Figure 5.1 – SOV Arrival and Departure Profile (Fall 1997 and Fall 2003)

Figure 5.1 indicates that although the number of AM peak period SOV trips have not changed significantly since 1997, SOV trips have decreased during the PM peak period. In addition to this, the Fall 2003 PM peak period shows some spreading in comparison to 1997.

Key observations regarding SOV travel include:

- The number of daily SOV trips per person has decreased by 18.5% since 1997, indicating that UBC is close to achieving the target of reducing SOV travel by 20%.
- The total number of SOV trips has decreased by 1,000 trips per day from 1997 levels, a reduction of 2.2%. During this same time period, the daytime population of the University has increased 20%.



5.2 HOV Travel

High occupancy vehicles include both carpools (two or more people in one vehicle) and vanpools travelling to the University. In Fall 1997, approximately 36,200 person trips were made each day by either carpool or vanpool. At that time, a target of increasing the number of HOV trips by 10,000 person trips per day was identified.

This turned out to be an overly optimistic target. By Fall 2003, the number of HOV trips decreased to 21,700 trips per day — a reduction of 40% from 1997 levels. When the effects of growth are discounted, HOV trips per person have decreased more than 50%. **Table 5.3** shows how HOV travel has steadily decreased since 1997.

	1997	1998	1999	2000	2001	2002	2003	% of Total
2 person	28,000	24,700	27,600	23,500	21,500	25,050	17,500	80%
3 person	5,700	4,500	4,800	4,300	2,500	2,350	2,200	10%
4+ person	2,500	2,400	3,300	1,800	2,000	1,650	2,050	9%
Total	36,200	31,600	35,700	29,600	26,000	29,050	21,750	100%
Total HOV Mode Split	34%	30%	32%	28%	23%	26%		
							17%	
Overall Change	-40%							

Table 5.3 – HOV Person Trips (24-hour period, Fall 1997 - Fall 2003)

Overall Change Source: UBC Annual Data Collection Program, 1997 - 2003

This reduction in HOV travel has occurred because carpoolers have switched to transit. Focus group sessions conducted with UBC students, faculty and staff revealed that transit is a much more attractive mode of travel for many carpoolers and vanpoolers, and as the frequency of transit services and route options have been improved, more and more commuters have switched to transit, particularly since the introduction of the student U-pass in September 2003.

Figure 5.2 compares the arrival and departure profile of total HOV person trips made to and from the University, for Fall 1997 and Fall 2003. What is most apparent in this comparison is the dramatic decrease in overall numbers of HOV person trips, during all times of the day.





Figure 5.2 – HOV Arrival and Departure Profile (Fall 1997 and Fall 2003)

Key observations regarding HOV travel include:

- The number of daily HOV trips per person has decreased by over 50% since 1997.
- The total number of daily HOV person trips observed is 40% less in Fall 2003 than in 1997.
- Corresponding increases in transit ridership since 1997 and direct feedback from carpoolers at UBC indicate that many former carpool and vanpool commuters have switched to transit, particularly since implementation of the student U-Pass in September 2003.

5.3 Transit

The most significant change in the past year has been the substantial increase in transit trips to and from UBC, as a result of the introduction of the student U-Pass. From Fall



2002 to Fall 2003, the total number of transit trips increased by 15,700 to a total of 45,400 daily person trips — an increase of 53% in one year. Transit now accounts for 39% of all person trips to and from UBC — more than any other mode of travel.

Table 5.4 indicates how trips by transit have increased each year. Since 1997, the total number of daily transit trips has increased 139%.

Table 5.4 – Person Trips by Transit (24-hr period, Fall 1997 to Fall 2003)

	1997	1998	1999	2000	2001	2002	2003
Total Number of Transit Person Trips	19,000	19,370	23,700	24,320	27,700	29,700	45,400
Overall Change			-	139%	-		_

Source: UBC Annual Data Collection Program, 1997 – 2003

When the total number of person trips made by transit is expressed independent of growth effects, the increase is equally dramatic, as summarized in **Table 5.5**. Transit trips per capita have doubled since 1997.

Table 5.5 – Person Trips by Transit per Capita (24-hr period, Fall 1997 – Fall2003)

	1997	1998	1999	2000	2001	2002	2003
Total Number of Transit Person Trips per Capita	0.45	0.45	0.53	0.54	0.60	0.61	0.89
Overall Change				99%			

Source: UBC Annual Data Collection Program, 1997 - 2003

Figure 5.3 indicates the sources of new transit ridership since 1997.





Figure 5.3 – Sources of New Transit Ridership Since 1997

Figure 5.4 illustrates the hourly arrival and departure profile of weekday transit person trips at UBC. An interesting trend in transit ridership for Fall 2003 is the significant increase in off-peak transit trips — trips made during the midday and evening. In comparison to Fall 2002, midday and evening ridership has increased by 55%, a rate that is substantially higher than the 39% growth in peak period transit ridership.





Figure 5.4 – Transit Arrival and Departure Profile (Fall 1997 and Fall 2003)

Figure 5.5 provides a comparison of transit ridership by route. Ridership on the Route 99 B-Line (which includes the non-stop "UBC Special") has increased 135% since 2002, and now amounts to half the daily transit ridership to and from UBC. Other routes experiencing significant ridership increases include the Routes 41 and 43 along 41st Avenue (78% increase), Route 44 to downtown Vancouver (104% increase), and Route 480 route to Richmond (90% increase).





Figure 5.5 – Fall 2002 vs. Fall 2003 Ridership to/from UBC by Route

Although TransLink anticipated an increase in transit ridership as a result of the student U-Pass, and substantially increased transit service levels in September 2003, the amount of the ridership increase was greater than expected, particularly on some routes. TransLink responded by adding even more service throughout Fall 2003 and in January 2004 on selected routes and at selected times, to address complaints regarding overcrowding and pass-ups.

Key observations regarding transit ridership at UBC include:

- The total number of daily transit trips to and from UBC increased by 15,700 trips an increase of 53% from Fall 2002 to Fall 2003. Transit ridership in Fall 2003 amounts to 45,400 daily trips.
- The mode share for transit is 39%. More trips are made to and from UBC by transit than by any other mode of transportation.
- Daily transit trips per person doubled from Fall 1997 to Fall 2003.
- Midday and evening ridership has increased more than peak period ridership since implementation of the student U-Pass.



5.4 Bicycles

Although the total number of person trips made by bicycle on a daily basis has varied each year since 1997, the number of bicycle trips observed in fall 2003 is only 3.7% more than in Fall 1997, as **Table 5.6** indicates. This actually represents a 13.6% reduction in bicycle trips per person, as indicated in **Table 5.7**.

Table 5.6 – Person	Trips by Bicy	cle (24-hr perio	d, Fall 1997 to	5 Fall 2003)

	1997	1998	1999	2000	2001	2002	2003
Total Number of Person Trips by Bicycle	2,700	3,850	3,090	3,200	2,900	3,300	2,800
Overall Change				3.7%			

Source: UBC Annual Data Collection Program, 1997 – 2003

 Table 5.7 – Bicycle Travel Trip Rates (24-hr period, Fall 1997 to Fall 2003)

	1997	1998	1999	2000	2001	2002	2003
Total Number of Person Trips by Bicycle	0.064	0.089	0.069	0.072	0.063	0.067	0.055
Overall Change				-13.6%			

Bicycle travel is affected by external factors such as weather and the availability of attractive bicycle routes. Consequently, it is expected that observed numbers of cyclists travelling to and from UBC would vary from year to year. However, experience at other post-secondary institutions where U-Pass programs have been implemented also suggests that the student U-pass program at UBC has resulted in some former cyclists shifting to transit. At the University of Victoria, for example, introduction of a U-Pass program resulted in a 37% reduction in bicycle trips to and from campus. In comparison, the reduction at UBC is considerably less than at U-Vic — only a 15% reduction from Fall 2002 to Fall 2003.

Figure 5.6 illustrates which routes commuting cyclists use to travel to and from UBC. University Boulevard is the most popular route for cyclists, accounting for approximately 40% of all bicycle trips during the AM and PM peak periods combined. 16th Avenue is becoming an increasingly popular route as well. These results indicate that the implementation of bicycle lanes on University Boulevard and 16th Avenue has had a positive effect on bicycle travel.





Figure 5.6 – Bicycle Trips to and From UBC by Route (Fall 2003)

Key observations regarding bicycle travel at UBC include:

- The total number of bicycle trips made to and from UBC in Fall 2003 was 2,800 daily trips. This number of trips is similar to the number of trips observed in Fall 1997.
- On a per capita basis, bicycle trips per person have decreased by 14%.
- University Boulevard remains the most popular bicycle route to UBC, carrying approximately 40% of all AM and PM peak period bicycle trips.

5.5 Pedestrians

Distance is a limiting factor for pedestrian trips to UBC — a typical walking trip from Point Grey would be 30 minutes, and would be even longer from other parts of Vancouver. Consequently, the number of persons walking to UBC is small, and is limited primarily to trips to and from the UEL. No significant increases in walking trips to and from UBC are expected.

Table 5.8 provides a summary of walking trips to and from UBC since 1997.



Table 5.8 – Pedestrian Person Trips (24-hr period, Fa	all 1997 to Fall 2003)
---	------------------------

	1997	1998	1999	2000	2001	2002	2003
Total Number of Pedestrian Person Trips	1,400	1,590	1,970	1,570	1,190	1,560	1,500
Overall Change		•		7.1%			_

Source: UBC Annual Data Collection Program, 1997 - 2003

The total number of pedestrian trips to and from UBC has remained relatively constant over the last six years. On a per capita basis, this reflects a decrease in walking trips per person of 9%.

Key observations regarding pedestrian travel include:

- Since Fall 1997, the total number of pedestrian trips to and from UBC has remained relatively constant at approximately 1,500 daily trips.
- On a per capita basis, pedestrian trips per person have decreased 9% since 1997.

5.6 Heavy Trucks

As a means of mitigating the impacts of heavy truck traffic on neighbouring communities, UBC has implemented a Truck Management Program. The intent of this program is to minimize truck trips and more evenly distribute truck traffic from day to day and among various truck routes leading to UBC. Means of achieving this include onsite storage of excavated materials, re-use of excavated materials, use of pup trailers, scheduling of construction activities to "even out" truck traffic, tarping of loads, wheel washes and other measures. Details regarding UBC's Truck Management Program are included in Appendix B.

Since the adoption of the Strategic Transportation Plan, UBC has pursued a target of an average of 300 truck trips per day or less to and from UBC. As **Table 5.9** and **Figure 5.7** indicate, with the exception of Fall 2002, UBC has achieved this target each year. The number of truck trips exceeded the target in Fall 2002 due to a high level of construction activity on campus, particularly excavation of the new Life Sciences building.



	Fall 1997	Fall 1998	Fall 1999	Fall 2000	Spring 2001	Fall 2001	Spring 2002	Fall 2002	Fall 2003
Total Number of Heavy Truck Trips	298	83	240	254	209	136	289	443	311
Overall Change					4.4%				

Table 5.9 – Heav	Truck Trips	(24-hr period, Fa	all 1997 to Fall 2003)
	,	\ - · · · · · · · · · · · · · · · · · ·	

Source: UBC Annual Data Collection Program, 1997 – 2003





Approximately two-thirds of heavy trucks (205 trucks) observed in Fall 2003 were construction-related trucks, as compared with one-third of heavy trucks (106 trucks) which were related to the on-going operation of the University.

Figure 5.8 illustrates the distribution of heavy truck trips among truck routes leading into UBC in Fall 2003. SW Marine Drive carries the highest proportion of heavy truck traffic to and from UBC. Approximately 61% of all heavy truck trips per day use this route. In comparison, the second most-used route is Chancellor Boulevard, with 14% of the daily heavy truck volume.



Figure 5.8 – Heavy Truck Traffic to/from UBC by Route (24-hrs, Fall 2003)

In October of 2003, a truck count was undertaken on SW Marine Drive at Dunbar Street. The purpose of this count was to determine the proportion of heavy trucks using SW Marine Drive which originate at UBC. This count showed that approximately 52% of the heavy trucks along SW Marine Drive were travelling to and from destinations within the City of Vancouver, and that the remaining 48% were travelling to or from destinations related to UBC and UEL. A similar count undertaken in January 2000 found that 74% of the heavy trucks using SW Marine Drive were travelling to and from destinations within the City of Vancouver, and that the remaining 26% were travelling to or from destinations within the City of Vancouver, and that the remaining 26% were travelling to or from destinations related to UBC and UEL.

Key observations regarding heavy truck travel at UBC for Fall 2003 include:

- Fall 2003 data indicate that heavy truck trips are at the target level of 300 trucks per day, despite increased levels of construction activity on campus. This result suggests that the Truck Management Program is having the desired effect of minimizing heavy truck traffic.
- In Fall 2003, SW Marine Drive carried approximately 61% of heavy truck trips to and from UBC. The majority of heavy trucks travelling along SW Marine Drive are travelling to and from locations within the City of Vancouver.



6.0 TRAVEL PATTERNS AT UBC

On-campus travel data have been collected as part of the annual data collection program as a means of monitoring how campus roads and intersections are functioning, particularly as travel patterns on campus change as a result of institutional and residential development. This section of the report provides a summary of on-campus traffic volumes and vehicle speeds, parking supply and demand, intersection performance and other significant travel patterns.

