

WATER STREET FILLMORE AVENUE RESTRIPING PROJECT SUMMARY OF ENGINEERING RECOMMENDATIONS

Water Street Fillmore Avenue Restriping Project

Report prepared: 5/26/2021

Public Hearing: 6/16/2021

PROJECT

Implementation of bicycle facilities on Water Street and Fillmore Avenue from Plato Boulevard to Livingston 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 east-west facility on Water Street and Fillmore Avenue, and make purposeful connections to existing nearby bikeways, improving safety, comfort, and connectivity for people using bicycles for transportation.



Figure 1: Project Map

I. INITIATING ACTION

The City of Saint Paul has a desire to improve safety and comfort for all modes in the project area. The bicycle facilities proposed are consistent with the Saint Paul Bicycle Plan. The City has also received requests from the community to update parking restrictions in the project area.

II. EXISTING CONDITIONS

Water Street and Fillmore Avenue within the project limits are classified as Collector roadways. Average Annual Daily Traffic (AADT) data was collected along the corridor in 2017 and 2018 and provided counts between 1,500 and 2,000 vehicles per day. The posted speed limit is 25 miles per hour, and a 2017 speed study on Fillmore Avenue between Wabasha and Livingston found the 85th percentile speeds to be 31 miles per hour.

Sidewalks are absent on both sides of Water Street between Plato Boulevard and Wabasha Street, and absent on the south side of Fillmore Avenue between Harriet Island Boulevard and Livingston Avenue. Sidewalks are present on the north side of Fillmore Avenue between Wabasha Street and Livingston Avenue. Pedestrian curb ramps are present where there is sidewalk and are generally compliant.

There are no existing bike facilities installed within the project limits. The Saint Paul Bicycle Plan identifies “in-street separated (bicycle) lanes” on Water Street and Fillmore Avenue as the recommended bicycle facility type. In-street bicycle lanes exist on Fillmore Avenue between Livingston Avenue and Robert Street, and are proposed as part of a different project on Fillmore Avenue between Robert Street and East Lafayette Frontage Road. The newly installed Robert Piraam Trail runs along Plato Boulevard to the south of the project area. A trail exists in Harriet Island Regional Park.

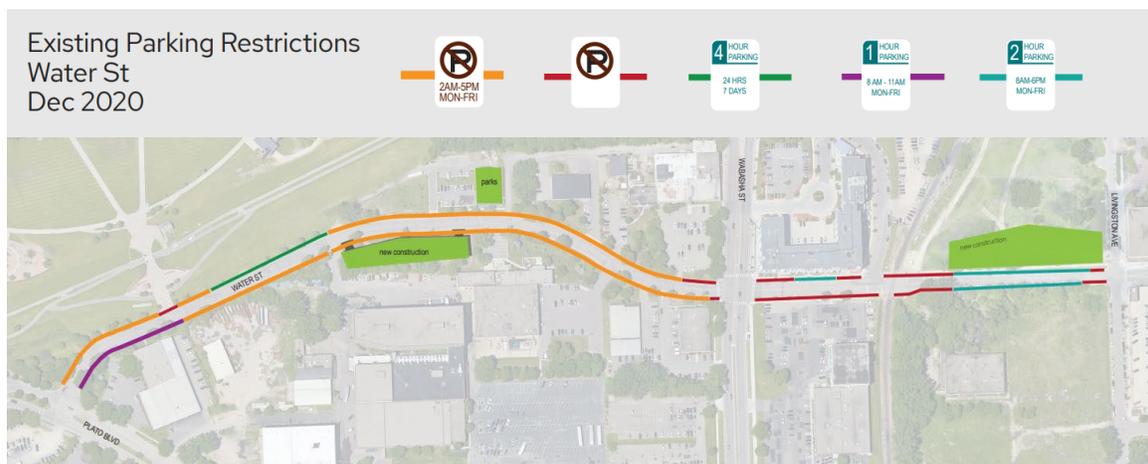


Figure 2. Existing parking regulations

III. PROPOSED IMPROVEMENTS

Water Street and Fillmore Avenue: Plato Boulevard to Livingston Avenue

- Restriping the roadway to add 6' EB and WB bicycle lanes
- Narrowing of existing vehicular travel lanes to 11'
- Installation of bike lane pavement markings and signage
- Removal of on-street parking described below

Changes to On-street Parking

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

Parking will be prohibited:

- South side of Water Street between Plato Boulevard and Wabasha Street
- South side of Fillmore Avenue between Harriet Island Boulevard and Livingston Avenue
- North side of Fillmore Avenue between Harriet Island Boulevard and Livingston Avenue

Parking will be allowed:

- North side of Water Street between Plato Boulevard and Harriet Island Boulevard. Parking will be limited to 4 HRS from 8AM-6PM.*

*Parking will be prohibited on the north side of Water Street between Plato Boulevard and Wabasha Street one night per week (2AM-7AM) for street cleaning.



Figure 2. Proposed parking regulations

There are a total of 176 parking spaces on Water Street and Fillmore Avenue in the project area. This project will eliminate 99 spaces, or 56% of available on street parking spaces. To measure existing parking demand, Public Works conducted 13 parking occupancy counts at representative time periods along Water Street and Fillmore Avenue in March 2021. During this time, parking on the north side of Fillmore Avenue on the block west of Livingston Avenue was prohibited because of the construction of a new residential development. All parking counts were collected during the COVID-19 pandemic. **Appendix 1** provides data collected from these parking occupancy counts.

