

Deliverable: Traffic Analysis Report

Project: N 40 St AAC (2019)

Summary by: Megan Hoyt

Date prepared: December 21, 2017

---

This AAC project will be a mill and overlay of N 40 St between Stone Way N and Latona Ave NE. Through implementation of the Bicycle Master Plan, channelization changes will be made as part of the project.

#### Traffic Data

- ADT: 11,500
- Speed limit: 30 mph
- 85th % speed: 33 mph

Stone Way N to Wallingford Ave N: 40' roadway width

- Two motor vehicle travel lanes
- No bicycle facilities
- Parking allowed on both sides of the street

Wallingford Ave N to Latona Ave NE: 30' roadway width

- Two motor vehicle lanes
- No bicycle facilities
- Parking allowed on the south side of the street

**Conclusion: No additional lanes of motor vehicle traffic are needed on this corridor. Spaces not needed for on-street parking can be used for bicycle facilities.**

#### Parking Utilization Data

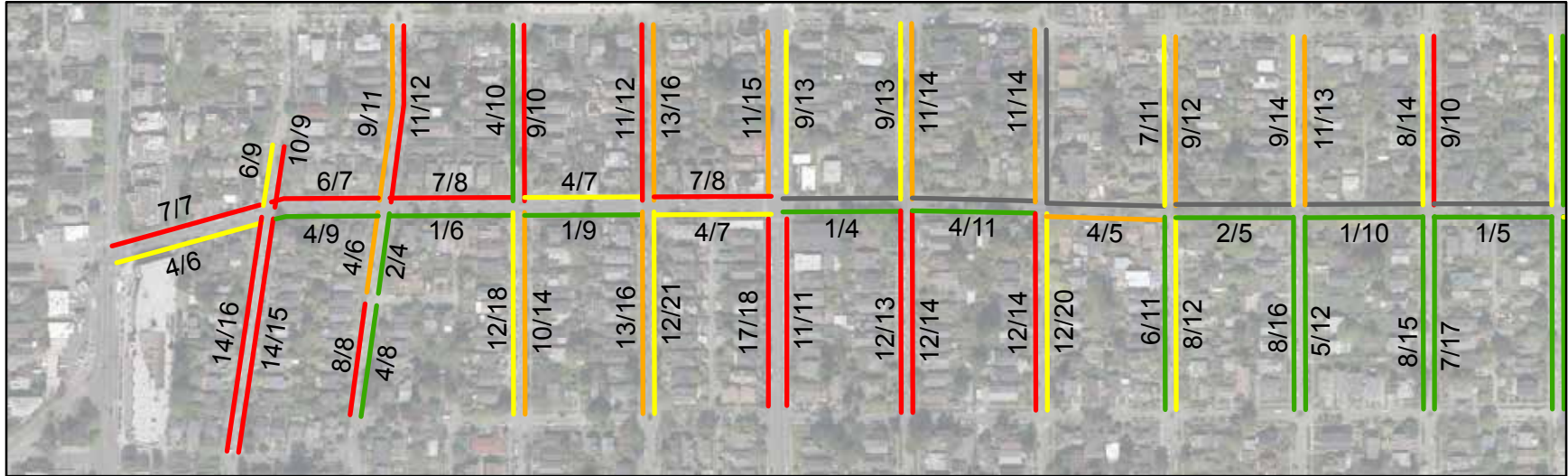
To review existing parking utilization, SDOT performed two parking studies. The first, in spring 2017, looked at parking utilization on N 40 St. The second, in October 2017, looked at parking utilization both on N 40 St and on the side streets to the north and south. A total of 875 parking spots were counted.

Existing legal parking on N 40 St

Segment of N 40 St	North side of N 40 St	South side of N 40 St
Stone Way N to Wallingford Ave N	37	37
Wallingford Ave N to Latona Ave NE	0	63
Latona Ave NE to 7 Ave NE (upper roadway)	27	0
<b>Totals</b>	<b>64</b>	<b>100</b>

Parking utilization for three weekday times (5am, 10am and 3pm) are shown on the following pages in Figures 1 – 3.