6.1 On-Campus Traffic

Figure 6.1 illustrates on-campus traffic volumes collected in Fall 2002 and 2003, in addition to volumes observed on major roadways leading to and from the Point Grey campus. Counts of on-campus traffic volumes are scheduled on a bi-annual basis, and therefore only half the locations were counted in Fall 2003. In **Figure 6.1**, Fall 2003 volumes are shown as solid lines and Fall 2002 volumes are shown as dashed lines.

In general, on-campus traffic volumes have not changed significantly over the last several years. The highest traffic volumes are on roadways leading to and from the campus, with moderately high volumes leading to and ending at major parking facilities on campus. As well, roads that generally have a high level of pedestrian activity have lower traffic volumes, such as East Mall north of Agronomy Road, and Agronomy Road east of Main Mall.

6.2 Parking

Introduction of the student U-Pass in September 2003 had a significant effect on parking demand at UBC. **Table 6.1** provides a summary of parking utilization rates for surface parking lots (B lots) and parkades, in Fall 2002 and Fall 2003. It should be noted that it is generally not possible nor desirable to achieve 100% utilization of parking facilities. Some empty parking stalls are required to accommodate daily and hourly fluctuations in parking demand, to minimize search times for an available parking stall, and to avoid spill-over parking impacts. Consequently, UBC's Parking and Access Control Services has established a target of 85% average utilization.

Table 6.1	– Average	Parking	Facility	Utilization	(Fall 2002	and Fall	2003)
	- Average	i ai king	racinty	othization	(1 411 2002		2003)

		Average Utilization											
	Target Fall 2002 Fall 2003												
Surface lots (B lots)	85%	90%	71%										
Parkades	85%	87%	78%										





The results in **Table 6.1** indicate that introduction of the student U-Pass has reduced parking demand by more than 10%. Other measures which indicate similar effects on parking include:

- The average daily parking demand in the surface B-Lots in Fall 2003 was 1,500 vehicles. This represents a reduction of 12% from the average 1,700 daily parking demand in fall 2002 of 1,700 vehicles.
- In Fall 2002, a total of 12,270 staff, faculty and student parking permits were sold. This represents a reduction of over 1,000 permits sold a reduction of 8% from the 13,315 permits sold the previous year in Fall 2002.

Introduction of the student U-Pass has also had an effect on parking off-campus in the Point Grey neighbourhood. Some students drive and park in Point Grey, and use their U-Passes to ride transit the rest of the way to UBC, thereby avoiding paying for parking at UBC.

On a typical weekday, observations indicate that a total of approximately 100 vehicles are parked on streets in Point Grey by students and others travelling to UBC. Locations where this is particularly noticeable include the 4500 blocks of West 9th and West 11th Avenues, as well as Blanca Street at 10th Avenue. The 4500 blocks of West 9th and West 9th and West 11th Avenues are attractive to students and others travelling to UBC because they are close to the 99 B-Line stop on 10th Avenue at Sasamat Street, and because there are no residential uses on the south side of 9th Avenue and for a portion of the north side of 11th Avenue within these blocks. Similarly, Blanca Street is attractive because all three trolley bus routes serve bus stops at the Blanca Street/10th Avenue intersection, and because there are no residential uses on the west side of Blanca Street.

UBC has no jurisdiction nor control of parking on streets in West Point Grey. The City of Vancouver's Parking Administration Branch is responsible for managing parking on City streets. The Parking Administration Branch is aware of the issue of UBC students and others parking on neighbourhood streets in Point Grey, and is considering ways in which resident parking only zones can be implemented on streets where parking is an issue. A resident parking only zone prohibits anyone from parking in the designated zone, except residents of that block. Resident parking only zones are used elsewhere in the City on residential streets adjacent commercial uses, for example.



6.3 Vehicle Speeds

Many areas of the UBC campus have high levels of pedestrian and bicycle activity. In these areas — as well as elsewhere on campus — it is important that motor vehicle speeds are moderated and that speeding is discouraged. Speed limits on campus roads are generally 30 km/h, with high speed limits on perimeter roads only. UBC has implemented traffic calming measures on a number of roads to discourage speeding and to increase safety for pedestrians, cyclists, motorists and other road users.

Figure 6.2 and **Figure 6.3** indicate observed 85^{th} percentile speeds for seven locations on campus in Fall 2003, for the AM and PM peak periods respectively. As these figures indicate, most roadways on campus have 85^{th} percentile speeds that range between 30 km/h and 45 km/h. 85^{th} percentile speed is a measure that indicates the speed at or below which 85% of all vehicles are travelling, and above which 15% of all vehicles are travelling. It is a recognized standard used throughout North America to measure traffic speeds.

Observed 85th percentile travel speeds that are significantly higher than the posted speed limit are indicated on **Figure 6.2** and **Figure 6.3** with red text. Speeds observed in Fall 2003 indicate that this is the case on many campus roads. Locations where UBC may wish to consider implementing traffic calming measures or other measures as appropriate to discourage speeding include:

- West Mall south of Thunderbird Boulevard. In combination with the construction that is happening in this area, there may be the opportunity to integrate traffic calming improvements along this stretch. Currently there are curb extensions on the east side of this portion of West Mall.
- Agronomy Boulevard, Thunderbird Boulevard and Crescent Boulevard between West Mall and East Mall. These campus roads have consistently shown relatively high 85th percentile speeds.
- Wesbrook Mall south of University Boulevard
- East Mall south of Thunderbird Boulevard





iects/1332/0056/01/graphics/ Figure 6.2



Transportation Status Report - March 2004

Appendix A 2004 Campus-Wide Transportation Survey Objectives



2004 Campus-Wide Transportation Survey Objectives

- 1. Basic longitudinal transportation data:
 - a. Personal data Postal code, faculty, etc.
 - b. Trip diary
- 2. Confirmation of average monthly transportation costs for students at UBC
 - a. This will help build financial business case for U-Pass @ UBC
 - b. Need to know how much students average cost has gone down due to U-Pass
 - c. In 1996, it was \$120 per month.
- 3. Determine perceived transportation benefits/costs of U-Pass
 - a. Mode splits pre and post U-Pass
 - How many students:
 - Have changed their mode (ie. car to bus)?
 - Combine use of U-Pass with another mode?
 - Do not use their U-Pass?
 - Have sold their car?
 - Have parked their car for the winter?
 - No longer purchase a parking permit?
 - b. User satisfaction to establish a benchmark
 - To what extent do students use U-Pass beyond their UBC commute?
 - To what extent is current service adequate to student needs to/from UBC?
 - To what extent is current service adequate to student needs on trips to destinations other than UBC (ie. other routes, Late Night service)?
- 4. Determine Support for Summer U-Pass
 - a. How many winter session students that attend summer courses would be interested in taking advantage of a summer U-Pass?
 - b. How many summer session students (ONLY) would be interested in summer U-Pass?
- 5. Determine Support for staff/faculty U-Pass program based on pilot introduction
 - a. Support for Price range at 100% (ie. Mandatory), 75%, 50% (i.e. opt in) participation
 - b. Support for opt-in vs. mandatory, or, under what conditions would they 'livewith' a mandatory U-Pass if it was the only option



- c. Need for a parking component of U-Pass and in what capacity
- d. Interest in combining with Aquatic Centre fitness pass, and at what price
- e. Determine if there are any factors internal to UBC that could be leveraged to increase support for Staff/Faculty U-Pass (similar to changes to class start times for students)
- 6. Determine Support for ComPass among non-student, non-staff/faculty residents of UBC
 - a. How many Other Residents would be interested in a ComPass?
 - b. Price point analysis



Appendix B Truck Management Fact Sheet



FACT SHEET

UBC's Unique Truck Management Plan

UBC Works to Minimize Impacts to Neighbours

Academic growth and development of a University Town at UBC mean that construction activity on campus will continue for many years. As part of its commitment to minimize the impacts of development on adjacent neighbourhoods, UBC has implemented an innovative Truck Management Plan — one that is unique in the Lower Mainland.

The UBC Properties Trust project management team now includes a transportation consultant with expertise in construction traffic management. The consultant is responsible for day-to-day management of trucks traveling to and from UBC, through the Truck Management Plan. Regular monitoring of truck traffic will enable the project management team to ensure that impacts of truck traffic are minimized off-campus as well as on-campus.

The Truck Management Plan

The key features of UBC's Truck Management Plan include:

- Compliance with all City of Vancouver truck bylaws (including tarp requirements and noise requirements), Ministry of Transportation regulations, and the traffic management requirements in UBC's Strategic Transportation Plan.
- Truck traffic dispersed over all designated truck routes on the west side of Vancouver.
- Scheduled truck arrivals and departures to more evenly distribute truck traffic throughout the day.
- A full-time inspector who monitors truck traffic arriving at UBC.
- Fines issued to truck operators who fail to comply with requirements.

University Town, External Affairs 6328 Memorial Road Vancouver, BC V6T 1Z2 Phone: 604-822-6400 Fax: 604-822-8102 E-mail: info.universitytown@ubc.ca

- Incentives for contractors to reuse materials, and thereby reduce truck traffic.
- Regular public notices and communication regarding upcoming road closures, truck routing changes and other important activities.
- Daily monitoring and weekly reporting regarding truck activity, compliance with requirements, forecasts of future truck activity, impending changes and other truck management issues.

The Plan is Working

The Truck Management Plan is already making a difference. Examples of some of the results UBC has achieved include:

- Reusing excavated material for landscaping at the Chancellor's Gate and Promontory projects has reduced truck traffic by 500 truck trips.
- Use of pups and transfers for excavation and delivery of aggregate materials has reduced truck volumes up to 44% per week.
- Fines have been levied against truck operators who failed to comply with requirements. Compliance has improved significantly in response, and as a result the number and amount of fines issued have decreased steadily.



Truck Traffic Management Site Check

Details

The specific components of the Truck Management Plan are described below.

Truck Routes and Staging Locations

- Included new Supplementary General Conditions for Traffic Management in the standard contract documents with general contractors. These conditions include requirements for alternating the routes for trucks traveling to and from UBC and become a component of the terms and conditions of the contract.
- Identified four City of Vancouver truck routes among which truck traffic will be dispersed:
 - \circ 4th Avenue.
 - \circ 10th Avenue.
 - o 41^{st} Avenue.
 - o SW Marine Drive.
- Established on-campus truck routes for all campus projects.
- Established staging locations for all campus projects.

Quality Assurance

- Weekly site audits for each site on campus to review standard traffic control practices, signage requirements, public safety, and truck practices.
- Included new Supplementary General Conditions for Traffic Management in the standard contract documents with general contractors. These conditions include requirements for the submission of an integrated Truck Management Plan which incorporates the specifications contained in the Truck Management Plan and becomes a component of the terms and conditions of the contract. The plans provide the following details:
 - Estimated average daily number of truck trips for each stage of construction.
 - Proposed haul routes to be utilized for each type of truck during each stage of construction.
 - o Standardized "Daily Haul Log."
 - o Standardized "Daily Traffic Control Logs."
 - Procedures utilized by the contractor to ensure the dissemination of information to local stakeholders as per the strategy specifications.
 - Procedures utilized by the contractor to ensure compliance with all City of Vancouver Bylaws, Ministry of Transportation regulations, and industry standards.

By-law and Regulations Compliance

- Included new Supplementary General Conditions for Traffic Management in the standard contract documents with general contractors. These conditions outline the requirements for trucking regulations and adherence to by-laws adopted from the City of Vancouver and becomes a component of the terms and conditions of the contract.
- Placement of a Quality Assurance Inspector for continual on-site surveillance to ensure compliance with all regulations, specifications, adopted bylaws including established general hours of operation, tarping regulations, noise by-laws, and truck routes.
- Implemented a penalty system for non-compliance with the Truck Management Plan and contract terms and conditions. Fines for a first offence range up to \$1000, and double with each subsequent offence.
- Implemented and maintaining a regular survey program for all trucks entering and leaving UBC Campus to ensure compliance with regulations.

Truck Trip Volume Reductions

- Stockpiled excavated material for backfill requirements to reduce trucking to and from campus.
- Using pups and transfers for excavation and delivery of aggregate materials to reduce numbers of trucks.

Hours of Work

- Adopted the recommendations of the University Neighbourhood Association to restrict hours for noise-related construction activities to 7:30 a.m. to 8:00 p.m. Monday to Friday, and 9:00 a.m. to 5:00 p.m. Saturday. Construction in the Theology Precinct ends one hour sooner at 7:00 p.m. Monday to Friday, and at 4:00 p.m. Saturday. There is no noise-related construction work on campus on Sundays and statutory holidays.
- Included new Supplementary General Conditions for Traffic Management in the standard contract documents with general contractors. These conditions outline the general allowable hours of operation and become a component of the terms and conditions of the contract.

www.universitytown.ubc.ca

Communications

- Established a Truck Management Public Information Line at 604-925-4142, which is answered Monday through Friday between 7:00 a.m. and 4:30 p.m. Staff respond the next day to messages left at other times.
- Providing weekly updates and a projected threeweek construction schedule every Friday after 3:00 p.m. at www.gtmconsulting.com/ubc.
- Attending community meetings off-campus as well as on-campus to address public concerns regarding truck traffic.

UBC Residential Areas

- Reduced truck trips through UBC residential areas.
- Established on-campus truck routes for Mid-Campus projects and staging locations for all projects.

