

**Alaskan Way Viaduct and Seawall Replacement Project
Moving Forward Projects Construction Traffic Mitigation**

**Enhanced Transit, Transit Travel Time and Demand Management
Performance Report**

Prepared for:
WSDOT

Prepared by:
King County Department of Transportation
Metro Service Development Section

Volume 13: Sept 2013 - Feb 2014
October 6, 2014



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TABLE OF CONTENTS

SUMMARY	5
SERVICES AND ACTIVITIES: SEPTEMBER 2013 TO FEBRUARY 2014	6
EXPENDITURES: SEPTEMBER 2009 – 4TH QUARTER 2013	7
PERFORMANCE REPORT SCHEDULE	8
Enhanced Transit Service Report.....	10
INTRODUCTION	10
ENHANCED TRANSIT SERVICE REPORT PURPOSE	10
RIDERSHIP TRENDS	11
RIDERSHIP CHANGE IN FALL 2013 COMPARED TO 2009 BASELINE	12
PERFORMANCE OF ENHANCED TRANSIT SERVICE ADDITIONS	13
TRANSIT CAPACITY.....	14
TRANSIT CAPACITY LEVEL OF SERVICE	15
FLEXIBLE TRANSIT SERVICE	19
WATER TAXI AND SHUTTLE SERVICE	20
Transit Travel Time Report.....	21
TRAVEL TIME REPORT PURPOSE.....	21
TRAVEL TIME DATA	24
FALL 2013 HIGHLIGHTS	25
SERVICE ADDITIONS TRAVEL TIME.....	26
Transportation Demand Management Report	27
TDM REPORT PURPOSE.....	27
TDM PROGRAM TIMELINE	28
TDM PROGRAM UPDATE AND PERFORMANCE	29
TDM BUDGET AND EXPENDITURE – FEBRUARY 2014.....	33

Appendix A

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Projects Overview

SUMMARY

To keep people and goods moving during construction of the Moving Forward Projects (primarily the Holgate to King project) of the Alaskan Way Viaduct and Seawall Replacement Project, the Washington State Department of Transportation (WSDOT) provided \$31.9 million to King County to enhance transit and water taxi service, improve bus monitoring equipment, and to provide transportation demand management services. This investment in transit and demand management services is one part of the state's construction traffic mitigation investments, which total more than \$125 million. Other projects include South Spokane Street Widening, State Route 519 improvements, electronic travel time signs and intelligent transportation systems.

These efforts are governed by three contracts - GCA 5820 Enhanced Transit Services, GCA 5864 Expanded Bus Monitoring Project and GCA 5865 South End Transportation Demand Management and Downtown Transportation Demand Management. Performance reports are a requirement of each of these contracts. Therefore, in an effort to consolidate and streamline the reporting process, this single performance report has been developed to address the contractual requirement for all three agreements.

The enhanced transit and trip reduction services were strategically designed to address the most significant Moving Forward construction traffic impacts and to build upon ongoing local, state and federal investments in transit and trip reduction services. Metro will maintain added bus trips to help increase transit capacity and maintain reliable schedules and will implement additional demand management programs to reduce drive-alone trips on the most congested routes.

This report is broken down into three sections:

- **Enhanced Transit Services:** This section compares the Fall 2013 service change data to the baseline 2009 data. This section will track the performance of WSDOT supported transit services that were operated during that period to mitigate construction impacts.
- **Transit Travel Time:** This section describes the changes in transit travel times in key corridors that feed into the Seattle Central Business District (CBD) and changes in travel time that occur within the CBD during the Fall 2013 service change.
- **Transportation Demand Management Report.** This section provides the status and impacts of education and outreach programs and marketing of travel options.

These transit and demand management performance reports will be published three times per year during the life of the construction project. The reports will be available approximately two months after each transit service change, which traditionally occur in February, June and September.

In the following chapters you will find baseline data, performance measurement methods and measured performance for state-sponsored transit and demand management services:

- Transit capacity and ridership
- Transit travel times
- Transportation demand management trip reduction
- Budget and expenditures

SERVICES AND ACTIVITIES: SEPTEMBER 2013 TO FEBRUARY 2014

Enhanced Transit Service summary

- Metro continued 30 peak period trips funded by WSDOT on routes 18X, 21X, 56X, 120, 121 and 358. This helped increase the combined peak period transit capacity of these routes by 18 percent, (see Table 5 on page 15).
- Peak-oriented service was provided on the West Seattle Water Taxi and Water Taxi shuttle service. The Water Taxi attracted over 400 rides and provided over 4,000 additional seats each day between West Seattle and Downtown Seattle (see Table 12 on page 20).

Ridership summary

- Peak period ridership increased in all four Enhanced Transit Service (ETS) pathways relative to the baseline (see tables 1 and 2 on pages 12 and 13). The overall increase in ridership (50%) was considerably in excess of the system growth rate (10%).
- Routes that received WSDOT funding carried on average 2,600 more people daily during the peak period than in the baseline. The largest absolute change was in response to upgrading the peak and shoulder frequencies from every 15 minutes to every 7-10 minutes on Route 358 between Aurora Village and Downtown Seattle. This improvement, in combination with other factors, resulted in an estimated 1,200 additional weekday boardings during the peak period, and 670 additional boardings during the shoulder periods. (See table 3 on page 13.)

Travel Time Summary

- Travel times on pathways using SR-99 continue to be impacted by the Wosca Detour, especially in the inbound direction during the AM peak, although AM travel times have shown some improvement since Summer 2013. PM travel times have increased by about one minute since Summer 2013. AM inbound travel times on SR-99 have increased by about 3 – 5 minutes compared to baseline conditions.
- Lane reductions on Alaskan Way surface street and Elliott Ave continue to impact some pathways due to traffic diversion; Ballard pathways have shown the highest impact, and this impact has increased slightly in Fall 2013 during the AM peak flow direction.
- North Portal and Mercer construction continue to impact pathways on Aurora Ave N, while impacts on Westlake Ave have subsided since Summer 2013. Travel times on Aurora south of N 38th Street have increased by 1 – 2 minutes compared to baseline conditions. North of 38th Street, travel time savings are evident due to installation of new Business Access and Transit (BAT) lanes in September 2013.
- Timber bridge replacement on SR-99 south of the West Seattle Bridge continues to affect one pathway in South Seattle during peak hours (Pathway I.1)

Transportation Demand Management Summary

Five Transportation Demand Management (TDM) Tasks have met their contract targets:

- Promotions of Transit and Ridesharing has reduced 13,196 trips, exceeding the reduction target of 1,380 trips.
- Incentives for Transit and Ridesharing has reduced 397 trips, exceeding the reduction target of 236 trips.
- Employer Outreach has reduced 1,240 trips, exceeding the reduction target of 100 trips.
- Carpool Program has reduced 691 trips, exceeding the reduction target of 370 trips.
- Residential Outreach has reduced an average of 451 weekday round trips during peak hours daily, 327 trips during non-peak hours and 397 daily trips on weekends. Both the trip reduction and participation targets have been exceeded for this task.

EXPENDITURES: SEPTEMBER 2009 – 4TH QUARTER 2013

As of the end of December 2013, Metro has invoiced WSDOT \$26,981,908 (\$544,456 under GCA 5864, \$24,946,176 under GCA 5820 and \$1,491,276 under GCA 5865) of the state's \$31.9 million investment in enhanced transit and demand management services.

PERFORMANCE REPORT SCHEDULE

Performance Reports will be produced three times a year, approximately two months after the service change. This reporting schedule is provided in more detail in the chart below.

Performance Report Release Dates

														CURRENT REPORT	
Performance Measure Updates Submittal Date	Draft	Volume 1	Volume 2	Volume 3	Volume 4	Volume 5	Volume 6	Volume 7	Volume 8	Volume 9	Volume 10	Volume 11	Volume 12	Volume 13	Volume 14
	12-14-09	4-05-10	8-09-10	12-13-10	4-04-11	8-22-11	12-12-11	4-16-12	08-20-12	12-10-12	4-22-13	8-19-13	12-9-13	3-31-14	8-18-14
Reporting Period of Volume Data															
Ridership/ Capacity/ Utilization Baseline		Feb 09 Jun 09 Sep 09													
Travel Time Baseline		Sep 2009*													
Service Plan		As of April 2010	As of Aug 2010	As of Dec 2010	As of April 2011	As of Aug 2011	As of Dec 2011	As of April 2012	As of Aug 2012	As of Dec 2012	As of April 2013	As of Aug 2013	As of Dec 2013	As of April 2014	As of Aug 2014
Travel Time Monitoring, Ridership/ Capacity/ Utilization Data, TDM Measures			Feb 10- Jun 10	Jun 10- Sept 10	Sep 10- Feb 11	Feb 11- Jun 11	Jun 11- Sep 11	Oct 11- Feb 12	Feb 12- Jun 12	Jun 12- Sep 12	Sep 12- Feb 13	Feb 13- Jun 13	Jun 13- Sep 13	Sep 13- Feb 14	Feb 14- Jun 14

*The September 2009 travel time data will serve as the travel time baseline, against which, all travel time monitoring activities will be compared

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Enhanced Transit Service Report

INTRODUCTION

The Nisqually earthquake highlighted the structural vulnerability of the State's Alaskan Way Viaduct portion of SR 99 and the region began immediately planning for its reinforcement or replacement. SR 99 serves as a major transportation facility carrying approximately 110,000 vehicles a day to and through downtown Seattle. As the region planned for its replacement it became apparent that a facility of this size could not be planned for and replaced without considering the impacts that the construction phase and final design would have on virtually all major north/south arterials and I-5. Inevitable construction impacts and potential for reduced capacity in the final SR 99 design increased interest in utilization of transit as a more compact travel alternative. In March of 2007, as planning continued on the central waterfront portion of SR 99 and the Viaduct (King St. to Battery Street), Governor Gregoire identified several projects for the Early Safety and Mobility projects, i.e. "Moving Forward Projects". Enhanced transit services were one of the major components of the Moving Forward Projects.

One of the major objectives of the enhanced transit services agreement is to "reduce vehicle travel demand in order to help mitigate construction related mobility impacts on the general public." Metro identified 33 candidate routes that, with additional service could help reduce vehicle travel demand. Greater transit utilization can help maintain public mobility while roadway capacity is constrained. The purpose of this report is to understand and document the usefulness of WSDOT's resources that will be used to maintain and enhance transit service in the SR 99 corridor during the Moving Forward construction projects.

In the Fall of 2009, the baseline against which service in this report will be compared, Metro transit service on these pathways provided an estimated 78,500 unlinked passenger trips daily. A conservative estimate would value these trips to equal approximately 38,000 vehicle trips a day in the SR 99 corridor. This transit service provided mobility to thousands of people per day and removed nearly 38,000 vehicle trips a day reducing delay for all other vehicular traffic in the corridor.

ENHANCED TRANSIT SERVICE REPORT PURPOSE

The Enhanced Transit Service Report provides various data that are useful in understanding the impact of the 30 additional trips funded by WSDOT. These trips are scheduled on routes 21 express, 56 express, and 120 (part of Pathway J); 121 (part of Pathway I); 358 (part of Pathway B); and 18 express (Pathway A). This report compares Fall 2009 baseline performance measures with Fall of 2013 performance measures. As with previous volumes, these transit performance measures are presented in daily totals and by peak, shoulder and midday periods. Ridership data for the past three years, 2011, 2012 and 2013 are also included to show short term trends.

Time of Day and Pathway Group designations are described below:

- **Time of Day Designations:** Time of day designations measure changes in transit supply and use by peak period (6-9am, 3-6pm), shoulder periods (9-10am, 2-3pm, 6-7pm) and midday periods (10am-2pm).
- **Pathway Groups:** The four pathway groups defined below are the transit corridors of emphasis for this contract. A more complete description is available in Travel Time Table 1, page 24. System-wide ridership numbers are also shown to give perspective on the relative performance of the four pathway groups when compared to the system as a whole.

Pathway A - Ballard/Magnolia: 15th Avenue and Elliot Avenue W between NW 85th Street and 1st Avenue and Denny Way, Including routes 15X, 17EX, 18EX, 19, 24, 32, 33 and RapidRide D Line.

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Pathway B – Aurora/Fremont: Aurora Avenue, Nickerson Street, Dexter Avenue and Westlake Avenue between NW 85th Street, Ballard Bridge, Fremont and 3rd Avenue/Denny Way, including routes 5, 5X, 16, 26, 26X, 28, 28X, 40, 62 and 358X.

Pathway I: - SODO: 1st Avenue S, East Marginal Way, and 4th Avenue S between S Michigan and S Jackson Streets, including routes 113, 121, 123, 124, 131 and 132.

Pathway J: - West Seattle: Admiral Way, Fauntleroy Way, 35th Avenue SW, Delridge Way and SR 99 between California Avenue, SW Morgan Street, Andover Street and Columbia/Seneca Streets, including routes 21, 21X, 37, 50, 55, 56X, 57, 116, 118X, 119X, 120, 125 and RapidRide C Line.

RIDERSHIP TRENDS

Transit ridership is influenced by many factors, including amount of service provided, seasonal travel patterns, the cost of driving (fuel/vehicle expenses and time), employment, route design, and construction impacts. The purpose of looking at ridership trend data is to measure and understand these influences. This section includes a brief overview of ridership trends over the last three years.

Three-Year Ridership Trends – System-wide ridership grew each year between 2011 and 2013 and increased by 5% over the three-year period. Higher fuel prices, a somewhat stabilized economy and a major restructuring of service are likely contributing factors to this ridership growth.

The Enhanced Transit Service Table 1 below shows that ridership growth rates were considerably in excess of the system growth rate in all four Enhanced Transit Service (ETS) pathways. Ridership increased in each corridor in each of the past three years.

Enhanced Transit Service Table 1

3 YEAR TRANSIT CORRIDOR WEEKDAY RIDERSHIP TREND FOR FALL SERVICE CHANGE				
Ridership Group	2011	2012	2013	% Change 2011-2013
System-wide Ridership	375,820	380,790	394,950	5%
Pathway A – Ballard/Magnolia	17,540	21,900	23,540	34%
Pathway B – Aurora Fremont	34,380	41,670	43,500	27%
Pathway I – SODO/Georgetown	12,960	13,230	14,320	10%
Pathway J – West Seattle	26,970	31,200	33,310	24%
Total of Pathways	91,850	107,990	114,670	25%

RIDERSHIP CHANGE IN FALL 2013 COMPARED TO 2009 BASELINE

The Enhanced Transit Service Table 2 below compares the Fall 2013 system-wide and Enhanced Transit Service pathway ridership with the Fall 2009 baseline for average weekday ridership by time of day.

Ridership Changes Vary by Time of Day – Evaluating aggregate ridership numbers alone can sometimes hide shifts in ridership that have important planning implications. Ridership analysis by time of day allows one to see which time period has the greatest demand for resources. Employment-driven transit service tends to be oriented toward the peak period (6-9 a.m.) and (3-6 p.m.) while other types of travel occur during all periods of the day. As shown in table 2, peak period ridership accounts for 50 percent of daily ridership at the system-wide level; among the individual pathways, peak period ridership accounted for between 48 and 54 percent of total daily ridership.

Peak period ridership increased significantly in all four pathways compared to Fall 2009 baseline figures, and ridership growth was particularly strong in Pathways B and J, where the majority of WSDOT-funded trips were added. Significant increases also occurred in these pathways for the shoulder and midday periods.

Enhanced Transit Service Table 2

COMPARISON OF SEPT 2009 BASELINE WEEKDAY RIDERSHIP BY TIME OF DAY AND PATHWAY WITH SEPT 2013 SERVICE CHANGE RIDERSHIP								
Ridership Group	Avg. Weekday		Peak Period*		Shoulder Periods		Midday Period	
	2009	2013 (% Change)	2009	2013 (% Change)	2009	2013 (% Change)	2009	2013 (% Change)
System-wide Ridership	364,000	395,000 (9%)	179,000	197,000 (10%)	66,000	71,000 (8%)	77,000	76,000 (3%)
Pathway A – Ballard/Magnolia	19,120	23,540 (23%)	9,820	12,710 (29%)	3,340	3,910 (17%)	3,610	3,850 (7%)
Pathway B – Aurora/Fremont	27,120	43,500 (60%)	12,640	20,800 (65%)	4,790	8,000 (67%)	5,780	8,830 (53%)
Pathway I – SODO/Georgetown	10,400	14,320 (38%)	5,240	7,470 (43%)	1,750	2,370 (35%)	1,910	2,530 (32%)
Pathway J – West Seattle	21,860	33,310 (52%)	11,110	17,400 (57%)	3,770	5,450 (45%)	4,420	6,210 (40%)
Total of Pathways	78,500	114,670 (46%)	38,810	58,380 (50%)	13,650	19,730 (45%)	15,720	21,420 (36%)

*Peak Period is 6-9 a.m. and 3-6 p.m.; Shoulder Period is 9-10 a.m., 2-3 p.m. & 6-7 p.m.; Midday is 10 a.m. - 2 p.m.

PERFORMANCE OF ENHANCED TRANSIT SERVICE ADDITIONS

Between Fall 2009 and Fall 2013, ridership increased during the peak period on all six routes that received Enhanced Transit Service (ETS) funding. With the exception of Route 121, ridership also increased during the shoulder periods on routes that received ETS funding. The largest absolute change was in response to upgrading the peak and shoulder frequencies from every 15 minutes to every 7-10 minutes on route 358. This improvement, in combination with other factors, resulted in an estimated 1,200 additional weekday boardings during the peak period, and 670 additional boardings during the shoulder periods. The second largest increase occurred during the peak and shoulder periods on Route 120, where frequencies during these time periods were improved from every 7-15 minutes to every 7-10 minutes, with resulting growth of 1,020 boardings during peak periods and 270 boardings during shoulder periods. In total, all-day ridership on ETS routes outperformed the system-wide trend by 18 percentage points.

Enhanced Transit Service Table 3

COMPARISON OF RIDERSHIP PERFORMANCE OF SERVICES THAT RECEIVED WSDOT FUNDED ENHANCEMENTS WITH FALL 2009 BASELINE								
Route/ Ridership Group	Avg. Weekday		Peak Period*		Shoulder Periods		Midday Period	
	2009	2013 (% Change)	2009	2013 (% Change)	2009	2013 (% Change)	2009	2013 (% Change)
21X / Pathway J	740	1,020 (38%)	700	930 (33%)	30	80 (167%)	No Service	No Service
56X / Pathway J	580	670 (16%)	500	540 (8%)	70	110 (57%)	No Service	No Service
120 / Pathway J	6,850	8,920 (30%)	2,960	3,980 (34%)	1,340	1,610 (20%)	1,660	1,980 (19%)
Total Pathway J	8,170	10,610 (30%)	4,160	5,450 (31%)	1,440	1,800 (25%)	1,660	1,980 (19%)
121 / Pathway I	1,030	950 (-8%)	670	770 (15%)	220	130 (-41%)	100	No Service
358 / Pathway B	9,140	11,730 (28%)	4,070	5,270 (29%)	1,600	2,270 (42%)	2,090	2,520 (21%)
18X/ Pathway A	760	900 (18%)	760	780 (3%)	No Service	120	No Service	No Service
Enhanced Transit Service Route Total	19,100	24,190	9,660	12,270 (27%)	3,260	4,320 (33%)	3,850	4,500 (17%)

*Peak Period is 6-9 a.m. and 3-6 p.m.; Shoulder Period is 9-10 a.m., 2-3 p.m. & 6-7 p.m.; Midday is 10 a.m. - 2 p.m.

TRANSIT CAPACITY

The primary way transit services mitigate construction impacts is by providing an alternative travel option to driving alone. In order to attract people to transit service, that service must be reliable. In addition, sufficient transit capacity is a prerequisite to establishing transit as a desirable alternative travel option.

Fall 2013 Transit Capacity Compared to Fall 2009 Baseline – The baseline is the scheduled number of seats supplied each weekday within a pathway group for Fall 2009. Enhanced Transit Service Table 4 shows the number of seats by time of day for Fall 2013 for the four different pathways compared to the baseline.

Overall, peak period capacity increased slightly between 2009 and 2013. The Fall 2013 service change continued the additional transit capacity added on Route 18X (Pathway A route), Route 358 (Pathway B route), Route 121 (Pathway I route) and Routes 21X, 56X, and 120 (Pathway J routes). However, other significant changes were implemented in all four pathways as part of the Fall 2012 service restructure. These changes affected both the number of trips and the number of seats per trip, the two factors that together determine seating capacity in each corridor. Consequently, capacity increases on individual WSDOT-funded routes may not directly correlate to changes in the pathways containing those routes due to changes to other routes within the pathway.

Enhanced Transit Service Table 4

FALL 2013 SERVICE CHANGE COMPARISON OF WEEKDAY TRANSIT SEATING CAPACITY BY CORRIDOR AND TIME OF DAY WITH FALL 2009 BASELINE						
Pathway	Peak Period		Shoulder Periods		Midday Period	
	2009	2013 (% Change)	2009	2013 (% Change)	2009	2013 (% Change)
Pathway A – Ballard/Magnolia	10,700	10,280 (-4%)	3,750	3,500 (-7%)	4,710	4,010 (-15%)
Pathway B – Aurora Fremont	14,760	16,580 (12%)	5,490	6,400 (17%)	7,110	7,780 (9%)
Pathway I – SODO/Georgetown	8,790	8,030 (-9%)	3,100	2,720 (-12%)	3,180	2,720 (-14%)
Pathway J – West Seattle	16,360	16,370 (0%)	5,860	5,390 (-8%)	7,680	6,360 (-17%)
Total of all Pathways	50,610	51,260 (1%)	18,200	18,010 (-1%)	22,680	20,870 (-8%)

Enhanced Transit Service Table 5 compares the actual transit capacity delivered during the Fall 2013 service change to the Fall 2013 enhanced transit service proposal. Metro provided added capacity consistent with the ETS proposal during the Fall 2013 change. WSDOT funds provided 18 percent more transit capacity than the peak period capacity of routes 18X, 21X, 56X, 120, 121 and 358. As will be shown in the next section, this additional capacity helped to mitigate the impact on transit capacity level of service caused by a 50 percent increase in peak period ridership relative to the Fall 2009 baseline.

Enhanced Transit Service Table 5

COMPARISON OF WSDOT FUNDED TRANSIT SEATING CAPACITY WITH METRO FUNDED PEAK PERIOD TRANSIT SEATING CAPACITY				
Fall 2013				
Route/Pathway	Metro Funded Peak Period*	Actual WSDOT Funded*	Fall 2013 ETS Proposal†	% Increase in Seating Capacity Compared to Metro Peak Period
18X	580	120	120	21%
21X	670	340	350	51%
56X	500	220	230	44%
120	3140	460	460	15%
121	1200	230	230	19%
358	3700	360	350	10%
Total	9,790	1,730	1,740	18%
*Actual average seats/trip for Fall 2013 were as follows: 18X:58, 21X:56, 56X:56, 120:58, 121:57, 358:60 †ETS Proposal was based on 58 seats/trip				

TRANSIT CAPACITY LEVEL OF SERVICE

Transit capacity level of service (LOS) measures how riders perceive crowding and comfort on transit services. The second edition of the Transit Cooperative Research Program's Transit Capacity and Quality of Service Manual describes the importance of transit capacity LOS in the following statement:

From the passenger's perspective, passenger loads reflect the comfort level of the on-board vehicle portion of a transit trip—both in terms of being able to find a seat and in overall crowding levels within the vehicle. From a transit operator's perspective, a poor LOS may indicate the need to increase service frequency or vehicle size in order to reduce crowding and provide a more comfortable ride for passengers. A poor passenger load LOS indicates that dwell times will be longer for a given passenger boarding and alighting demand at a transit stop and, as a result, travel times and service reliability will be negatively affected.