Across the 13 parking counts, staff observed total parking utilization ranging from nine to 86 vehicles parked in the project area (five to 49 percent occupied). Average occupancy was six percent, and median occupancy was seven percent. In all but one Saturday afternoon count where on street parking demand was high adjacent to Harriet Island Regional Park, parking demand was low or very low.

Parking Conclusions

Based on the data collected by Public Works, it is anticipated that remaining parking supply in the project area following the implementation of bicycle lanes will be sufficient to meet observed demand in most circumstances.

IV. ALTERNATIVES

Not pursuing bicycle facilities in 2021 would not improve safety or comfort for people bicycling on Water Street and Fillmore Avenue, and would be inconsistent with the Saint Paul Bicycle Plan.

Parking removal is proposed for the south side of Water Street and Fillmore Avenue between Plato Boulevard and Livingston Avenue, and on the north side of Fillmore Avenue on the block west of Livingston Avenue. Removing parking from the north side of Water Street was considered but is not recommended due to greater impact on Harriet Island Regional Park visitors. On the block of Fillmore Avenue west of Livingston Avenue where the road width is constrained, removal of parking on both sides of the street is necessary to accommodate bike lanes.

V. POSITIVE BENEFITS

This project will improve the safety of all users of the roadway. Providing dedicated bike lanes on Water Street and Fillmore Avenue will improve the safety and comfort for people bicycling on the street, encourage predictable riding behavior, and will provide connectivity to the existing Robert Pira Trail and Harriet Island Regional Park. Narrowing the travel lanes to accommodate bicycle facilities will minimize roadway exposure to motorized traffic for pedestrians.

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.

VII. TIME SCHEDULE

It is anticipated that the bicycle improvements as proposed will be installed in Fall of 2021.

VIII. COST ESTIMATE

Implementation of bicycle lanes will cost an estimated \$28,000.

I. ESTIMATED FINANCING

Signing and striping for bike lanes on Water Street and Fillmore Avenue will be funded through funds budgeted in the General Fund for Bicycle Facility Improvements.

II. SOURCE OF ADDITIONAL INFORMATION

For additional information, please contact:

Reuben Collins, Transportation Planning and Safety Division
Email: Reuben.Collins@ci.stpaul.mn.us
Phone: 651-266-6059

III. SUMMARY AND RECOMMENDATIONS

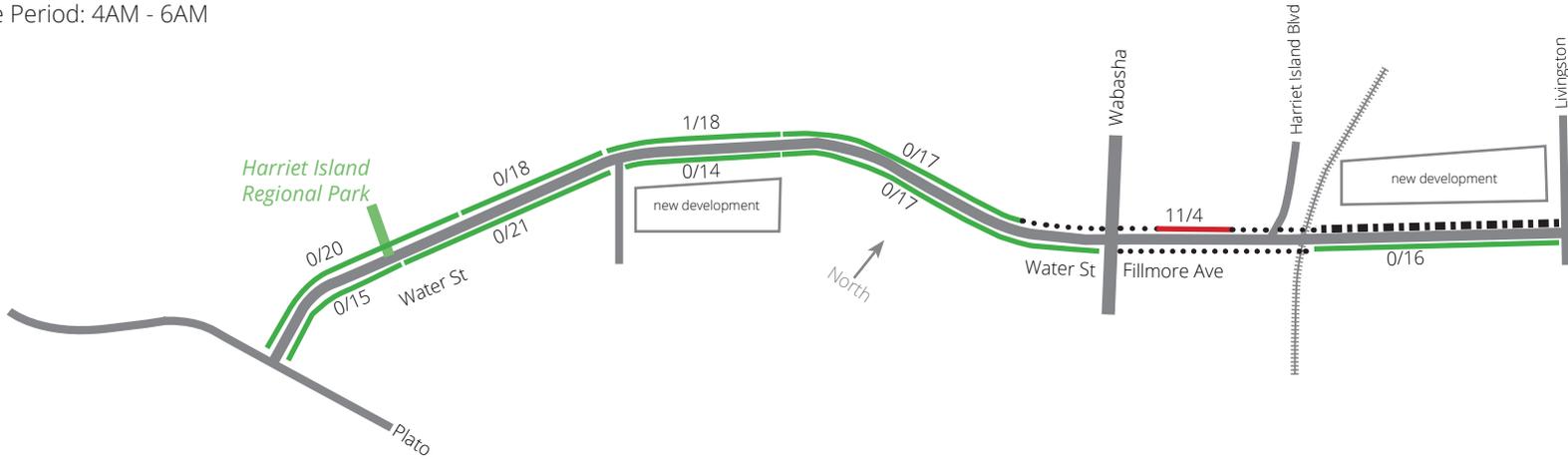
The Department of Public Works believes the project submitted herein to be necessary and feasible. The Department's Engineering Recommendation is for approval of the project as proposed.

