Sumner Station Access Improvements

Transportation Technical Report

401 South Jackson Street
Seattle, WA 98104-2826

March 2016

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Acronyms and Abbreviations

CFR	Code of Federal Regulations
City	City of Sumner
FGTS	Freight and Goods Transportation System
LOS	level of service
MAP-21	Moving Ahead for Progress in the 21st Century Act
MEV	million entering vehicles
mph	miles per hour
NEPA	National Environmental Policy Act
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act
Sound Transit	Central Puget Sound Regional Transit Authority
SR	State Route
ST2	Sound Transit 2
TWSC	two-way stop-controlled
WSDOT	Washington State Department of Transportation

1 INTRODUCTION

1.1 Project Background

The Central Puget Sound Regional Transit Authority (Sound Transit) is proposing to improve access to the Sumner Station for pedestrians, bicyclists, and drivers. Approximately 1,000 people ride a Sounder train or ST Express bus from the Sumner Station every day. Over 40 percent of Sounder riders drive and park at the Sumner Station or use nearby on-street parking. Another 25 percent use local bus services to access the Sumner Station. The remaining Sounder riders (35 percent) access Sumner Station via kiss-and-ride services or non-motorized modes of transportation. Many of these riders find it difficult to access the station because parking is full by the second morning train before 6 am. Traffic congestion already creates delays at intersections around the station, similarly affecting both drivers and buses.

Sound Transit is expanding its South Line Sounder rail service, which is planned to include three new round-trip trains by 2017, for a total of 13 daily round trips. Sound Transit is also forecasting ridership to increase to 1,500 riders in Sumner by 2035. Additional parking capacity and congestion management will be required to meet this growing ridership demand. Similarly, additional pedestrian amenities will improve non-motorized access to the station.

The project would be located on the existing Sumner Station surface parking lot at 810 Maple Street, Sumner, WA. The project includes building a structured parking garage at the station while retaining some existing parking at the station surface lot. The proposed project includes a new five-level, approximately 623-space parking garage located on part of the existing main parking lot. The proposed project would retain 234 existing station surface parking spaces; these spaces would be located in the main lot south of Maple Street (116 spaces), the surface lot north of Maple Street (68 spaces), and the Red Apple South Lot (50 spaces). On completion of the project, the number of parking spaces would be 857. This would be an increase of 505 parking spaces over the existing number of 352.

A traffic turn movement restriction at Thompson St and Station Lane is also in the project. Access to the parking garage are from Harrison Street and Station Lane. The project also includes access and non-motorized improvements, such as driveways, sidewalks, bicycle storage in the parking garage, curb ramps, pedestrian signal, and an optional pedestrian bridge. Figure 1 shows these improvements.

The proposed parking garage would be the tallest structure of the project, and would be approximately 50 feet tall. The parking garage would be a concrete structure with exterior architectural features. Landscaping, including trees, would be incorporated into the site design. The landscaping would be consistent with the design goals of providing an aesthetically pleasing, functional building that works within the context of its surroundings.

The project would include stormwater runoff control and treatment. The final control method would be determined during final design of the project. Sound Transit also would provide water quality treatment for pollution-generating impervious surface. Because the parking facility would be in an urban area, a treatment technology with a small footprint would be used, such as linear modular wetlands or Filterra Biofiltration Units (which are like bioretention areas), as part of the on-site landscaping.

The project is anticipated to acquire four City-owned parcels and two City right-of-way properties. Temporary construction easements will be needed for one or more properties.

The project would also acquire a one-story masonry structure that is 1,700 square feet in size. A day care business currently uses this structure. This structure would be demolished. The project would remove a natural gas line on the daycare property.

The current use of all the parcels that comprise the proposed project site is parking for the Sumner Station, except the one parcel containing the daycare.

Current and forecasted congestion in the vicinity of the Sumner Station Access Improvements project along Traffic Avenue and Thompson Street are attributed to existing limitations at the SR 410/Traffic Avenue interchange. Implementation of the project would be sequenced in conjunction with the funding, design, and construction of the SR 410/Traffic Avenue improvements, in coordination with, and as agreed to by, the City of Sumner. To support the City's SR 410/Traffic Avenue project and Sound Transit's parking garage, Sound Transit would participate in the City of Sumner's SR 410/Traffic Avenue partnering group with the Cities of Sumner and Puyallup and WSDOT. Any opening of the parking garage in advance of the completed SR 410/Traffic Avenue project would be in coordination with, and as agreed to by, the City of Sumner.

1.2 Purpose of Technical Report

This technical report presents detailed findings from the technical transportation analysis conducted as part of the environmental review for the Sumner Station Access Improvements Project. The analysis evaluates potential project impacts and develops proposals to mitigate project impacts, where warranted.

1.3 Organization of Technical Report

In addition to this Chapter 1, Introduction, the technical report comprises the following chapters:

- Chapter 2, Methodology and Assumptions, summarizes the analysis methods used to assess the alternatives in this technical report.
- Chapter 3, Relevant Plans, Policies, and Coordination, provides information regarding guiding regulations, plans, and policies and agency participation in the planning and analysis processes.
- Chapter 4, Affected Environment, discusses current transportation conditions.
- Chapter 5, Long-Term Impacts, describes anticipated impacts on all modes of travel.
- Chapter 6, Construction Sequencing and Impacts, discusses the sequence of construction activities and expected impacts due to project construction activities.
- Chapter 7, Indirect and Secondary Impacts, describes the potential effects that may occur later in time or some distance from the project.
- Chapter 8, Potential Mitigation Measures, describes the potential measures that could be implemented to mitigate effects of the project.

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2 METHODOLOGY AND ASSUMPTIONS

The methodology and assumptions used to analyze the transportation impacts of the Sumner Station Access Improvements have been compiled in two documents: *Sumner Station Access Improvements Project–Traffic Operations Analysis Methodology and Assumptions* (Appendix A) and the *Sumner Station Access Improvements Project—Non-motorized Analysis Methodology and Assumption*s (Appendix B). These methodology and assumption documents provide the following information:

- Introduction
- Study Area
- Data Collection
- Analysis Techniques and Models
- Measures of Effectiveness
- Identification of Operational Impact
- Documentation
- Future Ridership Distribution

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3 RELEVANT PLANS, POLICIES, AND COORDINATION

Transportation facilities and functions are governed by national, state, regional, and local laws, plans, and policies. These regulations identify goals, infrastructure needs, and performance standards for various transportation modes and systems. This transportation analysis is guided by the following laws, regulations, and plans:

- National Environmental Policy Act (NEPA)
- State Environmental Policy Act (SEPA)
- Moving Ahead for Progress in the 21st Century Act (MAP-21), Public Law 112-141
- Washington State Growth Management Act (Revised Code of Washington [RCW] 36.70A.070)
- ST2 Plan, approved November 4, 2008
- Washington State Transportation Plan 2007-2026 (Washington State Department of Transportation [WSDOT], November 14, 2006)
- Sumner Comprehensive Plan
- Sumner Transportation Improvement Plan

The Sumner Station improvements, as well as other transportation improvements within the study area, are identified in and are consistent with the local plans listed above.

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4 AFFECTED ENVIRONMENT

This chapter documents the affected environment for this transportation analysis by defining the study area and describing the 2014 existing transportation conditions. The 2014 existing transportation conditions serve as the basis against which conditions projected for 2035, the project design year, will be compared.

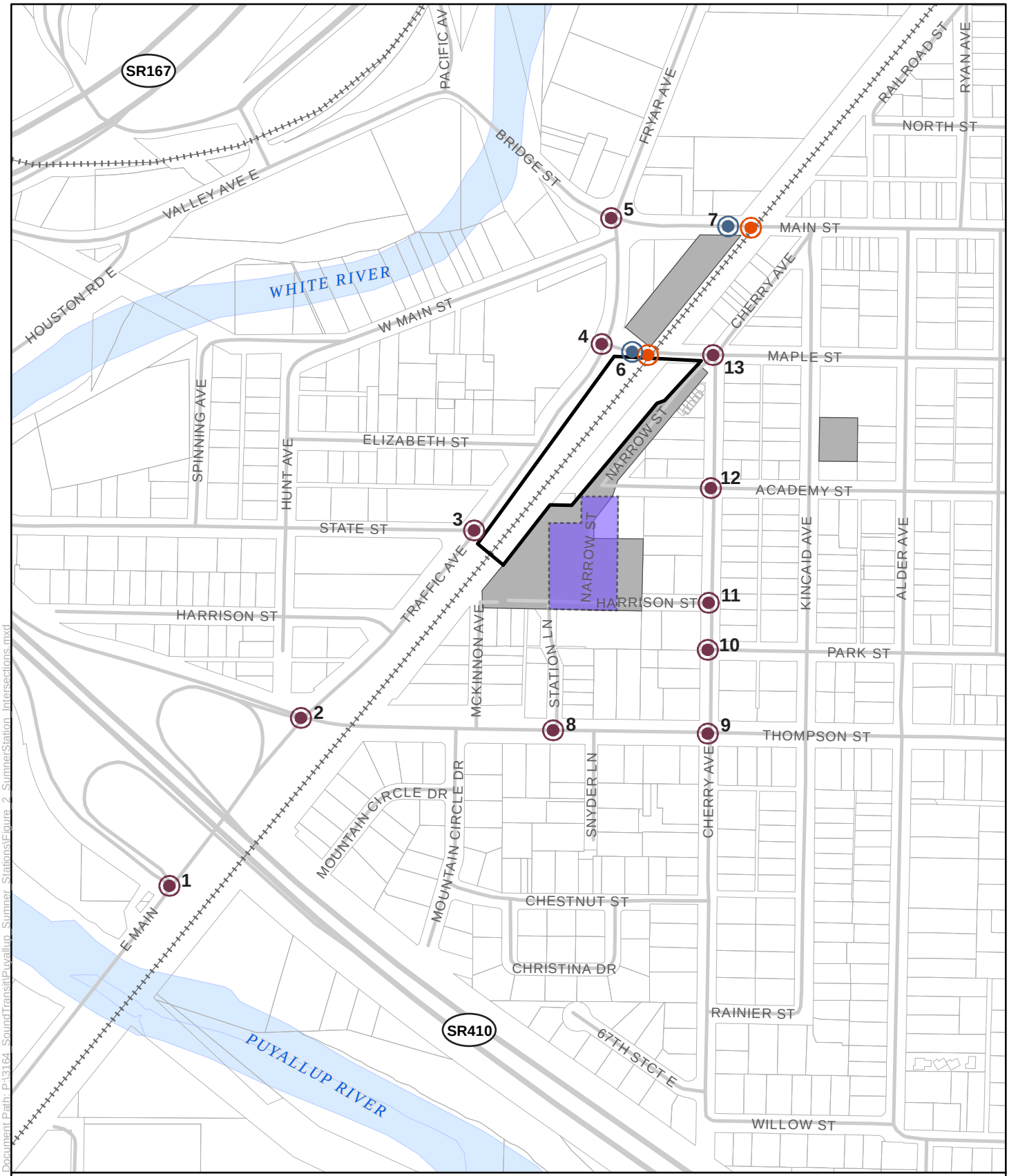
4.1 Study Area

The proposed project would build a parking garage and provide pedestrian and bicycle improvements at the Sumner Station. The Sumner Station is located between Maple Street and Thompson Street, as shown in Figure 4-1. Ingress and egress driveways to the Sumner Station parking lots are located on Main Street, Maple Street, Academy Street, and Harrison Street. Roadway segments and intersections were selected for analysis in coordination with City of Sumner (City) staff, and include the roadway network in the vicinity of the existing station area parking lots, the nearby railroad crossings, and all driveways to the existing station area parking lots.

4.2 Existing Transportation Conditions

The transportation facilities, service types, and conditions that exist in the study area in 2014 are listed below and discussed in subsequent sections.

- Roadway Network: Roadway type and facilities within the study area
- Traffic Volumes: Peak-hour intersection volumes at all study area intersections and daily volumes at several locations throughout the study area
- Traffic Operations: Intersection level of service and average vehicle delay, as well as average travel time on key corridors
- Public Transportation: Summary of transit routes and stops within the study area
- Freight: Summary of freight routes and freight volumes at study area intersections
- Rail Transportation: Summary of rail facilities and users within the study area
- Non-motorized Transportation: Bicycle and pedestrian facilities and non-motorized volumes at the study area intersections
- Parking: Summary of parking facilities supply and utilization
- Safety: Summary of safety issues at intersections within the study area



SOUNDTRANSIT
RIDE THE WAVE

N

0 250 500 Feet

Analyzed Intersections

- Driveway Turn Movement
- Intersection Turn Movement
- Railroad Crossing

- Station Location
- Existing Parking
- Railroad
- New Parking Garage

Figure 4-1
Sumner Station
Study Area

Document Path: P:\3164 SoundTransit\Puyallup_Sumner_Stations\Figure 2_SumnerStation_Intersections.mxd

4.2.1 Roadway Network

The project area is served by a network of roadways consisting of principal arterials, minor arterials, collector streets, and local streets.

State Route (SR) 410 is a four-lane highway with a speed limit of 55 miles per hour (mph). The western terminus is SR 167, and it continues east through Sumner, Bonney Lake, Buckley, and Enumclaw. Approximately two-thirds of the traffic accessing the Sumner Station travels through the SR 410 interchange at Traffic Avenue, which frequently experiences heavy congestion during peak travel periods. Sounder traffic accounts for approximately 10 percent of the total traffic traveling through the SR 410/Traffic Avenue interchange during the PM peak hour.

Traffic Avenue between the SR 410 interchange to the south and Main Street to the north is a five-lane principal arterial with two lanes in each direction and a landscaped center median with turn lanes at some intersections. Traffic Avenue across SR 410 is only one lane in each direction. At the Traffic Avenue/Fryar Avenue and Main Street/Bridge Street intersection, the principal arterial classification continues east on Bridge Street. The speed limit is 25 mph.

South of the SR 410 interchange, Traffic Avenue becomes East Main Street, which continues west into Puyallup, and is classified as a Minor Arterial. East Main Street has five lanes, with two lanes in each direction and a center two-way left-turn lane. The speed limit is 35 mph.

North of Main Street/Bridge Street, Traffic Avenue becomes Fryar Avenue, and is classified as a Major Collector. It is a three-lane roadway with one lane in each direction and a center two-way left-turn lane. The speed limit is 25 mph.

Main Street is classified as a Minor Arterial. It is a two-lane roadway through downtown Sumner with a speed limit of 25 mph.

Thompson Street is classified as a Major Collector. It is a two-lane roadway with a speed limit of 25 mph.

All other roadways in the study area are classified as local roads, and have a 25-mph speed limit.

4.2.2 Traffic Volumes

Existing weekday turning movement counts were collected on September 23, 2014 between 3:30 and 7:00 pm at the study area intersections identified in Figure 4-1. These study area intersections included intersections, railroad crossings, and driveways. The counts collected the total number of vehicles, heavy vehicles, pedestrians, and bicycles. Typically, turn movement counts are aggregated into 15-minute periods, but because Sounder train-related traffic fluctuates in shorter durations, traffic volumes were aggregated into 1-minute periods. The PM peak period was analyzed because the short-duration surges in traffic volumes after the arrival of each Sounder train in the evening commute have a greater impact on the surrounding

transportation network than comparatively steady traffic volumes accessing the station during the morning commute. Also, traffic volumes are higher during the evening commute period compared to the morning commute period.

Daily (24-hour) traffic counts were collected over a 3-day period at four locations in the study area:

- Fryar Avenue south of Zehnder Street
- East Main Street north of Shaw Road
- SR 410 eastbound ramps at Traffic Avenue interchange
- SR 410 westbound ramps at Traffic Avenue interchange

The daily (24-hour) traffic volumes on the SR 410 ramps, and on Fryar Avenue south of Zehnder Street, range between 12,000 and 14,000 vehicles per day; on East Main Street north of Shaw Road the daily (24-hour) volume is 22,000 vehicles per day.

Figure 4-2 summarizes the existing 2014 traffic volumes during the PM peak hour. All of the PM peak period and daily traffic count information is included in Appendix C.

4.2.3 Traffic Operations

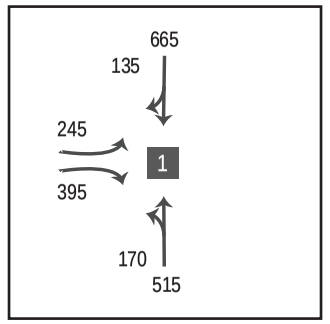
4.2.3.1 Intersection Operations

A common method of measuring traffic operations is level of service (LOS), a scale ranging from A to F, to designate the LOS depending on the delay conditions at the intersection. LOS A represents the best conditions with minimal delay and LOS F represents the worst conditions with severe congestion. Table 4-1 lists the intersection LOS delay thresholds for signalized and stop-controlled intersections.

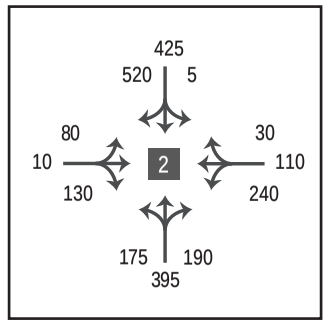
Table 4-1. Level of Service Thresholds

	Average Control Delay per Vehicle (seconds)	
Level of Service	**Signalized Intersections**	**Stop-controlled Intersections**
A	≤ 10	≤ 10
B	> 10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

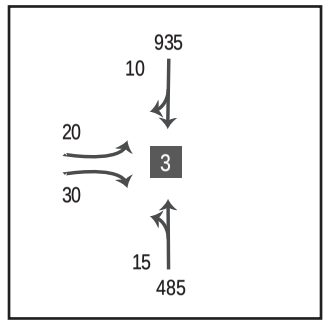
Note: The LOS criteria are based on control delay, which includes initial deceleration delay, queue move-up time, stopped delay, and final deceleration delay.



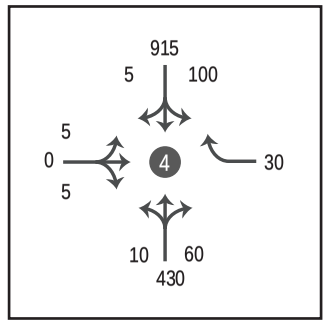
Traffic Ave /
SR 410 Eastbound Ramps



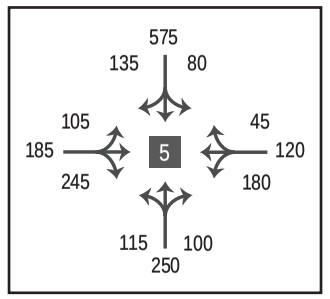
Traffic Ave / Thompson ST
(SR 410 Westbound Ramps)



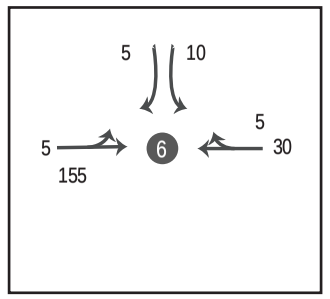
Traffic Ave / State ST



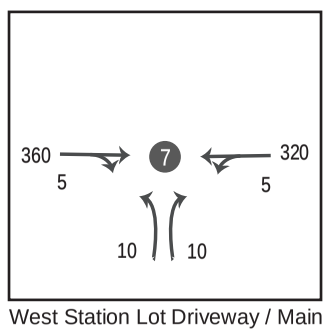
Traffic Ave / Maple ST



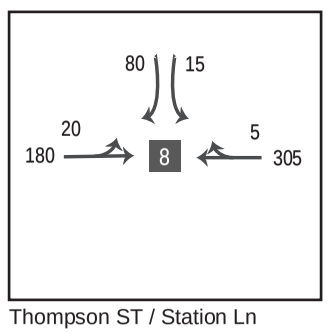
Traffic Ave / Fryar Ave /
Bridge ST / Main ST



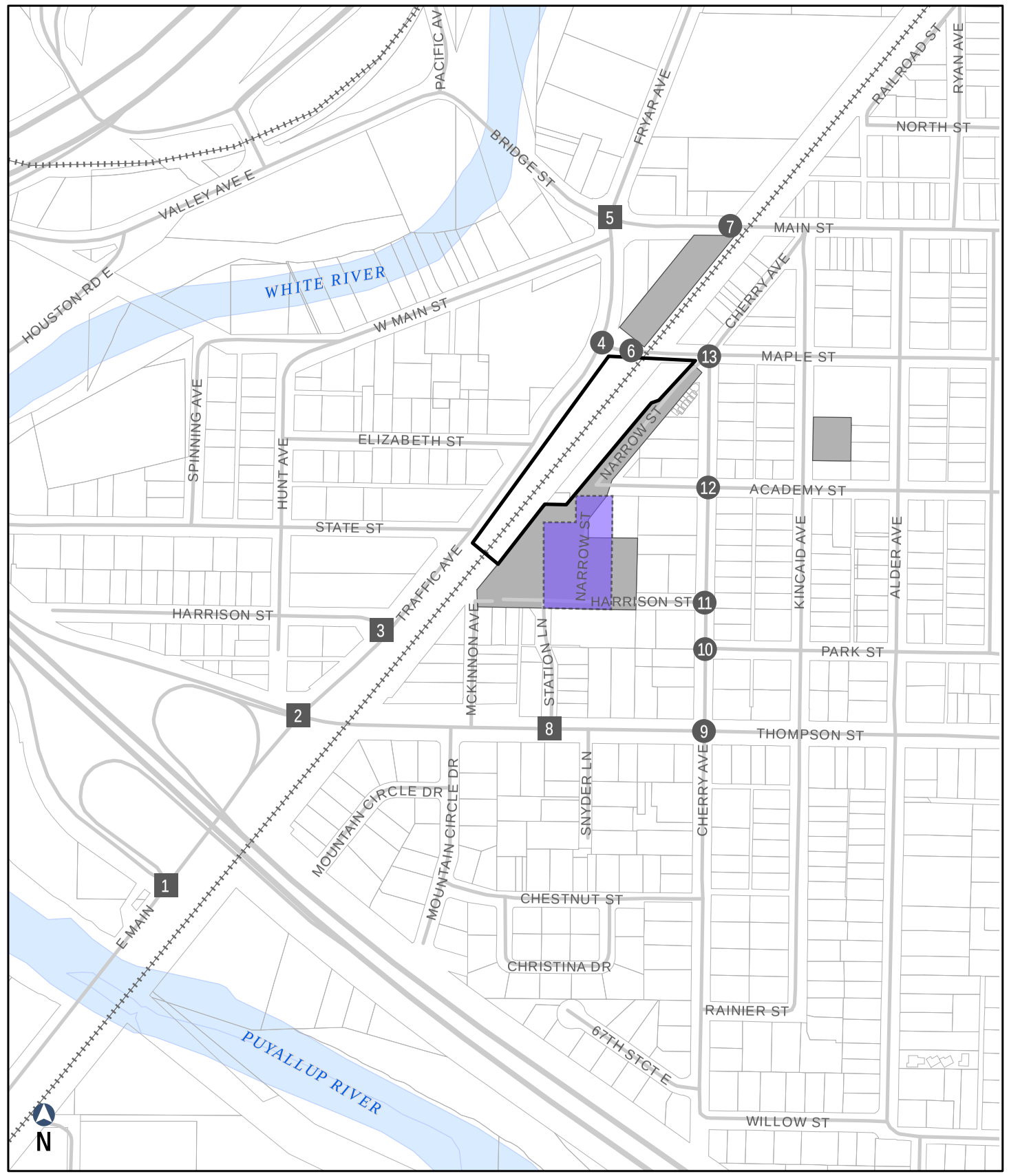
Maple ST /
West Station Lot Driveway

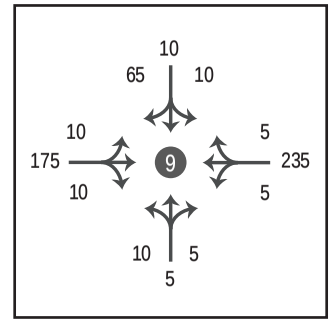


West Station Lot Driveway / Main ST

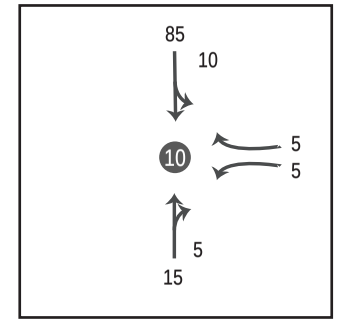


Thompson ST / Station Ln

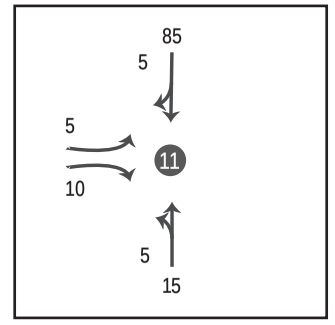




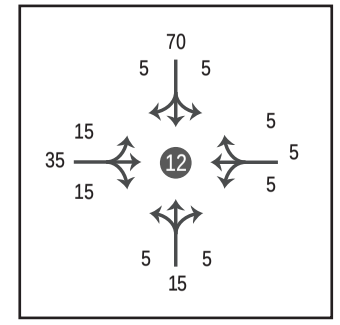
Cherry Ave / Thompson ST



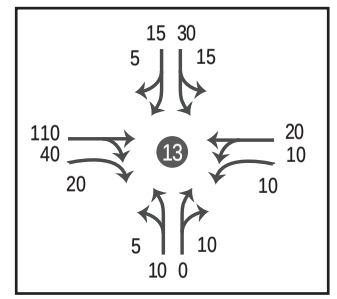
Cherry Ave / Park ST



Cherry Ave / Harrison ST



Cherry Ave / Academy ST



Narrow ST / Cherry Ave / Maple ST

SoundTransit
RIDE THE WAVE

X Unsignalized Intersection
X Signalized Intersection

Existing Parking
New Parking Garage

Figure 4-2
Sumner
Traffic Volume - 2014 PM Existing

Sumner Station Access Improvements

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At signalized intersections, LOS is calculated based on the delay of all vehicles entering the intersection. At two-way stop-controlled (TWSC) intersections the LOS is calculated based on the worst stopped approach. The delay thresholds are also lower for stop-controlled intersections because driver behavior considerations make delays at stop-controlled intersections more onerous. For example, at a signalized intersection, drivers may relax during the red interval while waiting for the green interval, but drivers on the stopped approach of a stop-controlled intersection must remain attentive to the task of identifying acceptable gaps in oncoming traffic.

Two traffic model analysis tools, Synchro and VISSIM, were used to capture the impacts of the proposed project. The tools are described in more detail in the methodology and assumptions document in Appendix A. Synchro was used to model existing signal timing plans and to optimize signal timing plans for the future scenarios for signalized study area intersections. Vehicle trips generated by Sounder Station service occur in short-duration surges, with high vehicle flows for short periods after the arrival of a train, and low vehicle flows between train arrivals. VISSIM explicitly models these short-duration surges, impacts from rail crossings on nearby intersections, and impacts from closely spaced intersections. Therefore, VISSIM was used to calculate the intersection delay and corresponding intersection LOS for the study area intersections. Pedestrians, bicycles, and trains were also modeled, thereby capturing the impacts of these modes and maneuvers on the transportation system.

The City's performance threshold for intersections is LOS D, with one exception: the Traffic Avenue/Fryar Avenue and Main Street intersection performance threshold is LOS F. The two SR 410 Ramp intersections (No.'s 1 and 2) are under WSDOT control and have a performance threshold for intersections of LOS D.

The existing PM peak hour LOS and delay for the study area intersections evaluated are shown in Table 4-2. The average delay for all vehicles is reported for signalized intersections and delay is reported for the worst-operating stopped approach at unsignalized intersections. As shown in Table 4-2, all of the study area intersections meet the City's and WSDOT's LOS performance thresholds, except for the intersection of Traffic Avenue and Thompson Street (SR 410 westbound ramps).

Table 4-2. Existing PM Peak Hour LOS

Intersection		Intersection Control	LOS	Delay (sec./vehicle)
No.	**Name**			
1	Traffic Avenue and SR 410 Eastbound Ramps	Signal	D	45
2	**Traffic Avenue and Thompson Street (SR 410 Westbound Ramps)**	**Signal**	**E**	**62**
3	Traffic Avenue and State Street	Signal	D	42
4	Traffic Avenue and Maple Street	Yield	A	4
5	Traffic Avenue/Fryar Avenue and Bridge Street/Main Street	Signal	E	57
6	Maple Street and West Station Lot Driveway	TWSC	A	6
7	West Station Lot Driveway and Main Street	TWSC	A	11
8	Thompson Street and Station Lane	Signal	C	27
9	Cherry Avenue and Thompson Street	TWSC	A	8
10	Cherry Avenue and Park Street	TWSC	A	5
11	Cherry Avenue and Harrison Street	TWSC	A	5
12	Cherry Avenue and Academy Street	TWSC	A	7
13	Narrow Street and Cherry Avenue and Maple Street	TWSC	A	7

Note: Cells highlighted in **grey/bold** exceed the City's LOS standards.

4.2.3.2 Travel Time Analysis

Average travel times from VISSIM along key corridors are summarized in Table 4-3. As shown, travel times range between 3.6 and 9.6 minutes.

Table 4-3. Average Travel Times (minutes)

Segment	Direction	Travel Time
Harrison Street to Shaw Road via Station Lane, Thompson Street, and Traffic Avenue	Southbound	5.0
Traffic Avenue – Shaw Road to Zehnder Street	Southbound	9.6
	Northbound	3.6

4.2.4 Public Transportation

Public transportation options are available within the study area. Table 4-4 summarizes the Sound Transit bus routes and Sounder commuter trains that serve the Sumner Station during the evening commute.

Table 4-4. Bus Routes and Sounder Trains Serving the Sumner Station

Service Provider and Route		Frequency	Station Served/Route Notes
Sound Transit			
578	Between Puyallup and Seattle	30 minutes throughout the day with service not available during the 3-hour AM and PM peak periods	Serves Sumner Station. No southbound service is provided during the evening commute.
596	Between Sumner and Bonney Lake	20 to 30 minutes during the AM and PM peak periods	Serves Sumner Station. Buses coincide with Sounder trains.
Sounder Trains	Between Lakewood and Seattle	20 to 30 minutes during the 3-hour AM and PM peak periods	Serves Sumner Station.

4.2.5 Freight

Truck freight within the Puget Sound region is transported along a system of designated freight routes that consist of freeways and arterial streets connecting major freight destinations. The Washington State Freight and Goods Transportation System (FGTS) is used to classify roadways according to the average annual gross truck tonnage they carry. Truck tonnage values are derived from actual or estimated truck traffic count data that are converted into average weights by truck type. Classifications range from T-1, which includes roadways that carry over 10 million tons per year, to T-5, which includes roadways that carry over 20,000 tons in 60 days (Table 4-5). Jurisdictions determine their designated truck route system according to the FGTS classifications.

Table 4-5. Freight and Goods Transportation System Classifications

FGTS Classification	Annual Gross Tonnage
T-1	More than 10 million tons
T-2	4 to 10 million tons
T-3	300,000 to 4 million tons
T-4	100,000 to 300,000 tons
T-5	At least 20,000 tons in 60 days and less than 100,000 tons per year

Source: Washington State Freight and Goods Transportation System 2013—Seattle, Tacoma, and Everett Urbanized Area

SR 410 is FGTS classified as a T1 roadway within the study area. East Main Street, Traffic Avenue, Fryar Avenue, Valley Avenue East, West Valley Highway East, and Sumner Heights Drive between West Valley Highway East and Valley Avenue are FGTS-classified T3 roadways in the study area. Other facilities in the study area carry truck traffic; however, they are not designated as freight routes. Most truck traffic provides local deliveries to nearby businesses and residential areas. During the PM peak hour, trucks account for 1 to 5 percent of vehicle traffic at study area intersections.

4.2.6 Rail Transportation

The main BNSF railroad line through the region travels northeast to southwest through the study area, paralleling East Main Street/Traffic Avenue. The two at-grade crossings within the study area are located at Maple Street and Main Street. The rail line is used by freight train, passenger rail, and commuter rail services.

