



## **CITY OF KIRKLAND**

### **Department of Public Works**

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**[www.kirklandwa.gov](http://www.kirklandwa.gov)**

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## **MEMORANDUM**

**To:** Transportation Commission

**From:** Joel Pfundt, Transportation Manager  
Iris Cabrera, Transportation Engineer

**Date:** September 17, 2021

**Subject:** LAKE ST S/LAKE WASHINGTON BLVD MULTIMODAL DATA COLLECTION

### **Staff Recommendation:**

It is recommended that the Transportation Commission receive a briefing, ask questions and provide comments on the results of the Lake St S/Lake Washington Boulevard Multimodal Data Collection.

### **Background:**

The City of Kirkland is evaluating creation of a walkway/promenade along Lake Street S/Lake Washington Boulevard between 2nd Ave S and NE 60th Street that further enhances the experience for people walking and rolling along the corridor, therefore encouraging more people to travel by the modes. This would likely require the elimination of existing on-street parking spaces. To better understand the impacts of this proposal, the City is evaluating the safety benefits and impacts, vehicle parking impacts, and changes in how people use the waterfront.

To accomplish these goals, the City hired a consultant (Transpo Group) to collect multimodal activity and vehicle parking data along the Lake Street S/Lake Washington Boulevard corridor. The consultant collected this data through traditional means of in-person observations, video recordings and using new technologies that allow for unique insights into origin-destination patterns for roadway users. The results of the data collection will help evaluate the parking impacts and what changes and benefits might be expected from implementing a walkway/promenade. Figure 1 below shows the study area where the following data was collected:

- Vehicle/Pedestrian/Bike Counts on Lake St S/Lake Washington Blvd Corridor at approximately these locations:
  - 7th Ave S (north end of corridor)
  - Marsh Park (middle of corridor)
  - NE 60th St (south end of corridor)
- Vehicle Parking Data
  - Lake St/Lake Washington Blvd between 2nd Ave S and NE 60th St
  - Side Streets (2nd Ave S, 2nd St S, 5th Ave S, 7th Ave S, 10th Ave S, NE 64th St, NE 63rd St, NE 62nd St)

- Parking Lots (Marsh Park, Houghton Beach, 58th St Lot)
- Streetlight Origin-Destination Data for 10 vehicle parking zones

The next step will be to develop preliminary design concepts and cost estimates for further consideration. This effort will be informed by these data collection results.



**Figure 1.** Study Area

Attachment 1 – September 22, 2021 Transportation Commission Presentation



# KIRKLAND LAKE ST/ LAKE WA BLVD

Transportation Commission Meeting  
9/22/2021

transpogroup   
WHAT TRANSPORTATION CAN BE.

# AGENDA

1. Study Area Map and Data Collection Summary
2. Vehicle Counts
3. Ped/Bike Data
4. Parking Occupancy
5. Parking O/D Study
6. Summary



STUDY  
AREA

# STUDY AREA/DATA COLLECTED



## PARKING DATA

- Lake St/Lake WA Blvd  
*from 2<sup>nd</sup> Ave to 60<sup>th</sup> Ave*
- Side Streets  
*2<sup>nd</sup>, 5<sup>th</sup>, 10<sup>th</sup>, 64<sup>th</sup>, 63<sup>rd</sup>, 62<sup>nd</sup>*
- Marsh Park,  
Houghton Beach,  
58<sup>th</sup> St Lot



