



CITY OF KIRKLAND
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MEMORANDUM

To: Kurt Triplett, City Manager

From: Dave Snider, P.E., Capital Projects Manager
Rod Steitzer, P.E., Capital Projects Supervisor
Pam Bissonnette, Interim Public Works Director

Date: April 24, 2014

Subject: Juanita Drive Corridor Study – Draft Plan Review

RECOMMENDATION:

It is recommended that City Council reviews and comments on the Draft Juanita Drive Corridor Study (Study) as prepared by staff and the City's consultant, Fehr & Peers, Inc. The Study has been previously reviewed by the Transportation Commission, whose members helped shape it into its current form. Due to the size of the Study, links are provided to view the Study in sections: [Executive Summary](#), [Study & Outreach](#), [Project Sheets](#), [Profile](#). The Executive Summary is also included as Attachment A.

BACKGROUND DISCUSSION:

Introduction

In the early stages of the annexation of Finn Hill, North Juanita, and Kingsgate neighborhoods, the City received requests for improvements to Juanita Drive. In response to those requests, City Council approved a Juanita Drive Corridor Study (Study) with the 2013-2018 Capital Improvement Program update. In April 2013, Fehr & Peers, Inc., began work on the Juanita Drive Study with the goal of assessing corridor needs and providing recommended improvements. The Study limits extend from the intersection of Juanita Drive & 98th Avenue NE to Juanita Drive & NE 143rd Street, at the northern-western City limits (Attachment B). The scope of work included conducting a thorough public involvement process, the evaluating and profiling of existing conditions, the development and assessment of design alternatives, and the production of a recommended list of prioritized improvements. The individual projects of the Juanita Drive Plan are currently being recommended for incorporation into the Kirkland Transportation Master Plan.



Juanita Dr. Outreach at Community Planning Day

Public Outreach

Stakeholder and community involvement was a key component to developing a successful Study. To help guide its development, a Citizen Advisory Committee was formed. The Committee consisted of representatives from Finn Hill and Juanita neighborhoods and businesses, the Cascade Bicycle Club, Bastyr University, Lake Washington School District, King County Parks, King County Trail Board, Kirkland Police and Fire, and the Project Team. To prepare a common vision for future improvements to the Corridor, the Project Team gathered input from stakeholders and the community at more than 15 public workshops, briefings with neighborhood groups, and informational booths at local events including three Kirkland Community Planning Days. All of the feedback received was processed through five Citizen Advisory Committee meetings where the main emphasis was found to be directed towards the need for safety improvements for pedestrians, bicyclists, and vehicles. Another common theme was connectivity along the corridor to the neighborhoods and nearby parks and schools; details about public outreach are included in Appendix A of the Study. The Project Team also presented and consulted with the Transportation Commission four times during the Study's development. The Commission offered several suggestions that influenced the Study, including suggestions for how individual projects are packaged and prioritized.

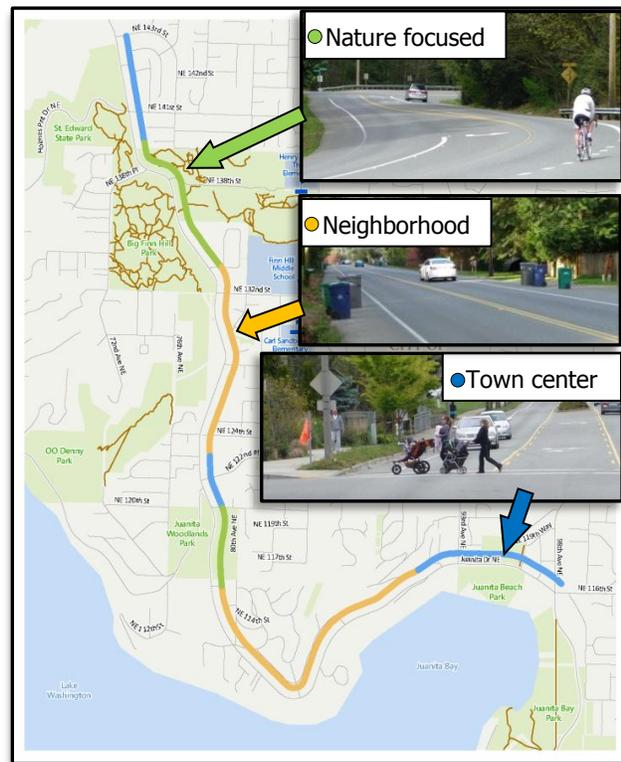
The Citizen Advisory Group identified five key goals to serve as guiding principles for development of the Study, including:

- Address safety needs for all travel modes.
- Maintain the corridor's unique identity, diversity of roadway character, and natural landscape.
- Respect neighborhood values and engage the community in a shared vision.
- Protect the extraordinary natural environment and encourage low impact design approaches.
- Provide a financially feasible, strategic and realistic set of community priorities for the corridor.

The adding of vehicle capacity was not a goal of the Study.

With the goals in mind, the Project Team profiled the Corridor to understand the historical context and changing roadway characteristics as Juanita Drive contains a town center, neighborhoods, and nature focused zones.

