

TERITORIAL ROAD BIKEWAY PROJECT SUMMARY OF ENGINEERING RECOMMENDATIONS

Territorial Road Bikeway

Report prepared: 5/20/2020

Public Hearing: 6/17/2020

PROJECT

Implementation of bicycle facilities on Territorial Road from Berry Street to Raymond 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 bicycle facility on Territorial Road, and make purposeful connections to existing nearby bikeways, improving the bicycling environment as it relates to safety, comfort, and connectivity.

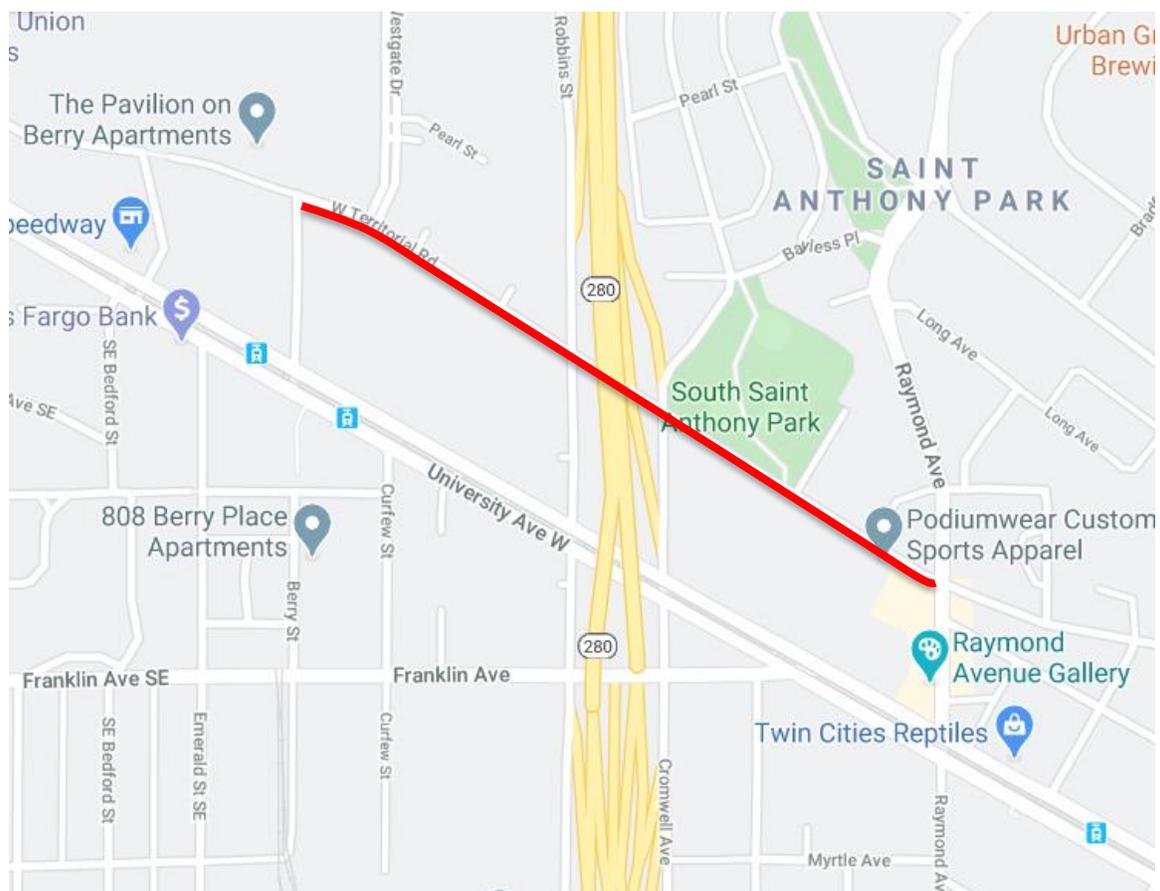


Figure 1: Project Map

I. INITIATING ACTION

The City of Saint Paul Department of Public Works is planning a mill and overlay of Territorial Road from Berry Street to Raymond Avenue in the Fall of 2020. To take advantage of the efficiencies associated with implementing bicycle facilities with existing maintenance projects, Public Works is proposing to implement bicycle lanes on Territorial Road within the mill and overlay boundaries. The bicycle facilities proposed are consistent with the Saint Paul Bicycle Plan.

II. EXISTING CONDITIONS

Territorial Road within the project limits is classified as a Collector roadway. Average Annual Daily Traffic (AADT) within the project limits ranges from 5,500 to 6,000 vehicles per day. There have not been any recent speed studies conducted within the project limits. The posted speed limit is 25 mph. Manual count data estimates September weekday bicycle trips ranging between 75 and 160 trips per day, and September weekday pedestrian trips ranging from 145 to 230 trips per day within project limits. There are no existing bike facilities installed within the project limits. Sidewalks are continuous on the north and south side of Territorial Road within the project limits, though pedestrian ramps are not ADA compliant. The Saint Paul Bicycle Plan identifies "in-street separated (bicycle) lanes on Territorial Road as the recommended bicycle facility type. In-street bicycle lanes are installed on Raymond Avenue north and south of the project limits.