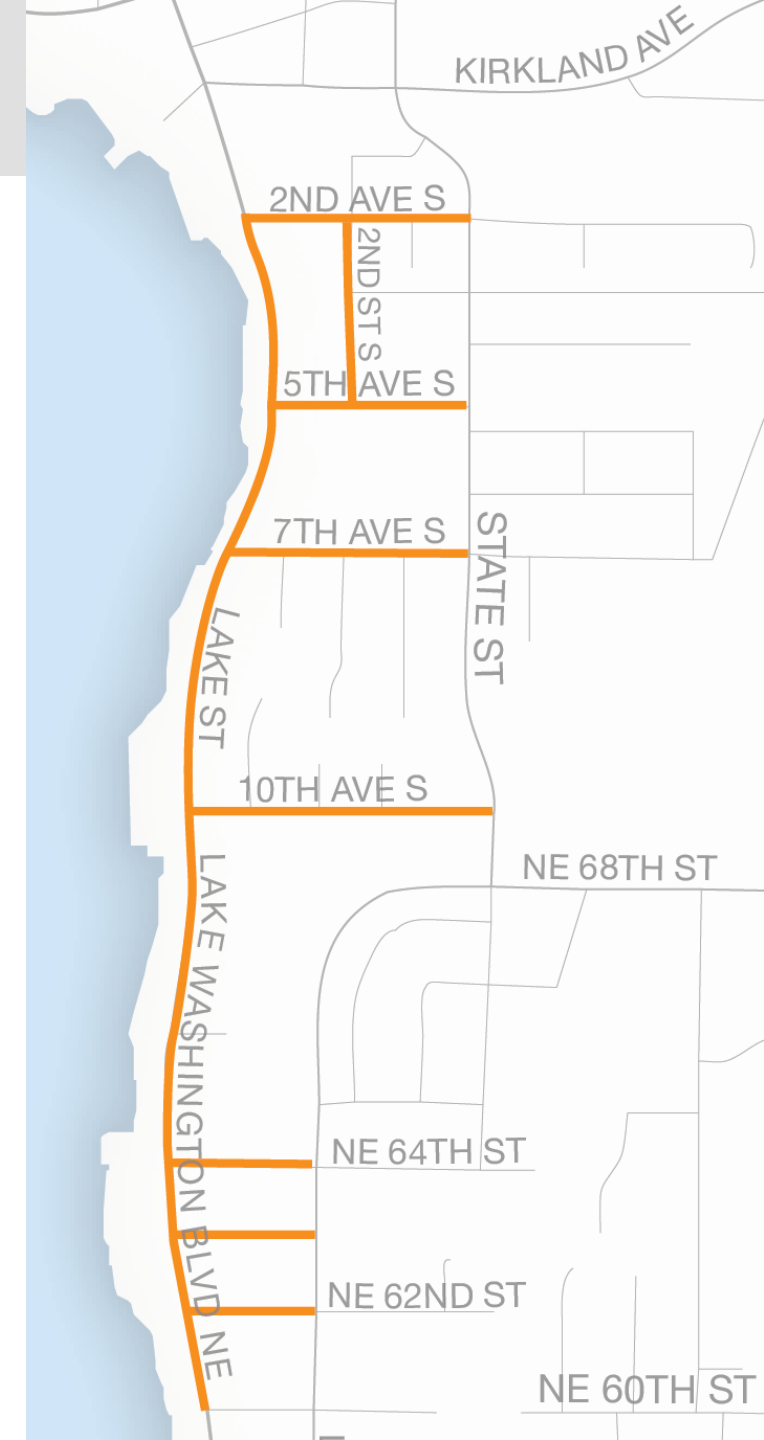
## VEHICLE/PED/ BIKE COUNTS

- 7<sup>th</sup> Ave S
- Marsh Park
- NE 60<sup>th</sup> St



## STREETLIGHT OD DATA

10 parking zones



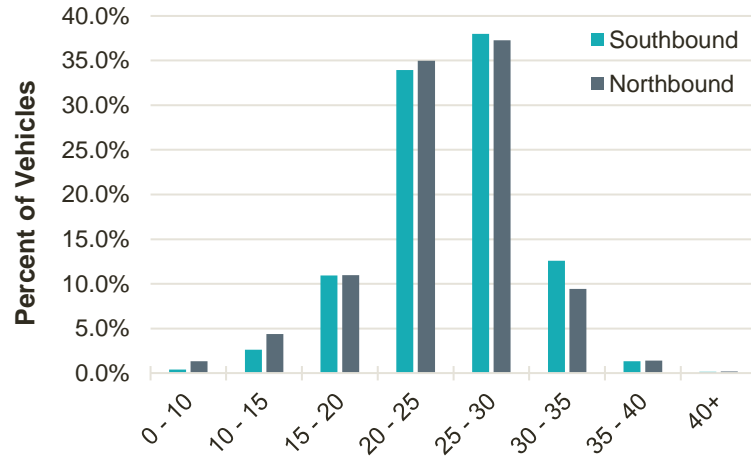




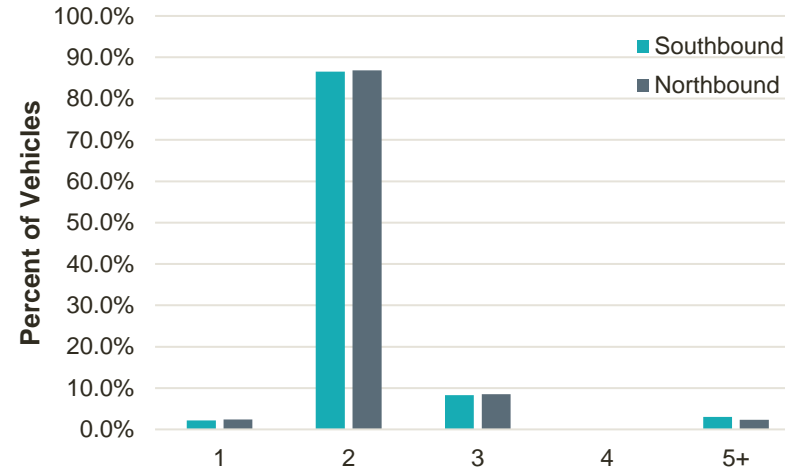
# VEHICLE COUNTS

# LAKE ST S & 7<sup>TH</sup> AVE S

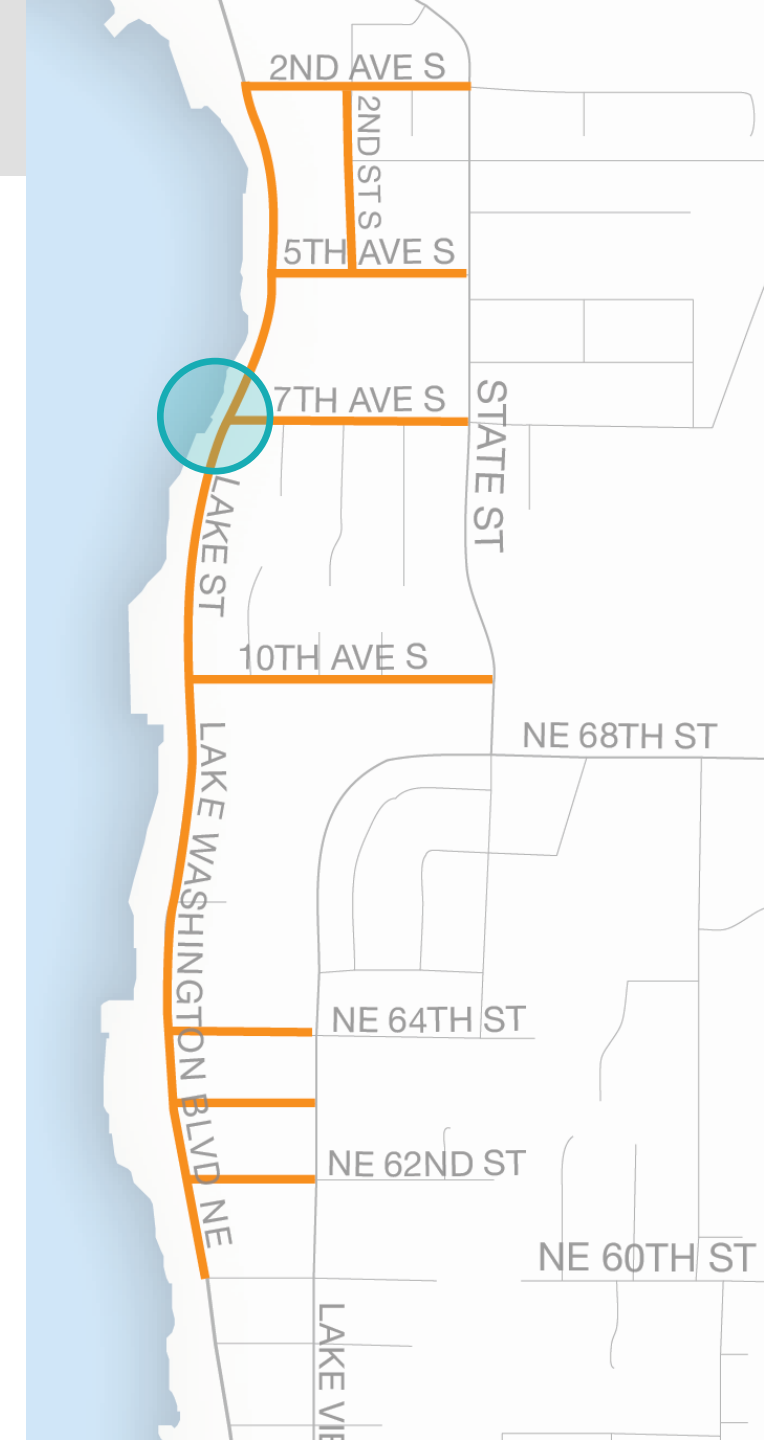
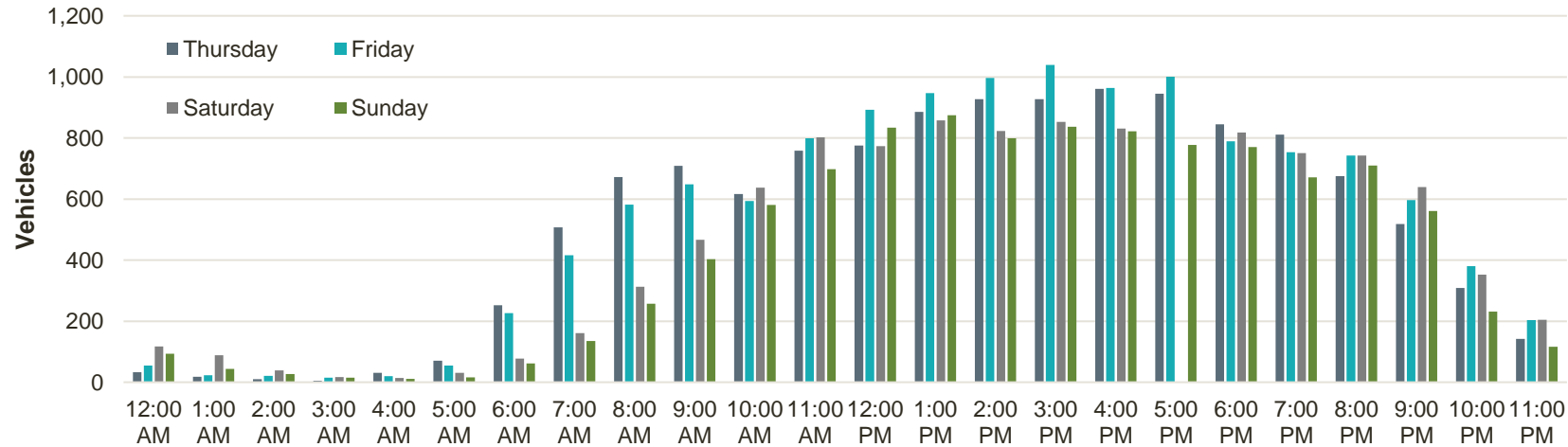
## VEHICLE SPEED (MPH)