# N 40th Street Parking Occupancy: Weekday Morning 5 AM



Occupancy of Each Blockface  
Data collected October 5th 2017

# N 40th Street Parking Occupancy: Weekday Morning 10 AM



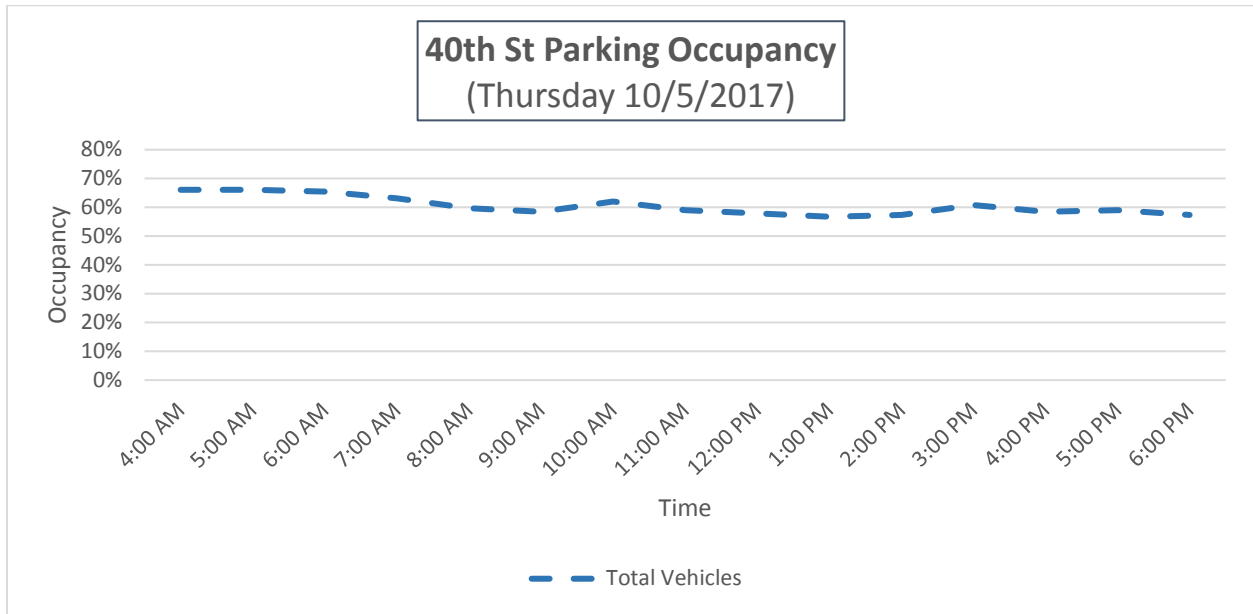
Occupancy of Each Blockface  
Data collected October 5th 2017