4.2.6.1 Freight Trains

During the 3-hour PM peak period, freight trains arrive at a rate of approximately one per hour, and range in length from 45 cars to 130 cars (average train includes 100 cars). The gates are typically closed between 1 minute 45 seconds and 3 minutes with the average gate closure of 2 minutes 30 seconds. The main BNSF rail line through the corridor is a major freight route for freight trains; however, BNSF has an agreement with Amtrak and Sound Transit to minimize freight traffic during commute hours to give passenger service priority.

4.2.6.2 Passenger Trains

Passenger rail service in the study area includes two passenger rail routes along the BNSF tracks: the Amtrak Cascades route from Vancouver, British Columbia, to Eugene, Oregon and the Coast Starlight route from Seattle to Los Angeles. These two routes result in five passenger trains operating along the BNSF tracks daily in each direction. During the 3-hour PM peak period, one northbound and one southbound passenger train would travel through the study area resulting in gate closures of less than 60 seconds.

4.2.6.3 Sounder Commuter Trains

Sounder commuter rail service, operated by Sound Transit, also uses the BNSF tracks in the study area. The Seattle to Lakewood route operates 10 trains per day (8 peak direction/2 off-peak direction) on weekdays and provides weekend service for events at Safeco Field and CenturyLink Field.

The Sounder station in Sumner is located along the BNSF railroad just south of the rail crossing at Maple Street. Gate operations at the rail crossings are influenced by trains stopping at the station and their respective approaches—either north or south. As southbound trains approach the station, the gates at the Main Street and Maple Street close. Once the southbound train has cleared each crossing, the gates open. When northbound trains are approaching the station, the gates at Maple Street and Main Street close. Once the northbound train has completely stopped at the station, the gates open at the Main Street crossing but the gates at the Maple Street crossing remain closed while the northbound train is stopped at the station. When the train begins leaving the station, the gates at the Main Street crossing close again. The gates at

both the Maple Street and Main Street crossings stay closed until the train leaves the station and has cleared the crossings.

4.2.7 Non-motorized Transportation

4.2.7.1 Pedestrian and Regional Trail Facilities

Pedestrian facilities were evaluated within a 0.25-mile radius of the station platform. To the east Sumner Station abuts the downtown commercial area and a residential neighborhood, where the sidewalk system is generally built with parking strips between the sidewalk and the street; on some blocks short stretches have missing or substandard sidewalks. Many corners have curb ramps but many have no ramps or substandard ramps. Intersections in the neighboring business district have "zebra" pedestrian crossings, as do other major pedestrian crossing locations. At the north end of the station there is a signaled gated crossing, and a fence runs between the tracks and the station, continuing south to the Thompson Street overpass, which prevents pedestrians from crossing the tracks. To the west of the station, there is automobile-oriented commercial development along Traffic Avenue, which has sidewalks with access to the west station platform. To the south of the station the existing non-motorized facilities crossing SR 410 at Traffic Avenue Interchange are extremely limited and discourage non-motorized users. Pedestrian crossings are provided only at signalized intersections along this stretch of Traffic Avenue.

The 5.1-mile Sumner Link Trail connects the station area with the Interurban Trail to the north and the White River Trail and Puyallup Riverwalk Trail to the west. Travel on surface streets is needed to make some of these connections.

Sounder riders walking to and from home currently comprise less than 3 percent of all riders who board at Sumner Station.

4.2.7.2 Bicycle Facilities

Bicycle facilities were evaluated within a 0.5-mile radius of the station platform. Other than the Trails mentioned above, Fryar Avenue is the only street with on-street bicycle facilities within the station area. Bicycle parking is provided on the station platform in bicycle lockers and racks.

Sounder riders who bicycle to and from the Sumner Station represent less than 3 percent of all riders.

4.2.8 Parking

Parking surveys were conducted to inventory the supply and use of unrestricted on-street parking near the station for the study area shown in Figure 4-3. Much, but not all, of the available on-street parking supply in the vicinity of Sumner Station is restricted by a residential parking zone. The City has "unrestricted" on-street parking, which allows Sounder riders to park

on the street near the Sumner Station. Parking surveys were conducted at unrestricted parking locations in the vicinity of the station as shown in Figure 4-2. The surveys indicated that approximately 150 unrestricted on-street spaces were used by Sounder passengers. Table 4-6 summarizes the existing dedicated parking facilities and the additional parking near the Sumner Station.

Table 4-6. Sumner Station Parking Facilities

Sumner Station Dedicated Parking Facilities	
Station Parking – North of Maple Street	68
Station Parking – South of Maple Street (Main Lot)	234
City of Sumner – Red Apple South Lot	50
Total Dedicated Sounder Parking	**352**
Additional Parking	
On-street parking	150
Bonney Lake Park-and-Ride	356
Total Additional Parking	**506**
Total Available Sounder Parking	**858**

4.2.9 Safety

Crash data were obtained from the City for the 4-year period between January 2011 and December 2014 within the study area. Crash rates were calculated for the study area intersections as number of crashes per million entering vehicles (MEV). Crash data were reviewed to identify which, if any, of the study area intersections had high crash rates and/or safety concerns. Table 4-7 summarizes the intersection locations, intersection volumes, crash severity, and crash rate.

The only intersections with a crash rate over 0.50 MEV are the intersections of Traffic Avenue and SR 410 eastbound ramps and Traffic Avenue at Thompson Street (SR 410 westbound ramps). The majority of the crashes at the 13 study area intersections resulted in property damage only (40 crashes of the 65 total crashes). There were no fatalities over the 4-year period at any of the study intersections.

Legend:

- 15 Minute Limit, 7-3, Weekdays
- 15 Minute Limit, 8-5, Weekdays
- 2 Hour Limit, 9-6, Weekdays
- 3 Hour Limit, 8-5, Weekdays
- 3 Hour Limit, 9-6, Weekdays
- 8 Hour Limit, 8-5, Weekdays
- Automobiles Only
- City Vechicles Only
- No Parking
- RPZ-1, 1 Hour Limit, 7-3:30, Weekdays
- RPZ-2, 30-Min Limit, 4-10 Weekdays, 9-5 Weekends
- RPZ-3, 3 Hour Limit, 7-7, Daily
- RPZ-3, 3 Hour Limit, 7-7, Weekdays
- Unrestricted Parking
- License Plate Survey Location

City of Sumner Parking Map

Scale:

0 250 500 1,000 Feet

N

Updated: 09-2014

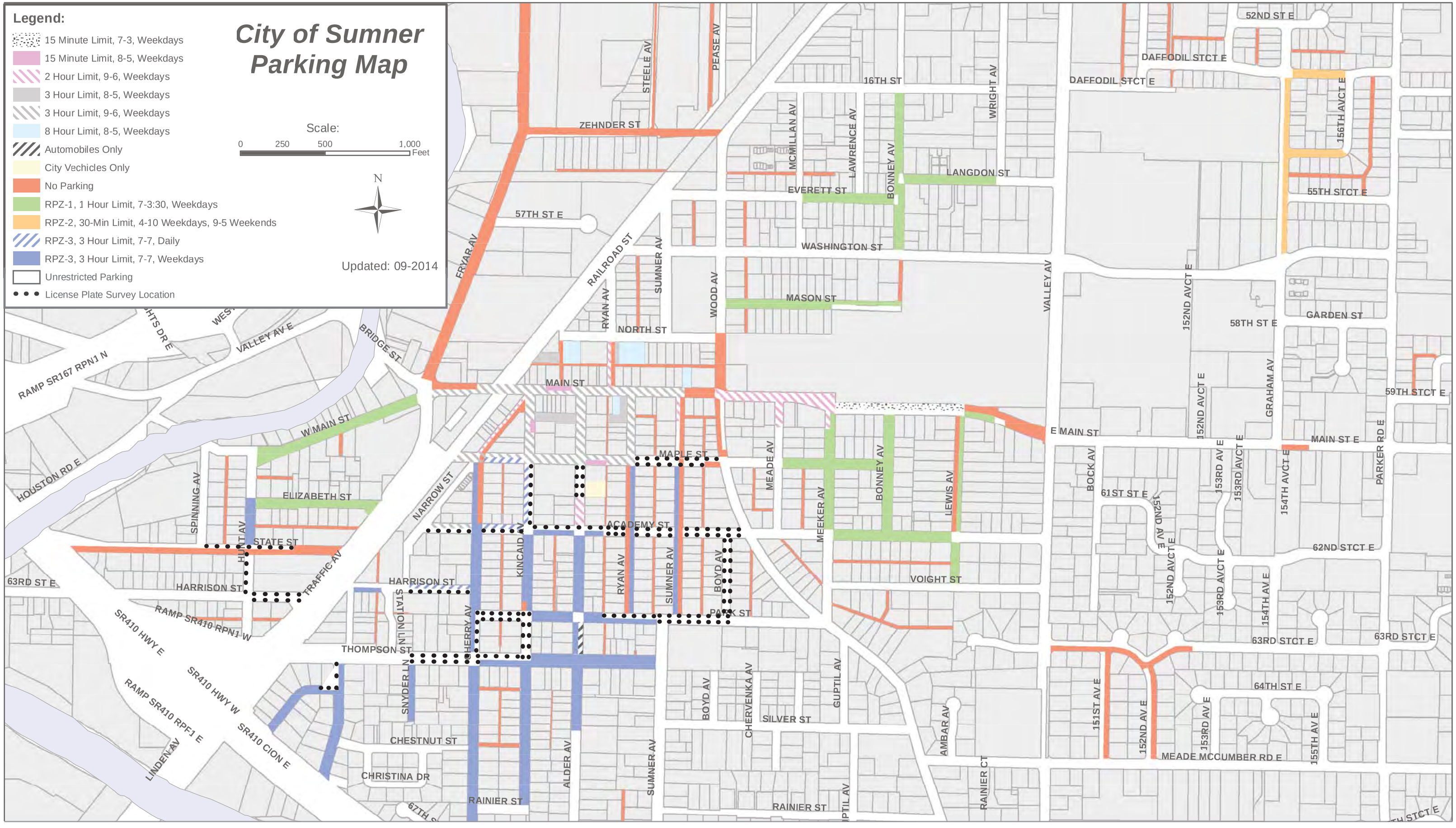

Figure 4-3
Sumner
Parking Survey Areas

Sumner Station Access Improvements

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Table 4-7. Existing Crash Analysis Results (January 2011 to December 2014)

Intersection		Average Daily Traffic	Crash Severity				Intersection Crash Rate (crashes/MEV)
No.	Name		Fatality	Injuries	Property Damage Only	Total	
1	Traffic Avenue and SR 410 Eastbound Ramps	25,03	0	10	11	21	0.59
2	Traffic Avenue and Thompson (SR 410 Westbound Ramps)	27,360	0	7	18	25	0.64
3	Traffic Avenue and State Street	17,460	0	1	2	3	0.12
4	Traffic Avenue and Maple Street	18,310	0	3	2	5	0.19
5	Traffic Avenue/Fryer Avenue and Bridge Street/Main Street	25,450	0	4	5	9	0.25
6	Maple Street and West Station Lot Driveway	2,425	0	0	1	1	0.29
7	West Station Lot Driveway and Main Street	8,420	0	0	0	0	0.00
8	Thompson Street and Station Lane	7,080	0	0	0	0	0.00
9	Cherry Avenue and Thompson Street	6,330	0	0	1	1	0.11
10	Cherry Avenue and Park Street	1,380	0	0	0	0	0.00
11	Cherry Avenue and Harrison Street	1,500	0	0	0	0	0.00
12	Cherry Avenue and Academy Street	2,040	0	0	0	0	0.00
13	Narrow Street and Cherry Avenue and Maple Street	3,410	0	0	0	0	0.00

Source: Sumner Crash Data from January 2011 to December 2014.

In addition to summarizing crashes by severity, study intersection crashes were summarized by type in Table 4-8. The most common type of crashes at the 13 study area intersections included rear-end and left-turn crashes. One crash involved a bicyclist and two crashes involved pedestrians.

Table 4-8. Existing Crashes by Type (January 2011 to December 2014)

Intersection		Crash Type										
No.	**Name**	**Angle**	**Rear-end**	**Sideswipe**	**Right-turn**	**Left-turn**	**U-turn**	**Reverse Travel**	**Fixed Object**	**Pedacyclist**	**Pedestrian**	**Total**
1	Traffic Avenue and SR 410 Eastbound Ramps	0	5	1	0	10	0	1	3	0	1	**21**
2	Traffic Avenue and Thompson Street (SR 410 Westbound Ramps)	0	14	0	2	7	0	0	1	1	0	**25**
3	Traffic Avenue and State Street	0	2	0	0	1	0	0	0	0	0	**3**
4	Traffic Avenue and Maple Street	0	1	0	0	3	0	0	0	0	1	**5**
5	Traffic Avenue/Fryer Avenue and Bridge Street/Main Street	1	5	0	0	3	0	0	0	0	0	**9**
6	Maple Street and West Station Lot Drive	0	1	0	0	0	0	0	0	0	0	**1**
7	West Station Lot Drive and Main Street	0	0	0	0	0	0	0	0	0	0	**0**
8	Thompson Street and Station Lane	0	0	0	0	0	0	0	0	0	0	**0**
9	Cherry Avenue and Thompson Street	1	0	0	0	0	0	0	0	0	0	**1**
10	Cherry Avenue and Park Street	0	0	0	0	0	0	0	0	0	0	**0**
11	Cherry Avenue and Harrison Street	0	0	0	0	0	0	0	0	0	0	**0**
12	Cherry Avenue and Academy Street	0	0	0	0	0	0	0	0	0	0	**0**
13	Narrow Street and Cherry Avenue and Maple Street	0	0	0	0	0	0	0	0	0	0	**0**

Source: Sumner Crash Data from January 2011 to December 2014.

5 LONG-TERM IMPACTS

This chapter describes the transportation facilities, service types, and conditions that are expected to exist in the study area in 2035 for the No Build and Build alternatives. The Build Alternative transportation conditions are compared with those of the No Build Alternative to identify project-related impacts on transportation and potential mitigation measures for adverse impacts. As was done for existing conditions, quantitative traffic analyses for 2035 were developed only for the PM peak period. This is because the short-duration surges in traffic volumes that occur after the arrival of each Sounder train in the evening commute have a greater impact on the surrounding transportation network than comparatively steady traffic volumes accessing the station during the morning commute; moreover, there are higher traffic volumes during the PM peak period compared to the AM peak period.

Modifications to the transportation system assumed to be in place under the No Build and Build alternatives are described in detail in the following subsection. The effects of the Build Alternative were analyzed assuming the proposed Sumner Station Access Improvements were in place. Potential mitigation measures to improve conditions were identified for the Build Alternative and are described in more detail in Chapter 8.

5.1 Roadway Network

The roadway configuration and the 13 study area intersections for the 2035 No Build Alternative would be the same as existing conditions summarized in the affected environment section. The station ingress and egress locations would be the same as summarized in existing conditions.

5.2 Traffic Volumes

5.2.1 No Build Alternative

The 2035 No Build Alternative traffic volumes were forecasted using a cumulative growth rate of 0.7 percent annually. This growth rate was provided by staff from the Puget Sound Regional Council and applied globally to existing traffic volumes to forecast 2035 traffic volumes. Traffic volumes in the study area are generally expected to increase by approximately 10 to 15 percent between 2014 and 2035 due to regional population and employment growth.

By the end of 2017, Sound Transit plans to operate 13 daily round trips on the Sounder South Line, with at least 9 of these trips operating in the peak direction during the 3-hour commute window. It was assumed that by 2035 Sound Transit would operate 10 daily round trips in the peak direction during the 3-hour commute window. This would allow a Sounder train to run every 20 minutes during the entire 3-hour evening peak period.

A number of variables (outlined in Appendix A) would affect future vehicular traffic volumes from Sounder passengers traveling on the ten southbound trains in the peak direction during the 3-hour commute window:

- Total number of Sounder riders (1,500 passengers in 2035)
- Portion of Sounder riders able to park at the station
- Portion of Sounder riders leaving the station by other modes than vehicles
- Distribution of riders by mode and by time of return

Traffic exiting the station during the PM peak commute was assumed to maintain the same distribution as existing conditions, with approximately 60 percent of the Sounder traffic traveling to Traffic Avenue and the SR 410 interchange, and 40 percent of the Sounder traffic traveling east through Sumner. It is likely that a portion of the trips traveling east through Sumner are accessing the SR 410 interchange at SR 162/Valley Avenue. However, this interchange currently experiences substantial congestion during the PM commute period, and it is anticipated that the congestion at the SR 162 interchange will increase similarly to the congestion at the Traffic Avenue interchange.

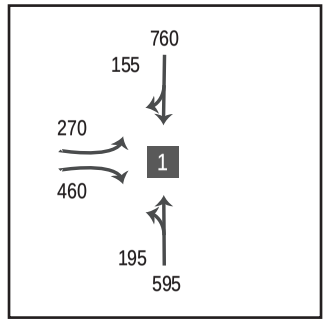
Figure 5-1 shows the forecasted traffic volumes in 2035 under the No Build Alternative during the PM peak hour.

5.2.2 Build Alternative

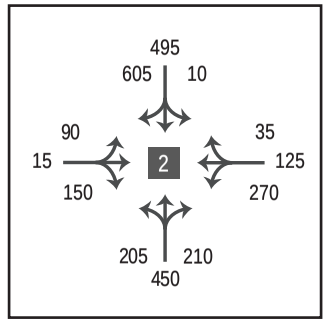
The Build Alternative includes construction of a new 623-space parking garage at the Sumner Station. The number of parking spaces would be 857 including the existing parking spaces remaining in the southwest corner of the surface parking lot. The proposed parking garage at the Sumner Station is shown in Figure 5-2.

The 2035 Build Alternative traffic volumes were forecasted using the same cumulative growth rate of 0.7 percent annually provided by staff from the Puget Sound Regional Council (for trips unrelated to Sumner Station improvements) plus the Sounder train-related traffic volumes. The Sounder train-related traffic volumes are different between the No Build and Build alternatives because the Sumner Station improvements would increase parking capacity and traffic activity near the Sumner Station.

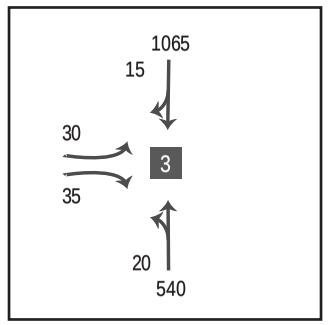
The strong demand for parking makes it likely that the proposed new parking will fill soon after opening, and that many riders who own cars will begin parking at the Station rather than using one of the other modes. The future ridership assumptions by mode for the Build Alternative are summarized in Appendix A.



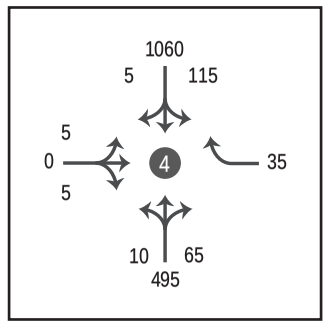
Traffic Ave /
SR 410 Eastbound Ramps



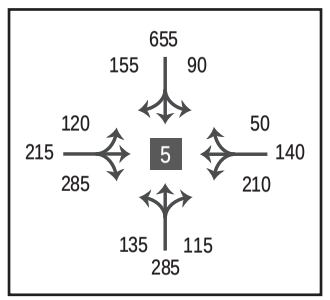
Traffic Ave / Thompson ST
(SR 410 Westbound Ramps)



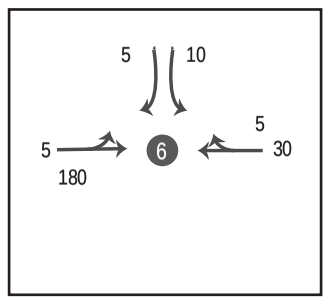
Traffic Ave / State ST



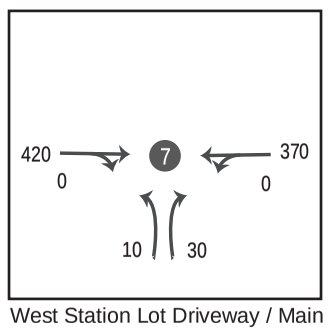
Traffic Ave / Maple ST



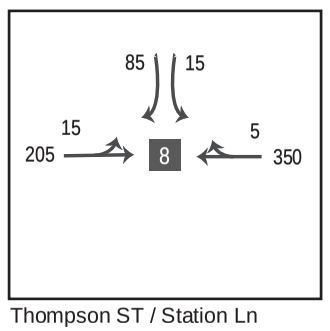
Traffic Ave / Fryar Ave /
Bridge ST / Main ST



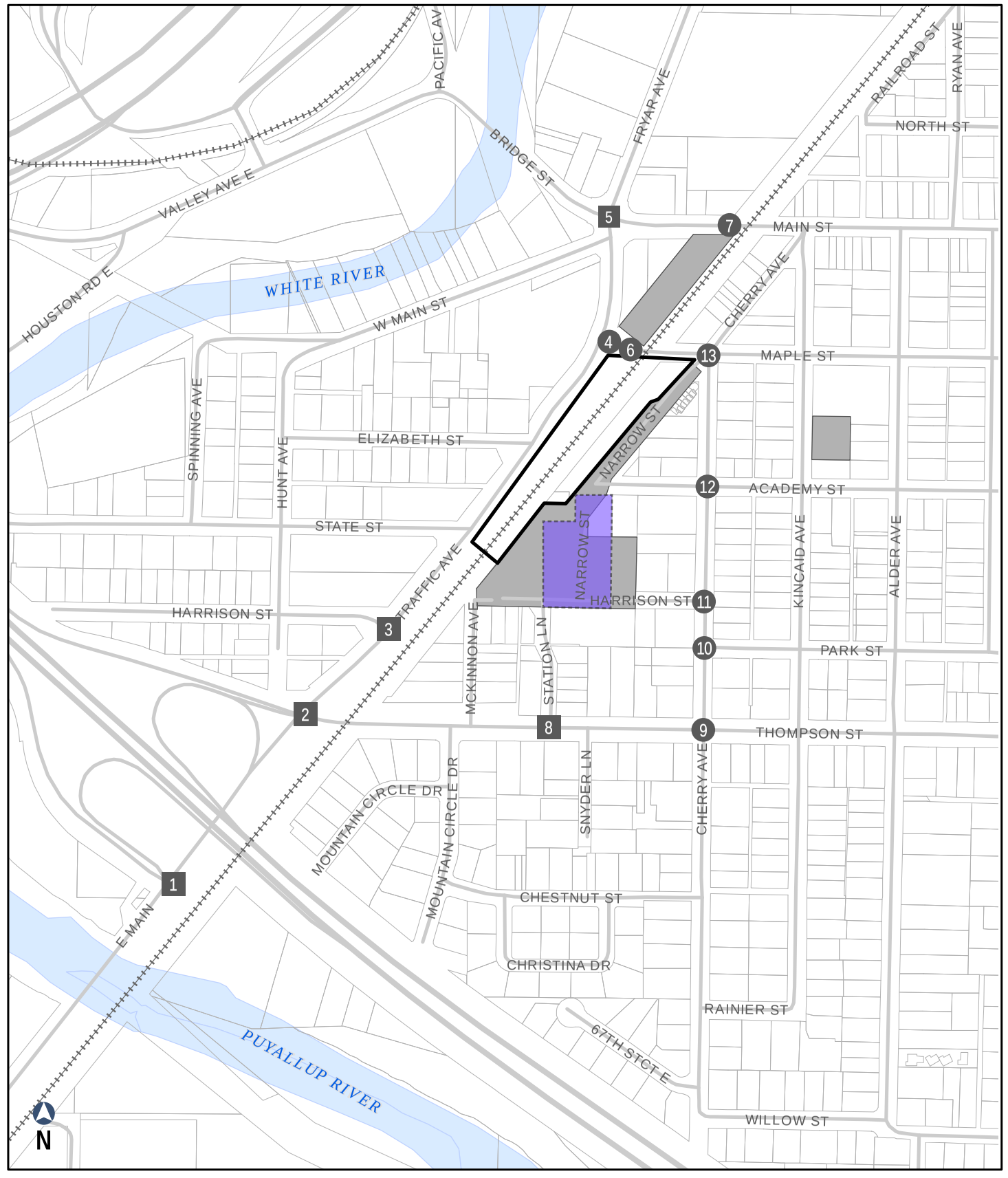
Maple ST /
West Station Lot Driveway

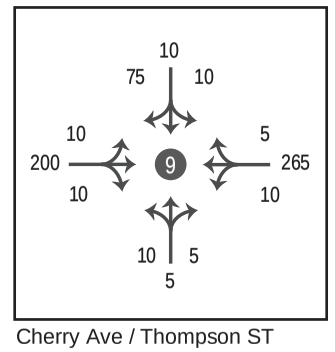


West Station Lot Driveway / Main ST

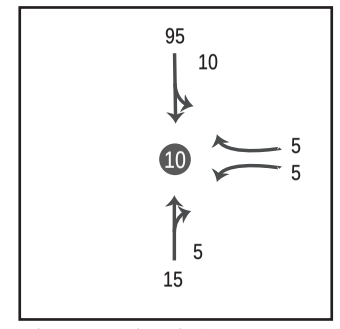


Thompson ST / Station Ln

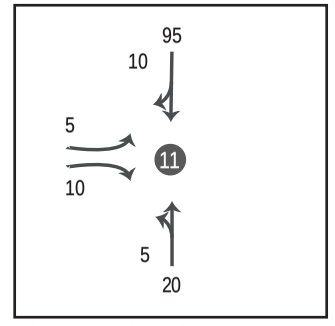




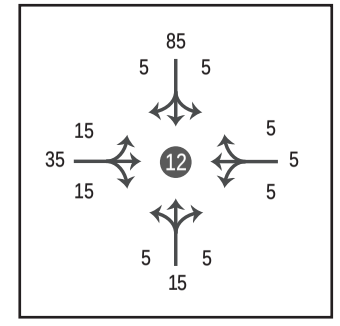
Cherry Ave / Thompson ST



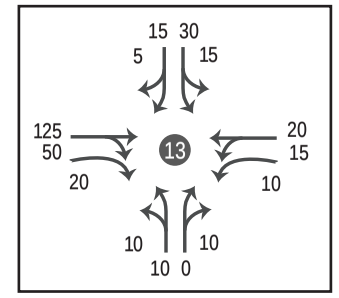
Cherry Ave / Park ST



Cherry Ave / Harrison ST



Cherry Ave / Academy ST



Narrow ST / Cherry Ave / Maple ST

SoundTransit
RIDE THE WAVE

X Unsignalized Intersection
X Signalized Intersection

Existing Parking
New Parking Garage

Figure 5-1
Sumner
Traffic Volume - 2035 PM No Build

Sumner Station Access Improvements

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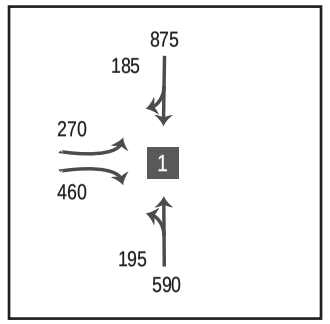
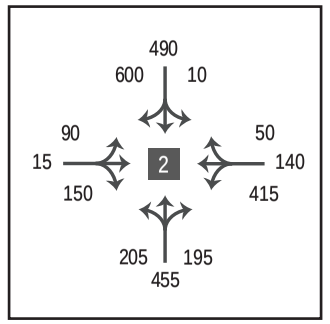
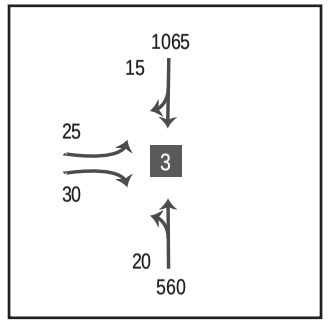


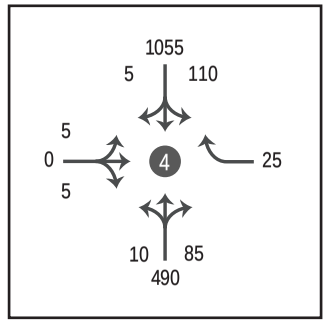
Traffic Ave /
SR 410 Eastbound Ramps



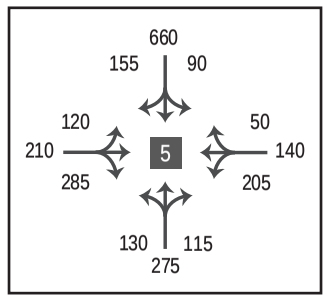
Traffic Ave / Thompson ST
(SR 410 Westbound Ramps)



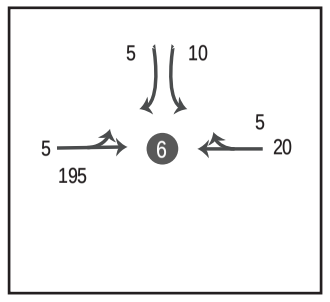
Traffic Ave / State ST



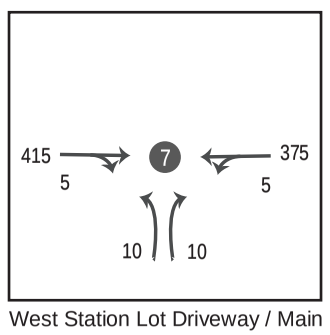
Traffic Ave / Maple ST



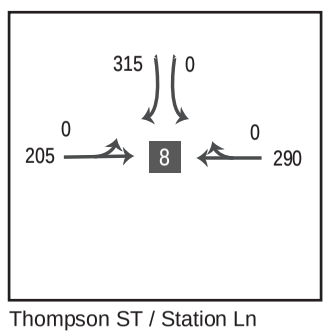
Traffic Ave / Fryar Ave /
Bridge ST / Main ST



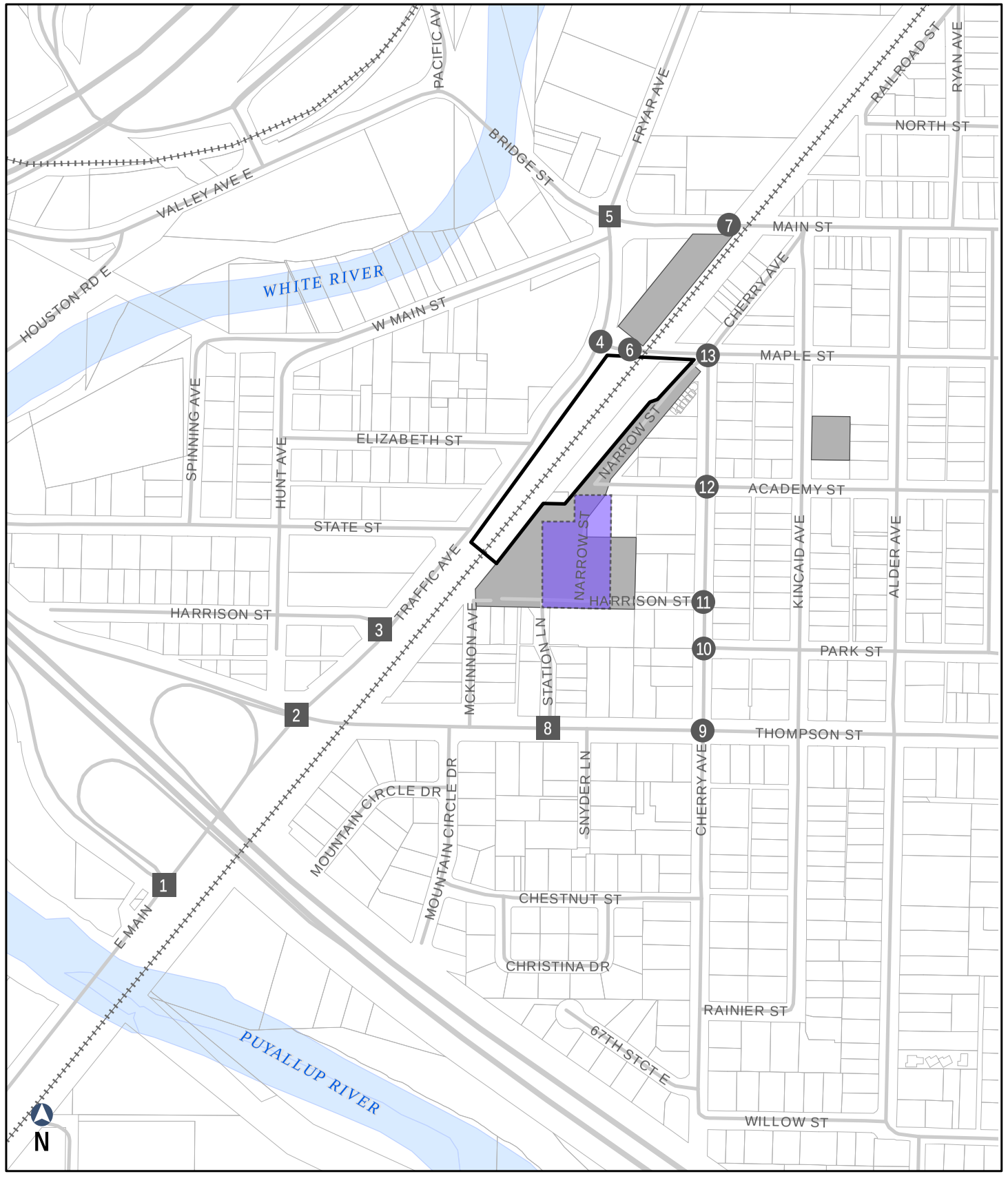
Maple ST /
West Station Lot Driveway

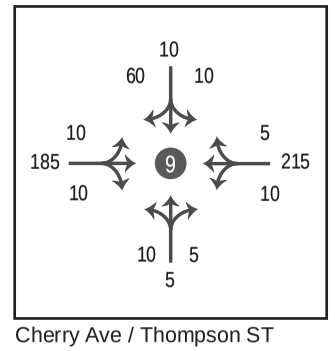


West Station Lot Driveway / Main ST

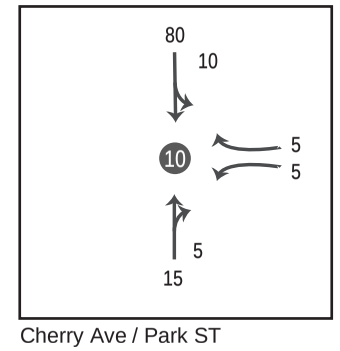


Thompson ST / Station Ln

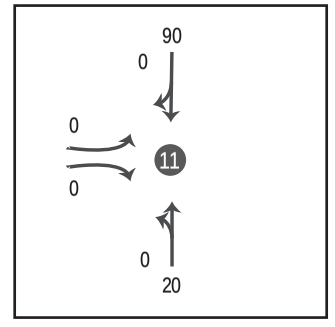




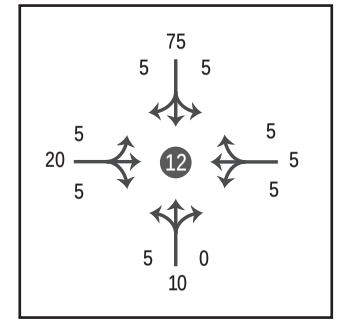
Cherry Ave / Thompson ST



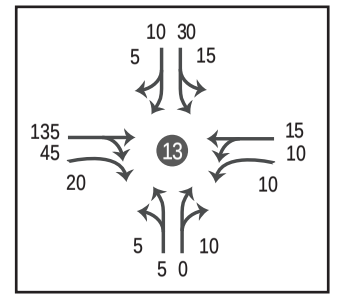
Cherry Ave / Park ST



Cherry Ave / Harrison ST



Cherry Ave / Academy ST



Narrow ST / Cherry Ave / Maple ST

SoundTransit
RIDE THE WAVE

X Unsignalized Intersection
X Signalized Intersection

Existing Parking
New Parking Garage

Figure 5-2
Sumner
Traffic Volume - 2035 PM Build

Sumner Station Access Improvements

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With the Build Alternative, southbound left turns were prohibited by channelization at the Thompson Avenue/Station Lane intersection, which ensures that 100 percent of the traffic exiting Sumner Station south of Academy Street would use Traffic Avenue to access SR 410 and would not filter through the local neighborhood roadways in Sumner.