The Transit Capacity and Quality of Service Manual provides suggested capacity LOS guidelines. This report uses the ratio of passengers to seats, or Load Factor to evaluate the transit capacity LOS on routes in the identified pathways. The level of service thresholds are described in the table below.

Enhanced Transit Service Table 6

TRANSIT CAPACITY AND QUALITY OF SERVICE MANUAL LOAD FACTOR GUIDELINES

LOS	Load Factor (passengers/seat)	Comments
A	0.00-0.50	No passenger need sit next to another
B	0.51-0.75	Passengers can choose where to sit
C	0.76-1.00	All passengers can sit
D	1.01-1.25*	Comfortable standee load for design
E	1.26-1.50*	Maximum schedule load
F	>1.50*	Crush load

*Approximate value for comparison, for vehicles designed to have most passengers seated.

Fall 2013 Transit Capacity Compared to Fall 2009 Baseline – Enhanced Transit Service tables 7, and 8 display the number and percent of riders experiencing a transit capacity LOS of C or worse when traveling in the peak direction during the peak period as compared to the Fall 2009 baseline.

Crowding happens when demand pushes the limits of capacity. Changes in crowding reflect a change in the capacity, the demand or both. The 27 percent increase in peak period ridership among routes with WSDOT-funded trips has resulted in a greater number of riders experiencing transit capacity level of service C or worse, **despite WSDOT’s investment**. Overall, there are 1,360 more AM and 690 more PM peak period riders experiencing transit capacity level of service C or worse than there were in Fall 2009. These findings are consistent with trends observed at the pathway level, as shown in Tables 9 and 10.

Enhanced Transit Service Table 7

COMPARISON OF FALL 2013 TRANSIT CAPACITY LOS WITH FALL 2009 BASELINE								
AM 6:00-9:00 Inbound								
Route/ Pathway	Average Load Factor		# of trips providing a transit capacity LOS of C or worse		% of riders at a transit capacity LOS of C or worse		Est. Number of daily riders at a transit capacity LOS of C or worse	
	2009	2013	2009	2013	2009	2013	2009	2013
18X	0.91	1.08	4	5	77%	100%	280	350
21X	0.74	0.83	4	7	65%	89%	250	430
56X	0.71	0.68	2	2	53%	43%	140	120
120	0.74	0.97	6	15	47%	91%	390	1110
121	0.5	0.69	0	2	0	43%	0	120
358X	0.7	0.88	7	10	47%	60%	540	830
Total							1,600	2,960

Enhanced Transit Service Table 8

COMPARISON OF FALL 2013 TRANSIT CAPACITY LOS WITH FALL 2009 BASELINE								
PM 3:00-6:00 Outbound								
Route/ Pathway	Average Load Factor		# of trips providing a transit capacity LOS of C or worse		% of riders at a transit capacity LOS of C or worse		Est. Number of daily riders at a transit capacity LOS of C or worse	
	2009	2013	2009	2013	2009	2013	2009	2013
18X	0.78	0.89	4	5	68%	90%	270	390
21X	0.73	0.76	2	4	47%	58%	150	260
56X	0.68	0.70	1	1	28%	21%	70	60
120	0.79	0.76	9	11	57%	49%	610	740
121	0.56	0.48	0	1	0	21%	0	60
358X	0.77	0.88	11	14	58%	53%	880	1,160
Total							1,980	2,670

Enhanced Transit Service tables 9, and 10 display similar information as tables 7 and 8 for all the ETS pathways. The percentage of riders experiencing LOS C or worse increased in each pathway during the peak periods and at other times of day. The increase was greatest in the AM peak inbound, when the percent of riders experiencing LOS C increased from 33% to 81% and the number of riders experiencing LOS C or worse increased from 4,240 to 13,220.

These tables also provide the number and percent of riders that experience a transit capacity LOS of C or worse for those traveling in off peak periods. The off peak information is included to show that crowding occurs at times outside the peak period. The table also provides the total daily trips and estimated number of riders that experience LOS C or worse. These tables are provided for context to evaluate the effectiveness of WSDOT funded construction mitigation services.

Enhanced Transit Service Table 9

FALL 2013 SERVICE CHANGE COMPARISON OF INBOUND WEEKDAY PASSENGER LOADS BY CORRIDOR PEAK PERIOD SUMMARY WITH FALL 2009 BASELINE						
AM 6:00-9:00 Inbound						
Pathway	% of riders experiencing a transit capacity LOS of C or worse		# of trips in period providing a transit capacity LOS of C or worse		Est. Number of daily riders experiencing transit capacity LOS of C or worse	
	2009	2013	2009	2013	2009	2013
Pathway A – Ballard/Magnolia	34%	98%	13	43	860	3,500
Pathway B – Aurora Fremont	41%	88%	30	63	1,940	4,900
Pathway I – SODO/Georgetown	9%	31%	3	10	140	570
Pathway J – West Seattle	32%	81%	20	60	1,300	4,250
All Pathways	33%	81%	66	176	4,240	13,220
Inbound Trips All Other Times of Day						
	2009	2013	2009	2013	2009	2013
Pathway A – Ballard/Magnolia	27%	76%	23	91	1,430	7,240
Pathway B – Aurora Fremont	18%	42%	30	112	1,840	8,200
Pathway I – SODO/Georgetown	9%	23%	5	24	230	1,300
Pathway J – West Seattle	6%	42%	7	83	480	5,940
All Pathways	15%	47%	65	310	3,980	22,680
Total Inbound Trips			131	486	8,220	35,900

Enhanced Transit Service Table 10

FALL 2011 SERVICE CHANGE COMPARISON OF OUTBOUND WEEKDAY PASSENGER LOADS BY CORRIDOR PEAK PERIOD SUMMARY WITH FALL 2009 BASELINE						
PM 3:00 – 6:00 Outbound						
Corridor	% of riders experiencing a transit capacity LOS of C or worse		# of trips in period providing a transit capacity LOS of C or worse		Est. Number of daily riders experiencing transit capacity LOS of C or worse	
	2009	2013	2009	2013	2009	2013
Pathway A – Ballard/Magnolia	45%	71%	19	45	1,240	3,340
Pathway B – Aurora Fremont	37%	67%	28	74	1,820	5,440
Pathway I – SODO/Georgetown	20%	36%	6	14	250	840
Pathway J – West Seattle	42%	56%	28	51	1,830	3,820
All Pathways	39%	61%	81	184	5,140	13,440
Outbound Trips All Other Times of Day						
	2009	2013	2009	2013	2009	2013
Pathway A – Ballard/Magnolia	17%	51%	18	64	970	4,820
Pathway B – Aurora Fremont	13%	17%	24	45	1,390	2,710
Pathway I – SODO/Georgetown	6%	28%	3	26	140	1,790
Pathway J – West Seattle	8%	40%	10	66	660	5,030
All Pathways	12%	33%	55	201	3,160	14,350
Total Outbound Trips			136	385	8,300	27,790

FLEXIBLE TRANSIT SERVICE

The Enhanced Transit Service contract provides for the use of flexible hours to meet the day to day variations in construction related traffic disruptions. These hours allow Metro to assign standby buses that enable Metro to respond immediately to conditions on the street. In the Fall 2013 ETS proposal, Metro budgeted 4,000 hours of flexible services to meet these needs, including a potential viaduct closure. However, the viaduct closure did not occur, and no flexible hours were needed during the Fall 2013 service change.

WATER TAXI AND SHUTTLE SERVICE

The Fall 2013 service change was the third service change during which WSDOT provided financial support for the West Seattle Water Taxi and Water Taxi shuttle services as part of the Alaskan Way Viaduct and Seawall Replacement Project Moving Forward Projects Construction Traffic Mitigation. The Water Taxi shuttle buses (Routes 773 and 775) connect riders in West Seattle with the West Seattle Water Taxi, which operates between Seacrest Dock in West Seattle and Pier 50 in Downtown Seattle.

During the Fall 2013 service change, the Water Taxi and shuttle services operated on a peak oriented schedule from October 28, 2013 to February 14, 2014. As shown in Table 12 below, the Water Taxi attracted 420 rides and provided over 4,000 additional seats each day between West Seattle and Downtown Seattle. Many of the trips on the Water Taxi were made in combination with trips on the Water Taxi shuttle services.

Enhanced Transit Service Table 12

Fall 2013 Water Taxi and Shuttle Service				
Route	Peak Period		Shoulder Periods	
	Rides	Seats	Rides	Seats
Water Taxi	370	3,610	50	860
Water Taxi Shuttles	190	600	50	210

Transit Travel Time Report

TRAVEL TIME REPORT PURPOSE

As part of the AWW Moving Forward contract, Metro received funding to improve the equipment that monitors bus travel time through the construction corridors. The Transit Travel Time report uses data from this equipment provided by WSDOT and other sources throughout the network. This report summarizes data collected to monitor transit travel times along pathways that are expected to be most heavily impacted by the Moving Forward project of the AWW program.

This report compares the Fall 2013 service change condition to the previous travel time report (Summer 2013) and the baseline condition (Fall 2009). The list below show the dates of when travel time observations were collected for those conditions:

- Fall 2009 service change (baseline condition): September 21, 2009 through October 16, 2009
- Summer 2013 service change condition: September 3, 2013 through September 27, 2013
- Fall 2013 service change condition: January 22, 2014 through February 14, 2014

Travel time data was collected and processed as discussed below:

- Transit travel time was measured on key transit corridors feeding into and within the Seattle Central Business District (CBD). The data for this was collected through:
 - o Automatic Vehicle Identification (AVI) readers installed at endpoints of key transit corridors
 - o **Data from Metro's signpost-based Automatic Vehicle Location (AVL) system**
 - o Logs from the Rapid Ride Transit Signal Priority (TSP) System
- Pathways were defined by the roadway segments on which one or more transit routes operate.
- Pathways were **grouped by geographic market area, as shown in the "Pathways and Pathway Groups" map on the next page. Each group consists of several distinct pathways described in the "Description of Pathways and Associated Transit Routes" (Travel Time Table 1).**
- Because pathway lengths vary, and travel times will not be comparable across pathways, travel *speeds* are used to assess pathway group performance and travel *times* are used to assess individual pathway performance.

Fall 2013 Service Changes and Impacts to Travel Time Reporting

No significant service changes were implemented during the Fall 2013 service change. No pathway definition changes were made during this reporting period.

AVI readers at 4th Ave & S Jackson St and 5th Ave & S Weller St have been offline since summer 2013 while an interference issue is investigated; in addition, the AVI reader at 1st Ave & Denny way was disconnected in 2014 due to a utility pole relocation project. When AVI data is not available, AVL data has been substituted. Although AVL should provide comparable travel times for most pathways, it is not as accurate and is not able to track coaches that are off-route. Pathway I.2 in the inbound direction does not have any comparable AVL data, and this chart has been removed from the report.

Pathways and Pathway Groups

Transit Routes Affected by AWW Project



Travel Time Table 1

Description of Pathways and Associated Transit Routes					
Pathway Group	Pathway	Market Coverage	From	To	Current Transit Routes*
A	A.1	Ballard, Uptown	15 th NW/NW 85th	1 st Ave/Denny	D-Line
	A.2	Ballard	15 th NW/NW 85th	1 st Ave/Denny	15X, [17X,18X]
	A.3	Magnolia	Elliot Ave/Magnolia Br.	1 st Ave/Denny	19,24,33
B	B.1	North Seattle	Aurora Ave NW/NE 85 th	3 rd Ave/Battery	358
	B.2	North Seattle	Bridge Way/N 38 th	3 rd Ave/Battery	5, [5X,26X,28X]
	B.3	Fremont	Dexter/Westlake/Fremont	Dexter/Denny	26,28
	B.4	South Lake Union	Ballard Br./Nickerson	Denny/Westlake	62
	B.5	South Lake Union	15 th NW/Leary Way	Denny/Westlake	40
I	I.1	South Seattle/Burien	1 st Ave S/E. Marginal (OB) S Alaska/E Marginal (IB)	1 st Ave/Columbia (OB) 1 st Ave/Seneca (IB)	121,122, 123
	I.2	South Seattle/Burien	4 th Ave S/S Michigan	4 th /2 nd Ave/Jackson **	131, 132
J	J.1	West Seattle	Alaska Jct	3 rd Ave/Seneca	none
	J.2	West Seattle	35 th Ave SW/SW Morgan	3 rd Ave/Seneca	21
	J.3	West Seattle	Alaska Jct.	1 st Ave/Columbia (OB) 1 st Ave/Seneca (IB)	C-Line, [21X]
	J.4	West Seattle	California Ave/SW Fauntleroy Way	3 rd Ave/Yesler	116,118, 119
	J.5	West Seattle/Burien	Delridge Way/Andover	1 st Ave/Columbia (OB) 1 st Ave/Seneca (IB)	120,125
	J.7	West Seattle	Admiral Way/California Ave	1 st Ave/Columbia (OB) 1 st Ave/Seneca (IB)	56X, 57
CBD	CBD.2	2 nd Ave	4th Ave/Stewart	2 nd /Jackson **	Many
	CBD.3	3 rd Ave	3 rd Ave/Stewart	3 rd Ave/Yesler	Many
	CBD.4	4 th Ave	4 th Ave/Jackson **	4 th Ave/Stewart	Many
	CBD.5	5 th Ave	5 th Ave/Pine	5 th Ave/Weller	Many
	Columbia	Columbia St	3rd Ave/Seneca	1st Ave/Columbia	Many

*Routes identified with an **X** are express routes. Routes in [BRACKETS] are routes that parallel a significant portion of the pathway, but are not included in the data for that pathway. Because so many routes operate on the CBD pathways they are not all listed here.

** Pathway affected by AVI reader outage at 4th Ave & S Jackson St.

TRAVEL TIME DATA

A summary of performance results are reported on the "Performance by Pathway Group" and "Performance of Pathways with Service Additions" tables below, while detailed travel time charts of the individual pathways are included in Appendix A.

Travel Time Table 2 below shows daily median travel speeds and range of speeds experienced by each pathway group during the am and pm peaks, including a comparison with the baseline condition. The "Median Speed" is the speed where 50 percent of the observed transit speeds are faster and 50 percent of the observed transit speeds are slower than the median speed. The median speed includes all transit trips operating along all of the pathways in each group, in both directions, on weekdays between 5 am and 8 pm. Median speed is reported rather than average speed because the median is less sensitive to unusual events such as bus breakdowns or accidents that could skew the average. This measure gives an overall performance metric for the pathway group, and is a useful aggregate measure to assess whether the speeds of individual pathways in a given group are trending up or down. **It is not, however, appropriate to use the pathway group median speed as an assessment of travel speed for any individual pathway.** In Appendix A, observed travel times are aggregated by hour of day for both directions of each pathway.

The strongest influence in travel time variability is time of day and direction of travel. The "PM Peak Period Hourly Median Range" and "AM Peak Hourly Median Range" are aggregate performance measures for the times of day that traditionally have the most congestion. The PM Peak Range is the range between the median speed for the slowest hour of the slowest pathway and the fastest hour of the fastest pathway between 3 pm and 6 pm; the AM Peak Range is a similar comparison of speeds between 6 am and 9 am. These ranges can be used to understand pathway group performance and assess whether, as a group, speeds are trending up or down during periods when daily travel demand is the greatest.

Travel Time Table 2: Fall 2013, Summer 2013, and Baseline Travel Speeds

Performance by Pathway Group: Fall 2013, Summer 2013, & Baseline Comparison					
Pathway Group	Area	Service Change Period	Median Speed [MPH]	AM Peak Period* Hourly Median Range [MPH]	PM Peak Period* Hourly Median Range [MPH]
A	Ballard, Interbay	Fall '13	16.0	12.6 – 18.5	13.6 – 17.0
		Summer '13	15.5	11.7 – 22.0	13.6 – 16.0
		Baseline	14.9	12.1 – 23.6	11.4 – 19.0
B	Aurora, Fremont	Fall '13	17.7	11.2 – 23.8	10.1 – 21.1
		Summer '13	17.8	12.0 – 23.5	10.9 – 21.1
		Baseline	18.6	11.0 – 22.7	11.0 – 20.3
I	SODO, Georgetown	Fall '13	18.1	17.0 – 33.4	13.5 – 20.0
		Summer '13	19.6	17.0 – 35.0	13.0 – 22.0
		Baseline	17.7	16.4 – 48.4	12.7 – 21.7
J 1 st Ave	West Seattle via 1 st Ave S	Fall '13	14.2	12.9 – 17.8	12.7 – 17.6
		Summer '13	14.2	12.1 – 19.0	12.8 – 18.0
		Baseline	15.9	11.9 – 20.7	12.4 – 21.0
J AWV	West Seattle via AWV	Fall '13	28.4	18.3 – 32.8	19.8 – 33.7
		Summer '13	29.9	16.7 – 33.2	21.6 – 33.1
		Baseline	30.1	20.1 – 36.6	22.1 – 33.8
CBD	2 nd - 5 th Avenues	Fall '13	6.7	5.3 – 10.7	4.7 – 9.2
		Summer '13	6.6	5.0 – 11.3	3.3 – 14.0
		Baseline	7.2	5.9 – 9.9	5.4 – 9.6

* AM peak includes 6 – 9 am and inbound trips only, pm peak includes 3 – 6 pm and outbound trips only, except CBD group includes both directions for am and pm peak ranges.

FALL 2013 HIGHLIGHTS

During the Fall 2013 reporting period, construction activities in the South Portal area continued to impact transit pathways on the AWW and parallel local streets. AM peak travel times on AWW pathways have shown slight improvement since Summer 2013, while PM peak travel times have become slightly worse. In the North Portal area, construction activities continue to impact north pathways, particularly in the inbound direction during peak hours; a significant portion of this increase is due to the Mercer West Project, which has continued the reduction of SR-99 from 3 to 2 lanes. The Alaskan Way surface street continued to experience long-term lane reductions during Fall 2013, resulting in additional traffic diverted to other routes in the CBD, Sodo, Belltown and Uptown areas.

A handful of construction projects with short term lane closures occurred during this reporting period, particularly in the South Lake Union and north CBD area.

J Pathways

J Pathways on 1st & 4th Avenue S have maintained median speeds compared to Summer 2013 conditions, however, PM peak travel times have increased by another minute. J pathways on the AWW have lost some speed overall, and have experienced about one minute higher travel times during the PM peak flow. AM travel times on both AWW and 1st & 4th Avenue have shown some improvement since Summer 2013, but are still 3 – 5 minutes longer compared to baseline conditions.

B pathways

Pathways B.1 and B.2 in the inbound/southbound direction continue to be impacted by ongoing construction in the vicinity of SR-99 and Mercer area. Pathway B.1 (Aurora Ave up to 85th St) has shown travel time improvement throughout most of the day due to new BAT lanes north of 38th St, while Pathway B.2 (Aurora Ave up to 38th St), which did not have any new Bus/BAT lanes installed this period, has shown increased travel times all day since Summer 2013. Pathways using Westlake Ave (Pathway B.4 and B.5) have shown significant improvement in the inbound direction since Summer 2013

Additional highlights of changes in travel time and travel speeds observed in Fall 2013 compared to Summer 2013 and baseline conditions are noted below. See Appendix A for details.

- A Pathways show travel time increases of one minute or less during the AM peak flow in Fall 2013 compared to Summer 2013, while PM peak flows are slightly better. This may be due to changing traffic diversion due to North Portal, Mercer project, and Alaskan Way surface street detours.
- Pathway I.1 has shown continued elevated travel time during the AM & PM peak flow directions due to the SR-99 Spokane St Overcrossing Project (timber bridge replacement). Inbound trips on this pathway are operating 3 – 5 minutes longer than baseline conditions all day. This pathway is expected to improve once the SR-99 Spokane St Overcrossing Project is completed in March 2014.
- Pathway CBD2 shows continued travel time increases during the PM peak although PM peak travel times are better than Summer 2014. First Hill Streetcar construction on Jackson Street is likely impacting this pathway.
- Pathway CBD3 travel times have held steady and shown slight improvement during selected periods since Summer 2013. New kiosks at RapidRide stations are expected to have reduced dwell time at these bus stops. Although Rapid Ride C/D line coaches are not included in the CBD3 results since they do not travel through the 3rd & Yelser intersection, the reduced dwell times benefit other routes using these bus stops.

SERVICE ADDITIONS TRAVEL TIME

The following is a summary of travel time performance of transit pathways that have received WSDOT funding during this period.

Route 21X [Pathway J.3] – Pathway J.3 shows a 1 – 2 minute improvement in travel times during AM/inbound peak flows compared to Summer 2013, while PM/outbound travel times have increased by less than a minute. Pathway J.3 had shown increases in travel time after the beginning of the Wosca Detour, but then showed improvement after implementation of Rapid Ride improvements. Route 21X benefits from a few of the Rapid Ride improvements, such as the AM peak period bus lane on Avalon Way, but does not receive the full complement of C Line Rapid Ride improvements. Based on previous and current travel time results, route 21X is likely experiencing travel times about 5 minutes longer than the baseline condition during the AM peak flow.

Route 56X [Pathway J.7] – Pathway J.7 is a peak-only pathway using the AWW. This pathway has shown travel time improvements during the AM peak but increased travel times during the PM peak, consistent with other AWW pathways. AM inbound travel times on this pathway are highly variable due to continued use of the Wosca Detour.

Route 121 [Pathway I.1] – Pathway I.1 is a peak-only pathway with limited reverse-peak trips. It has been impacted by the Timber Bridge replacement project in addition to the Wosca detour during the AM peak flow. AM inbound travel times are 3 – 4 minutes greater than baseline conditions.

Route 120 [Pathway J.5] – Pathway J.5 has shown 1 - 2 minutes travel time improvement during the AM peak flow, but travel times are still 2 – 4 minutes longer than baseline conditions. PM peak flow travel times are about a minute longer than both Summer 2013 and baseline conditions.

Route 18X [Pathway A.2] – Pathway A.2, a peak-only pathway using 15th, Elliott, shows a slight travel time increase during the AM peak flow in Fall 2013 compared to Summer 2013, and about 1 – 3 minutes longer than baseline conditions.

Route 358 [Pathway B.1] – Pathway B.1 continues to be impacted in the southbound/inbound direction by construction and lane closures related to the Mercer and North Portal projects, although travel times have improved in Fall 2013 due to the installation of new BAT lanes on Aurora north of 38th St. Travel times in the inbound directions are up to 4 minutes longer all day compared to baseline conditions. Northbound/outbound travel times have remained consistent or better than baseline conditions due to bus-only and BAT lanes on Aurora and Battery Street.

Transportation Demand Management Report

TDM REPORT PURPOSE

Transportation Demand Management (TDM) projects are designed to improve system efficiency by reducing traffic congestion on SR 99 during the construction of the Moving Forward Projects, primarily S Holgate Street to S King Street. WSDOT is investing \$1.7 million in strategic trip reduction projects to complement the Enhanced Transit Service project with incentives, transit subsidies, outreach events and consultations. These projects encourage people to ride the bus, helping to fill seats on the added bus service. The TDM projects also help show people their travel options which include carpooling, vanpooling, teleworking, or flexing their work schedules.