III. PROPOSED IMPROVEMENTS

Territorial Road: Berry Street to Westgate Drive

- Restriping the roadway to add 7' 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 on the south side of Territorial Road

Territorial Road: Westgate Drive to TH-280

- Restriping the roadway to add 7' EB and WB bicycle lanes with 4' buffers between the travel lanes and the 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 north and south sides of Territorial Road

Territorial Road: At TH-280

- Restriping the roadway to add 6' EB and WB bicycle lanes
- Narrowing of existing vehicular travel lanes to 11'
- Adding new 10' wide left turn lanes at Eustis Street and Cromwell Avenue
- Installation of bike lane pavement markings and signage

Territorial Road: TH-280 to Raymond Avenue

- Restriping the roadway to add 7' 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 on the north side of Territorial Road

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 Territorial Road from Berry Street to Eustis Street
- north side of Territorial Road from Westgate Drive to Raymond Avenue

Parking will continue to be permitted:

- north side of Territorial Road from Berry Street to Westgate Drive
- south side of Territorial Road from Cromwell to Raymond

There are a total of 110 parking spaces on Territorial Road within the project limits. This project will eliminate 76 spaces, or 69% of available parking spaces. To measure existing parking demand, Public works conducted 15 parking occupancy counts at representative time periods along Territorial Road as well as along Berry Street between University Avenue and Territorial Road. Across the 15 parking counts, staff observed parking utilization ranging from 9 to 24 vehicles on Territorial Road, or 8% to 21% utilization of total available parking spaces. The highest parking utilization was observed at the west and east ends of the project, west of Westgate Drive and east of Hunt Place.

Based on the data collected by Public Works, it is anticipated that remaining parking supply on Territorial Road following the implementation of bicycle lanes will be sufficient to meet observed demand in most circumstances. The parking occupancy data is attached in the **Appendix** of this document.

IV. ALTERNATIVES

Not pursuing bicycle facilities with the 2020 mill and overlay would not improve safety or comfort for people bicycling on Territorial Road, and would be inconsistent with the Saint Paul Bicycle Plan.

Parking removal is proposed for the south side of Territorial Road between Berry Street and Westgate Drive. Removing parking from the north side of Territorial Road instead of the south side was examined, but is not recommended due to less desirable lane alignment as Territorial Road curves near Westgate Drive.

Parking removal is proposed for both sides of Territorial Road between Westgate Drive and TH-280. Removing parking from only one side of Territorial Road was examined, but was not recommended due to low observed demand for on-street parking in this area.

V. POSITIVE BENEFITS

This project will improve the safety of all users of the roadway. Providing dedicated bike lanes on Territorial Road 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 Raymond Avenue. 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 concurrent with the planned mill and overlay on Territorial Road, scheduled for Fall of 2020.

VIII. COST ESTIMATE

Implementation of bicycle lanes and lane reconfiguration within the limits of the mill and overlay will incur little additional cost beyond the amount already budgeted for resurfacing.

I. ESTIMATED FINANCING

Signing and striping for bike lanes on Territorial Road will be funded through funds budgeted for the Citywide Mill and Overlay program.

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

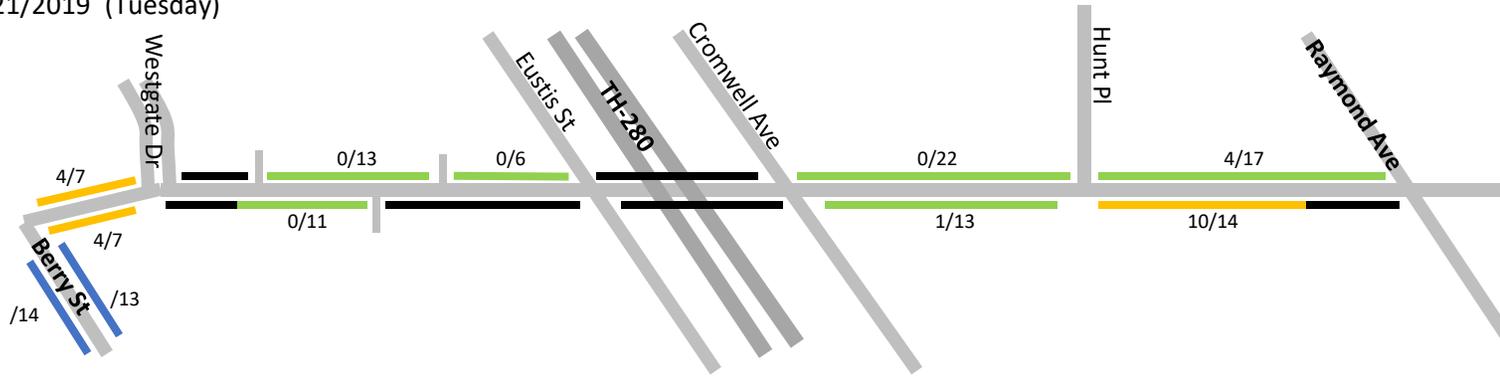
The Department of Public Works believes the project submitted herein to be necessary and feasible. The Department's Engineering Recommendation is for approval of the project as proposed.