Glossary

Strategic Transportation Plan — A document created by UBC's TREK Program Centre, recommending policies in fulfillment of transportation-related commitments under the Greater Vancouver Regional District's *Official Community Plan* and in support of the UBC Trek 2000 *Vision and Principles for Physical Planning at UBC*.

Supplementary General Conditions for Traffic Management — Specifications contained in the tender and contract documents which supplement the *Canadian Construction Document Committee II-1994* and outline for the contractor the various procedures and regulations, which must be followed in relation to truck traffic management throughout the duration of the contract.

UBC Properties Trust — is a market oriented private company wholly owned by the University of British Columbia established by the Board of Governors on June 2, 1988 with a mission to acquire, develop and manage real estate assets for the benefit of the University.

References UNIVERSITY OF BC: **GREATER VANCOUVER REGIONAL** University Town: www.universitytown.ubc.ca DISTRICT: Properties Trust Weekly Project Update: GVRD Livable Region Strategic Plan: www.gtmconsulting.com/ubc www.gvrd.bc.ca/growth/lrsp.htm Campus and Community Planning: www.planning.ubc.ca **CITY OF VANCOUVER:** TREK Program Centre: City of Vancouver Bylaws: www.trek.ubc.ca www.city.vancouver.bc.ca/bylaws

Appendix C Data Summary, Fall 1997 to Fall 2003



Characteristics of Travel To/From the University of British Columbia Last Updated: March 4, 2004

			Easthound	1997 - UBC Westbound	Screenlines	Percentage	Fastbound	1998 - UBC Westbound	Screenlines	Percentage	Fastbound	1999 - UBC So Westbound	reenlines Total	Percentage
Person Trips	24-Hour (estimated)		52061	54036	106097	100.0%	53594	52701	106295	100.0%	59538	53834	113372	100.0%
	AM Peak Hour	8:00-9:00 AM	1,796	9362	11157	10.5%	1860	8455	10315	9.7%	2550	8170	10720	9.5%
	AM Peak Period	7:00-10:00 AM	4226	20478	24704	23.3%	4755	19127	23882	22.5%	4234	20353	24587	21.7%
	PM Peak Period	3:00-6:00 PM	18186	6869	25055	23.6%	18132	2794 8355	26487	24.9%	21239	8220	29459	26.0%
	AM + PM Peak Periods		22412	27347	49760	46.9%	22887	27482	50369	47.4%	25473	28573	54046	47.7%
	Midday 2 Hours	11:30 AM-1:30 PM	6602	5455	12058	11.4%	6795	5899	12694	11.9%	6853	5905	12758	11.3%
Person Trips	24-Hour (estimated)	SOV	22491	23509	46000	43.4%	43358	24300	49316	46.4%	24872	23127	47999	42.3%
		HOV, 2 person	13357	14589	27947	26.3%	11967	12750	24717	23.3%	14651	12944	27596	24.3%
		HOV, 3 person	2628	3062	5690	5.4%	2251	2186	4437	4.2%	2673	2120	4792	4.2%
		Transit	9597	9403	19000	2.3%	9701	9668	19369	18.2%	12131	11536	23667	20.9%
		Bicycle	1453	1247	2700	2.5%	1997	1850	3847	3.6%	1497	1589	3085	2.7%
		Pedestrian	774	626	1400	1.3%	837	755	1592	1.5%	1274	694	1968	1.7%
		Light Truck (2 axles)	243	152	395	0.4%	74	111	185	0.2%	196	147	343	0.3%
	1M D. J. D. C.J.	Heavy Trucks (3 axles or more)	178	121	298	0.3%	54	29	83	0.1%	146	94	240	0.2%
	AM Feak Ferioa	HOV. 2 person	2315 926	8244 5403	6329	42.7%	2622 860	4200	5060	45.0%	2449 854	4360	5214	42.3%
		HOV, 3 person	180	1066	1246	5.0%	195	720	915	3.8%	201	714	915	3.7%
		HOV, 4+ person Transit	69 533	411	480	20.3%	224	288	512	2.1%	56	476	532 6307	2.2%
		Bicycle	38	557	594	2.4%	62	712	774	3.2%	38	668	706	2.9%
		Pedestrian	70	163	233	0.9%	79	146	225	0.9%	110	183	293	1.2%
		Light Truck (2 axles)	51	31 64	35	0.1%	0 38	50	50 99	0.2%	6 30	49	55 81	0.2%
		Heavy Trucks (3 axles or more)	43	52	94	0.4%	11	14	25	0.1%	35	39	74	0.3%
	PM Peak Period	SOV	7108	3208	10317	41.2%	7512	3815	11327	42.8%	7937	3700	11637	39.5%
		HOV, 2 person	921	426	1347	5.4%	717	489	1206	4.6%	915	465	1380	4.7%
		HOV, 4+ person	447	201	647	2.6%	396	272	668	2.5%	732	332	1064	3.6%
		I ransit Bicycle	4066	1086	5152	20.6%	4404 747	1053	5457 954	20.6%	5222 587	1180	6402 720	21.7%
1		Pedestrian	257	152	408	1.6%	260	229	489	1.8%	422	167	589	2.0%
		Motorcycle	45	3	48	0.2%	61	39	100	0.4%	82	37	119	0.4%
		Heavy Trucks (3 axles)	59 37	24 18	83	0.3%	36	33	69 13	0.3%	26	32 14	84 40	0.3%
[AM + PM Peak Periods	SOV	9424	11452	20876	42.0%	10134	12072	22206	44.1%	10386	11661	22047	40.8%
		HOV, 2 person HOV, 3 person	5597	7107	12704	25.5%	4848	6416	11264	22.4%	6118	6520	12638	23.4%
		HOV, 4+ person	515	612	1127	2.3%	620	560	1180	4.2%	788	808	1596	3.0%
		Transit	4599	5575	10174	20.4%	5062	5732	10794	21.4%	5677	7032	12709	23.5%
		Pedestrian	613	604 315	641	2.4%	809 339	375	714	3.4% 1.4%	625 532	350	1426 882	2.6%
		Motorcycle	47	34	81	0.2%	67	89	156	0.3%	88	86	174	0.3%
		Light Truck (2 axles) Heavy Trucks (3 axles or more)	110	88 69	197 149	0.4%	30	62	92 38	0.2%	82	83	165 114	0.3%
	Midday 2 Hours	SOV	2833	2498	5331	44.2%	3230	2679	5909	46.5%	2924	2640	5564	43.6%
		HOV, 2 person	1665	1195	2860	23.7%	1520	1282	2802	22.1%	1448	1380	2828	22.2%
		HOV, 4+ person	191	72	264	2.2%	188	116	304	2.4%	216	100	316	2.5%
		Transit	1219	1202	2421	20.1%	1185	1106	2291	18.0%	1645	1194	2839	22.3%
		Pedestrian	94	123	217	1.8%	148	199 85	347 249	2.7%	93	134	227	2.0%
		Motorcycle	12	8	20	0.2%	23	30	53	0.4%	16	24	40	0.3%
		Light Truck (2 axles) Heavy Trucks (3 axles or more)	48	41	89 102	0.7%	53	75	128	1.0%	50	59	109	0.9%
Traffic Volumes	24-Hour	neury meas (5 axies of more)	31915	31748	63663	100.0%	32466	31937	64403	100.0%	31563	31221	62784	100.0%
Total	AM Peak Hour	8:00-9:00 AM	1144	5036	6180	9.7%	1169	4812	5981	9.3%	1352	4738	6090	9.7%
	AM Peak Period PM Peak Hour	7:00-10:00 AM 4:00-5:00 PM	2976	11280	14256	22.4%	3017	11152	14169 5381	22.0%	3250	11147	14397 5226	22.9%
	PM Peak Period	3:00-6:00 PM	10405	4229	14634	23.0%	10135	4714	14849	23.1%	9930	4595	14525	23.1%
	AM + PM Peak Periods		13373	15466	28838	45.3%	13152	15866	29018	45.1%	13180	15742	28922	46.1%
	Miaday 2 Hours Davtime	7:00 AM to 6:00 PM	26928	27150	54077	12.8%	25551	27147	52698	12.0%	22823	25008	47831	76.2%
Traffic Volumes	24-Hour	NW Marine Dr.	1005	1035	2041	3.2%	1079	1111	2190	3.4%	905	1067	1972	3.1%
By Route		Chancellor Blvd. University Blvd	6006	5654	11660	18.3%	5802	5540	11342	17.6%	6224	5540	11764	18.7%
		16th Avenue	6486	6388	12875	20.2%	6867	6526	13393	20.8%	6657	6350	13007	20.7%
		41st Avenue	n/a	n/a	n/a	n/2 26.80	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	AM Peak Hour	NW Marine Dr.	36	133	169	2.7%	36	91	127	2.1%	32	97	129	2.1%
		Chancellor Blvd.	196	891	1088	17.6%	213	896	1109	18.5%	357	896	1253	20.6%
1		Oniversity Blvd. 16th Avenue	319 254	795	1113 1419	18.0%	282 279	700 1156	982 1435	16.4% 24.0%	294 283	626 1154	920 1437	15.1% 23.6%
		41st Avenue	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	AM Peak Period	SW Marine Dr. NW Marine Dr	392	1973	2365	38.3%	359 95	1969	2328	38.9%	386	1965	2351	38.6%
		Chancellor Blvd.	466	1993	2459	17.2%	465	2016	2481	17.5%	708	2016	2724	18.9%
1		University Blvd.	855	1776	2632	18.5%	770	1633	2403	17.0%	742	1513	2255	15.7%
		41st Avenue	n/a	n/a	n/a	n/a	n/a	2419 n/a	n/a	n/a	n/a	n/a	n/a	1/a
	PM Paak Hav-	SW Marine Dr.	946	4839	5785	40.6%	977	4898	5875	41.5%	996	4944	5940	41.3%
	r m r euk nour	Chancellor Blvd.	827	221	1048	19.6%	733	253	201 986	18.3%	740	253	993	19.0%
		University Blvd.	778	367	1145	21.4%	696	359	1055	19.6%	678	347	1025	19.6%
		16th Avenue 41st Avenue	771 n/a	317 n/a	1088 n/a	20.3%	823 n/a	332 n/a	1155 n/a	21.5% n/a	828 n/a	310 n/a	1138 n/a	21.8%
		SW Marine Dr.	1363	509	1873	35.0%	1437	547	1984	36.9%	1340	567	1907	36.5%
1	PM Peak Period	NW Marine Dr. Chancellor Blvd	288	185	473	3.2%	317	275	592	4.0%	252	240	492	3.4%
		University Blvd.	2139	1046	3185	21.8%	1891	1084	2975	20.0%	1802	1054	2856	19.7%
1		16th Avenue	2049	876	2925	20.0%	2171	950	3121	21.0%	2247	918	3165	21.8%
		SW Marine Dr.	3796	1606	5402	36.9%	3805	1654	5459	36.8%	3681	1632	5313	36.6%
	AM + PM Peak Periods	NW Marine Dr.	378	417	795	2.8%	401	461	862	3.0%	331	439	770	2.7%
		University Blvd.	2581 2993	2646 2820	5228	18.1%	2415 2660	2767	5182 5377	17.9%	2656	2767 2567	5423 5111	18.8% 17.7%
		16th Avenue	2729	3338	6067	21.0%	2890	3368	6258	21.6%	2972	3393	6365	22.0%
		41st Avenue SW Marine Dr	n/a 4738	n/a 6441	n/a 11178	n/a 38.8%	n/a 4782	n/a 6552	n/a 11334	n/a 39.1%	n/a 4677	n/a 6576	n/a 11253	n/a 38 9%
	Midday 2 Hours	NW Marine Dr.	161	144	305	3.7%	176	169	345	4.5%	150	159	309	4.1%
		Chancellor Blvd.	736	667	1403	17.2%	703	639	1342	17.3%	784	639	1423	19.0%
		16th Avenue	916	964 703	2098	25.7%	928 807	788	1/16 1533	22.2%	8/1 799	738	1609	21.4% 20.1%
		41st Avenue	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Daytime	SW Marine Dr. NW Marine Dr.	1261 858	1360 888	2622 1745	32.1%	1489 911	1311 947	2800 1858	36.2% 3.5%	1341 684	1313 820	2654 1504	35.4% 3.1%
	(7AM to 6PM)	Chancellor Blvd.	5071	4863	9934	18.4%	4584	4781	9365	17.8%	4572	4463	9035	18.9%
		University Blvd. 16th Avenue	6280 5377	5623 5520	11903	22.0%	5359 5375	5102	10461	19.9% 20.8%	4584 4942	4404	8988 10166	18.8%
1		41st Avenue			n/a	20.2% n/a	n/a	5.579 n/a	n/a	20.0% n/a	4943 n/a	5225 n/a	n/a	21.5% n/a
		SW Marine Dr.	8892	10554	19446	36.0%	9322	10738	20060	38.1%	8040	10098	18138	37.9%
<u> </u>			Eastbound	Westbound	Total	Percentage	Eastbound	Westbound	Total	Percentage	Eastbound	Westbound	Total	Percentage

ESTIMATION RELIABILITY SCALE

LE

Actual Data Lower Degree Collected in field of Factoring

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→ Higher Degree of Factoring

