

WESTERN AVENUE BIKEWAY PROJECT SUMMARY OF ENGINEERING RECOMMENDATIONS

Western Avenue Bikeway

Report prepared: 8/1/2018

Open House: 7/23/2018

Public Hearing: 8/15/2018

PROJECT

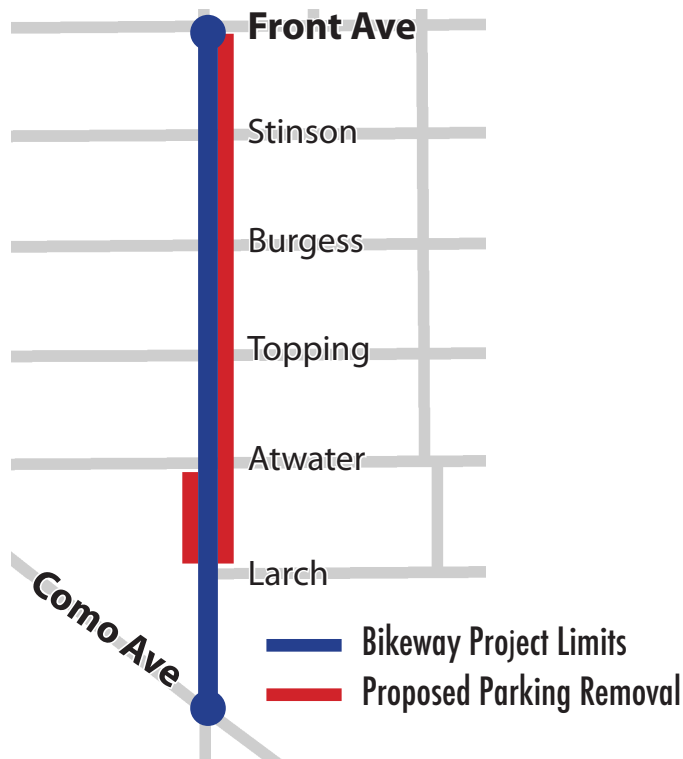
Implementation of bicycle facilities on Western Avenue from Front Avenue to Como Avenue.

Improvements include the installation of dedicated bicycle lanes, pavement markings, signage, and other elements as described below.

PURPOSE

The purpose of this project is to provide an improved north-south bicycle facility on Western Avenue, and make purposeful connections to existing nearby bikeways, improving the bicycling environment as it relates to safety, comfort, and connectivity.

Figure 1: Project Map



I. INITIATING ACTION

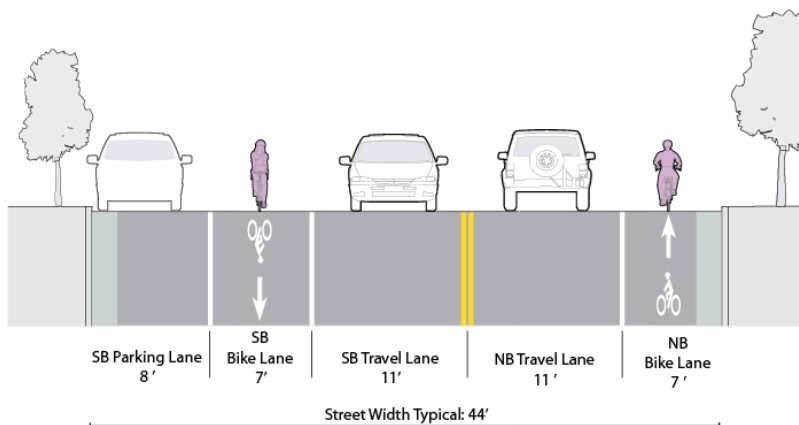
The City of Saint Paul Department of Public Works is planning a mill and overlay of Western Avenue between Front Avenue and Como Avenue in 2018. To take advantage of the efficiencies associated with implementing bicycle facilities with existing maintenance projects, Public Works is proposing to implement bicycle lanes on Western Avenue within the mill and overlay boundaries between Front and Como avenues. The facilities proposed are consistent with the recommendations of the Saint Paul Bicycle Plan.