Appendix

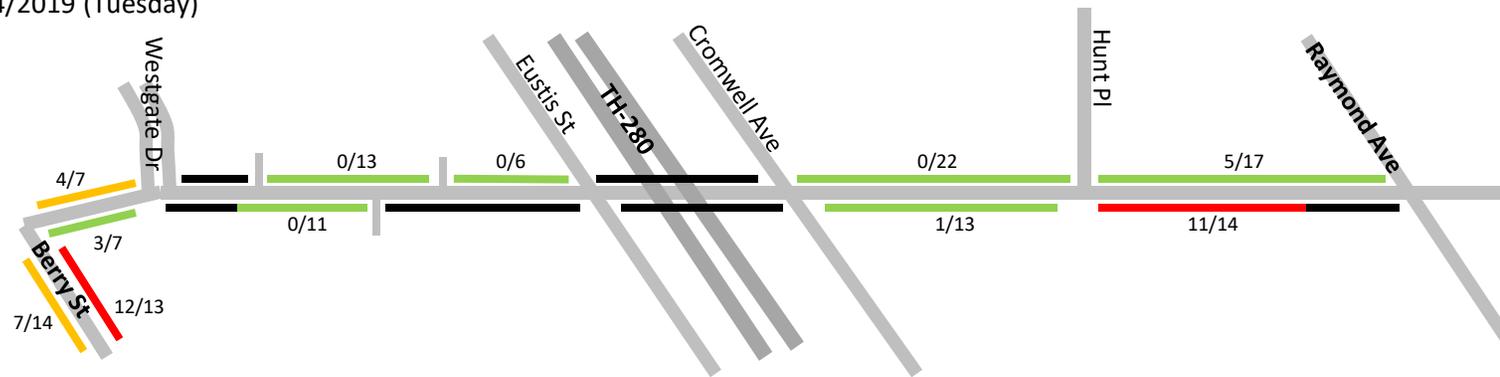
1. Territorial Road Parking Occupancy Study

TERRITORIAL ROAD PARKING UTILIZATION WEEKDAY MIDDAY (11:00 AM – 1:00 PM)

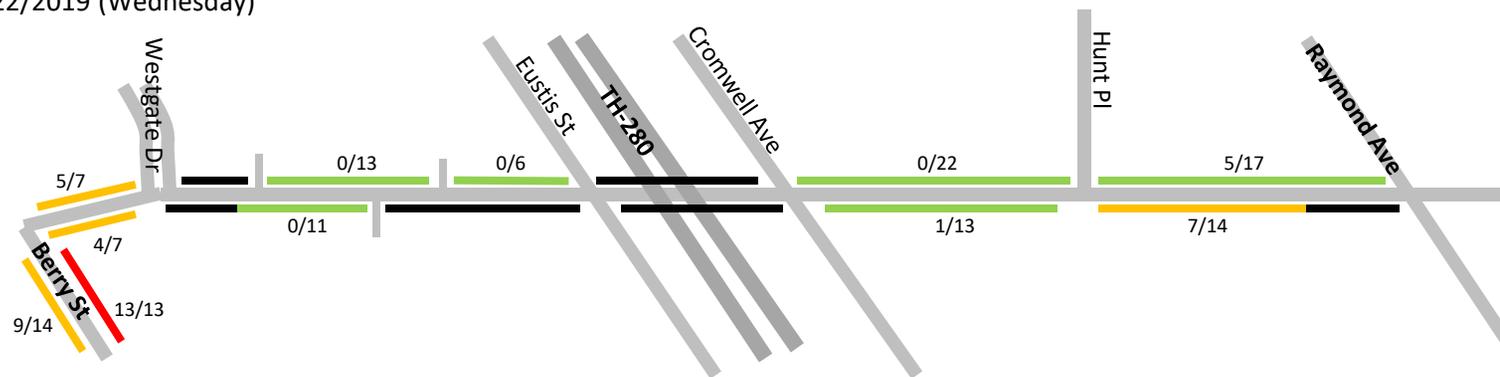
5/21/2019 (Tuesday)



6/4/2019 (Tuesday)



5/22/2019 (Wednesday)