The Team also surveyed existing physical conditions, roadway cross-sections, topography and roadway geometry, transportation operations, and surface water pathways.



Feedback received during the outreach and profiling phase was used to create alternatives for further development with stakeholders, the public, and the Citizen Advisory Committee. Some of the feedback included:

- Walking concerns on Juanita Drive
- No impacts on parks along the corridor
- Mixed reactions to roundabouts
- Heavily favored crosswalks connecting the east and west sides of Big Finn Hill Park
- Strong support for dedicated bike lanes and pedestrian paths
- Providing as much separation as possible for pedestrians and bikes from vehicles
- Turning lanes at Juanita Drive and side street intersections
- General agreement on various proposed alternatives

The Project Team used this information and, in conjunction with the Citizen Advisory Committee, developed alternative road sections, pedestrian treatments, street lighting, storm drainage upgrades, together with traffic calming and intersection improvements. The Project Team also identified projects and project groups for planning and funding opportunities for implementation. These design elements and projects were presented to the Transportation Commission whose comments were incorporated into the Study.

Recommendations:

The Study recommendations consist of 32 projects grouped into packages with an estimated total cost range of \$19 to \$26 million, depending on design options such as undergrounding aerial utilities, multipurpose trails, and roundabouts. The projects were then packaged to grant funding opportunity categories. Consistent with Study feedback, highlights include buffered bicycle lanes and a walkway that could be raised or at the same grade as the bicycle lane. These decisions could vary throughout the Corridor and would be made with community input during design production. The bicycle lane buffer is envisioned as a two-foot specially-painted area along most of the roadway with physical buffers in identified areas to allow access to frequent driveway and intersection spacings as well as service needs such as garbage truck access. The walkway could be on either side of the roadway in the south section of the corridor with the eastern side being most likely in the central and northern sections. The plan would prohibit on-street parking due to the designation of the bicycle lane and walkway.

A multipurpose trail option provides for a more pleasant and safe environment for all nonmotorized users through the park sections of the Corridor. The trail section would be separated from the roadway by a planter strip, with the bicycle lane either adjacent to the travel lanes or next to the trail resulting in about a 10 feet wider cross-section. The Study does not envision additional travel lanes to accommodate traffic, but rather intersection treatments to improve overall traffic flow and safety.

The Study also identifies eleven 'quick-win' projects for a total cost of \$1.35M. These projects target non-motorized improvements, consistent with various Study findings, and can be completed within the existing road sections, as follows:

- Interim Pedestrian/Bicycle Safety Treatments (\$130,000)
- Centerline Rumble Strips (\$40,000)
- Lighting Upgrade (NE 122nd Place) (\$50,000)
- Gateway Signs (north and south ends of corridor) (\$40,000)
- Left turn refuge pocket-NE 138th Place (\$40,000)

- 98th Avenue Bicycle/Pedestrian Enhancements (\$90,000)
- Flashing Pedestrian Crossing at 93rd Avenue NE (\$90,000)
- Flashing Pedestrian Crossing at Big Finn Hill Park (\$210,000)
- Flashing Pedestrian Crossing at NE 143rd Street (\$90,000)
- Northbound Bicycle Lane Throughout Corridor (\$380,000)
- Bicycle Signs for Northbound Bicycle Lane (\$190,000)

The 21 remaining recommended projects have been prioritized into high, medium, and low ratings based on a weighted average of the five guiding principles and nine criteria categories. More information on prioritization can be found on page 11 of Study Appendix B. Following normal protocol, the new major projects will be coordinated with other needs of the Transportation Master Plan and will be included in the 2015 Capital Improvement Program update.

Attachment A – Draft Report Executive Summary
Attachment B – Vicinity Map



JUANITA DRIVE Corridor Study

SUMMARY

Spring 2014

ABOUT THE STUDY

The City of Kirkland has developed a plan for future improvements to the Juanita Drive Corridor between Juanita Village and the northern City limits in Finn Hill. A key route around the northern end of Lake Washington between Kirkland and Kenmore, Juanita Drive serves over 10,000 vehicles per day and traverses steep topography with many twists, turns, and hills. The existing roadway geometry, multiple driveway access points, and limited sight distance complicate overall safety conditions along the corridor.

The Juanita Drive Corridor Study evaluates existing conditions, relies on input from stakeholders and users, and analyzes potential safety improvements for drivers, bicyclists and pedestrians. The study identifies key improvements that may be included for future construction in the Capital Improvement Program.



GUIDING PRINCIPLES

The vision for the future of the Juanita Drive Corridor will adhere to the following guiding principles:

- > Address safety needs for all travel modes.
- > Maintain the corridor's unique identity, diversity of roadway character, and natural landscape.
- > Respect neighborhood values and engage the community in a shared vision for future improvements.
- > Protect the extraordinary natural environment and encourage low impact design approaches.
- > Provide a financially feasible, strategic, and realistic set of community priorities for the corridor.

These were developed after consulting with stakeholders.