Characteristics of Travel To/From the Univer Last Updated: March 4, 2004

New Tex New Tex Norw Alternation Norw Alternatintereexpansion Norw Alternation				2000 - UBC Screenlines Eastbound Westbound Total Percentage			Spring 2001 - UBC Screenlines - Transit Strike Eastbound Westbound Total Percentage				Fall 2001 - UBC Screenlines Eastbound Westbound Total Percentage				
Martial Mar	Person Trips	24-Hour (estimated)		53389	53327	106716	100.0%	53884	54674	108558	100.0%	54007	56893	110900	100.0%
Tarbatabar And allow in a set of the set of		AM Peak Hour AM Peak Period	8:00-9:00 AM 7:00-10:00 AM	2097 4624	7756 20000	9853 24624	9.2% 23.1%	2429 4987	7621 18104	23091	9.3%	3155 6734	6593 19217	9748 25951	8.8% 23.4%
Mar 1995 1993 1993 1993 1993 1993 1993 1993		PM Peak Hour	4:00-5:00 PM	6240	2592	8832	8.3%	6044	3055	9099	8.4%	5483	3777	9260	8.4%
Network weights of the second sec		PM Peak Period	3:00-6:00 PM	18241	8362	26602	24.9%	18181	8217	26398	24.3%	17112	9179	26291	23.7%
Non-normal Non-nor		AM + PM Peak Periods Midday 2 Hours	11:30 AM-1:30 PM	22865	28361	51227	48.0%	23168	26321	49489	45.6%	23846	28396	52242 13404	47.1%
Name is a process of the sector of the sec		Daytime (estimated)	7:00 AM-6:00 PM	43215	45005	88220	82.7%	43646	45223	88869	81.9%	43953	47394	91347	82.4%
A Proprio provide p	Person Trips	24-Hour (estimated)	SOV	23223	23942	47165	44.2%	23025	22282	45308	41.7%	25937	26637	52574	47.4%
Phi - Long Dia Set Dia Dia <thdia< th=""> Dia <thdia< th=""> <thdia< td=""><td></td><td></td><td>HOV, 2 person HOV, 3 person</td><td>2500</td><td>11342</td><td>4304</td><td>4.0%</td><td>4514</td><td>20129 5868</td><td>10382</td><td>50.4% 9.6%</td><td>11331</td><td>10135</td><td>21400 2468</td><td>2.2%</td></thdia<></thdia<></thdia<>			HOV, 2 person HOV, 3 person	2500	11342	4304	4.0%	4514	20129 5868	10382	50.4% 9.6%	11331	10135	21400 2468	2.2%
Marka 100 100 200 200 200 200 200 200 200 200			HOV, 4+ person	1169	654	1822	1.7%	2437	2440	4878	4.5%	934	1100	2034	1.8%
Nome No No No No No<			Transit Bicycle	11318	12998	24316	22.8%	2523	2320	4843	0.0%	12277	15422	27700	25.0%
Marke and a second			Pedestrian	922	643	1565	1.5%	1293	1235	2528	2.3%	612	575	1187	1.1%
No. No. <td></td> <td></td> <td>Motorcycle</td> <td>151</td> <td>132</td> <td>283</td> <td>0.3%</td> <td>214</td> <td>234</td> <td>448</td> <td>0.4%</td> <td>143</td> <td>130</td> <td>273</td> <td>0.2%</td>			Motorcycle	151	132	283	0.3%	214	234	448	0.4%	143	130	273	0.2%
Affiel Parter Differ Differ <thdiffer< th=""> <thdi< td=""><td></td><td></td><td>Heavy Trucks (3 axles or more)</td><td>141</td><td>112</td><td>254</td><td>0.2%</td><td>163</td><td>46</td><td>209</td><td>0.4%</td><td>108</td><td>27</td><td>136</td><td>0.1%</td></thdi<></thdiffer<>			Heavy Trucks (3 axles or more)	141	112	254	0.2%	163	46	209	0.4%	108	27	136	0.1%
Biol Series	(AM Peak Period	SOV	2571	8018	10589	43.0%	3105	7402	10507	45.5%	4298	8523	12821	49.4%
Biol App App< App App App </td <td></td> <td></td> <td>HOV, 2 person HOV, 3 person</td> <td>1090</td> <td>3678 585</td> <td>4/68</td> <td>19.4%</td> <td>1228</td> <td>6566 1914</td> <td>2133</td> <td>33.8% 9.2%</td> <td>1310</td> <td>2596</td> <td>3906 451</td> <td>15.1%</td>			HOV, 2 person HOV, 3 person	1090	3678 585	4/68	19.4%	1228	6566 1914	2133	33.8% 9.2%	1310	2596	3906 451	15.1%
Image G.3 G.3 <thg.3< th=""> <thg.3< td="" th<=""><td></td><td></td><td>HOV, 4+ person</td><td>68</td><td>212</td><td>280</td><td>1.1%</td><td>84</td><td>796</td><td>880</td><td>3.8%</td><td>208</td><td>413</td><td>621</td><td>2.4%</td></thg.3<></thg.3<>			HOV, 4+ person	68	212	280	1.1%	84	796	880	3.8%	208	413	621	2.4%
Nome 11 17 23 17 18 18 19 18 19 18 19 1			Transit Bicycle	424	6594 596	7018	28.5%	156	871	1027	0.0%	569	6448	7017	27.0%
Matrix 13 3 3 3 6 1 </td <td></td> <td></td> <td>Pedestrian</td> <td>141</td> <td>179</td> <td>320</td> <td>1.3%</td> <td>119</td> <td>432</td> <td>551</td> <td>2.4%</td> <td>69</td> <td>164</td> <td>233</td> <td>0.9%</td>			Pedestrian	141	179	320	1.3%	119	432	551	2.4%	69	164	233	0.9%
Improve late Improve late<			Motorcycle	12	44	56	0.2%	9	58	67	0.3%	12	44	56	0.2%
MAX Model May M			Light Truck (2 axles) Heavy Trucks (3 axles or more)	39	44 50	83	0.3%	50	48	98 34	0.4%	27	14	41 44	0.2%
Biol State 300	1	PM Peak Period	SOV	7127	3749	10876	40.9%	6795	3837	10632	40.3%	7154	4770	11924	45.4%
Int / Lenne 130 <th< td=""><td></td><td></td><td>HOV, 2 person</td><td>3978</td><td>2164</td><td>6142</td><td>23.1%</td><td>7098</td><td>2954</td><td>10052</td><td>38.1%</td><td>3693</td><td>2462</td><td>6155</td><td>23.4%</td></th<>			HOV, 2 person	3978	2164	6142	23.1%	7098	2954	10052	38.1%	3693	2462	6155	23.4%
Image Align Align <th< td=""><td></td><td></td><td>HOV, 4+ person</td><td>420</td><td>260</td><td>680</td><td>2.6%</td><td>964</td><td>316</td><td>1280</td><td>4.8%</td><td>204</td><td>136</td><td>340</td><td>1.3%</td></th<>			HOV, 4+ person	420	260	680	2.6%	964	316	1280	4.8%	204	136	340	1.3%
No.2 101			Transit	4872	1330	6201	23.3%			0	0.0%	4852	1248	6100	23.2%
Manupat 1 21 <th< td=""><td></td><td></td><td>Bicycle Pedestrian</td><td>618 244</td><td>178</td><td>796</td><td>3.0%</td><td>929</td><td>299</td><td>1228</td><td>4.7%</td><td>502 201</td><td>113</td><td>615 324</td><td>2.3%</td></th<>			Bicycle Pedestrian	618 244	178	796	3.0%	929	299	1228	4.7%	502 201	113	615 324	2.3%
Left Table 1, 2019			Motorcycle	51	21	72	0.3%	83	60	143	0.5%	51	21	72	0.3%
Har PADAD Areas Hor			Light Truck (2 axles) Heavy Trucks (2 axles or more)	47	25	72	0.3%	100	20	120	0.5%	21	15	36	0.1%
Hor: Store Mol: Mol: <td>}</td> <td>AM + PM Peak Periods</td> <td>SOV</td> <td>23 9698</td> <td>11767</td> <td>21465</td> <td>41.9%</td> <td></td> <td>11239</td> <td>21139</td> <td>42.7%</td> <td>11452</td> <td>13293</td> <td>24745</td> <td>47.4%</td>	}	AM + PM Peak Periods	SOV	23 9698	11767	21465	41.9%		11239	21139	42.7%	11452	13293	24745	47.4%
International Internat International International			HOV, 2 person	5068	5842	10910	21.3%	8326	9520	17846	36.1%	5003	5058	10061	19.3%
Trans. Trans. <thtrans.< th=""> <thtrans.< t<="" td=""><td></td><td></td><td>HOV, 3 person HOV, 4+ person</td><td>1044 488</td><td>1071 472</td><td>2115 960</td><td>4.1%</td><td>1941 1048</td><td>2445</td><td>4386 2160</td><td>8.9% 4.4%</td><td>575</td><td>582 549</td><td>1157 961</td><td>2.2%</td></thtrans.<></thtrans.<>			HOV, 3 person HOV, 4+ person	1044 488	1071 472	2115 960	4.1%	1941 1048	2445	4386 2160	8.9% 4.4%	575	582 549	1157 961	2.2%
Back OP Trill Log As Log As As< As< As<			Transit	5296	7923	13220	25.8%	10-10		0	0.0%	5421	7696	13117	25.1%
Managab I-G			Bicycle Bedestrian	678	774	1452	2.8%	1085	1170	2255	4.6%	554	822	1376	2.6%
Lage Trank C 2-sep 10 0 10 0			Motorcycle	63	65	128	0.2%	92	118	210	0.4%	63	65	128	0.2%
Holey J. Have 907 1009 200 100			Light Truck (2 axles)	86	69	155	0.3%	150	68	218	0.4%	48	29	77	0.1%
HOV.2 prome 1408 1106 2024 21.1 2000 23.00 <t< td=""><td></td><td>Midday 2 Hours</td><td>Heavy Trucks (3 axles or more) SOV</td><td>2895</td><td>2523</td><td>5418</td><td>0.2% 43.5%</td><td>3239</td><td>26 3001</td><td>96 6240</td><td>0.2%</td><td>48 3412</td><td>3193</td><td>6605</td><td>0.1% 49.3%</td></t<>		Midday 2 Hours	Heavy Trucks (3 axles or more) SOV	2895	2523	5418	0.2% 43.5%	3239	26 3001	96 6240	0.2%	48 3412	3193	6605	0.1% 49.3%
HOV: 1 process 330 240 340			HOV, 2 person	1438	1186	2624	21.1%	2000	2046	4046	32.9%	1548	1448	2996	22.3%
Image Image <th< td=""><td></td><td></td><td>HOV, 3 person</td><td>324</td><td>252</td><td>576</td><td>4.6%</td><td>387</td><td>342</td><td>729</td><td>5.9%</td><td>196</td><td>183</td><td>379</td><td>2.8%</td></th<>			HOV, 3 person	324	252	576	4.6%	387	342	729	5.9%	196	183	379	2.8%
Bucke 110 132 222 2.16 2.28 2.96 5.45 100 1.55 3.56 1.15 Prof. Values Half Tack Cale one 4 3.6 0.5 1.2 1.70 2.06 1.8 1.8 1.3 3.1 0.05 Prof. Values Mare 8.0.90 AM 1.01 0.02 1.00<			Transit	1535	1345	2880	23.1%	152	152	204	0.0%	1292	1263	2555	19.1%
Homma Light Prior & 2 abor Dia Dia <thdia< t<="" td=""><td></td><td></td><td>Bicycle</td><td>110</td><td>152</td><td>262</td><td>2.1%</td><td>208</td><td>298</td><td>506</td><td>4.1%</td><td>80</td><td>126</td><td>206</td><td>1.5%</td></thdia<>			Bicycle	110	152	262	2.1%	208	298	506	4.1%	80	126	206	1.5%
Light Trait Cales/n 14 54 98 0.00 20 20 0.00 21 0.00 0.00 Mark Label Law Keed Law <td></td> <td></td> <td>Pedestrian Motorcycle</td> <td>109</td> <td>104</td> <td>213</td> <td>1.7%</td> <td>127</td> <td>197</td> <td>324</td> <td>2.6%</td> <td>110</td> <td>137</td> <td>247</td> <td>1.8%</td>			Pedestrian Motorcycle	109	104	213	1.7%	127	197	324	2.6%	110	137	247	1.8%
Cardio Values Heavy Tasks/ allow areast 0.72 33 50 0.64 22 23 54 0.64 113 1.6 1.6 1.6 0.15 Card AM Fed Kord 700.109.0M 3011 1.017 2530 1.621 4.670 4.641 4.620 1.611 4.670 1.518 0.162 4.570 1.518 0.162 1.518 0.161 4.518 1.518 0.161 4.518 1.518 0.161 4.518 1.518 0.161 4.518 1.518 0.161 4.518 1.518 1.516 1.518 1.517 1.517 1.517 1.517 1.517 1.517 1.517 1.518			Light Truck (2 axles)	44	54	98	0.8%	40	62	102	0.8%	24	21	46	0.3%
Mar Des Mare 800-803 AM [21] [12] <td>Traffic Volumes</td> <td>24-Hour</td> <td>Heavy Trucks (3 axles or more)</td> <td>27</td> <td>29</td> <td>56 60896</td> <td>0.4%</td> <td>22</td> <td>32</td> <td>54 70901</td> <td>0.4%</td> <td>18</td> <td>32595</td> <td>54930</td> <td>0.3%</td>	Traffic Volumes	24-Hour	Heavy Trucks (3 axles or more)	27	29	56 60896	0.4%	22	32	54 70901	0.4%	18	32595	54930	0.3%
AM Pak Prind 7.50 (100 AM 301 10.33 13.54 21.26 12.09 13.79 21.16 51.23 101.2 12.50 12.55 MM Pak Prind 300.00 AM 13.64 12.67 12.67 12.77 12.77 12.77 12.75 12.55 43.04 12.77 12.75 12.	Total	AM Peak Hour	8:00-9:00 AM	1211	4372	5583	9.2%	1621	4870	6491	9.2%	1889	3777	5666	8.7%
Def had func 138.30 [PM] 306 1.41 500 3.5 4.03 100 3.55 3.56		AM Peak Period	7:00-10:00 AM	3031	10333	13364	21.9%	4299	12080	16379	23.1%	5128	10162	15290	23.5%
Aff + PH Fook foreight International of the phone in the		PM Peak Hour PM Peak Period	4:00-5:00 PM 3:00-6:00 PM	3604	1461	5065 14287	8.3%	4034	1952	5986 16706	8.4%	3283	2164	5447	8.4%
Midday 2 Hears 11:03 AM 01:03 PM 2381 7351 2715 2716 2406 9056 12.88 4410 4133 4533 13.05 Cift Values Prot AM 16 (0) PM 2390 4041 7755 2201 4051 7755 116 7255 2204 4053 7555 7291 6041 1338 7555 7555 7291 6041 1338 7555 7575 7291 6041 1338 7555 7291 6041 1338 7555 7291 6041 6071 1138 220 7575 7291 6041 6071 1138 220 755 7291 6081 757 758 1285 2164 6071 1138 220 755 7291 6081 757 758 1285 2164 1292 1138 2050 138 129 138 129 138 129 138 129 138 129 139 1215 131 139 139 139		AM + PM Peak Periods		12877	14774	27651	45.4%	15463	17622	33085	46.7%	14277	16266	30543	47.0%
Database		Midday 2 Hours	11:30 AM to 1:30 PM	3817	3534	7351	12.1%	4770	4286	9056	12.8%	4410	4123	8533	13.1%
By Rene Chancelle Birkd. 566 5181 [017] 77.55 6983 9961 1234 13.15 57.97 11165 127.25 72.91 61.84 15.85 12.95 22.95 12.90 12.95 22.95 12.95	Traffic Volumes	24-Hour	NW Marine Dr.	737	881	1618	2.7%	1275	1284	2559	3.6%	786	885	49833	2.6%
Lineardy Birled. 6619 5998 [1212 2005 7291 6438 [1369 1225 1258 200 6470 1123 2255 144 Around 159 6172 20 50 7291 7293 7295 729 7295 729 7295 6171 728 1259 7295 7295 7295 7295 7295 7295 7295 7	By Route		Chancellor Blvd.	5466	5181	10647	17.5%	6883	5961	12844	18.1%	5398	5767	11165	17.2%