II. EXISTING CONDITIONS

Western Avenue between Front Avenue and Como Avenue is classified as a Collector and a Metropolitan State Aid (MSA) Route. AADT within the project limits was measured at 6,125 vehicles per day. There were no speed studies performed within project limits. The posted speed limit is 30 mph. Metro Transit's Route 3B bus provides transit service within the project corridor. There are no existing bike facilities installed on Western Avenue between Front and Como avenues. The Saint Paul Bicycle Plan identifies "in-street separated (bicycle) lanes between within project limits as the recommended facility type.

III. PROPOSED IMPROVEMENTS

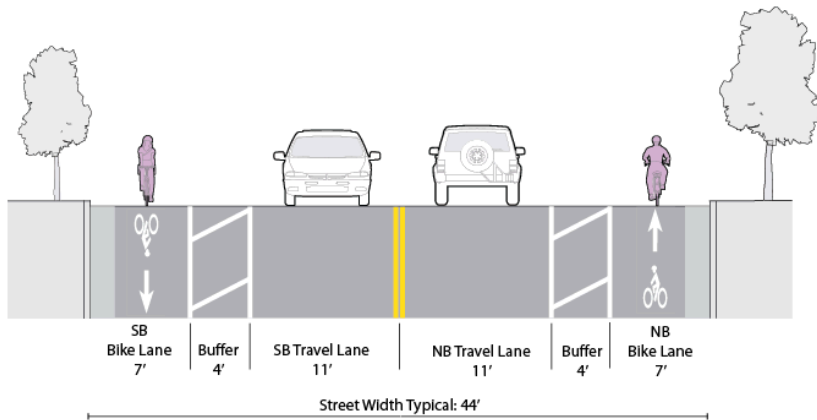
Western Avenue: Front to Atwater



Elements proposed for implementation are:

- Restriping the roadway to add 7' (NB and SB) bicycle lanes
- Narrowing of existing vehicular travel lanes to 11'
- Installation of bike lane pavement markings and signage
- Removal of on-street parking on the east side of Western Avenue

Western Avenue: Atwater to Como



Elements proposed for implementation are:

- Restriping the roadway to add 7' (NB and SB) bicycle lanes, and 4' buffer zones
- Narrowing of existing vehicular travel lanes to 11'
- Installation of bike lane pavement markings and signage
- Removal of on-street parking on the east side and west side of Western Avenue between Atwater and Larch

Changes to On-street Parking

To accommodate the installation of bicycle facilities, on-street parking removal is proposed for the following locations:

- The east side of Western Avenue between Front Avenue and Larch Street
- The west side of Western Avenue between Atwater Street and Larch Street

To capture demonstrative parking demand, Public works conducted 13 parking occupancy counts at representative time periods along Western Avenue, and parking occupancy counts along intersecting side streets. Based on the data collected by Public Works, it is anticipated that remaining parking supply on the west side of Western Avenue following the implementation of bicycle lanes will be sufficient to meet all observed demand. The parking occupancy data is attached in the **Appendix** of this document.

IV. ALTERNATIVES

Not pursuing bicycle facilities with the 2018 mill and overlay would not improve safety or comfort for people bicycling on Western Avenue, and would fail to connect to existing bicycle facilities on Front Avenue, Como Avenue, and on Western Avenue just south of project limits.

Parking removal is proposed for the east side of Western Avenue between Front Avenue and Larch Street. Removing parking from the west side of Western Avenue was

originally proposed and messaged to residents and stakeholders by Public Works. The original recommendation was the product of the following rationale:

- a) Removing parking on the west side of the street is consistent with the cross-section of Western Avenue south of project limits
- b) There are more houses facing Western on the east side of the street
- c) There is slightly higher parking use on the east side of the street (3.6 on east side, 2.9 on west side)

In response to community feedback, Public Works staff ultimately changed the recommendation for parking removal from the west side of Western Avenue between Front Avenue and Larch Street, to the east side of the roadway. Removing parking from the east side of the street instead of the west side presents the opportunity to maintain ten additional parking spaces, maximizing available parking capacity within project limits. The updated recommendation does not compromise the utility or design of the proposed bikeway in any capacity.