Figure 5-2 shows the forecasted traffic volumes in 2035 under the Build Alternative during the PM peak hour.

5.2.3 Traffic Operations

5.2.3.1 Intersection Operations

The traffic operations analysis compares the 2035 No Build and Build alternatives at the same study area intersections analyzed under existing conditions. The 2035 No Build and Build PM peak hour LOS and delay for the study area intersections evaluated are shown in Table 5-1. The average delay for all vehicles is reported for signalized intersections; delay is reported for the worst-operating stopped approach at unsignalized intersections.

Table 5-1. 2035 No Build and Build Alternatives PM Peak Hour LOS

Intersection			2014 Existing		2035 No Build Alternative		2035 Build Alternative	
No.	Name	Intersection Control	LOS	Delay (sec. /vehicle)	LOS	Delay (sec. /vehicle)	LOS	Delay (sec. /vehicle)
1	**Traffic Avenue and SR 410 Eastbound Ramps**	**Signal**	**D**	**45**	**E**	**79**	**F**	**81**
2	**Traffic Avenue and Thompson Street (SR 410 Westbound Ramps)**	**Signal**	**E**	**62**	**E**	**71**	**F**	**84**
3	**Traffic Avenue and State Street**	**Signal**	**D**	**42**	**E**	**61**	**E**	**63**
4	Traffic Avenue and Maple Street	Yield	A	4	A	8	A	6
5	Traffic Avenue/Fryar Avenue and Bridge Street/Main Street	Signal	E	57	F	145	F	152
6	Maple Street and West Station Lot Driveway	TWSC	A	6	A	5	A	8
7	West Station Lot Driveway and Main Street	TWSC	A	11	C	17	C	18
8	**Thompson Street and Station Lane**	**Signal**	**C**	**27**	**D**	**45**	**F**	**99**
9	**Cherry Avenue and Thompson Street**	**TWSC**	**A**	**8**	**B**	**16**	**F**	**63**
10	Cherry Avenue and Park Street	TWSC	A	5	A	5	A	5
11	Cherry Avenue and Harrison Street	TWSC	A	5	A	6	B	23
12	Cherry Avenue and Academy Street	TWSC	A	7	A	7	A	8
13	Narrow Street and Cherry Avenue and Maple Street	TWSC	A	7	A	7	A	7

Note: Cells highlighted in **grey/bold** exceed the City's LOS standards. The intersection LOS standard is D, except for the intersection of Traffic Avenue/Fryar Avenue and Bridge Street/Main Street, which is LOS F.

As shown in Table 5-1, three of the study area intersections are forecast to operate below the City's and WSDOT's LOS performance thresholds in 2035 for the No Build Alternative. The three signalized intersections include Traffic Avenue at SR 410 eastbound ramps (Intersection No. 1), Traffic Avenue at Thompson Street (SR 410 westbound ramps) (Intersection No. 2), and Traffic Avenue at State Street (Intersection No. 3). Only Intersection No. 2 would have an increase in delay for more than 2 seconds with the Build Alternative compared to the No Build Alternative.

Two additional intersections are forecast to operate below the City's LOS performance threshold in 2035 for the Build Alternative (as shown in Table 5-1). The two additional intersections include the signalized intersection of Thompson Street at Station Lane (Intersection No. 8) and the TWSC intersection of Cherry Avenue at Thompson Street (Intersection No. 9).

With the No Build Alternative, the three intersections that operate below the City's and WSDOT's LOS performance thresholds are all on Traffic Avenue. This low performance is a result of traffic congestion spilling back from the over-capacity interchange at SR 410, specifically the one southbound lane on the bridge over SR 410.

With the Build Alternative, the new parking garage would add traffic volume to the already congested SR 410 interchange at Traffic Avenue. The additional traffic would lead to backups on Thompson Street approaching the interchange and would result in two intersections on Thompson Street near the parking garage exceeding the City's LOS performance thresholds.

The Traffic Avenue/Fryar Avenue and Bridge Street/Main Street intersection is over capacity in the No Build Alternative, and also experiences the effects of traffic congestion spilling back from the SR 410/Traffic Avenue interchange. The situation is similar in the Build Alternative, and the intersection operates with approximately 150 seconds of delay in both alternatives; however, the City's LOS performance threshold for this intersection is LOS F.

In both the No Build and Build alternatives, the congestion from the SR 410/Traffic Avenue interchange extends beyond the limits of the VISSIM model study area. At the end of the modeled peak hour, VISSIM accounts for the number of "unserved vehicles" that were not able to enter the study area; these vehicles are waiting in queues outside of the model study area. Therefore, an increase in the number of unserved vehicles indicates that delays are worsening. The No Build Alternative has approximately 470 unserved vehicles and the Build Alternative has approximately 540 unserved vehicles. If the VISSIM model study area were extended such that all queued vehicles were able to enter the modeled area, the delay at some intersections would increase. This delay increase is relative to the number of unserved vehicles; therefore, more delay would be expected for the Build Alternative compared to the No Build Alternative based on the additional unserved vehicles.

5.2.3.2 Travel Times

Average travel times from VISSIM along key corridors for the 2035 No Build and Build alternatives are summarized in Table 5-2. All of the segment travel times are forecast to increase over existing conditions for both alternatives in 2035.

Table 5-2. 2035 No Build and Build Alternatives Average Travel Times (minutes)

Segment	Direction	2014 Existing Travel Time	2035 No Build Alternative Travel Time	2035 Build Alternative Travel Time
Harrison Street to Shaw Road via Station Lane, Thompson Street, and Traffic Avenue	Southbound	5.0	5.4	8.6
Traffic Avenue – Shaw Road to Zehnder Street	Southbound	9.6	15.3	16.2
	Northbound	3.6	4.6	4.9

As discussed in Section 5.2.3.1 Intersection Operations, the SR 410 interchange at Traffic Avenue is over capacity in the No Build and Build alternatives, specifically the one southbound lane on the bridge over SR 410. The queue that spills back from the bridge extends north on Traffic Avenue past Main Street. When vehicles are exiting the Sounder Station after the arrival of a train, a queue also forms on Thompson Street. In the No Build Alternative the queue on Thompson Street spills back to Station Lane; in the Build Alternative, the additional volume from the new parking garage would result in the queue extending beyond Station Lane.

As shown in Table 5-2, the travel times on Traffic Avenue increase slightly with the Build Alternative; however, the travel time for vehicles exiting Sumner Station via Station Lane increases by over 3 minutes.

5.2.4 Public Transportation

No substantial changes to bus service at Sumner Station are anticipated in the future beyond the increases in intersection delay and roadway congestion that could occur over time. The bus routes summarized in Table 4-4 were assumed to remain the same. It is also expected that Sound Transit will coordinate bus service to match any changes in Sounder service.

5.2.5 Freight

No substantial changes to truck freight mobility and access are expected with this project beyond the increases in intersection delay and roadway congestion that could occur over time. Truck freight is expected to use the currently designated freight facilities for moving truck freight.

5.2.6 Rail Transportation

Except for the additional two southbound Sounder Trains during the evening commute, no changes to rail transportation were assumed. It is anticipated that freight traffic would continue to be minimal during the 3-hour evening commute period when Sounder trains are running.

5.2.7 Non-motorized Transportation

5.2.7.1 Pedestrians

Commensurate with the projected increased in riders, a portion is anticipated to be pedestrians. To provide safety, comfort, and convenience for these users, the project also includes potential pedestrian improvements that are shown in Figure 5-3. These potential pedestrian improvements were included with the project to be consistent with Sound Transit's System Access Policy, which encourages convenient and safe connections to Sound Transit services through all access modes. In 2012, Sound Transit prepared a Sounder Stations Access Study, which identified pedestrian improvements that could improve access to the station. This initial list of improvements was reviewed with City staff in a field reconnaissance. Based on City feedback, the program of potential improvements was modified to include the current proposal of upgrading curb ramps, installing an accessible pedestrian signal, providing additional street lighting, and completing or improving missing or substandard sidewalk links. The project may also add a potential pedestrian bridge across the BNSF tracks between the parking garage and the west platform. As mentioned earlier, the pedestrian facilities on Traffic Ave crossing SR410 is already extremely limited in terms of capacity, posing potential safety and comfort concerns. To address this, Sound Transit plans to contribute to interchange improvements at SR 410/Traffic Avenue which will include pedestrian improvements. These improvements would improve pedestrian safety, comfort, and convenience, but are unlikely to substantially affect pedestrian volumes.

5.2.7.2 Bicycles

Commensurate with the projected increased in riders, a portion is anticipated to be bicyclists. To provide safety, comfort, and convenience for these users, the project also includes bicycle improvements were also considered for the project, including additional bicycle parking at the station. Similar to the pedestrian improvements above, these potential improvements were included to be consistent with Sound Transit's System Access Policy. The list of improvements was reviewed with City staff in a field reconnaissance to determine the potential bicycle improvements. As mentioned earlier, the bicyclists facilities on Traffic Ave crossing SR410 is already extremely limited in terms of capacity, posing potential safety and comfort concerns. To address this, Sound Transit plans to contribute to interchange improvements at SR 410/Traffic Avenue which will include bicycle improvements. These improvements would improve cycling safety, comfort, and convenience, but are unlikely to substantially affect bicycle volumes.

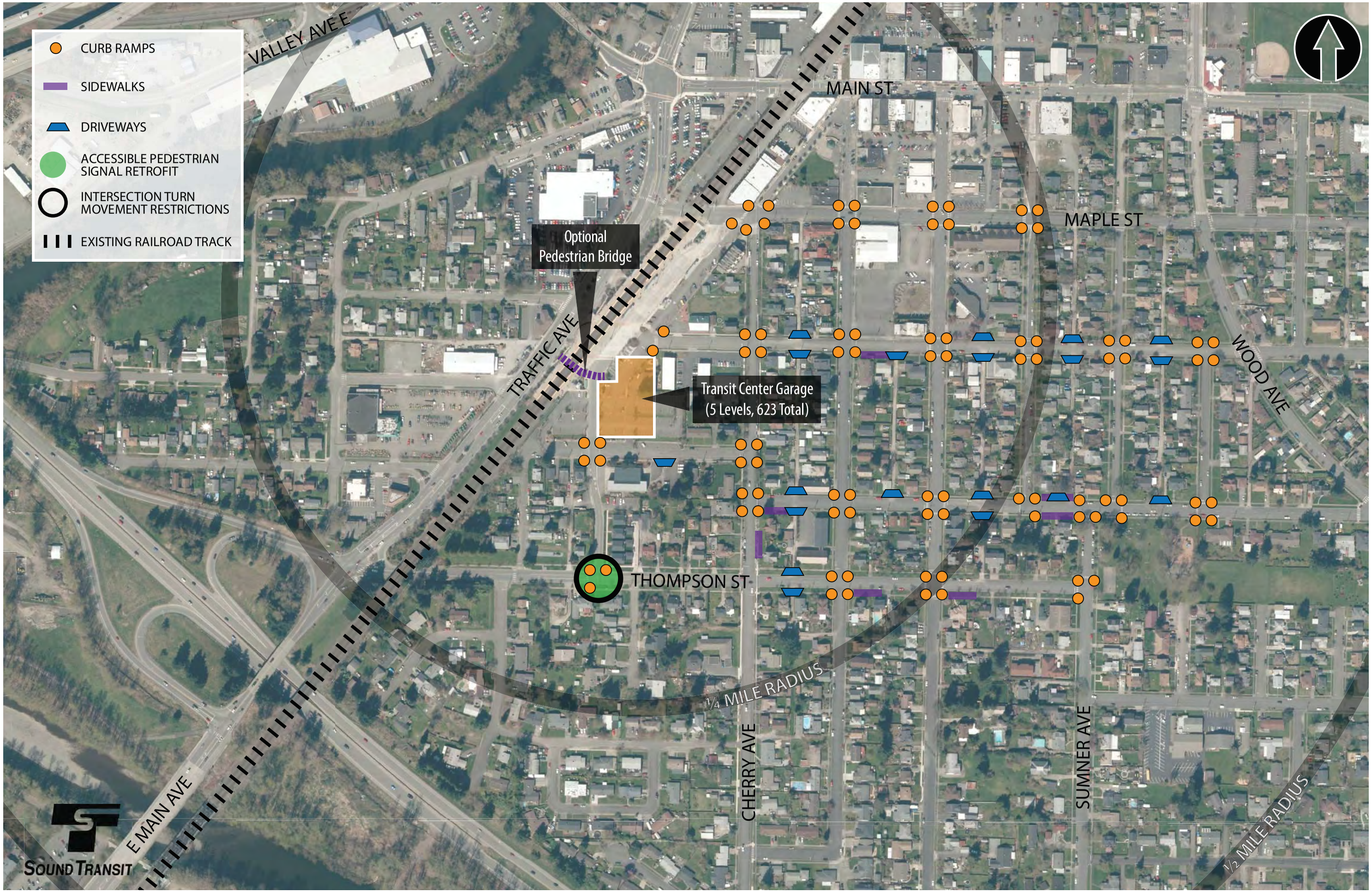

Figure 5-3. Summary of Proposed Improvements

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5.2.8 Parking

The proposed project would build a 623-space parking garage at the existing station that would provide a total of 857 available parking spaces.

As summarized in Appendix A, the following assumptions were made regarding future parking:

- New parking at or near the Sumner Station will be fully utilized shortly after opening of the new parking facilities (assumed to be in 2020).
- Enforcement measures would be taken so that station parking will only be used by transit riders (currently about 80 parking spaces are used by informal carpools).
- The majority of transit riders currently parking on city streets will park in new parking facilities, but the amount of transit riders parking on city streets will increase over time.

5.2.9 Safety

Traffic volumes at the study area intersections are forecast to be similar between the 2035 No Build and Build alternatives; therefore, the vehicle crash rates are expected to be similar at these intersections.

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6 CONSTRUCTION SEQUENCING AND IMPACTS

This chapter discusses and compares potential transportation mobility impacts resulting from construction of the Sumner Station improvements. The construction approach will be refined during the final design effort to establish the limits and parameters for various construction phases, contracts, and active work zones. Construction impacts identified in this chapter are estimated based on the level of design completed to date.

6.1 Construction Duration and Phasing

Construction of the Sumner Station improvements would result in temporary impacts on roadways, transit, sidewalks, and parking within the study area. The overall construction duration would be approximately 18 months.

Construction activities would be largely confined to the existing station site south of Academy Street. Construction of the parking garage will likely require that all current station activities south of Academy Street be suspended for the 18-month construction period.

6.2 Construction Impacts

Construction of the Build Alternative would affect local vehicle access, transit service, and non-motorized travel. These impacts would include increased congestion, traffic diversions caused by temporary road closures and detours, increased truck traffic associated with construction activity, and temporary changes in roadside characteristics that could affect safety. Impacts could also result from the intrusion of non-local traffic into residential areas as a result of temporary street closures and traffic detours, disruptions to vehicular and pedestrian access, and the temporary loss of on-street or off-street parking.

As part of normal construction planning and permitting, Sound Transit, WSDOT, and the City would work to minimize the duration and impact of lane closures and reductions by (a) maintaining through traffic, where practical, except for short-duration closures that would generally occur on nights and weekends; (b) establishing detour routes on nearby arterials for short-duration closures; and (c) maintaining traffic management systems.

A Maintenance of Traffic Plan that addresses all travel modes would be prepared at final design for approval and implementation during construction. This plan would include construction design drawings establishing physical and operating characteristics for staging, access, lane or shoulder closures and transitions, haul routes, traffic management, detours, lane modifications, and other construction zones or activities. The plan would incorporate established guidance for best practices to be applied during construction periods, many of which would be focused on reducing congestion impacts and minimizing safety hazards. For example, typical measures

would include providing signage, communicating traveler advisories, installing special lighting for work zones and travel lanes, scheduling work during reduced travel times, and establishing contractor requirements.

There are 195 existing parking spaces at the station, south of Academy Street. It is likely these spaces would be disrupted during construction. Vehicles parked at the station that are affected could temporarily shift to other nearby on-street parking, other nearby park-and-ride lots such as the Red Apple south lot and Bonney Lake Park-and-Ride, or change travel modes to access Sumner Station.

Parking for construction workers would be provided by the contractor or could occur on city streets where parking is unrestricted.

6.3 Haul Routes

Most construction-related trips would use SR 410 to access the site. Once off the freeway, construction-related trips would likely use Traffic Avenue to access the construction site. Specific haul routes would be identified as part of the Maintenance of Traffic Plan, minimizing cut-through traffic in residential neighborhoods.

7 INDIRECT AND SECONDARY IMPACTS

This chapter discusses indirect and secondary transportation impacts as a result of the Sumner Station improvements. As defined in 40 Code of Federal Regulations (CFR) § 1508.8, indirect impacts are "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems."

The completion of the improvements would improve parking at or near the Sumner Station and also improve non-motorized access and operations near the station. The increase in parking spaces would make using the Sumner Station more convenient and, thus, could result in an increase in ridership on the Sounder commuter train. More people riding the train could result in less growth of commuter-related congestion on roads that serve employment centers.

With more parking spaces at the station, additional Sounder commuters would be able to park at the station versus parking at off-site facilities or on the street, as many do today, which could free up parking around the station for uses other than transit.

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8 POTENTIAL MITIGATION MEASURES

This chapter describes the potential mitigation measures for transportation mobility impacts related to the Sumner Station improvements.

8.1 Potential Traffic Improvement Measures

For assessing potential traffic improvement measures, impacts were determined by comparing intersection LOS for the No Build and Build alternatives during the PM peak hour. The following criteria were used to identify traffic impacts related to the Build Alternative:

- Increase in traffic demand that results in unacceptable intersection operations according to the City's LOS standards (LOS E or F) at an intersection that operates acceptably (LOS D or better) under the No Build Alternative in 2035
- Increase in traffic demand at an intersection that increases delay by more than 15 percent at an intersection that operates unacceptably (LOS E or F) in the No Build Alternative in 2035

As shown in Table 5-1, under the Build Alternative two intersections degrade from an acceptable LOS (D or better) to an unacceptable LOS (E or F):

- Intersection No. 8 - Thompson Street and Station Lane (Signal)
- Intersection No. 9 - Thompson Street and Cherry Avenue (TWSC)

In addition, the intersection delay at the signalized intersection of Intersection No. 2, Traffic Avenue and Thompson Street (SR 410 westbound ramps), increases by more than 15 percent from 71 seconds of delay (LOS E) in the No Build Alternative to 84 seconds of delay (LOS F) in the Build Alternative.

As discussed in Section 5.2.3.1 Intersection Operations, congestion in the No Build Alternative is caused by the SR 410 interchange at Traffic Avenue, specifically the one southbound lane on the Traffic Avenue bridge over SR 410.

Although the intersection delays are forecast to increase along the Traffic Avenue corridor and on Thompson Street, the source of the congestion is the SR 410 interchange at Traffic Avenue and not the proposed parking garage. There are no other localized mitigation measures that would improve the specific intersections. Therefore, the proposed approach to addressing these intersections is to coordinate with the City on sequencing the Sumner parking garage and SR 410/Traffic Avenue improvements as described in Section 8.2.

The following design changes to SR 410/Traffic Avenue would improve intersection operations at all study area intersections to meet the City's performance thresholds, as shown in Table 8-1:

- Either widen the existing bridge or construct a new parallel bridge so that there are two travel lanes in each direction, plus provide adequate left-turn pockets approaching the ramp intersections
- Widen each of the two SR 410 off-ramps to provide three lanes approaching the ramp intersection

Table 8-1. No Build Alternative and Build Alternative plus SR 410/Traffic Avenue Improvements PM Peak Hour LOS

Intersection		Intersection Control	2035 No Build Alternative		2035 Build Alternative plus SR 410/Traffic Avenue Improvements	
No.	Name		LOS	Delay (sec.)	LOS	Delay (sec.)
1	**Traffic Avenue and SR 410 Eastbound Ramps**	**Signal**	**E**	**79**	C	24
2	**Traffic Avenue and Thompson Street (SR 410 Westbound Ramps)**	**Signal**	**E**	**71**	C	28
3	**Traffic Avenue and State Street**	**Signal**	**E**	**61**	A	5
4	Traffic Avenue and Maple Street	Yield	A	8	A	5
5	Traffic Avenue/Fryar Avenue and Bridge Street/Main Street	Signal	F	145	E	59
6	Maple Street and West Station Lot Driveway	TWSC	A	5	A	9
7	West Station Lot Driveway and Main Street	TWSC	C	17	A	10
8	Thompson Street and Station Lane	Signal	D	45	C	21
9	Cherry Avenue and Thompson Street	TWSC	B	16	A	7
10	Cherry Avenue and Park Street	TWSC	A	5	A	5
11	Cherry Avenue and Harrison Street	TWSC	A	6	A	0
12	Cherry Avenue and Academy Street	TWSC	A	7	A	6
13	Narrow Street and Cherry Avenue and Maple Street	TWSC	A	7	A	7

Note: Cells highlighted in **grey/bold** exceed the City's LOS standards.

The SR 410/Traffic Avenue interchange improvements described above would provide enough capacity to accommodate traffic volume at the interchange with considerably less congestion than even the No Build Alternative. With the interchange improvements for the 2035 Build Alternative, congestion would no longer extend beyond the limits of the VISSIM model study area, and the number of unserved vehicles would be zero. As a result, delays shown in Table 8-1 would remain the same, even if the study area was extended. However, with 470 unserved

vehicles, the 2035 No Build Alternative would have higher delays than those shown in Table 8-1 because the delays from the unserved vehicles are not included in the analysis.

Sound Transit is participating in a partnership with WSDOT and the Cities of Sumner and Puyallup to develop the design for the interchange improvements and obtain the funding to construct them. The City of Sumner is acting as lead agency. As part of the Sumner Station Access Improvements Project, Sound Transit would also contribute financially to support the non-motorized SR 410/Traffic Avenue interchange improvements in order to improve station access for bicycles and pedestrians.

The traffic evaluation also includes the following measures requested by the City of Sumner to reduce use of local streets by transit commuters:

- Reconfigure the internal roadways at Sumner Station so that 100 percent of the vehicles in the station south of Academy Street must exit southbound via Station Lane
- Prohibit southbound left turns at the Thompson Street/Station Lane intersection to direct all exiting traffic west to Traffic Avenue

The reconfiguration of the roadways near the Sumner Station, along with the prohibited southbound left turns at the Thompson Avenue/Station Lane intersection, would direct all traffic exiting the station south of Academy Street to use Traffic Avenue to access SR 410.

8.2 State Route 410/Traffic Avenue Project Coordination and Project Sequencing

Implementation of the Sumner Station Improvement project would be sequenced in conjunction with the funding, design, and construction of the SR 410/Traffic Avenue improvements, in coordination and as agreed to with the City of Sumner. The following monitoring activities would be in place to support the City's SR 410/Traffic Avenue project and Sound Transit's parking garage:

- Sound Transit would participate in the City of Sumner's SR 410/Traffic Avenue partnering group with members from the cities of Sumner and Puyallup and WSDOT. Objectives of the group include but are not limited to the following:
    - Support the City's effort to submit an Interchange Justification Report for WSDOT's review and approval.
    - Identify design and construction funding grant opportunities and apply for them.
- Any opening of the parking garage in advance of the completed SR 410/Traffic Avenue project would be in coordination with the City and as agreed to with the City.
    - For example, the parking garage could be opened in phases. For the first phase of opening, the number of parking spaces available to the community could be

the same as the number of spaces that were displaced as part of the project construction.

- For subsequent phasing, traffic would be monitored by Sound Transit and the City, as appropriate, at the following intervals:
  - During final design, Sound Transit would update the traffic analysis, including the traffic counts.
  - Prior to opening, traffic counts would be monitored by the City to confirm conditions.
  - Six months after opening of the garage, the City would monitor traffic conditions for review.
- Depending on the traffic counts, parking demand, and progress on the SR 410/Traffic Avenue project, Sound Transit and the City would consider temporary traffic control measures such as allowing left turns at Station Lane/Thompson Avenue.

8.3 Transit Mitigation

Transit mitigation would not be required because Sound Transit services will be maintained and enhanced by the Sumner Station improvements.

8.4 Freight Mitigation

The Sumner Station improvements would not require freight mitigation because truck routes and freight mobility would be maintained throughout the study area.

8.5 Rail Transportation Mitigation

Rail transportation mitigation would not be required because rail transportation service is not expected to experience adverse changes in operations with the completion of the Sumner Station improvements.

8.6 Non-motorized Mitigation

Non-motorized mitigation would not be required because pedestrians and cyclists are not expected to experience adverse changes in access with the completion of the Sumner Station improvements, nor would the potential investments adversely affect other pedestrians and cyclists in the station area. Improvements to the SR 410/Traffic Avenue interchange described above would have the added benefit of improving non-motorized access to the station.

8.7 Parking Mitigation

No parking mitigation would be required.

8.8 Safety Mitigation

Safety mitigation would not be required because safety throughout the study area for all travel modes will be improved with the completion of the Sumner Station improvements.

8.9 Construction Mitigation

As part of the proposed Sumner Station improvements, Sound Transit would finalize construction plans in coordination with the City during the final design and permitting phases of the project. All mitigation measures associated with constructing these improvements would comply with local regulations governing construction traffic control and construction truck routing. Potential mitigation measures for all modes during construction could include the following practices:

Traffic Operations

- Develop the Maintenance of Traffic Plan to conform to the Manual on Uniform Traffic Control Devices and to jurisdictional agency requirements for traffic control.
- Use lighted or reflective signage to direct drivers to truck haul routes to ensure visibility during nighttime work hours.
- Communicate public information about construction activities via print, radio, posted signs, websites, email, and direct communication with other agencies and affected parties to provide information regarding any required street closures, hours of construction, business access, and parking impacts.
- Coordinate access closures with affected businesses and residents. The contractor would be required to perform this task in coordination with Sound Transit staff. If access closures are required, then property access to residences and businesses would be maintained to the extent possible. If access to the property could not be maintained, the specific construction activity would be reviewed to determine if it could occur during non-business hours, or if the parking spaces and users of the affected access (for example, deliveries) could be provided at an alternative location.
- Provide detour, open for business, and other signage as appropriate.
- Post advance notice signs prior to construction in areas where surface construction activities would affect access to surrounding businesses.
- Provide regular updates to schools, emergency service providers, local agencies, solid waste utilities, and postal services, and assist public school officials in providing advance and ongoing notice to students and parents concerning construction activity near schools.
- Schedule traffic lane closures and high volumes of construction truck traffic during off-peak (including school peak) hours to minimize delays during periods of higher traffic volumes as much as possible.
- Cover potholes and open trenches, where possible, and use protective barriers to protect drivers from open trenches.

Parking

To mitigate the temporary loss of Sounder parking spaces during construction, Sound Transit would coordinate with local jurisdictions and transit providers to develop and implement plans for replacement parking and alternative access measures. Mitigation measures would include the following, as appropriate or other measures developed in coordination with the City of Sumner and Pierce Transit:

- Lease parking lots and/or new parking areas near the Station
- Redirect transit riders who use these locations to nearby park-and-ride lots.
- Use construction phasing strategies to build new parking facility and temporary parking spaces before the loss of existing spaces.
- Inform passengers about changes to parking space by using signage, website information, rider information systems, emails, and agency mailing lists.

Require the contractor to provide parking areas for construction workers. This may include providing remote parking with shuttle service to and from the construction site if sufficient on-site parking cannot be provided.