The goal of the overall TDM project is to reduce *4,130 peak round trips each weekday*. The agreement requires that the projects target two areas, downtown Seattle (and impacted surrounding areas) and the south end along the SR 99 corridor. In addition to the WSDOT funded programs, Metro will contribute matching dollars. A description of the various TDM projects follows TDM Table 1 below:

TDM Table 1

TDM Project Definitions for Downtown Seattle and the South End SR 99 Corridor	
Program	Description
Incentives for Transit and Ridesharing \$343,520 WSDOT	Provide a minimum of 2,500 transit pass incentives to downtown Seattle employers.
Reduce Single Occupancy Vehicles (SOV) Commuter Parking \$225,000 WSDOT	Encourage property owners and drivers to use the City of Seattle's electronic parking guidance system to convert 2,000 long term commuter parking stalls to short-term parking through marketing and incentives.
Promotions for Transit and Ridesharing \$362,000 WSDOT	Promote new transit services and all rideshare programs to a minimum of 165,000 households and/or employees.
Teleworking/Flexible Schedules \$140,000 WSDOT	Develop telework and flexible schedule plans with a minimum of 15 downtown Seattle companies with the help of a telework consultant. Consultant will also conduct a feasibility study for a telework center in West Seattle.
Plan Your Commute Programs \$81,480 WSDOT	Provide one-on-one consultations about commute options with Plan Your Commute Events. Information and free bus ride tickets are usually given to participants.

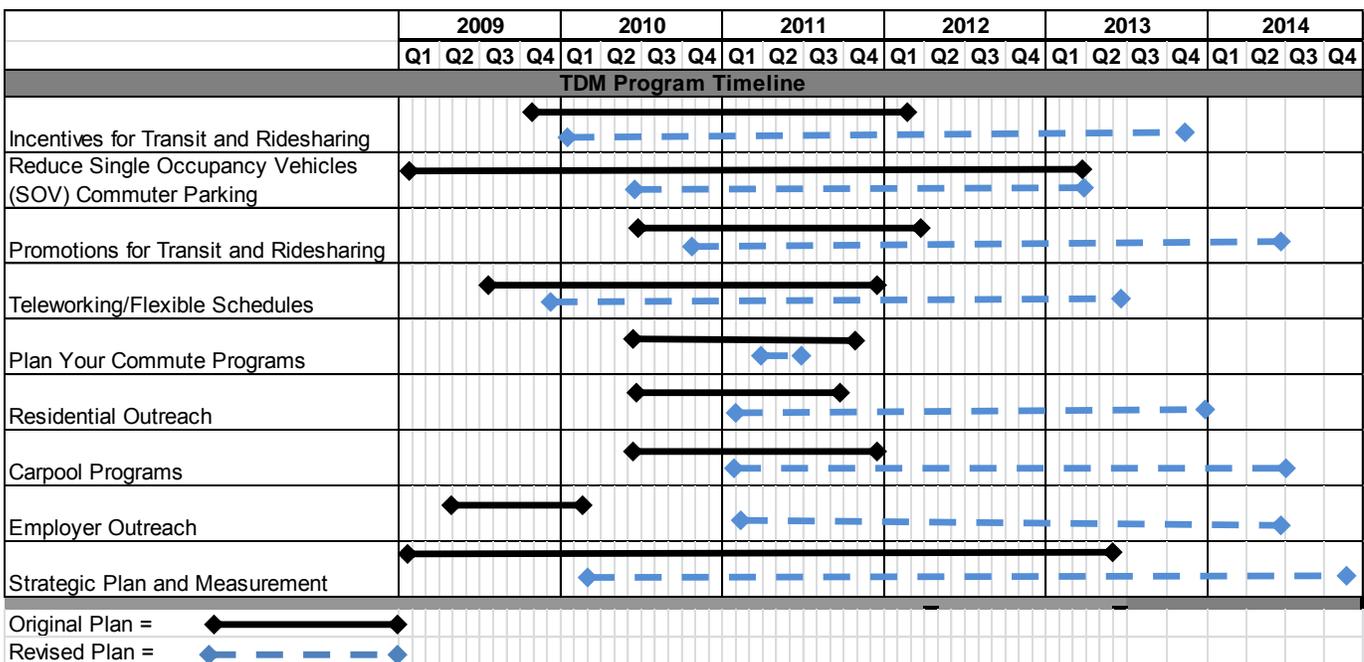
TDM Project Definitions for Downtown Seattle and the South End SR 99 Corridor

Program	Description
Residential Outreach \$300,000 WSDOT	Conduct residential outreach targeted to neighborhoods potentially affected by construction. Outreach will encourage residents to ride the bus, carpool, bicycle, walk or eliminate trips.
Carpool Programs \$105,000 WSDOT	Offer 2,000 incentives to new carpoolers in the SODO/Duwamish and West Seattle areas.
Employer Outreach \$100,000 WSDOT	Offer transit passes or subsidies to smaller employers (not required to participate in commute trip reduction) in SODO/Duwamish and the downtown neighborhoods (Lower Queen Anne, South Lake Union, First Hill, etc.).
Strategic Plan and Measurement \$51,612 WSDOT	Analyze and report on overall results of transportation demand management efforts
Match \$1,050,000 Metro	

TDM PROGRAM TIMELINE

Most TDM programs began in early 2011. Teleworking/Flexible Schedules, Reduce SOV Commuter Parking, Promotions for Transit and Ridership, and the Metro-funded Incentives for Transit began in 2010. The program schedule is below:

TDM Table 2



TDM PROGRAM UPDATE AND PERFORMANCE

Listed below in TDM Table 3 are the TDM program updates for October 2013 to February 2014.

Each TDM task has a trip reduction target set by contract (GCA 5865). At the beginning of the contract, Metro worked with WSDOT and SDOT staff to develop the methodology to measure progress in meeting the trip reduction targets. The factors used to measure progress in the AWW TDM program used past performance and other factors to estimate performance. The mitigation is a collaboration of efforts to encourage people to meet their travel needs without driving alone. All the TDM elements are implemented in an environment where many different actions interact including but not limited to other promotions, changes in bus service, and construction activities. Broader factors like the price of gas, seasonal effects, unemployment, and other economic factors, can also influence a traveler's choice.

Individual tasks often targeted the same employers and travelers with different approaches. Task implementation also had to remain flexible to respond to factors beyond the project including staffing resources, agency policies, data gathering, gas prices or the economy. These factors made it difficult to attribute a trip reduction to a single task. To address this difficulty, King County Metro and WSDOT reviewed and documented changes to task level deliverables, **trip reduction targets, funding allocations and performance measurement methodology. This ensured the task's** deliverables, expected performance, and final cost per trip reduced remained aligned. The adjustments outlined do not result in any net changes at the overall agreement level to deliverables, trip reduction targets or budget for the mitigation program.

Most reporting tools have been revised as of this reporting period; revised performance spreadsheets (and data) are available in the appendix for all TDM tasks.

TDM Table 3

TDM Program Update – (October 2013 – February 2014)	
Incentives for Transit and Ridesharing	<p>Performance: 397 trips have been reduced, exceeding the revised trip reduction target of 236.</p> <p>Activities: Incentives continue to be offered in the Center City for first year Passport purchases. There were 376 incentives/passes distributed from October 2013 through January 2014.</p>
Reduce Single Occupancy Vehicles (SOV) Commuter Parking	<p>Performance (no change): As of program completion in February 2013, 2,063 long-term parking spaces have been reduced, but no trips have been reduced. However, this service period showed a reduction in the number of vehicles parked by 9AM, which are assumed to be commuters, in five of the six reporting facilities. The decrease in parking occupancy is consistent with the 2012 Downtown Seattle Modesplit Survey from Commute Seattle (http://www.commuteseattle.com/2012survey/) showing a decrease from 2010 to 2012 in the number of commuters that drive alone or carpool to work, with increases in those that take transit, walk or bike.</p> <p>SDOT's e-Park system went 'live' fall 2010 during the Great Recession when unemployment was high and fewer people were using long-term parking in downtown. Now the economic recovery is increasing the number of office workers, shoppers and tourists returning to downtown Seattle looking for long-term and short-term parking.</p> <p>Comparing e-Park baseline obtained during the recession to the subsequent data collected during an economic recovery is not a true measurement of this task's performance. A pre-recession baseline of parking data would provide a more complete understanding of the parking trends in downtown Seattle and the effect of this task. Unfortunately garages are reluctant to share additional information that would enable more accurate trip reduction estimates because they consider the information to be proprietary to their business.</p> <p>Activities: Work on this task was completed in December 2012.</p>
Promotions for Transit and Ridesharing	<p>Performance: The Promotions trip target of 1,380 has been exceeded with 13,196 trips reduced.</p> <p>Activities: No outreach activities occurred during this time period. A final round of outreach is being planned for late spring 2014.</p>
Teleworking/Flexible Schedules	<p>Performance (no change): Companies participating in the program have reduced 290 trips as a result of the telework program. This includes 142 trips from two companies that completed a telework/compressed work week survey and the remainder calculated based on available CTR survey data for participants.</p> <p>Activities: Final case studies were prepared and the final telework report completed.</p>
Plan Your Commute	<p>Performance (no change): The program has reduced 33 trips.</p> <p>Activities (no change): Work on this task was completed in June 2011, with 83 of the 36 required events held, and more than 15,000 pledges in Rideshare Online, more than exceeding the 1,800 required. Benefits of this task are on-going.</p>
Residential Outreach	<p>Performance (no change): The program has reduced an average of 451 weekday round trips during peak hours daily, 327 trips during non-peak hours and 397 daily trips on weekends. Both the trip reduction and participation targets have been exceeded for this task.</p> <p>Activities: The final In Motion project work under this task concluded in December 2012. Future activity will include analysis of ORCA card reload data.</p>

TDM Program Update – (October 2013 – February 2014)

<p align="center">Carpool Program</p>	<p>Performance: 691 trips have been reduced through this program, well above the goal of 370. This is an increase of 54 trips from last period's report.</p> <p>Activities: Metro continued promoting its "In a van, I can" campaign. This campaign utilizes social media, bus advertising, posters, newsletters, postcards, participant testimonials and outreach to strengthen Metro's vanpool program by retaining current participants and attracting new participants. These promotional efforts will continue through 2014 and will have an added focus of encouraging new vanpool formations.</p>
<p align="center">Employer Outreach</p>	<p>Performance: This program has reduced 1,240 trips.</p> <p>Activities: Ongoing employer support was provided via employer network groups and local events and 167 new Passports were sold during this period.</p>

As of this reporting period, five TDM Tasks have met their contract targets:

- Promotions: target 1,380 trips, total of 13,196 trips reduced to date
- Incentives: target 236 trips, total of 397 trips reduced to date
- Residential Outreach: target 390 trips, total of 451 trips reduced to date
- Employer Outreach: target 100 trips, total of 1,240 trips reduced to date
- Carpool: target 370 trips, total of 691 trips reduced to date

To date, 16,298 trips have been converted, nearly 400% of the 4,130 trips targeted for reduction.

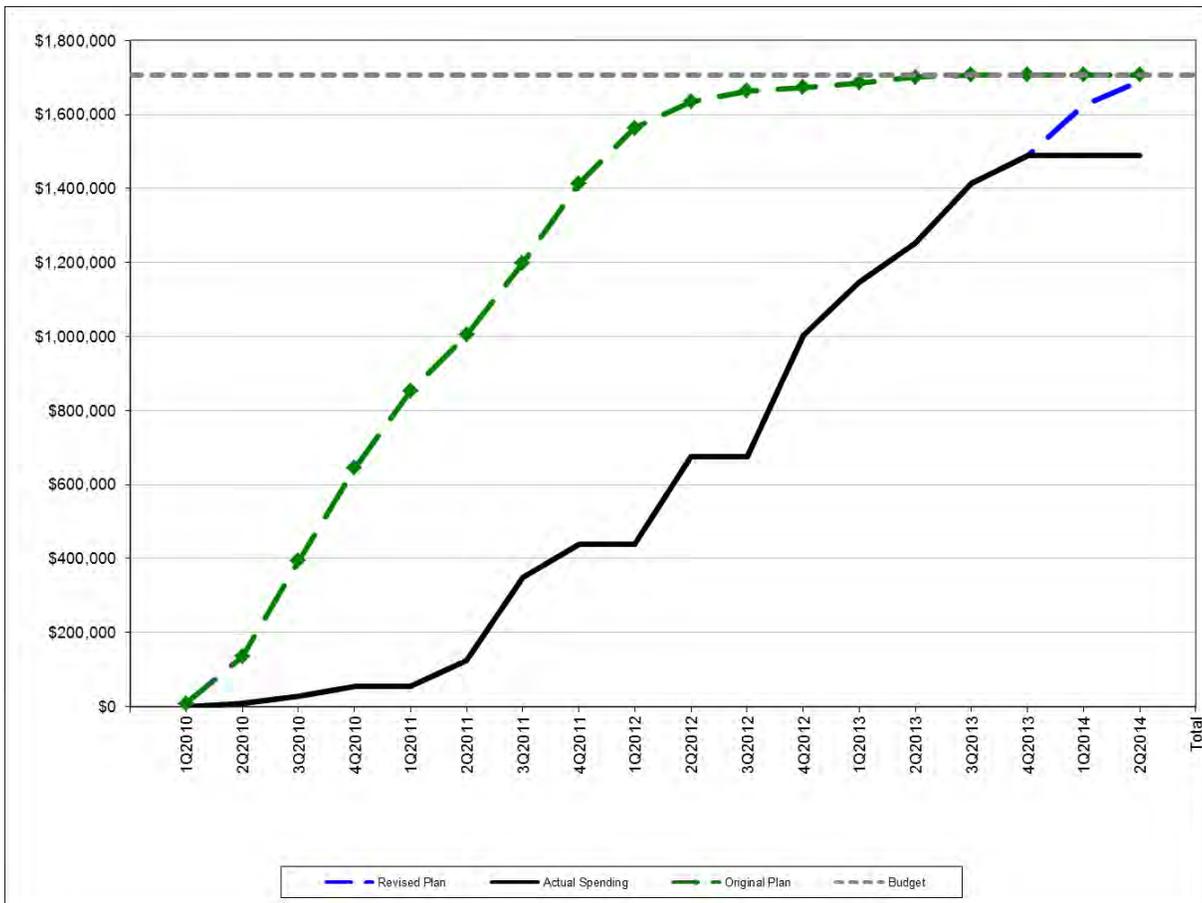
TDM Table 4

Activity	Trip Reduction (round trips reduced daily)		Individual Metrics		
	Target for entire program period	Current performance	Description	Target for entire program period	Current performance
Promotions for Transit and Ridesharing	1,380	13,196	Households / Employees	165,000	194,984
Incentives for Transit or Ridesharing	236	397	Transit Pass Incentives	2,284+	7,199
			Incentives to Garages	5	5
Carpool Program	370	691	Carpool Incentive	2,000	6,808
Reduce Single Occupancy Vehicles (SOV) Commuter Parking	200	0	Net Reduction of Downtown Long-Term Parking Spaces	2,000	2,063
Residential Outreach	390	451	Household Participation Rate	10%	14.2%
Plan Your Commute	744	33	Pledges	1,800	15,000+
			Transit Passes Distributed	N/A	216
			Pre-loaded ORCA Cards Distributed	N/A	331
Teleworking	710	290	Number of Companies Participating	15-20	10
Employer Outreach	100	1,240	Transit Passes Distributed	N/A	892
TOTAL	4,130	16,298			

TDM BUDGET AND EXPENDITURE – FEBRUARY 2014

The estimated cash flow as of February by quarter is listed in the table below.

TDM Table 5

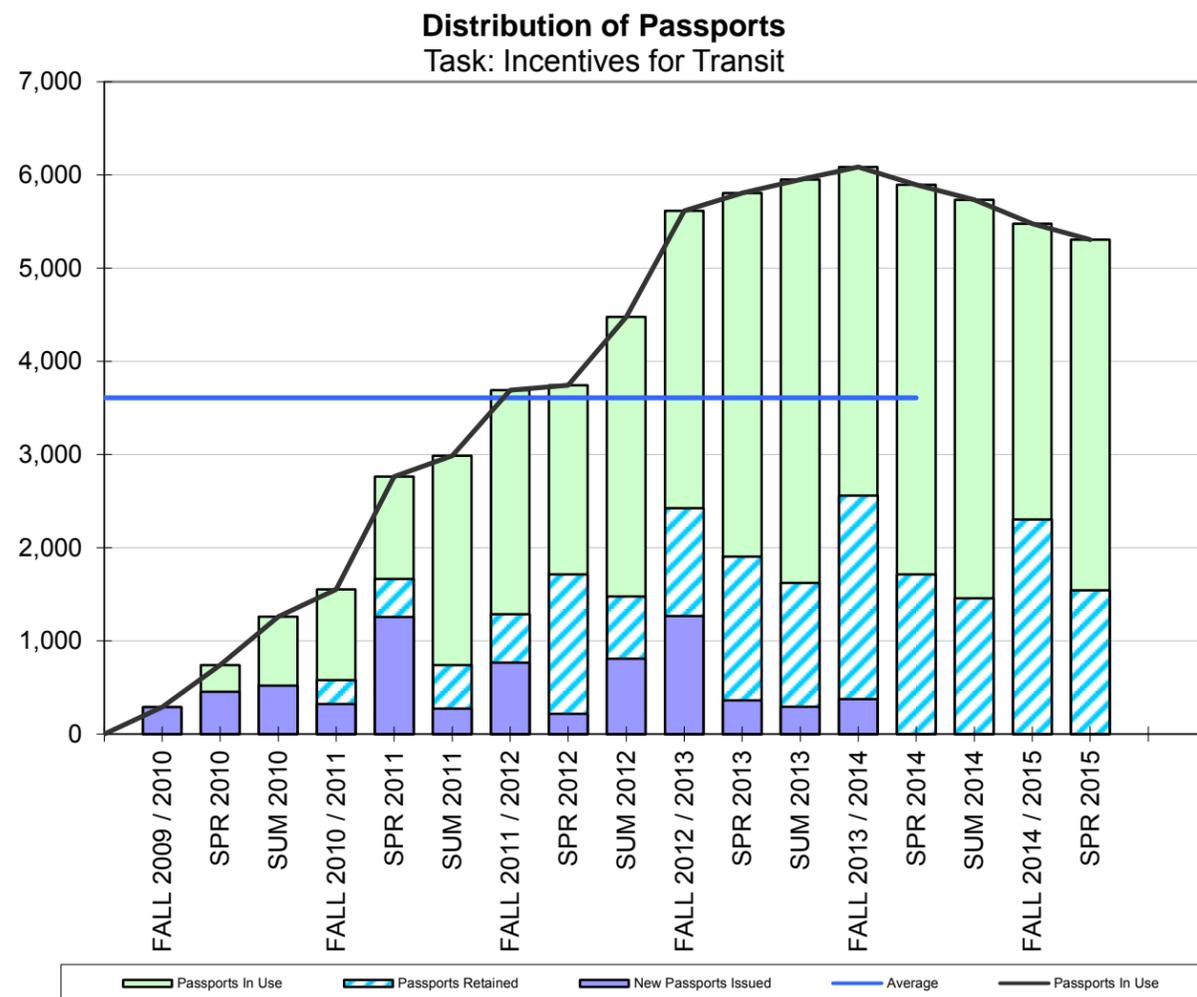


Task: Incentives for Transit
Task Lead: Carol Cooper

Target	
236	Trips Reduced
2,284+	Transit Pass Incentives
5	Garage Incentives

ORCA Passport	
Alternate Mode Share (transit and vanpool) for Passport Sites	44.0%
Alternate Mode Share for Non-Passport Sites	33.0%
Retention of Newly Distributed Passports	90.0%

	Service Period	Garage Incentives	New Passports Issued	Passports Expiring	Passports Retained	Passports In Use	Average Passports In Use
Program Period	FALL 2009 / 2010		288			288	3,610
	SPR 2010		453			741	
	SUM 2010		518			1,259	
	FALL 2010 / 2011		321	288	259	1,551	
	SPR 2011		1,257	453	408	2,763	
	SUM 2011		274	518	466	2,985	
	FALL 2011 / 2012	5	765	580	522	3,692	
	SPR 2012		216	1,665	1,498	3,742	
	SUM 2012		810	740	666	4,478	
	FALL 2012 / 2013		1,267	1,287	1,158	5,616	
	SPR 2013		362	1,714	1,543	5,806	
	SUM 2013		292	1,476	1,329	5,951	
	FALL 2013 / 2014		376	2,425	2,183	6,084	
	SPR 2014				1,905	1,714	
Post Program Period	SUM 2014			1,621	1,459	5,732	5,502
	FALL 2014 / 2015			2,559	2,303	5,476	
	SPR 2015			1,714	1,543	5,304	
Total		5	7,199				



Average Daily Round Trips Reduced Through Distribution of New Passports

$$= \left(\left(\begin{matrix} \text{Alt. Mode Share} \\ \text{for Passport Sites} \\ \text{During Program} \end{matrix} \right) - \left(\begin{matrix} \text{Alt. Mode Share} \\ \text{for non-Passport Sites} \\ \text{During Program} \end{matrix} \right) \right) * \left(\begin{matrix} \text{Average \# of Passports} \\ \text{In Use During Program} \end{matrix} \right)$$

$$= ((44.0\%) - (33.0\%)) * (3,610) = 397$$

Task: Carpool Program
Task Lead: Tom Devlin

Target	
370	Trips Reduced
2,000	Carpool Incentives

Average Ridership Per Vanpool	7.5
Average Number of One-Way Trips Per Vanpool Rider Per Week	8

Program Period (Service Change, Year)	Service Period	New Vanpools Formed	Vanpools Disbanded	Current Vanpools	Vanpool Riders	One-Way Vanpool Trips	Reported One-Way Carpool Trips	Commuter Days in Service Period	Ridesharing Incentives Distributed
	SPR 2010			0	0	0		88	
	SUM 2010			0	0	0		77	
	FALL 2010 / 2011			0	0	0		86	
	SPR 2011	33	1	32	240	33,792	45,595	88	1,216
	SUM 2011	42	0	74	555	68,376	65,174	77	733
	FALL 2011 / 2012	74	4	144	1,080	165,888	82,423	96	1,508
	SPR 2012	21	5	160	1,200	149,760	61,014	78	705
	SUM 2012	41	16	185	1,388	170,940	81,829	77	809
	FALL 2012 / 2013	69	12	242	1,815	278,784	124,381	96	918
	SPR 2013	29	15	256	1,920	239,616	82,776	78	200
	SUM 2013	34	19	271	2,033	253,656	106,045	78	317
	FALL 2013 / 2014	40	8	303	2,273	352,692	166,656	97	402
	SPR 2014			303	2,273	287,244		79	
% of Reported Trips Resulting in Trip Reductions by Mode						88%	50%	Total	6,808
Participants Newness to Alternate Mode by Type*						57%	36%		
Total Round Trip Reduction(see formula below)						595	96	691	

Total Trip Reduction =

$$\left(\frac{\text{Total Reported One Way Trips by Mode Type}}{\text{Commuter Days During Program Period}} \right) * \left(\frac{1 \text{ round trip}}{2 \text{ one way trips}} \right) * \left(\% \text{ of Reported Trips Resulting in Trip Reductions by Mode Type} \right) * \left(\% \text{ of Participants Newness to Alternate Mode by Type 0 - 6 months} \right)$$

* Participants newness to alternate mode by type was derived from data King County Metro collected. The vanpool percentage was based on King County Metro's vanpool entry survey (sent to all new vanpool participants).

