

KIRKLAND

Transit Implementation Plan

Presented to:

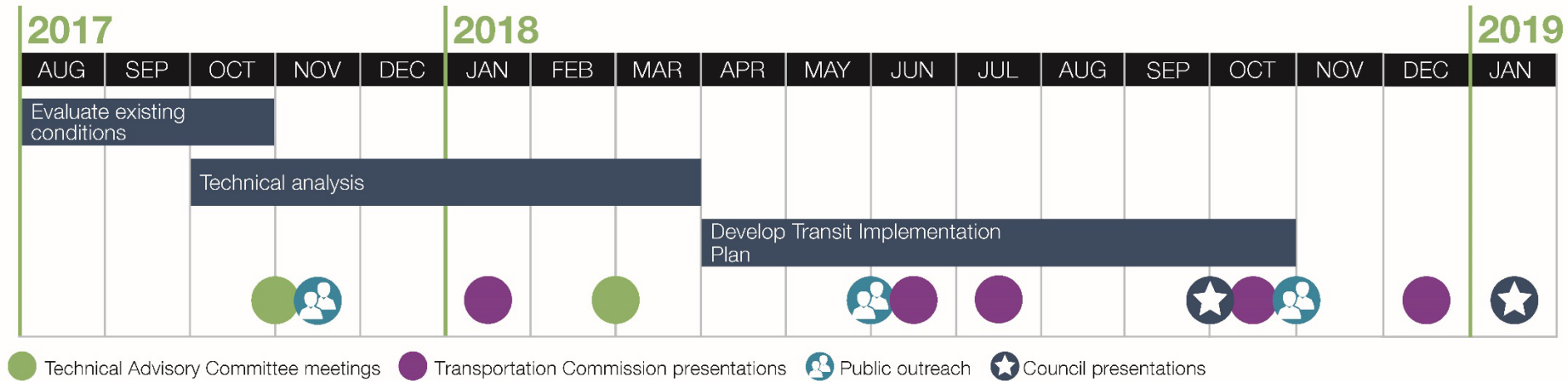
Kirkland Transportation Commission

October 24, 2018

Agenda

- Project Status
- Outreach to Date
- Overview of Draft Kirkland Transit Implementation Plan (KTIP)
- Project List
- Next Steps

Project Status



What's Coming Up?

- Outreach effort underway through mid-November
- Follow-up with TC in December
- Working toward final plan
- Council action

Outreach to Date

- Open House – November 14, 2017
 - Nearly 20 participants
- Survey – Dec 2017/Jan 2018
 - 260+ participants
- Online Open House – May & June 2018
 - 89 participants
- Survey and Flyering – Oct & Nov 2018

Overview of KTIP



Overview of KTIP



INTRODUCTION

PLAN PURPOSE

Today, Kirkland's over 83,000 residents are served by several transit routes connecting the city to various Eastside destinations, as well as in Seattle and southwest Snohomish County. Kirkland is also a growing employment center that attracts transit trips from around the region.

In response to increased growth, the City of Kirkland developed the Kirkland Transit Implementation Plan (KTIP) to improve transit service within the City. In 2015, the City worked closely with stakeholders and the community to develop the Transportation Master Plan, which helped to prioritize transportation projects through 2035. The KTIP builds upon the goals of the Transportation Master Plan and serves as a tool to help get Kirkland residents where they want to go in the safest and most efficient way.

PLANNING PROCESS

This Plan is the result of a year-long process that involved local stakeholders, transit agencies, community members, and comprehensive technical

analyses to understand the current state of fixed-route transit service and plan for the future. A Technical Advisory Committee comprised of King County Metro, Sound Transit, and Washington State Department of Transportation (WSDOT) was convened to identify the best strategies to enhance transit connections, while the Kirkland Transportation Commission provided guidance throughout the plan development process.

COMMUNITY OUTREACH

The KTIP was informed by two phases of community outreach. For the first phase, feedback was collected at an in-person Open House in November 2017 and through an online survey that was available for resident participation in December 2017 and January 2018. After these comments were collected, the input was used to guide transit improvement priorities in Kirkland and to identify specific projects which enhance transit service throughout the City. For the second phase, the City hosted an Online Open House for community members to learn more about potential transit projects and provide feedback on the proposals. These efforts are described in greater detail in the upcoming sections.