APPENDIX A

Traffic Operations Methodology and Assumptions Report for Sumner Station

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SUMNER STATION ACCESS IMPROVEMENTS PROJECT—TRAFFIC OPERATIONS ANALYSIS METHODOLOGY AND ASSUMPTIONS

Introduction

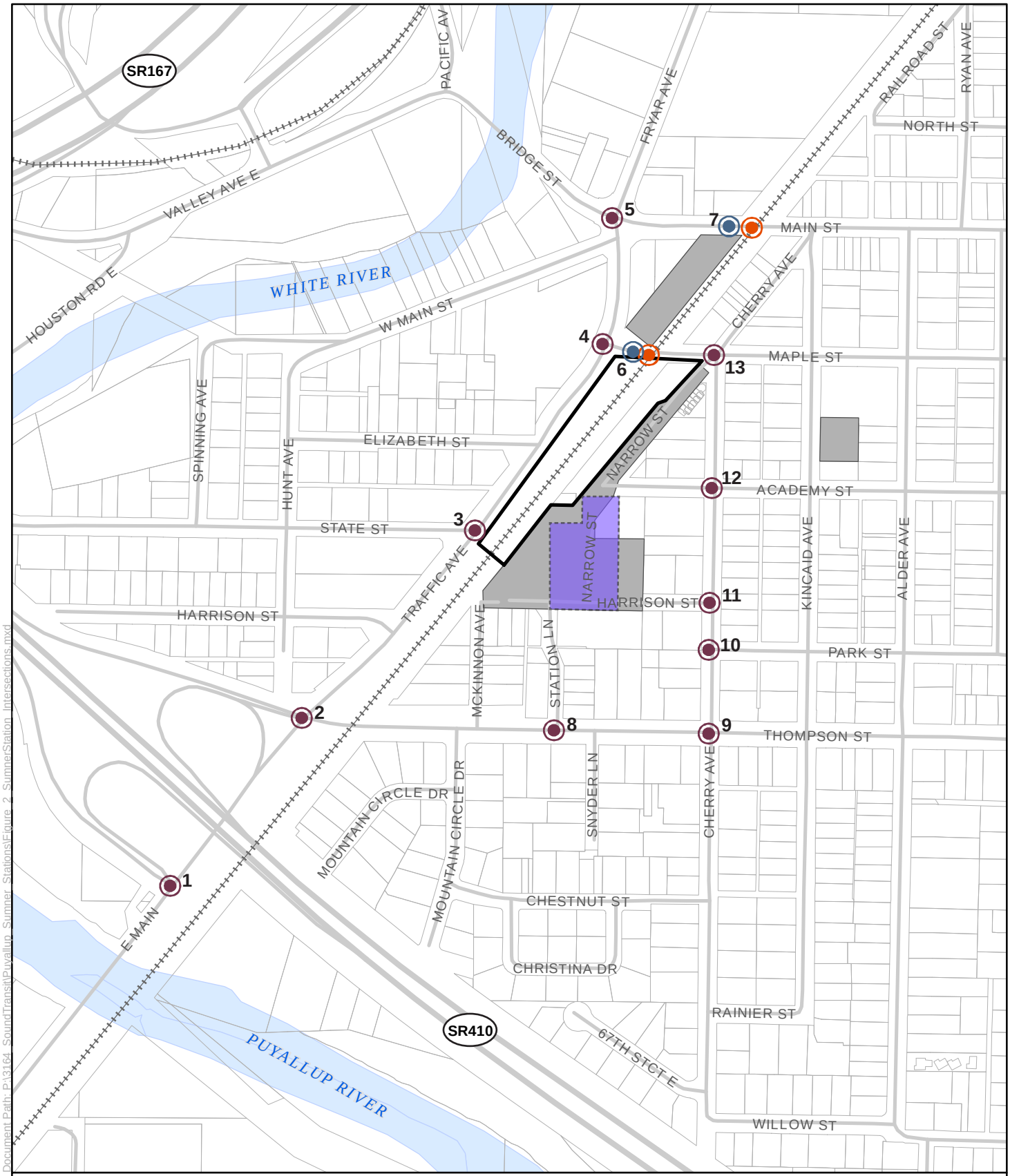
This technical memorandum describes the methods that will be used in the traffic operations analysis to be conducted as part of the environmental review for the Sumner Station Access Improvements Project. The analysis will evaluate the impacts and develop proposals to mitigate impacts, where warranted. The following sections describe the geographic boundaries of the study area, the data collection, the traffic operations analysis techniques and models, measures of effectiveness, and documentation.

Study Area

The proposed project would build a parking garage and pedestrian improvements near the Sumner Station.

Sumner Station

The Sumner Station is located between Maple Street and Thompson Street, as shown in Figure 1. The proposed project would build a parking garage at the existing station. Roadway segments and intersections to be analyzed were developed in coordination with City staff, and include the roadway network in the vicinity of the existing station area parking lots, the nearby railroad crossings, and all driveways to the existing station area parking lots.



SOUNDTRANSIT
RIDE THE WAVE

N

0 250 500 Feet

Analyzed Intersections

- Driveway Turn Movement
- Intersection Turn Movement
- Railroad Crossing

- Station Location
- Existing Parking
- Railroad
- New Parking Garage

Figure 1
Sumner Station
Study Area

Document Path: P:\3164 SoundTransit\Puyallup_Sumner_Stations\Figure_2_SumnerStation_Intersections.mxd

Data Collection

The purpose of the data collection effort is to understand the elements that affect the operational characteristics of the transportation network. This includes physical elements such as the number of travel lanes, traffic control (e.g., stop signs or traffic signal locations), non-motorized amenities, as well as non-physical elements such as speed and the vehicular volumes on the road at a given time. Data will be collected for the following components of the project:

- Physical characteristics of the existing transportation network, including roadway geometry, intersection control, traffic signal timing and phasing patterns, speed limits, bus stop locations, and the presence of on-street parking. Traffic signal information will be obtained from the agency responsible for signal operation, and verified in the field. All other physical characteristics of the transportation network will be obtained through a combination of aerial imagery and field observation.
- Turn movement counts will be collected at the locations identified in Figure 1. These include intersections, railroad crossings, and driveways. Counts will be collected from 3:30 to 7:00 pm, and will include the total number of vehicles, heavy vehicles, pedestrians, and bicycles. Typically, turn movements are aggregated into 15-minute periods, but since the Sounder train-related traffic fluctuates in shorter durations, traffic volumes will be aggregated in 1-minute periods.
- Daily (24-hour) traffic counts will be collected over a 3-day period at locations to be determined in conjunction with City staff.
- Parking surveys will be conducted to determine the number of Sounder train passengers that use off-street parking in areas near the Sumner Station. Sumner Station is also used as an unofficial carpool and vanpool meeting location, and a survey will be conducted to determine how many spaces at Sumner Station are used by carpools and vanpools.
- Existing transit routes and schedules that operate in the study area will be compiled.
- Data will be collected at rail crossings, including the gate closure time, the number of trains, the type of train, and the number of cars on the train. Current railroad preemption strategies applied to traffic signals affected by gate closures will be obtained from the City of Sumner.
- Funded improvements to the transportation network in the study area will be identified and applied to the future analysis.
- Existing and forecast Sounder train ridership and mode split data will be obtained from Sound Transit.

Analysis Techniques and Models

Overview

The existing physical and non-physical elements collected will be used to understand and analyze the existing transportation system. Forecasts of future conditions will also be developed and used to analyze how the proposed project will affect the transportation system in the future. Traffic operations models will be used to determine specific, measureable impacts to the future transportation system. After the specific impacts are understood, mitigation measures will be developed to address impacts, and the traffic operations models will be used to confirm that the proposed mitigation measures would be effective. The following sections describe the methodology used to determine direct and cumulative impacts on transportation.

Transportation Analysis Years

The transportation analysis will focus on the following time periods:

- Existing Year – 2014
- Design Year – 2035

Study Time Period

The analysis will include the evening commute period because that is the time period when the Sounder train has the greatest impact on the local transportation system. The evening commute produces impacts because vehicle traffic exiting the station increases substantially for short periods following the arrival of each Sounder train as many Sounder train passengers exit the train at one time, get into their vehicles, and drive away. In contrast, during the morning commute, vehicle traffic entering the station is relatively steady because Sounder train passengers arrive at the station over a longer period of time prior to the departure of each Sounder train.

The short-duration surges in traffic volume that occur after the arrival of each Sounder train during the evening commute have a greater impact on the surrounding transportation network than the comparatively steady traffic volume accessing the station during the morning commute. Also, traffic volumes are typically higher during the evening commute period compared to the morning commute period.

Turn movement counts will be collected at the study intersections shown in Figure 1 from 3:30 to 7:00 pm. The turn movement counts will be used to determine which hour of the evening commute experiences the highest traffic volumes, and this 1-hour period will be analyzed, including the surges in traffic.

Travel Modes

The transportation networks in the vicinity of Sumner Station support a variety of travel modes, including passenger cars, freight, buses, pedestrians, and bicycles. The rail lines support Sounder train service, freight trains and Amtrak service. The following travel modes are included as part of this study:

- Vehicular traffic—Travel patterns associated with the following trip types will be a part of the travel forecasts:
  - Local Traffic – Passenger vehicles on the roadway network that do not access Sumner Station.
  - Park-and-Ride Traffic – Vehicles on the roadway network that park at one of the designated Sumner Station parking lots.
  - Kiss-and-Ride Traffic – Vehicles on the roadway network that drop off or pick up passengers at the Sumner Station.
  - On-street Parking Traffic – Vehicles on the roadway network that use on-street parking near the Sumner Station.
  - Carpools and Vanpools – Vehicles on the roadway network that use the Sumner Station as an unofficial location to meet for carpooling and vanpooling.
  - Truck Traffic – Freight traffic on the roadway network that do not access Sumner Station.
- Bus Transit—Sound Transit bus routes that provide access to Sumner Station during the evening commute are listed in Table 1.
- Rail Traffic—The rail lines used by the Sounder train also support freight train and Amtrak passenger service. Rail traffic delays vehicles at the crossings, causing congestion.
- Pedestrian and Bicycle Traffic—This type of travel will also be included in the analysis at the study intersections, primarily to determine the effect it has on the other travel modes.

Table 1. Bus Routes that Serve the Sumner Station

Service Provider and Route		Frequency	Station Served/Route Notes
Sound Transit			
578	Between Puyallup and Seattle	30 minutes	Serves Sumner Station. No southbound service provided during evening commute.
596	Between Sumner and Bonney Lake	20–30 minutes	Serves Sumner Station. Buses coincide with Sounder trains.

Alternative Scenarios Traffic Volume Development

This section describes the strategy for developing traffic volumes for the study area for the existing year (2014) and future year (2035) No Build and Build alternatives.

Existing Year Volumes

Existing year traffic volumes will be based on the turn movement counts collected in the study area. The turn movement counts collected at the driveways will be compared to the Sounder train schedule to determine how much the traffic volumes increase following the arrival of Sounder trains, and the duration in which the volume increase lasts. The turn movement counts collected at the driveways to the stations, along with the parking survey data, will be used to determine what portion of the existing traffic on the transportation system is related to the Sounder train service.

Traffic volumes will be divided into the following categories:

- Park-and-ride trips
- Kiss-and-ride trips (drop-off and pickup)
- On-street parking trips (Trips related to the Sounder train station)
- Bus trips
- Carpool or Vanpool trips (Trips that use the Sounder train station as a carpool or vanpool meeting location, but do not ride the train)
- Local traffic trips (Trips not related to the Sounder train station)

This information will be used to model the surges in traffic volumes that occur on the local system as the Sounder trains arrive and depart.

Future Year Volumes

Future year traffic volumes will be developed for a No Build Alternative and a Build Alternative for each station area. The assumed growth in local traffic volume of 0.7 percent

annually (for trips unrelated to the stations) will be the same for the No Build and Build alternatives based on growth rates from the Puget Sound Regional Council.

The Sounder train-related traffic volumes will be different between the No Build and Build alternatives because the proposed project would increase parking capacity and traffic activity near the station areas. For purposes of traffic analysis, all available parking will be assumed to be utilized in 2035. Also, it is assumed that the carpool and vanpool meeting location will occur at another location, and that all vehicles parking in the Sounder Station will be taken by train commuters.

Currently in the evening commute, Sounder trains run southbound on 20- to 30-minute headways, for a total of eight southbound trains arriving at the Sumner Station between 3:47 and 6:47 pm. By year 2035, Sound Transit could add two peak southbound trips to the evening commute. This would allow a Sounder train to run every 20 minutes during the entire 3-hour peak period. A number of variables would affect future vehicular traffic volumes from Sounder passengers returning on the 10 trains:

- Total number of Sounder riders
- Portion of riders able to park at the station
- Portion of riders leaving the station by other modes than parking at the station
- Distribution of riders by mode and by time of return

The assumptions on these variables are outlined in Attachment A.

Traffic Operations

A common method of measuring traffic operations is level of service (LOS), a scale ranging from A to F, to designate the LOS depending on the delay conditions at the intersection. LOS A represents the best conditions with minimal delay and LOS F represents the worst conditions with severe congestion. LOS ratings are based on the ratio of actual traffic volumes to traffic capacity of the intersection or roadway being studies. Table 2 lists the intersection LOS delay thresholds for signalized and stop-controlled intersections.

At signalized intersections, LOS is calculated based on the delay of all vehicles entering the intersection. At stop-controlled intersections, the LOS is calculated based on the worst stopped approach. The delay thresholds are also lower for stop-controlled intersections because driver behavior considerations make delays at stop-controlled intersections more onerous. For example, at a signalized intersection, drivers may relax during the red interval while waiting for the green interval, but drivers on the stopped approach of a stop-controlled intersection must remain attentive to the task of identifying acceptable gaps in oncoming traffic.

Table 2. Level of Service Thresholds

	Average Control Delay per Vehicle (seconds)	
Level of Service	**Signalized Intersections**	**Stop-controlled Intersections**
A	≤ 10	≤ 10
B	> 10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

Note: The LOS criteria are based on control delay, which includes initial deceleration delay, queue move-up time, stopped delay, and final deceleration delay.

Agency Thresholds

The City of Sumner has a Level of Service (LOS) standard of LOS D for intersections, with one exception: the Traffic Avenue/Fryar Avenue and Main Street intersection standard is LOS F.

Analysis Tools

Two analysis tools, Synchro and VISSIM, will be used to capture the impacts of the proposed project. The tools are described in more detail below. Synchro is useful for calculating intersection LOS and delay and optimizing signal timing plans, however this project includes elements that would not be captured in a typical intersection LOS analysis. Trips generated by the Sounder Station occur in short duration surges, with high vehicle flows for short periods of time after the arrival of a train, and low vehicle flows between train arrivals. VISSIM can be used to explicitly model these short duration surges in vehicle and non-motorized traffic. There are also two rail crossings in the study area, and the Sounder Trains and freight trains can also be explicitly modeled in VISSIM. Finally, there are closely spaced intersections in the study area and VISSIM will capture the effects of queues from one intersection extending back to upstream intersections.

Synchro

A Synchro (version 9.0) model of the transportation network in the study area, identified in Figure 1, will be developed. Synchro is a macroscopic analysis and signal timing optimization software. Synchro implements the methods of the Transportation Research Board's 2010 Highway Capacity Manual. These methods calculate capacities at intersections based on the geometric configuration and signal timing at the intersection. The traffic volume approaching the intersection is compared with the available capacity, and this relationship is used to calculate vehicle delay. Synchro will be used to optimize signal timing plans for the future scenarios with and without the proposed project.

VISSIM

A VISSIM (version 7.00) model of the study area (see Figure 1) will be developed using the data described in the previous sections. VISSIM is a microscopic simulation software for modeling and analyzing multimodal transportation systems. VISSIM models individual vehicles on the transportation network. Each vehicle interacts with the vehicles around it and with network elements (such as signals and stop signs) as it travels through the network. Pedestrians, bicycles and trains are also modeled so the impact of these modes on the transportation system is captured. VISSIM also provides a highly flexible framework for modeling traffic volumes that can accurately capture the short duration increases in traffic flow that are associated with vehicles exiting the parking lots after a Sounder train arrival.

The VISSIM model will capture the effects of the short duration increases in traffic flow associated with the Sounder passengers exiting the station, and account for the effects the rail crossings have on the transportation system. VISSIM provides a high degree of flexibility for reporting measures of effectiveness that can accurately describe the full impact of short duration increases in volume will have on the overall transportation system. The following measures of effectiveness will be used to calibrate the existing conditions VISSIM models and determine the effects the proposed project would have on the transportation system:

- Travel times and travel speeds on primary corridors and routes to and from the stations
- Maximum queue lengths at intersections, driveways, and rail crossings
- Vehicle throughput on primary corridors and at station access points

The existing VISSIM models will be calibrated to accurately reflect conditions during the weekday evening commute period using the measures of effectiveness and criteria listed in Table 3.

Table 3. VISSIM Calibration Criteria

Calibration Measure	Location	Criteria
Travel Time	Traffic Avenue northbound Traffic Avenue southbound	< 10% or 1 minute, whichever is greater
Vehicle Throughput	All entry and exit locations	All locations GEH < 3
	Traffic Avenue segments	85% of locations GEH < 5
Vehicle Queues	All intersections on Traffic Avenue	Match field observation

Note: The GEH statistic is a formula used to compare two data sets. Traffic volume flows vary widely, and using a single percentage for an acceptance threshold can be problematic because the threshold for relatively low volumes is too strict and the threshold for relatively high volumes is too lax. The GEH statistic is non-linear, allowing a single acceptance threshold to be used. In the equation below, M is the traffic volume in the model, and C is the traffic volume counted in the field.

$$GEH = \sqrt{\frac{2(M-C)^2}{M+C}}$$

A key factor when calibrating a microscopic simulation model is developing the correct capacity for vehicle flow rates. Typically, the default driving behavior parameters in VISSIM result in a roadway capacity much higher than conditions in the field, and must be adjusted to decrease vehicle flows in the model. The primary parameters in VISSIM that affect vehicle flow, which will be adjusted, are the average standstill distance, the additive part of safety distance, and the multiplicative part of safety distance. These three factors will be adjusted so that at known capacity constraints the vehicle flow in the model matches vehicle flow in the field.

Intersection control, such as traffic signals and stop signs, also have an effect on roadway capacity. Traffic signal timing plans will be obtained from the City of Sumner, and the Washington State Department of Transportation (for the intersections at the SR 410 interchange in Sumner), and coded in the model. At stop-controlled intersections, and at permitted movements at signalized intersections, gap acceptance becomes an important factor. Similar to the driving behavior parameters, the default gap acceptance parameters in VISSIM's priority rules and conflict areas result in higher vehicle flows than are typically found in the field. The gap acceptance parameters will be adjusted so that the model meets the calibration criteria listed above.

No changes to the roadway network in the future year alternatives are expected to change the roadway capacity. The adjusted parameters used to calibrate the existing conditions in the VISSIM model will be held constant in the future year models. However, signal timings will be optimized for future year traffic volumes. VISSIM will be used to calculate the intersection delay and corresponding intersection LOS.

Measures of Effectiveness

The following measures of effectiveness will be summarized for the evening commute period operational analysis:

- Intersection LOS
- Average vehicle delay by intersection
- Average travel time on key corridors

Identification of Operational Impact

The following criteria will be used to identify impacts caused by the implementation of the Build Alternative. For vehicular traffic, impacts will be determined by comparing LOS for the No Build and Build Alternatives during the evening commuter period. The Build Alternative will consider mitigation if it would do any of the following compared to the No Build Alternative:

- Cause an increase in traffic demand that results in unacceptable (LOS E or F) operations at an intersection that operates acceptably (LOS D or better) under the No Build Alternative in 2035.
- Cause an increase in traffic demand at an intersection that increases delay by more than 15 percent at an intersection that operations unacceptably (LOS E or F) in the No Build Alternative for 2035.

Documentation

The transportation data gathering and analysis will provide information about the project's affected environment, potential impacts (construction, operation, and cumulative), and potential mitigation measures to address impacts associated with the Build alternatives. This information will be documented through the following deliverables:

- Traffic Operations Analysis Technical Memorandum
- Environmental checklist section

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ATTACHMENT A

Future Ridership Distribution for Sumner Station

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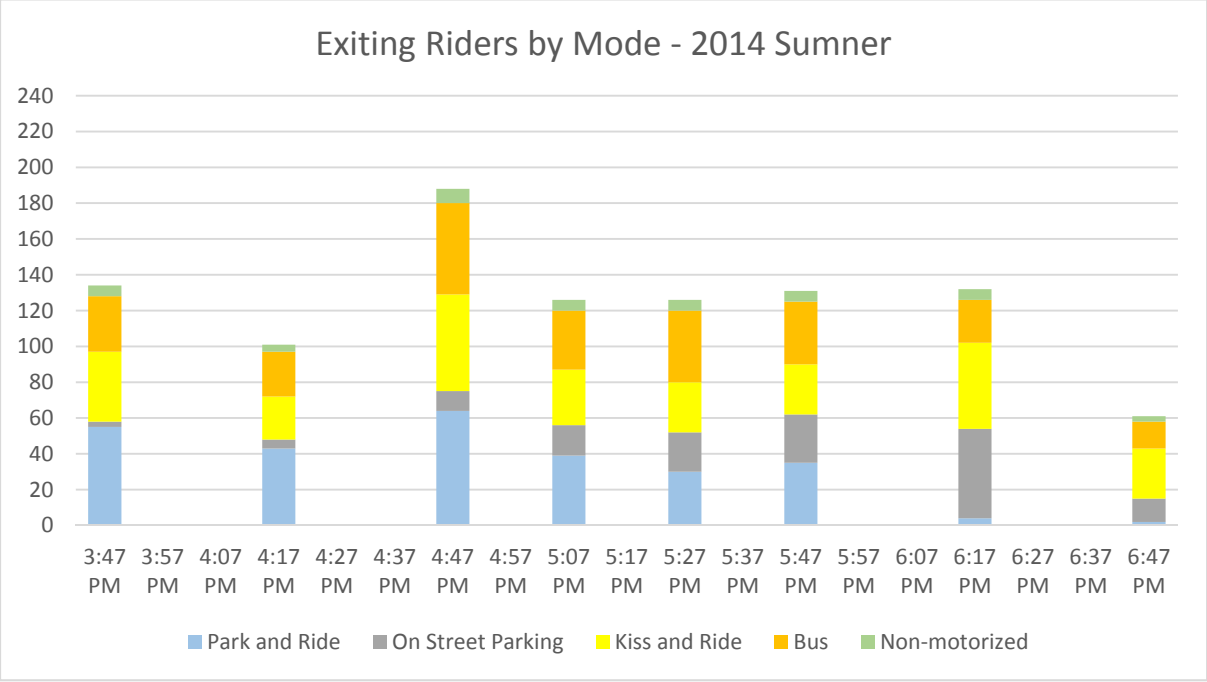
The purpose of this appendix is to summarize the assumptions related to future ridership volumes and the mode by which riders will access the stations after parking is expanded.

Existing Ridership and Mode Split

Sounder service from the Sumner Station has been very popular, and demand for parking is much greater than the supply. As a result, parking at each station is full around 5:30 am before the second morning train. In addition to parking at the station, riders use several other modes of access:

- Bus
- Kiss-and-ride
- Non-motorized (walk and bike)
- Parking on city streets

Based on automated passenger count (APC) data and detailed traffic counts in the fall of 2014, there were 999 riders exiting the 8 peak-direction trains in Sumner, and leaving the station area by the various modes as shown below:



As shown in the chart above, trains are spaced at approximately 30-minute intervals in the first hour and third hour of the commute window, and spaced at 20-minute intervals in the second hour. (Some current arrival times have been adjusted by 1 minute to keep the intervals even).

Future Ridership Projection

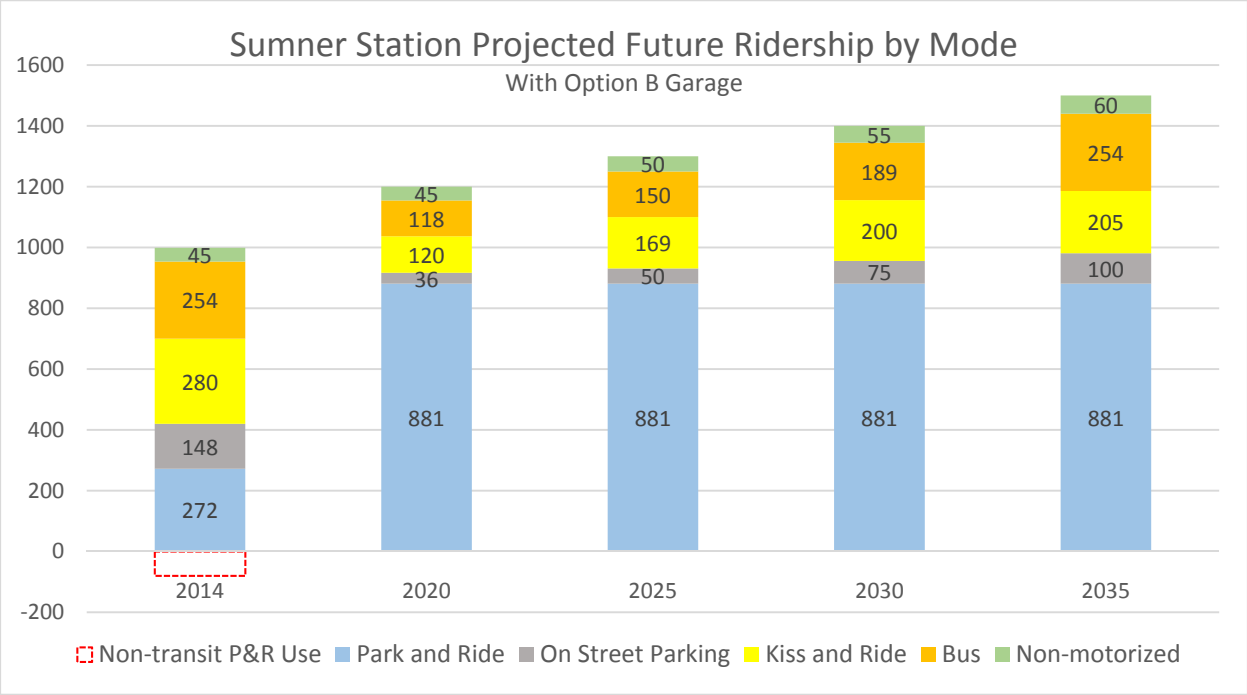
Ridership projections for the year 2035 were made by Bob Harvey of Sound Transit, and communicated via email on August 1, 2013 for use by Parametrix (the "consultant" mentioned below). Key points in this guidance included:

- "The consultant should treat the Sounder markets for the Sumner and Puyallup stations as a single market.
- The consultant should use the station boarding estimates for 2035 that are currently assumed by Sound Transit as the base for any analysis of access mode shares (e.g., for Sumner and Puyallup, this is the combined weekday total of 3,100 that we have already discussed with them).
- The 3,100 may be apportioned between Sumner and Puyallup using the current ridership distribution between the two stations, as available from the most recent Sounder station-level count data (Mike Bergman, Service Planning).
- The consultant will propose various methods to describe likely changes in access shares related to differing potential Sound Transit investments in station access improvements and select a combination of methods that best addresses the evaluation criteria described in the scope of work."

The guidance above is a refinement of the ridership forecast contained in Sound Transit's Sounder Stations Access Study, completed in 2012. Based on the total ridership forecast of 3,100 riders between the two stations, and the observed split of riders in 2014, the analysts have rounded to the nearest hundred and used 1,600 riders per day in Puyallup and 1,500 riders per day in Sumner.

Future Distribution by Mode

The strong demand for parking makes it likely that new parking areas will fill fairly soon after they are brought on line, and that many riders who own cars will begin parking at the station rather than using one of the other modes. This likelihood is represented graphically below for the Sumner Station. The scenario below shows the potential growth in riders and shifts in access mode in the timeframe between 2020 (assumed year of opening) and 2035 with the largest addition of parking currently being considered.



The ridership estimate in the chart illustrates some basic assumptions for the future year traffic analysis:

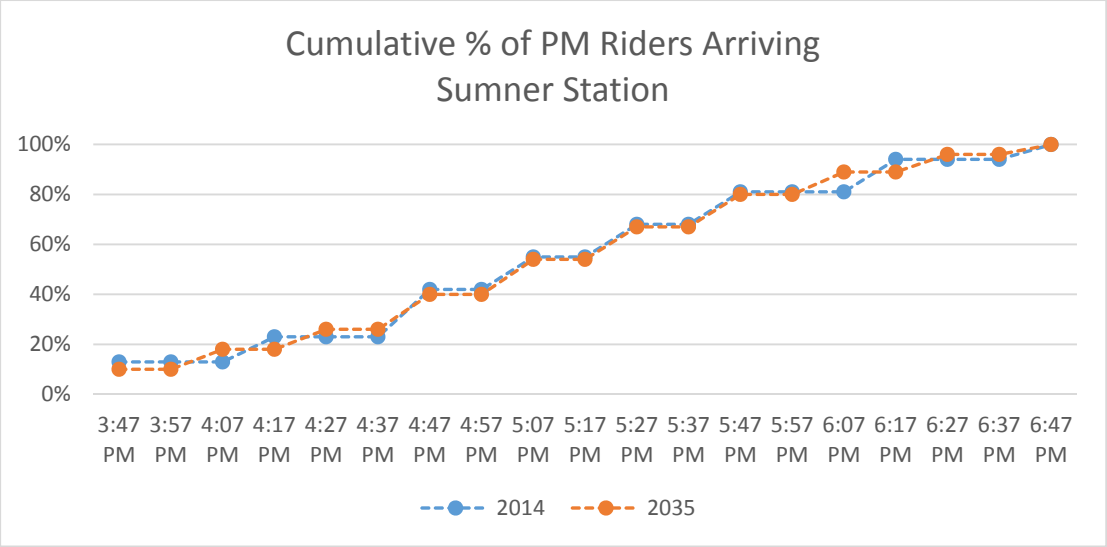
1. The total Sounder ridership in 2035 will be 1,500. This number does not depend on how much parking is available.
2. Ridership will grow linearly between 2020 and 2035.
3. New parking at the station will be full shortly after opening (assumed open by 2020).
4. Enforcement measures will be taken so that station parking will only be used by transit riders (currently about 80 spaces are used by informal carpools in Sumner).
5. The majority of riders parking on city streets will move into station parking, but some will remain on city streets.
6. The majority of current bus riders own cars, and will drive their cars rather than riding the bus if convenient parking is available.
7. After dropping initially, bus usage will rebuild to current volumes by 2035.
8. The majority of current kiss-and-ride riders own cars, and will drive their cars rather than getting a ride if convenient parking is available.
9. After dropping initially, kiss-and-ride volume will rebuild to over 200 by 2035.
10. The number of riders walking or biking to the station will increase slightly by 2035.

These assumptions are key to estimating traffic volumes for the future condition in the station area. The kiss-and-ride volumes are especially important, because they generate a round trip in the peak hour rather than a one-way exiting trip.

Future Distribution by Arrival Time

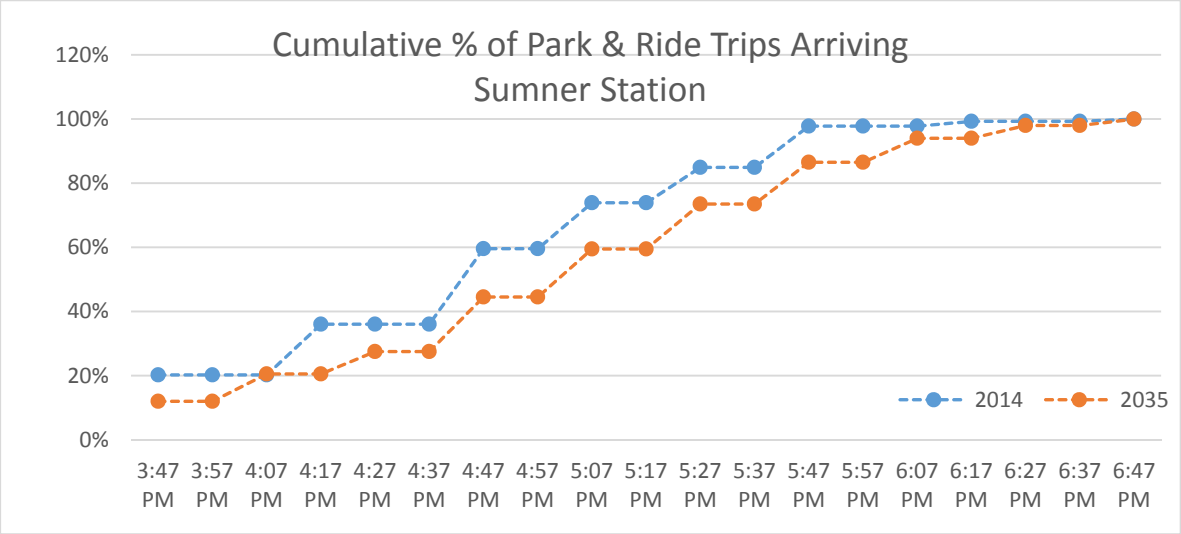
In addition to projecting the total future ridership and the mode split of those riders, it is necessary to estimate the time that riders will return to the station in the 3-hour evening commute window. There are currently 8 peak-direction (southbound) trains. In the 2035 planning year, there are planned to be at least 9, and potentially 10 peak-direction trains in the 3-hour window. For purposes of this analysis, the assumption is 10 trains.