Task: Telework / Flexible Schedules
Task Lead: Sunny Knott

Target	
710	Trips Reduced
15	Companies Participating

Company	Total Employees	Teleworkers %	Estimated Trip Reduction*
Russell Investments	950	36%	92
Fred Hutchinson Cancer Research Center	3,539	8%	49
Perkins Coie LLP	891	12%	-5
Starbucks Coffee Company	3,627	12%	73
Vulcan Inc.	309	5%	1
Gates Foundation	926	36%	7
Fisher Broadcasting Inc.	409	3%	1
Seattle Housing Authority	214	12%	3
US EPA	584	28%	19
Port of Seattle	613	20%	50

Note: 17 companies engaged in developing telework/flex schedule plans. We are measuring performance for the 10 companies that implemented their plans.

290*

Example Russell Investments
 Total Number of Employees at Company 950

Mode	Number of Reported Trips in a Typical Week						Estimated Number of Trips Teleworkers Would Have Taken in a Week Without Telework Option	Resulting Daily Round Trip Reduction
	All Respondents 545 respondents		Non-Teleworkers 351 respondents		Teleworkers 194 respondents			
Drive Alone	187	7.4%	138	8.7%	49	5.1%	83	12
Bus	1,322	52.0%	972	61.2%	350	36.6%	585	-79
Train	441	17.3%	242	15.2%	199	20.8%	146	18
Carpool	182	7.2%	131	8.3%	51	5.3%	79	-5
Bicycle	18	0.7%	16	1.0%	2	0.2%	10	-3
Walk	99	3.9%	87	5.5%	12	1.3%	52	-14
Telework	289	11.4%	0	0.0%	289	30.3%	0	101
Compressed Work Week	4	0.2%	1	0.1%	3	0.3%	1	1
Total	2,542		1,587		955			92*

% of Reported Trips Resulting in Trip Reductions by Mode	
Bus	97%
Light Rail / Train	98%
Carpool	50%
Bicycle	100%
Walk	100%
Telework	100%
Compressed Work Week	100%

Estimated Number of Trips Teleworkers Would Have Taken in a Week Without Telework Option

$$= \left(\frac{\text{Mode Share for Non-Teleworkers}}{\text{Mode Share for Teleworkers}} \right) * \left(\text{\# of Reported Trips in a Typical Week by Teleworkers by Mode} \right)$$

*Resulting daily round trip reduction equals the sum of

$$= \left(\begin{matrix} + \text{ for drive alone mode} \\ - \text{ for all higher efficiency modes} \end{matrix} \right) * \left(\left(\frac{\text{Estimated \# of Trips Teleworkers Would Have Taken in a Week Without Telework Option by Mode}}{\text{\# of Reported Trips in a Typical Week by Teleworkers by Mode}} \right) - \left(\frac{\% \text{ of Reported Trips Resulting in Trip Reductions by Mode}}{\% \text{ of Reported Trips Resulting in Trip Reductions by Mode}} \right) * \left(\frac{1 \text{ week}}{5 \text{ days}} \right) * \left(\frac{\text{Total Employees at Company}}{\text{Total Survey Respondents}} \right)$$

for all modes except if the sum of the bus/train modes is negative in which case the bus/train modes are ignored. Negative summations of the bus/train modes are ignored since transit ridership is likely to be backfilled by new riders.

Task: Plan Your Commute
Task Lead: Carol Cooper

Target	
744	Trips Reduced
216	Transit Pass Incentives
1,800	Pledges

Distribution of \$6 Pre-Loaded ORCA Cards

pre-loaded cards distributed to employees	331
total commute days during program	212
total calendar months during program	10.0
program period	5/1/2011 to 2/29/2012
maximum amount considered a transit transfer	\$0.50
Card Use Stats	
cards reloaded	43
cards reloaded with monthly pass	6
purse trips	1,859
purse trips per day	9
cards reloaded more than once or with a monthly pass	33

Total Trip Reduction = (E-Purse Trip Reductions) + (Monthly Pass Trip Reductions)

where

$$E\text{-Purse Reductions} = \left(\frac{\# \text{ of Transit Purse Transactions} > \text{Maximum Amount Considered a Transit Transfer}}{\text{Eligible Commute Days}} \right) * \left(\frac{1 \text{ round trip}}{2 \text{ one-way trips}} \right)$$

$$\text{Monthly Pass Trip Reductions} = \frac{(\# \text{ of Monthly Pass Reloads}) * \left(\frac{\text{Total Commute Days During Program}}{\text{Total Calendar Months During Program}} \right)}{\text{Eligible Commute Days}}$$

Eligible Commute Days

= Count of Commute Days Between Earliest Date of Card Use and Program End Date

Trip Reductions	
E-Purse	6
monthly pass	3
Total	9

* Monthly passes are assumed to be used for each commute day in a month.

ORCA Passport (Transit Pass) Sales

Passports (transit passes) sold to employers	216
alternate mode share for Passport sites	44.0%
alternate mode share for non-Passport sites	33.0%

$$\text{ORCA Passport Sales Trip Reductions} = \left(\left(\text{Alternate Mode Share for Passport Sites} \right) - \left(\text{Alternate Mode Share for non-Passport Sites} \right) \right) * (\text{Passports Sold})$$

$$= ((44.0\%) - (33.0\%)) * (216) = 24$$

Total Trip Reduction for Plan Your Commute Task

$$\text{Total Trip Reduction} = \left(\text{Trip Reduction from Distribution of Pre-Loaded ORCA Cards} \right) + \left(\text{Trip Reduction from ORCA Passport Sales} \right)$$

$$= (9) + (24) = 33$$

Interpreting the Hourly Pathway Summaries

Pathway
Each page is a report of one pathway, defined in the title.

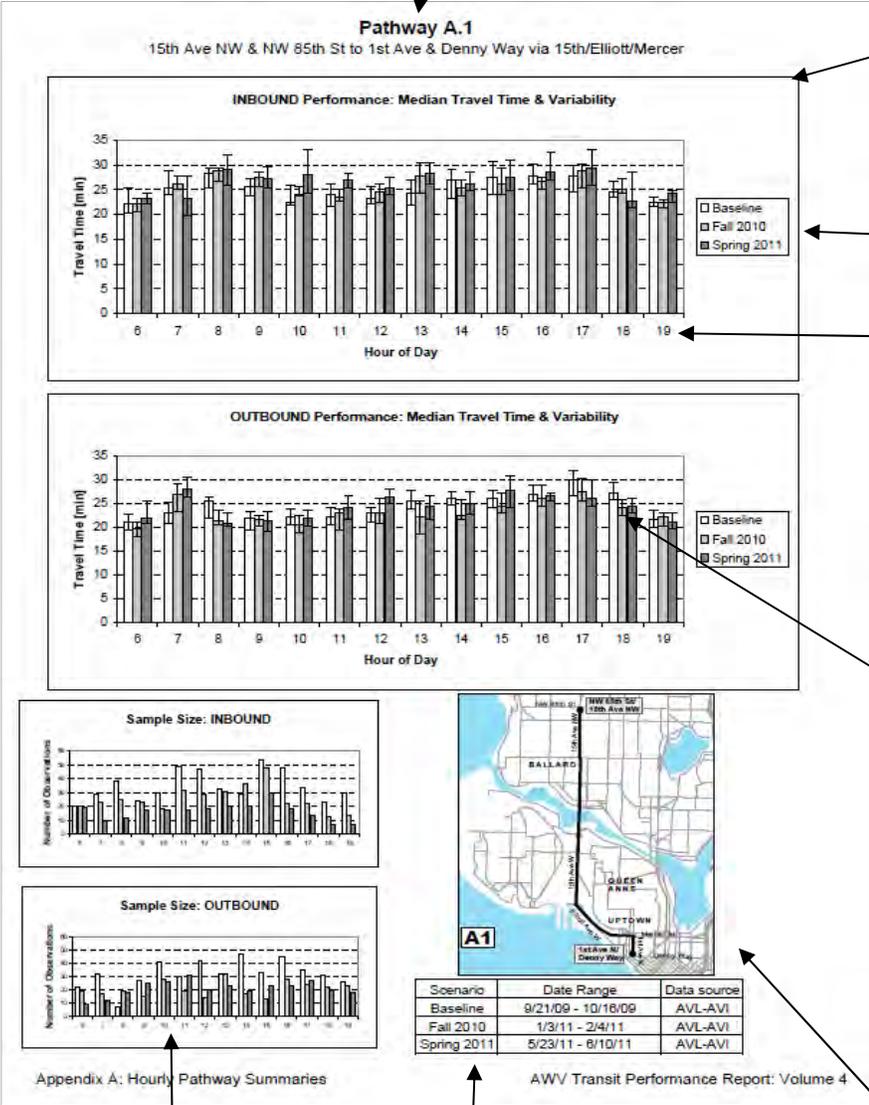
Direction
Most pathways have two directions, either inbound/outbound or northbound/southbound. Inbound trips generally head into the Seattle CBD, and outbound trips generally originate in the CBD. Separate charts are provided for the two directions.

Scenario
Long-term changes in transit performance are illustrated by selecting various scenarios for side-by-side comparison.

Time-of-Day
Travel time data is sliced into hour-interval segments for each pathway and direction, and the median travel time is calculated for each hour interval between 5:00 and 19:59 (5:00am - 7:59pm). The hour interval for each trip is determined by the hour of day when the trip passes the end point of the pathway.

Variability Factors
In addition to the median travel time shown in the bar charts, a variability indicator is shown with whiskers extending above and below each bar. The upper whisker shows the 75th percentile travel time measured for the hour interval, and the lower whisker shows the 25th percentile travel time. A larger spread between the 25th and 75th percentile indicates a larger variation in travel times. In other words, 50% of the observed trips fit within this range.

Pathway Map
The map shows the detailed route of the pathway being reported, as well as the start and end points. In some cases, the start or end points are different for inbound/outbound directions, for example for trips using the Seneca and Columbia AWW ramps.

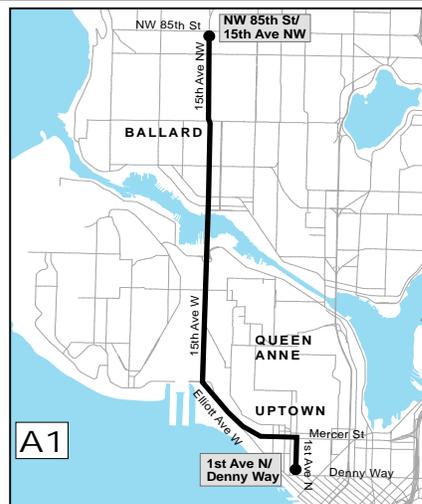
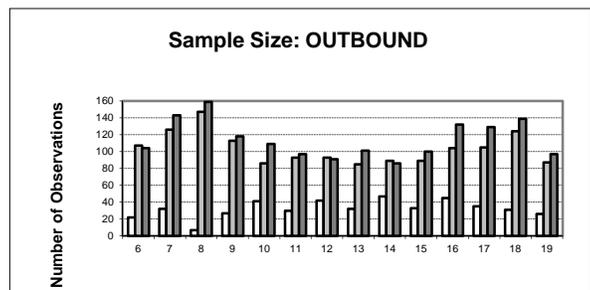
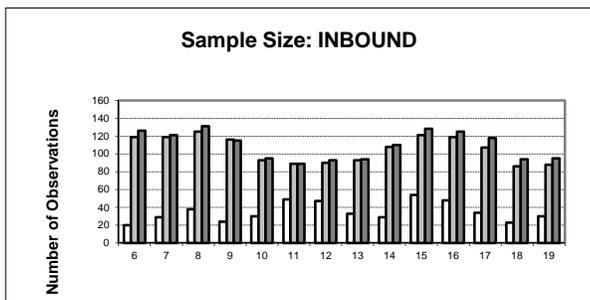
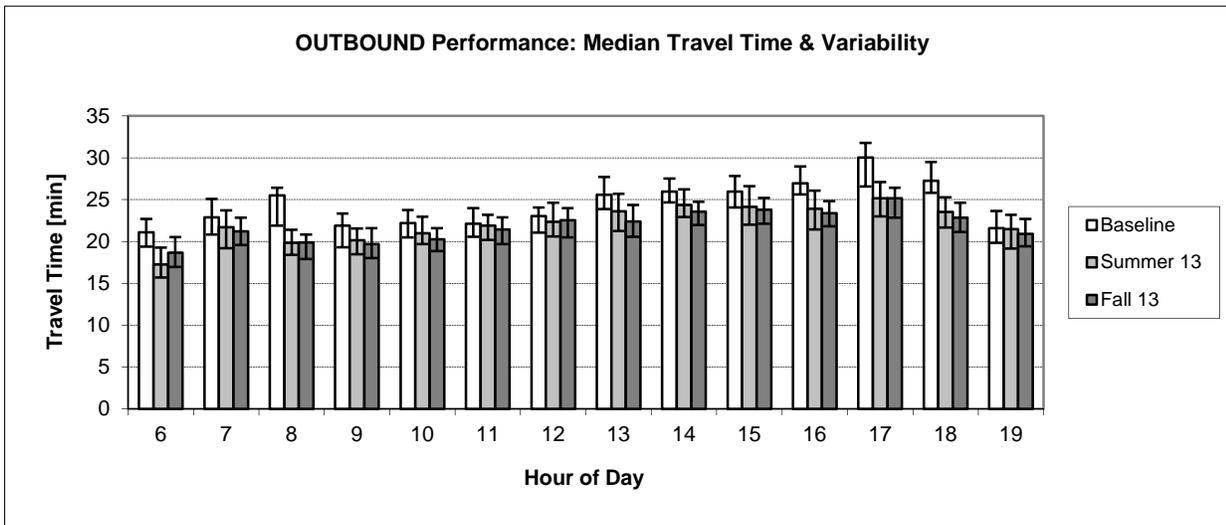
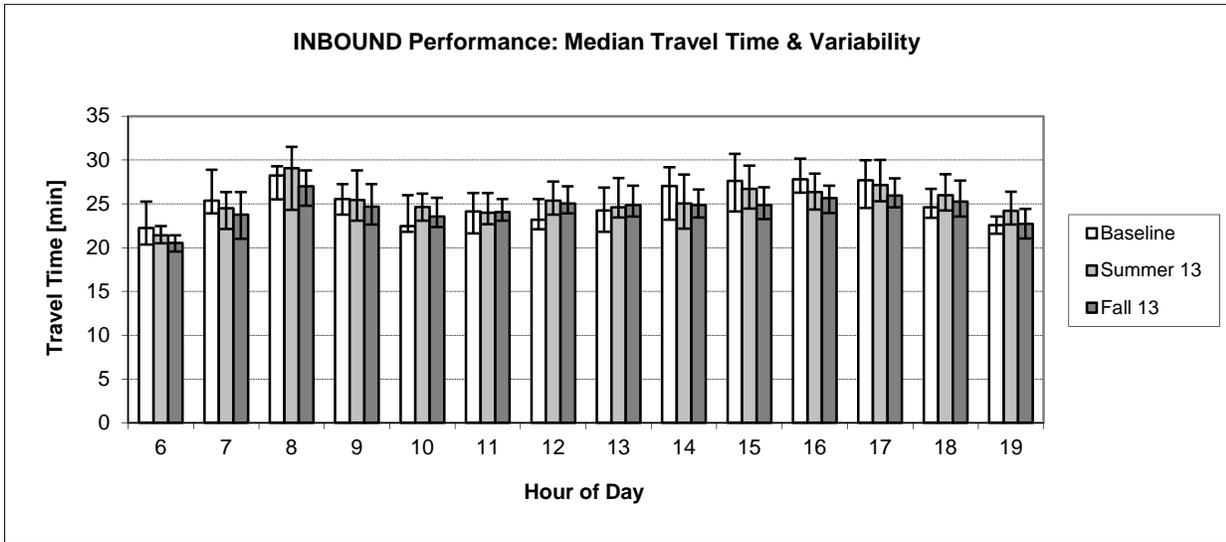


Sample Size Charts
These charts show the number of observations used within each slice of travel time data. These charts provide an indication of the quality and relevancy of the data that is presented in the larger charts.

Scenario Descriptions
Details about the scenarios being reported are shown in the table, including the date ranges and data source used (AVL or AVI).

Pathway A.1

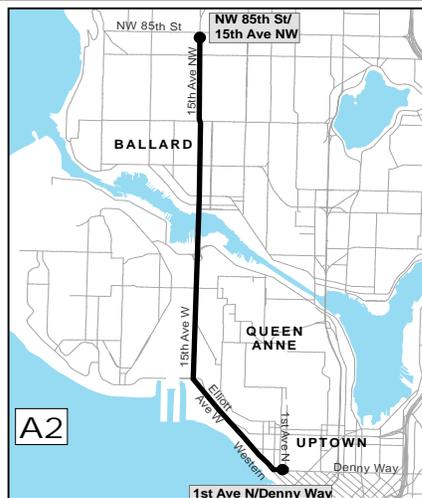
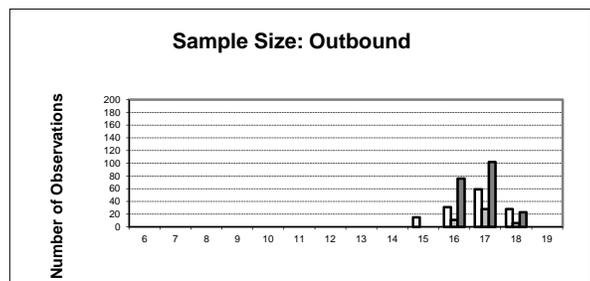
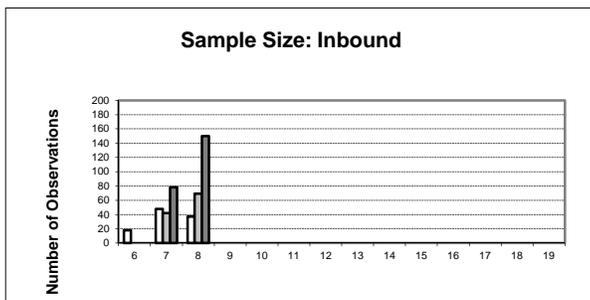
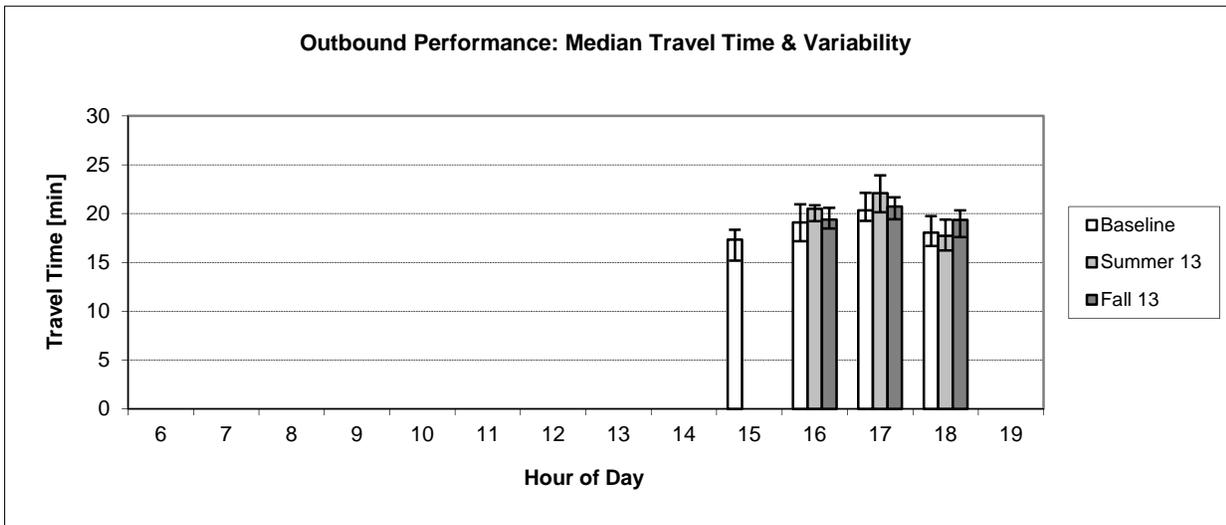
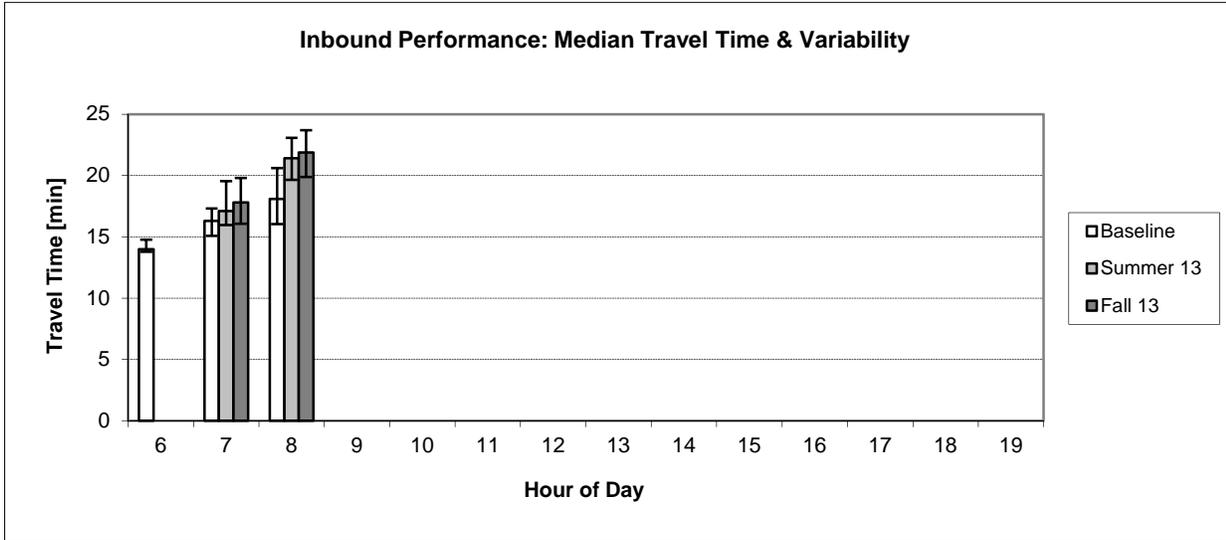
15th Ave NW & NW 85th St to 1st Ave & Denny Way via 15th/Elliott/Mercer



Scenario	Date Range	Data source
Baseline	9/21/09 - 10/16/09	AVL-AVI
Summer 13	9/03/13 - 9/27/13	TSP
Fall 13	1/21/14 - 2/14/14	TSP