V. POSITIVE BENEFITS

This project will improve the safety of all users of the roadway. Providing dedicated bike lanes on Western Avenue will improve the safety and comfort for people bicycling on the street, encourage predictable riding behavior, and will provide connectivity to existing bike facilities on Front Avenue, Como Avenue, and on Western Avenue south of project limits. Narrowing the travel lanes to accommodate bicycle facilities will minimize roadway exposure to motorized traffic for pedestrians. ADA-compliant pedestrian ramps will improve safety for pedestrians at intersections, and all users will benefit from improved pavement quality following the street resurfacing.

VI. ADVERSE EFFECTS

Normal issues relative to implementing infrastructure improvement projects will be present. Those issues include, but may not be necessarily limited to, noise, dust, and general disruptions to vehicular traffic. Removal of some on-street parking will reduce overall parking capacity and make parking less convenient for stakeholders who regularly park on the east side of Western Avenue between Front Avenue and Larch Street.

VII. TIME SCHEDULE

It is anticipated that the bicycle improvements as proposed will be installed concurrent with the planned mill and overlay on Western Avenue, scheduled for Fall 2018.

VIII. COST ESTIMATE

Construction: \$10,000 – 15,000*

* This is an estimate developed in advance of a final signing and striping plan.

I. ESTIMATED FINANCING

Signing and striping for bike lanes on Western Avenue will be funded through the Street Maintenance Service Program and the Bicycle and Pedestrian traffic Safety Fund.

II. SOURCE OF ADDITIONAL INFORMATION

For additional information, please contact:

Luke Hanson, Transportation Planning and Safety Division
Email: Luke.Hanson@ci.stpaul.mn.us
Phone: 651-266-6146

III. SUMMARY AND RECOMMENDATIONS

The Department of Public Works believes the project submitted herein to be necessary and feasible. The Department's Engineering Recommendation is for approval of the project as proposed.

Appendix

Attached:

1. Western Avenue Parking Occupancy Study

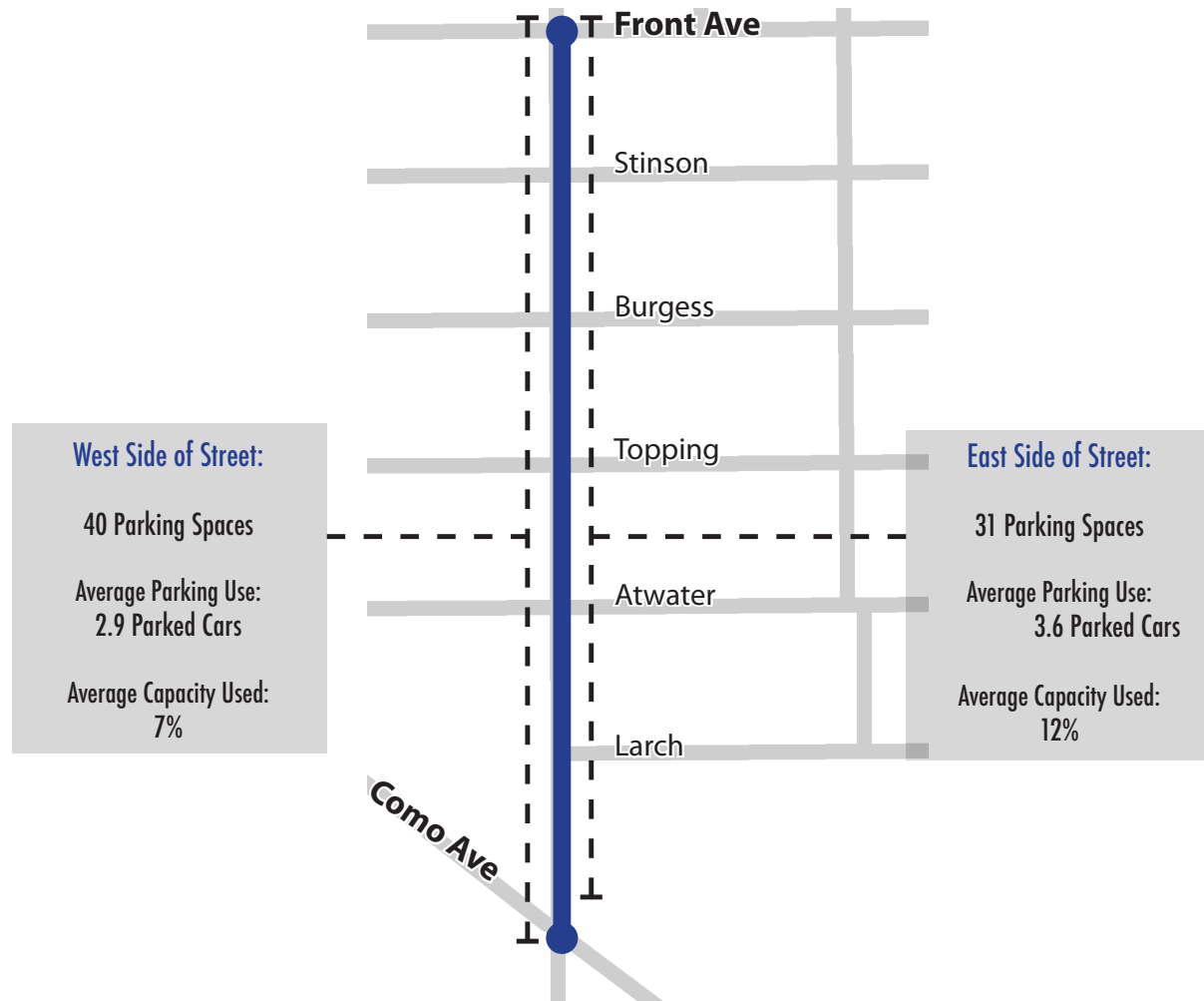
WESTERN AVENUE PARKING SUMMARY

Western Avenue Parking Count Summary

Boundaries: Front (north) to Como (south)

Legal Parking Capacity: 70

Average Parking Utilization (13 Counts): 6.5 Parked Cars (9.3% of total parking capacity used)