## FHWA CLASSIFICATION



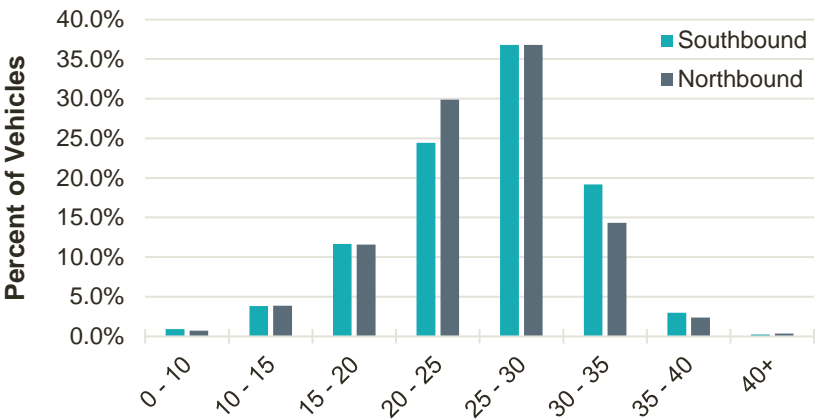
## HOURLY VOLUME BY DAY



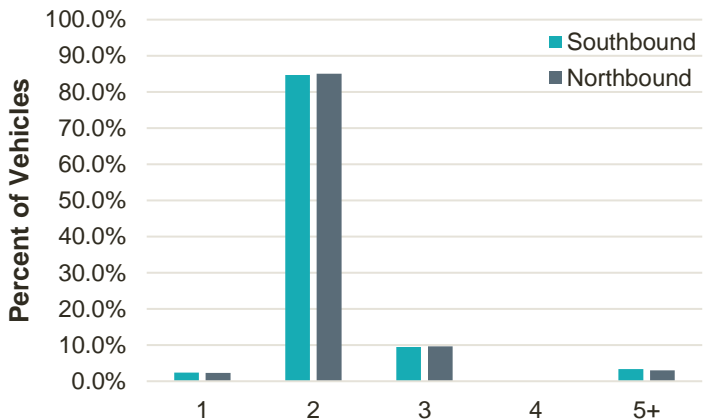


# LAKE WASHINGTON BLVD NE & MARSH PARK

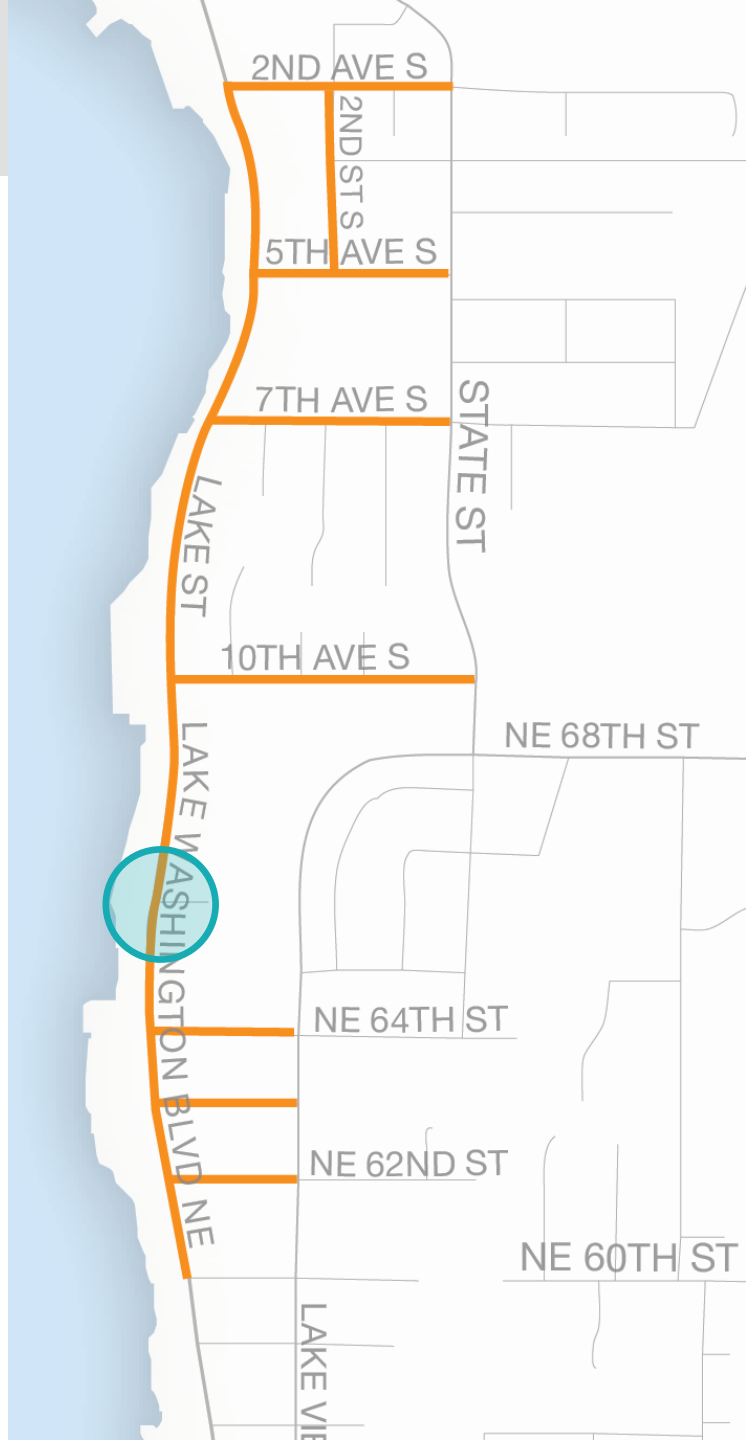
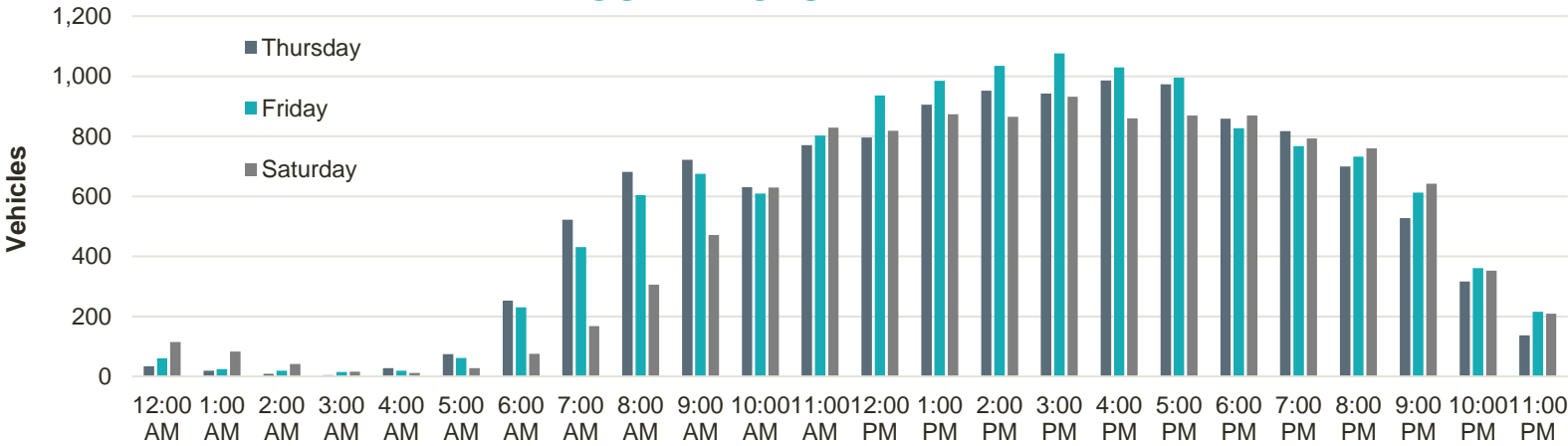
VEHICLE SPEED (MPH)



