



Public Works Department City of Bellingham

STAFF REPORT

To: CITY COUNCIL - PUBLIC WORKS AND NATURAL RESOURCES COMMITTEE
From: ERIC JOHNSTON, PUBLIC WORKS DIRECTOR
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CC: MAYOR KIM LUND
Subject: HOLLY STREET BIKE LANE PILOT PROJECT
Date: April 8, 2024

OVERVIEW

The Holly Street Bike Lane Pilot Project will install a new bicycle lane on Holly Street through the Bellingham downtown core. This bike lane will include a buffered lane from Ellis Street to N State Street, and a parking protected lane from N State Street to Bay Street. As a pilot project, the Public Works Department will complete the project using pavement markings, signs, and low-cost features, without changes to the number of existing downtown parking stalls. The project is planned to be constructed in early May of 2024, and will be evaluated on its success later this year based on community feedback and operational performance, which will inform the Department on the viability of a more permanent and substantive project in the future.

BACKGROUND AND PROJECT NEEDS

Holly Street from Ellis Street to Bay Street serves as the primary east-west arterial through downtown for both vehicles and bicycles and provides a critical network connection both as local access to the downtown business district.

An engineering evaluation of the existing conditions along this stretch of roadway found that the downtown portion of Holly Street from Ellis to Bay streets has a high level of traffic stress for bicyclists. The high stress level results from systemic safety issues results in a functional gap in the active transportation network and likely deters the use of all but the most confident bicyclists. As described in the bicycle master plan there is a large segment of the population who would choose to ride a bicycle if they felt safe doing so. Concerns about safety are particularly true on higher volume arterials such as Holly. This group is sometimes referred to as “interested but concerned” and may be between 40-60% of the population. Adding protected, separated bike facilities in the network will help encourage greater use by people of all abilities and comfort levels.

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An engineering study of existing conditions was conducted as part of the Holly Street Overlay project in 2016. This study found that approximately 400 bicycles per day, or 3.6% of the total traffic during the afternoon peak hour, traveled this corridor despite the high level of stress for bicyclists. This level of existing bicycle use demonstrates the importance of this section of roadway to the city bike network. The addition of protected bike lanes in this area could result not only in a significant increase in usage in this corridor but also on the surrounding network by cyclists of all abilities not just those currently using the roadway.

Over the past 15 years, downtown Bellingham has seen a steady progression of improved facilities for active transportation modes, including the construction of bike lanes along most downtown arterials. This project seeks to fill this existing gap in the bike network as its primary goal; however, this project provides an opportunity to improve the safety and comfort for people walking downtown as well. The City's 2022 and now [2024 Local Road Safety Plan](#) identifies downtown as an area where pedestrian safety could be improved.

Additionally, the current 2024 DRAFT Bellingham Bicycle Master Plan (BMP) identifies Holly Street from Ellis Street to Broadway Street as a high priority for bicycle improvements, which is based on a data-driven network analysis and input received from public and stakeholder engagement, the Transportation Commission, and City staff.

CLIMATE ACTION POLICY

According to the 2018 Update to the [Climate Protection Action Plan](#), transportation is the largest source of greenhouse gas emissions in Bellingham. One of the areas of focus in the plan is to further reduce these emissions, by promoting a mode shift away from drive-alone vehicle trips. This project helps encourage people to choose to bike, walk, or bus for transportation purposes by providing a more safe, comfortable, and connected transportation network in downtown.

COMMUNITY ENGAGEMENT

As part of this effort, staff has reached out to local community groups and has held several outreach events to present the project to the public and solicit feedback from those who are most likely to be using the new facility. Community groups included the Walk and Role Bellingham, We Bike Downtown, and Downtown Partnership. City staff has also coordinated with Whatcom Transportation Authority since transit operates along the corridor between Ellis and State.

PROJECT SCOPE, RECOMMENDATIONS AND GOALS

To improve the safety, mobility, and accessibility of active transportation modes through downtown, City staff is recommending the installation of the following on Holly Street:

- A buffered bike lane from Ellis Street to State Street
- A parking protected separated bike lane from State Street to Bay Street

- Leading Pedestrian Intervals (LPIs) along the Holly Street corridor
- Corresponding changes to signing and signal timing for vehicle lanes

Buffered bike lanes include a bike lane with a marked buffer between the bike lane and adjacent motor vehicle traffic. The buffer treatment consists entirely of pavement markings with no vertical elements. This treatment provides greater offset distance between bicyclists and drivers. For this area of the project, the separated bicycle lanes will include a 3-foot painted buffer, similar to N State Street.