Pathway A.2

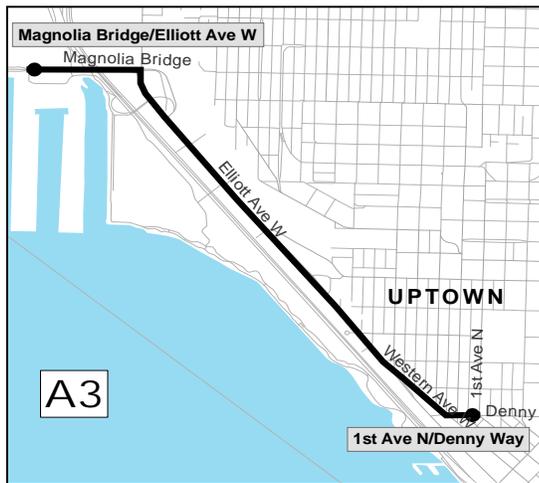
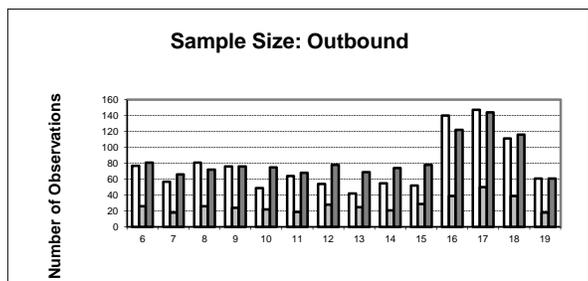
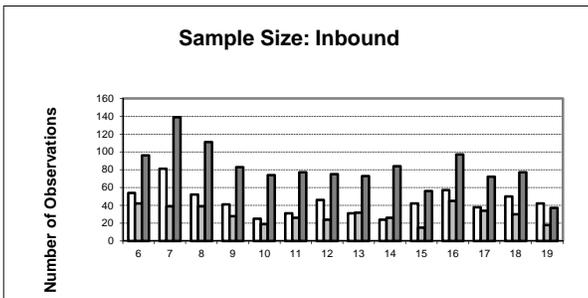
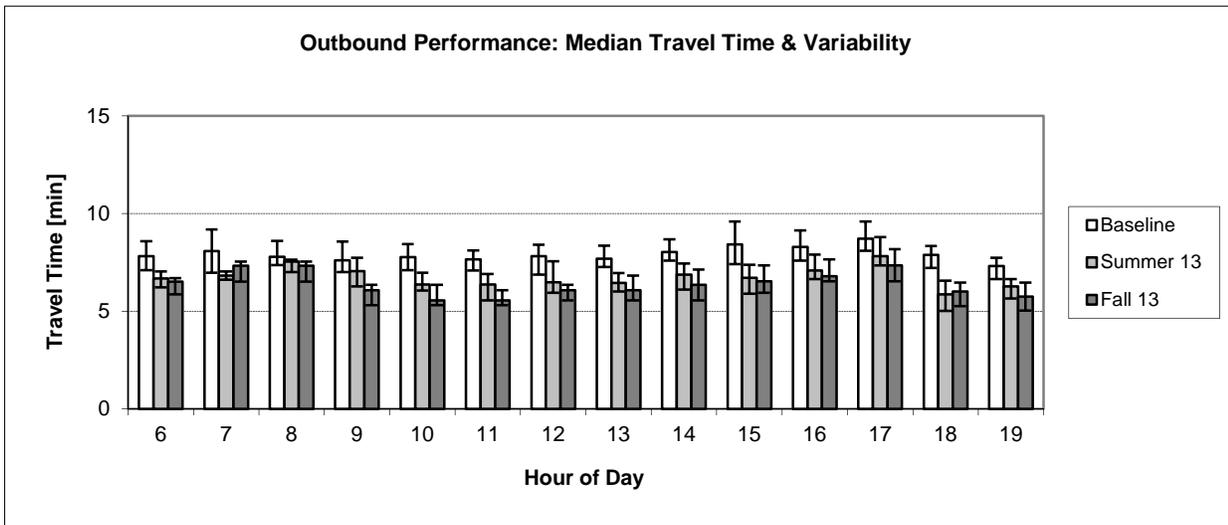
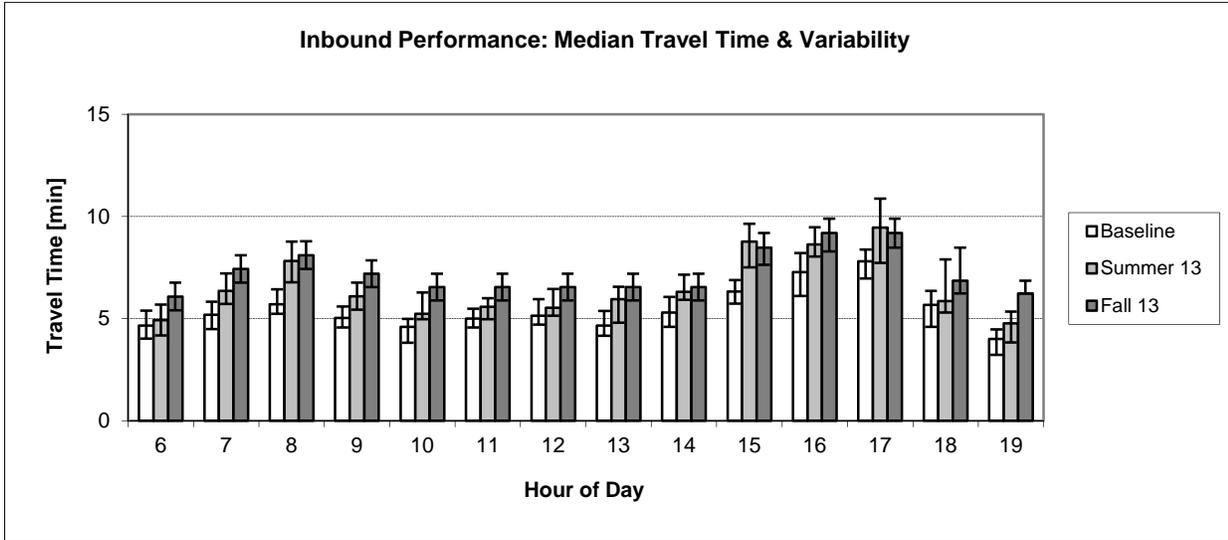
15th Ave NW & NW 85th St to 1st Ave & Denny Way via 15th/Elliott/Western (Peak Only)



Scenario	Date Range	Data source
Baseline	9/21/09 - 10/16/09	AVL-AVI
Summer 13	9/03/13 - 9/27/13	AVL-AVI
Fall 13	1/21/14 - 2/14/14	AVL-AVI

Pathway A.3

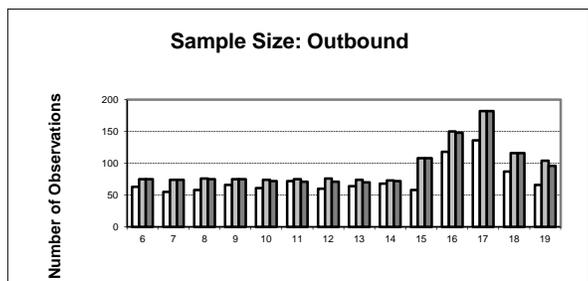
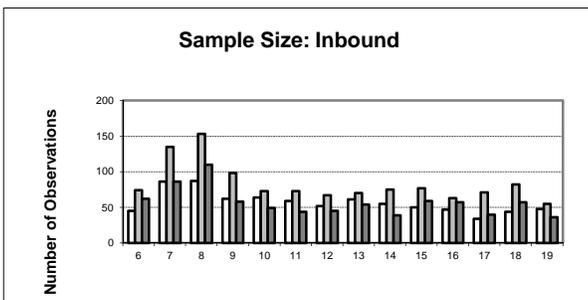
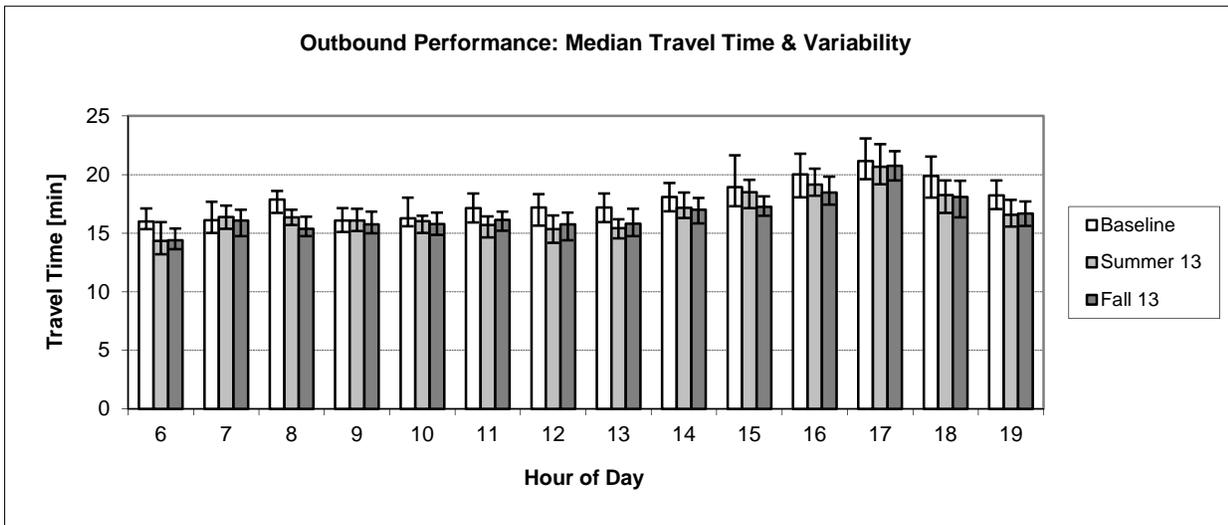
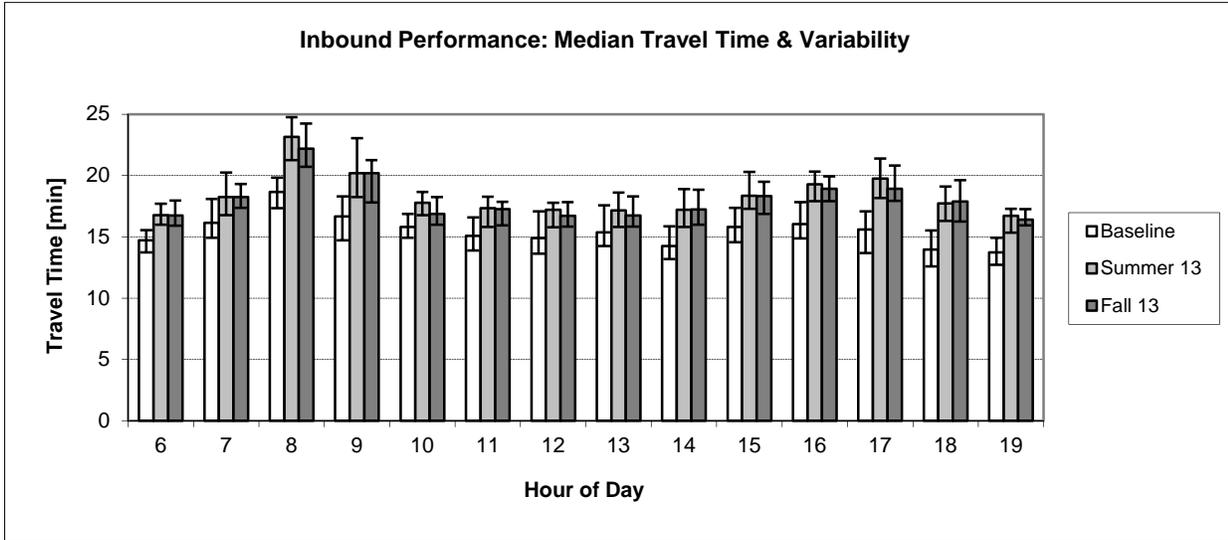
Magnolia Bridge to 1st Ave & Denny Way via Elliott/Western



Scenario	Date Range	Data source
Baseline	9/21/09 - 10/16/09	AVL-AVI
Summer 13	9/03/13 - 9/27/13	AVL-AVI
Fall 13	1/21/14 - 2/14/14	AVL-AVI

Pathway B.1

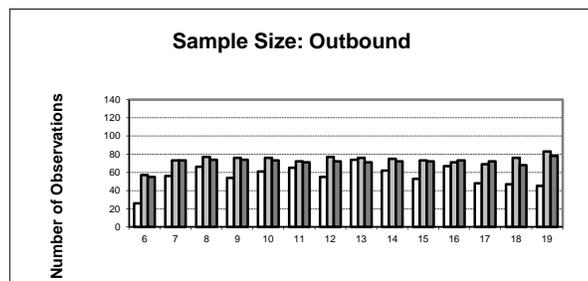
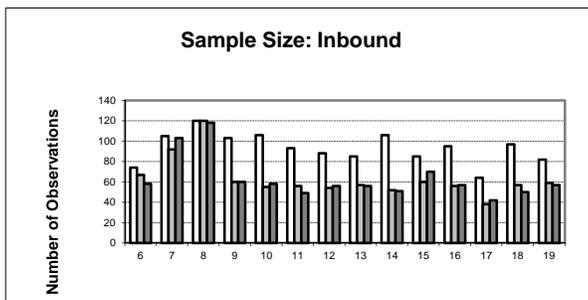
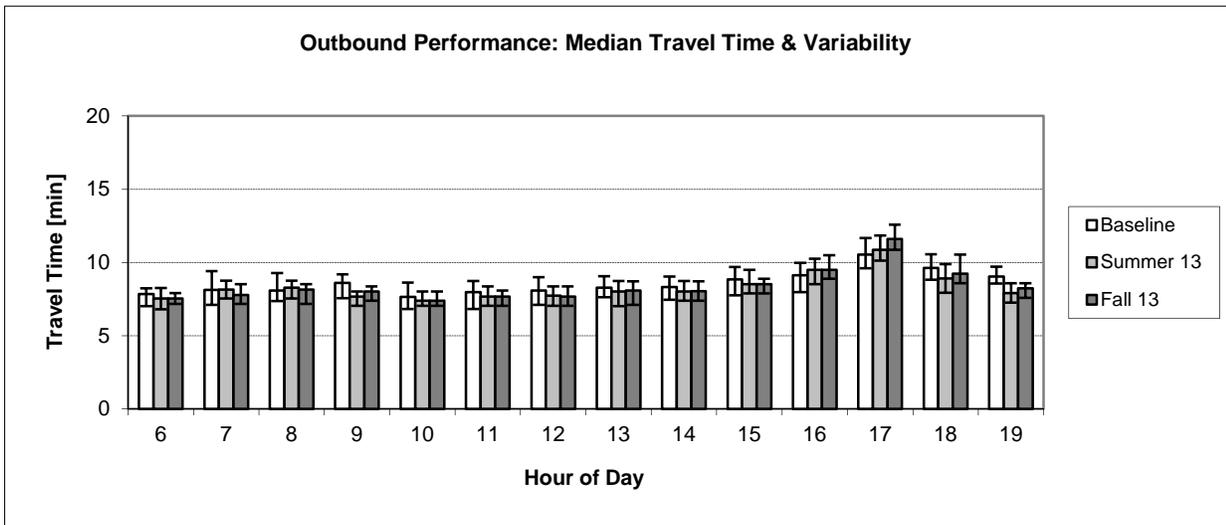
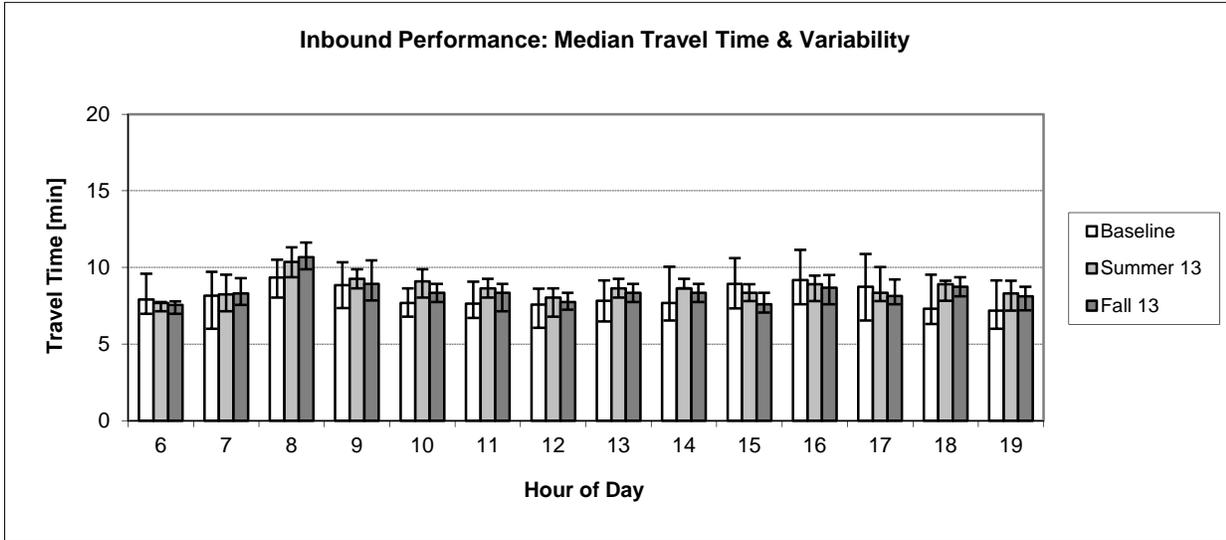
Aurora Ave N & N 85th St to 3rd Ave & Battery St via Aurora Ave



Scenario	Date Range	Data source
Baseline	9/21/09 - 10/16/09	AVL-AVI
Summer 13	9/03/13 - 9/27/13	AVL
Fall 13	1/21/14 - 2/14/14	AVL

Pathway B.2

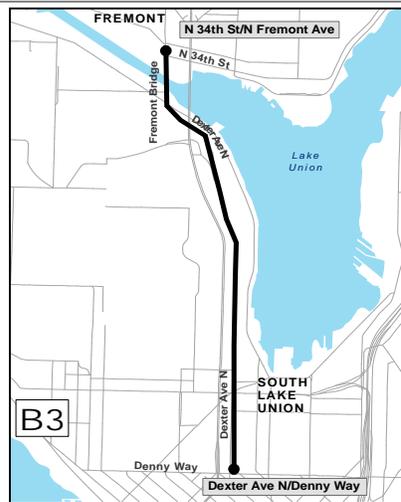
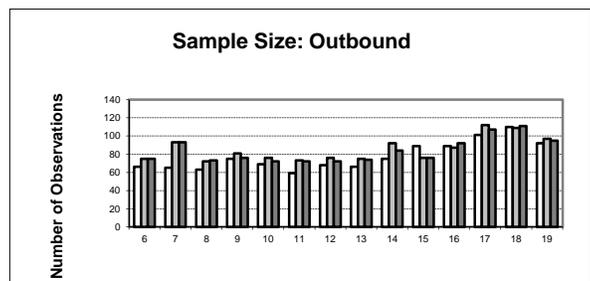
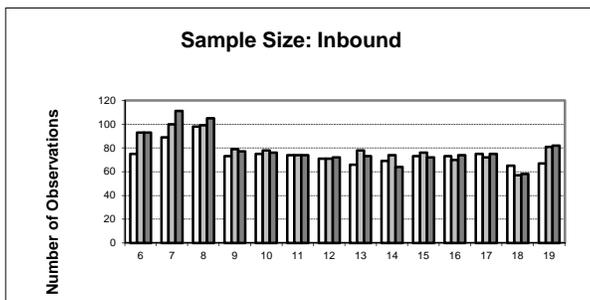
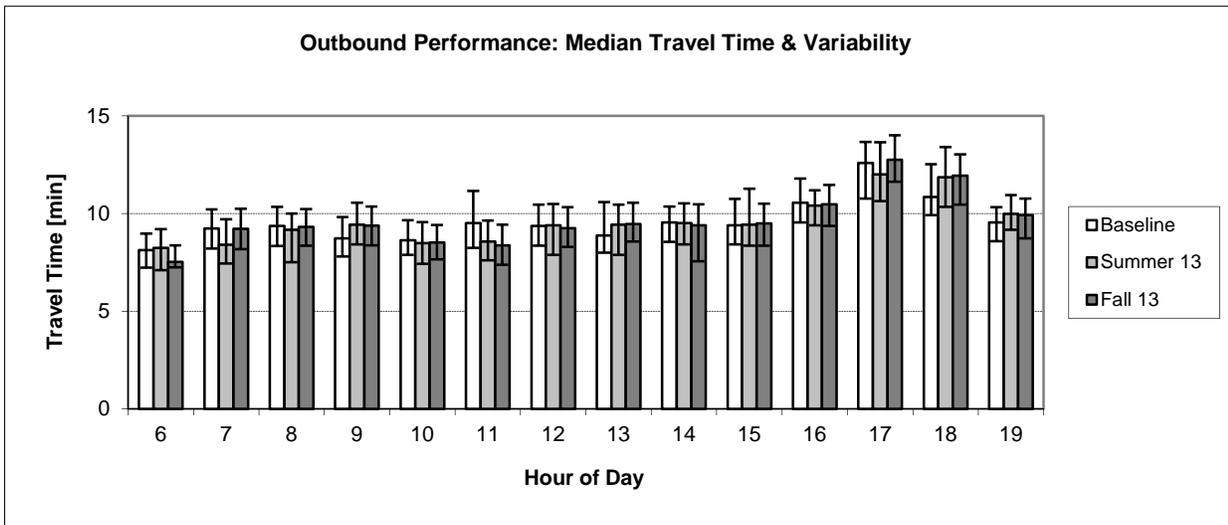
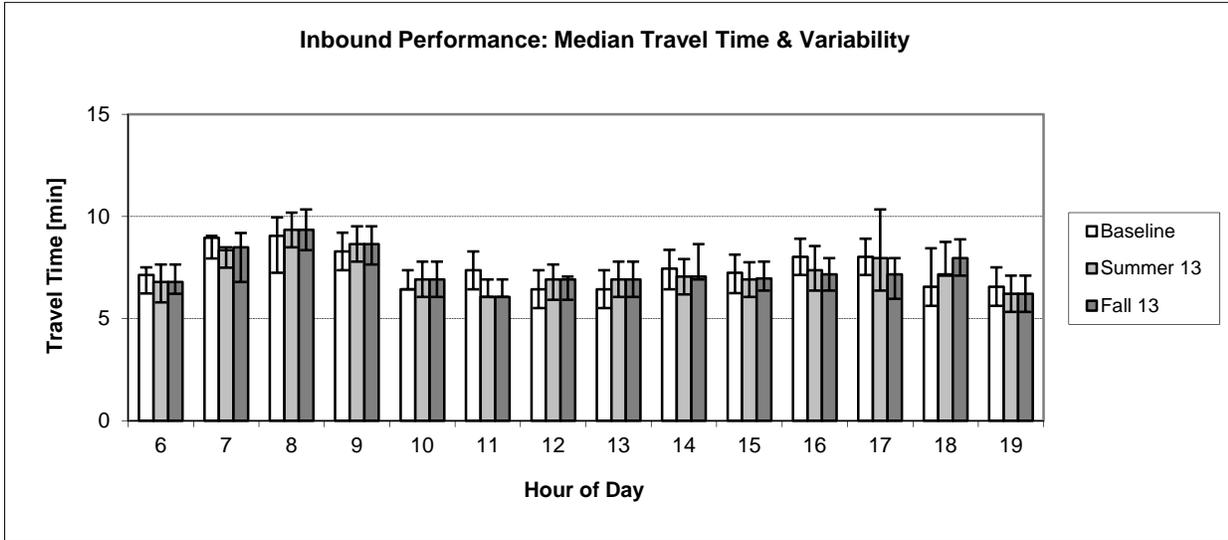
Bridge Way & N 38th St to 3rd Ave & Battery via Aurora Ave