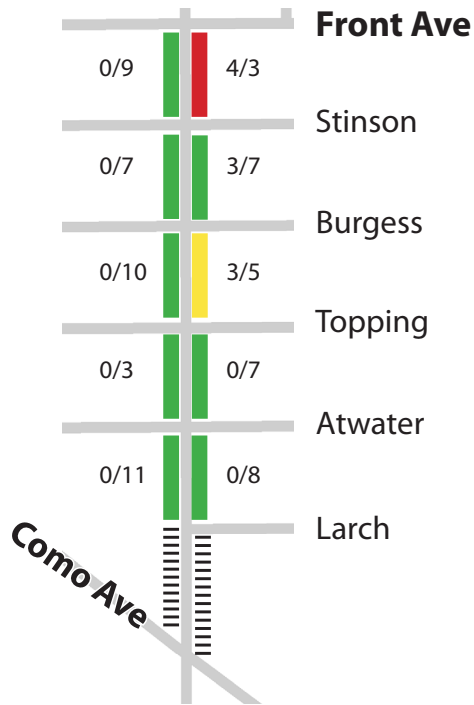


Saint Paul Minnesota

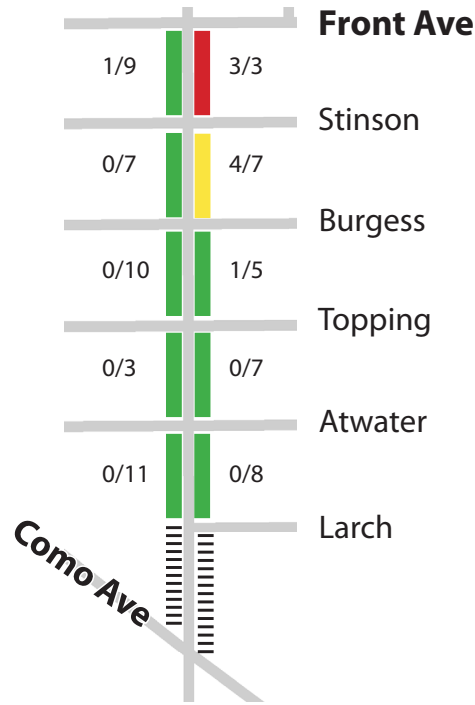
The most livable city in America

Western Avenue Parking Counts Weekday Early Morning (4 AM - 6 AM)

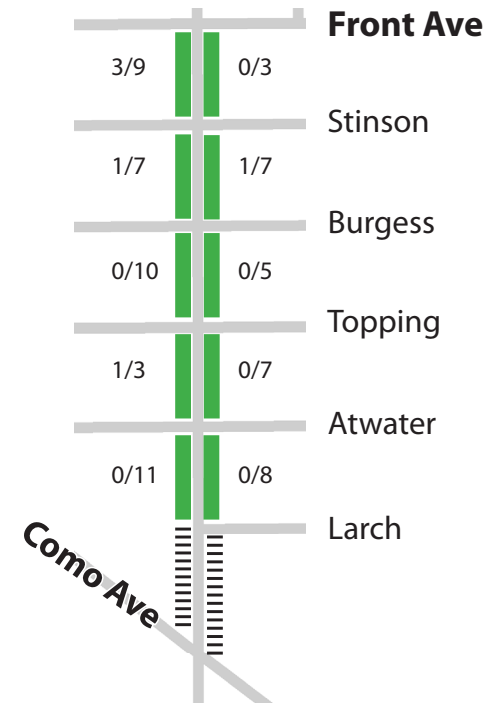
Date: Tuesday, January 9th
Time Period: 4 AM - 6 AM



Date: Thursday, January 11th
Time Period: 4 AM - 6 AM



Date: Wednesday, January 31st
Time Period: 4 AM - 6 AM



Legend

Observed Parking Utilization

- Signed "No Parking"
- 0 - 49%
- 50 - 74%
- 75 - 100+%

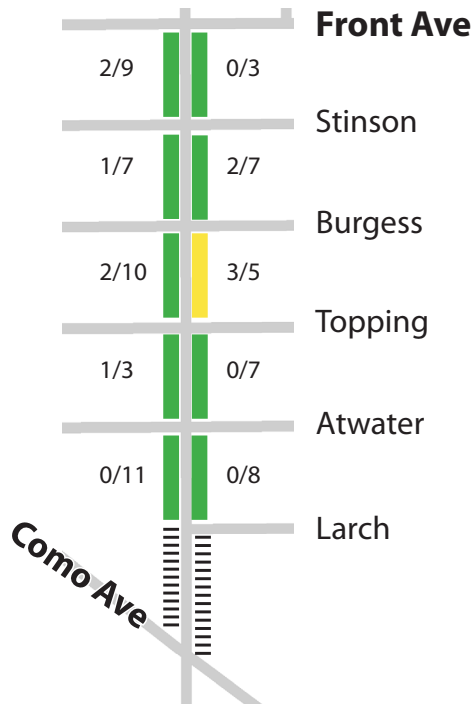
Example: 8/11 =

Observed Parked Cars /
Estimated Legal Parking Capacity

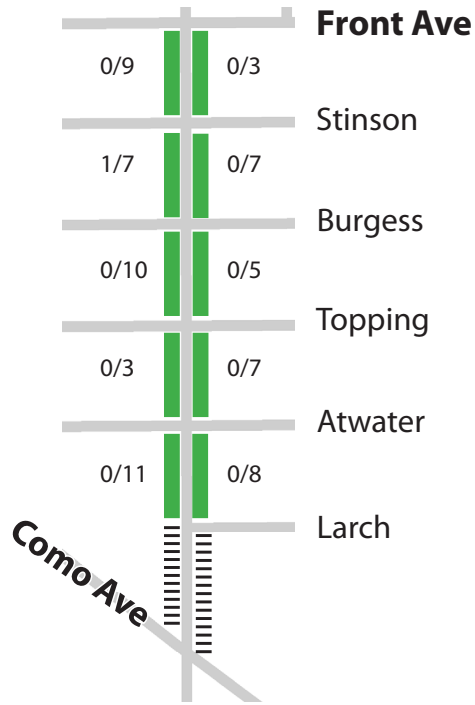
(Observed parking utilization may
exceed estimated legal capacity)