The chart below shows the distribution of riders returning to the Sumner Station, expressed as a cumulative percentage of the riders that have returned by a particular time in the 3-hour period. Note that the future train arrivals are assumed to be spaced at 20-minute intervals.

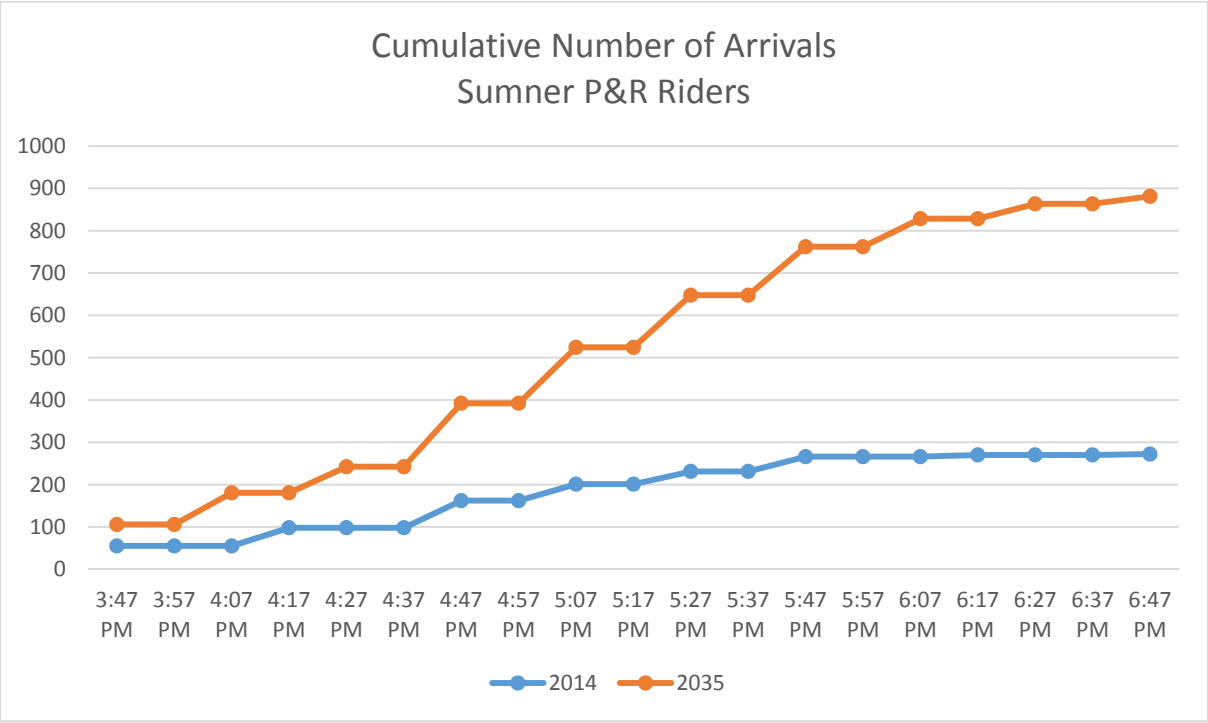


The 2014 line is based on data from the APC sensors at the train doors and the 2035 line is an assumed projection. *The key assumption is that distribution of return times in 2035 will be very similar to 2014.*

There is reason to think that the distribution *by mode* may be different in 2035 than it was in 2014. Data show that at stations with a larger supply of parking, the park-and-ride usage occurs later in the day than it does in Sumner. This is reasonable, because almost everyone currently parking at the station in Sumner is arriving in Seattle before 6:30 am; most commuters would choose to start their work days later if they had a reasonable commute option. The chart below shows an assumed distribution of the time Sounder riders who park at the station will return to the station in the evening.

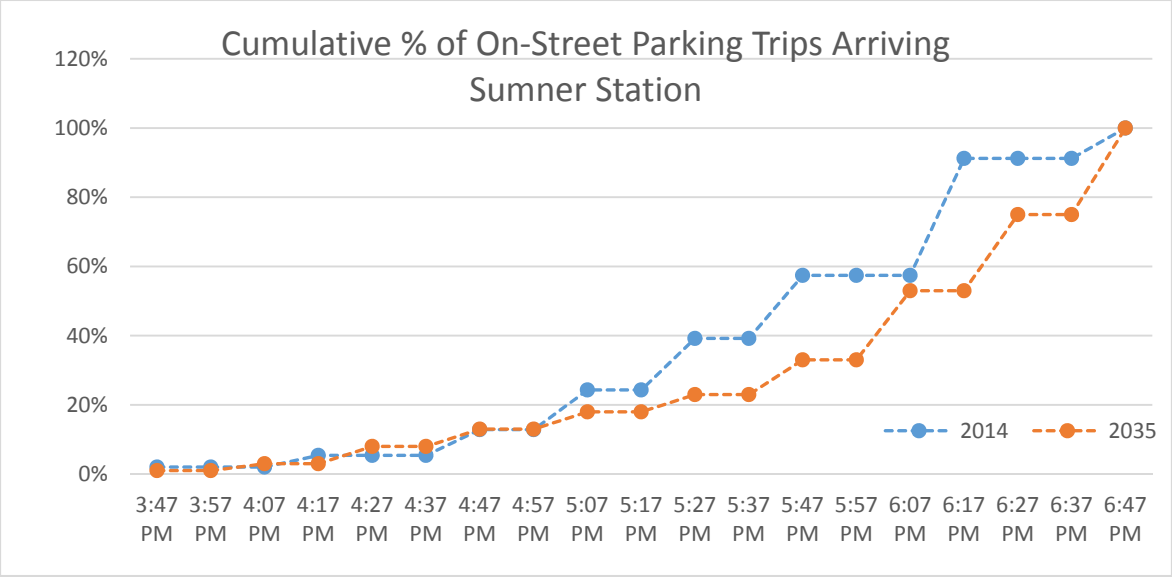


In 2014, 98 percent of the Sounder riders who parked at the station had returned by 5:47 pm. This is understandable, because a person who left Sumner on the first train at 5:12 am and returned on the 6th train at 5:47 pm would have spent more than 11 hours in Seattle. The projection for 2035 shown above assumes that with a greater supply of parking, the average person parking at the station will start their day later, and the later start will result in a slightly later return in the evening. *The key assumption is that the average arrival time of riders who parked at the station will be approximately 20 minutes later in 2035 than it was in 2014.* Assuming the distribution of park-and-ride riders shown above by percent results in the distribution by number of riders below.



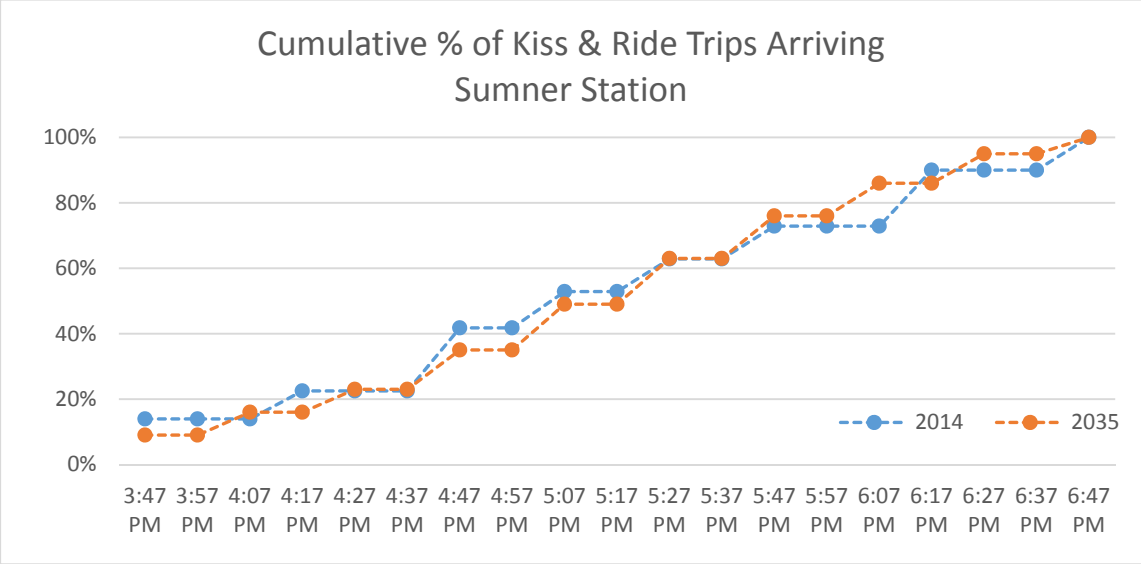
This chart illustrates that even with a later average return time, there will be higher absolute numbers of park-and-ride riders who have returned even in the earliest parts of the 3-hour commute window.

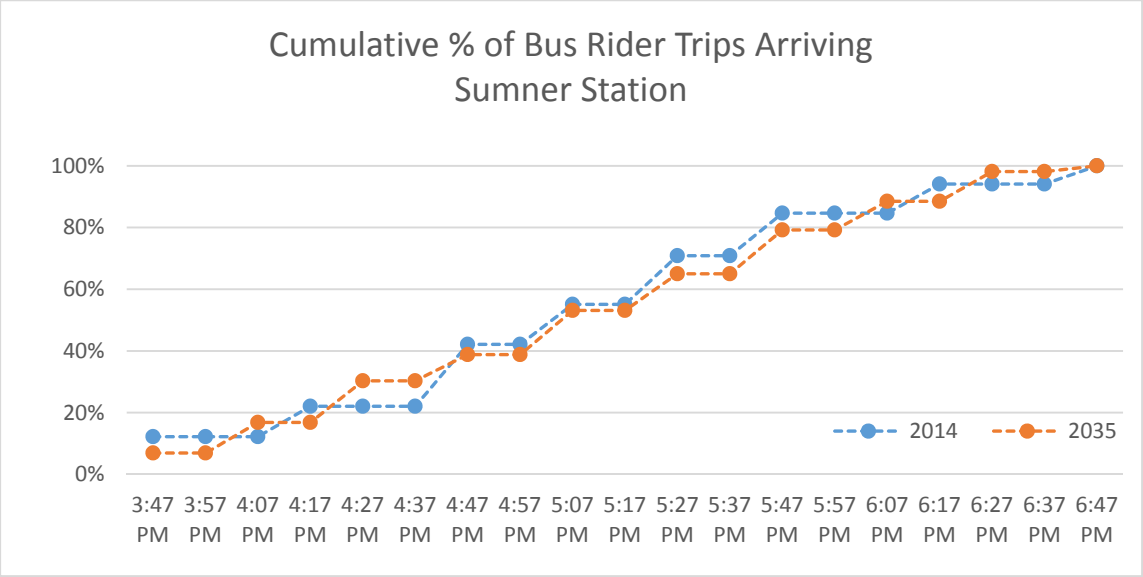
The assumed distribution of riders parking on city streets is shown below.

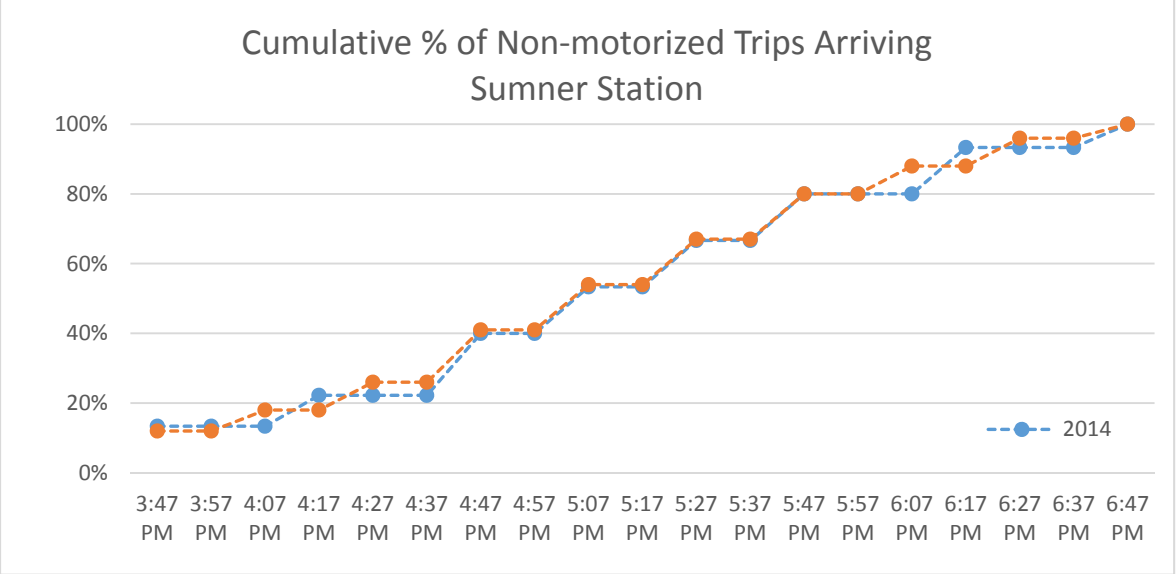


The key assumption is that the distribution in 2035 will be weighted more toward the later trains than it was in 2014, because the greater supply of parking at the station will reduce the need to arrive very early to park.

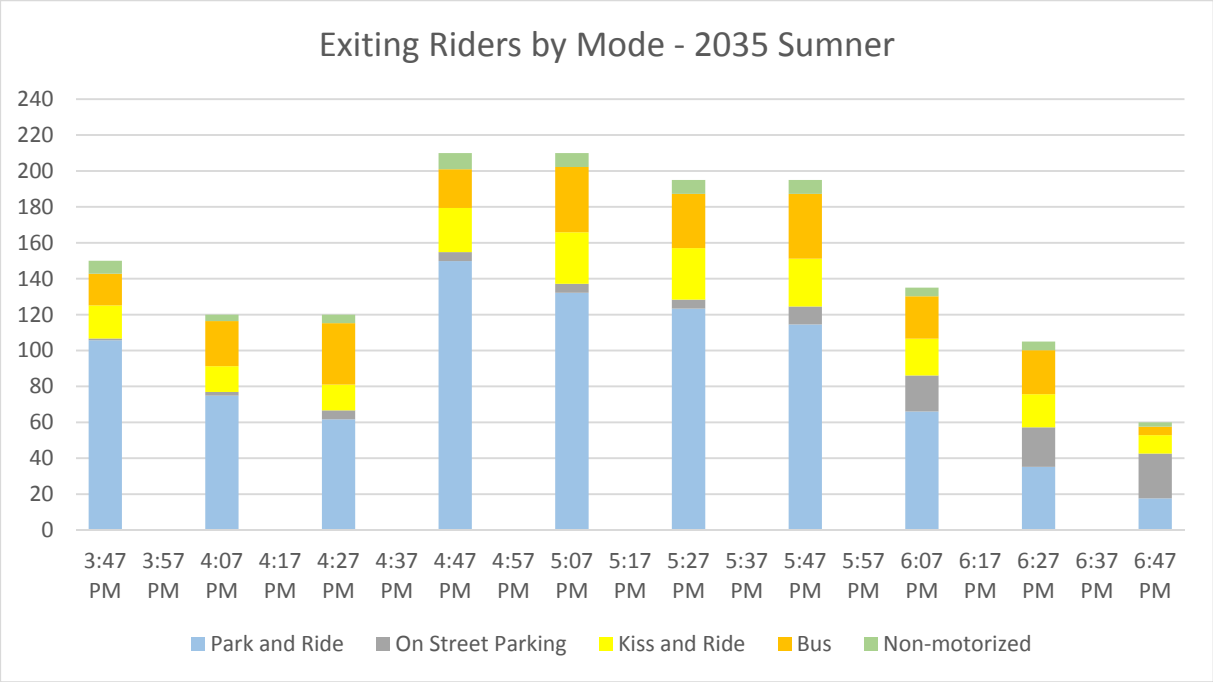
The assumed distribution of the other access modes in 2035 is very close to what it was in 2014, as shown in the following charts:







Combining the projections of total future ridership, mode split, and time distribution by mode, the chart below illustrates the assumed distribution of peak-direction riders returning to the Sumner Station in 2035.



This distribution will be a key input to the future-condition VISSIM model.

APPENDIX B

Non-Motorized Methodology and Assumptions Report for Sumner Station

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SUMNER STATION ACCESS IMPROVEMENTS PROJECT—NON-MOTORIZED ANALYSIS METHODOLOGY AND ASSUMPTIONS

Introduction

This technical memorandum describes the methods that will be used in the non-motorized analysis to be conducted as part of the environmental review for the Sumner Station Access Improvements Project. The analysis will evaluate the impacts and develop proposals to mitigate impacts, where warranted. The following sections describe the geographic boundaries of the study area, the data collection, the non-motorized analysis techniques, measures of effectiveness, and documentation.

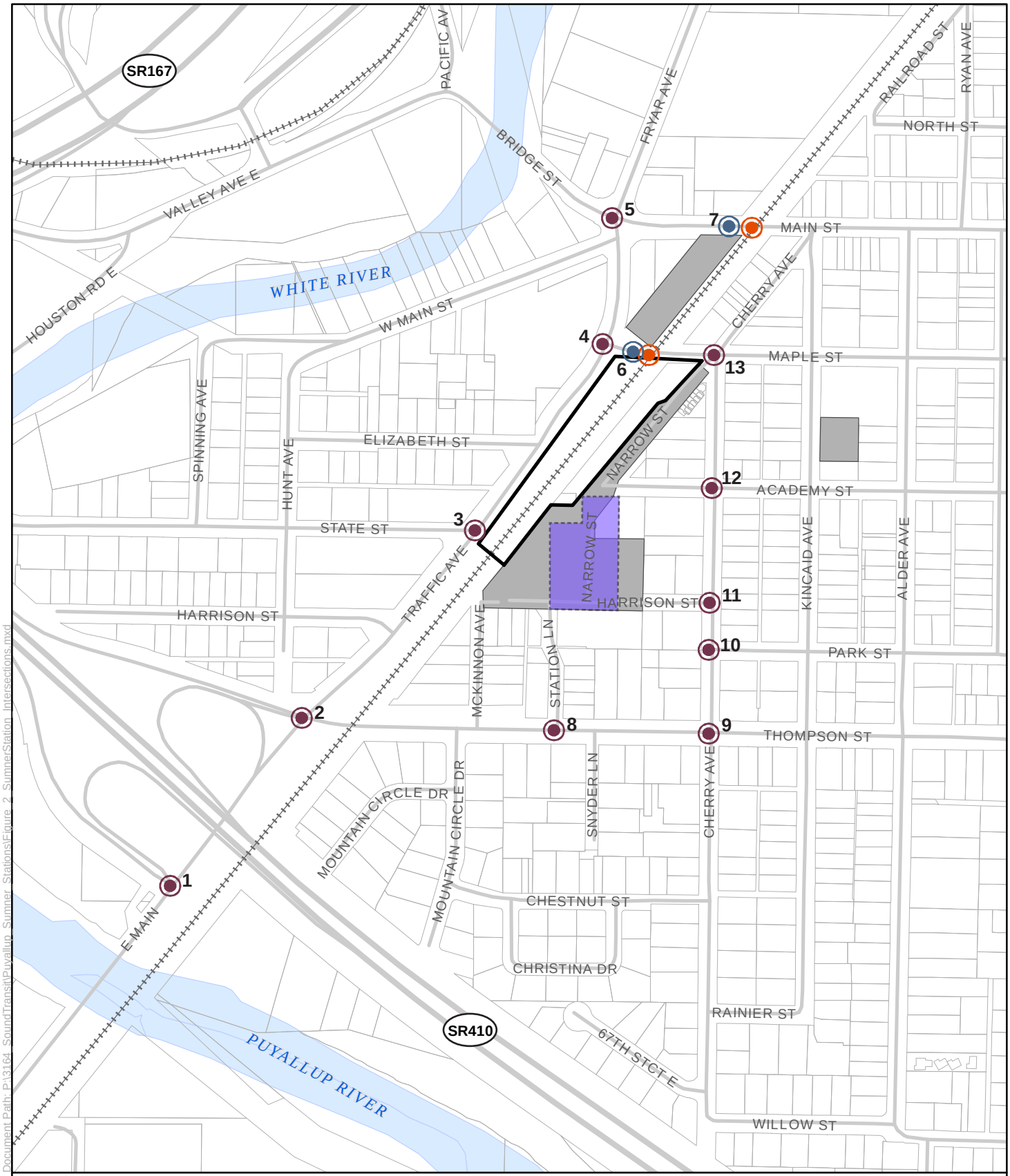
Study Area

The proposed project would remove an existing parking lot and construct a parking garage at the Sumner Station.

Sumner Station

The Sumner Station is located on Traffic Avenue between Maple St. and Harrison St, as shown in Figure 1. The proposed project would remove an existing surface parking lot and build a 600+/- space parking garage.

The study area is a ¼ mile radius for pedestrian access and a ½ mile radius for bicycle access.



SOUNDTRANSIT
RIDE THE WAVE

N

0 250 500 Feet

Analyzed Intersections

- Driveway Turn Movement
- Intersection Turn Movement
- Railroad Crossing

- Station Location
- Existing Parking
- Railroad
- New Parking Garage

Figure 1
Sumner Station
Study Area

Document Path: P:\3164 SoundTransit\Puyallup_Sumner_Stations\Figure_2_SumnerStation_Intersections.mxd

Data Collection

The purpose of the data collection effort is to understand the elements that affect the operational characteristics of the transportation network for pedestrians and bicycles. The physical elements such as the number of travel lanes, traffic control (e.g., stop signs or traffic signal locations), as well as non-physical elements such as speed and the vehicular volumes on the road at a given time will be collected in the Traffic Analysis work (see "Sumner Station Access Improvements Project – Traffic Operations Analysis Methodology and Assumptions"), and analyzed with regards to pedestrian and bicycle access, focusing on safety, comfort and convenience. In addition, the non-motorized evaluation will collect data for the following components of the project:

- Physical characteristics of walk routes within ¼ mile of the station and bicycle routes within a ½ mile of the station focused on routes from existing and proposed Sounder parking garages and parking lots. Informal on-street parking used by Sounder riders will be identified and physical characteristics of walk routes will be noted. The focus will be on possible impediments to safety, comfort and convenience for pedestrians and bicycles not captured in the Traffic Operations data collection, including pedestrian scale lighting and driveway locations and sightlines.
- Physical characteristics of the pedestrian and bicycle network will be obtained through a combination of aerial imagery and field observation. Detailed surveying and/or measuring will not be conducted with the exception of documenting sidewalk widths.
- Funded improvements to the pedestrian and bicycle network in the study area will be identified and applied to the future analysis.
- Existing and future land uses within the station area will be identified as well as clusters of employment and/or housing developments that could be considered areas that might generate potential Sounder walking or biking to the station.
- Walk and bicycle sheds as prepared for the 2012 Access Study.

Analysis Techniques

Overview

Analysis of future conditions will focus on the potential effects of increases in vehicular traffic on pedestrian and bicycle access to the station. Based on existing data we do not expect significant increases in walk or bike access to the station, so the analysis will focus on the effects of changes in traffic patterns in the station area on pedestrian and bike access. Documentation to support this assumption will be provided. Documentation will come from existing sources.

The existing physical and non-physical elements collected will be used to understand and analyze the existing pedestrian and bicycle access system. Forecasts of future conditions will also be developed (in the Traffic Operations work) and used to analyze how the proposed project will affect the transportation system in the future. After the specific impacts are understood, mitigation measures will be developed to address impacts.

Transportation Analysis Years

Consistent with the traffic operations analysis methodology, the non-motorized analysis will focus on the following time periods:

- Existing Year – 2014
- Design Year – 2035

Study Time Period

The non-motorized analysis will evaluate conditions for the shortest day of the year when pedestrians and bicyclists will be arriving and leaving in the dark. Data from the traffic operations analysis may be used and the study time period will be consistent with that analysis.

Travel Modes

The non-motorized portion of this study will analyze pedestrian and bicycle station access with emphasis on safety, comfort and convenience for these passengers.

Alternative Scenarios Traffic Volume Development

Results from the traffic operations models will be used identify locations where specific, measureable impacts to the future transportation system might affect potential pedestrian and bicycle access to the station.

Measures of Effectiveness

After the specific impacts are understood, mitigation measures will be developed to address impacts, if any, and a qualitative analysis – based on industry experience – will be used to confirm the effectiveness of proposed mitigation measures.

Documentation

The transportation data gathering and analysis will provide information about the project's affected environment and potential mitigation measures to address impacts associated with the Build alternative(s). This information will be documented through the following deliverables:

- A Non-motorized section in the Traffic Operations Analysis Technical Memorandum
- Environmental checklist section

APPENDIX C

Existing Traffic Counts for Sumner Station

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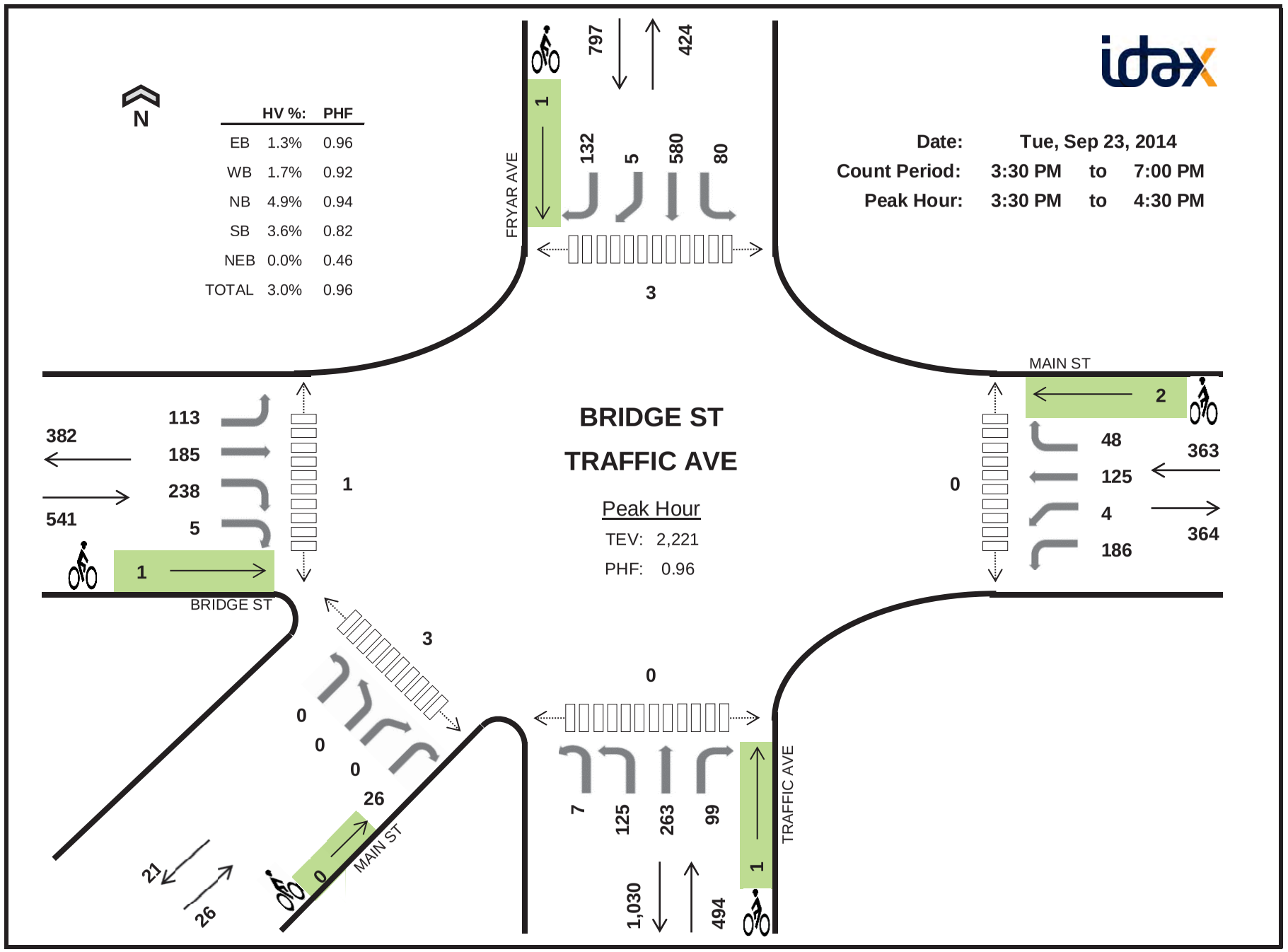


Mark Skaggs: 425 - 250 - 0777

mark.skaggs@idaxdata.com

www.idaxdata.com

Six-Hour Count Summaries

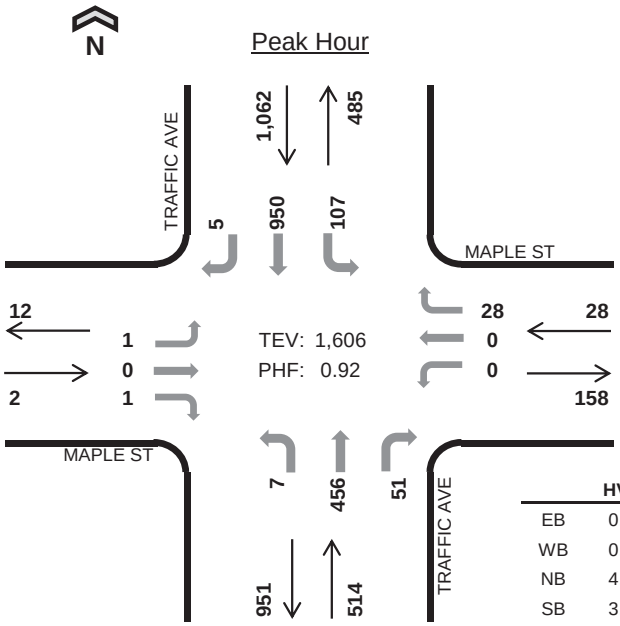
Interval Start	BRIDGE ST Eastbound				MAIN ST Westbound				TRAFFIC AVE Northbound				FRYAR AVE Southbound				MAIN ST Northeastbound				15-min Total	Rolling One Hour
	LT	TH	RT	HR	LT	BL	TH	RT	HL	LT	TH	RT	LT	TH	BR	RT	HL	BL	BR	HR		
3:30 PM	**26**	**44**	**51**	**2**	**44**	**1**	**24**	**11**	**3**	**25**	**75**	**25**	**18**	**184**	**0**	**41**	**0**	**0**	**0**	**6**	**580**	
3:45 PM	**32**	**51**	**57**	**1**	**46**	**1**	**33**	**8**	**2**	**33**	**70**	**27**	**17**	**137**	**1**	**38**	**0**	**0**	**0**	**2**	**556**	
4:00 PM	**25**	**44**	**70**	**1**	**53**	**1**	**32**	**13**	**1**	**36**	**49**	**22**	**22**	**127**	**2**	**21**	**0**	**0**	**0**	**14**	**533**	
4:15 PM	**30**	**46**	**60**	**1**	**43**	**1**	**36**	**16**	**1**	**31**	**69**	**25**	**23**	**132**	**2**	**32**	**0**	**0**	**0**	**4**	**552**	**2,221**
4:30 PM	22	49	58	2	43	0	34	8	1	20	58	30	22	159	3	43	0	0	0	6	558	2,199
4:45 PM	21	44	66	1	37	2	25	12	0	23	50	30	16	116	1	29	0	0	0	6	479	2,122
5:00 PM	23	50	50	0	55	2	42	11	1	31	58	20	22	129	4	25	0	0	0	7	530	2,119
5:15 PM	23	52	46	2	38	3	20	9	1	35	47	28	24	101	0	30	0	0	0	4	463	2,030
5:30 PM	29	57	39	1	35	5	33	2	2	26	54	23	29	111	0	27	0	0	0	8	481	1,953
5:45 PM	23	53	46	0	41	1	22	10	1	42	43	31	8	83	0	24	0	0	0	9	437	1,911
6:00 PM	20	36	39	2	41	2	30	4	1	26	32	11	13	104	2	19	0	0	0	4	386	1,767
6:15 PM	14	30	38	1	31	3	28	8	0	31	34	30	10	79	0	18	0	0	0	0	355	1,659
6:30 PM	14	30	49	1	38	5	21	8	1	19	30	23	8	89	1	16	0	0	0	1	354	1,532
6:45 PM	9	26	38	0	35	3	38	8	0	22	22	17	12	57	0	13	0	0	0	3	303	1,398
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,012
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	657
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	303
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	311	612	707	15	580	30	418	128	15	400	691	342	244	1,608	16	376	0	0	0	74	6,567	
Peak Hr	**113**	**185**	**238**	**5**	**186**	**4**	**125**	**48**	**7**	**125**	**263**	**99**	**80**	**580**	**5**	**132**	**0**	**0**	**0**	**26**	**2,221**	

Note: Six-hour count summary volumes include heavy vehicles but excludes bicycles in overall count.