FHWA CLASSIFICATION

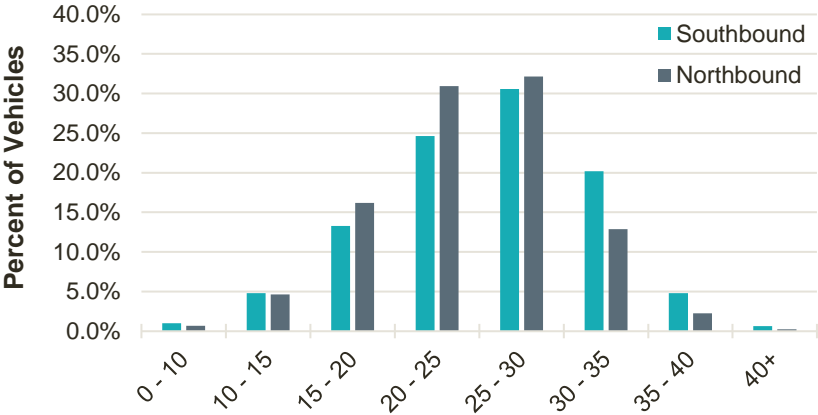


HOURLY VOLUME BY DAY

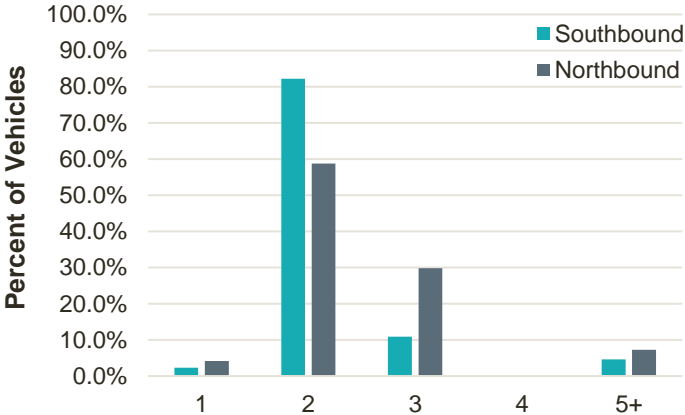


# LAKE WASHINGTON BLVD NE & NE 60<sup>TH</sup> ST

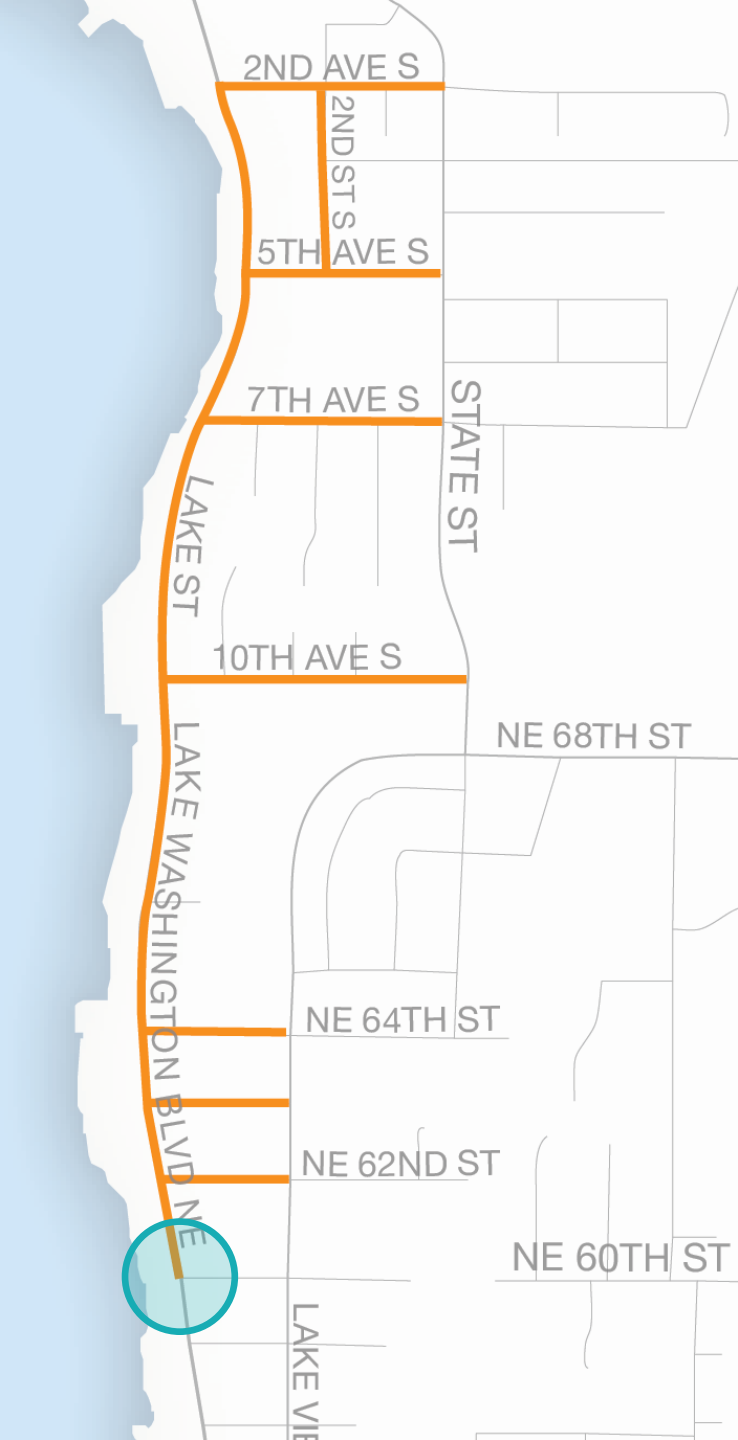
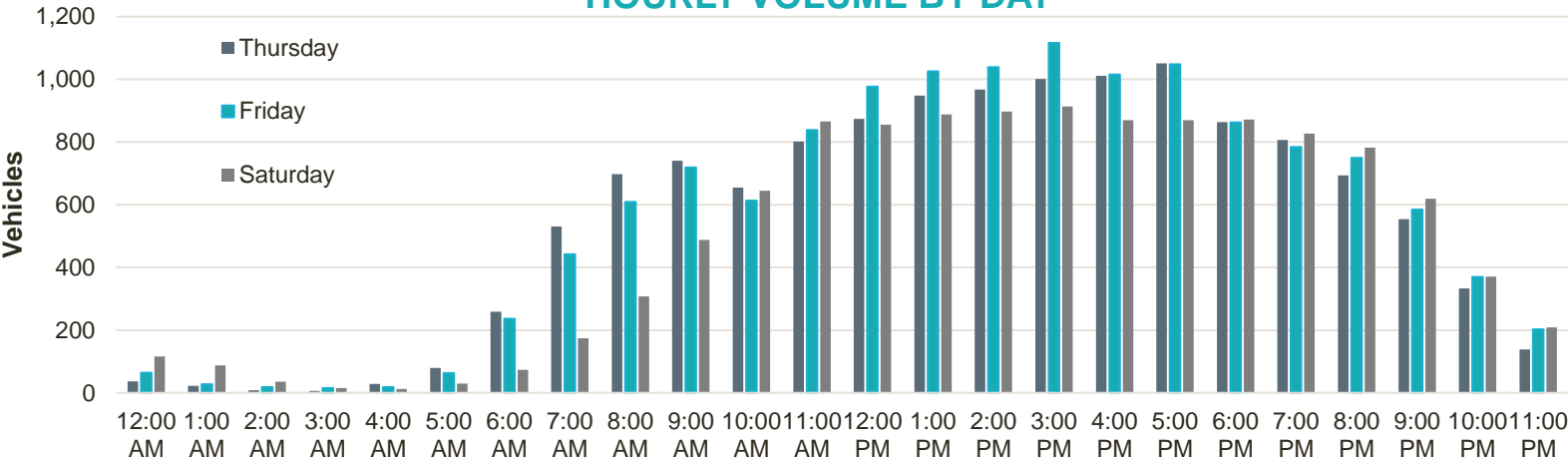
VEHICLE SPEED (MPH)



FHWA CLASSIFICATION



HOURLY VOLUME BY DAY

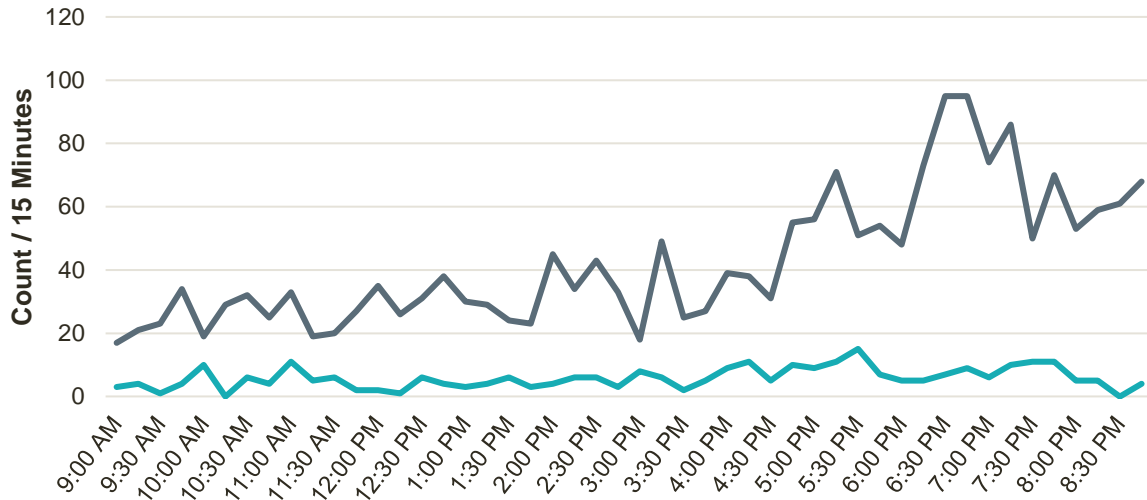




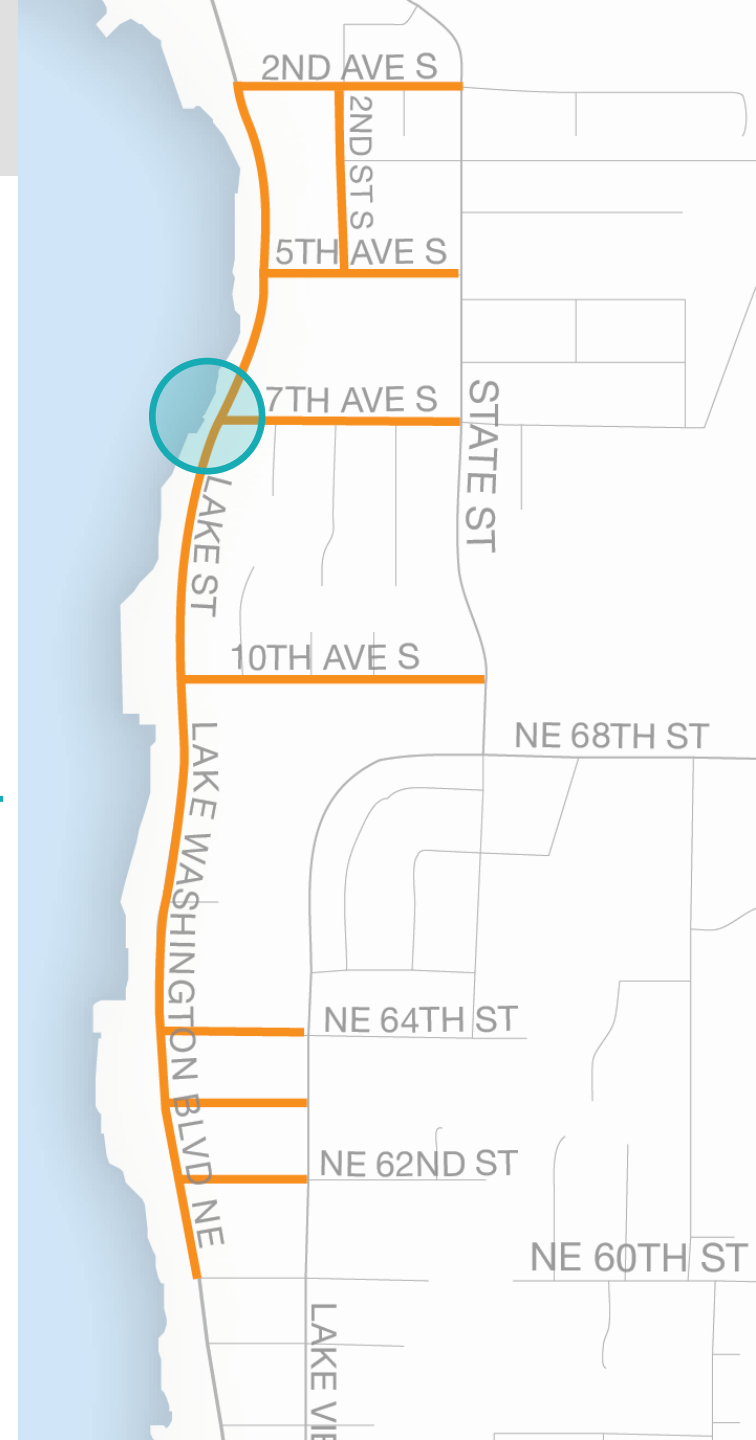
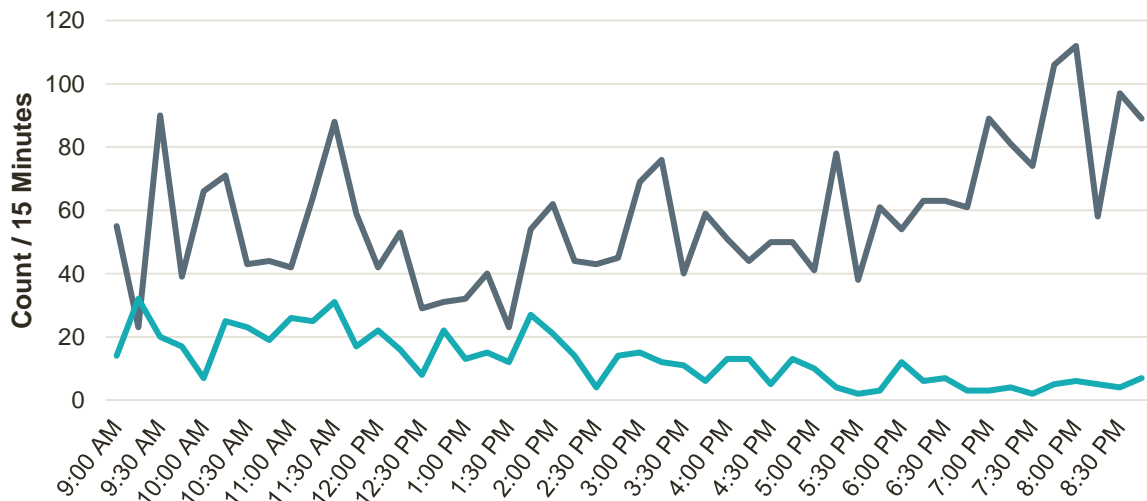
# PEDESTRIAN /BICYCLE COUNTS