Western Avenue Parking Counts Weekday Midday (11 AM - 1 PM)

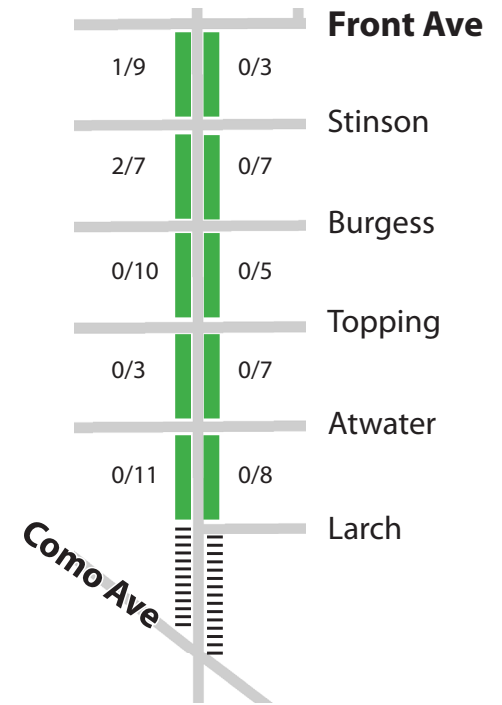
Date: Wednesday, January 10th
Time Period: 11 AM - 1 PM