Scenario	Date Range	Data source
Baseline	9/21/09 - 10/16/09	AVL-AVI
Summer 13	9/03/13 - 9/27/13	AVL
Fall 13	1/21/14 - 2/14/14	AVL

Pathway B.3

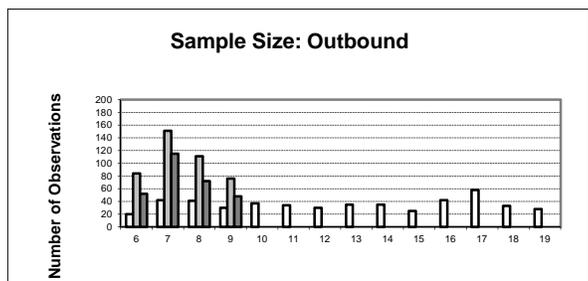
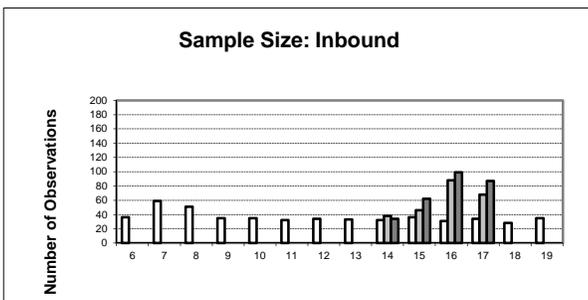
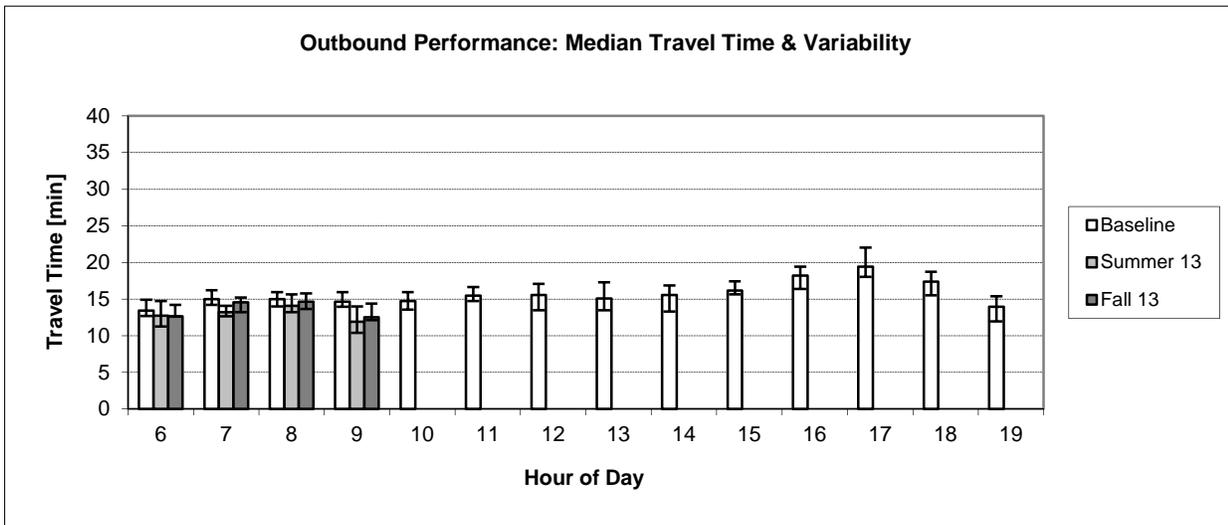
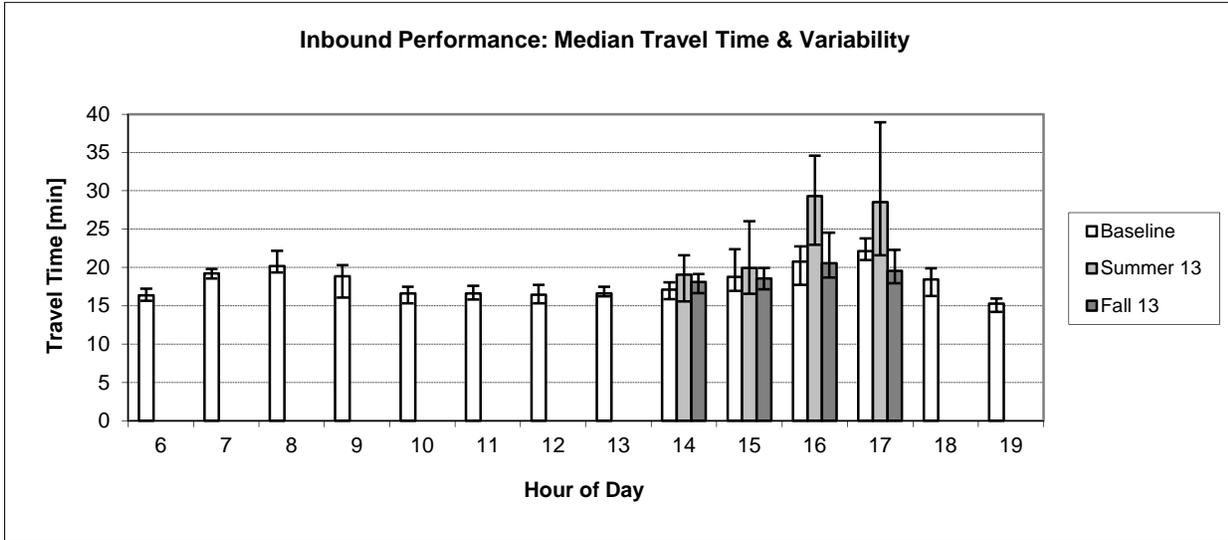
Fremont Ave N & N 34th St to Denny Way & Dexter Ave via Dexter



Scenario	Date Range	Data source
Baseline	9/21/09 - 10/16/09	AVL
Summer 13	9/03/13 - 9/27/13	AVL
Fall 13	1/21/14 - 2/14/14	AVL

Pathway B.4

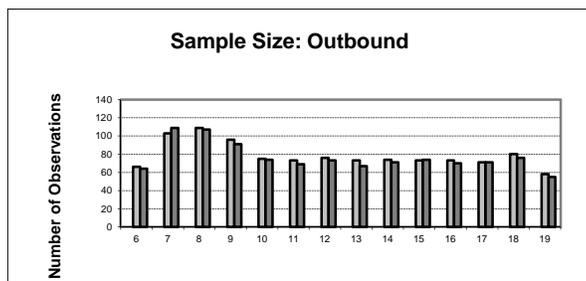
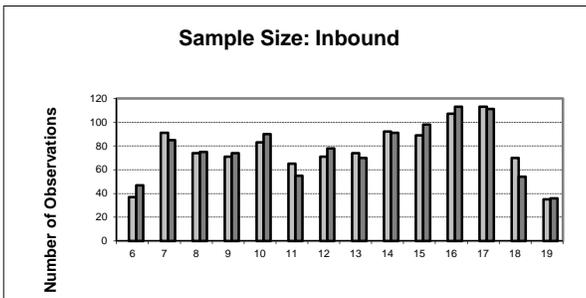
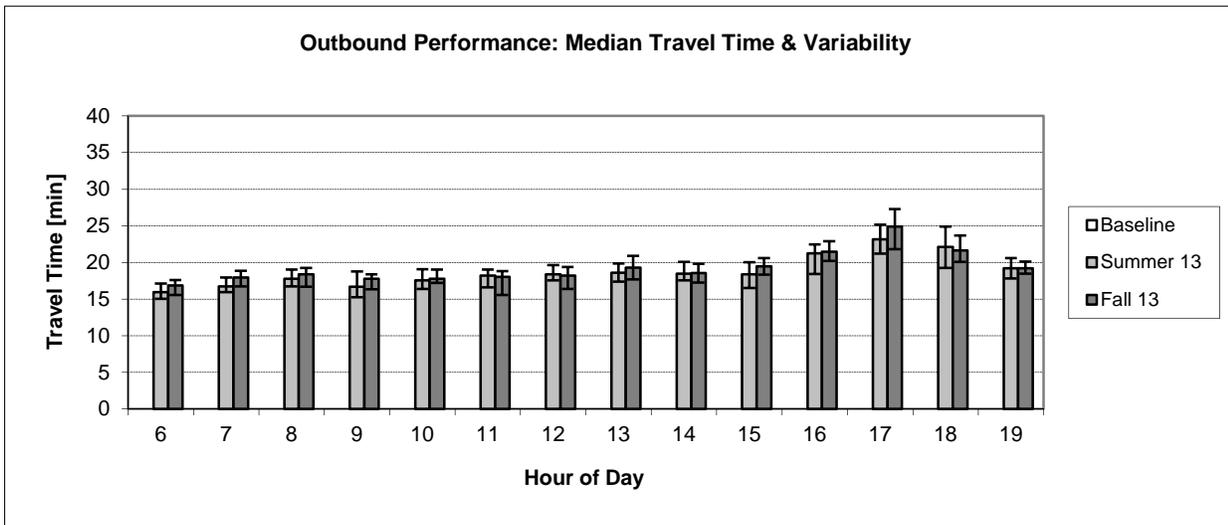
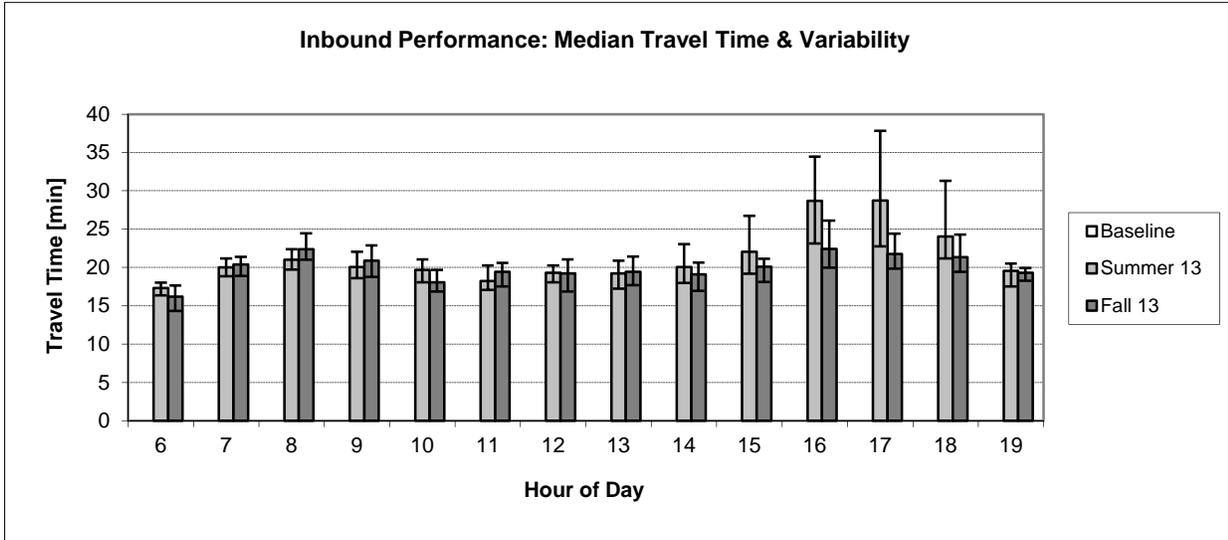
Ballard Bridge to Denny Way & Westlake Ave via Nickerson/Westlake



Scenario	Date Range	Data source
Baseline	9/21/09 - 10/16/09	AVL
Summer 13	9/03/13 - 9/27/13	AVL
Fall 13	1/21/14 - 2/14/14	AVL

Pathway B.5

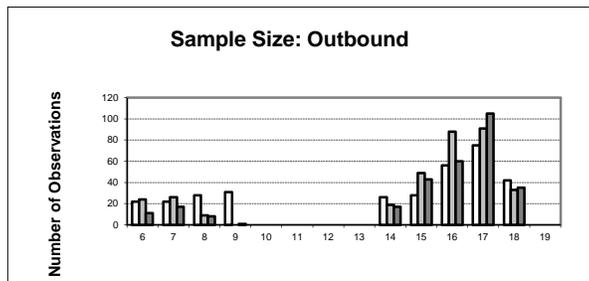
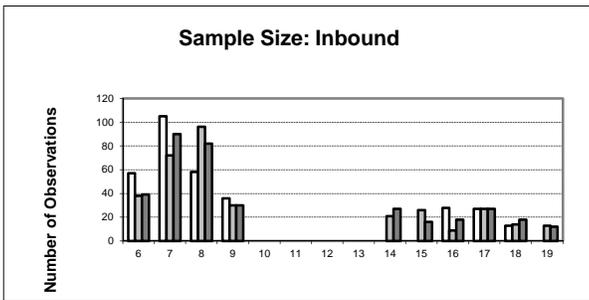
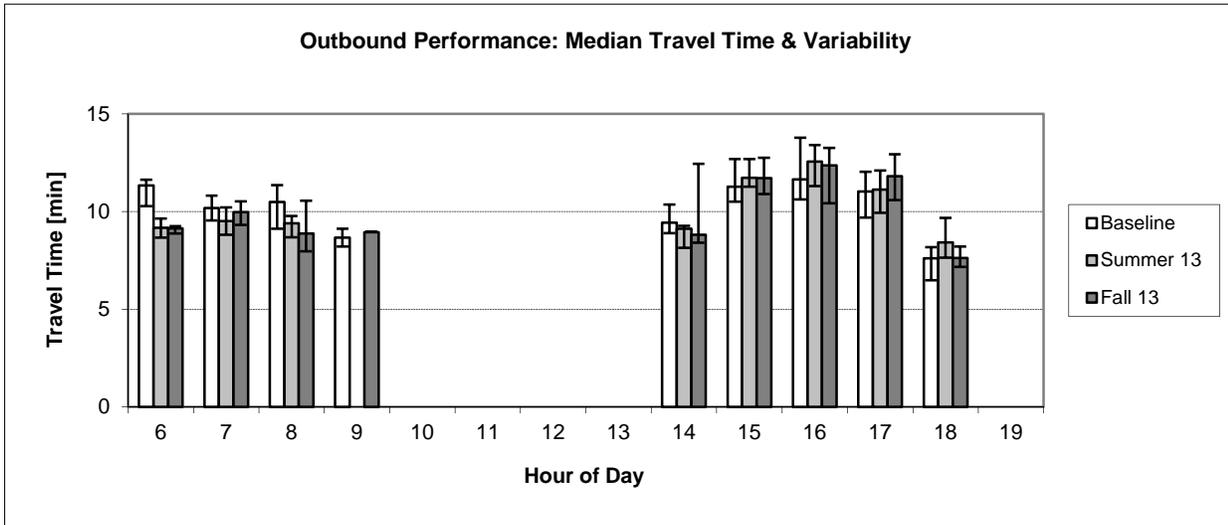
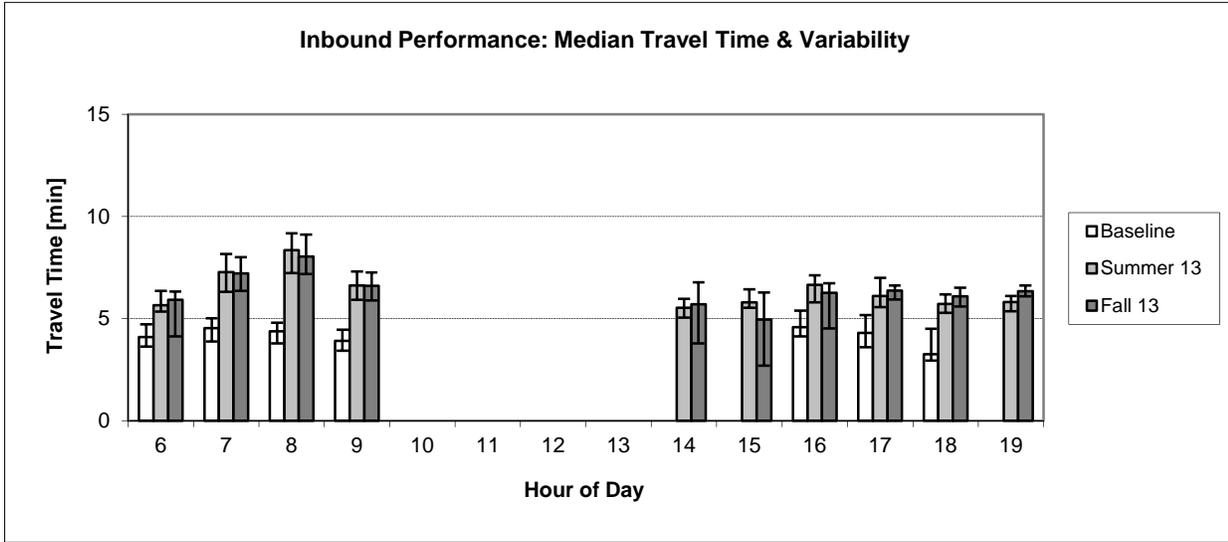
Westlake Ave/9th Ave & Denny Way to Leary Way & 15th Ave NW via Westlake Ave



Scenario	Date Range	Data source
Baseline	Pathway was not used	N/A
Summer 13	9/03/13 - 9/27/13	AVL
Fall 13	1/21/14 - 2/14/14	AVL

Pathway I.1

East Marginal Way & 1st Ave/Alaska St to 1st Ave & Seneca/Columbia St via Marginal/AWV



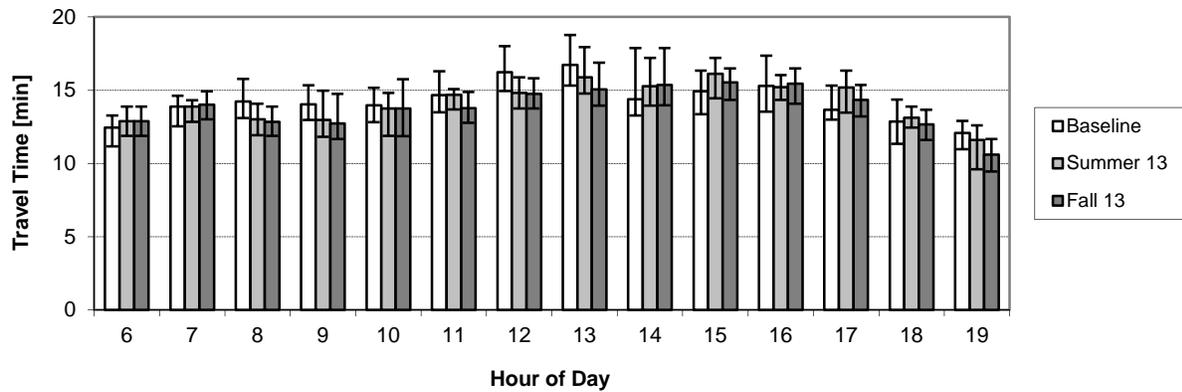
Scenario	Date Range	Data source
Baseline	9/21/09 - 10/16/09	AVL-AVI
Summer 13	9/03/13 - 9/27/13	AVL-AVI
Fall 13	1/21/14 - 2/14/14	AVL-AVI

Pathway I.2

4th Ave S & S Michigan St to 4th/2nd Ave & Jackson St via 4th Ave S

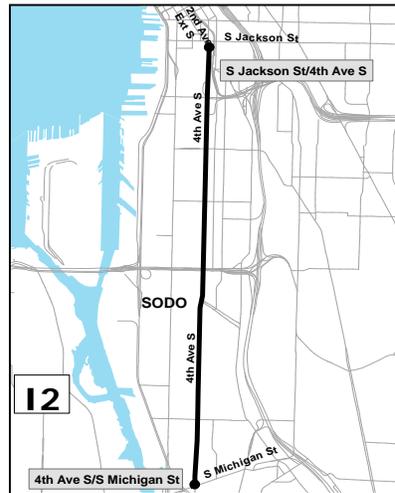
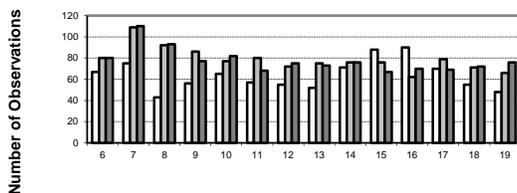
DATA NOT AVAILABLE

Outbound Performance: Median Travel Time & Variability



DATA NOT AVAILABLE

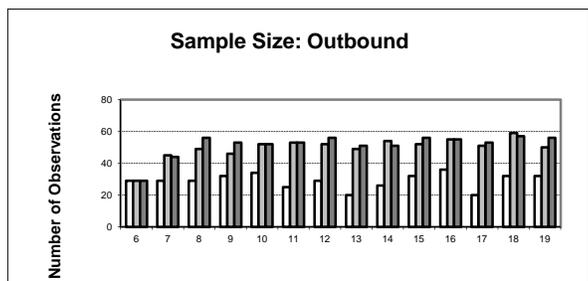
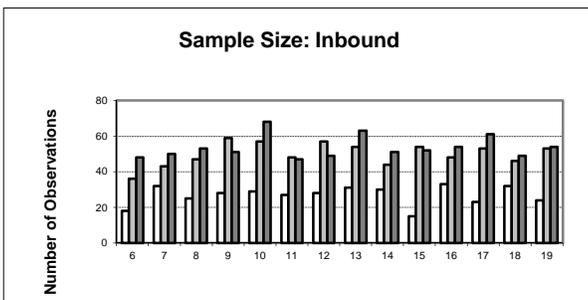
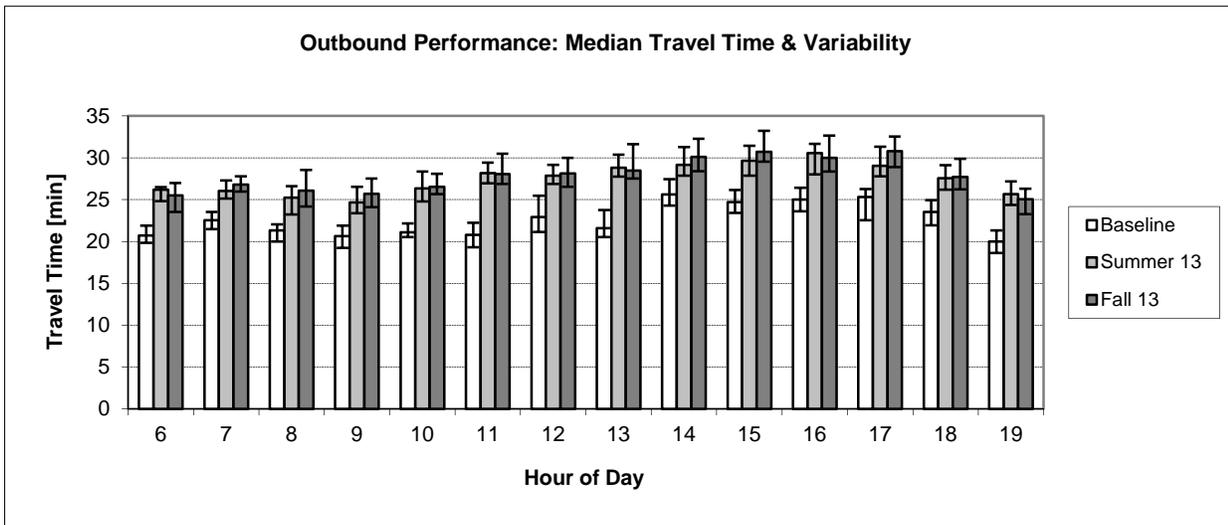
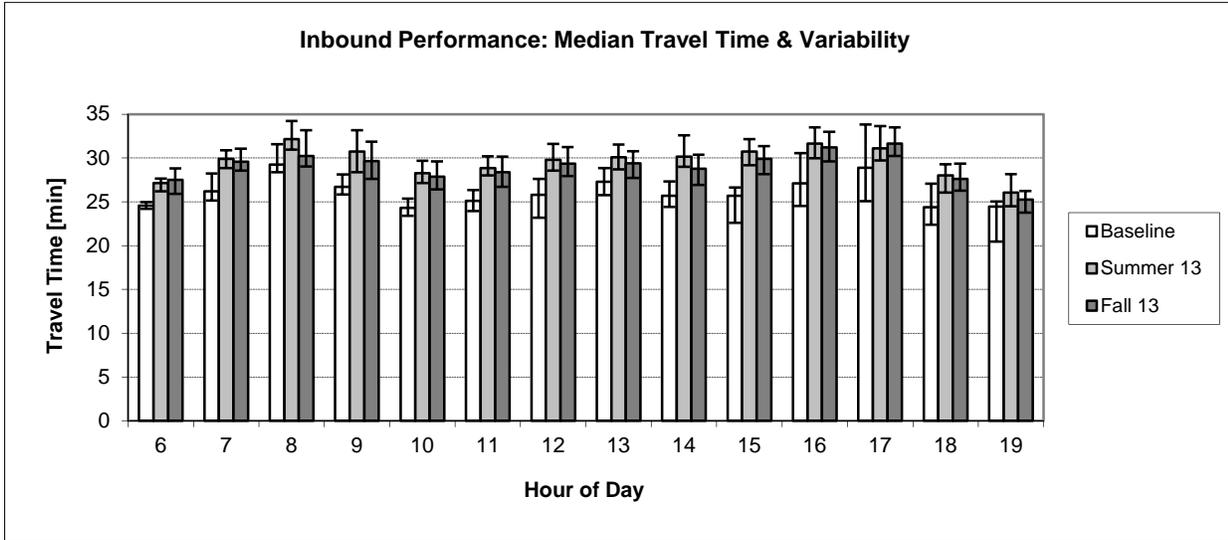
Sample Size: Outbound