Legend

Observed Parking Utilization

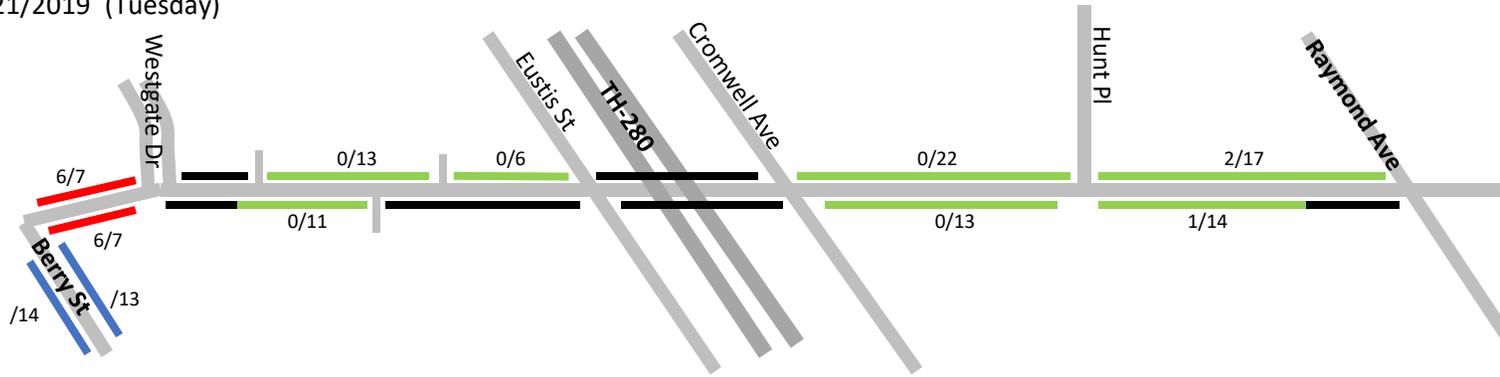
- Parking Prohibited
- 0-49%
- 50-74%
- 75-100+%
- No Data

Example: 8/11 =
Observed Parked Cars/
Estimated Legal Parking
Capacity

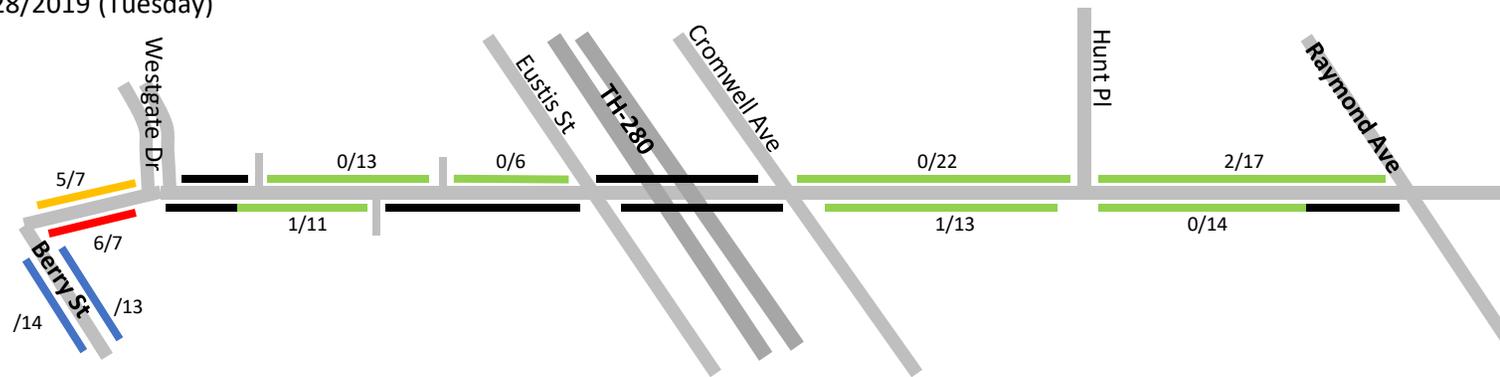
(Observed parking utilization
may Exceed estimated
legal capacity)

TERRITORIAL ROAD PARKING UTILIZATION WEEKDAY EVENING (6:00 PM – 8:00 PM)

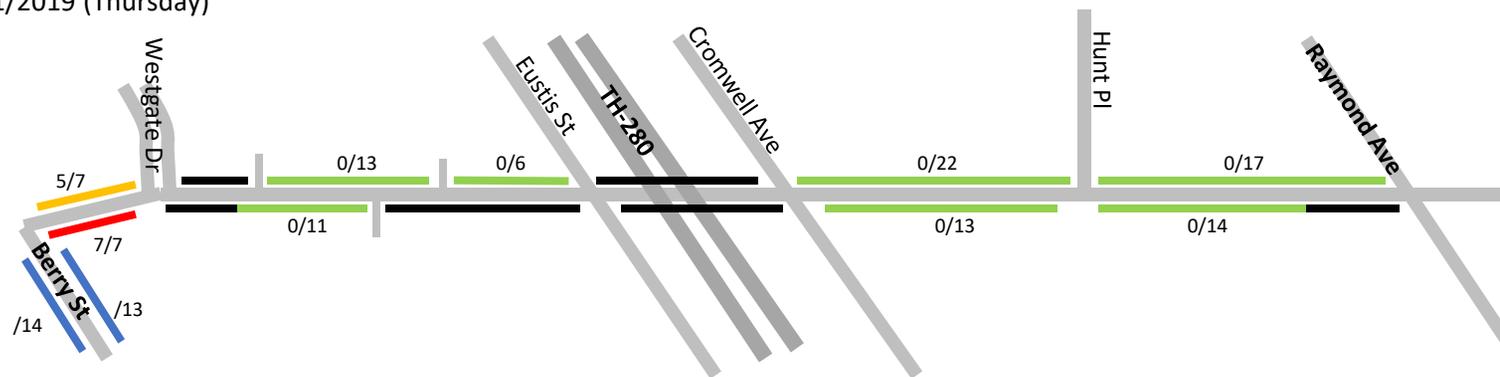
5/21/2019 (Tuesday)