Date: Thursday, February 1st
Time Period: 11 AM - 1 PM



Date: Tuesday, February 6th
Time Period: 11 AM - 1 PM



Legend

Observed Parking Utilization

- |||||| Signed "No Parking"
- █ 0 - 49%
- █ 50 - 74%
- █ 75 - 100+%

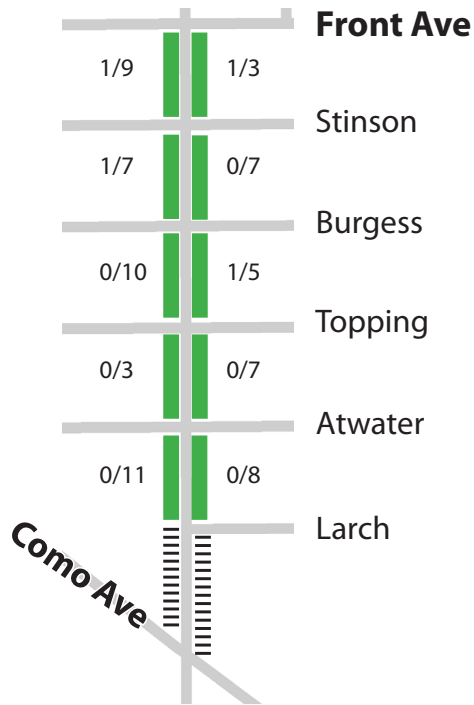
Example: 8/11 =

Observed Parked Cars /
Estimated Legal Parking Capacity

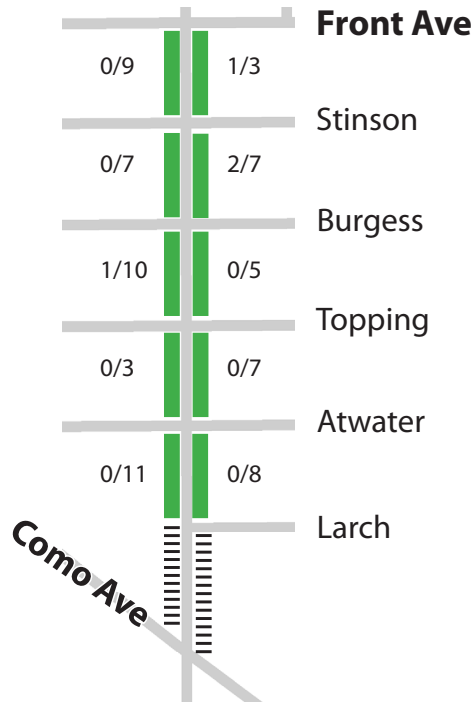
(Observed parking utilization may
exceed estimated legal capacity)

Western Avenue Parking Counts Saturday Midday (11 AM - 1 PM)

Date: Saturday, March 17th
Time Period: 11 AM - 1 PM



Date: Saturday, June 23rd
Time Period: 11 AM - 1 PM



Legend

Observed Parking Utilization

- ||||| Signed "No Parking"
- █ 0 - 49%
- █ 50 - 74%
- █ 75 - 100+%

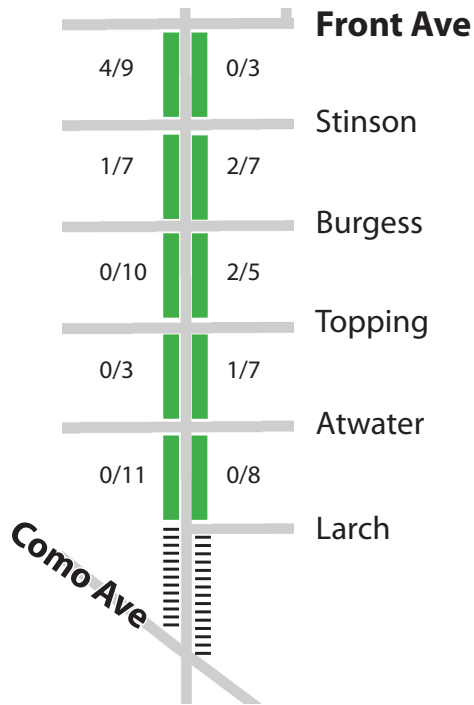
Example: 8/11 =

Observed Parked Cars /
Estimated Legal Parking Capacity

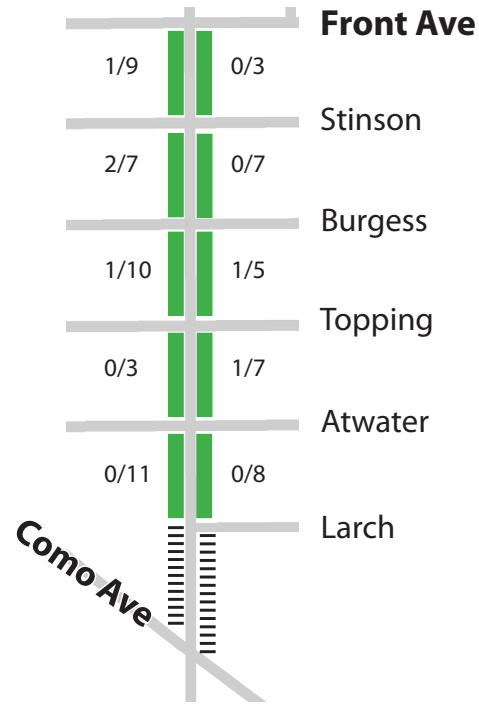
(Observed parking utilization may
exceed estimated legal capacity)

Western Avenue Parking Counts Saturday Evening (6 PM - 8 PM)

Date: Saturday, March 24th
Time Period: 6 PM - 8 PM



Date: Saturday, July 21st
Time Period: 6 PM - 8 PM



Legend

Observed Parking Utilization

- |||||| Signed "No Parking"
- █ 0 - 49%
- █ 50 - 74%
- █ 75 - 100+%

Example: 8/11 =

Observed Parked Cars /
Estimated Legal Parking Capacity

(Observed parking utilization may
exceed estimated legal capacity)