PROSPERITY AVENUE, HAZELWOOD STREET, AND PROSPERITY ROAD BIKEWAY PROJECT SUMMARY OF ENGINEERING RECOMMENDATIONS

Prosperity / Hazelwood Bikeway

Report prepared: 4/12/2018

Open House 1: 1/23/2018 Public Hearing: 5/2/2018

PROJECT

Implementation of bicycle lanes on Prosperity Avenue, Hazelwood Street, and Prosperity Road from Maryland Avenue to Larpenteur 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 Prosperity Avenue, Hazelwood Street, and Prosperity 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

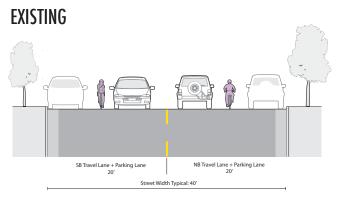
Ramsey County Public Works is planning to mill and overlay Hazelwood Street and Prosperity Road between Arlington Avenue and Larpenteur Avenue in 2018. Ramsey County is also planning to chip seal Prosperity Avenue between Maryland Avenue and Arlington Avenue at the same time as the street resurfacing. To take advantage of the efficiencies associated with implementing bicycle facilities with existing maintenance projects, Public Works is proposing to implement bicycle lanes on Prosperity Avenue, Hazelwood Street, and Prosperity Road from Maryland Avenue to Larpenteur Avenue as a component of the scheduled mill and overlay and chip seal projects. These proposed facilities are consistent with the recommendations of the Saint Paul Bicycle Plan.

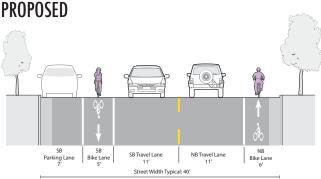
II. EXISTING CONDITIONS

Prosperity Avenue, Hazelwood Street, and Prosperity Road from Maryland Avenue to Larpenteur Avenue are classified as a B-Minor Arterials and are County State Aid Highways (CSAH 64). AADT within the project limits ranges from 5,465 to 6,994 vehicles per day. 85th percentile speeds of 33 - 34 MPH northbound, and 33 - 36 MPH southbound were recorded within the project limits. The posted speed limit is 30 mph. Bicycle and pedestrian traffic data has not been collected within the project corridor. There are no existing bike facilities installed within the projects limits. The Saint Paul Bicycle Plan identifies "in-street separated (bicycle) lanes as the recommended facility type on Prosperity Avenue, Hazelwood Street, and Prosperity Road from Maryland Avenue to Larpenteur Avenue. In-street separated lanes are installed on Phalen Boulevard south of the project limits.

III. PROPOSED IMPROVEMENTS

Prosperity Avenue and Hazelwood Street: Maryland Avenue to Idaho Avenue



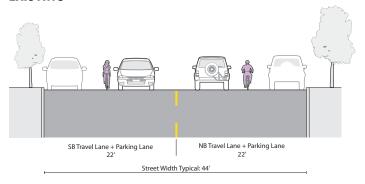


Elements proposed for implementation are:

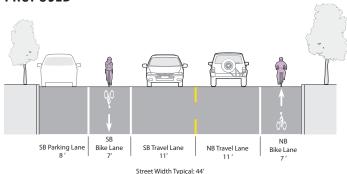
- Restriping the roadway to add 6' NB and 5' SB bicycle lanes
- Narrowing of existing vehicular travel lanes to 11'
- Installation of bike lane pavement markings and signage
- Removal of on-street parking on the east side of Prosperity Avenue and Hazelwood Street between Maryland Avenue and Idaho Avenue

Prosperity Road: Idaho Avenue to Larpenteur Avenue

EXISTING



PROPOSED



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 Prosperity Road between Idaho Avenue and Larpenteur Avenue

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 Prosperity Avenue, Hazelwood Street, and Prosperity Road between Maryland Avenue and Larpenteur Avenue.

To capture demonstrative parking demand, Public works conducted thirteen parking occupancy counts at representative time periods along the corridor. Based on the data collected by Public Works, it is anticipated that remaining parking supply on the west side of Prosperity Avenue, Hazelwood Street, and Prosperity Road following the implementation of bicycle lanes will be sufficient to meet 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 and chip seal would not improve safety or comfort for people bicycling on Prosperity Avenue, Hazelwood Street, and Prosperity Road, and would fail to connect to existing bicycle facilities on Phalen Boulevard immediately south of the project limits.