5/28/2019 (Tuesday)



8/1/2019 (Thursday)



Legend

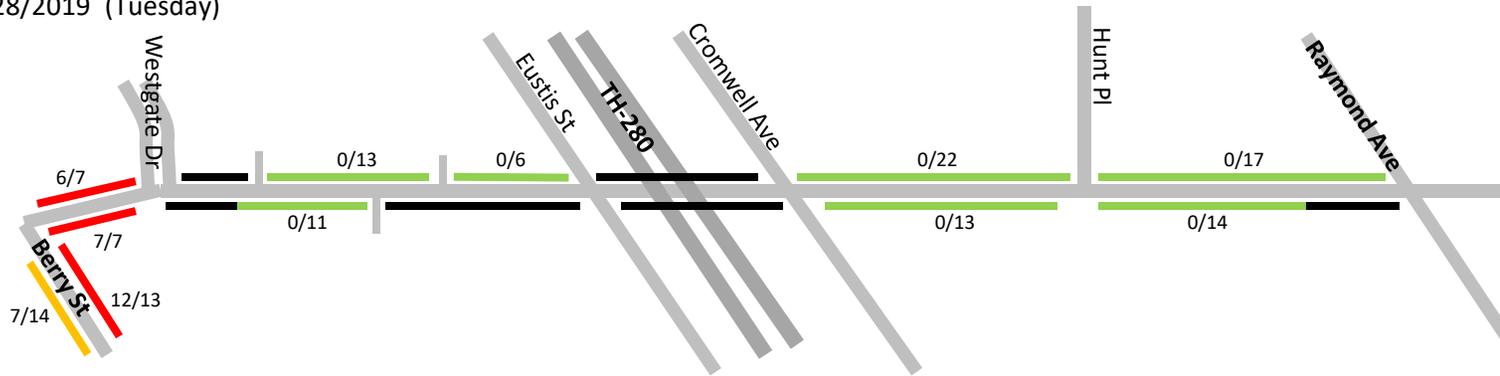
- Observed Parking Utilization
- Parking Prohibited
 - 0-49%
 - 50-74%
 - 75-100+%
 - No Data

Example: 8/11 =
Observed Parked Cars/
Estimated Legal Parking
Capacity

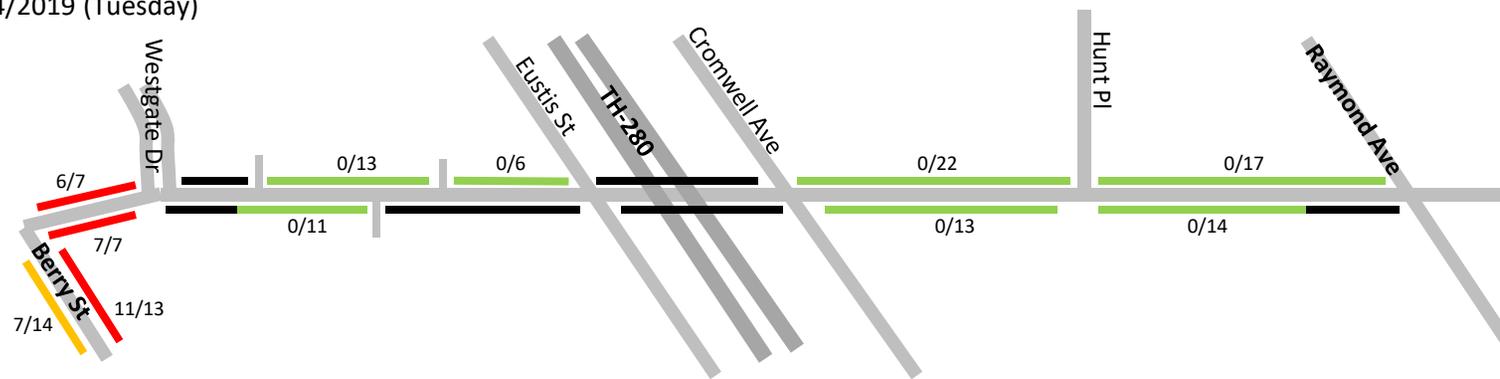
(Observed parking utilization
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legal capacity)