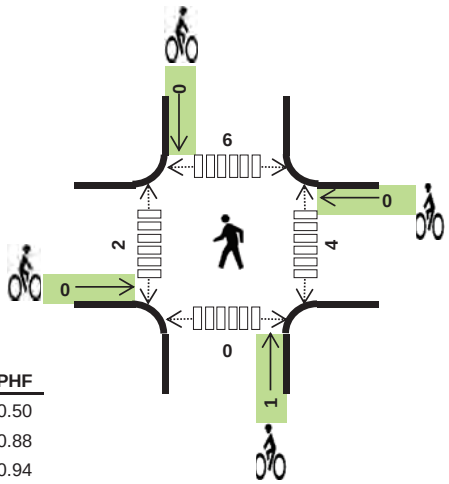
Interval Start	Heavy Vehicle Totals						Bicycles						Pedestrians (Crossing Leg)					
	EB	WB	NB	SB	NEB	Total	EB	WB	NB	SB	NEB	Total	East	West	North	South	SW	Total
3:30 PM	**1**	**4**	**6**	**9**	**0**	***20***	**0**	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	**1**	***1***
3:45 PM	**1**	**0**	**8**	**6**	**0**	***15***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**0**	**0**	***2***
4:00 PM	**3**	**2**	**3**	**7**	**0**	***15***	**1**	**0**	**0**	**1**	**0**	***2***	**0**	**1**	**1**	**0**	**1**	***3***
4:15 PM	**2**	**0**	**7**	**7**	**0**	***16***	**0**	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	**1**	***1***
4:30 PM	0	1	9	6	0	*16*	0	0	0	1	0	*1*	1	2	1	0	2	*6*
4:45 PM	2	5	3	2	0	*12*	2	0	0	0	0	*2*	2	0	3	0	2	*7*
5:00 PM	1	2	4	4	0	*11*	0	0	0	0	0	*0*	0	0	1	0	1	*2*
5:15 PM	1	2	3	4	0	*10*	0	1	0	1	0	*2*	4	3	4	0	1	*12*
5:30 PM	1	1	0	5	0	*7*	0	0	0	0	0	*0*	2	1	2	0	0	*5*
5:45 PM	1	1	2	7	0	*11*	0	0	0	0	0	*0*	1	0	1	0	4	*6*
6:00 PM	0	2	2	3	1	*8*	0	0	0	0	0	*0*	0	0	1	0	0	*1*
6:15 PM	0	0	3	2	0	*5*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
6:30 PM	0	2	1	3	0	*6*	0	0	0	0	0	*0*	4	0	4	0	5	*13*
6:45 PM	0	1	1	2	0	*4*	0	0	0	0	0	*0*	1	0	1	0	2	*4*
7:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
7:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
7:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
7:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
8:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
8:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
8:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
8:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
9:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
9:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
Count Total	13	23	52	67	1	*156*	3	3	1	3	0	*10*	15	7	21	0	20	*63*
Peak Hr	**7**	**6**	**24**	**29**	**0**	***66***	**1**	**2**	**1**	**1**	**0**	***5***	**0**	**1**	**3**	**0**	**3**	*7*

Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

TRAFFIC AVE
MAPLE ST



Date: Tue, Sep 23, 2014
Count Period: 3:30 PM to 7:00 PM
Peak Hour: 3:30 PM to 4:30 PM



	HV %:	PHF
EB	0.0%	0.50
WB	0.0%	0.88
NB	4.9%	0.94
SB	3.5%	0.89
TOTAL	3.9%	0.92

Peak-Hour Count Summaries

Interval Start	MAPLE ST Eastbound			MAPLE ST Westbound			TRAFFIC AVE Northbound			TRAFFIC AVE Southbound			15-min Total
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
3:30 PM	0	0	0	0	0	6	2	120	10	33	262	3	436
3:45 PM	1	0	0	0	0	8	1	127	9	22	223	1	392
4:00 PM	0	0	1	0	0	8	1	110	11	14	251	1	397
4:15 PM	0	0	0	0	0	6	3	99	21	38	214	0	381
Peak Hr	**1**	**0**	**1**	**0**	**0**	**28**	**7**	**456**	**51**	**107**	**950**	**5**	**1,606**

Note: For all six-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:30 PM	0	0	5	11	*16*	0	0	1	0	*1*	0	0	2	0	*2*
3:45 PM	0	0	10	6	*16*	0	0	0	0	*0*	0	0	0	0	*0*
4:00 PM	0	0	3	12	*15*	0	0	0	0	*0*	3	1	3	0	*7*
4:15 PM	0	0	7	8	*15*	0	0	0	0	*0*	1	1	1	0	*3*
Peak Hr	**0**	**0**	**25**	**37**	***62***	**0**	**0**	**1**	**0**	***1***	**4**	**2**	**6**	**0**	***12***

Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

Six-Hour Count Summaries

Interval Start	MAPLE ST Eastbound			MAPLE ST Westbound			TRAFFIC AVE Northbound			TRAFFIC AVE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:30 PM	**0**	**0**	**0**	**0**	**0**	**6**	**2**	**120**	**10**	**33**	**262**	**3**	**436**	
3:45 PM	**1**	**0**	**0**	**0**	**0**	**8**	**1**	**127**	**9**	**22**	**223**	**1**	**392**	
4:00 PM	**0**	**0**	**1**	**0**	**0**	**8**	**1**	**110**	**11**	**14**	**251**	**1**	**397**	
4:15 PM	**0**	**0**	**0**	**0**	**0**	**6**	**3**	**99**	**21**	**38**	**214**	**0**	**381**	**1,606**
4:30 PM	0	0	1	0	0	6	3	91	16	24	234	2	377	1,547
4:45 PM	0	0	0	0	0	12	2	97	24	17	196	2	350	1,505
5:00 PM	0	1	0	0	0	14	0	95	12	34	211	0	367	1,475
5:15 PM	0	1	1	0	0	6	0	102	9	17	188	0	324	1,418
5:30 PM	0	1	0	0	0	7	1	97	13	23	179	0	321	1,362
5:45 PM	0	1	0	0	0	12	0	95	7	18	154	3	290	1,302
6:00 PM	0	0	0	0	0	7	0	66	7	7	184	1	272	1,207
6:15 PM	0	0	1	0	0	10	1	93	6	7	144	1	263	1,146
6:30 PM	0	0	1	0	0	4	0	63	8	3	166	0	245	1,070
6:45 PM	0	0	1	0	0	6	0	53	5	3	129	0	197	977
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	705
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	442
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	197
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	1	4	6	0	0	112	14	1,308	158	260	2,735	14	4,612	
Peak Hr	**1**	**0**	**1**	**0**	**0**	**28**	**7**	**456**	**51**	**107**	**950**	**5**	**1,606**	

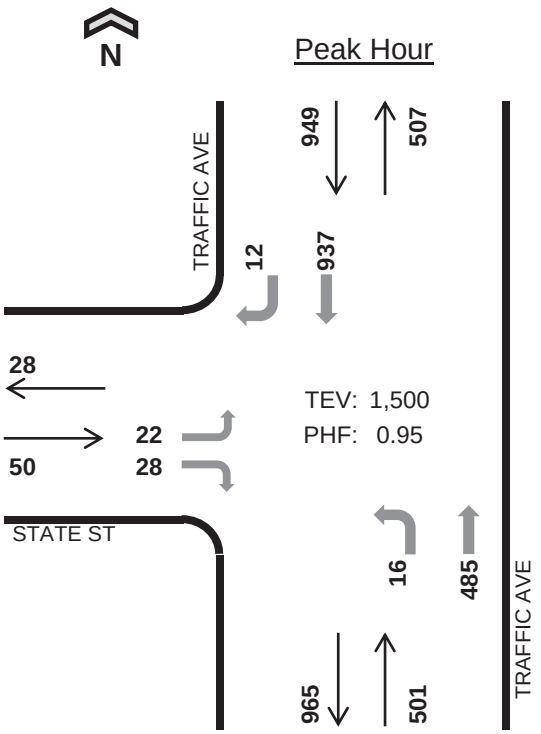
Note: Six-hour count summary volumes include heavy vehicles but excludes bicycles in overall count.

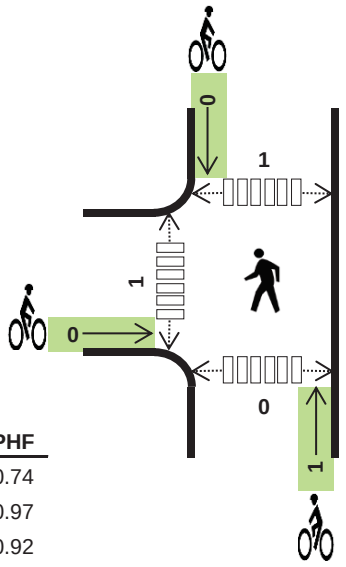
Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
3:30 PM	**0**	**0**	**5**	**11**	***16***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**2**	**0**	***2***
3:45 PM	**0**	**0**	**10**	**6**	***16***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
4:00 PM	**0**	**0**	**3**	**12**	***15***	**0**	**0**	**0**	**0**	***0***	**3**	**1**	**3**	**0**	***7***
4:15 PM	**0**	**0**	**7**	**8**	***15***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**1**	**0**	***3***
4:30 PM	0	0	7	5	*12*	0	0	0	1	*1*	3	0	4	0	*7*
4:45 PM	0	0	5	8	*13*	0	0	0	0	*0*	5	0	2	0	*7*
5:00 PM	0	0	4	7	*11*	0	1	0	0	*1*	0	0	2	0	*2*
5:15 PM	0	0	2	4	*6*	0	0	0	0	*0*	5	0	8	0	*13*
5:30 PM	0	0	1	3	*4*	0	0	0	2	*2*	1	5	6	0	*12*
5:45 PM	0	0	1	8	*9*	0	1	0	1	*2*	0	2	9	0	*11*
6:00 PM	0	0	2	5	*7*	0	0	0	0	*0*	0	4	0	0	*4*
6:15 PM	0	0	3	3	*6*	0	0	0	0	*0*	0	10	4	0	*14*
6:30 PM	0	0	1	3	*4*	0	0	0	0	*0*	2	1	0	0	*3*
6:45 PM	0	0	2	3	*5*	0	0	0	0	*0*	1	1	1	0	*3*
7:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	0	53	86	*139*	0	2	1	4	*7*	21	25	42	0	*88*
Peak Hr	**0**	**0**	**25**	**37**	***62***	**0**	**0**	**1**	**0**	***1***	**4**	**2**	**6**	**0**	***12***

Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

TRAFFIC AVE
STATE ST

Date: Tue, Sep 23, 2014
Count Period: 3:30 PM to 7:00 PM
Peak Hour: 3:30 PM to 4:30 PM





	HV %:	PHF
EB	2.0%	0.74
NB	4.6%	0.97
SB	3.7%	0.92
TOTAL	3.9%	0.95

Peak-Hour Count Summaries

Interval Start	STATE ST Eastbound			STATE ST Westbound			TRAFFIC AVE Northbound			TRAFFIC AVE Southbound			15-min Total
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
3:30 PM	4	0	5	0	0	0	4	123	0	0	255	4	395
3:45 PM	6	0	6	0	0	0	4	125	0	0	225	2	368
4:00 PM	6	0	11	0	0	0	4	123	0	0	237	4	385
4:15 PM	6	0	6	0	0	0	4	114	0	0	220	2	352
Peak Hr	**22**	**0**	**28**	**0**	**0**	**0**	**16**	**485**	**0**	**0**	**937**	**12**	**1,500**

Note: For all six-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:30 PM	0	0	4	11	*15*	0	0	1	0	*1*	0	0	0	0	*0*
3:45 PM	0	0	10	7	*17*	0	0	0	0	*0*	0	0	0	0	*0*
4:00 PM	0	0	3	10	*13*	0	0	0	0	*0*	0	1	1	0	*2*
4:15 PM	1	0	6	7	*14*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hr	**1**	**0**	**23**	**35**	***59***	**0**	**0**	**1**	**0**	***1***	**0**	**1**	**1**	**0**	***2***

Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

Six-Hour Count Summaries

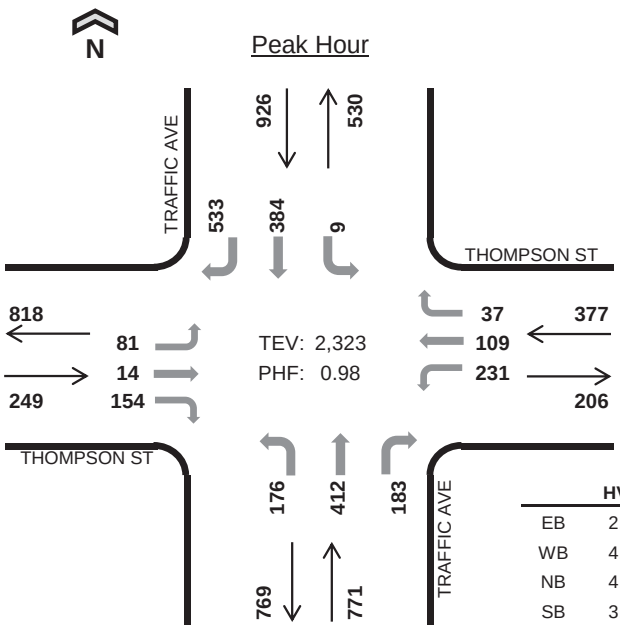
Interval Start	STATE ST Eastbound			STATE ST Westbound			TRAFFIC AVE Northbound			TRAFFIC AVE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:30 PM	**4**	**0**	**5**	**0**	**0**	**0**	**4**	**123**	**0**	**0**	**255**	**4**	**395**	
3:45 PM	**6**	**0**	**6**	**0**	**0**	**0**	**4**	**125**	**0**	**0**	**225**	**2**	**368**	
4:00 PM	**6**	**0**	**11**	**0**	**0**	**0**	**4**	**123**	**0**	**0**	**237**	**4**	**385**	
4:15 PM	**6**	**0**	**6**	**0**	**0**	**0**	**4**	**114**	**0**	**0**	**220**	**2**	**352**	**1,500**
4:30 PM	6	0	10	0	0	0	7	106	0	0	254	4	387	1,492
4:45 PM	11	0	10	0	0	0	3	109	0	0	223	2	358	1,482
5:00 PM	10	0	16	0	0	0	4	99	0	0	214	0	343	1,440
5:15 PM	14	0	11	0	0	0	4	95	0	0	193	3	320	1,408
5:30 PM	10	0	9	0	0	0	3	103	0	0	181	5	311	1,332
5:45 PM	9	0	11	0	0	0	2	92	0	0	179	3	296	1,270
6:00 PM	1	0	5	0	0	0	3	71	0	0	184	0	264	1,191
6:15 PM	2	0	6	0	0	0	1	100	0	0	143	1	253	1,124
6:30 PM	4	0	11	0	0	0	1	65	0	0	174	0	255	1,068
6:45 PM	0	0	1	0	0	0	1	58	0	0	131	0	191	963
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	699
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	446
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	191
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	89	0	118	0	0	0	45	1,383	0	0	2,813	30	4,478	
Peak Hr	**22**	**0**	**28**	**0**	**0**	**0**	**16**	**485**	**0**	**0**	**937**	**12**	**1,500**	

Note: Six-hour count summary volumes include heavy vehicles but excludes bicycles in overall count.

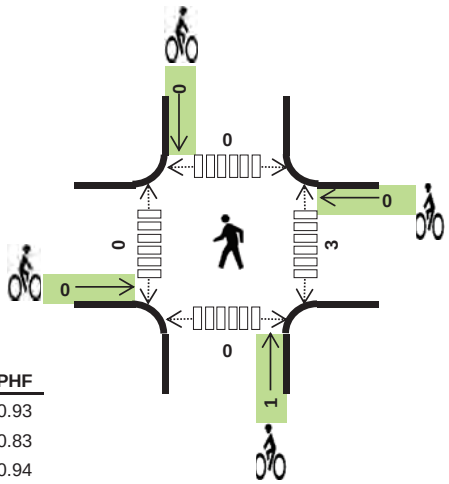
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:30 PM	**0**	**0**	**4**	**11**	***15***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***
3:45 PM	**0**	**0**	**10**	**7**	***17***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
4:00 PM	**0**	**0**	**3**	**10**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**1**	**0**	***2***
4:15 PM	**1**	**0**	**6**	**7**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
4:30 PM	0	0	7	7	*14*	0	0	0	1	*1*	0	0	2	0	*2*
4:45 PM	1	0	5	7	*13*	0	0	0	0	*0*	0	0	6	0	*6*
5:00 PM	0	0	4	8	*12*	0	0	0	0	*0*	0	1	3	0	*4*
5:15 PM	0	0	2	9	*11*	0	0	0	1	*1*	0	0	0	0	*0*
5:30 PM	0	0	1	3	*4*	0	0	0	0	*0*	0	0	8	0	*8*
5:45 PM	0	0	2	9	*11*	0	0	0	1	*1*	0	0	4	0	*4*
6:00 PM	0	0	2	5	*7*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 PM	0	0	3	3	*6*	0	0	0	1	*1*	0	0	0	0	*0*
6:30 PM	0	0	1	4	*5*	0	0	0	0	*0*	0	0	7	0	*7*
6:45 PM	0	0	2	3	*5*	0	0	0	0	*0*	0	2	2	0	*4*
7:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	2	0	52	93	*147*	0	0	1	4	*5*	0	4	33	0	*37*
Peak Hr	**1**	**0**	**23**	**35**	***59***	**0**	**0**	**1**	**0**	***1***	**0**	**1**	**1**	**0**	***2***

Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

TRAFFIC AVE
THOMPSON ST



Date: Tue, Sep 23, 2014
Count Period: 3:30 PM to 7:00 PM
Peak Hour: 3:30 PM to 4:30 PM



	HV %:	PHF
EB	2.4%	0.93
WB	4.0%	0.83
NB	4.5%	0.94
SB	3.5%	0.94
TOTAL	3.8%	0.98

Peak-Hour Count Summaries

Interval Start	THOMPSON ST Eastbound			THOMPSON ST Westbound			TRAFFIC AVE Northbound			TRAFFIC AVE Southbound			15-min Total
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
3:30 PM	22	4	31	49	24	6	45	114	45	3	101	143	587
3:45 PM	18	2	41	44	35	8	46	107	52	1	97	130	581
4:00 PM	19	3	45	59	26	13	39	99	47	4	96	144	594
4:15 PM	22	5	37	79	24	10	46	92	39	1	90	116	561
Peak Hr	**81**	**14**	**154**	**231**	**109**	**37**	**176**	**412**	**183**	**9**	**384**	**533**	**2,323**

Note: For all six-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:30 PM	1	2	7	8	*18*	0	0	1	0	*1*	0	0	0	0	*0*
3:45 PM	2	6	13	5	*26*	0	0	0	0	*0*	0	0	0	0	*0*
4:00 PM	2	4	5	10	*21*	0	0	0	0	*0*	1	0	0	0	*1*
4:15 PM	1	3	10	9	*23*	0	0	0	0	*0*	2	0	0	0	*2*
Peak Hr	**6**	**15**	**35**	**32**	***88***	**0**	**0**	**1**	**0**	***1***	**3**	**0**	**0**	**0**	***3***

Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

Six-Hour Count Summaries

Interval Start	THOMPSON ST Eastbound			THOMPSON ST Westbound			TRAFFIC AVE Northbound			TRAFFIC AVE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:30 PM	**22**	**4**	**31**	**49**	**24**	**6**	**45**	**114**	**45**	**3**	**101**	**143**	**587**	
3:45 PM	**18**	**2**	**41**	**44**	**35**	**8**	**46**	**107**	**52**	**1**	**97**	**130**	**581**	
4:00 PM	**19**	**3**	**45**	**59**	**26**	**13**	**39**	**99**	**47**	**4**	**96**	**144**	**594**	
4:15 PM	**22**	**5**	**37**	**79**	**24**	**10**	**46**	**92**	**39**	**1**	**90**	**116**	**561**	**2,323**
4:30 PM	21	4	21	65	28	5	38	85	47	2	90	149	555	2,291
4:45 PM	19	1	23	63	32	4	50	96	57	0	107	105	557	2,267
5:00 PM	16	0	26	85	37	5	34	81	48	0	74	149	555	2,228
5:15 PM	19	1	30	67	34	5	61	85	57	4	84	126	573	2,240
5:30 PM	11	3	36	74	39	5	41	92	55	4	101	105	566	2,251
5:45 PM	14	6	33	53	26	2	31	76	36	4	130	77	488	2,182
6:00 PM	11	6	62	33	25	5	41	61	47	3	137	81	512	2,139
6:15 PM	12	5	38	21	15	3	32	83	34	4	105	42	394	1,960
6:30 PM	5	4	25	46	14	6	32	65	44	7	131	62	441	1,835
6:45 PM	8	4	33	40	15	5	32	44	35	3	88	42	349	1,696
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1,184
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	790
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	349
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	217	48	481	778	374	82	568	1,180	643	40	1,431	1,471	7,313	
Peak Hr	**81**	**14**	**154**	**231**	**109**	**37**	**176**	**412**	**183**	**9**	**384**	**533**	**2,323**	

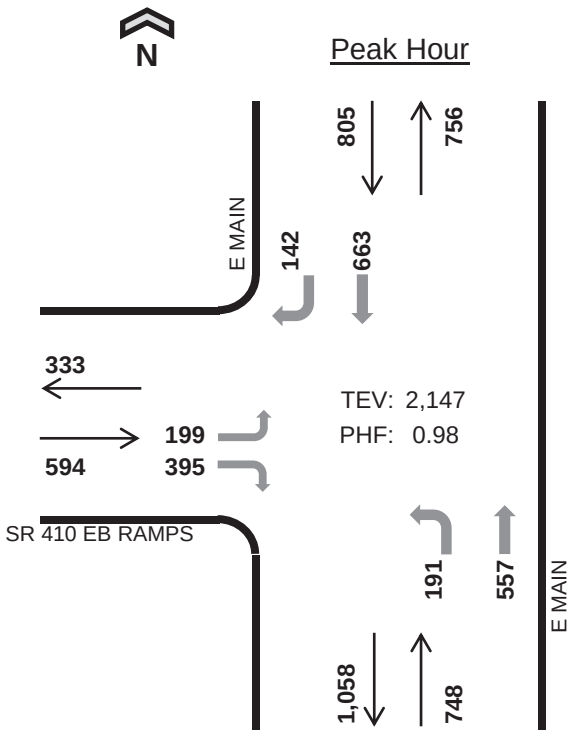
Note: Six-hour count summary volumes include heavy vehicles but excludes bicycles in overall count.

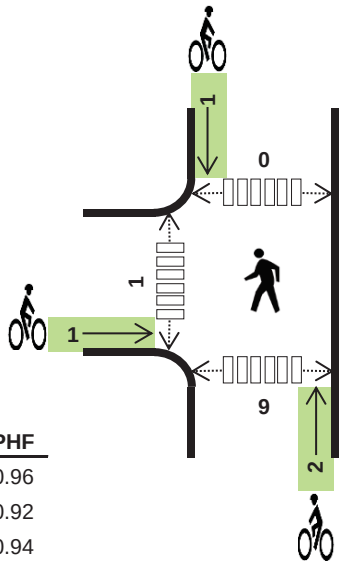
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:30 PM	**1**	**2**	**7**	**8**	***18***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***
3:45 PM	**2**	**6**	**13**	**5**	***26***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
4:00 PM	**2**	**4**	**5**	**10**	***21***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***
4:15 PM	**1**	**3**	**10**	**9**	***23***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**0**	***2***
4:30 PM	2	1	6	6	*15*	0	0	2	1	*3*	0	0	0	0	*0*
4:45 PM	1	2	7	2	*12*	0	0	0	0	*0*	3	0	0	0	*3*
5:00 PM	3	0	3	8	*14*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	1	2	5	9	*17*	0	1	0	1	*2*	1	0	0	0	*1*
5:30 PM	3	2	6	3	*14*	0	1	0	0	*1*	0	0	0	0	*0*
5:45 PM	1	2	1	10	*14*	0	0	0	1	*1*	0	0	0	0	*0*
6:00 PM	2	0	2	5	*9*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 PM	0	1	5	2	*8*	0	0	0	1	*1*	0	0	0	0	*0*
6:30 PM	0	1	4	4	*9*	0	0	0	0	*0*	3	0	0	0	*3*
6:45 PM	1	2	5	2	*10*	0	0	0	0	*0*	2	0	0	0	*2*
7:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	20	28	79	83	*210*	0	2	3	4	*9*	12	0	0	0	*12*
Peak Hr	**6**	**15**	**35**	**32**	***88***	**0**	**0**	**1**	**0**	***1***	**3**	**0**	**0**	**0**	***3***

Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

E MAIN
SR 410 EB RAMPS

Date: Tue, Sep 23, 2014
Count Period: 3:30 PM to 7:00 PM
Peak Hour: 4:45 PM to 5:45 PM





	HV %:	PHF
EB	2.9%	0.96
NB	2.3%	0.92
SB	1.6%	0.94
TOTAL	2.2%	0.98

Peak-Hour Count Summaries

Interval Start	SR 410 EB RAMPS Eastbound			SR 410 EB RAMPS Westbound			E MAIN Northbound			E MAIN Southbound			15-min Total
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
4:45 PM	49	0	93	0	0	0	43	141	0	0	172	41	539
5:00 PM	46	0	108	0	0	0	48	132	0	0	157	45	536
5:15 PM	55	0	91	0	0	0	47	134	0	0	169	28	524
5:30 PM	49	0	103	0	0	0	53	150	0	0	165	28	548
Peak Hr	**199**	**0**	**395**	**0**	**0**	**0**	**191**	**557**	**0**	**0**	**663**	**142**	**2,147**

Note: For all six-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:45 PM	5	0	2	2	*9*	0	0	0	0	*0*	0	0	0	2	*2*
5:00 PM	6	0	9	4	*19*	0	0	0	0	*0*	0	0	0	1	*1*
5:15 PM	3	0	2	2	*7*	1	0	0	0	*1*	0	0	0	0	*0*
5:30 PM	3	0	4	5	*12*	0	0	2	1	*3*	0	1	0	6	*7*
Peak Hr	**17**	**0**	**17**	**13**	***47***	**1**	**0**	**2**	**1**	***4***	**0**	**1**	**0**	**9**	***10***

Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

Six-Hour Count Summaries

Interval Start	SR 410 EB RAMPS Eastbound			SR 410 EB RAMPS Westbound			E MAIN Northbound			E MAIN Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:30 PM	66	0	107	0	0	0	45	131	0	0	150	24	523	
3:45 PM	71	0	95	0	0	0	43	144	0	0	170	22	545	
4:00 PM	67	0	93	0	0	0	34	116	0	0	182	40	532	
4:15 PM	59	0	106	0	0	0	43	117	0	0	155	43	523	2,123
4:30 PM	58	0	104	0	0	0	46	128	0	0	164	36	536	2,136
4:45 PM	**49**	**0**	**93**	**0**	**0**	**0**	**43**	**141**	**0**	**0**	**172**	**41**	**539**	2,130
5:00 PM	**46**	**0**	**108**	**0**	**0**	**0**	**48**	**132**	**0**	**0**	**157**	**45**	**536**	2,134
5:15 PM	**55**	**0**	**91**	**0**	**0**	**0**	**47**	**134**	**0**	**0**	**169**	**28**	**524**	2,135
5:30 PM	**49**	**0**	**103**	**0**	**0**	**0**	**53**	**150**	**0**	**0**	**165**	**28**	**548**	**2,147**
5:45 PM	46	0	82	0	0	0	34	104	0	0	173	36	475	2,083
6:00 PM	46	0	71	0	0	0	36	105	0	0	179	42	479	2,026
6:15 PM	44	0	65	0	0	0	53	108	0	0	138	23	431	1,933
6:30 PM	45	0	99	0	0	0	27	99	0	0	140	57	467	1,852
6:45 PM	38	0	108	0	0	0	24	76	0	0	134	31	411	1,788
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1,309
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	878
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	411
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	739	0	1,325	0	0	0	576	1,685	0	0	2,248	496	7,069	
Peak Hr	**199**	**0**	**395**	**0**	**0**	**0**	**191**	**557**	**0**	**0**	**663**	**142**	**2,147**	

Note: Six-hour count summary volumes include heavy vehicles but excludes bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
3:30 PM	7	0	3	10	*20*	0	0	1	0	*1*	0	0	0	0	*0*
3:45 PM	11	0	6	6	*23*	0	0	0	0	*0*	0	0	0	0	*0*
4:00 PM	5	0	5	5	*15*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	6	0	6	5	*17*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	8	0	6	3	*17*	0	0	0	0	*0*	0	0	0	1	*1*
4:45 PM	**5**	**0**	**2**	**2**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**2**	***2***
5:00 PM	**6**	**0**	**9**	**4**	***19***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***
5:15 PM	**3**	**0**	**2**	**2**	***7***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***
5:30 PM	**3**	**0**	**4**	**5**	***12***	**0**	**0**	**2**	**1**	***3***	**0**	**1**	**0**	**6**	***7***
5:45 PM	4	0	1	3	*8*	0	0	0	1	*1*	0	0	0	0	*0*
6:00 PM	3	0	1	1	*5*	0	0	0	0	*0*	0	0	0	1	*1*
6:15 PM	5	0	2	0	*7*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 PM	1	0	4	4	*9*	0	0	0	1	*1*	0	0	0	0	*0*
6:45 PM	3	0	2	3	*8*	0	0	0	0	*0*	0	0	0	0	*0*
7:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	70	0	53	53	*176*	1	0	3	3	*7*	0	1	0	11	*12*
Peak Hr	**17**	**0**	**17**	**13**	***47***	**1**	**0**	**2**	**1**	***4***	**0**	**1**	**0**	**9**	***10***