did A venue (mail min			University Blvd.	6619	5998	12617	20.7%	7291	6348	13639	19.2%	7459	6900 6474	14359	22.1%
SW Mare Dr. 11446 1127 2127 32.85 1275 1178 2026 2175 1178 1250 23.45 127 23.55 127 23.55 127 23.55 141 85 23.55 23.55 Charden Brd 22.5 15.3 16.9 15.0 14.0 12.45 12.0 12.3 <td></td> <td></td> <td>41st Avenue</td> <td>n/a</td> <td>n/a</td> <td>n/a</td> <td>20.9% n/a</td> <td>n/a</td> <td>n/a</td> <td>n/a</td> <td>n/a</td> <td>n/a</td> <td>n/a</td> <td>n/a</td> <td>20.0% n/a</td>			41st Avenue	n/a	n/a	n/a	20.9% n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	20.0% n/a
AM Peak Burner AM Peak Burner Hear Construction of the second s		IMDE J. Hereit	SW Marine Dr.	11446	11826	23272	38.2%	12775	13798	26573	37.5%	11778	12569	24347	37.5%
Luinershy Bhol, 16d Avenue 222 (104) 133 (22.8% (356) 644 (100) (15.4% (24.5% (309) (102) 122 (22.23.5% (309) (307) (30		AM Feak Hour	Nw Marine Dr. Chancellor Blvd.	225	825	1050	2.1%	432	922	139	2.1%	874	229	128	2.3% 19.5%
Info Avenue 282 1049 133 2.258 346 126 192 2.458 309 1012 1231 2.333 na			University Blvd.	291	578	869	15.6%	356	644	1000	15.4%	254	540	794	14.0%
SW Marine Dr. 383 1833 2216 9375 437 1999 2205 715 411 1999 2203 4005 AM Feak Period NW Marine Dr. 72 177 240 1996 131 220 51 215 112 191 303 2057 AM Feak Period NW Marine Dr. 731 4210 1806 1033 2265 3299 20.1% 2017 515 2032 7175 418 Avenue na			16th Avenue	282	1049	1331	23.8%	346	1246	1592	24.5%	309	1012	1321	23.3%
AM Peak Period NW Marine Dr. Chancellor Bivld. 72 177 249 199 131 220 531 2.1% 112 191 303 200 Chancellor Bivld. 751 1448 2219 16.6% 1003 1093 2786 1105 1105 1181 2251 3252 21.1% All A Arenne na			SW Marine Dr.	383	1833	2216	39.7%	437	1969	2406	37.1%	411	1909	2320	40.9%
Lumicentri avo. 977 19/11 4410 18.0% 1043 2256 5399 20.1% 2117 515 262 1725 Lumicentry Bird. 1731 4268 2219 16.0% 1093 1693 2766 17.0% 1055 1819 2875 18.8% 400 Areance 0.0 m 64 44 160 n0 m 6 m 6 m 73 0.0 18.0% 100 m 73 0.0 23 0.0 10 20 200 100 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0		AM Peak Period	NW Marine Dr.	72	177	249	1.9%	131	220	351	2.1%	112	191	303	2.0%
Info Armae 731 2211 2942 2205 867 201 568 2245 788 2327 7225 21.1% SW Marine Dr. 978 4566 5544 41.5% 1116 5110 6275 38.3% 1055 5320 6255 40.0% PM Peak Hour NW Marine Dr. 73 60 133 2.0% 113 90 209 535 83 60 122 28% Chancellor Brd. 684 236 920 18.2% 775 331 1166 18.5% 235 714 976 120.4% 414 Areme n0			University Blvd.	499 751	1911 1468	2410 2219	18.0%	1043	2256	5299 2786	20.1%	2117 1056	515 1819	2632 2875	17.2%
Hit Avenue nn	1		16th Avenue	731	2211	2942	22.0%	867	2801	3668	22.4%	788	2437	3225	21.1%
PM Pak Hour NW Mama Dr. 7 00 13 2.0 13 50 529 5.5 63 00 122 2.20 Chancilly Bud. 664 236 130 122 220 131 104 114 255 741 976 170 Linking Dr. 613 337 1122 2225 951 413 164 128 883 446 1199 220% SW Main Dr. 139 930 1882 2688 1445 588 1444 583 207 563 208 1485 585 1443 588 1444 583 207 563 208 208 208 208 208 208 208 208 208 208 208 208 208 208 209 208 208 208 208 208 208 208 208 208 208 208 208 208 208 208 208 208	1		41st Avenue SW Marine Dr.	n/a 978	n/a 4566	n/a 5544	n/a 41.5%	n/a 1165	n/a 5110	n/a 6275	n/a .38 3%	n/a 1055	n/a 5200	n/a 6255	n/a 40.9%
Chancellor Bivd. 684 236 920 18.2% 775 331 1106 18.5% 235 711 976 1708 Liniversity Bivd. 673 335 1028 20.3% 710 443 1364 12.28% 8633 346 1119 20.4% 418 Avenue n/a n/	1	PM Peak Hour	NW Marine Dr.	73	60	133	2.6%	113	96	209	3.5%	83	69	152	2.8%
Lutrixity arva. 0:3 3.33 1/20 2.22% 1/10 43*8 1/10*8 1/25*8 688 4/25 1/11 2.21% 41st Avenue n/n			Chancellor Blvd.	684	236	920	18.2%	775	331	1106	18.5%	235	741	976	17.9%
Hat Avenue n'a	1		16th Avenue	815	307	1028	20.3%	710 951	454 413	1364	19.4%	688 853	425 346	1113	20.4%
SW Marine Dr. 1290 513 1862 36,288 1425 658 2143 15,588 1421 58.6 2010 388 287 PM Peak Period NW Marine Dr. 201 188 389 2,77 317 97 634 3.88 1210 186 305 2.08 University Brd. 1816 1055 2871 20.15 20.15 20.15 3339 20.06 1984 1268 3252 21.3% Ióñ Avenae 2174 931 3105 22.17% 24.65 1158 3023 21.7% 21.66 965 3131 20.5% AM ereac 2173 305 538 2.3% 466 517 985 3.0% 166 965 377.7% 4173 1816 5989 3.5% 4061 1668 779 27.6% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0% 2.0%			41st Avenue	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Chancellor Bird, University Brd, Task 1814 Total		PM Peak Period	SW Marine Dr. NW Marine Dr	1359 201	503 188	1862 389	36.8% 2.7%	1485 337	658 297	2143 634	35.8%	1424	583 186	2007 396	36.8%
University Bvd. 1816 105 2871 20.1% 20.13 1326 3339 20.0% 1984 1268 3322 12.3% Ibh Avenue n/a			Chancellor Blvd.	1824	708	2532	17.7%	2176	945	3121	18.7%	728	2017	2745	18.0%
Ioth Avenue 2114 911 3103 2.1.78 3463 32.23 2.1.78 1200 903 1311 2.138 302.3 2.1.78 1200 903 1311 2.138 303 SW Marine Dr. 3831 1.559 5300 37.7% 4.173 1816 5989 33.88 4661 1668 5729 37.768 AM + PM Peak Feriods MW marine Dr. 273 365 638 2.3% 4668 517 985 3.08 432 5309 3.24 468 517 985 3.08 432 5377 17.6% University Bird, 22567 2233 5090 18.4% 3106 3019 6125 18.5% 3402 6356 2.0.8% 160 Ana n/a n/a n/a n/a n/a n/a n/a n/a 17.6% 32.16 3332 3959 7291 22.0% 2.054 3.022 2.0.8% 3.08 2.0.8% 3.08 0.0			University Blvd.	1816	1055	2871	20.1%	2013	1326	3339	20.0%	1984	1268	3252	21.3%
SW Marine Dr. 3831 1559 5390 37,7% 44,73 1816 5989 538% 4061 1668 7729 37,6% AM + PM Peak Period WMarine Dr. 2273 365 538 2.37 468 517 985 3.0% 538% 4061 1668 779 97 3.0% Chancellor Blvd. 2233 2619 4412 17.9% 3319 3301 6420 19.4% 2345 2332 5177 10.1% Lifeh Avenue 2965 3142 6417 21.9% 3332 3959 7291 22.0% 2354 3402 6136 6368 1194 6356 29.8% Mdkry 2 Hours NW Marine Dr. 123 132 235 35% 191 190 381 42.5 440 148 288 34% Chancelor Bivd. 706 621 1327 18.1% 951 748 1699 13.8% 718 1817 25.8% 34%			41st Avenue	21/4 n/a	931 n/a	3105 n/a	21.7% n/a	2405 n/a	1158 n/a	5025 n/a	21.7% n/a	2100 n/a	905 n/a	5151 n/a	20.5% n/a
AM + PM Peak Periods NW Marine Dr. 273 365 638 2.3% 468 517 985 3.0% 522 377 699 2.3% Chancellor Bivd. 2233 2619 4942 17.9% 3319 6420 19.4% 5232 5377 17.6% 16th Avenue 2567 2523 5090 18.4% 3106 3019 6422 18.5% 3040 3087 635 20.8% 16th Avenue n/a			SW Marine Dr.	3831	1559	5390	37.7%	4173	1816	5989	35.8%	4061	1668	5729	37.6%
University Bivd. 2257 2523 5000 18.4% 3106 2019 6125 18.5% 3040 3087 6127 20.1% 16th Avenue 2905 3142 6047 2.1% 3332 3959 7.91 2.20% 2954 3402 6356 6127 20.1% 41st Avenue n/a		AM + PM Peak Periods	NW Marine Dr. Chancellor Blyd	273	365	638 4942	2.3%	468	517	985 6420	3.0%	322	377	699 5377	2.3%
Ioth Avenue 2905 3142 0647 21.9% 3332 3959 7291 22.0% 2954 3402 6356 20.8% Mild Avenue n/a n/a <td< td=""><td>1</td><td></td><td>University Blvd.</td><td>2567</td><td>2523</td><td>5090</td><td>18.4%</td><td>3106</td><td>3019</td><td>6125</td><td>18.5%</td><td>3040</td><td>3087</td><td>6127</td><td>20.1%</td></td<>	1		University Blvd.	2567	2523	5090	18.4%	3106	3019	6125	18.5%	3040	3087	6127	20.1%
HIM Avenue Ina	1		16th Avenue	2905	3142	6047	21.9%	3332	3959	7291	22.0%	2954	3402	6356	20.8%
Midday 2 Hours NW Marine Dr. 123 152 255 3.5% 191 190 331 4.2% 140 148 288 3.8% Chancellor Blvd. 706 621 1327 18.1% 951 748 1699 18.8% 731 81.7 1548 18.1% University Blvd. 796 753 1579 21.5% 1050 864 1920 21.2% 977 858 185 21.5% Ioth Avenue 798 667 1495 20.3% 1003 858 1861 20.6% 932 815 21.5% Midday Marine Dr. 1394 1301 265 367% 1569 1626 3195 35.3% 1630 1485 3171 25% Organize NW Marine Dr. 565 691 1265 2.7% 966 984 1950 35% 1631 1485 3115 35.5% Organize Warine Dr. 565 6191 1265 <			41st Avenue SW Marine Dr.	n/a 4809	n/a 6125	n/a 10934	n/a 39.5%	n/a 5338	n/a 6926	n/a 12264	n/a 37.1%	n/a 5116	n/a 6868	n/a 11984	n/a 39.2%
Chancellor Blvd. 706 621 1327 18.1% 951 748 1699 18.8% 731 817 1548 18.1% University Blvd. 796 783 1579 21.5% 1055 864 1920 21.2% 977 885 1835 21.5% I6th Avenue 798 697 1495 20.3% 1003 858 1861 20.6% 932 815 1747 20.5% Maine Dr. 1394 1301 2695 36.7% 1569 1626 3195 3.5% 1631 1485 3.115 26.5% Digrime NW Maine Dr. 565 601 1256 2.7% 565 984 1950 3.5% 1631 1485 3.115 26.5% (7AM to 6PM) Chancelor Bivd. 3991 4259 8250 17.8% 5802 5167 10969 19.4% 5566 5173 1055 2.1.1% 10.5% 2.1.1% 10.5% 2.1.1% 10.55 <td>1</td> <td>Midday 2 Hours</td> <td>NW Marine Dr.</td> <td>123</td> <td>132</td> <td>255</td> <td>3.5%</td> <td>191</td> <td>190</td> <td>381</td> <td>4.2%</td> <td>140</td> <td>148</td> <td>288</td> <td>3.4%</td>	1	Midday 2 Hours	NW Marine Dr.	123	132	255	3.5%	191	190	381	4.2%	140	148	288	3.4%
Conversion from 1 / 20 Conv C/2 2 / 1.3% 10.00 eth 1 / 20 2 / 1.4% 9 / 1 858 18.53 2 / 1.5% 16th Avenue n% n% n% n% n% n% 16th 2 / 1.6% 9 / 1 858 18.51 2 / 1.5% 2 / 1.5% 10/0 858 1861 2 / 0.6% 9/32 815 17.47 2 / 0.5% 16/3 n/a 1/b 1/b 2.5% 2.5% 1/b 1/b 2.5% 1/b 1/b 1/b 2.5% 1/b	1		Chancellor Blvd. University Blvd	706	621	1327	18.1%	951	748	1699	18.8%	731	817	1548	18.1%
dist Avenue n/a n/a <th< td=""><td>1</td><td></td><td>16th Avenue</td><td>798</td><td>697</td><td>1495</td><td>21.3%</td><td>1056</td><td>858</td><td>1920</td><td>21.2%</td><td>932</td><td>815</td><td>1855</td><td>21.5%</td></th<>	1		16th Avenue	798	697	1495	21.3%	1056	858	1920	21.2%	932	815	1855	21.5%
Sw summe Lr. 1299 1901 2027 50,78 1299 1625 3195 33.88 1630 1488 3115 35.85 Daytime NW Marine Dr. 555 691 1256 27.8 660 1950 35.86 1630 1483 3115 35.85 (7AM to 6PM) Chancellor Blvd. 3991 4259 82.50 17.8% 5802 5167 10969 19.4% 4509 42.45 87.54 17.6% University Blvd. 44503 4430 9023 19.5% 5817 5099 10916 19.4% 5366 5173 107.59 21.1% I fish Avenue n'a	1		41st Avenue	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
(7AM to 6PM) Chancellor Blvd. 3991 4259 8250 17.8% 5802 5167 1099 19.4% 4509 4215 8754 17.6% University Blvd. 4593 4430 9023 19.5% 5817 5099 10916 19.4% 5366 5173 10539 21.1% 16th Avenue 4782 4933 9715 20.9% 5648 6149 11797 20.9% 4944 5141 10135 20.3% 41st Avenue n'a a	}	Daytime	S W Marine Dr. NW Marine Dr.	1394 565	1301 691	2695 1256	36.7% 2.7%	1569 966	1626 984	3195 1950	35.3% 3.5%	1630 631	1485 740	3115 1371	36.5% 2.8%
University Bvd. 4450 9023 19.5% S817 5099 10916 19.4% 5366 5173 10539 2.1.1% 16th Avenue 4782 4933 9715 20.9% 5648 6149 11797 20.9% 4994 5141 10135 20.3% 41st Avenue n'a	1	(7AM to 6PM)	Chancellor Blvd.	3991	4259	8250	17.8%	5802	5167	10969	19.4%	4509	4245	8754	17.6%
How reaction How reaction<	1		University Blvd. 16th Avenue	4593 4782	4430 4932	9023	19.5% 20.9%	5817 5649	5099 6149	10916	19.4%	5366 4994	5173	10539	21.1%
SW Marine Dr. 8459 9671 18130 39.1% 9483 11284 20767 36.8% 8659 10395 19054 38.2% Eastbound Westbound Total Percentage Eastbound Total Percentage Eastbound Total Percentage Eastbound Total Percentage For 100.1 IBC Screenblors For 100.1 IBC Screenblors	1		41st Avenue	4762 n/a	4955 n/a	n/a	20.9% n/a	n/a	n/a	n/a	20.9% n/a			n/a	20.3% n/a
Eastbound Westbound Total Percentage Eastbound Total Percentage 2000 LEG Screenlines Staring 2001 USC Screenlines Total Percentage			SW Marine Dr.	8459	9671	18130	39.1%	9483	11284	20767	36.8%	8659	10395	19054	38.2%
				Eastbound	Westbound 2000 - UBC Scr	Total reenlines	Percentage	Eastbound	Westbound g 2001 - UBC Scree	Total nlines - Transit	Percentage Strike	Eastbound	Westbound Fall 2001 - UBC	Total Screenlines	Percentage