TERRITORIAL ROAD PARKING UTILIZATION WEEKDAY OVERNIGHT (12:00 PM – 6:00 AM)

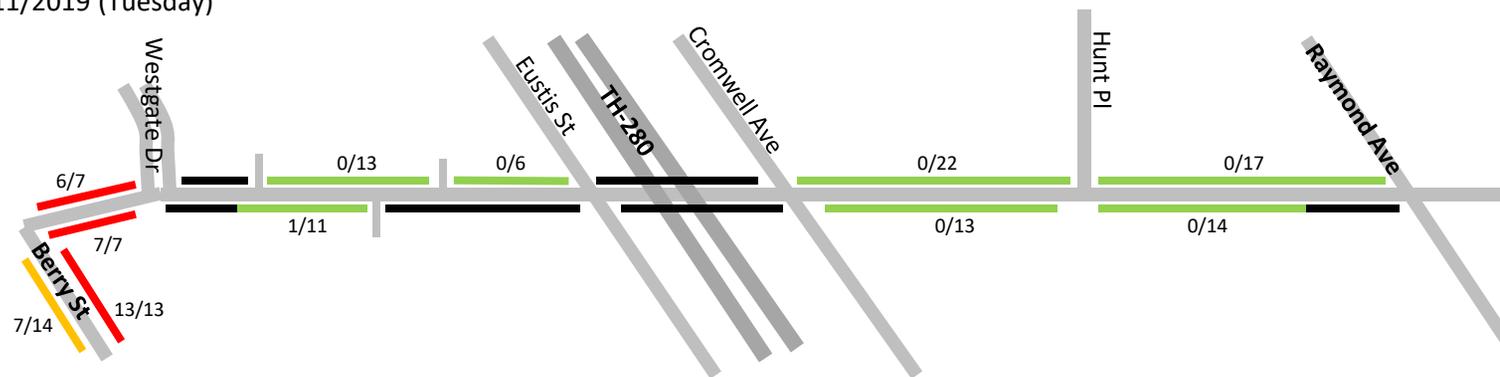
5/28/2019 (Tuesday)



6/4/2019 (Tuesday)



6/11/2019 (Tuesday)



Legend

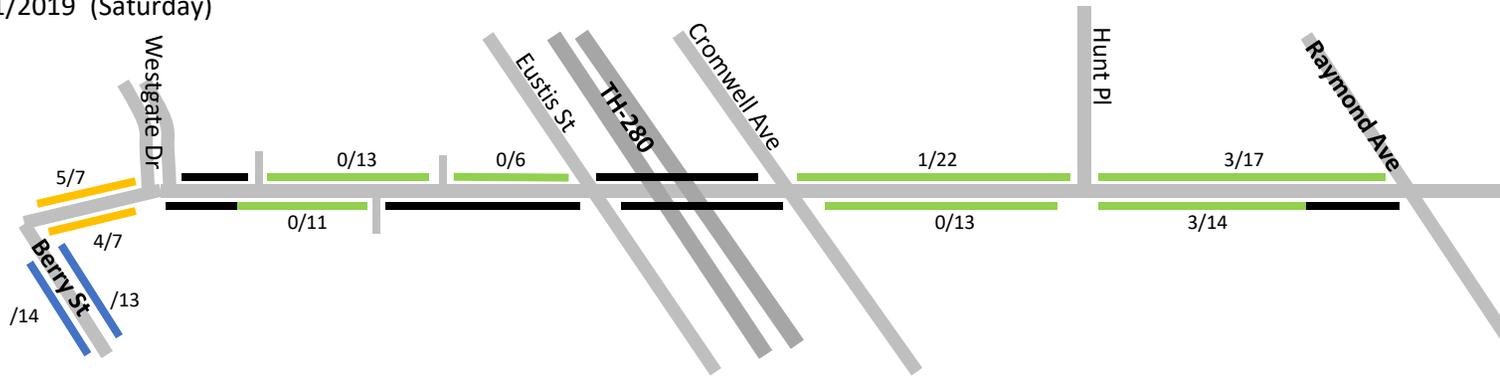
- Observed Parking Utilization
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 - 0-49%
 - 50-74%
 - 75-100+%
 - No Data