Appendix

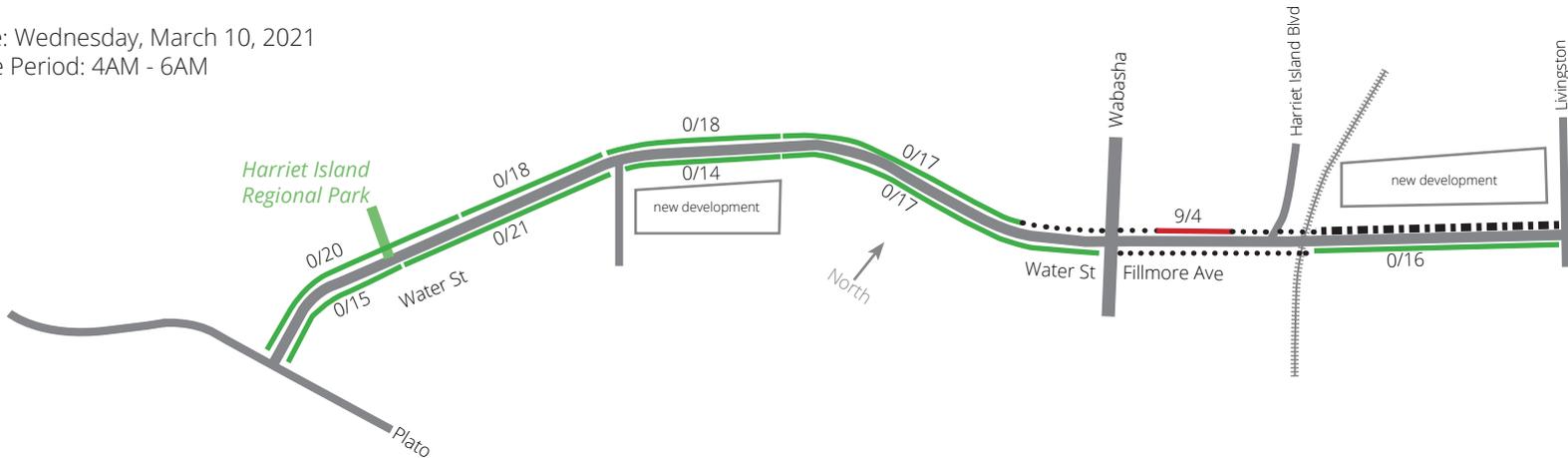
1. Water Street and Fillmore Avenue Parking Occupancy Study

Water St - Fillmore Ave Parking Counts Weekday Early Morning (4AM - 6AM)

Date: Tuesday, March 2, 2021
Time Period: 4AM - 6AM



Date: Wednesday, March 10, 2021
Time Period: 4AM - 6AM



Legend

- Parking currently prohibited
- - - - - Temporary NO PARKING due to construction
- 0 - 49%
- 50 - 74%
- 75 - 100+%

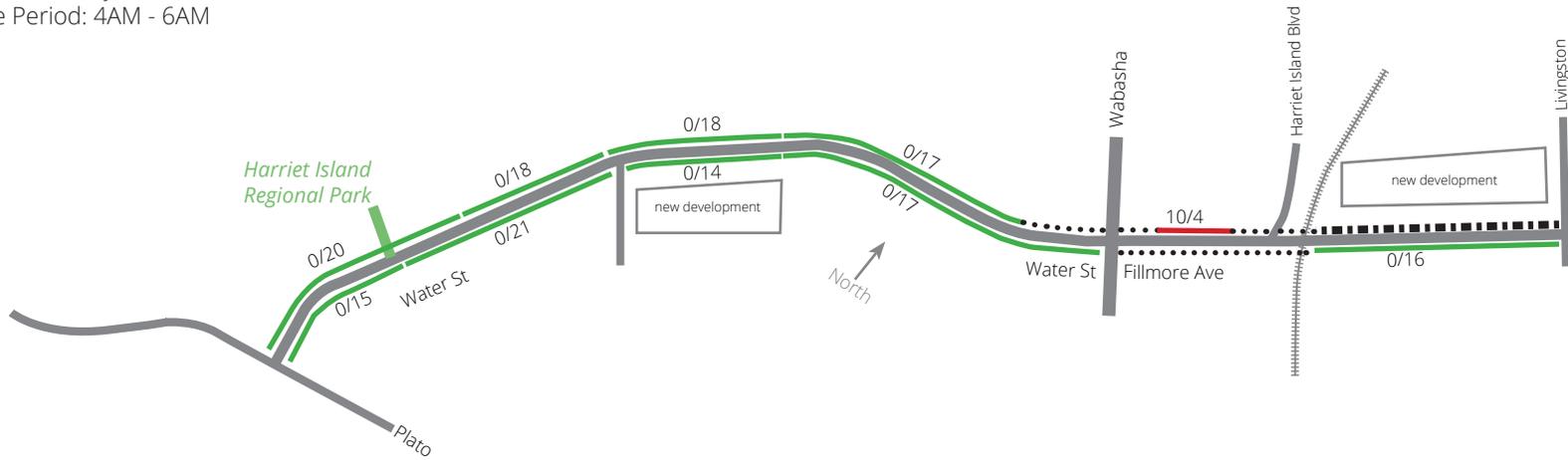
Example: 8/21 =
Observed parked cars/
Estimated legal parking capacity
(Observed parking utilization may exceed estimated legal capacity)



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Water St - Fillmore Ave Parking Counts Weekday Early Morning (4AM - 6AM)