Parking removal is proposed for the east side of Prosperity Avenue, Hazelwood Street, and Prosperity Road between Maryland Avenue and Larpenteur Avenue. Removing

parking from the west side of the project corridor instead of the east side was examined, but was ultimately rejected as a result of the following data-driven findings:

- a) There is more estimated parking capacity on the west side of the project corridor between Maryland Avenue and Larpenteur Avenue
 - (153 spaces on the west side of the street, and 130 spaces on the east side)
- b) There is more parking utilization on the west side of the project corridor between Maryland Avenue and Larpenteur Avenue
 - (Average of 22.8 vehicles parked west side of street, and 11.5 vehicles parked on the east side of street)
- Removing parking on the east side of the street prevents impacts to the bus loading zone for the L'Etoile du Nord French Immersion School at Prosperity Avenue and Ivy Avenue

V. POSITIVE BENEFITS

This project will improve the safety of all users of the roadway. Providing dedicated bike lanes on Prosperity Avenue, Hazelwood Street, and Prosperity Road will improve the safety and comfort for people bicycling on the street, encourage predictable riding behavior, and will provide connectivity to exiting bike facilities immediately south of the project limits on Phalen Boulevard. 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 and make parking less convenient for stakeholders who regularly park on the east side of Prosperity Avenue, Hazelwood Street, and Prosperity Road between Maryland and Larpenteur avenues.

VII. TIME SCHEDULE

It is anticipated that the bicycle improvements as proposed will be installed concurrent with the planned mill and overlay of Hazelwood Street and Prosperity Road, and the planned chip seal of Prosperity Avenue scheduled for summer 2018.

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 by Ramsey County.

I. ESTIMATED FINANCING

Signing and striping for bike lanes on Prosperity Avenue, Hazelwood Street, and Prosperity Road will be funded by Ramsey County with funds from the gas tax and wheelage tax.

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:

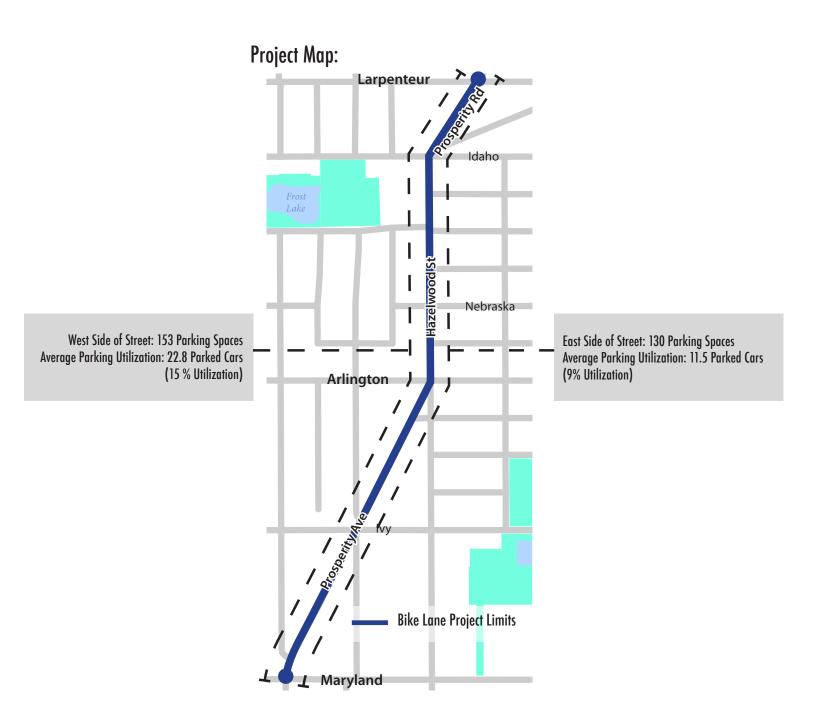
1. Prosperity Avenue, Hazelwood Street, and Prosperity Road Parking Occupancy Study