Example: 8/11 =
Observed Parked Cars/
Estimated Legal Parking
Capacity

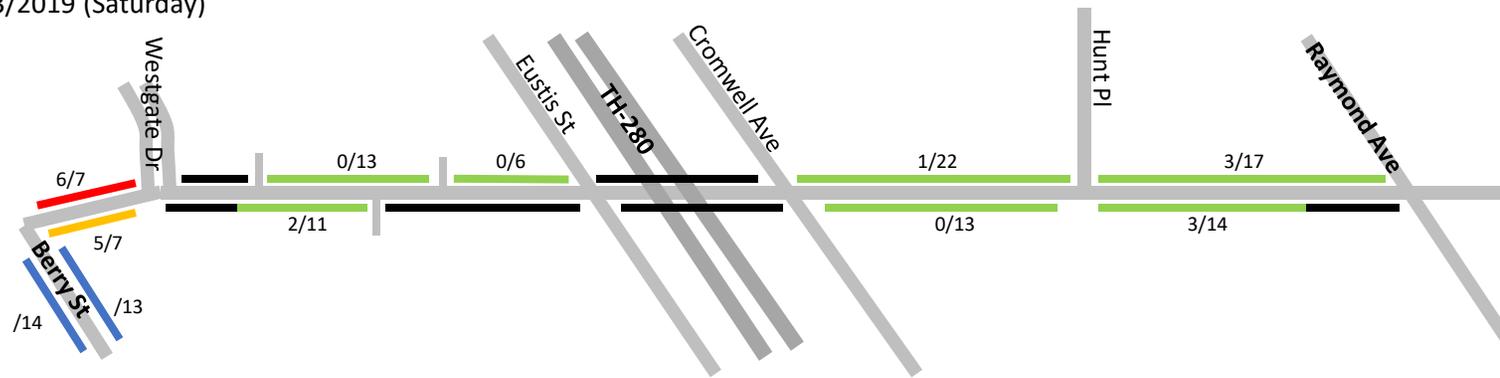
(Observed parking utilization
may Exceed estimated
legal capacity)

TERRITORIAL ROAD PARKING UTILIZATION SATURDAY MIDDAY (11:00 AM – 1:00 PM)

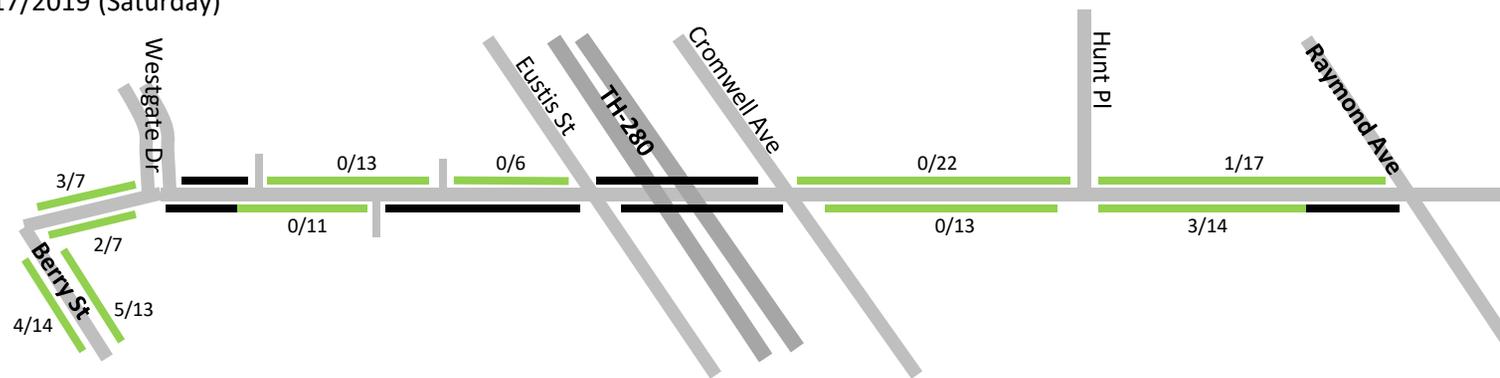
6/1/2019 (Saturday)



8/3/2019 (Saturday)



8/17/2019 (Saturday)



Legend

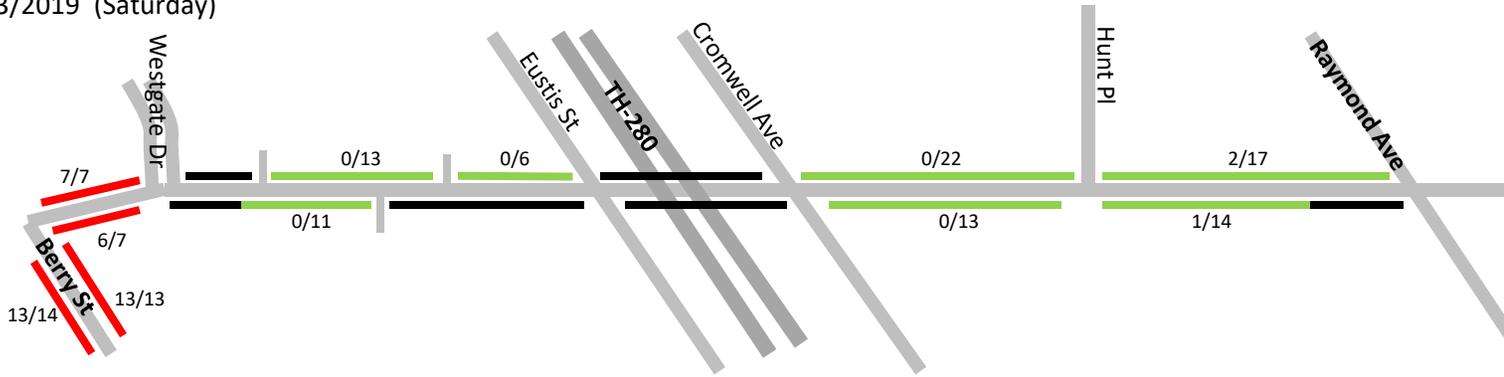
- Observed Parking Utilization
- Parking Prohibited
 - 0-49%
 - 50-74%
 - 75-100+%
 - No Data