Parking protected bike lanes are separated bike lanes with the added benefit of a parking lane, with high parking utilization, between the buffer and the travel lane. Parked cars protect people in the bike lane from the cars in vehicle travel lane. This treatment is expected to provide a higher level of comfort for cyclists thereby encouraging “interested but concerned” to choose cycling over driving. This type of bike facility was frequently requested from the community during recent BMP Update engagement. For this project, the parking protected bike lane will include a painted buffer and tubular markers, as well as a 12-foot parking lane between the buffer and the vehicle travel lanes.

The decision to change from a typical buffered bike lane to a parking protected bike lane was based on several considerations, including roadway context, traffic characteristics, and transit use. Part of the pilot project process will be to gather community feedback regarding which form of bike lane is preferable and will eventually inform future design decisions for proposed capital projects along this portion of roadway.

As a complement to the bike lanes, the downtown signal system will be re-timed. The traffic signals in downtown are currently timed to maximize the volume of vehicles and minimize delay. Removal of one of the traffic lanes lowers the vehicular throughput capacity resulting in delay, particularly at signalized intersections. The traffic signals will need to be re-timed to accommodate the reduced vehicle capacity and increased left turn queuing. The additional delay is not expected to be significant but may be seen by some as a negative aspect of the pilot.

In addition to re-timing for vehicles, the signals and pedestrian crossing timing will be modified for the benefit of pedestrians. Leading Pedestrian Intervals (LPI) give pedestrians the opportunity to enter the crosswalk at an intersection 3-7 seconds before vehicles are given a green indication. While creating a slight delay to vehicles, the LPI helps pedestrians better establish their presence in the crosswalk before vehicles have priority to turn right or left. Leading Pedestrian Intervals have been shown to reduce pedestrian-vehicle crashes by an average of 13% nationwide in some studies. In addition to LPIs, pedestrian safety and comfort within this project will be improved through reduced crosswalk lengths and larger buffers between pedestrians and active vehicle traffic.

Lastly, intersections and signals will be modified to provide a 2-stage left turn box for cyclists. While some cyclists will continue to use the existing travel lanes, the 2-stage left turn box concept allows an “interested but concerned” cyclist to make a left hand turn with greater levels of protection.

Pilot project data collection will include:

- Evaluate the effectiveness of parking protected bike lanes by utilizing quantitative and qualitative data before and after implementation.
- Continuously engage the community throughout the project to obtain feedback.
- Conduct engineering evaluations before and after to inform future improvements.

Downtown Plan

As identified in [Mayor Lund's Executive Order #2024-01](#) a workgroup has been formed to prepare a comprehensive downtown strategy to support businesses, community solutions and bring people downtown. Implementation of this project is an early action while the workgroup develops the longer-term strategies. The benefits of this project to traffic calming and creating greater spaces for pedestrians and cyclists help meet the objectives of inviting people downtown.

Future capital project(s)

As a pilot project, we expect there will be areas for additional improvement and that modifications and adjustments will be needed. For example, the section from Ellis to N. State Street might be considered for modification to a parking protected bike lane. The observations, data and community feedback will help inform decision making for a future project.

Anticipating a need for future improvements, a project(s) will be proposed in the 2025-2030 6-year Transportation Improvement Program to consider extending the protected bike lanes from Bay Street west to Broadway and making additional physical improvements and modifications in the downtown core in the pilot project area. The pilot project will help inform development and scoping of this larger project as well as potential impacts, such as changes to existing on-street parking.

Planning for future projects helps address some of the early feedback and input we have already received from interested community members.

TRANSPORTATION COMMISSION RECOMMENDATION

The project idea was originally presented to the Transportation Commission on February 13, 2024. The recommendations summarized above were then presented to the Commission on March 12, 2024. The Commission discussed the project with City staff and voted unanimously to recommend implementation.

Recommendation

Staff recommend a motion to support the implementation of the Holly Street bicycle lane pilot project.