# LAKE ST S & 7<sup>TH</sup> AVE S

## THURSDAY

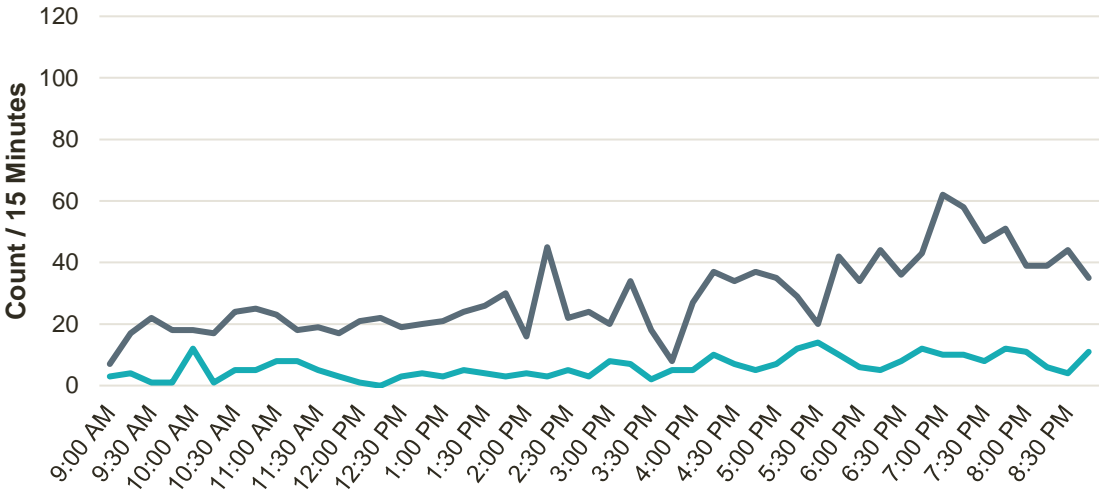


## SATURDAY

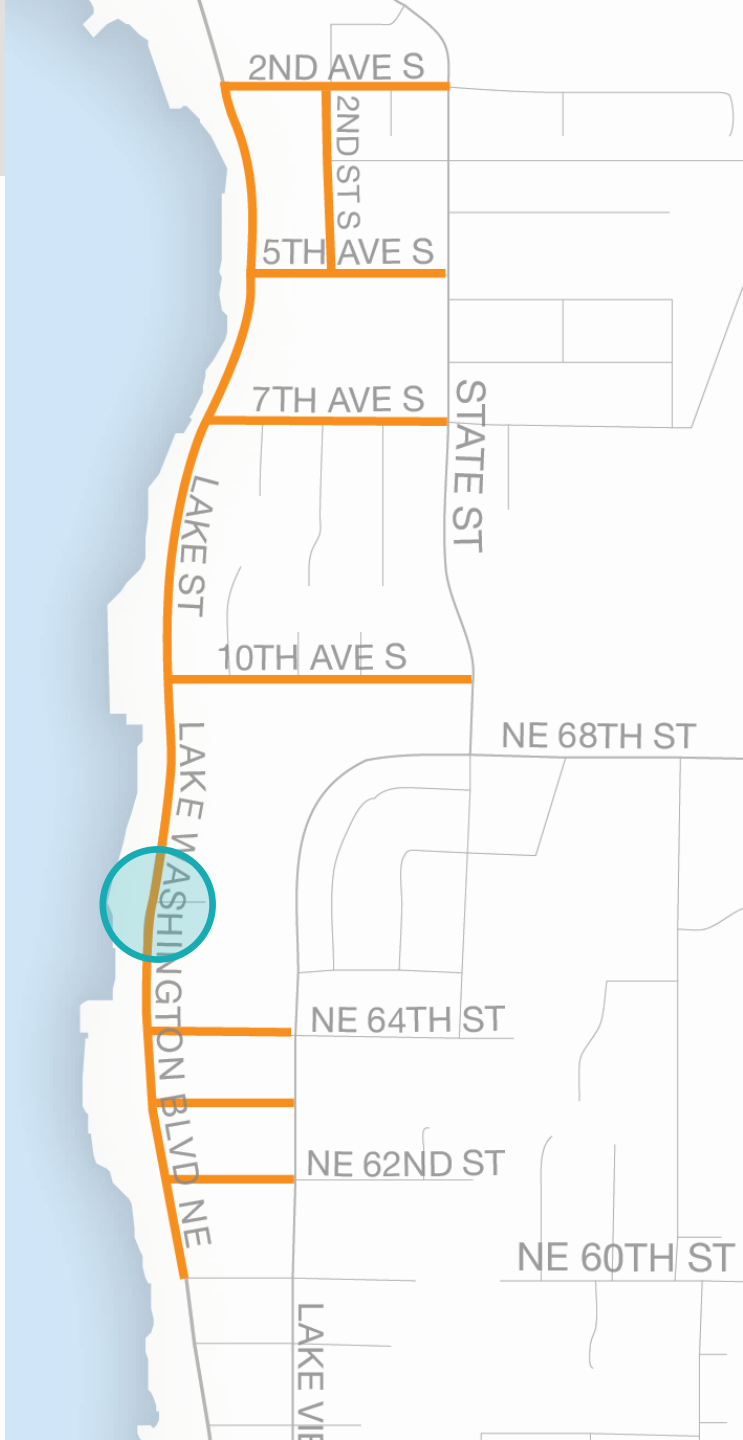
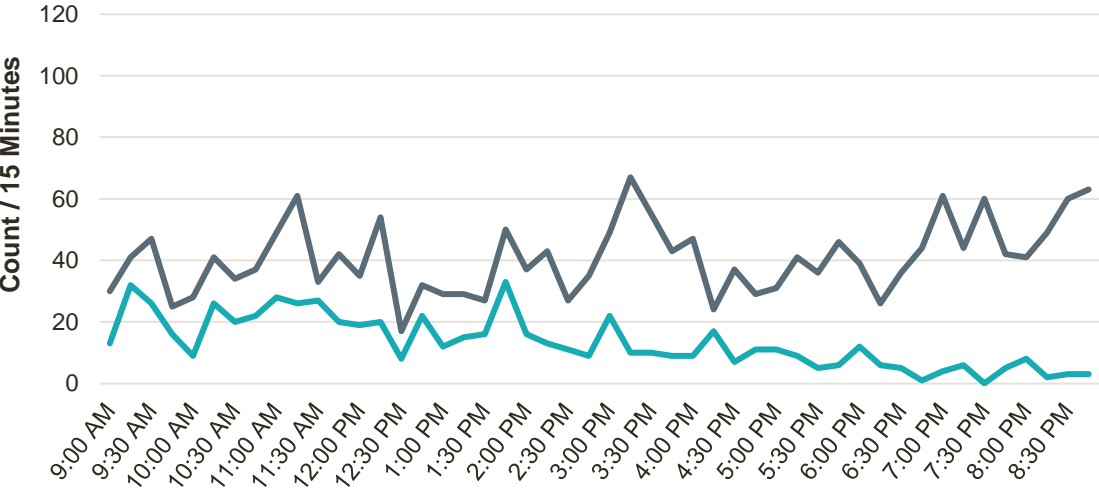