Example: 8/11 =
Observed Parked Cars/
Estimated Legal Parking
Capacity

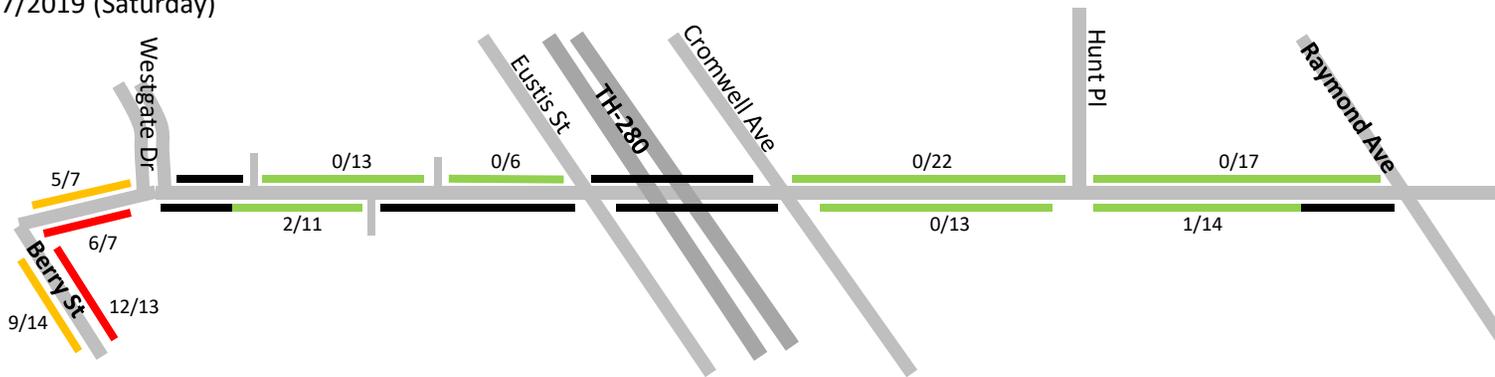
(Observed parking utilization
may Exceed estimated
legal capacity)

TERRITORIAL ROAD PARKING UTILIZATION SATURDAY EVENING (6:00 PM – 8:00 PM)

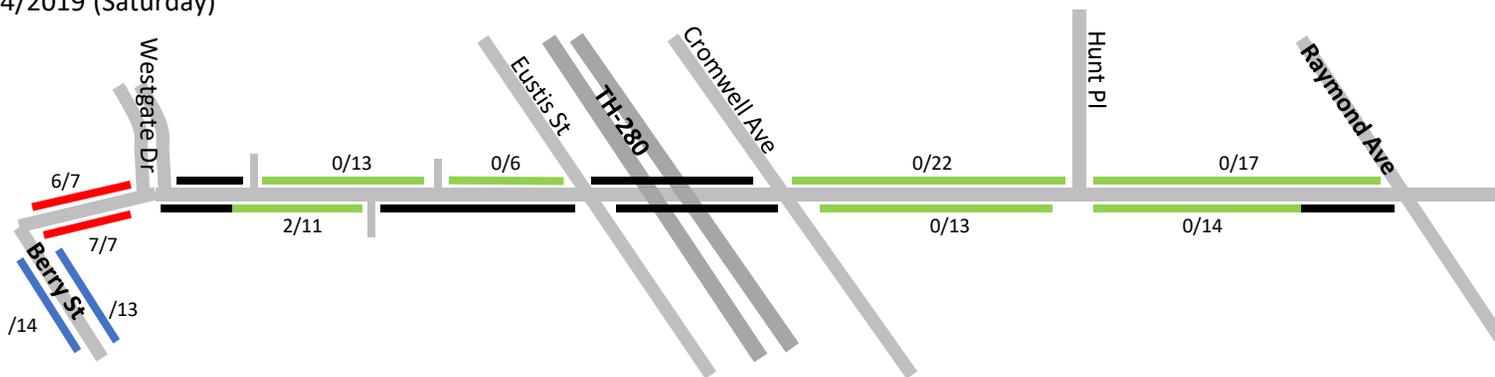
8/3/2019 (Saturday)



8/17/2019 (Saturday)



8/24/2019 (Saturday)



Legend

Observed Parking Utilization

- Parking Prohibited
- 0-49%
- 50-74%
- 75-100+%
- No Data

Example: 8/11 =
Observed Parked Cars/
Estimated Legal Parking
Capacity

(Observed parking utilization
may Exceed estimated
legal capacity)