COMMUNITY OUTREACH

The City identified key target audiences to engage:

- > Businesses and residents along the project corridor and within the City of Kirkland
- > Users of the project corridor; local and regional
- > Management and users of parks and public spaces
- > Local agencies, such as Lake Washington School District and King County Metro Transit
- > Community groups and organizations
- > City of Kirkland staff, including public safety officials
- > Elected officials



SUMMARY

Spring 2014

THE PROPOSED PLAN

Working with a Citizen Advisory Committee, the Kirkland Transportation Commission, and by conducting extensive public outreach, the City used the guiding principles to identify and prioritize the corridor recommendations. The Transportation Commission reviewed the draft recommendations and approved them for consideration by the City Council.

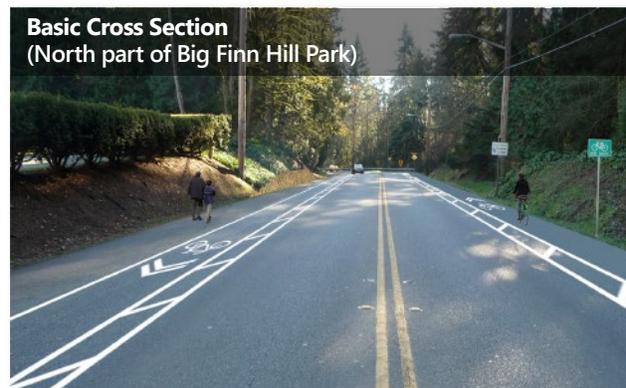
The Juanita Drive Corridor Plan contains a variety of projects that meet the study's guiding principles and that can be phased in over the next several years. While the needs vary throughout the corridor, the plan contains several corridor-wide features, including the following:

- > A basic roadway cross-section that contains a travel lane in each direction, buffered bicycle lanes, and a walkway on at least one side of the roadway. In some sections, an off-road multipurpose path is an option.
- > Pedestrian crosswalks with flashing beacons.
- > Street lighting upgrades.
- > Drainage improvements.
- > Intersection treatments, such as turn pockets and better sight distance.
- > Traffic calming treatments to reduce speeds.
- > Removal of on-street parking.

The plan does not envision the addition of travel lanes to accommodate more traffic, but the intersection treatments will improve overall traffic flow and safety.

The plan consists of 32 projects grouped into logical packages along Juanita Drive. The total cost of the plan ranges from \$19 to \$26 million, depending on the design options. About half of the cost (\$10 million) is to provide the basic cross-section through the corridor. Building the wider multipurpose trails through the parks would add around \$3.3 million in project costs. Intersection treatments, including turn pockets, crossing

treatments and lighting would cost an additional \$5 to \$6 million, while various other nonmotorized, Intelligent Transportation Systems (ITS), safety and lighting treatments would add around \$3 to \$4 million in cost. Recognizing that because of their cost they will take several years to fund and implement, the plan sets priorities and identifies 'quick win' projects with a total cost of \$1.0 to \$1.5 million and which could potentially start in the near future as funding becomes available.



Projects	Basic Cost	Additional Costs for Option
Basic Cross-section	\$10.4M	\$3.3M (Multipurpose Trails)
Intersections	\$5.3M	\$1.2M (Roundabouts)
Uphill Bicycle Lane throughout Corridor	\$0.6M	
Other Pedestrian/Bike Safety Treatments	\$1.5M	
Intelligent Transportation Systems (ITS)	\$1.1M	\$1.2M (undergrounding utilities)
Other Safety Projects	\$0.2M	
Total Projects	\$19.1 Million	\$5.7 Million

Note: Projects not in priority order



SUMMARY

Spring 2014

MATCHING THE RECOMMENDATIONS TO THE COMMUNITY VISION

What we Heard from the Community	What the Proposed Master Plan Recommends
Improving safety in the corridor is important; especially for bicycles and pedestrians	Separated walkway and bicycle lanes with buffer strips; intersection channelization; active pedestrian crossings
There are too many vehicle collisions	Intersection turn lanes to reduce rear end collisions; center line rumble strips to reduce head-on collisions
Traveling the corridor during rush hour is difficult, but minimal interest in widening the corridor for more automobile lanes	No new auto lanes, but some intersection turn lanes and traffic signal improvements
There aren't enough connections between neighborhoods and parks, including safe routes to local schools	Several new 'flashing' pedestrian crossings and links to neighborhoods, schools and parks
Provide as much separation as possible for pedestrians and bikes	Bike lanes with buffer strips and walkway on one side of road; option for multipurpose trail in Woodland and Big Finn Hill parks.
Mixed reactions to roundabouts; some people wanted them, some did not.	Options for a roundabout at NE 122nd St/Holmes Point Dr and at NE 138th Pl.
Don't impact the parks along the corridor	Two options in parks- basic cross section or wider section with multipurpose trail. Sensitivity to roadway width and right-of-way
Get something done soon!	Several 'quick win' projects that could be implemented soon as funding is available

Stay Involved!

Visit www.kirklandwa.gov (search "Juanita Drive") to:



- > Find up-to-date news on the study
- > Provide feedback on the City's interactive map
- > Sign up for emails from the project's list serve

For additional information, please reach out to:

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Juanita Drive Area Map



Vicinity Map
Juanita Drive Master Plan Corridor Study