Prosperity Ave - Hazelwood St - Propserity Rd Parking Count Summary

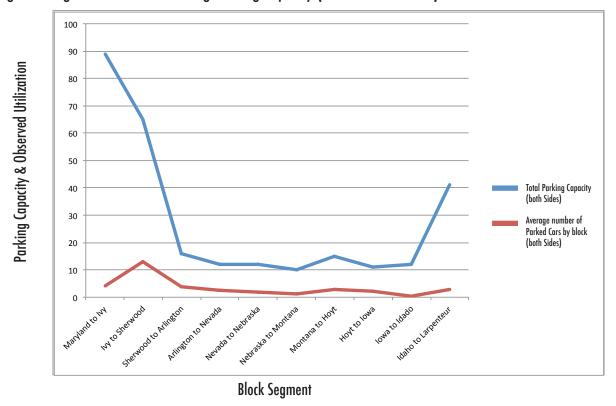
Boundaries: Maryland (south) to Larpenteur (north)

Estimated Legal Parking Capacity: 283

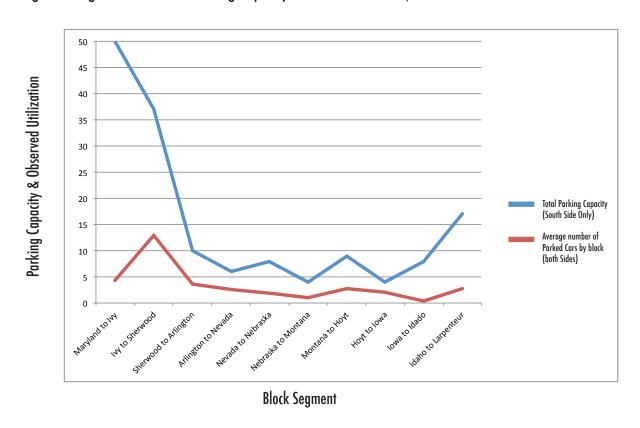
Average Parking Utilization (13 Counts): 34.3 Parked Cars (12% Utilization)



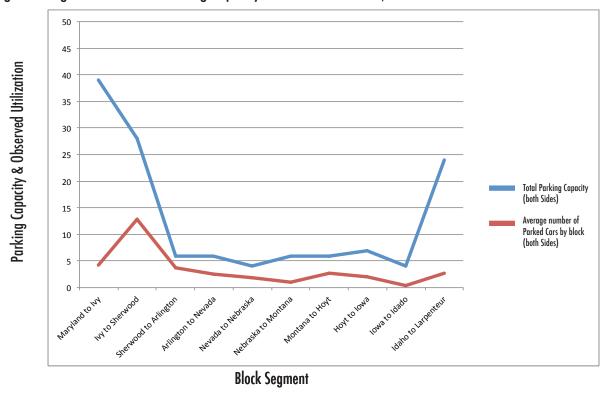
Prosperity-Hazelwood Prosperity (Maryland to Larpenteur) Average Parking Utilization and existing Parking Capacity (both sides of street)



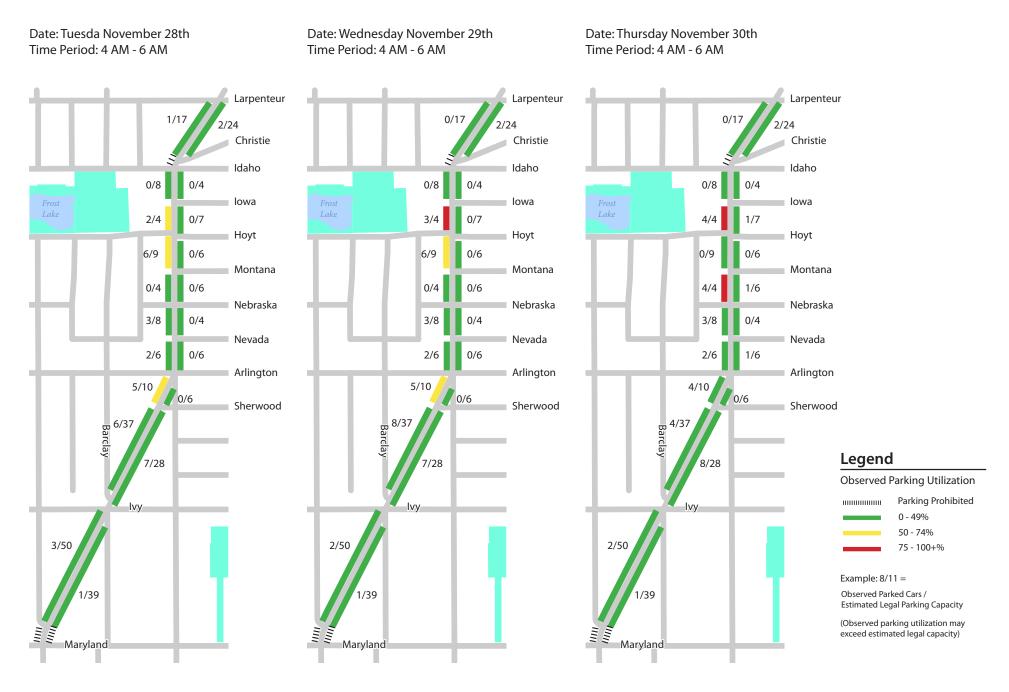
Prosperity-Hazelwood Prosperity (Maryland to Larpenteur)
Average Parking Utilization and existing Capacity: East Side Removed, West Side Preserved