Date: Thursday, March 18, 2021
Time Period: 4AM - 6AM



Legend

..... Parking currently prohibited

..... Temporary NO PARKING due to construction

..... 0 - 49%

..... 50 - 74%

..... 75 - 100+%

Example: 8/21 =

Observed parked cars/
Estimated legal parking capacity

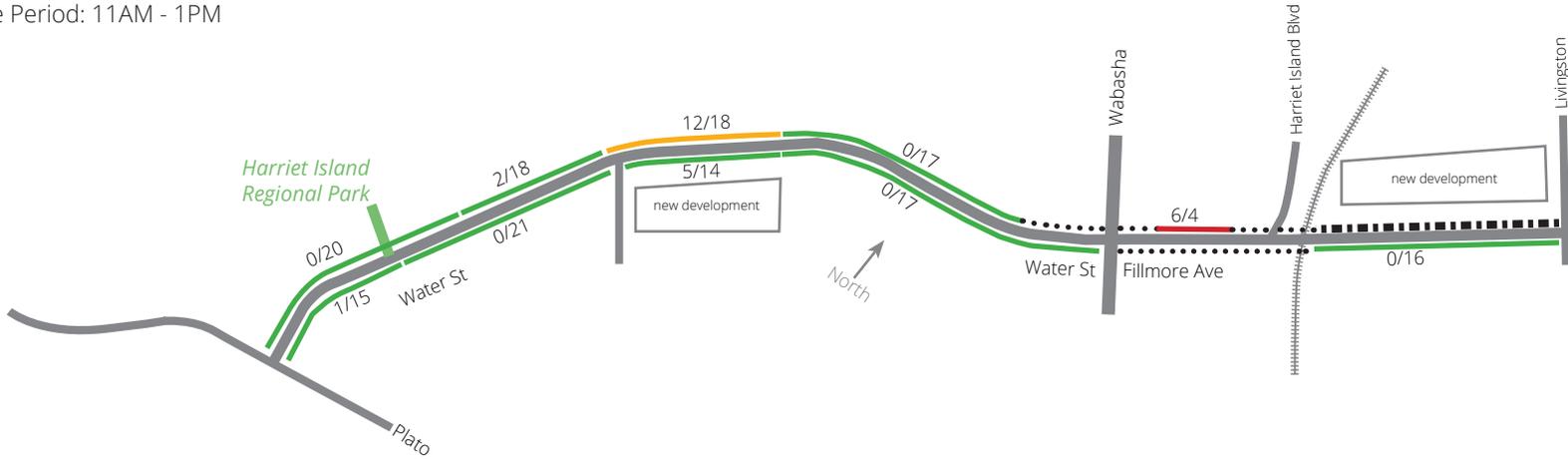
(Observed parking utilization may exceed estimated legal capacity)



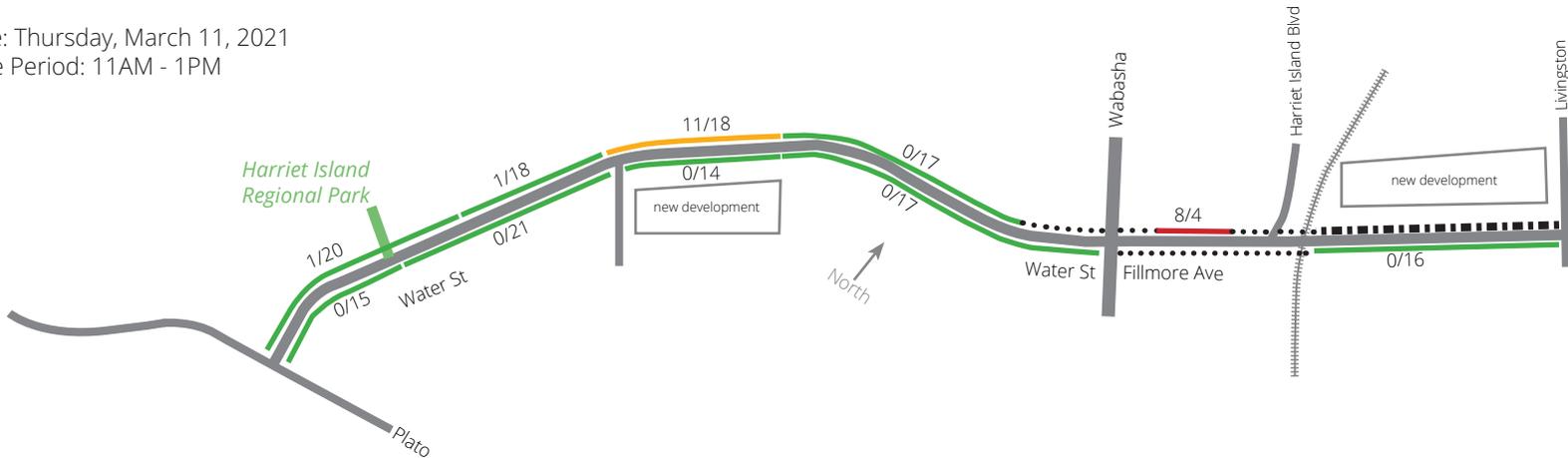
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Water St - Fillmore Ave Parking Counts Weekday Midday (11AM - 1PM)

Date: Wednesday, March 3, 2021
Time Period: 11AM - 1PM



Date: Thursday, March 11, 2021
Time Period: 11AM - 1PM



Legend

- Parking currently prohibited
- Temporary NO PARKING due to construction
- 0 - 49%
- 50 - 74%
- 75 - 100+%