# N 40th Street Parking Occupancy: Weekday Afternoon 3 PM



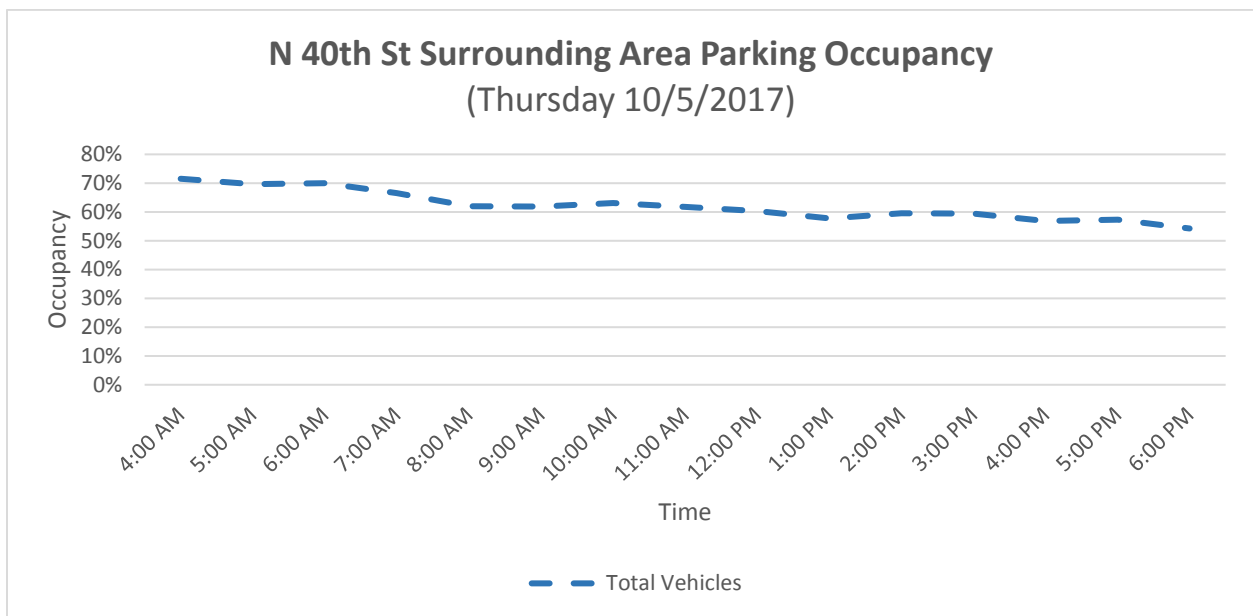
Occupancy of Each Blockface  
Data collected October 5th 2017

There was a notable difference in parking utilization on the north and south sides of N 40 St between Stone Way N and Wallingford Ave N. Within each studied timeframe, more spaces were utilized on the north side of the street. The early morning (4am/5am) was the peak occupancy counted.



**Figure 4**

Interestingly, parking in the surrounding area shows a more pronounced decrease in parking occupancy throughout the course of the day. 5am was peak occupancy and 6pm was the lowest counted occupancy. The area included in this count (shown in Figure 5) included the side avenues one block north and one block south of N 40 St.



**Figure 5**

At 10% design, there are two proposed options for channelization changes on the corridor to add bicycle facilities (see Alternatives Analysis for further details):

Option 3 considered removal of 164 on-street parking spaces: all 64 spaces on the north side of N 40 St and all 100 spaces on the south side of N 40 St.

Option 5 considered removal of 127 parking spaces: all 100 spaces on the south side of N 40 St and the 27 spaces on the north side of N 40 St Upper Roadway between Latona Ave NE and 7 Ave NE.

An alternative available spot within one block was identified for 151 parking spots. The only blocks without convenient alternate spots identified was N 40 St between Stone Way N and Ashworth Ave N.

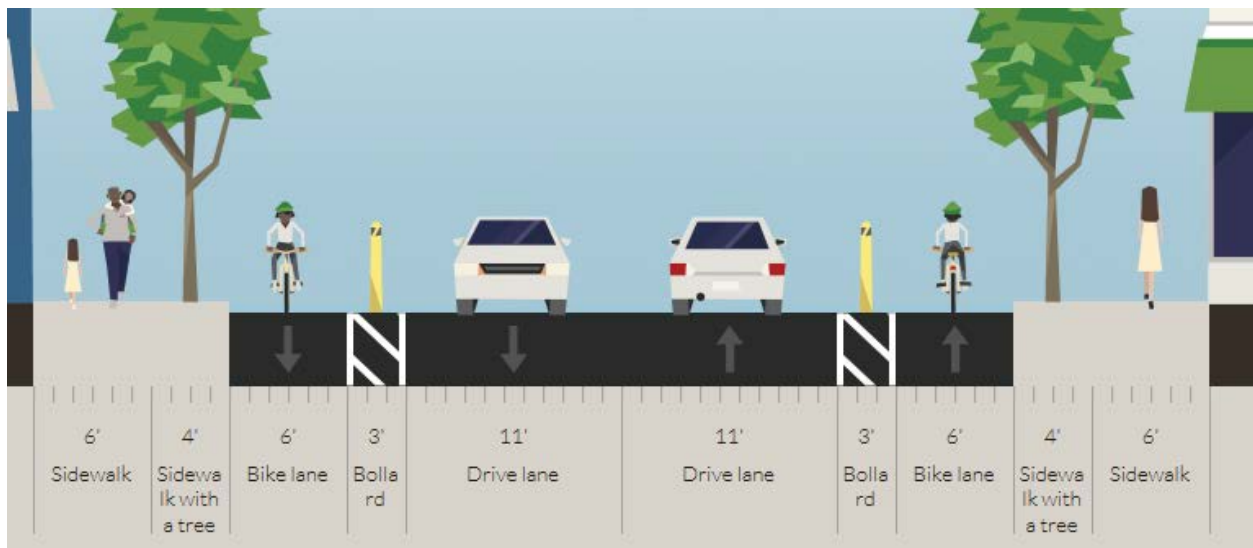
**Conclusion:** Based on parking utilization data collected for N 40 St and adjacent side streets, parking on the south side of the street can be removed for the entire corridor to allow for installation of on-street bicycle facilities. Parking removal can be considered on both sides of N 40 St, however further public process is recommended.