Prosperity-Hazelwood Prosperity (Maryland to Larpenteur) Average Parking Utilization and existing Capacity: West Side Removed, East Side Preserved



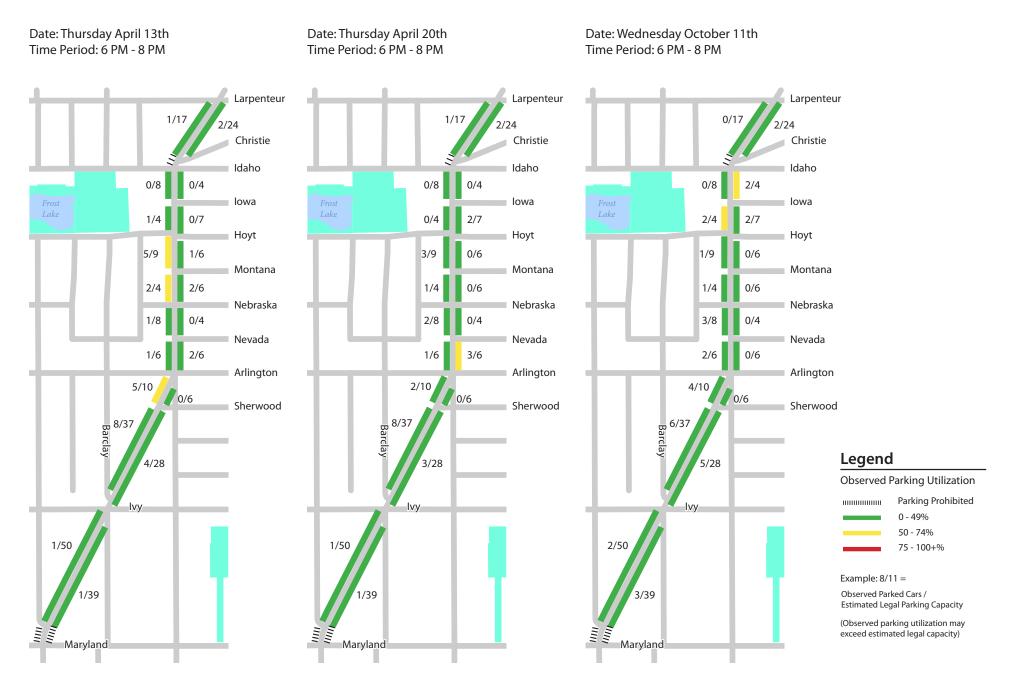
Prosperity - Hazelwood Parking Counts: Weekday Early Morning (4 AM - 6 AM)



Prosperity - Hazelwood Parking Counts: Weekday Midday (11 AM - 1 PM)



Prosperity - Hazelwood Parking Counts: Weekday Evening (6 PM - 8 PM)



Prosperity - Hazelwood Parking Counts: Saturday Midday (11 AM - 1 PM)

Date: Saturday November 2nd Time Period: 11 AM - 1 PM Date: Saturday November 9th Time Period: 11 AM - 1 PM



Legend

Observed Parking Utilization

Parking Prohibited 0 - 49%

50 - 74% 75 - 100+%

Example: 8/11 =

Observed Parked Cars / Estimated Legal Parking Capacity

(Observed parking utilization may exceed estimated legal capacity)

Prosperity - Hazelwood Parking Counts: Saturday Evening (6 PM - 8 PM)

Date: Saturday November 2nd Time Period: 6 PM - 8 PM Date: Saturday November 9th Time Period: 6 PM - 8 PM



Legend

Observed Parking Utilization



50 - 74% 75 - 100+%

Example: 8/11 =

Observed Parked Cars / Estimated Legal Parking Capacity

(Observed parking utilization may exceed estimated legal capacity)