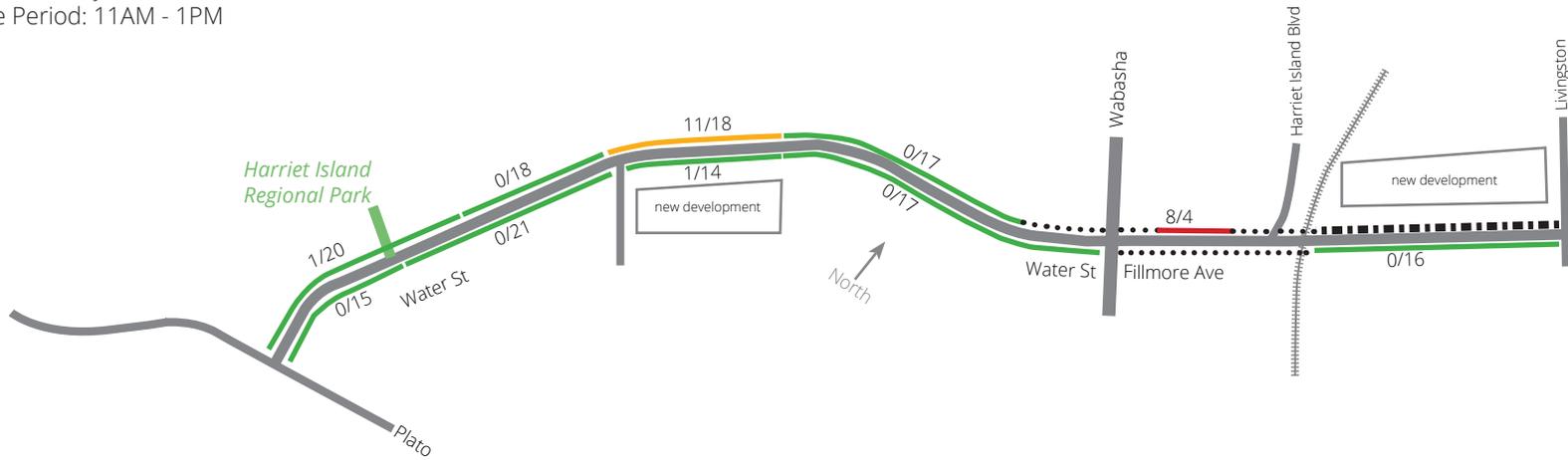
Example: 8/21 =
Observed parked cars/
Estimated legal parking capacity
(Observed parking utilization may exceed estimated legal capacity)



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Water St - Fillmore Ave Parking Counts Weekday Midday (11AM - 1PM)

Date: Tuesday, March 16, 2021
Time Period: 11AM - 1PM



Legend

..... Parking currently prohibited

----- Temporary NO PARKING due to construction

— 0 - 49%

— 50 - 74%

— 75 - 100+%

Example: 8/21 =

Observed parked cars/
Estimated legal parking capacity

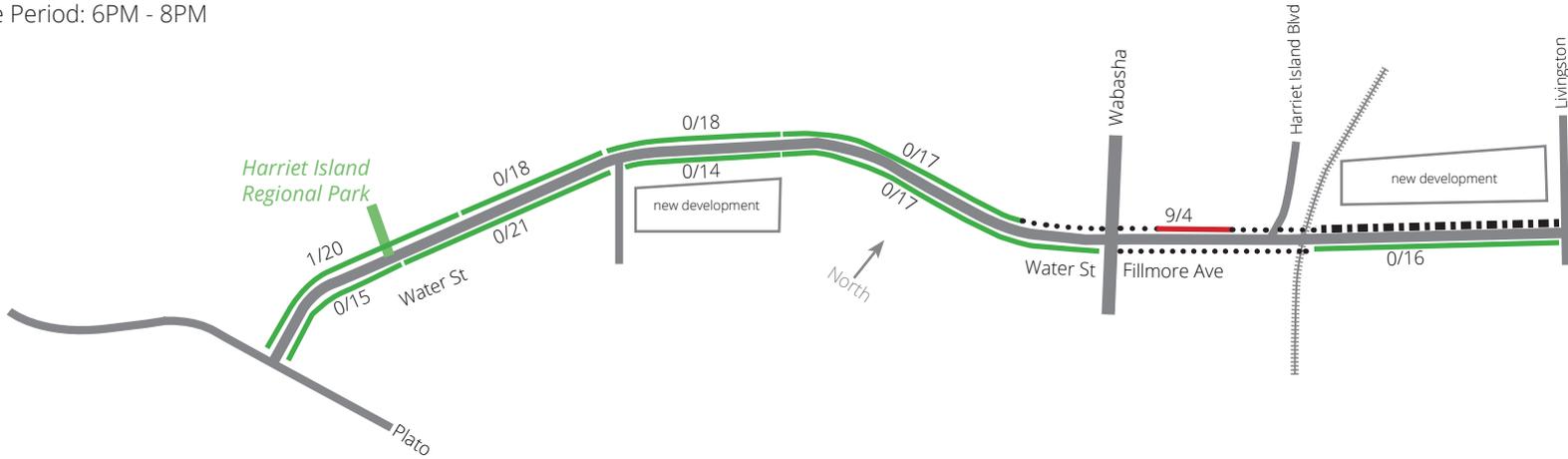
(Observed parking utilization may exceed estimated legal capacity)