Overview of KTIP



EXISTING AND FUTURE CONDITIONS

EXISTING TRANSIT LANDSCAPE

Existing Services

Kirkland currently has fourteen bus routes that pass through its boundaries: two frequent lines, with buses arriving every 15 minutes or less during peak periods (the 245 and 255); four express lines, with limited stops (the 252, 257, 277, and 540); and eight local lines. There are three hubs for transit in City limits – the Downtown Kirkland Transit Center, the Totem Lake Transit Center, and the South Kirkland Park and Ride. Additionally, there are five other Park and Ride lots in Kirkland, including Houghton, Kirkland Way, Kingsgate, Holy Spirit Lutheran Church, and Korean Covenant Church. These are shown in Figure 1.

The Transportation Master Plan identified priority transit areas along primary and secondary corridors, shown in yellow and grey respectively in Figure 1. The corridors represent key transit functions with existing or planned frequent service. However, much of the City is still without frequent service, and some areas, such as the northwestern part of the City along Juanita Drive, have no transit service.¹

Approximately 8,000 people board a bus in Kirkland each day, with some routes carrying a majority of the total ridership. Route 255, which operates between Kirkland and Downtown Seattle has the highest ridership among all Kirkland routes with approximately 3,300 people boarding each day. In general, ridership has increased since 2013, with citywide daily boardings up over 100 percent, as shown in Table 1.

1. The City of Kirkland is working with King County Metro through their "Community Connections" program in order to identify the appropriate alternative solution.

Overview of KTIP



PROJECT DEVELOPMENT

This chapter details a long list of potential projects to address existing or anticipated transit challenges. These projects stem from public input, discussions with City staff and the Technical Advisory Committee, field visits, Kirkland's Transportation Master Plan (TMP), and recent King County Metro studies. Projects fall into one of three overall categories – speed and reliability, non-motorized access to transit, and flexible transit service.

COMMUNITY OUTREACH FEEDBACK

On November 14, 2017, the City held an Open House at Heritage Hall with almost 20 people in attendance. Community members identified additional speed & reliability issues, which include:

- Delays entering/exiting the South Kirkland Park & Ride
- Delays near Northwest University
- Access within the neighborhood of Juanita
- Reliability of Route 540
- Queuing northbound on Market Street
- NE 132nd Street congestion (eastbound in the AM, westbound in the PM)
- 124th Avenue NE congestion between NE 85th and 104th Streets in the AM
- NE 85th Street congestion (eastbound in the AM, westbound in the PM)

Attendees were asked to rank six potential transit improvement types using dots at the meeting on a scale of one to six, one being the highest priority and six being the lowest. Attendee rankings of these potential improvements were averaged and are shown in [Table 2](#). The full ranking and additional details on the Open House can be found in [Appendix A](#).

Overview of KTIP



FINAL PROJECT LIST

The potential Speed & Reliability projects were prioritized based on the evaluation criteria, and the top nine projects were carried forward to the Final Project List. In addition, two programmatic projects focused on Non-Motorized Access and Flexible Transit are included in the Final Project List.

This section includes a description of each project, the benefits and challenges, and the estimated costs of the project. Additionally, a timeline of each project and coordination and funding considerations are included to establish the next steps for implementation of the Plan.

The benefits, cost estimates, and considerations are based on a mostly qualitative review of existing information and are provided as a means to compare separate projects. More detailed technical analysis would be required to more accurately estimate travel time benefits, design-based cost estimates, and other technical considerations for construction and feasibility.

The projects are not listed in priority order.

The following benefits are summarized for each project:

- Travel time saved per bus trip – The amount of travel time saved per trip is determined by standard estimates of travel time improvements based on project type
- Number of bus trips per peak hour – The number of trips operating per hour is based on schedule information for both current and planned service
- Number of riders benefited – The total number of riders on transit that would benefit from the project is based on current ridership and growth projections
- Total travel time saved per day – The combined person-hours savings is based on the total number of daily riders multiplied by the estimated travel time savings per trip