# LAKE WASHINGTON BLVD NE & MARSH PARK

## THURSDAY

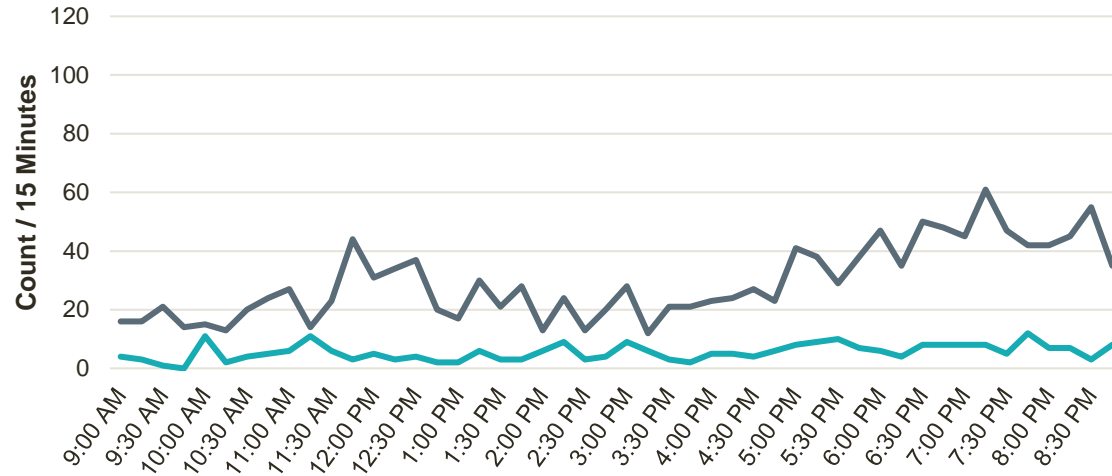


## SATURDAY

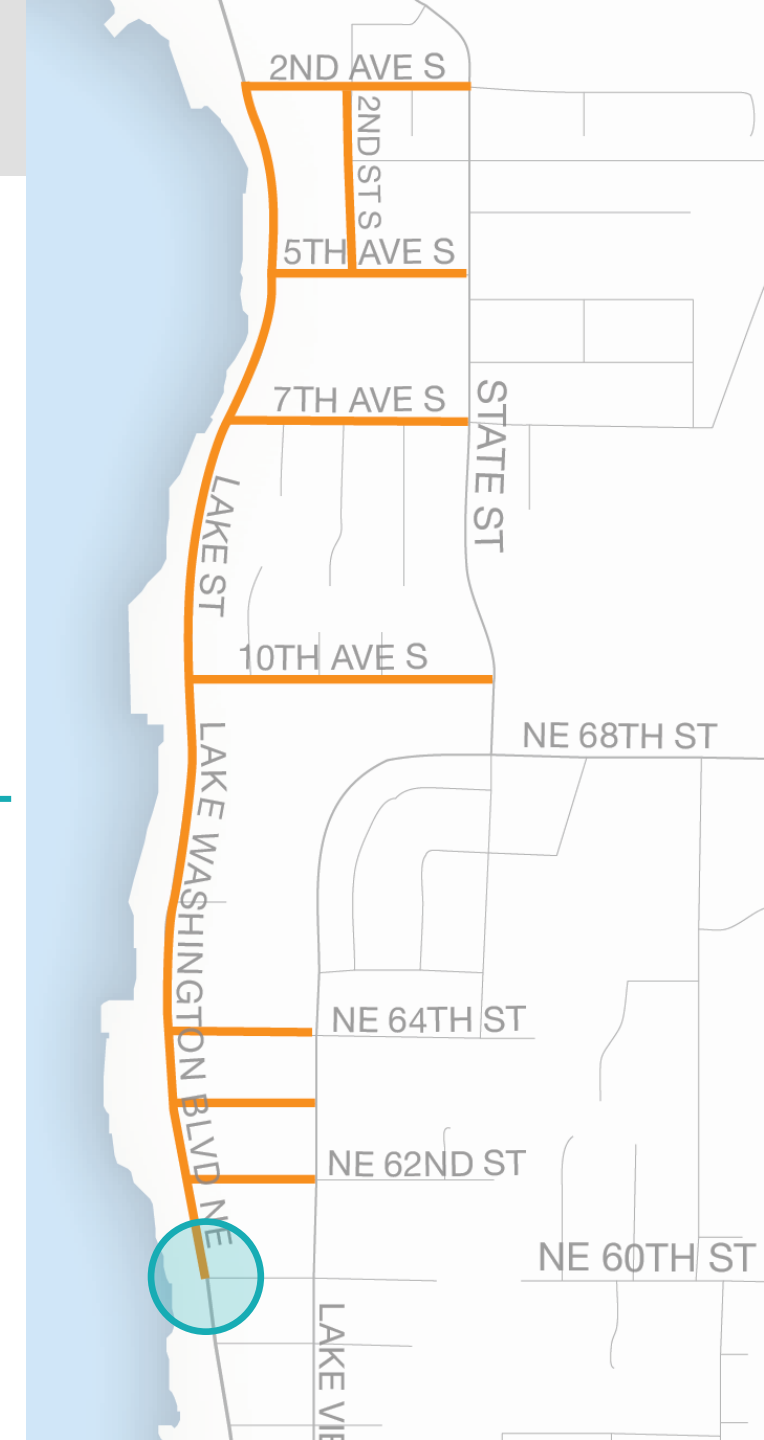
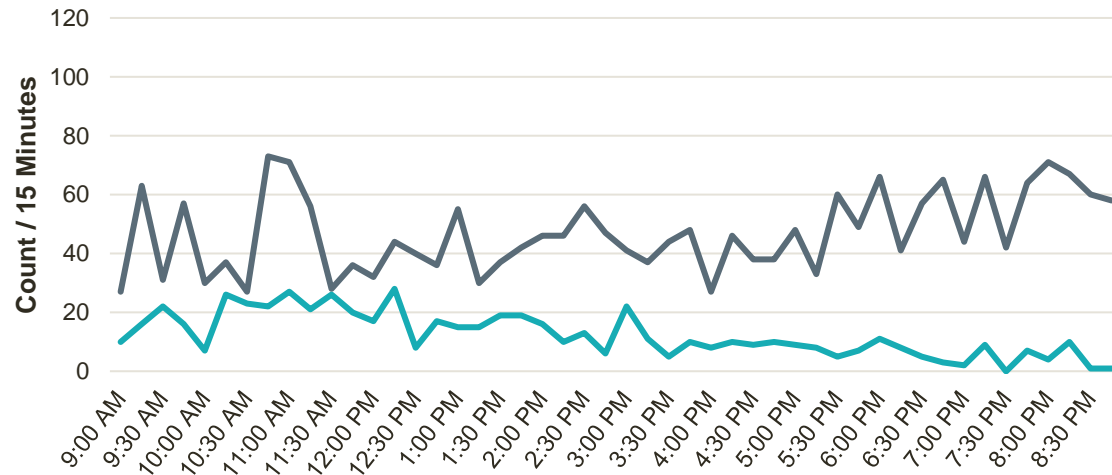