Scenario	Date Range	Data source
Baseline	9/21/09 - 10/16/09	AVL-AVI
Summer 13	9/03/13 - 9/27/13	AVL-AVI
Fall 13	1/21/14 - 2/14/14	AVL

Pathway J.2

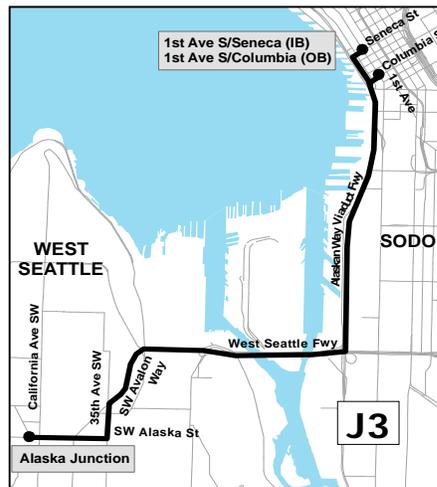
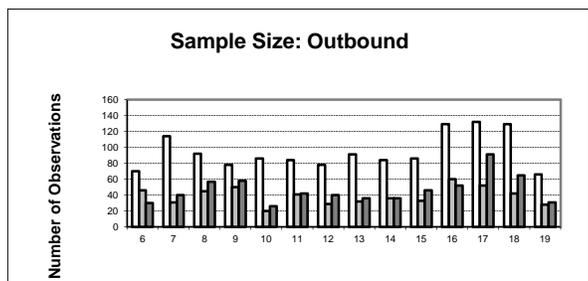
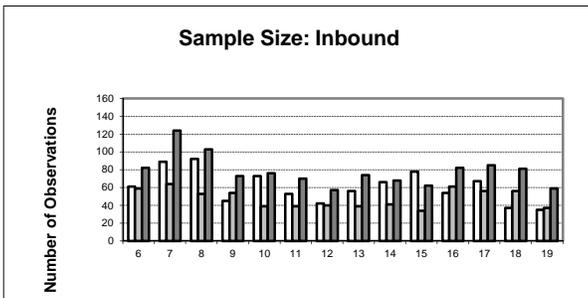
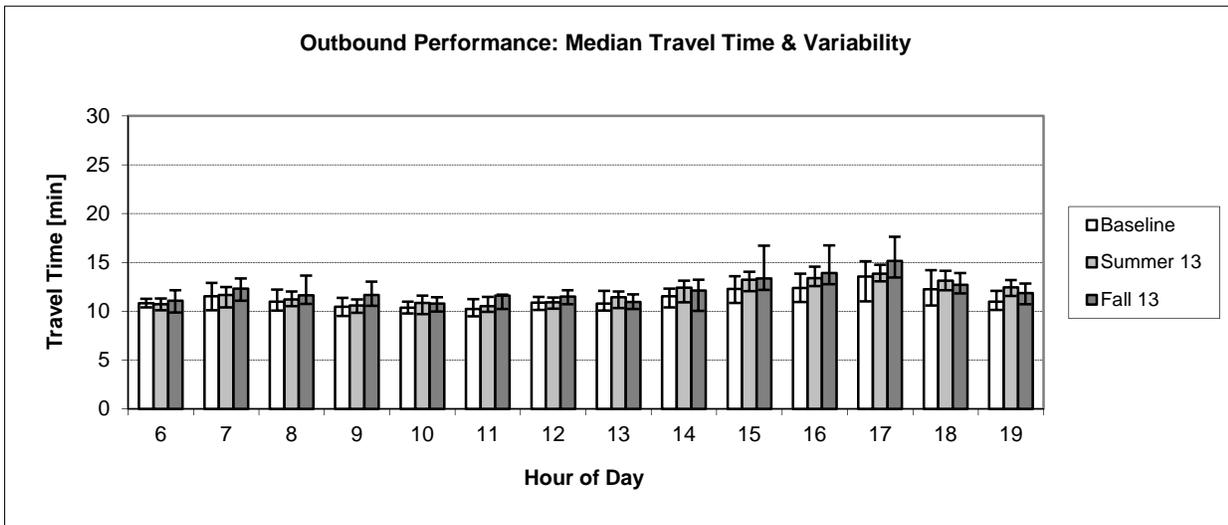
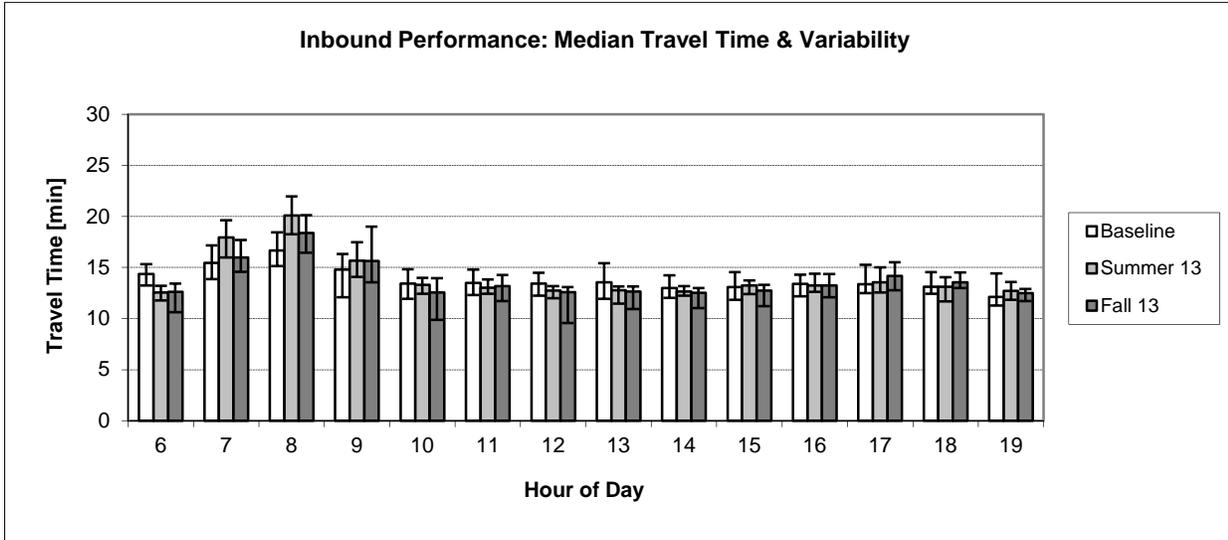
35th Ave SW & SW Morgan St to 3rd Ave & Seneca St via 1st Ave S



Scenario	Date Range	Data source
Baseline	9/21/09 - 10/16/09	AVL-AVI
Summer 13	9/03/13 - 9/27/13	AVL-AVI
Fall 13	1/21/14 - 2/14/14	AVL-AVI

Pathway J.3

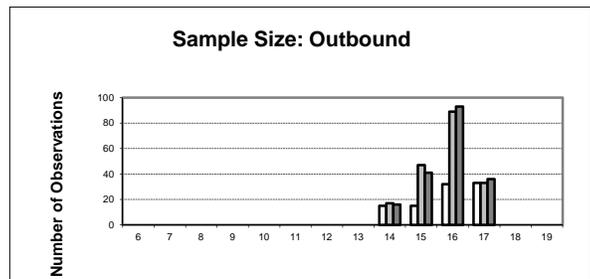
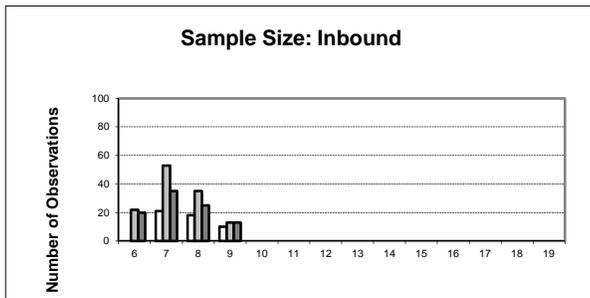
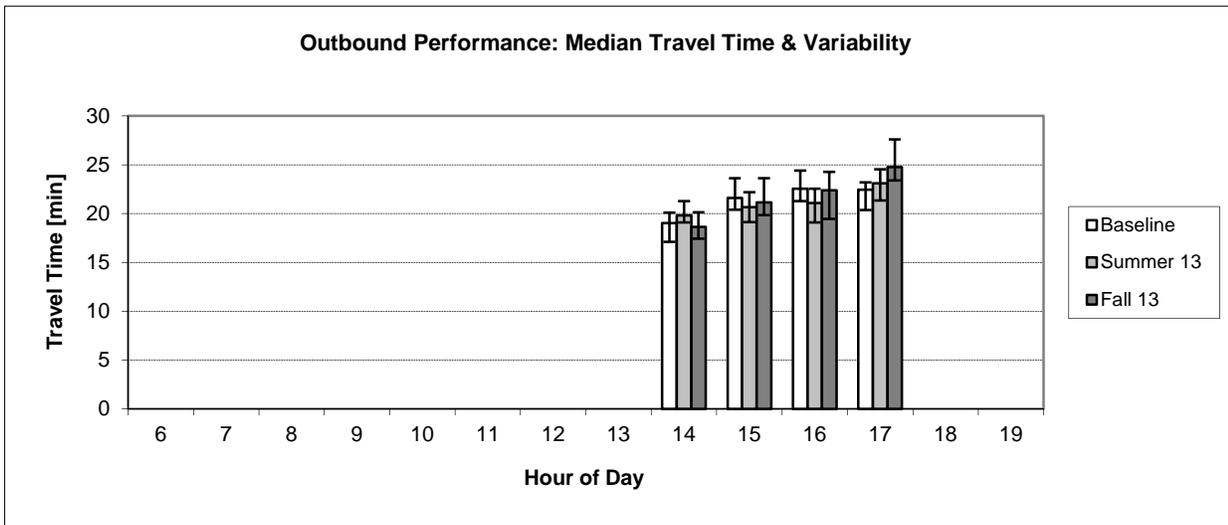
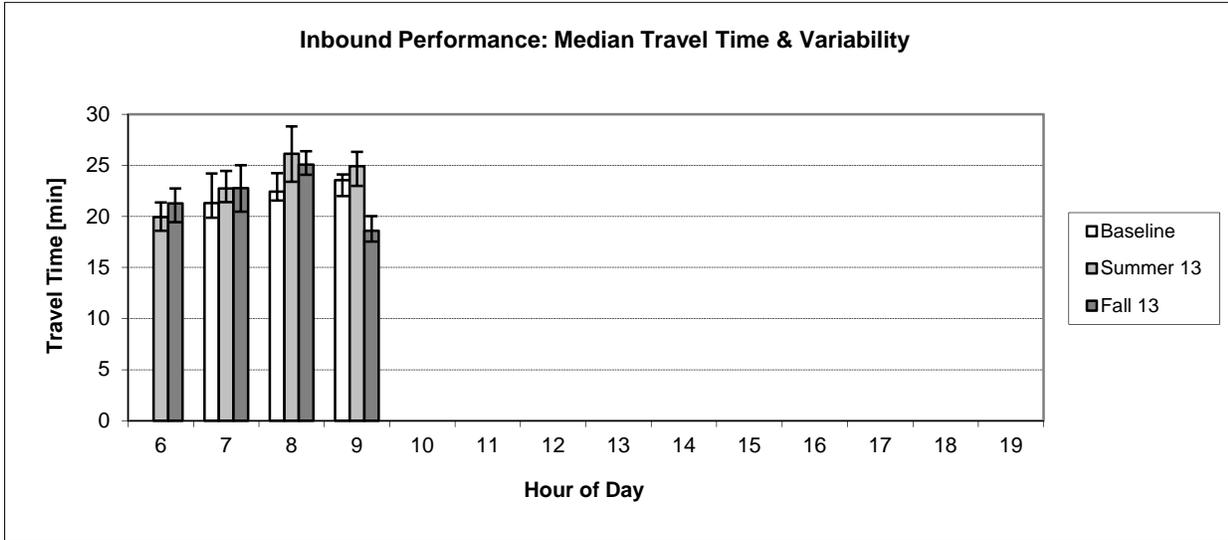
Alaska Junction to 1st Ave & Seneca/Columbia St via Alaskan Way Viaduct



Scenario	Date Range	Data source
Baseline	9/21/09 - 10/16/09	AVI
Summer 13	9/03/13 - 9/27/13	TSP-AVI
Fall 13	1/21/14 - 2/14/14	TSP-AVI

Pathway J.4

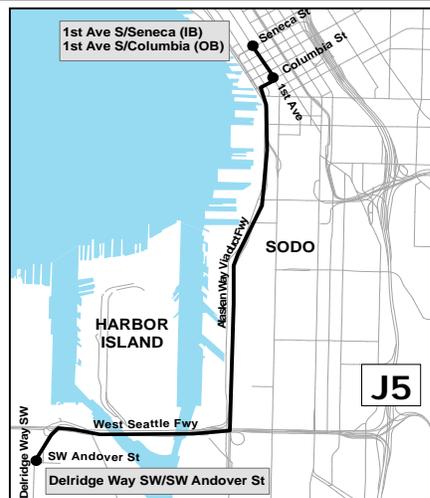
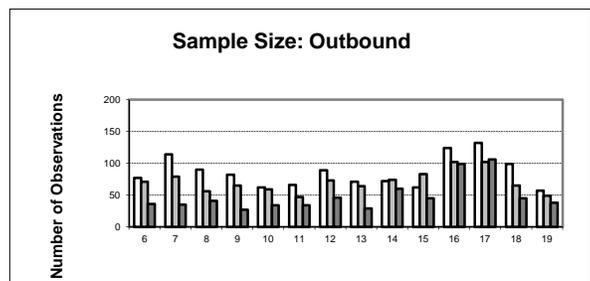
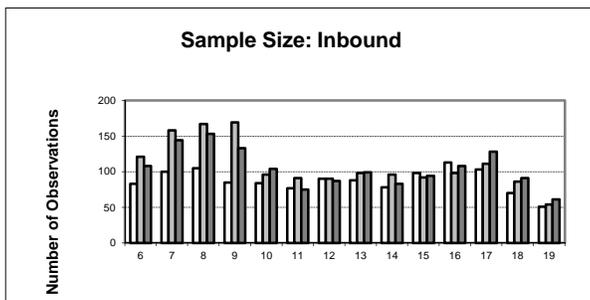
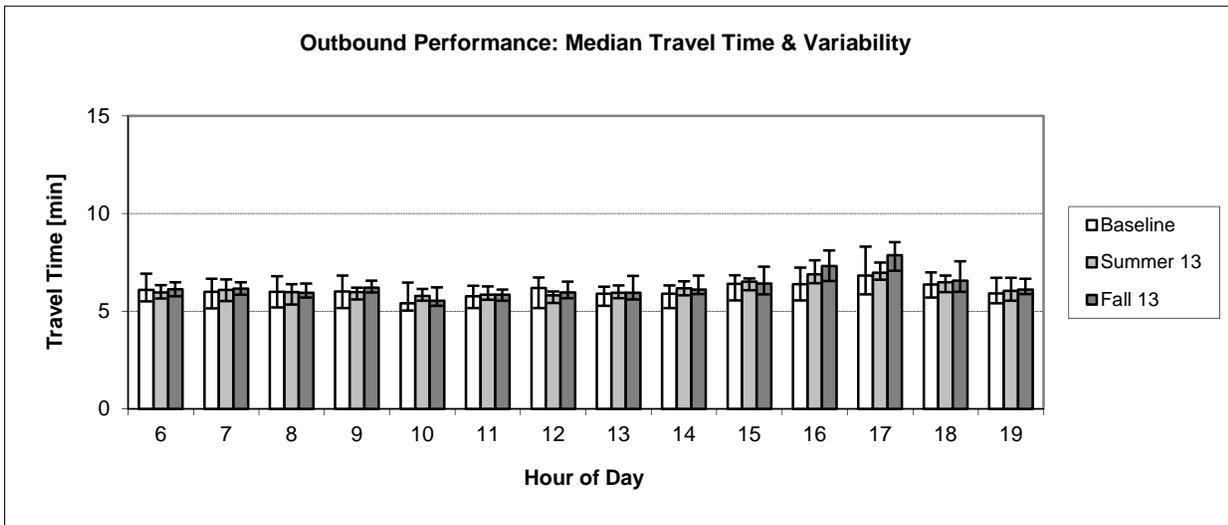
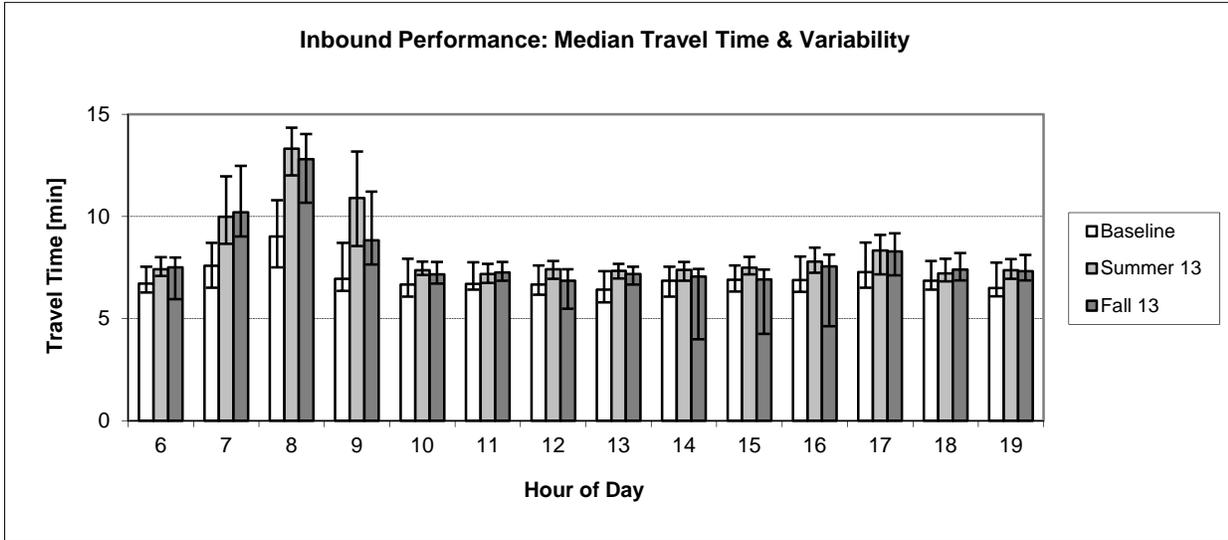
California Ave SW & SW Fauntleroy Way SW to 3rd Ave & Yesler St via 1st Ave S (Peak Only)



Scenario	Date Range	Data source
Baseline	9/21/09 - 10/16/09	AVL-AVI
Summer 13	9/03/13 - 9/27/13	AVL-AVI
Fall 13	1/21/14 - 2/14/14	AVL-AVI