Characteristics of Travel To/From the Univer

Last Updated: March 4, 2004	4	 -	-	-	-	-	

Dee Net Dee Net <t< th=""><th></th><th></th><th></th><th>Eastbound</th><th>Spring 2002 - UB Westbound</th><th>C Screenlines Total</th><th>Percentage</th><th>Eastbound</th><th>Fall 2002 - UB Westbound</th><th>C Screenlines Total</th><th>Percentage</th><th>Eastbound</th><th>Fall 2003 - UBC Westbound</th><th>Screenlines Total</th><th>Percentage</th></t<>				Eastbound	Spring 2002 - UB Westbound	C Screenlines Total	Percentage	Eastbound	Fall 2002 - UB Westbound	C Screenlines Total	Percentage	Eastbound	Fall 2003 - UBC Westbound	Screenlines Total	Percentage	
Martial Control and a sector of the secto	Person Trips	24-Hour (estimated)		52241	55346	107586	100.0%	56416	57046	113462	100.0%	57511	59609	117121	100.0%	
Marting and a section of a s	1	AM Peak Hour	8:00-9:00 AM	2616	6951	9567	8.9%	2255	7904	10160	9.0%	2399	7710	10108	8.6%	
Martial Processor Proce		AM FEAK FERIOD PM Peak Hour	4:00-10:00 AM 4:00-5:00 PM	5097 5738	21051 3205	26148 8943	24.5%	4292 6593	22875	2/167 9282	23.9%	3965 6532	204/8 3320	24443 9852	20.9%	
Matrix Product Des Des Des <thdes< th=""> <t< td=""><td></td><td>PM Peak Period</td><td>3:00-6:00 PM</td><td>18326</td><td>8444</td><td>26770</td><td>24.9%</td><td>21052</td><td>6562</td><td>27614</td><td>24.3%</td><td>22430</td><td>7596</td><td>30026</td><td>25.6%</td></t<></thdes<>		PM Peak Period	3:00-6:00 PM	18326	8444	26770	24.9%	21052	6562	27614	24.3%	22430	7596	30026	25.6%	
Matrix Normal Normal<		AM + PM Peak Periods	11.20 AM 1.20 DM	23423	29495	52918	49.2%	25344	29437	54781	48.3%	26395	28074	54469	46.5%	
Charles Alles and solution Control in the solution of		Miaday 2 Hours Davtime (estimated)	7:00 AM-6:00 PM	4819	4401	9220 89364	83.1%	46059	47843	93902	82.8%	47139	49098	96237	82.2%	
Here Here <th< td=""><td>Person Trips</td><td>24-Hour (estimated)</td><td>SOV</td><td>23754</td><td>23838</td><td>47593</td><td>44.2%</td><td>24371</td><td>23991</td><td>48363</td><td>42.6%</td><td>22809</td><td>22134</td><td>44943</td><td>38.4%</td></th<>	Person Trips	24-Hour (estimated)	SOV	23754	23838	47593	44.2%	24371	23991	48363	42.6%	22809	22134	44943	38.4%	
Image: product of the sector of the			HOV, 2 person	11085	12263	23348	21.7%	12343	12716	25059	22.1%	8139	9364	17503	14.9%	
Image: Image:<			HOV, 3 person HOV, 4+ person	1332	640	1410	2.5%	701	936	2375	2.1%	661	1254	2000	1.9%	
Marka and a set of the set of			Transit	12995	14645	27640	25.7%	14957	14708	29665	26.1%	22435	22977	45412	38.8%	
Marcia 10 <th< td=""><td></td><td></td><td>Bicycle Pedestrian</td><td>1076</td><td>1346</td><td>2422</td><td>2.3%</td><td>1403</td><td>1912</td><td>3316 1560</td><td>2.9%</td><td>1235</td><td>1512</td><td>2747</td><td>2.3%</td></th<>			Bicycle Pedestrian	1076	1346	2422	2.3%	1403	1912	3316 1560	2.9%	1235	1512	2747	2.3%	
Internation IP			Motorcycle	215	241	456	0.4%	199	204	403	0.4%	289	253	542	0.5%	
MAX Food Dist (1)			Light Truck (2 axles)	239	127	366	0.3%	453	188	641	0.6%			610	0.5%	
Phi 2 part of the phi 2 p		AM Peak Period	SOV	3054	7718	10772	41.2%	2503	8814	11317	41.7%	2488	7589	10077	41.2%	
Horization Horizat			HOV, 2 person	980	3930	4910	18.8%	882	4563	5445	20.0%	642	3037	3679	15.1%	
India 10 100 <td></td> <td></td> <td>HOV, 3 person HOV 4+ person</td> <td>126</td> <td>417</td> <td>543 235</td> <td>2.1%</td> <td>64</td> <td>451</td> <td>515 342</td> <td>1.9%</td> <td>48</td> <td>434</td> <td>482</td> <td>2.0%</td>			HOV, 3 person HOV 4+ person	126	417	543 235	2.1%	64	451	515 342	1.9%	48	434	482	2.0%	
No. No. <td></td> <td></td> <td>Transit</td> <td>579</td> <td>7979</td> <td>8558</td> <td>32.7%</td> <td>518</td> <td>7587</td> <td>8105</td> <td>29.8%</td> <td>287</td> <td>7470</td> <td>7757</td> <td>31.7%</td>			Transit	579	7979	8558	32.7%	518	7587	8105	29.8%	287	7470	7757	31.7%	
Handia 11 2 1 3 7 5 7 5 7 7 1 10 5 7 5 7 7 7 10 10 20 10 20 10 10 20 10 10 20 10 10 20 10 10 20 10 20 10 10 20 10 10 20 10 10 20 10 10 20 10 10 20 10 10 20 10 10 20 10 10 20 10 10 20 10 10 10 20 10 1			Bicycle	65	498	563	2.2%	50	675	725	2.7%	68	739	807	3.3%	
Lear Lab: Lab Lab <thlab< th=""> Lab <thlab< th=""> <thlab<< td=""><td></td><td></td><td>Motorcycle</td><td>2</td><td>41</td><td>43</td><td>0.2%</td><td>49</td><td>237</td><td>280</td><td>0.3%</td><td>135</td><td>255</td><td>86</td><td>0.4%</td></thlab<<></thlab<></thlab<>			Motorcycle	2	41	43	0.2%	49	237	280	0.3%	135	255	86	0.4%	
Bit of the sector Sign 000000000000000000000000000000000000			Light Truck (2 axles)	42	50	92	0.4%	82	88	170	0.6%	134	282	416	1.7%	
Normal and the second secon		PM Peak Period	Heavy Trucks (3 axles or more) SOV	45	47	92 11070	0.4%	108	77	185	0.7%	105	98 3265	203	0.8%	
Here Here <th< td=""><td></td><td>1 51 1 Cak 1 Criou</td><td>HOV, 2 person</td><td>3757</td><td>2084</td><td>5841</td><td>21.8%</td><td>4386</td><td>1860</td><td>6246</td><td>22.6%</td><td>2878</td><td>1555</td><td>4433</td><td>14.8%</td></th<>		1 51 1 Cak 1 Criou	HOV, 2 person	3757	2084	5841	21.8%	4386	1860	6246	22.6%	2878	1555	4433	14.8%	
Image 100 </td <td></td> <td></td> <td>HOV, 3 person</td> <td>443</td> <td>225</td> <td>668</td> <td>2.5%</td> <td>344</td> <td>266</td> <td>610</td> <td>2.2%</td> <td>445</td> <td>181</td> <td>626</td> <td>2.1%</td>			HOV, 3 person	443	225	668	2.5%	344	266	610	2.2%	445	181	626	2.1%	
Bayle 300 100 300 </td <td></td> <td></td> <td>HOV, 4+ person Transit</td> <td>270</td> <td>138</td> <td>408</td> <td>28.8%</td> <td>270</td> <td>160 433</td> <td>430 7448</td> <td>1.6%</td> <td>244 10122</td> <td>189</td> <td>433</td> <td>1.4%</td>			HOV, 4+ person Transit	270	138	408	28.8%	270	160 433	430 7448	1.6%	244 10122	189	433	1.4%	
Pattern Lapit rotations 10 23 30 15 27 10 10 100			Bicycle	395	162	557	2.1%	549	291	840	3.0%	600	209	809	2.7%	
Link Link <thlink< th=""> Link Link <thl< td=""><td></td><td></td><td>Pedestrian</td><td>116</td><td>203</td><td>319</td><td>1.2%</td><td>273</td><td>170</td><td>443</td><td>1.6%</td><td>262</td><td>184</td><td>446</td><td>1.5%</td></thl<></thlink<>			Pedestrian	116	203	319	1.2%	273	170	443	1.6%	262	184	446	1.5%	
Line Part And Description 2 <td>1</td> <td></td> <td>Light Truck (2 axles)</td> <td>45 60</td> <td>20</td> <td>65 80</td> <td>0.2%</td> <td>78 183</td> <td>53 31</td> <td>214</td> <td>0.4%</td> <td>331</td> <td>54 130</td> <td>163 461</td> <td>0.5%</td>	1		Light Truck (2 axles)	45 60	20	65 80	0.2%	78 183	53 31	214	0.4%	331	54 130	163 461	0.5%	
And Y Alf York Resol OTA Desc Desc <thdesc< th=""> Desc <thdesc< th=""> <thdesc< th=""> Desc</thdesc<></thdesc<></thdesc<>			Heavy Trucks (3 axles or more)	25	22	47	0.2%	55	14	69	0.2%	62	26	88	0.3%	
HOC: prom 130 1	1	AM + PM Peak Periods	SOV HOV 2 person	10151 4727	11691 6014	21842	41.3%	10402	12118	22520	41.1%	9865	10854	20719	38.0% 14.9%	
Link - space 100 - d mode 110 - d mode<			HOV, 3 person	569	642	1211	2.3%	408	717	1125	21.3%	493	615	1108	2.0%	
Inst. mode mode <t< td=""><td>1</td><td></td><td>HOV, 4+ person</td><td>329</td><td>314</td><td>643</td><td>1.2%</td><td>299</td><td>473</td><td>772</td><td>1.4%</td><td>286</td><td>693</td><td>979</td><td>1.8%</td></t<>	1		HOV, 4+ person	329	314	643	1.2%	299	473	772	1.4%	286	693	979	1.8%	
Peckenin Haffy 2 Harr Peckenin Mart 1966-1 Analog 201 90 0.0 1.0			Bicycle	460	9576	102/3	2.1%	/533 599	8020 966	15555	28.4%	668	9273	19682	30.1%	
Math Sch			Pedestrian	261	398	659	1.2%	322	407	729	1.3%	397	439	836	1.5%	
Image Image <th< td=""><td></td><td></td><td>Motorcycle Light Truck (2 axles)</td><td>92</td><td>118</td><td>210</td><td>0.4%</td><td>85 265</td><td>103</td><td>188</td><td>0.3%</td><td>125</td><td>124</td><td>249</td><td>0.5%</td></th<>			Motorcycle Light Truck (2 axles)	92	118	210	0.4%	85 265	103	188	0.3%	125	124	249	0.5%	