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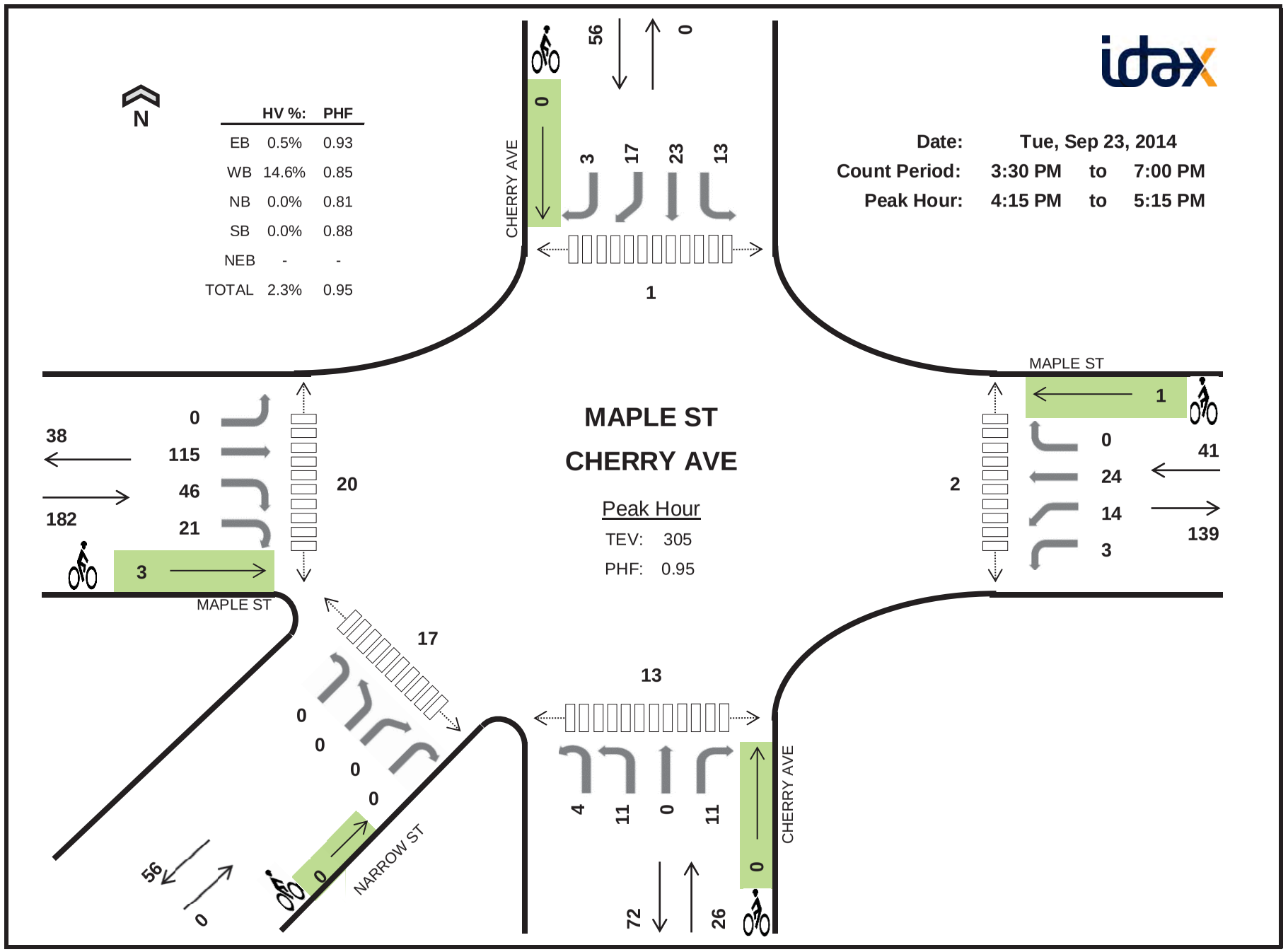

Mark Skaggs: 425 - 250 - 0777

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Six-Hour Count Summaries

Interval Start	MAPLE ST Eastbound				MAPLE ST Westbound				CHERRY AVE Northbound				CHERRY AVE Southbound				NARROW ST Northeastbound				15-min Total	Rolling One Hour
	LT	TH	RT	HR	LT	BL	TH	RT	HL	LT	TH	RT	LT	TH	BR	RT	HL	BL	BR	HR		
3:30 PM	0	27	17	3	1	1	5	0	0	1	0	1	3	3	4	0	0	0	0	0	66	
3:45 PM	0	17	11	2	2	1	9	0	3	2	0	4	2	3	1	1	0	0	0	0	58	
4:00 PM	0	23	8	2	4	2	2	0	2	4	0	4	2	8	1	1	0	0	0	0	63	
4:15 PM	**0**	**33**	**11**	**5**	**0**	**5**	**5**	**0**	**1**	**1**	**0**	**1**	**5**	**9**	**2**	**0**	**0**	**0**	**0**	**0**	**78**	265
4:30 PM	**0**	**29**	**12**	**7**	**2**	**6**	**4**	**0**	**2**	**2**	**0**	**4**	**2**	**6**	**3**	**0**	**0**	**0**	**0**	**0**	**79**	278
4:45 PM	**0**	**30**	**3**	**5**	**1**	**0**	**8**	**0**	**1**	**4**	**0**	**2**	**5**	**4**	**5**	**0**	**0**	**0**	**0**	**0**	**68**	288
5:00 PM	**0**	**23**	**20**	**4**	**0**	**3**	**7**	**0**	**0**	**4**	**0**	**4**	**1**	**4**	**7**	**3**	**0**	**0**	**0**	**0**	**80**	**305**
5:15 PM	0	18	6	6	2	3	5	0	1	1	0	5	4	6	0	0	0	0	0	0	57	284
5:30 PM	0	32	5	1	1	2	4	0	0	2	0	5	6	10	1	1	0	0	0	0	70	275
5:45 PM	0	14	10	4	1	2	7	0	0	4	0	4	1	7	1	1	0	0	0	0	56	263
6:00 PM	0	8	2	2	1	4	3	0	2	5	0	3	0	3	1	0	0	0	0	0	34	217
6:15 PM	0	10	2	3	1	0	5	0	3	3	0	1	4	3	0	2	0	0	0	0	37	197
6:30 PM	0	8	1	0	3	1	3	0	0	2	0	4	2	0	1	1	0	0	0	0	26	153
6:45 PM	0	4	0	7	2	1	1	0	0	4	0	4	0	4	1	1	0	0	0	0	29	126
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	92
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	276	108	51	21	31	68	0	15	39	0	46	37	70	28	11	0	0	0	0	801	
Peak Hr	**0**	**115**	**46**	**21**	**3**	**14**	**24**	**0**	**4**	**11**	**0**	**11**	**13**	**23**	**17**	**3**	**0**	**0**	**0**	**0**	**305**	

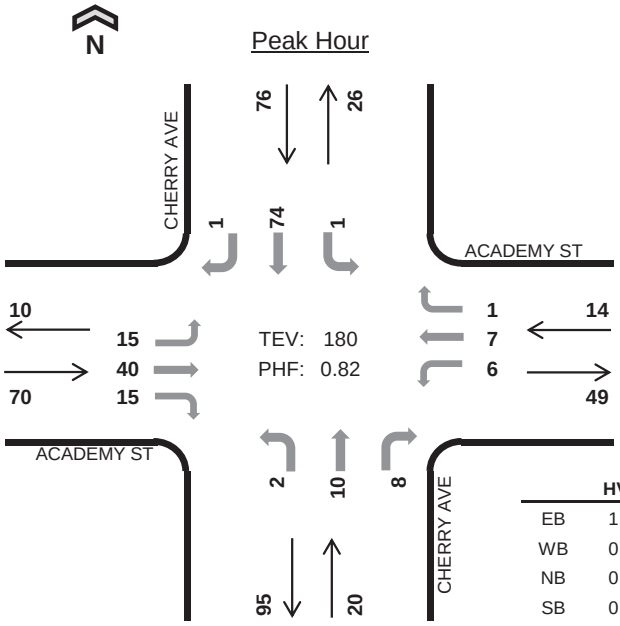
Note: Six-hour count summary volumes include heavy vehicles but excludes bicycles in overall count.

Interval Start	Heavy Vehicle Totals						Bicycles						Pedestrians (Crossing Leg)					
	EB	WB	NB	SB	NEB	Total	EB	WB	NB	SB	NEB	Total	East	West	North	South	SW	Total
3:30 PM	1	2	1	0	0	*4*	0	0	0	0	0	*0*	0	3	0	0	0	*3*
3:45 PM	0	3	0	0	0	*3*	0	1	0	0	0	*1*	0	1	0	2	2	*5*
4:00 PM	0	0	1	0	0	*1*	0	0	0	0	0	*0*	0	1	0	5	4	*10*
4:15 PM	**0**	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**8**	**0**	**2**	**4**	***14***
4:30 PM	**0**	**3**	**0**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**3**	**3**	***7***
4:45 PM	**1**	**2**	**0**	**0**	**0**	***3***	**3**	**0**	**0**	**0**	**0**	***3***	**1**	**4**	**1**	**6**	**7**	***19***
5:00 PM	**0**	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	**0**	***1***	**0**	**8**	**0**	**2**	**3**	***13***
5:15 PM	0	2	0	0	0	*2*	1	0	0	0	0	*1*	0	1	0	1	1	*3*
5:30 PM	0	1	0	1	0	*2*	0	0	0	0	1	*1*	0	5	1	4	3	*13*
5:45 PM	0	2	0	0	0	*2*	0	0	1	0	0	*1*	1	8	2	4	3	*18*
6:00 PM	0	1	0	0	0	*1*	0	0	0	0	0	*0*	3	1	0	4	1	*9*
6:15 PM	1	1	0	0	0	*2*	0	0	0	0	0	*0*	1	10	0	4	3	*18*
6:30 PM	0	1	1	0	0	*2*	0	0	0	0	0	*0*	2	0	0	4	1	*7*
6:45 PM	0	0	0	0	0	*0*	0	1	0	0	1	*2*	0	0	0	2	2	*4*
7:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
7:15 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
7:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
7:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
8:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
8:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
8:30 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
8:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
9:00 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
9:45 PM	0	0	0	0	0	*0*	0	0	0	0	0	*0*	0	0	0	0	0	*0*
Count Total	3	19	3	1	0	*26*	4	3	1	0	2	*10*	9	50	4	43	37	*143*
Peak Hr	**1**	**6**	**0**	**0**	**0**	***7***	**3**	**1**	**0**	**0**	**0**	***4***	**2**	**20**	**1**	**13**	**17**	*53*

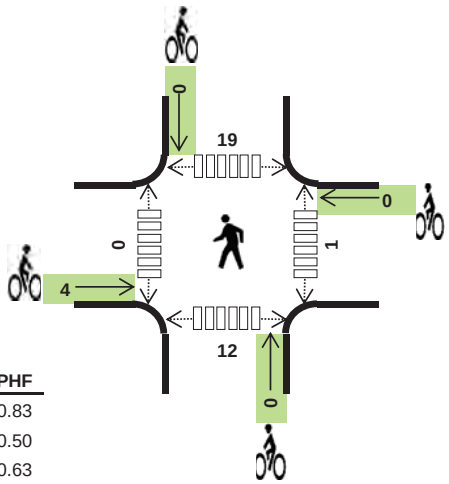
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

CHERRY AVE
ACADEMY ST

Date: Tue, Sep 23, 2014
Count Period: 3:30 PM to 7:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV %:	PHF
EB	1.4%	0.83
WB	0.0%	0.50
NB	0.0%	0.63
SB	0.0%	0.79
TOTAL	0.6%	0.82



Peak-Hour Count Summaries

Interval Start	ACADEMY ST Eastbound			ACADEMY ST Westbound			CHERRY AVE Northbound			CHERRY AVE Southbound			15-min Total
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
4:15 PM	2	14	4	1	1	0	1	1	2	0	19	0	45
4:30 PM	5	3	3	0	0	0	0	3	0	0	20	1	35
4:45 PM	7	10	4	3	3	1	1	1	3	1	11	0	45
5:00 PM	1	13	4	2	3	0	0	5	3	0	24	0	55
Peak Hr	**15**	**40**	**15**	**6**	**7**	**1**	**2**	**10**	**8**	**1**	**74**	**1**	**180**

Note: For all six-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:15 PM	0	0	0	0	*0*	1	0	0	0	*1*	0	0	5	1	*6*
4:30 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	1	*1*
4:45 PM	0	0	0	0	*0*	1	0	0	0	*1*	0	0	11	2	*13*
5:00 PM	0	0	0	0	*0*	2	0	0	0	*2*	1	0	3	8	*12*
Peak Hr	**1**	**0**	**0**	**0**	***1***	**4**	**0**	**0**	**0**	***4***	**1**	**0**	**19**	**12**	***32***

Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

Six-Hour Count Summaries

Interval Start	ACADEMY ST Eastbound			ACADEMY ST Westbound			CHERRY AVE Northbound			CHERRY AVE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:30 PM	0	5	2	2	2	0	1	2	2	0	19	1	36	
3:45 PM	1	1	1	1	1	0	0	6	0	1	14	1	27	
4:00 PM	5	14	4	1	1	0	1	4	0	2	19	0	51	
4:15 PM	**2**	**14**	**4**	**1**	**1**	**0**	**1**	**1**	**2**	**0**	**19**	**0**	**45**	159
4:30 PM	**5**	**3**	**3**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**20**	**1**	**35**	158
4:45 PM	**7**	**10**	**4**	**3**	**3**	**1**	**1**	**1**	**3**	**1**	**11**	**0**	**45**	176
5:00 PM	**1**	**13**	**4**	**2**	**3**	**0**	**0**	**5**	**3**	**0**	**24**	**0**	**55**	**180**
5:15 PM	2	2	1	1	0	0	0	4	1	0	12	1	24	159
5:30 PM	2	10	4	0	1	0	0	3	0	0	15	1	36	160
5:45 PM	4	3	4	2	2	0	0	4	1	0	13	4	37	152
6:00 PM	4	2	0	2	1	2	0	4	1	0	4	2	22	119
6:15 PM	1	3	2	0	1	0	0	4	1	0	4	2	18	113
6:30 PM	3	11	2	1	2	1	0	2	4	0	4	0	30	107
6:45 PM	7	4	5	0	0	0	1	2	1	0	6	0	26	96
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	74
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	56
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	26
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	44	95	40	16	18	4	5	45	19	4	184	13	487	
Peak Hr	**15**	**40**	**15**	**6**	**7**	**1**	**2**	**10**	**8**	**1**	**74**	**1**	**180**	

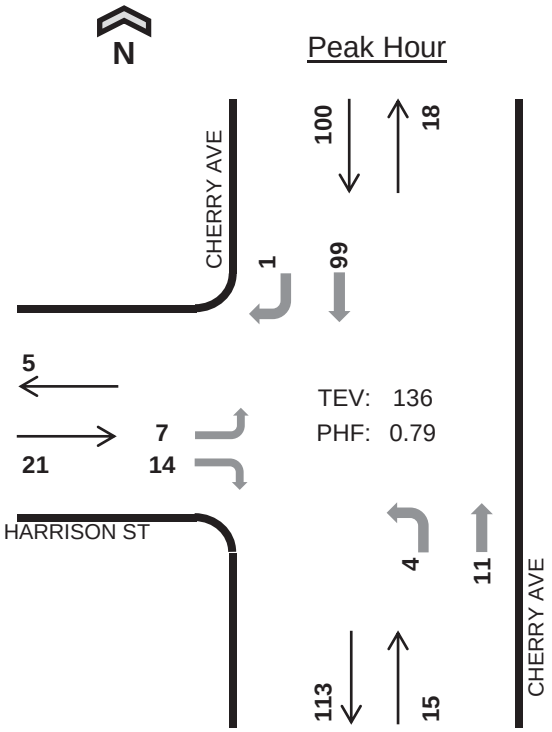
Note: Six-hour count summary volumes include heavy vehicles but excludes bicycles in overall count.

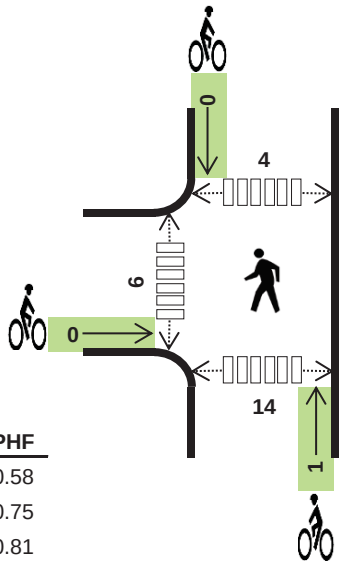
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:30 PM	1	0	1	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
3:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
4:00 PM	0	0	1	0	*1*	0	0	0	0	*0*	1	1	7	5	*14*
4:15 PM	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**5**	**1**	***6***
4:30 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***
4:45 PM	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**11**	**2**	***13***
5:00 PM	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**0**	***2***	**1**	**0**	**3**	**8**	***12***
5:15 PM	0	0	0	0	*0*	1	0	0	0	*1*	1	0	0	0	*1*
5:30 PM	0	0	0	1	*1*	0	0	0	0	*0*	2	0	9	5	*16*
5:45 PM	0	0	0	0	*0*	2	0	1	0	*3*	1	0	12	4	*17*
6:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	3	0	*3*
6:15 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	6	6	*12*
6:30 PM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	1	*1*
6:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	1	2	*4*
7:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	2	1	3	1	*7*	7	0	1	0	*8*	6	2	57	35	*100*
Peak Hr	**1**	**0**	**0**	**0**	***1***	**4**	**0**	**0**	**0**	***4***	**1**	**0**	**19**	**12**	***32***

Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

CHERRY AVE
HARRISON ST

Date: Tue, Sep 23, 2014
Count Period: 3:30 PM to 7:00 PM
Peak Hour: 4:15 PM to 5:15 PM





	HV %:	PHF
EB	0.0%	0.58
NB	0.0%	0.75
SB	1.0%	0.81
TOTAL	0.7%	0.79

Peak-Hour Count Summaries

Interval Start	HARRISON ST Eastbound			HARRISON ST Westbound			CHERRY AVE Northbound			CHERRY AVE Southbound			15-min Total
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
4:15 PM	0	0	4	0	0	0	1	3	0	0	26	0	34
4:30 PM	1	0	0	0	0	0	1	2	0	0	25	0	29
4:45 PM	3	0	6	0	0	0	2	1	0	0	17	1	30
5:00 PM	3	0	4	0	0	0	0	5	0	0	31	0	43
Peak Hr	**7**	**0**	**14**	**0**	**0**	**0**	**4**	**11**	**0**	**0**	**99**	**1**	**136**

Note: For all six-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	1	1	*2*
4:30 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	1	0	0	*1*
4:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	2	2	2	*6*
5:00 PM	0	0	0	0	*0*	0	0	1	0	*1*	0	3	1	11	*15*
Peak Hr	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**1**	**0**	***1***	**0**	**6**	**4**	**14**	***24***

Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

Six-Hour Count Summaries

Interval Start	HARRISON ST Eastbound			HARRISON ST Westbound			CHERRY AVE Northbound			CHERRY AVE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:30 PM	2	0	0	0	0	0	0	4	0	0	24	2	32	
3:45 PM	0	0	2	0	0	0	0	6	0	0	11	3	22	
4:00 PM	1	0	4	0	0	0	1	4	0	0	19	3	32	
4:15 PM	**0**	**0**	**4**	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**26**	**0**	**34**	120
4:30 PM	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**25**	**0**	**29**	117
4:45 PM	**3**	**0**	**6**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**17**	**1**	**30**	125
5:00 PM	**3**	**0**	**4**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**31**	**0**	**43**	**136**
5:15 PM	2	0	2	0	0	0	0	4	0	0	14	0	22	124
5:30 PM	0	0	2	0	0	0	2	3	0	0	20	2	29	124
5:45 PM	2	0	0	0	0	0	0	3	0	0	19	0	24	118
6:00 PM	0	0	2	0	0	0	0	4	0	0	7	0	13	88
6:15 PM	0	0	1	0	0	0	2	6	0	0	3	1	13	79
6:30 PM	1	0	0	0	0	0	0	5	0	0	10	0	16	66
6:45 PM	0	0	4	0	0	0	0	3	0	0	11	0	18	60
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	47
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	34
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	18
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	15	0	31	0	0	0	9	53	0	0	237	12	357	
Peak Hr	**7**	**0**	**14**	**0**	**0**	**0**	**4**	**11**	**0**	**0**	**99**	**1**	**136**	

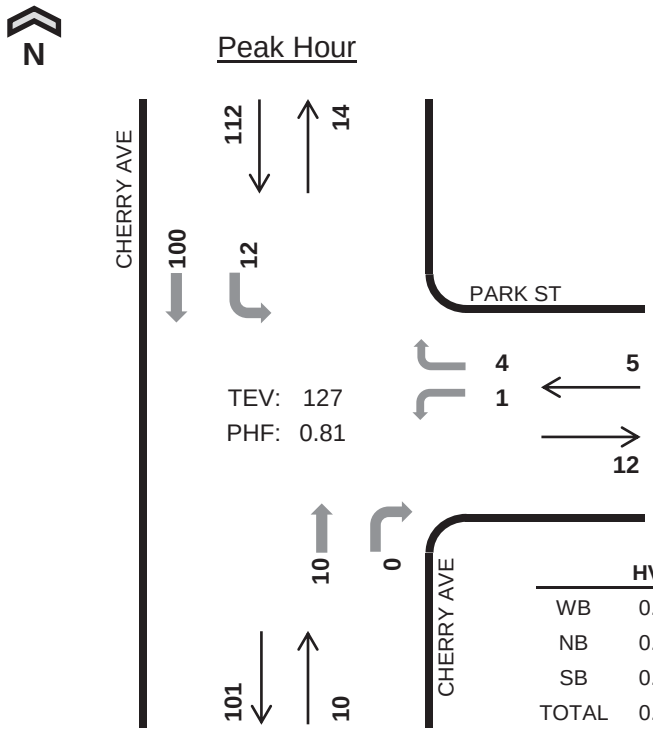
Note: Six-hour count summary volumes include heavy vehicles but excludes bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:30 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	2	0	0	*2*
3:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	0	0	*1*
4:00 PM	1	0	1	0	*2*	1	0	0	0	*1*	0	1	0	2	*3*
4:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**1**	***2***
4:30 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	***1***
4:45 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**2**	**2**	***6***
5:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***	**0**	**3**	**1**	**11**	***15***
5:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	6	*6*
5:45 PM	0	0	0	0	*0*	1	0	0	1	*2*	0	2	0	7	*9*
6:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 PM	0	0	1	0	*1*	1	0	0	0	*1*	0	0	0	0	*0*
6:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	2	0	9	*11*
6:45 PM	0	0	0	0	*0*	1	0	0	0	*1*	0	0	1	3	*4*
7:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	1	0	3	2	*6*	4	0	1	1	*6*	0	14	5	41	*60*
Peak Hr	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**1**	**0**	***1***	**0**	**6**	**4**	**14**	***24***

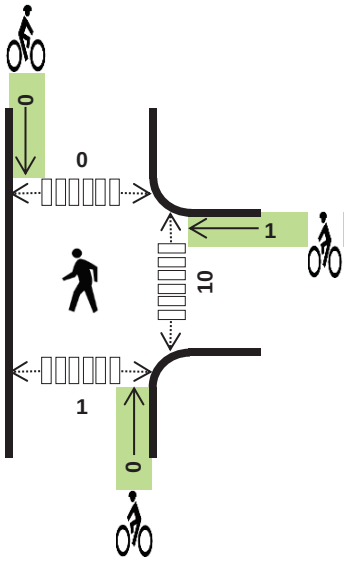
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

CHERRY AVE
PARK ST

Date: Tue, Sep 23, 2014
Count Period: 3:30 PM to 7:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV %:	PHF
WB	0.0%	0.42
NB	0.0%	0.50
SB	0.9%	0.80
TOTAL	0.8%	0.81



Peak-Hour Count Summaries

Interval Start	PARK ST Eastbound			PARK ST Westbound			CHERRY AVE Northbound			CHERRY AVE Southbound			15-min Total
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
4:15 PM	0	0	0	0	0	0	0	5	0	4	26	0	35
4:30 PM	0	0	0	0	0	1	0	1	0	1	23	0	26
4:45 PM	0	0	0	1	0	2	0	1	0	6	17	0	27
5:00 PM	0	0	0	0	0	1	0	3	0	1	34	0	39
Peak Hr	**0**	**0**	**0**	**1**	**0**	**4**	**0**	**10**	**0**	**12**	**100**	**0**	**127**

Note: For all six-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	7	0	0	0	*7*
5:00 PM	0	0	0	0	*0*	0	1	0	0	*1*	3	0	0	1	*4*
Peak Hr	**0**	**0**	**0**	**1**	***1***	**0**	**1**	**0**	**0**	***1***	**10**	**0**	**0**	**1**	***11***

Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

Six-Hour Count Summaries

Interval Start	PARK ST Eastbound			PARK ST Westbound			CHERRY AVE Northbound			CHERRY AVE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:30 PM	0	0	0	0	0	1	0	2	0	0	24	0	27	
3:45 PM	0	0	0	0	0	1	0	5	1	0	13	0	20	
4:00 PM	0	0	0	1	0	1	0	4	1	5	19	0	31	
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**4**	**26**	**0**	**35**	113
4:30 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**23**	**0**	**26**	112
4:45 PM	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**1**	**0**	**6**	**17**	**0**	**27**	119
5:00 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	**0**	**1**	**34**	**0**	**39**	**127**
5:15 PM	0	0	0	1	0	3	0	3	0	1	16	0	24	116
5:30 PM	0	0	0	1	0	1	0	5	1	1	21	0	30	120
5:45 PM	0	0	0	4	0	1	0	1	0	1	18	0	25	118
6:00 PM	0	0	0	0	0	0	0	5	0	0	9	0	14	93
6:15 PM	0	0	0	1	0	3	0	4	0	0	5	0	13	82
6:30 PM	0	0	0	0	0	0	0	4	0	1	8	0	13	65
6:45 PM	0	0	0	1	0	1	0	2	0	3	11	0	18	58
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	44
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	31
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	18
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	10	0	16	0	45	3	24	244	0	342	
Peak Hr	**0**	**0**	**0**	**1**	**0**	**4**	**0**	**10**	**0**	**12**	**100**	**0**	**127**	

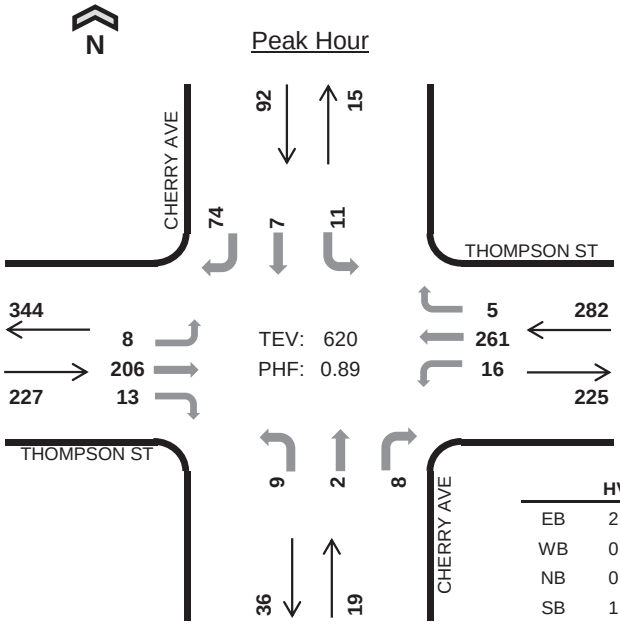
Note: Six-hour count summary volumes include heavy vehicles but excludes bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:30 PM	0	0	1	0	*1*	0	0	0	0	*0*	1	0	0	0	*1*
3:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
4:00 PM	0	0	1	1	*2*	0	0	0	1	*1*	2	0	1	0	*3*
4:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
4:30 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
4:45 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**7**	**0**	**0**	**0**	***7***
5:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	***1***	**3**	**0**	**0**	**1**	***4***
5:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	0	0	0	1	*1*	0	0	0	0	*0*	7	0	3	0	*10*
5:45 PM	0	0	0	0	*0*	0	0	0	1	*1*	6	0	7	1	*14*
6:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 PM	0	1	1	0	*2*	0	0	0	1	*1*	0	0	0	0	*0*
6:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	6	0	0	0	*6*
6:45 PM	0	0	0	0	*0*	0	0	0	1	*1*	7	0	4	0	*11*
7:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	1	3	3	*7*	0	1	0	4	*5*	39	0	15	2	*56*
Peak Hr	**0**	**0**	**0**	**1**	***1***	**0**	**1**	**0**	**0**	***1***	**10**	**0**	**0**	**1**	***11***

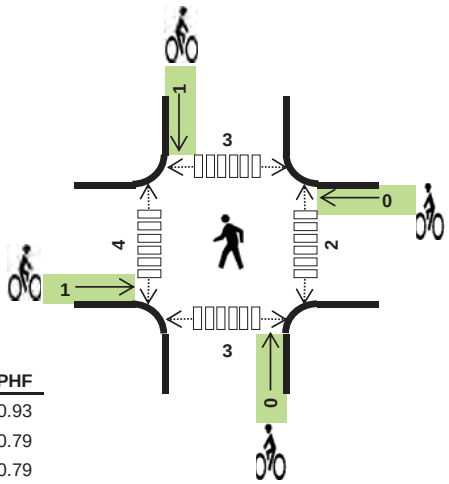
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

CHERRY AVE
THOMPSON ST

Date: Tue, Sep 23, 2014
Count Period: 3:30 PM to 7:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	2.6%	0.93
WB	0.4%	0.79
NB	0.0%	0.79
SB	1.1%	0.70
TOTAL	1.3%	0.89



Peak-Hour Count Summaries

Interval Start	THOMPSON ST Eastbound			THOMPSON ST Westbound			CHERRY AVE Northbound			CHERRY AVE Southbound			15-min Total
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
4:45 PM	0	58	2	2	59	1	2	0	0	2	1	15	142
5:00 PM	0	43	4	5	80	4	3	0	2	7	3	23	174
5:15 PM	3	51	5	4	59	0	2	1	3	1	2	15	146
5:30 PM	5	54	2	5	63	0	2	1	3	1	1	21	158
Peak Hr	**8**	**206**	**13**	**16**	**261**	**5**	**9**	**2**	**8**	**11**	**7**	**74**	**620**

Note: For all six-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:45 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	3	0	1	*4*
5:00 PM	1	1	0	0	*2*	0	0	0	0	*0*	1	0	0	1	*2*
5:15 PM	2	0	0	0	*2*	0	0	0	1	*1*	0	1	2	1	*4*
5:30 PM	2	0	0	1	*3*	1	0	0	0	*1*	1	0	1	0	*2*
Peak Hr	**6**	**1**	**0**	**1**	***8***	**1**	**0**	**0**	**1**	***2***	**2**	**4**	**3**	**3**	***12***

Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

Six-Hour Count Summaries

Interval Start	THOMPSON ST Eastbound			THOMPSON ST Westbound			CHERRY AVE Northbound			CHERRY AVE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:30 PM	1	35	3	3	52	1	4	0	0	1	2	21	123	
3:45 PM	6	50	2	3	60	0	5	0	1	4	4	6	141	
4:00 PM	4	42	3	0	57	0	2	1	0	4	1	14	128	
4:15 PM	3	45	1	1	64	0	1	1	2	3	2	22	145	537
4:30 PM	0	40	1	2	56	0	0	1	0	1	2	21	124	538
4:45 PM	**0**	**58**	**2**	**2**	**59**	**1**	**2**	**0**	**0**	**2**	**1**	**15**	**142**	539
5:00 PM	**0**	**43**	**4**	**5**	**80**	**4**	**3**	**0**	**2**	**7**	**3**	**23**	**174**	585
5:15 PM	**3**	**51**	**5**	**4**	**59**	**0**	**2**	**1**	**3**	**1**	**2**	**15**	**146**	586
5:30 PM	**5**	**54**	**2**	**5**	**63**	**0**	**2**	**1**	**3**	**1**	**1**	**21**	**158**	**620**
5:45 PM	0	37	3	0	46	1	2	0	4	2	4	16	115	593
6:00 PM	3	37	0	1	45	0	3	2	3	1	4	4	103	522
6:15 PM	1	40	6	0	30	1	3	2	1	1	1	4	90	466
6:30 PM	2	38	2	3	41	0	2	1	1	0	4	4	98	406
6:45 PM	0	36	2	1	32	0	1	1	2	2	2	7	86	377
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	274
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	184
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	86
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	28	606	36	30	744	8	32	11	22	30	33	193	1,773	
Peak Hr	**8**	**206**	**13**	**16**	**261**	**5**	**9**	**2**	**8**	**11**	**7**	**74**	**620**	

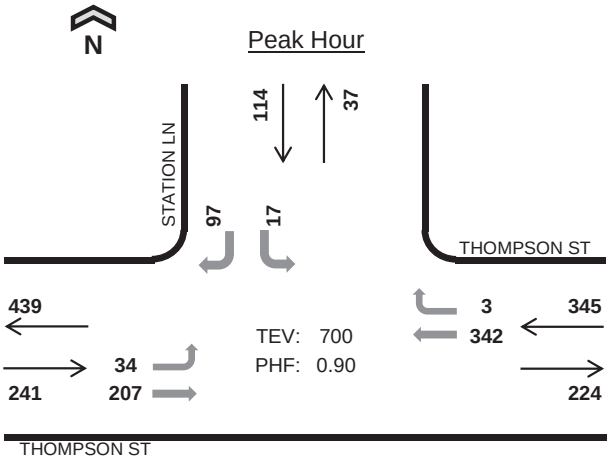
Note: Six-hour count summary volumes include heavy vehicles but excludes bicycles in overall count.