Pathway J.5

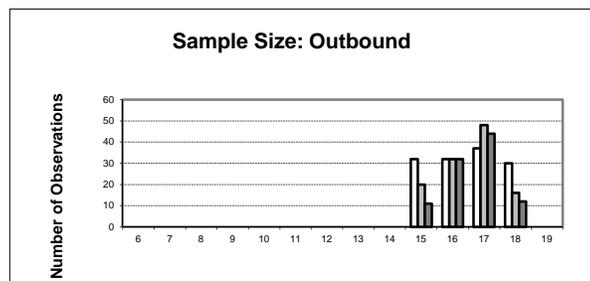
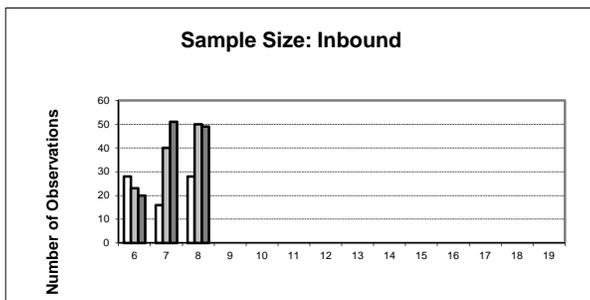
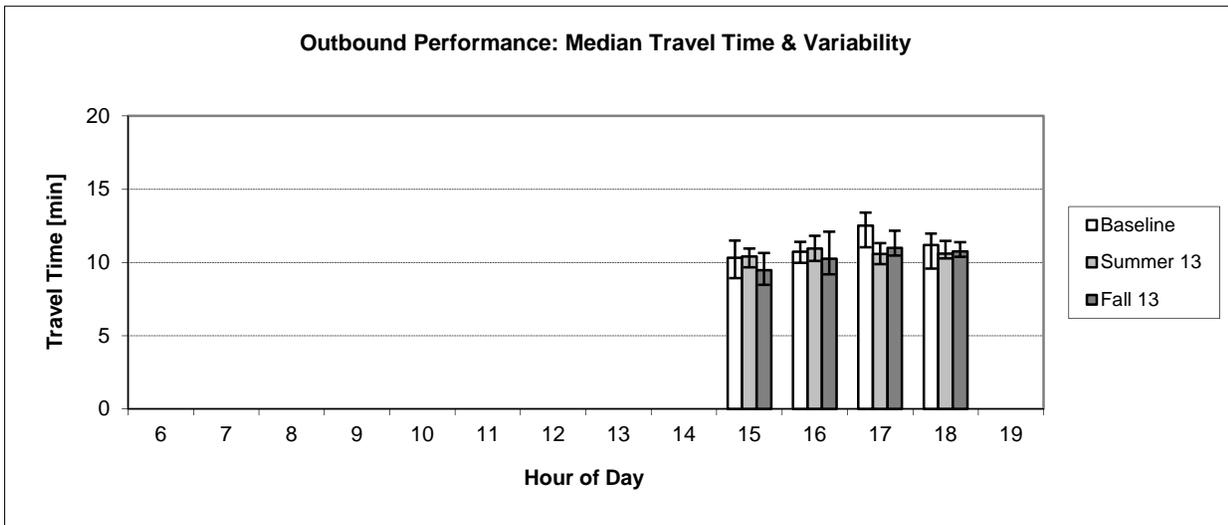
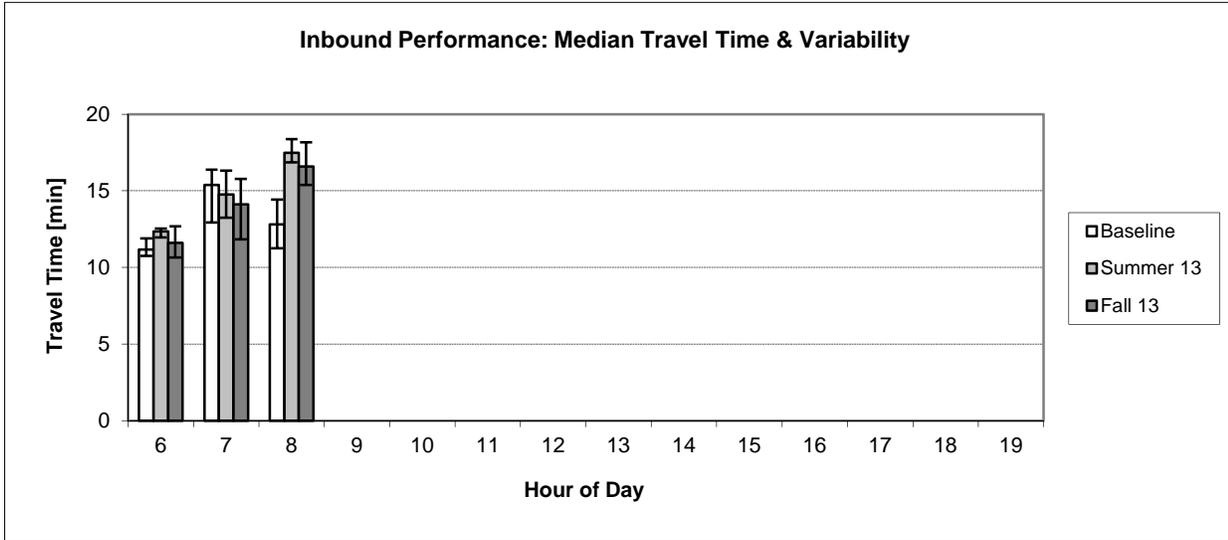
Delridge Way SW & SW Andover St to 1st Ave & Seneca/Columbia St via AWW



Scenario	Date Range	Data source
Baseline	9/21/09 - 10/16/09	AVI
Summer 13	9/03/13 - 9/27/13	AVI
Fall 13	1/21/14 - 2/14/14	AVI

Pathway J.7

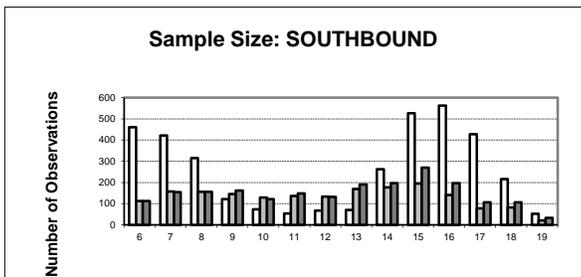
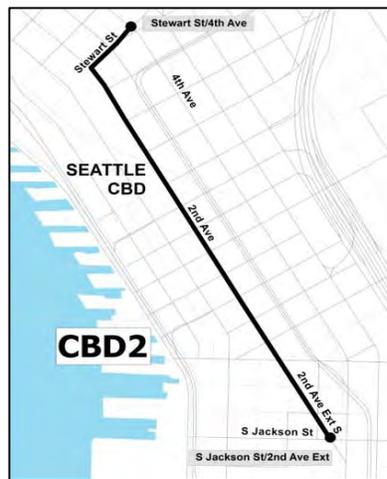
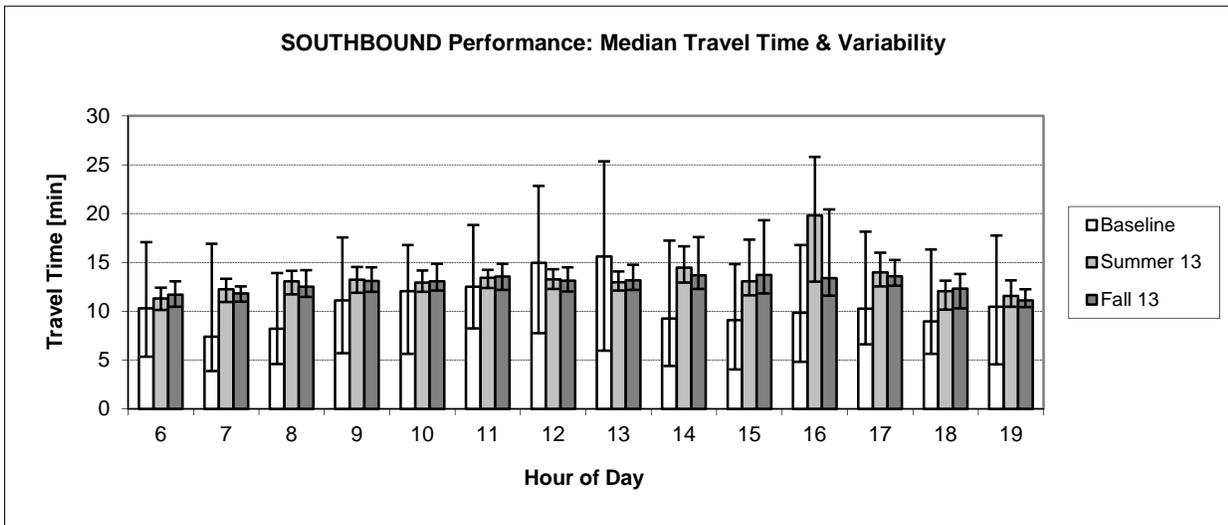
Admiral Way SW & California Ave SW to 1st Ave & Seneca/Columbia St via AWV (Peak Only)



Scenario	Date Range	Data source
Baseline	9/21/09 - 10/16/09	AVI-AVL
Summer 13	9/03/13 - 9/27/13	AVI-AVL
Fall 13	1/21/14 - 2/14/14	AVI-AVL

Pathway CBD2

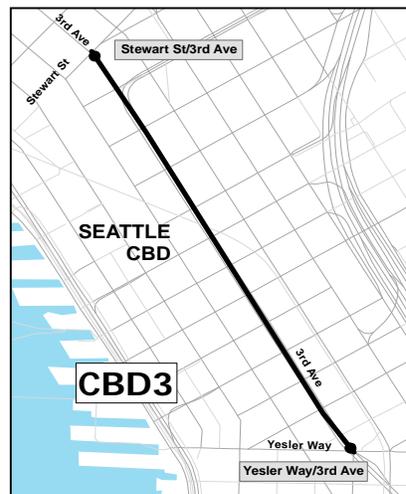
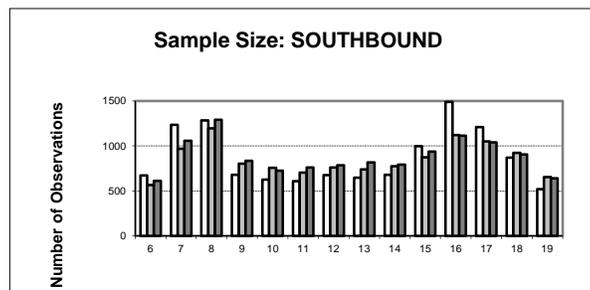
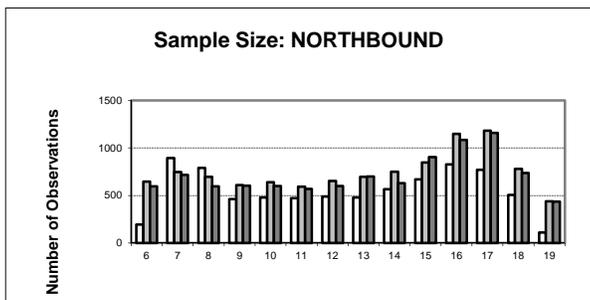
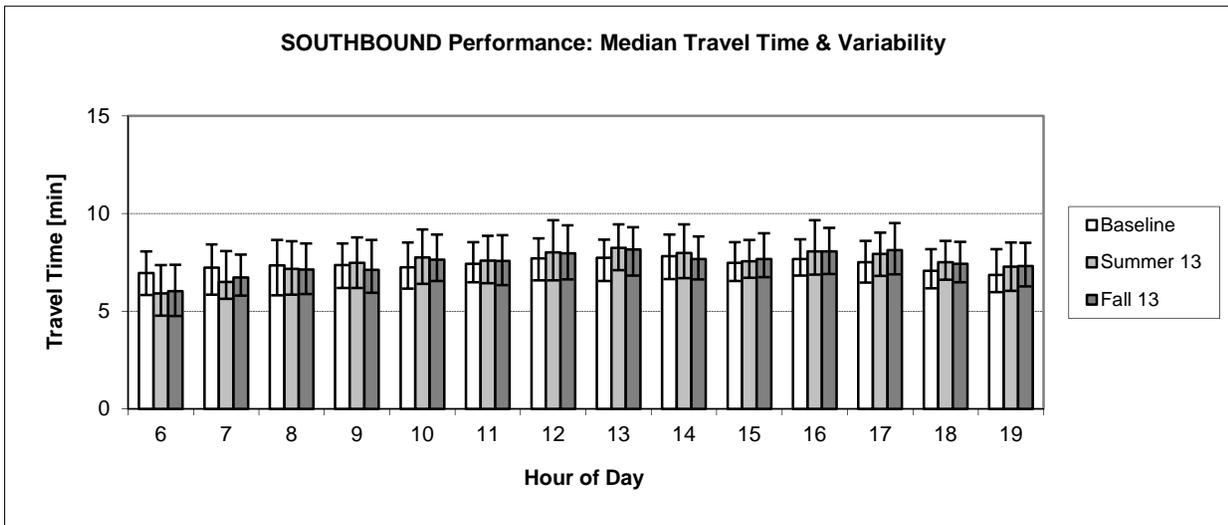
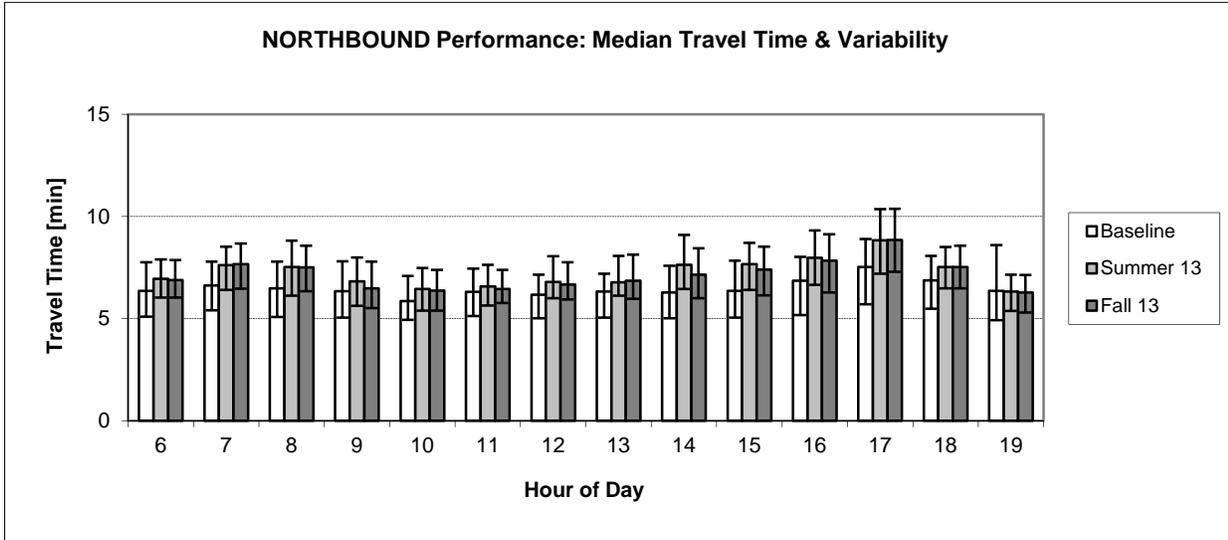
Second Avenue: Pike St to Jackson St



Scenario	Date Range	Data source
Baseline	9/21/09 - 10/16/09	AVI
Summer 13	9/03/13 - 9/27/13	AVI
Fall 13	1/21/14 - 2/14/14	AVI-AVL

Pathway CBD3

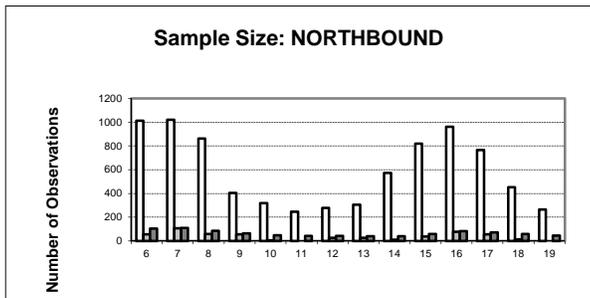
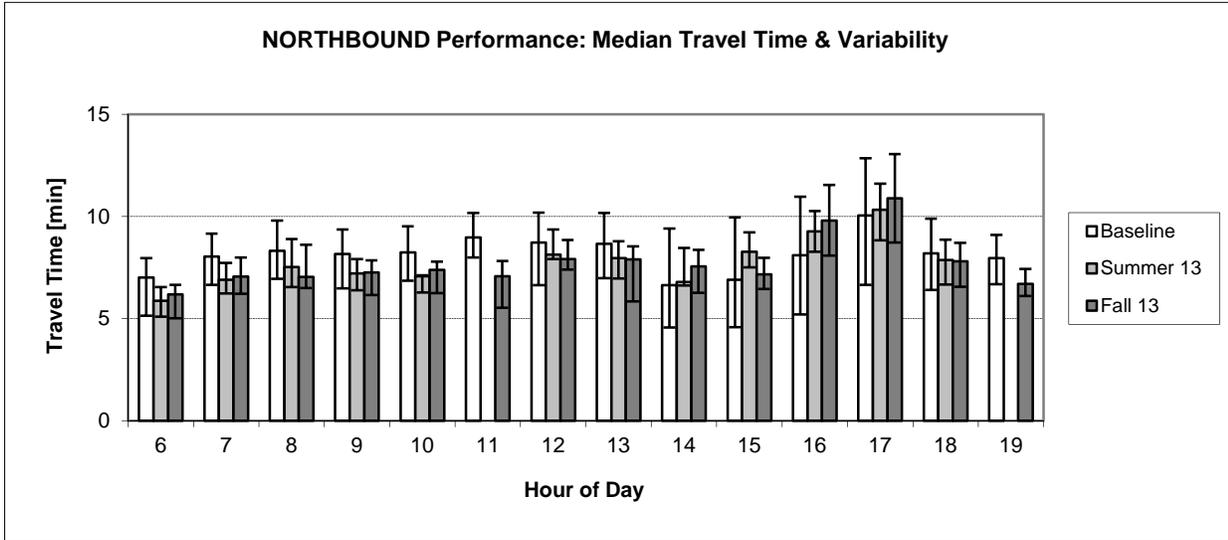
Third Ave: Stewart St to Yesler Way



Scenario	Date Range	Data source
Baseline	9/21/09 - 10/16/09	AVI
Summer 13	9/03/13 - 9/27/13	AVI
Fall 13	1/21/14 - 2/14/14	AVI

Pathway CBD4

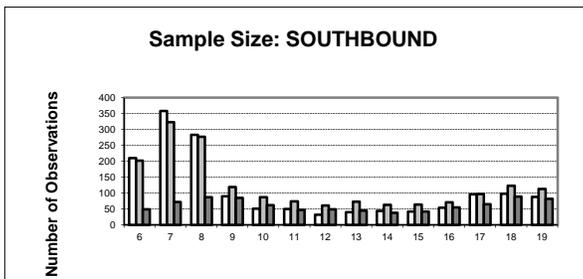
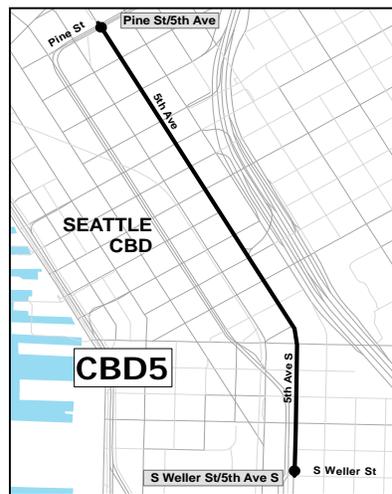
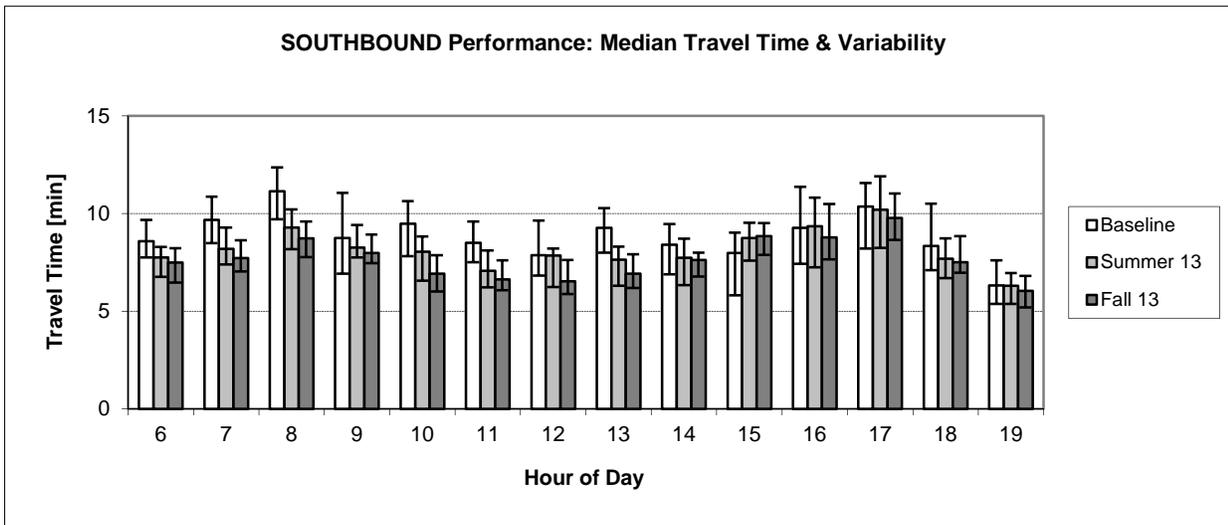
Fourth Ave: Jackson St to Stewart St



Scenario	Date Range	Data source
Baseline	9/21/09 - 10/16/09	AVI
Summer 13	9/03/13 - 9/27/13	AVI
Fall 13	1/21/14 - 2/14/14	AVI-AVL

Pathway CBD5

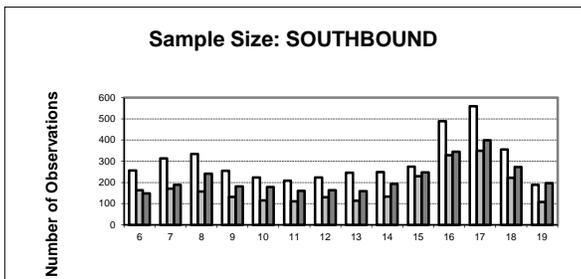
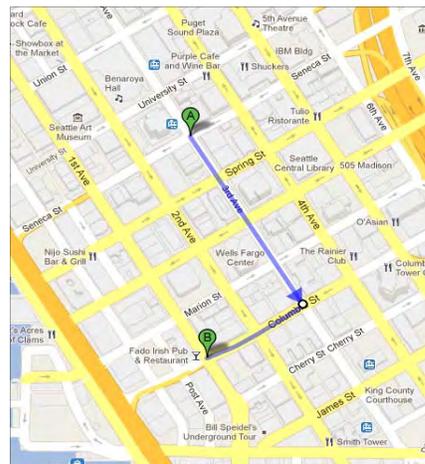
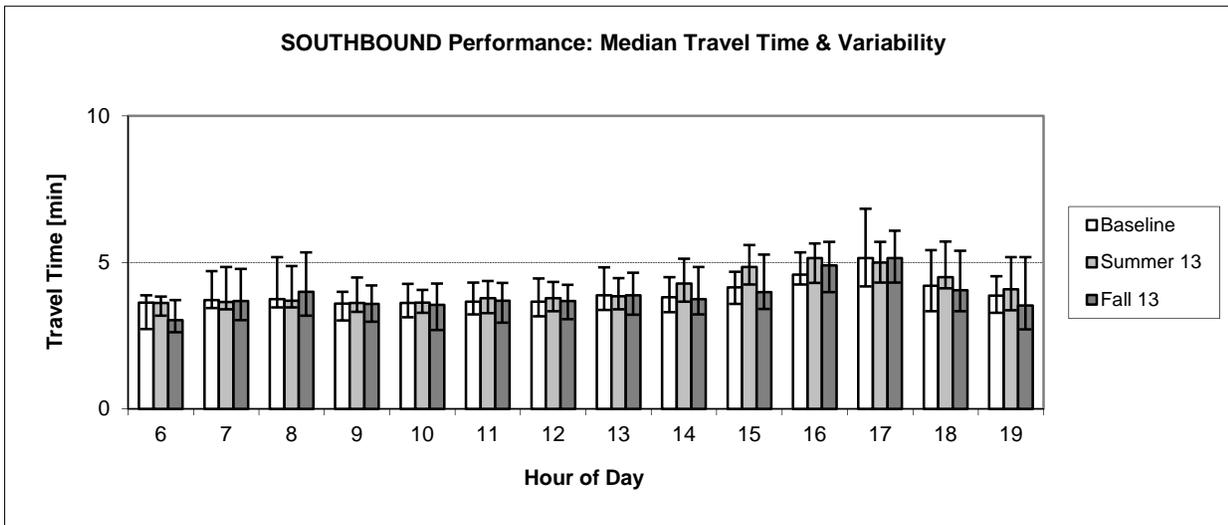
Fifth Ave: Pine St to Weller St



Scenario	Date Range	Data source
Baseline	9/21/09 - 10/16/09	AVI
Summer 13	9/03/13 - 9/27/13	AVI
Fall 13	1/21/14 - 2/14/14	AVI

Pathway Columbia

Columbia Street: 3rd & Seneca to 1st & Columbia



Scenario	Date Range	Data source
Baseline	9/21/09 - 10/16/09	AVI
Summer 13	9/03/13 - 9/27/13	AVI
Fall 13	1/21/14 - 2/14/14	AVI