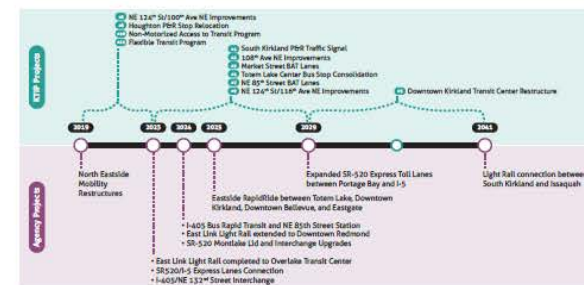
Overview of KTIP



IMPLEMENTATION AND NEXT STEPS

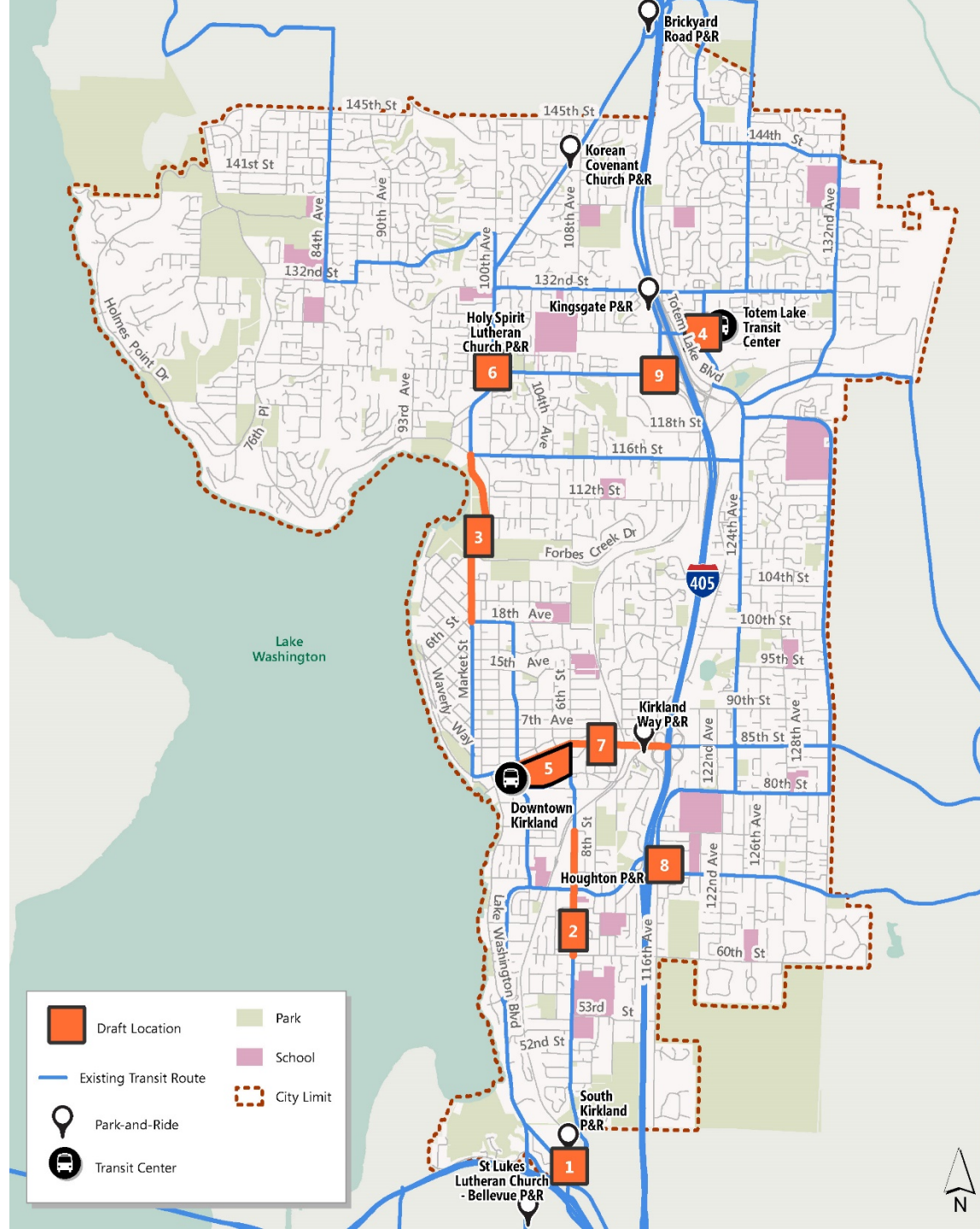
Establishing a prioritized list of transit investments is the first step in improving the transit experience for riders within the City of Kirkland. The areas of focus and potential strategies establish a framework to move forward to secure funding, leverage partner agencies, and begin the planning and design phases for implementation of the projects. Key actions are required in order to engage with upcoming planning processes and to ensure the phasing of the next steps aligns with other projects, both under city control and with other agencies.