# LAKE WASHINGTON BLVD NE & NE 60<sup>TH</sup> ST

## THURSDAY



## SATURDAY



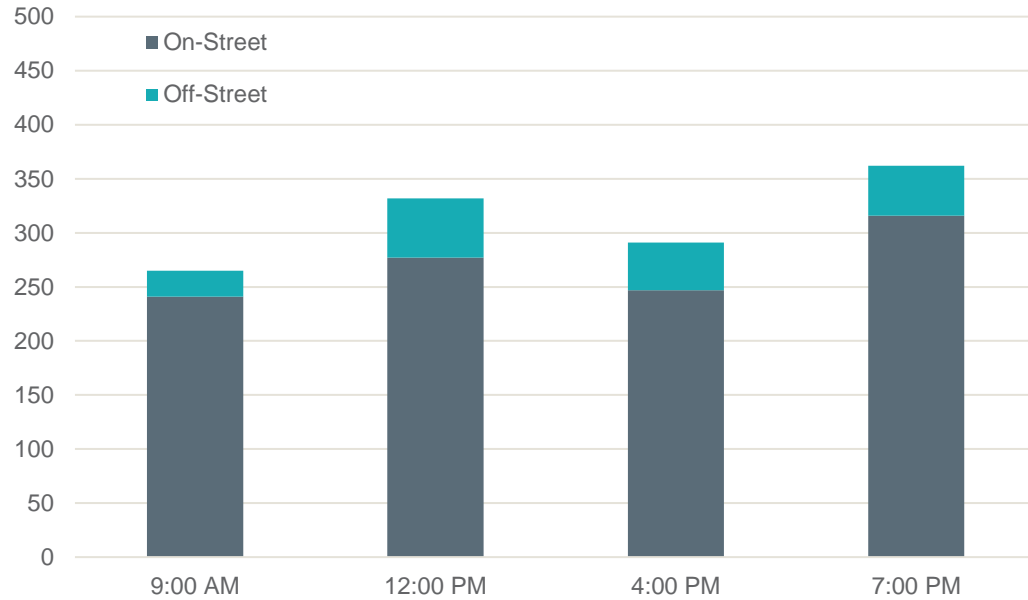


PARKING  
OCCUPANCY

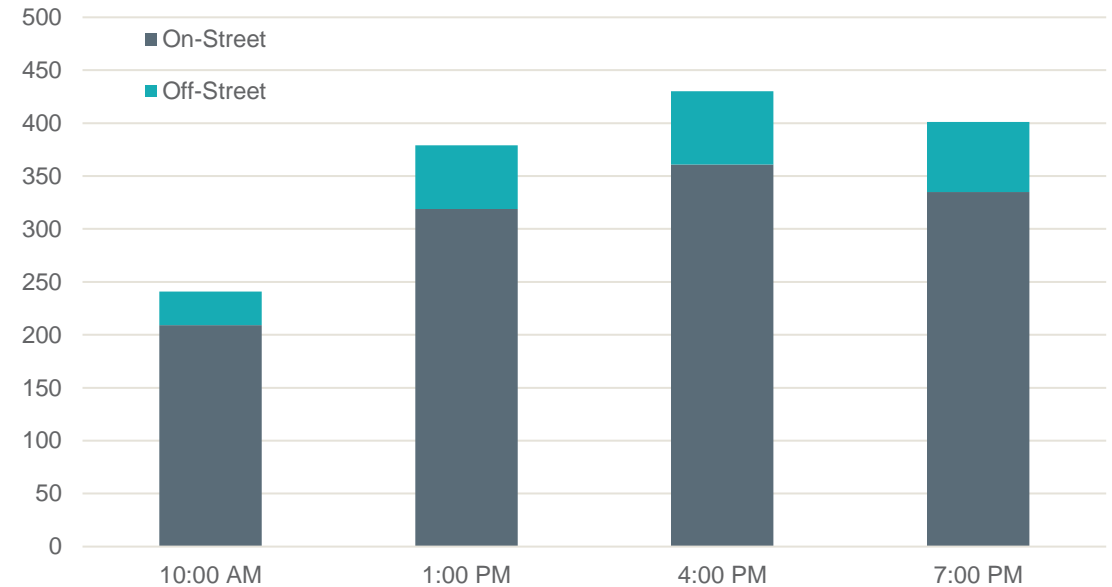


# PARKING OCCUPANCY BY TIME OF DAY

**THURSDAY**  
Parked Vehicles / Hour



**SATURDAY**  
Parked Vehicles / Hour



**P 645**  
spaces

**SAT > THU**  
higher occupancy

**SAT 4 PM**  
busiest time

# THURSDAY PEAK - 7 PM



**HIGH**  
occupancy  
at the north end

**MID-RANGE**  
occupancy  
in the south end

**LOWER**  
in the middle  
near Marsh Park



# SATURDAY PEAK – 4 PM



**HIGH**  
occupancy  
at the north end

**HIGH**  
occupancy  
in the south end

**LOWER**  
in the middle  
near Marsh Park  
(but higher than TH)





# PARKING ORIGIN DESTINATION

# ORIGIN DESTINATION – TOTAL STUDY AREA

## TRIPS FROM KIRKLAND



**Weekday**

**45%**  
DAILY

**35%**  
AM

**50%**  
PM

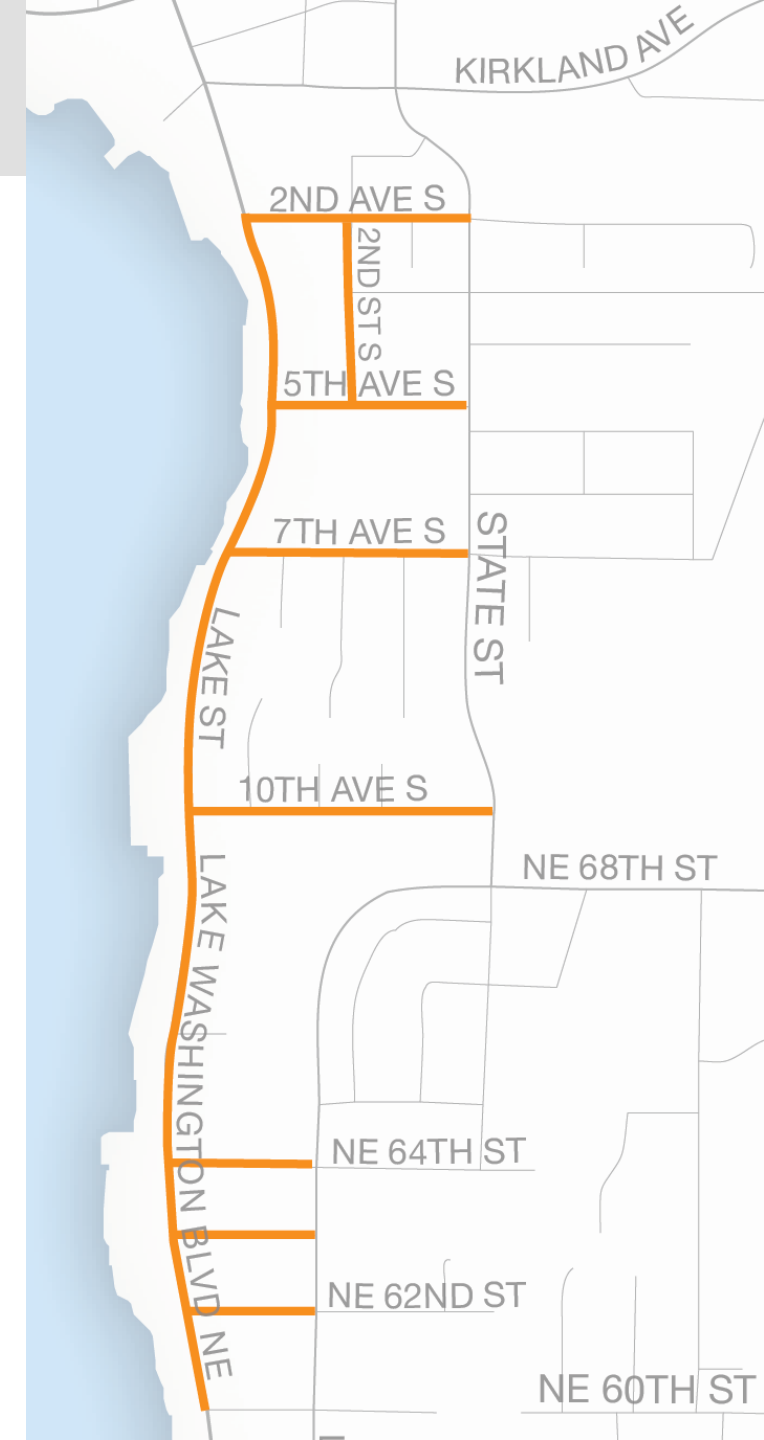


**Saturday**

**50%**  
DAILY  
(25% from within study area)

**75%**  
AM

**45%**  
PM



# ORIGIN DESTINATION – NORTHERN ZONE

## TRIPS FROM KIRKLAND



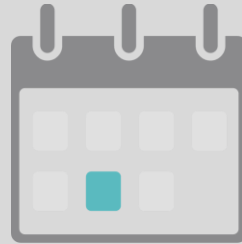
**Weekday**

**55%**  
DAILY

**60%**  
AM

**60%**  
PM

(35% from within  
study area)