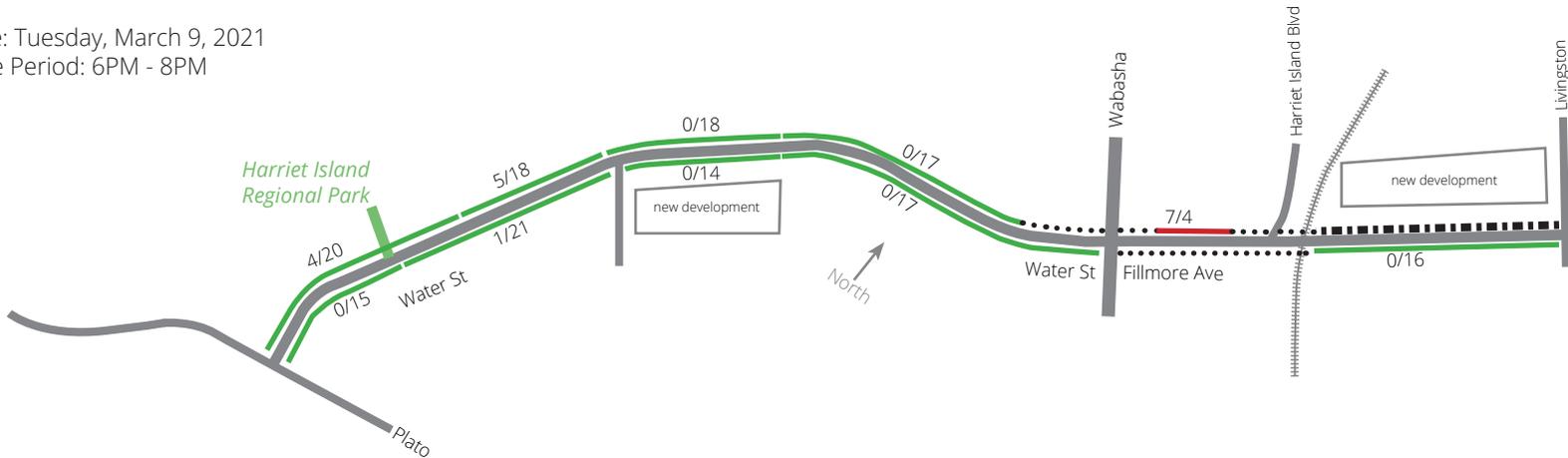
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Water St - Fillmore Ave Parking Counts Weekday Evening (6PM - 8PM)

Date: Thursday, March 4, 2021
Time Period: 6PM - 8PM



Date: Tuesday, March 9, 2021
Time Period: 6PM - 8PM



Legend

- Parking currently prohibited
- Temporary NO PARKING due to construction
- 0 - 49%
- 50 - 74%
- 75 - 100+%

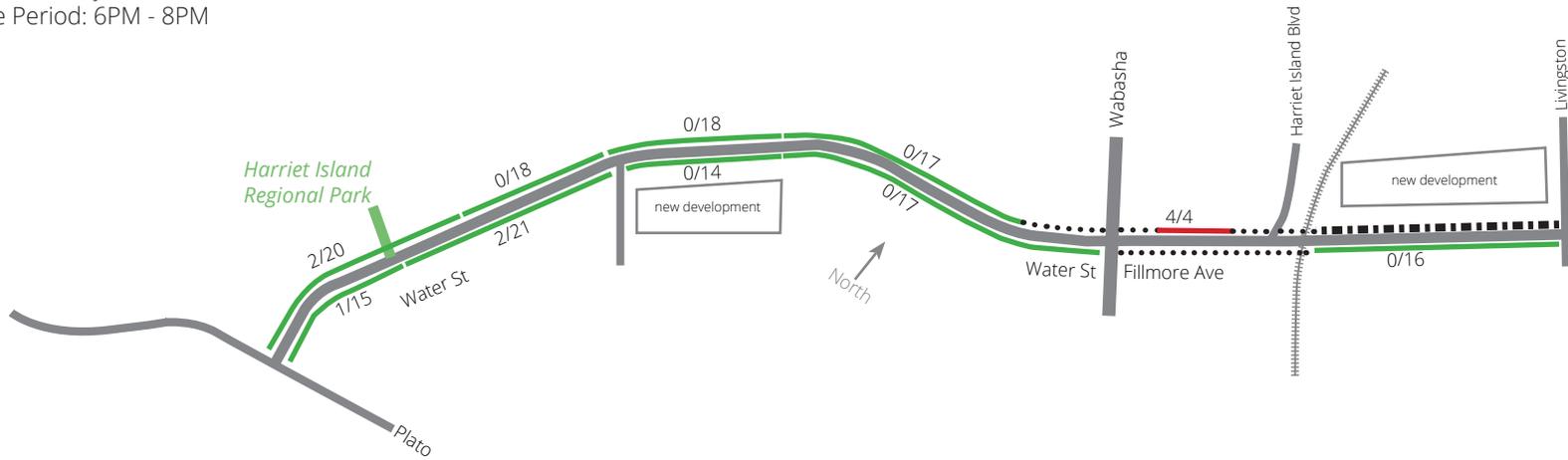
Example: 8/21 =
Observed parked cars/
Estimated legal parking capacity
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Water St - Fillmore Ave Parking Counts Weekday Evening (6PM - 8PM)

Date: Tuesday, March 17, 2021
Time Period: 6PM - 8PM



Legend

- Parking currently prohibited
- Temporary NO PARKING due to construction
- Green line 0 - 49%
- Orange line 50 - 74%
- Red line 75 - 100+%