The timeline below highlights the expected planning phases for the prioritized projects and ongoing planning efforts with other agencies.



The Project List





Project 1: South Kirkland P&R Signal

Benefits

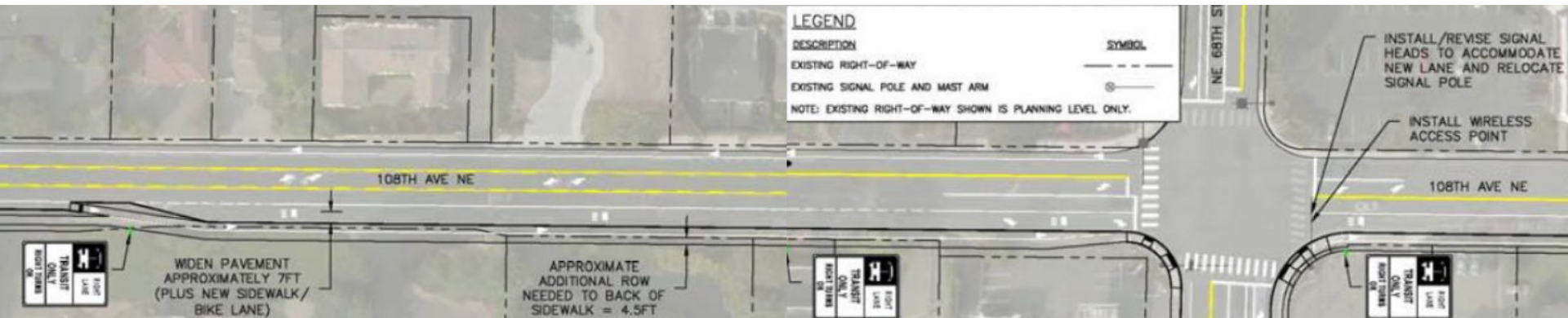
- Over 20 person-hours saved per day
- Planned RapidRide corridor

Considerations/Constraints

- Signal spacing constraints
- Vehicle delays and queueing
- Transit-only signal head for northbound left-turn



Project 2: 108th Ave Improvements



Benefits

- Over 40 person-hours saved per day
- Planned RapidRide corridor

Considerations/Constraints

- Right-of-way requirements
- Signal modifications

Project 3: Market St BAT Lanes

Benefits

- Over 30 person-hours saved per day
- Planned RapidRide corridor

Considerations/Constraints

- Parking removal during peak hours
- ROW constraints
- Southbound queue jump lane at Forbes Creek
- Options for shared bus/bike lane northbound