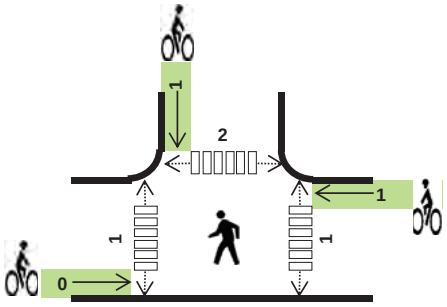
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:30 PM	1	3	0	0	*4*	0	0	0	0	*0*	1	7	0	3	*11*
3:45 PM	6	5	1	0	*12*	0	0	0	0	*0*	0	0	0	7	*7*
4:00 PM	2	0	0	1	*3*	0	0	0	1	*1*	0	0	0	0	*0*
4:15 PM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	3	1	0	1	*5*	0	0	0	0	*0*	0	1	0	0	*1*
4:45 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**3**	**0**	**1**	***4***
5:00 PM	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**1**	***2***
5:15 PM	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**0**	**1**	***1***	**0**	**1**	**2**	**1**	***4***
5:30 PM	**2**	**0**	**0**	**1**	***3***	**1**	**0**	**0**	**0**	***1***	**1**	**0**	**1**	**0**	***2***
5:45 PM	2	0	1	0	*3*	0	0	0	0	*0*	0	1	0	0	*1*
6:00 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	1	0	*1*
6:15 PM	2	1	0	0	*3*	0	1	0	0	*1*	0	0	0	0	*0*
6:30 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	1	0	0	*1*
6:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	25	12	2	3	*42*	1	1	0	2	*4*	3	14	4	13	*34*
Peak Hr	**6**	**1**	**0**	**1**	***8***	**1**	**0**	**0**	**1**	***2***	**2**	**4**	**3**	**3**	***12***

Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

STATION LN
THOMPSON ST

Date: Tue, Sep 23, 2014
Count Period: 3:30 PM to 7:00 PM
Peak Hour: 4:45 PM to 5:45 PM





	HV %:	PHF
EB	4.1%	0.86
WB	0.3%	0.82
SB	5.3%	0.65
TOTAL	2.4%	0.90

Peak-Hour Count Summaries

Interval Start	THOMPSON ST Eastbound			THOMPSON ST Westbound			STATION LN Northbound			STATION LN Southbound			15-min Total
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
4:45 PM	5	47	0	0	75	1	0	0	0	10	0	34	172
5:00 PM	11	48	0	0	105	0	0	0	0	2	0	28	194
5:15 PM	9	61	0	0	76	2	0	0	0	0	0	11	159
5:30 PM	9	51	0	0	86	0	0	0	0	5	0	24	175
Peak Hr	**34**	**207**	**0**	**0**	**342**	**3**	**0**	**0**	**0**	**17**	**0**	**97**	**700**

Note: For all six-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:45 PM	2	0	0	2	*4*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 PM	2	0	0	1	*3*	0	0	0	0	*0*	0	1	0	0	*1*
5:15 PM	3	0	0	1	*4*	0	1	0	0	*1*	1	0	0	0	*1*
5:30 PM	3	1	0	2	*6*	0	0	0	1	*1*	0	0	2	0	*2*
Peak Hr	**10**	**1**	**0**	**6**	***17***	**0**	**1**	**0**	**1**	***2***	**1**	**1**	**2**	**0**	***4***

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Six-Hour Count Summaries

Interval Start	THOMPSON ST Eastbound			THOMPSON ST Westbound			STATION LN Northbound			STATION LN Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:30 PM	4	45	0	0	69	1	0	0	0	0	0	7	126	
3:45 PM	5	49	0	0	74	0	0	0	0	1	0	8	137	
4:00 PM	4	44	0	0	78	0	0	0	0	5	0	30	161	
4:15 PM	5	41	0	0	83	0	0	0	0	3	0	32	164	588
4:30 PM	2	44	0	0	77	1	0	0	0	1	0	5	130	592
4:45 PM	**5**	**47**	**0**	**0**	**75**	**1**	**0**	**0**	**0**	**10**	**0**	**34**	**172**	627
5:00 PM	**11**	**48**	**0**	**0**	**105**	**0**	**0**	**0**	**0**	**2**	**0**	**28**	**194**	660
5:15 PM	**9**	**61**	**0**	**0**	**76**	**2**	**0**	**0**	**0**	**0**	**0**	**11**	**159**	655
5:30 PM	**9**	**51**	**0**	**0**	**86**	**0**	**0**	**0**	**0**	**5**	**0**	**24**	**175**	**700**
5:45 PM	6	36	0	0	59	1	0	0	0	5	0	21	128	656
6:00 PM	7	43	0	0	51	0	0	0	0	0	0	5	106	568
6:15 PM	6	41	0	0	36	1	0	0	0	1	0	8	93	502
6:30 PM	7	44	0	0	45	1	0	0	0	2	0	19	118	445
6:45 PM	7	34	0	0	38	1	0	0	0	1	0	17	98	415
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	309
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	216
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	98
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	87	628	0	0	952	9	0	0	0	36	0	249	1,961	
Peak Hr	**34**	**207**	**0**	**0**	**342**	**3**	**0**	**0**	**0**	**17**	**0**	**97**	**700**	

Note: Six-hour count summary volumes include heavy vehicles but excludes bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:30 PM	2	2	0	1	*5*	0	0	0	0	*0*	0	0	0	0	*0*
3:45 PM	5	6	0	1	*12*	0	0	0	0	*0*	0	0	0	0	*0*
4:00 PM	1	1	0	2	*4*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	1	1	0	2	*4*	0	0	0	1	*1*	0	0	0	0	*0*
4:30 PM	2	1	0	1	*4*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	**2**	**0**	**0**	**2**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:00 PM	**2**	**0**	**0**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	***1***
5:15 PM	**3**	**0**	**0**	**1**	***4***	**0**	**1**	**0**	**0**	***1***	**1**	**0**	**0**	**0**	***1***
5:30 PM	**3**	**1**	**0**	**2**	***6***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**2**	**0**	***2***
5:45 PM	1	0	0	2	*3*	0	0	0	0	*0*	0	0	1	0	*1*
6:00 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	1	0	*1*
6:15 PM	2	1	0	1	*4*	0	1	0	1	*2*	0	0	0	0	*0*
6:30 PM	1	0	0	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
6:45 PM	0	0	0	2	*2*	0	0	0	0	*0*	0	0	0	0	*0*
7:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	26	13	0	19	*58*	0	2	0	3	*5*	1	1	4	0	*6*
Peak Hr	**10**	**1**	**0**	**6**	***17***	**0**	**1**	**0**	**1**	***2***	**1**	**1**	**2**	**0**	***4***

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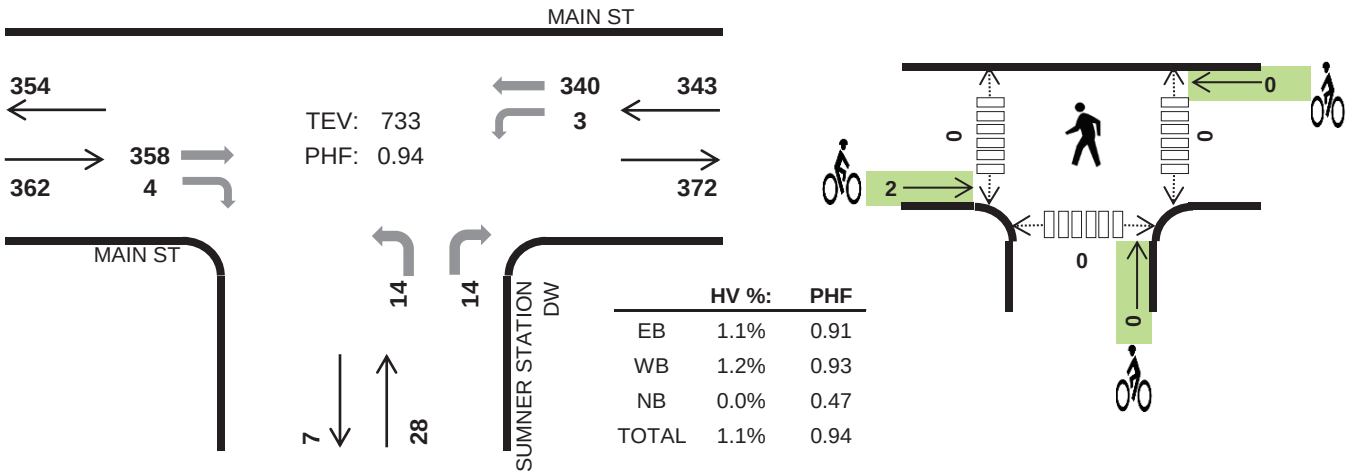
SUMNER STATION DW
MAIN ST

N

Peak Hour

Date: Tue, Sep 23, 2014
Count Period: 3:30 PM to 7:00 PM
Peak Hour: 3:45 PM to 4:45 PM



Peak-Hour Count Summaries

Interval Start	MAIN ST Eastbound			MAIN ST Westbound			SUMNER STATION DW Northbound			SUMNER STATION DW Southbound			15-min Total
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
3:45 PM	0	85	2	0	80	0	3	0	1	0	0	0	171
4:00 PM	0	80	1	0	82	0	8	0	7	0	0	0	178
4:15 PM	0	94	1	3	89	0	3	0	5	0	0	0	195
4:30 PM	0	99	0	0	89	0	0	0	1	0	0	0	189
Peak Hr	**0**	**358**	**4**	**3**	**340**	**0**	**14**	**0**	**14**	**0**	**0**	**0**	**733**

Note: For all six-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:45 PM	0	0	0	0	*0*	1	0	0	0	*1*	0	0	0	0	*0*
4:00 PM	0	2	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	4	1	0	0	*5*	1	0	0	0	*1*	0	0	0	0	*0*
Peak Hr	**4**	**4**	**0**	**0**	***8***	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***

Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

Six-Hour Count Summaries

Interval Start	MAIN ST Eastbound			MAIN ST Westbound			SUMNER STATION DW Northbound			SUMNER STATION DW Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:30 PM	0	89	1	0	76	0	1	0	1	0	0	0	168	
3:45 PM	**0**	**85**	**2**	**0**	**80**	**0**	**3**	**0**	**1**	**0**	**0**	**0**	**171**	
4:00 PM	**0**	**80**	**1**	**0**	**82**	**0**	**8**	**0**	**7**	**0**	**0**	**0**	**178**	
4:15 PM	**0**	**94**	**1**	**3**	**89**	**0**	**3**	**0**	**5**	**0**	**0**	**0**	**195**	712
4:30 PM	**0**	**99**	**0**	**0**	**89**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**189**	**733**
4:45 PM	0	96	0	1	70	0	2	0	2	0	0	0	171	733
5:00 PM	0	82	1	0	86	0	2	0	3	0	0	0	174	729
5:15 PM	0	107	1	0	82	0	0	0	1	0	0	0	191	725
5:30 PM	0	106	2	0	68	0	2	0	3	0	0	0	181	717
5:45 PM	0	98	1	0	65	0	0	0	0	0	0	0	164	710
6:00 PM	0	56	0	0	73	0	0	0	1	0	0	0	130	666
6:15 PM	0	74	0	0	71	0	0	0	0	0	0	0	145	620
6:30 PM	0	48	0	0	53	0	3	0	0	0	0	0	104	543
6:45 PM	0	65	0	2	80	0	1	0	0	0	0	0	148	527
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	397
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	252
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	148
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	1,179	10	6	1,064	0	25	0	25	0	0	0	2,309	
Peak Hr	**0**	**358**	**4**	**3**	**340**	**0**	**14**	**0**	**14**	**0**	**0**	**0**	**733**	

Note: Six-hour count summary volumes include heavy vehicles but excludes bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:30 PM	3	3	0	0	*6*	0	0	0	0	*0*	0	0	0	1	*1*
3:45 PM	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***
4:00 PM	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
4:15 PM	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
4:30 PM	**4**	**1**	**0**	**0**	***5***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***
4:45 PM	0	5	0	0	*5*	1	0	0	0	*1*	0	0	0	0	*0*
5:00 PM	2	2	0	0	*4*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	2	2	0	0	*4*	1	0	0	0	*1*	1	0	0	0	*1*
5:30 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	2	*2*
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
6:00 PM	0	2	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 PM	0	2	0	0	*2*	0	0	0	0	*0*	0	0	0	1	*1*
6:45 PM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
7:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	13	21	0	0	*34*	4	0	0	0	*4*	1	0	0	4	*5*
Peak Hr	**4**	**4**	**0**	**0**	***8***	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***

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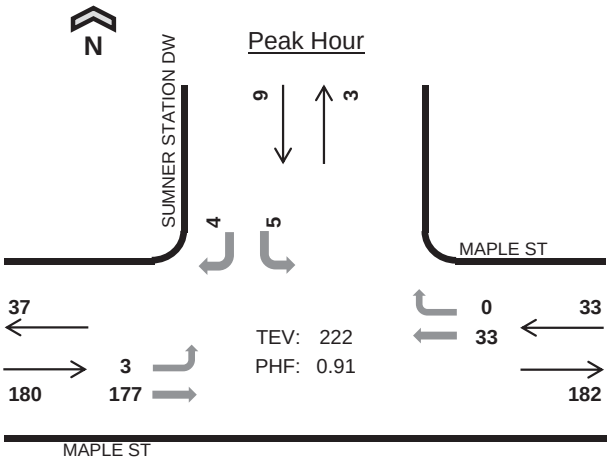
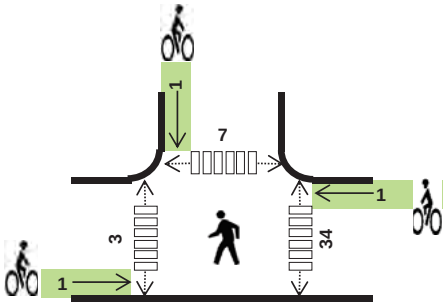
SUMNER STATION DW
MAPLE ST



Date: Tue, Sep 23, 2014
Count Period: 3:30 PM to 7:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV %:	PHF
EB	0.0%	0.92
WB	0.0%	0.63
SB	0.0%	0.56
TOTAL	0.0%	0.91

Peak-Hour Count Summaries

Interval Start	MAPLE ST Eastbound			MAPLE ST Westbound			SUMNER STATION DW Northbound			SUMNER STATION DW Southbound			15-min Total
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
4:15 PM	1	48	0	0	5	0	0	0	0	3	0	1	58
4:30 PM	1	48	0	0	5	0	0	0	0	0	0	0	54
4:45 PM	1	36	0	0	10	0	0	0	0	1	0	1	49
5:00 PM	0	45	0	0	13	0	0	0	0	1	0	2	61
Peak Hr	**3**	**177**	**0**	**0**	**33**	**0**	**0**	**0**	**0**	**5**	**0**	**4**	**222**

Note: For all six-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	13	0	1	0	*14*
4:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	1	0	*2*
4:45 PM	0	0	0	0	*0*	0	0	0	1	*1*	9	1	4	0	*14*
5:00 PM	0	0	0	0	*0*	1	1	0	0	*2*	12	1	1	0	*14*
Peak Hr	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**0**	**1**	***3***	**34**	**3**	**7**	**0**	***44***

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Six-Hour Count Summaries

Interval Start	MAPLE ST Eastbound			MAPLE ST Westbound			SUMNER STATION DW Northbound			SUMNER STATION DW Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:30 PM	2	40	0	0	5	1	0	0	0	1	0	0	49	
3:45 PM	2	30	0	0	6	1	0	0	0	0	0	1	40	
4:00 PM	0	23	0	0	7	0	0	0	0	10	0	3	43	
4:15 PM	**1**	**48**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**58**	190
4:30 PM	**1**	**48**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**54**	195
4:45 PM	**1**	**36**	**0**	**0**	**10**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**49**	204
5:00 PM	**0**	**45**	**0**	**0**	**13**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**61**	**222**
5:15 PM	0	30	0	0	4	0	0	0	0	0	0	0	34	198
5:30 PM	0	36	0	0	6	0	0	0	0	1	0	1	44	188
5:45 PM	3	23	0	0	11	0	0	0	0	4	0	1	42	181
6:00 PM	0	12	0	0	7	0	0	0	0	0	0	0	19	139
6:15 PM	1	15	0	0	9	0	0	0	0	0	0	0	25	130
6:30 PM	0	10	0	0	5	0	0	0	0	0	0	0	15	101
6:45 PM	0	9	0	0	6	0	0	0	0	1	0	0	16	75
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	56
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	31
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	16
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	11	405	0	0	99	2	0	0	0	22	0	10	549	
Peak Hr	**3**	**177**	**0**	**0**	**33**	**0**	**0**	**0**	**0**	**5**	**0**	**4**	**222**	

Note: Six-hour count summary volumes include heavy vehicles but excludes bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:30 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	2	0	*2*
3:45 PM	0	0	0	0	*0*	0	1	0	0	*1*	0	0	1	0	*1*
4:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	32	0	3	0	*35*
4:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**13**	**0**	**1**	**0**	***14***
4:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**1**	**0**	***2***
4:45 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***	**9**	**1**	**4**	**0**	***14***
5:00 PM	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**0**	**0**	***2***	**12**	**1**	**1**	**0**	***14***
5:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	0	0	*1*
5:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	5	1	2	0	*8*
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	7	0	2	0	*9*
6:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 PM	0	0	0	0	*0*	0	1	0	0	*1*	4	0	1	0	*5*
6:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	2	0	1	0	*3*
6:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	0	0	0	*1*
7:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:00 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
9:15 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	1	0	0	0	*1*	1	3	0	1	*5*	85	5	19	0	*109*
Peak Hr	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**0**	**1**	***3***	**34**	**3**	**7**	**0**	***44***

Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

Location: FRYAR AVE S/O ZEHNDER ST
Date Range: 9/23/2014 to 9/25/2014
Site Code: 01

	Tuesday			Wednesday			Thursday			Friday			Saturday			Sunday			Monday			Mid-Week Average		
	9/23/2014			9/24/2014			9/25/2014			9/26/2014			9/27/2014			9/28/2014			9/29/2014					
Time	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00 AM	27	62	89	35	60	95	22	66	88	-	-	-	-	-	-	-	-	-	-	-	-	28	63	91
1:00 AM	30	66	96	25	67	92	25	67	92	-	-	-	-	-	-	-	-	-	-	-	-	27	67	93
2:00 AM	27	64	91	28	49	77	30	43	73	-	-	-	-	-	-	-	-	-	-	-	-	28	52	80
3:00 AM	64	47	111	74	33	107	81	34	115	-	-	-	-	-	-	-	-	-	-	-	-	73	38	111
4:00 AM	305	58	363	353	61	414	314	61	375	-	-	-	-	-	-	-	-	-	-	-	-	324	60	384
5:00 AM	722	102	824	798	113	911	759	140	899	-	-	-	-	-	-	-	-	-	-	-	-	760	118	878
6:00 AM	644	149	793	619	165	784	698	152	850	-	-	-	-	-	-	-	-	-	-	-	-	654	155	809
7:00 AM	591	195	786	646	207	853	651	188	839	-	-	-	-	-	-	-	-	-	-	-	-	629	197	826
8:00 AM	326	212	538	479	176	655	397	182	579	-	-	-	-	-	-	-	-	-	-	-	-	401	190	591
9:00 AM	283	213	496	279	231	510	291	241	532	-	-	-	-	-	-	-	-	-	-	-	-	284	228	513
10:00 AM	240	243	483	262	249	511	236	255	491	-	-	-	-	-	-	-	-	-	-	-	-	246	249	495
11:00 AM	290	326	616	263	295	558	285	323	608	-	-	-	-	-	-	-	-	-	-	-	-	279	315	594
12:00 PM	325	295	620	291	322	613	304	331	635	-	-	-	-	-	-	-	-	-	-	-	-	307	316	623
1:00 PM	297	406	703	302	392	694	303	380	683	-	-	-	-	-	-	-	-	-	-	-	-	301	393	693
2:00 PM	345	592	937	321	585	906	311	599	910	-	-	-	-	-	-	-	-	-	-	-	-	326	592	918
3:00 PM	442	754	1,196	397	709	1,106	398	735	1,133	-	-	-	-	-	-	-	-	-	-	-	-	412	733	1,145
4:00 PM	346	686	1,032	310	640	950	349	687	1,036	-	-	-	-	-	-	-	-	-	-	-	-	335	671	1,006
5:00 PM	291	555	846	259	535	794	279	532	811	-	-	-	-	-	-	-	-	-	-	-	-	276	541	817
6:00 PM	147	379	526	157	310	467	190	361	551	-	-	-	-	-	-	-	-	-	-	-	-	165	350	515
7:00 PM	105	174	279	114	123	237	146	149	295	-	-	-	-	-	-	-	-	-	-	-	-	122	149	270
8:00 PM	69	118	187	104	127	231	105	117	222	-	-	-	-	-	-	-	-	-	-	-	-	93	121	213
9:00 PM	85	74	159	75	67	142	84	84	168	-	-	-	-	-	-	-	-	-	-	-	-	81	75	156
10:00 PM	35	58	93	47	65	112	52	58	110	-	-	-	-	-	-	-	-	-	-	-	-	45	60	105
11:00 PM	32	67	99	37	52	89	29	46	75	-	-	-	-	-	-	-	-	-	-	-	-	33	55	88
Total	**6,068**	**5,895**	**11,963**	**6,275**	**5,633**	**11,908**	**6,339**	**5,831**	**12,170**	-	-	-	-	-	-	-	-	-	-	-	-	**6,227**	**5,786**	**12,014**
Percent	**51%**	**49%**	-	**53%**	**47%**	-	**52%**	**48%**	-	-	-	-	-	-	-	-	-	-	-	-	-	**52%**	**48%**	-

1. Mid-week average includes data between Tuesday and Thursday.

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: SR 410 WB RAMPS W/O TRAFFIC AVE
Date Range: 9/24/2014 to 9/25/2014
Site Code: 02

	Wednesday			Thursday			Friday			Saturday			Sunday			Monday			Tuesday					
	9/24/2014			9/25/2014			9/26/2014			9/27/2014			9/28/2014			9/29/2014			9/30/2014			Mid-Week Average		
Time	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total
12:00 AM	16	51	67	18	64	82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17	58	75
1:00 AM	3	70	73	13	80	93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	75	83
2:00 AM	7	80	87	7	70	77	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	75	82
3:00 AM	31	114	145	30	122	152	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31	118	149
4:00 AM	207	292	499	151	399	550	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	179	346	525
5:00 AM	361	292	653	349	298	647	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	355	295	650
6:00 AM	342	338	680	346	311	657	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	344	325	669
7:00 AM	436	370	806	443	419	862	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	440	395	834
8:00 AM	294	441	735	308	460	768	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	301	451	752
9:00 AM	250	496	746	226	449	675	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	238	473	711
10:00 AM	218	492	710	198	502	700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	208	497	705
11:00 AM	227	492	719	209	567	776	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	218	530	748
12:00 PM	206	479	685	193	620	813	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200	550	749
1:00 PM	218	627	845	224	666	890	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	221	647	868
2:00 PM	235	767	1,002	234	737	971	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	235	752	987
3:00 PM	237	880	1,117	226	936	1,162	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	232	908	1,140
4:00 PM	267	770	1,037	245	894	1,139	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	256	832	1,088
5:00 PM	248	815	1,063	258	921	1,179	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	253	868	1,121
6:00 PM	189	509	698	200	582	782	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195	546	740
7:00 PM	118	290	408	104	254	358	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	111	272	383
8:00 PM	102	306	408	98	251	349	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	279	379
9:00 PM	73	213	286	50	206	256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	62	210	271
10:00 PM	41	131	172	40	133	173	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41	132	173
11:00 PM	20	103	123	22	86	108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21	95	116
Total	**4,346**	**9,418**	**13,764**	**4,192**	**10,027**	**14,219**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**4,269**	**9,723**	**13,992**
Percent	**32%**	**68%**	-	**29%**	**71%**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**31%**	**69%**	-

1. Mid-week average includes data between Tuesday and Thursday.

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: SR 410 EB RAMPS W/O TRAFFIC AVE
Date Range: 9/23/2014 to 9/25/2014
Site Code: 03

	Tuesday			Wednesday			Thursday			Friday			Saturday			Sunday			Monday					
	9/23/2014			9/24/2014			9/25/2014			9/26/2014			9/27/2014			9/28/2014			9/29/2014			Mid-Week Average		
Time	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total	EB	WB	Total
12:00 AM	107	17	124	98	20	118	97	24	121	-	-	-	-	-	-	-	-	-	-	-	-	101	20	121
1:00 AM	67	13	80	55	13	68	56	15	71	-	-	-	-	-	-	-	-	-	-	-	-	59	14	73
2:00 AM	54	11	65	52	12	64	50	12	62	-	-	-	-	-	-	-	-	-	-	-	-	52	12	64
3:00 AM	83	8	91	77	0	77	88	5	93	-	-	-	-	-	-	-	-	-	-	-	-	83	4	87
4:00 AM	299	20	319	305	0	305	301	24	325	-	-	-	-	-	-	-	-	-	-	-	-	302	15	316
5:00 AM	517	73	590	519	3	522	533	89	622	-	-	-	-	-	-	-	-	-	-	-	-	523	55	578
6:00 AM	366	150	516	349	13	362	531	133	664	-	-	-	-	-	-	-	-	-	-	-	-	415	99	514
7:00 AM	478	195	673	520	13	533	480	204	684	-	-	-	-	-	-	-	-	-	-	-	-	493	137	630
8:00 AM	409	140	549	499	197	696	454	173	627	-	-	-	-	-	-	-	-	-	-	-	-	454	170	624
9:00 AM	399	147	546	376	154	530	422	162	584	-	-	-	-	-	-	-	-	-	-	-	-	399	154	553
10:00 AM	395	182	577	375	168	543	393	164	557	-	-	-	-	-	-	-	-	-	-	-	-	388	171	559
11:00 AM	422	220	642	436	6	442	439	226	665	-	-	-	-	-	-	-	-	-	-	-	-	432	151	583
12:00 PM	464	223	687	488	69	557	496	214	710	-	-	-	-	-	-	-	-	-	-	-	-	483	169	651
1:00 PM	555	243	798	546	235	781	567	242	809	-	-	-	-	-	-	-	-	-	-	-	-	556	240	796
2:00 PM	613	267	880	580	288	868	594	321	915	-	-	-	-	-	-	-	-	-	-	-	-	596	292	888
3:00 PM	639	311	950	651	326	977	693	328	1,021	-	-	-	-	-	-	-	-	-	-	-	-	661	322	983
4:00 PM	625	316	941	630	354	984	635	329	964	-	-	-	-	-	-	-	-	-	-	-	-	630	333	963
5:00 PM	540	298	838	586	329	915	649	311	960	-	-	-	-	-	-	-	-	-	-	-	-	592	313	904
6:00 PM	492	282	774	529	260	789	544	316	860	-	-	-	-	-	-	-	-	-	-	-	-	522	286	808
7:00 PM	453	147	600	369	167	536	427	147	574	-	-	-	-	-	-	-	-	-	-	-	-	416	154	570
8:00 PM	304	130	434	322	102	424	320	117	437	-	-	-	-	-	-	-	-	-	-	-	-	315	116	432
9:00 PM	244	91	335	256	73	329	253	85	338	-	-	-	-	-	-	-	-	-	-	-	-	251	83	334
10:00 PM	186	52	238	162	40	202	229	44	273	-	-	-	-	-	-	-	-	-	-	-	-	192	45	238
11:00 PM	118	19	137	150	29	179	138	17	155	-	-	-	-	-	-	-	-	-	-	-	-	135	22	157
Total	**8,829**	**3,555**	**12,384**	**8,930**	**2,871**	**11,801**	**9,389**	**3,702**	**13,091**	-	-	-	-	-	-	-	-	-	-	-	-	**9,049**	**3,376**	**12,425**
Percent	**71%**	**29%**	-	**76%**	**24%**	-	**72%**	**28%**	-	-	-	-	-	-	-	-	-	-	-	-	-	**73%**	**27%**	-

1. Mid-week average includes data between Tuesday and Thursday.

Mark Skaggs:425-250-0777
mark.skaggs@idaxdata.com

Location: E MAIN AVE S/O 4TH AVE
Date Range: 9/23/2014 to 9/25/2014
Site Code: 04

	Tuesday			Wednesday			Thursday			Friday			Saturday			Sunday			Monday					
	9/23/2014			9/24/2014			9/25/2014			9/26/2014			9/27/2014			9/28/2014			9/29/2014			Mid-Week Average		
Time	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00 AM	38	112	150	31	87	118	41	96	137	-	-	-	-	-	-	-	-	-	-	-	-	37	98	135
1:00 AM	36	54	90	15	55	70	29	51	80	-	-	-	-	-	-	-	-	-	-	-	-	27	53	80
2:00 AM	54	49	103	22	43	65	47	39	86	-	-	-	-	-	-	-	-	-	-	-	-	41	44	85
3:00 AM	98	39	137	0	27	27	97	28	125	-	-	-	-	-	-	-	-	-	-	-	-	65	31	96
4:00 AM	383	64	447	354	74	428	406	63	469	-	-	-	-	-	-	-	-	-	-	-	-	381	67	448
5:00 AM	580	169	749	674	175	849	666	182	848	-	-	-	-	-	-	-	-	-	-	-	-	640	175	815
6:00 AM	567	313	880	547	356	903	762	299	1,061	-	-	-	-	-	-	-	-	-	-	-	-	625	323	948
7:00 AM	730	513	1,243	749	504	1,253	699	501	1,200	-	-	-	-	-	-	-	-	-	-	-	-	726	506	1,232
8:00 AM	667	495	1,162	700	486	1,186	699	508	1,207	-	-	-	-	-	-	-	-	-	-	-	-	689	496	1,185
9:00 AM	545	440	985	606	511	1,117	610	500	1,110	-	-	-	-	-	-	-	-	-	-	-	-	587	484	1,071
10:00 AM	515	504	1,019	606	507	1,113	592	480	1,072	-	-	-	-	-	-	-	-	-	-	-	-	571	497	1,068
11:00 AM	543	593	1,136	622	606	1,228	630	586	1,216	-	-	-	-	-	-	-	-	-	-	-	-	598	595	1,193
12:00 PM	653	635	1,288	622	635	1,257	728	667	1,395	-	-	-	-	-	-	-	-	-	-	-	-	668	646	1,313
1:00 PM	599	700	1,299	661	716	1,377	652	692	1,344	-	-	-	-	-	-	-	-	-	-	-	-	637	703	1,340
2:00 PM	590	907	1,497	722	906	1,628	698	911	1,609	-	-	-	-	-	-	-	-	-	-	-	-	670	908	1,578
3:00 PM	646	1,026	1,672	691	1,047	1,738	737	1,037	1,774	-	-	-	-	-	-	-	-	-	-	-	-	691	1,037	1,728
4:00 PM	602	1,140	1,742	717	1,093	1,810	737	1,085	1,822	-	-	-	-	-	-	-	-	-	-	-	-	685	1,106	1,791
5:00 PM	602	1,162	1,764	724	1,210	1,934	739	1,190	1,929	-	-	-	-	-	-	-	-	-	-	-	-	688	1,187	1,876
6:00 PM	452	1,026	1,478	567	852	1,419	614	980	1,594	-	-	-	-	-	-	-	-	-	-	-	-	544	953	1,497
7:00 PM	356	716	1,072	390	511	901	397	571	968	-	-	-	-	-	-	-	-	-	-	-	-	381	599	980
8:00 PM	249	384	633	256	413	669	253	423	676	-	-	-	-	-	-	-	-	-	-	-	-	253	407	659
9:00 PM	202	277	479	200	299	499	216	279	495	-	-	-	-	-	-	-	-	-	-	-	-	206	285	491
10:00 PM	104	200	304	109	188	297	114	232	346	-	-	-	-	-	-	-	-	-	-	-	-	109	207	316
11:00 PM	64	136	200	66	123	189	66	124	190	-	-	-	-	-	-	-	-	-	-	-	-	65	128	193
Total	**9,875**	**11,654**	**21,529**	**10,651**	**11,424**	**22,075**	**11,229**	**11,524**	**22,753**	-	-	-	-	-	-	-	-	-	-	-	-	**10,585**	**11,534**	**22,119**
Percent	**46%**	**54%**	-	**48%**	**52%**	-	**49%**	**51%**	-	-	-	-	-	-	-	-	-	-	-	-	-	**48%**	**52%**	-

1. Mid-week average includes data between Tuesday and Thursday.

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