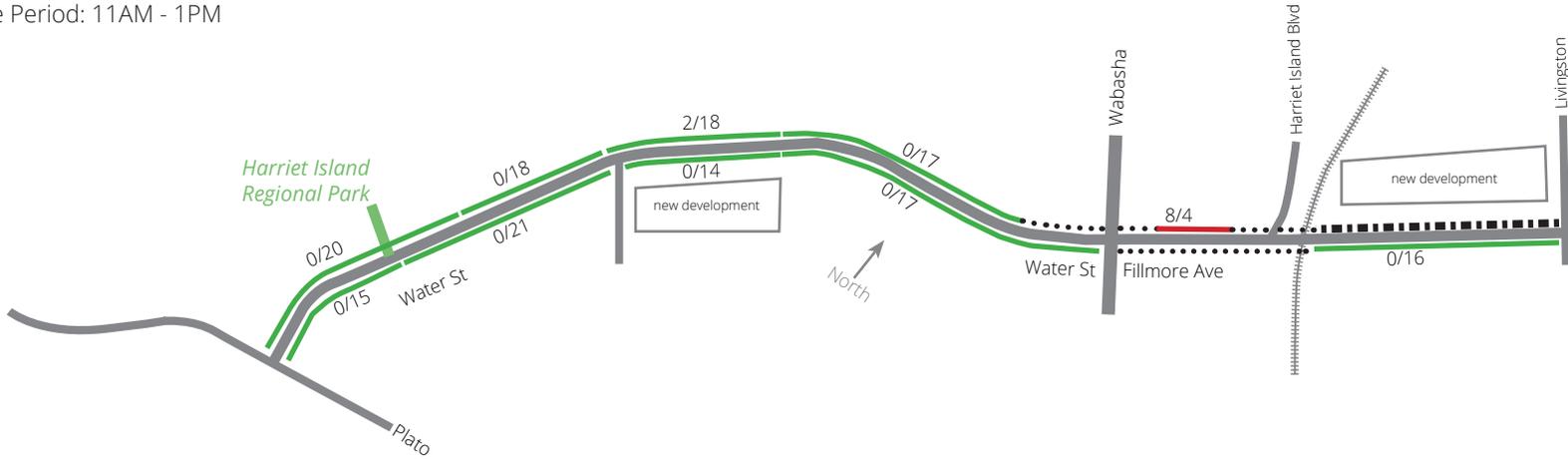
Example: 8/21 =
Observed parked cars/
Estimated legal parking capacity
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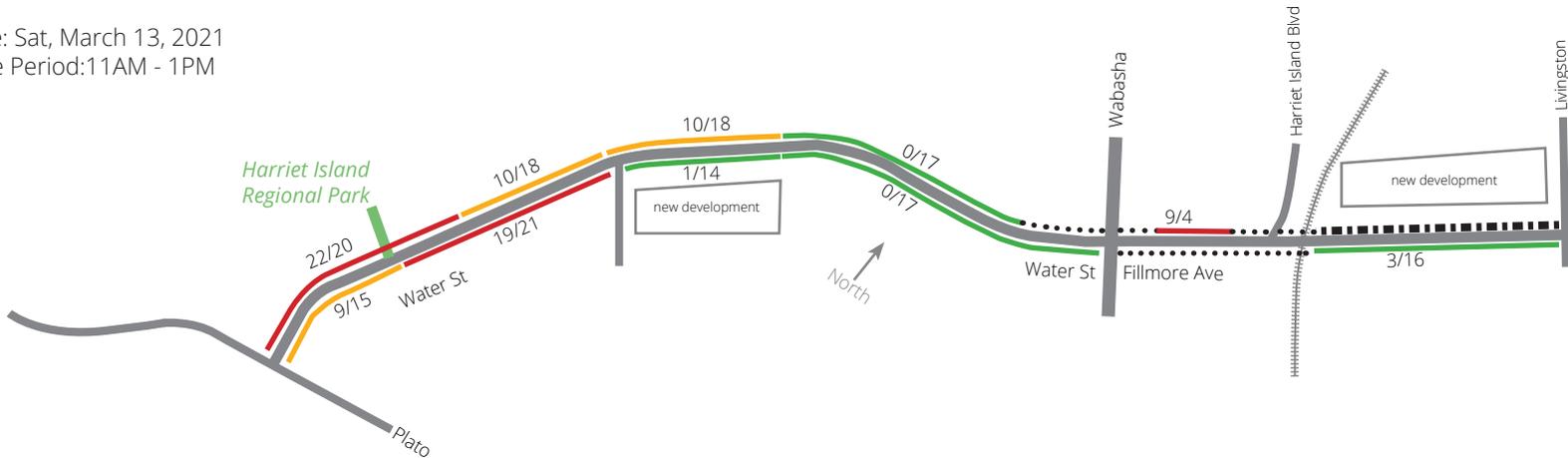
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Water St - Fillmore Ave Parking Counts Weekend Midday (11AM - 1PM)

Date: Saturday, Feb 27, 2021
Time Period: 11AM - 1PM



Date: Sat, March 13, 2021
Time Period: 11AM - 1PM



Legend

- Parking currently prohibited
- Temporary NO PARKING due to construction
- 0 - 49%
- 50 - 74%
- 75 - 100+%