### Final Recommendations

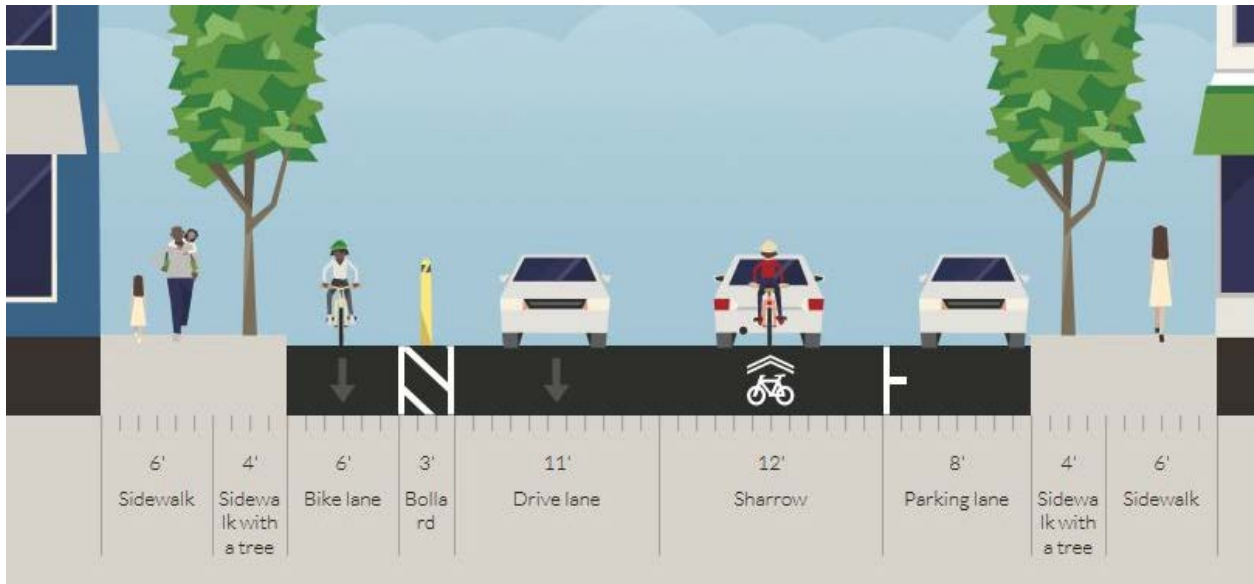
The following cross-sections are proposed for this project. Each allows for 11-foot general purpose lanes, which is the minimum desired for transit operations.

N 40 St: Stone Way N to Wallingford Ave N (two options)

Option 3 (facing west)



**Option 5 (facing west)**



**N 40 St: Wallingford Ave N to 7 Ave NE (facing west)**