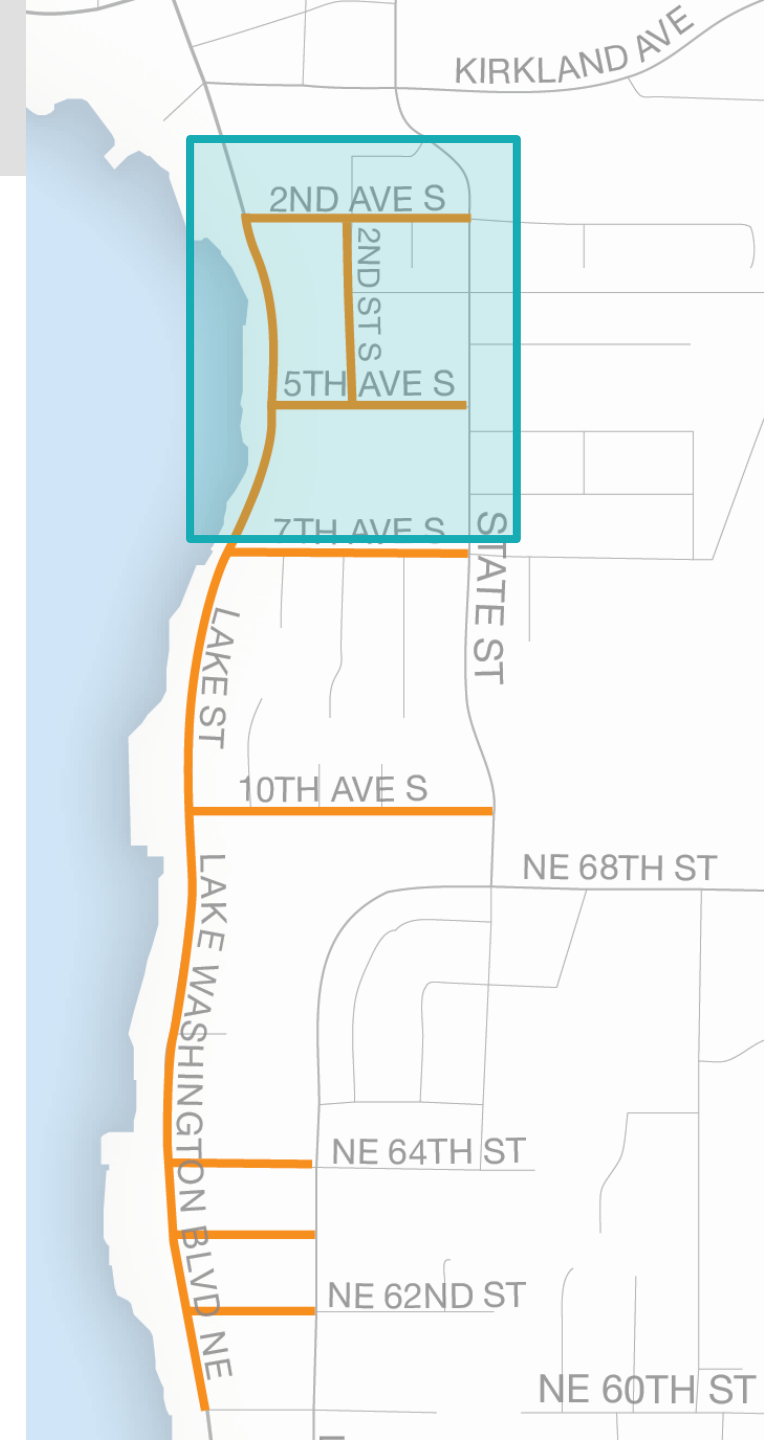


**Saturday**

**50%**  
DAILY

**100%**  
AM

**35%**  
PM



# ORIGIN DESTINATION – MID ZONE

## TRIPS FROM KIRKLAND



Weekday

**50%**  
DAILY

**40%**  
AM

**45%**  
PM

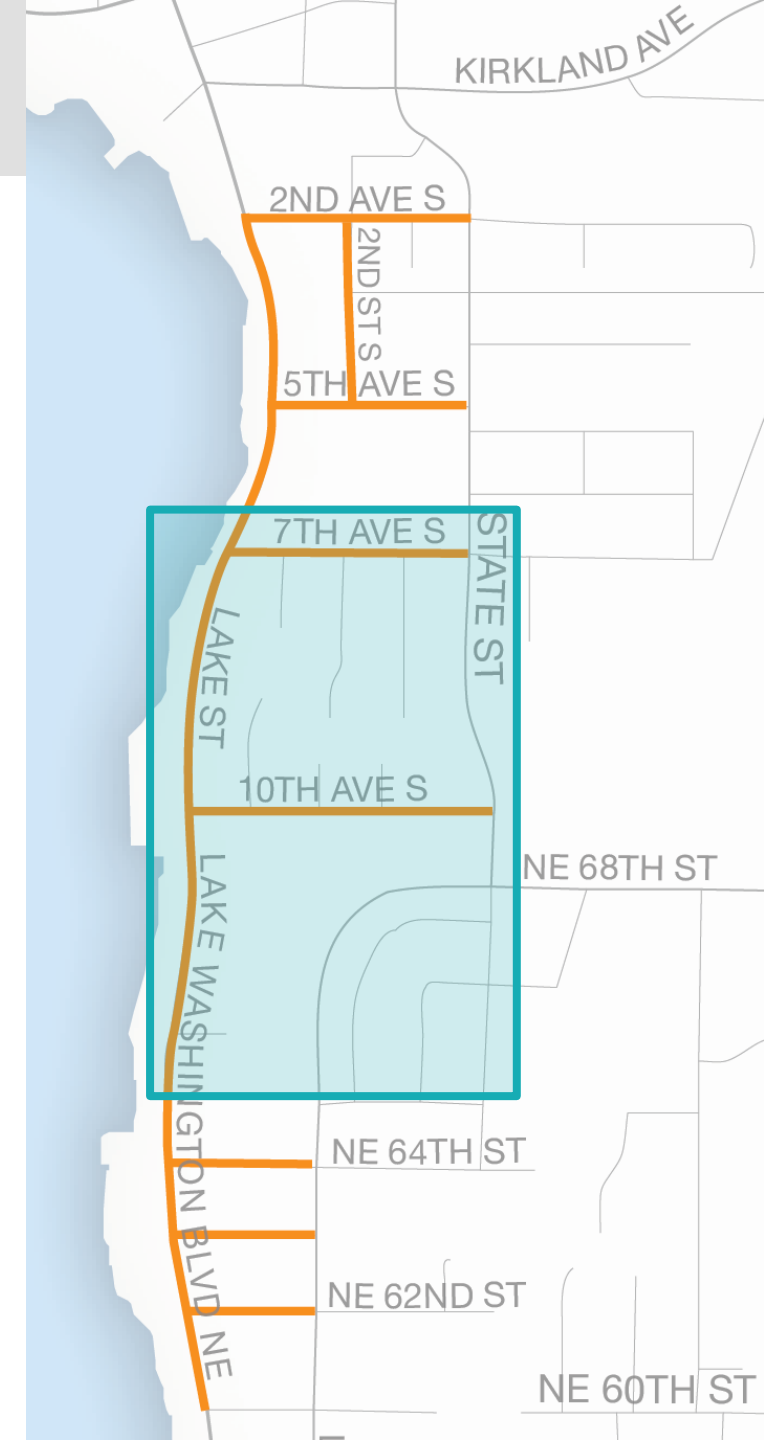


Saturday

**55%**  
DAILY

**70%**  
AM

**45%**  
PM





# ORIGIN DESTINATION – SOUTHERN ZONE

## TRIPS FROM KIRKLAND

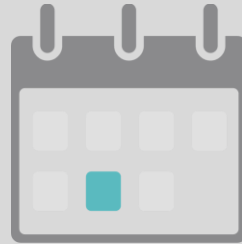


**Weekday**

**35%**  
DAILY

**0%**  
AM

**50%**  
PM

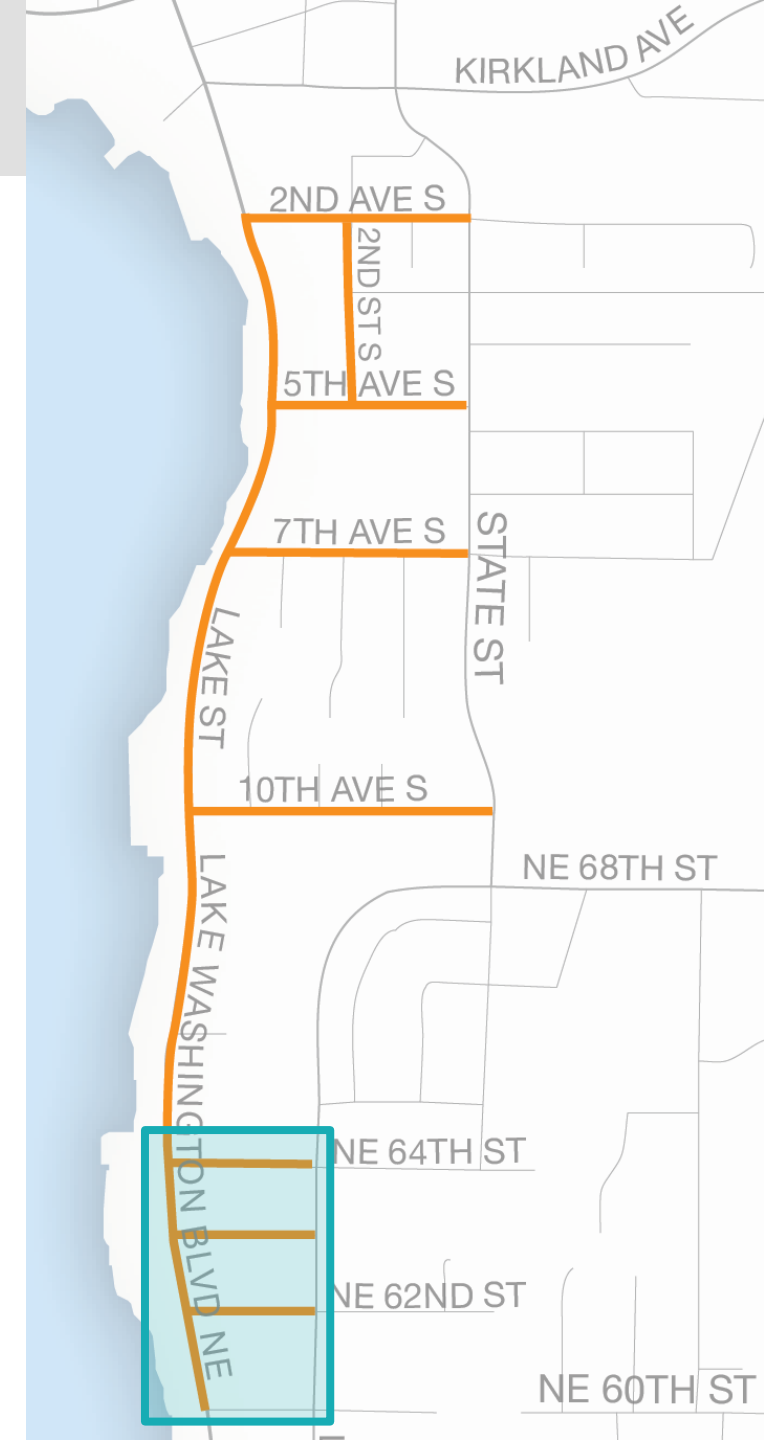


**Saturday**

**40%**  
DAILY

**60%**  
AM

**60%**  
PM



# Q&A