MMag 2 Ham SV PP			Heavy Trucks (3 axles or more)	70	69	139	0.3%	163	91	254	0.5%	167	124	291	0.5%	
Link Link <thlink< th=""> Link Link <thl< td=""><td></td><td>Midday 2 Hours</td><td>SOV</td><td>1791</td><td>1843</td><td>3634</td><td>39.4%</td><td>3028</td><td>2820</td><td>5848</td><td>42.8%</td><td>2566</td><td>2384</td><td>4950</td><td>40.3%</td></thl<></thlink<>		Midday 2 Hours	SOV	1791	1843	3634	39.4%	3028	2820	5848	42.8%	2566	2384	4950	40.3%	
BUX - Spectro BOX - Sp			HOV, 2 person	112	749	186	2.0%	154	207	361	2.6%	55	48	103	0.8%	
Image Image <th< td=""><td></td><td></td><td>HOV, 4+ person</td><td>66</td><td>31</td><td>97</td><td>1.1%</td><td>83</td><td>147</td><td>230</td><td>1.7%</td><td>27</td><td>23</td><td>50</td><td>0.4%</td></th<>			HOV, 4+ person	66	31	97	1.1%	83	147	230	1.7%	27	23	50	0.4%	
Polement 100 101 102 110 101 10			Transit Bicycle	1691	1450	3141	34.1%	1826	1695	3521	25.8%	2327	2674	5001	40.7%	
Metrocyle 7 8 15 0.20 3.4 0.9 5.4 0.45<			Pedestrian	69	93	162	1.8%	107	167	274	2.0%	121	96	217	1.8%	
Interview 10 <			Motorcycle	7	8	15	0.2%	35	19	54	0.4%	32	29	61	0.5%	
Time Union Momen State 2017 3166 6.237 10.217 2277 62.37 100.05 30.01 2018 3956 15.15 3270 62.37 100.05 30.01 2018 3956 15.15 30.01 12.15 50.15 12.15 50.15 12.16 12.16 12.16 12.16 12.16 12.16 12.16 12.16 12.16 12.16 12.16 12.16 12.16 12.16 12.16 12.16 12.16 12.16			Heavy Trucks (3 axles)	29	25	54	0.6%	50 116	41 73	189	1.4%	132	108	300 146	2.4%	
Taul All Pia Lhur 538 (51) All 139 970 251 135 137 457 138 139 357 PH Fak Ford 308-50 PM 146 533 1432 233 1374 455 142 169 1374 455 1425 159 455 1425 159 455 1425 159 455 1425 159 145 1405 <t< td=""><td>Traffic Volumes</td><td>24-Hour</td><td></td><td>30737</td><td>31656</td><td>62393</td><td>100.0%</td><td>32970</td><td>32267</td><td>65237</td><td>100.0%</td><td>30041</td><td>29783</td><td>59824</td><td>100.0%</td></t<>	Traffic Volumes	24-Hour		30737	31656	62393	100.0%	32970	32267	65237	100.0%	30041	29783	59824	100.0%	
PM Feak Line: 4305-50 PM 4305 1313 1.20 1.53 1.321 1.121 1.531 1.520 1.531 1.532 1.531	Total	AM Peak Hour	8:00-9:00 AM 7:00 10:00 AM	1539	3976	5515	8.8%	1318	4471	5789 15060	8.9%	1253	3852	5105	8.5%	
Def De Arbord 3.06.60 PM 949 538 1432 23.86 1647 51.00 22.58 97.99 4455 1423 20.99 1433 23.86 1447 10.10 21.50 20.70		PM Peak Hour	4:00-5:00 PM	3376	1833	5209	8.3%	3853	1521	5374	8.2%	3412	1659	5071	8.5%	
M + M Fack Product 133 1335 2660 438 1497 2007 44.06 12973 11005 21973 1100 21973 1100 21973 1100 21973 1100 21973 1100 21973 1100 21973 1100 21973 1100 21973 1100 21973 1100 21973 1100 21973 1100 21973 1100 21973 1100 21973 1100 21973 1100 21973 2100 2125 2100 2125 2100 2125 2100 2125		PM Peak Period	3:00-6:00 PM	9449	5383	14832	23.8%	10746	4564	15310	23.5%	9729	4556	14285	23.9%	
Institute 720 AM (2019) 7220 7230 <td></td> <td>AM + PM Peak Periods Midday 2 Hours</td> <td>11-20 AM to 1-20 PM</td> <td>13135</td> <td>15525</td> <td>28660</td> <td>45.9%</td> <td>14072</td> <td>16298</td> <td>30370</td> <td>46.6%</td> <td>12993</td> <td>14605</td> <td>27598</td> <td>46.1%</td>		AM + PM Peak Periods Midday 2 Hours	11-20 AM to 1-20 PM	13135	15525	28660	45.9%	14072	16298	30370	46.6%	12993	14605	27598	46.1%	
Thiffe Values NW Marie Dr. 783 997 1120 2.86 All 771 1613 2.55 918 1007 2015 3.46 by Rece Charcebr Bird. 5802 6.671 11237 11.45 5903 5132 5130 1007 2015 3.46 Market Dr. 580 660 5716 11770 19.75 3.46 Market Dr. 1120 1236 2007 11.86 2021 13.87 1008 1.87 108 1.8 1.9		Daytime	7:00 AM to 6:00 PM	22870	25312	48182	77.2%	24043	25791	49834	76.4%	18733	22135	40868	68.3%	
D ₂ Rome Chancelle Bird. 58:0 547 1127 118 18 50 546 1105 545 1100 1238 50 1007 2175 1207 2208 110 2201 220 220 200 200 200 200 200 20	Traffic Volumes	24-Hour	NW Marine Dr.	783	937	1720	2.8%	842	771	1613	2.5%	918	1097	2015	3.4%	
Info Gold Cold Cold <th< td=""><td>By Route</td><td></td><td>Chancellor Blvd.</td><td>5830</td><td>5457</td><td>11287</td><td>18.1%</td><td>5993</td><td>5461</td><td>11454</td><td>17.6%</td><td>5532</td><td>5140</td><td>10672</td><td>17.8%</td></th<>	By Route		Chancellor Blvd.	5830	5457	11287	18.1%	5993	5461	11454	17.6%	5532	5140	10672	17.8%	
dial Avene na			16th Avenue	6632	6305	12937	20.7%	7003	6527	13530	20.7%	6642	6108	12750	21.3%	
AM Peak Row 100 <th< td=""><td></td><td></td><td>41st Avenue</td><td>n/a</td><td>n/a</td><td>n/a</td><td>n/a</td><td>n/a</td><td>n/a</td><td>n/a</td><td>n/a</td><td>n/a</td><td>n/a</td><td>n/a</td><td>n/a</td></th<>			41st Avenue	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Chanceller Bivd. 233 815 1048 1008 1211 850 1877 205 725 941 18.86 10h Avenue 207 933 1200 22.24 300 1100 126 22.97 206 879 11.75 23.06 AM Avenue 311 2017 276 2.06 89 100 126 22.97 1.74 537 183 2.00 1.85 2.01 1.74 537 183 2.00 1.85 2.15 2.16 2.05 1.05 2.17 1.74 537 1.83 2.00 1.85 1.00 2.11 1.08 2.15 1.83 2.00 1.83 2.00 2.05 1.83 1.00 2.11 1.08 1.00 2.11 1.08 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03 1.03 <td< td=""><td></td><td>AM Peak Hour</td><td>NW Marine Dr.</td><td>21</td><td>12380</td><td>23996</td><td>38.5%</td><td>12092</td><td>13149</td><td>25241</td><td><u>58.7%</u> 1.8%</td><td>10885</td><td>81</td><td>22617</td><td>2.3%</td></td<>		AM Peak Hour	NW Marine Dr.	21	12380	23996	38.5%	12092	13149	25241	<u>58.7%</u> 1.8%	10885	81	22617	2.3%	
Luiversig Bird. 584 227 871 1.5.58 317 643 960 (160) 222 538 8.20 6.6.57 160 Avenue 277 60 277 60 200 22.28 287 200 122 229 200 277 400 400 423 102 229 120 200 200 200 200 200 200 200 200 200			Chancellor Blvd.	233	815	1048	19.0%	231	850	1081	18.7%	206	735	941	18.4%	
Horison Los Los <thlos< th=""> Los <thlos< th=""> <thlos< t<="" td=""><td></td><td></td><td>University Blvd. 16th Avenue</td><td>584</td><td>287</td><td>871</td><td>15.8%</td><td>317</td><td>643 1020</td><td>960 1326</td><td>16.6% 22.0%</td><td>292</td><td>528 879</td><td>820</td><td>16.1%</td></thlos<></thlos<></thlos<>			University Blvd. 16th Avenue	584	287	871	15.8%	317	643 1020	960 1326	16.6% 22.0%	292	528 879	820	16.1%	
SW Marine Dr. 440 180 2207 4.00% 4.28 189 2317 40.0% 423 1.62% 2032 40.0% AM Feak Period NW Marine Dr. 75 201 276 206 93 156 230 1.74% 537 1863 2400 180 Chancellor Bivd. 131 2057 2268 181 1710 231 16.8% 753 1463 2400 180 753 1463 2400 180 753 143 2406 2470 2420 42.5% 140 245 240 425 1240 2450 180 355 641 750 74 74 225 753 653 161 203 574 502 44.26% 180 355 611 203 574 502 44.26% 180 355 611 203 574 302 956 18.5% 611 203 574 302 966 18.5% 180			41st Avenue	297 n/a	963 n/a	1280 n/a	25.2% n/a	.506 n/a	1020 n/a	1.520 n/a	22.9% n/a	290 n/a	o/9 n/a	n/a	25.0% n/a	
And rear D 2.01 2.05 9.75 126 239 1.77 1182 259 1.58 Chancelle Bivd, University Bird, 44 Arenee 110 2057 2248 11.78 511 2269 1.78 535 1440 2155 16.88 535 1440 2155 12.68 1.71 16.28 531 1.638 535 1440 2155 1.638 1.		AM Beach Desited	SW Marine Dr.	404	1803	2207	40.0%	428	1889	2317	40.0%	423	1629	2052	40.2%	
University Biol. 1492 749 2241 162.5 531 1700 2311 163.8 755 1440 2195 163.2 166 Avenue n/a n/		AM FEAK FERIOD	Chancellor Blvd	75	201 2057	276 2368	2.0%	93	2106	249	1.7%	537	182	259 2400	1.9%	
India Avenue 148 2211 3019 21.8% 765 2478 3243 21.5% 825 21.40 2965 22.3% SW Mains Dr. 1000 4844 5924 42.8% 6100 23.4% 6100 4421 5493 42.1% 1120 52.4% 64.00 42.0% 1000 4421 5493 4318 42.3% PM Peak Buar NW Mains Dr. 78 67 143 2.3% 995 18.5% 691 23.8 693 163 503 163 503 163 503 163 503 163 163 173 163 1748 1748 1743 </td <td></td> <td></td> <td>University Blvd.</td> <td>1492</td> <td>749</td> <td>2241</td> <td>16.2%</td> <td>831</td> <td>1700</td> <td>2531</td> <td>16.8%</td> <td>755</td> <td>1440</td> <td>2195</td> <td>16.5%</td>			University Blvd.	1492	749	2241	16.2%	831	1700	2531	16.8%	755	1440	2195	16.5%	