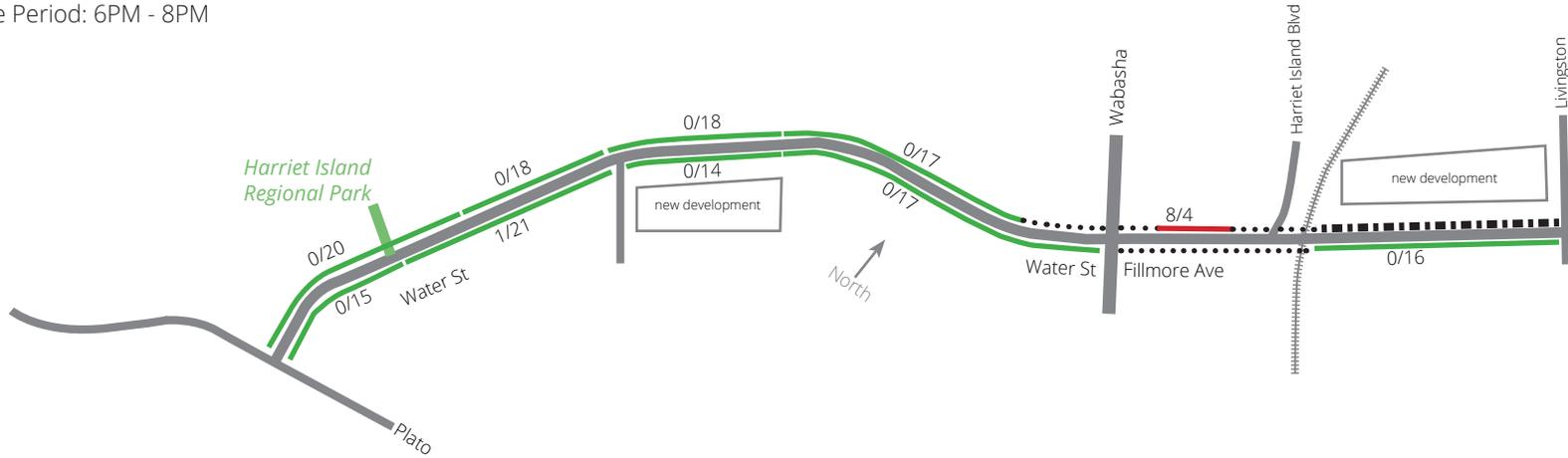
Example: 8/21 =
Observed parked cars/
Estimated legal parking capacity
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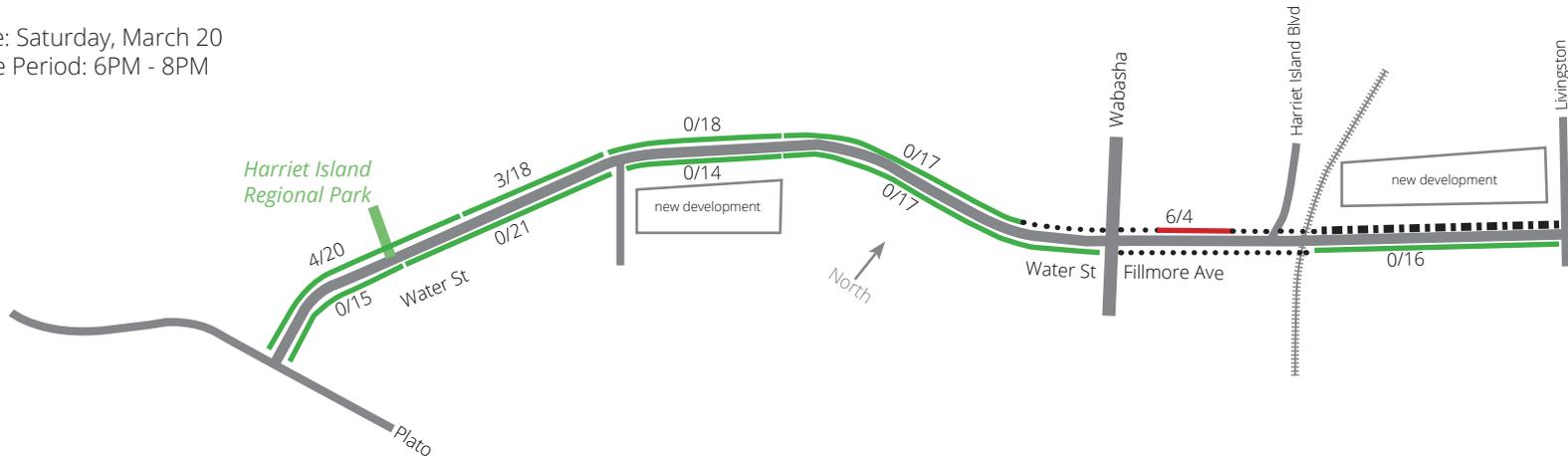
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Water St - Fillmore Ave Parking Counts Weekend Evening (6PM - 8PM)

Date: Saturday, March 6, 2021
Time Period: 6PM - 8PM



Date: Saturday, March 20
Time Period: 6PM - 8PM



Legend

- Parking currently prohibited
- Temporary NO PARKING due to construction
- 0 - 49%
- 50 - 74%
- 75 - 100+%

Example: 8/21 =
Observed parked cars/
Estimated legal parking capacity
(Observed parking utilization may exceed estimated legal capacity)



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