Image: Second			16th Avenue 41st Avenue	748	2271	3019	21.8%	765	2478	3243	21.5%	825	2140	2965	22.3%	
PM Peak Hour 78 67 145 2.8% 80 52 122 2.5% 93 87 180 5.89 Chancelor Bird, University Bird, 160 Avenue 352 652 1004 19.3% 706 385 1001 2.3% 571 335 1036 936 18.5% 41st Avenue n/a			SW Marine Dr.	1060	4864	5924	42.8%	1126	5294	6420	42.6%	1070	4423	5493	41.3%	
Chancellor Hivd. (Job 2-11 98/ 18.9% 177 2.38 995 18.5% 691 288 979 19.38 Lünversigi Bivd. 132 6.52 1004 19.3% 574 362 956 18.5% Markene na <		PM Peak Hour	NW Marine Dr.	78	67	145	2.8%	80	52	132	2.5%	93	87	180	3.5%	
Infer The second s	1		Chancellor Blvd. University Blvd	736	251 652	987 1004	18.9%	757 706	238	995 1091	18.5% 20.3%	691 574	288 362	979 936	19.3% 18.5%	
Hart Avenue n'n n'n <th< td=""><td></td><td></td><td>16th Avenue</td><td>792</td><td>314</td><td>1106</td><td>21.2%</td><td>883</td><td>300</td><td>1183</td><td>22.0%</td><td>751</td><td>335</td><td>1086</td><td>21.4%</td></th<>			16th Avenue	792	314	1106	21.2%	883	300	1183	22.0%	751	335	1086	21.4%	
PM Peak Period NW Marine Dr. 214 198 412 2.6.% 142 2.6.% 142 2.6.% 142 2.6.% 142 2.6.% 142 2.6.% 142 2.6.% 142 2.6.% 142 2.6.% 142 2.6.% 142 2.6.% 142 2.6.% 123 120 123 1230 <td></td> <td></td> <td>41st Avenue SW Marine Dr</td> <td>n/a</td> <td>n/a</td> <td>n/a</td> <td>n/a 27 00/</td> <td>n/a</td> <td>n/a</td> <td>n/a</td> <td>n/a</td> <td>n/a</td> <td>n/a =====</td> <td>n/a</td> <td>n/a 27 201</td>			41st Avenue SW Marine Dr	n/a	n/a	n/a	n/a 27 00/	n/a	n/a	n/a	n/a	n/a	n/a =====	n/a	n/a 27 201	
Chanceller Blvd. 1981 766 2747 18.5% 2048 731 2779 18.2% 1702 799 2501 17.5% 16h Avenue 2187 963 3150 21.2% 2424 938 3362 22.0% 1895 943 2838 19.9% 41st Avenue n/a n		PM Peak Period	NW Marine Dr.	214	198	412	2.8%	218	161	379	2.5%	261	275	536	3.8%	
University Bivd. Ution 186.0 2995 1955 1965 1101 3004 20.0% 1529 1005 2258 17.9% I 6th Avenue n/n			Chancellor Blvd.	1981	766	2747	18.5%	2048	731	2779	18.2%	1702	799	2501	17.5%	
dia Lin Lin <td></td> <td></td> <td>University Blvd. 16th Avenue</td> <td>1067 2187</td> <td>1826 963</td> <td>2893 3150</td> <td>19.5% 21.2%</td> <td>1963 2424</td> <td>1101 938</td> <td>3064</td> <td>20.0%</td> <td>1529</td> <td>1026 943</td> <td>2555 2838</td> <td>17.9% 19.9%</td>			University Blvd. 16th Avenue	1067 2187	1826 963	2893 3150	19.5% 21.2%	1963 2424	1101 938	3064	20.0%	1529	1026 943	2555 2838	17.9% 19.9%	
SW Marine Dr. 4000 1630 5726 3786 3786 3786 3786 3786 3786 3786 3786 3786 3787 3787 3786 3786 3787 3787 3786 3786 3787 3786 3878 3878 3878 3878 3878 3878 3787			41st Avenue	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Chart Manuelar. 200 300 2-4% 311 311 0.05 2-1% 355 457 959 2578 Chancello Bivd. 2292 22823 5115 17.8% 2559 2837 5356 17.8% 2259 2662 4901 17.8% 16th Avenue 2295 3254 6169 21.5% 3189 3416 6605 21.7% 2704 2801 5555 18.4% 2224 2466 4750 17.8% Midday 2 Hears n/a	}	AM + PM Peak Periode	SW Marine Dr. NW Marine Dr.	4000	1630	5630	38.0%	4093	1633	5726 529	37.4%	3464	1666	5130 705	35.9%	
University Blvd. 2559 2757 5134 17.9% 2794 2801 5595 18.4% 2224 2466 4730 17.2% 16th Avenue 2935 3234 6169 21.5% 3189 3416 6605 21.7% 2720 3083 5803 51.2% na na <td>1</td> <td></td> <td>Chancellor Blvd.</td> <td>289 2292</td> <td>2823</td> <td>5115</td> <td>2.4%</td> <td>2559</td> <td>2837</td> <td>628 5396</td> <td>2.1%</td> <td>2239</td> <td>457</td> <td>4901</td> <td>2.9%</td>	1		Chancellor Blvd.	289 2292	2823	5115	2.4%	2559	2837	628 5396	2.1%	2239	457	4901	2.9%	
Ióth Avenue 2935 3234 6169 21.5% 3189 3416 6605 21.7% 2720 3083 5803 21.0% Mit Avenue n/a n/a <th <="" td=""><td></td><td></td><td>University Blvd.</td><td>2559</td><td>2575</td><td>5134</td><td>17.9%</td><td>2794</td><td>2801</td><td>5595</td><td>18.4%</td><td>2284</td><td>2466</td><td>4750</td><td>17.2%</td></th>	<td></td> <td></td> <td>University Blvd.</td> <td>2559</td> <td>2575</td> <td>5134</td> <td>17.9%</td> <td>2794</td> <td>2801</td> <td>5595</td> <td>18.4%</td> <td>2284</td> <td>2466</td> <td>4750</td> <td>17.2%</td>			University Blvd.	2559	2575	5134	17.9%	2794	2801	5595	18.4%	2284	2466	4750	17.2%
Harder Dr. Got of the state Intermation of the state Intermatication of the state Intermaticatistate Intermaticatiestate			16th Avenue 41st Avenue	2935	3234 n/2	6169 n/c	21.5%	3189 n/2	3416	6605 n/2	21.7%	2720	3083 n/a	5803	21.0%	
Midday 2 Hours NW Marine Dr. 89 95 184 3.9% 127 145 272 3.8% 119 128 247 3.6% Chancellor Blvd. 456 394 850 17.9% 785 648 1433 118 168 822 72 3.8% 119 128 247 3.6% University Blvd. 478 554 1052 2.1.8% 886 788 1614 21.2% 695 667 1382 20.4% 16th Avenue 528 443 971 20.5% 851 716 1567 19.8% 690 668 1378 20.3% Midday 2 Marine Dr. 843 861 1704 35.5% 1531 1436 2907 37.5% 1006 1432 2518 371.8% Objectime WMarine Dr. 612 753 1365 2.5% 624 589 1213 2.4% 604 452 1356 3.5% (7AM to 6PM)			SW Marine Dr.	n/a 5060	n/a 6494	n/a 11554	n/a 40.3%	n/a 5219	n/a 6927	n/a 12146	n/a 40.0%	n/a 4534	n/a 6089	n/a 10623	n/a 38.5%	
Chancellor Blvd. 455 394 850 17.9% 785 648 1433 18.1% 582 672 1254 1855 University Blvd. 478 554 1032 2.13% 886 788 1674 21.2% 695 687 1832 20.4% Iofh Avenue 528 443 971 20.5% 851 716 1567 19.8% 690 688 1378 20.4% 41st Avenue n/a	[Midday 2 Hours	NW Marine Dr.	89	95	184	3.9%	127	145	272	3.4%	119	128	247	3.6%	
India Acenae India Acena	1		Chancellor Blvd. University Blvd	456 479	394 554	850	17.9% 21.8%	785 884	648 789	1433 1674	18.1% 21.2%	582 695	672 687	1254	18.5% 20.4%	
Image: state stat	1		16th Avenue	528	443	971	20.5%	851	716	1567	19.8%	690	688	1378	20.3%	
Sw Name br. 843 801 1/14 55.5% 1531 1436 2907 37.5% 1006 1422 2518 37.1% Daysime Winne Dr. 612 753 1365 2.5% 1213 2.4% 1006 1422 2518 37.1% (7AM to 6PM) Chancellor Blvd. 4265 4533 8798 18.3% 4404 4531 8935 17.9% 3473 4028 7510 18.4% University Blvd. 4436 4666 9102 18.9% 4910 4752 956 18.5% 16b Avenue 494 5135 10029 20.8% 5175 5224 10399 20.9% 4140 4518 8658 21.2% 41st Avenue n/a			41st Avenue	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
(7AM to 6PM) Chanceller Blvd. 4265 4453 8798 18.3% 4404 4531 8935 17.9% 3473 40.88 751 18.4% University Blvd. 4436 4666 9102 18.9% 4410 4531 8935 17.9% 3473 40.88 7515 18.5% 16th Avenue 4436 4666 9102 20.9% 5175 5224 10399 20.9% 4140 4518 8658 21.2% 41st Avenue n th	}	Daytime	NW Marine Dr.	843 612	861 753	1704	35.9% 2.8%	1531 624	1436 589	2967 1213	<u>57.5%</u> 2.4%	1086 604	14 <i>3</i> 2 752	2518 1356	57.1% 3.3%	
University Blvd. 4436 4666 9102 18.9% 4910 4752 9662 19.4% 3672 3884 7556 18.5% 16th Avenue 4894 5135 10029 20.8% 5175 5224 10399 20.9% 4140 4518 8658 21.2% 41st Avenue n/a	1	(7AM to 6PM)	Chancellor Blvd.	4265	4533	8798	18.3%	4404	4531	8935	17.9%	3473	4028	7501	18.4%	
1 out result 1 out result <th1 out="" result<="" th=""> 1 out result<</th1>			University Blvd. 16th Avenue	4436	4666	9102	18.9% 20.8%	4910	4752	9662 10399	19.4%	3672	3884	7556	18.5% 21.2%	
SW Marine Dr. 8663 10225 18888 39.2% 8930 10695 19625 39.4% 6684 8953 15797 38.7% Eastbound Westbound Total Percentage Eastbound Eastbound			41st Avenue	4094 n/a	n/a	n/a	20.076 n/a	n/a	5224 n/a	n/a	20.9% n/a	+1+0 n/a	4.518 n/a	n/a	21.276 n/a	
Eastbound Westbound Total Percentage Eastbound Westbound Total Percentage Spring 2002 - URC Screenlines Fall 2003 - URC Screenlines			SW Marine Dr.	8663	10225	18888	39.2%	8930	10695	19625	39.4%	6844	8953	15797	38.7%	
Full 2003 - Che sector and a se				Eastbound	Westbound Spring 2002 - URG	Total C Screeplines	Percentage	Eastbound	Westbound Fall 2002 - URG	Total C Screeplines	Percentage	Eastbound	Westbound Fall 2003 - URC	Total Screenlines	Percentage	