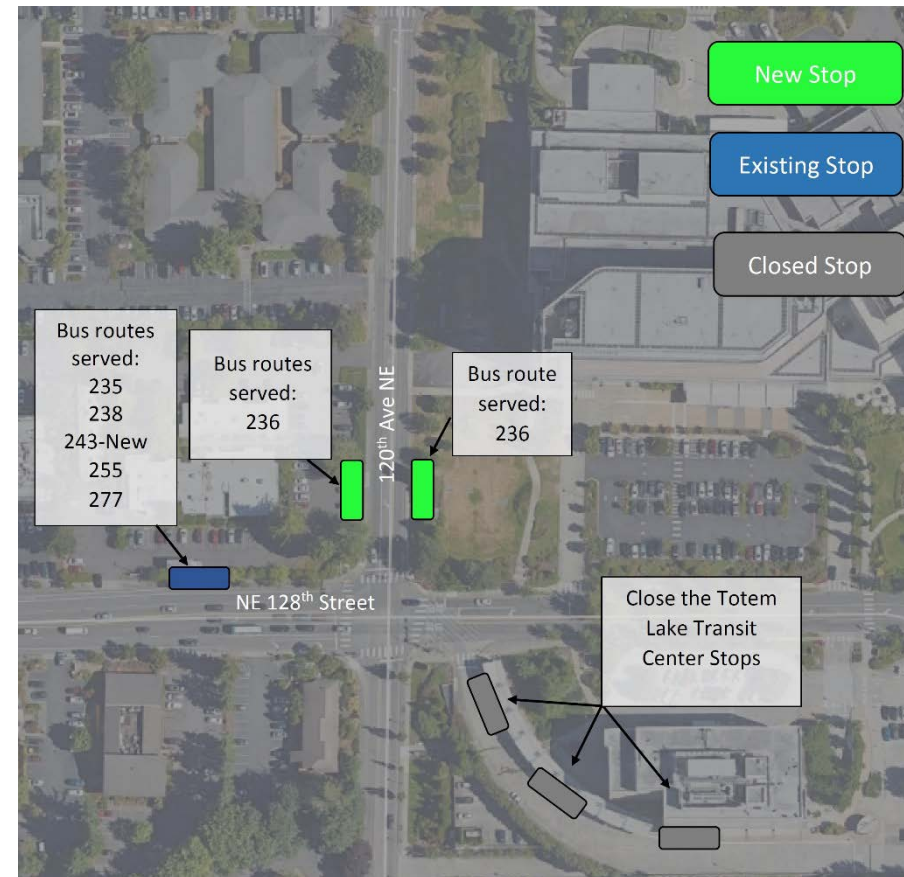
Project 4: Totem Lake TC bus stop

Benefits

- Almost two minutes saved per bus trip
- Over 15 person-hours saved per day

Considerations/Constraints

- Nearby medical facilities
- Potential ROW limitations
- Options for a new eastbound near-side stop on 128th St or a southbound far-side stop.



Project 5: Downtown TC restructure

Benefits

- Over 30 seconds saved per bus trip and over 20 person-hours saved per day
- Planned RapidRide corridor

Considerations/Constraints

- Access for parking garage
- Potential to extend curb
- Potential for partial and time-of-day restrictions
- Diversion of traffic from 3rd St to parallel streets



Project 6: Dual Left Lanes at NE 124th St & 100th Ave NE

- Over 30 seconds saved per bus trip and almost 10 person-hours saved per day
- Planned RapidRide corridor

Considerations/Constraints

- Requires split phasing
- Signal head modifications required
- Potential minor increase in intersection delay due to split phasing



Project 7: NE 85th St BAT Lanes

Benefits

- Between 30 and 60 seconds saved per bus trip and almost 20 person-hours saved per day

Considerations/Constraints

- Queue jump and signal priority investments at: 3rd St, 6th St, 114th Ave
- Significant constructability issues due to topography constraints
- Coordination and design considerations required for potential shared-use path from Cross-Kirkland Corridor to I-405



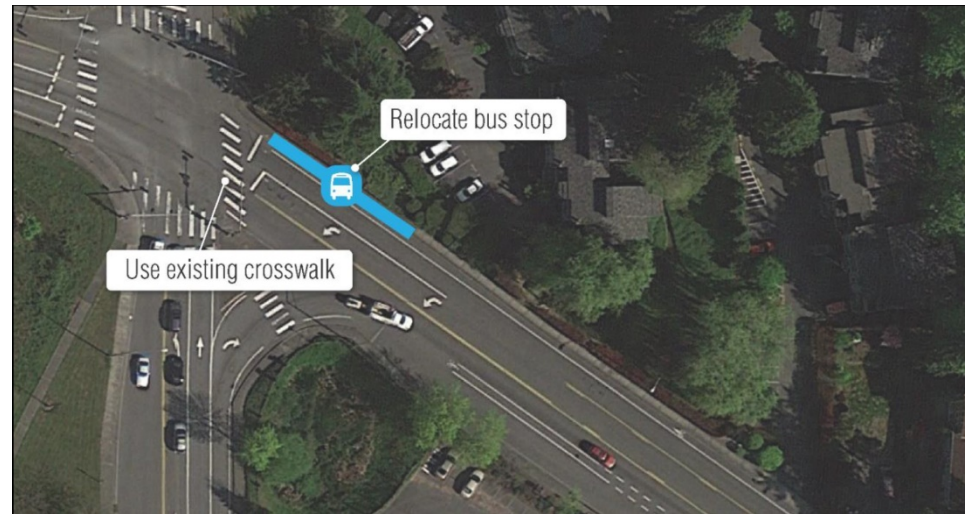
Project 8: Houghton P&R bus stop

Benefits

- Over 90 seconds saved per bus trip
- Almost 10 person-hours saved per day

Considerations/Constraints

- Passengers using the stop may incur some additional delay due to crossing NE 70th Place to reach the Park & Ride



Project 9: SB Right-Turn Lane NE 124th St & 116th Ave NE

Benefits

- Over 50 seconds saved per bus trip and almost five person-hours saved per day
- Planned RapidRide corridor

Considerations/Constraints

- Underground utility relocations, pole relocations, driveway reconstruction
- ROW constraints
- Excessive queue lengths



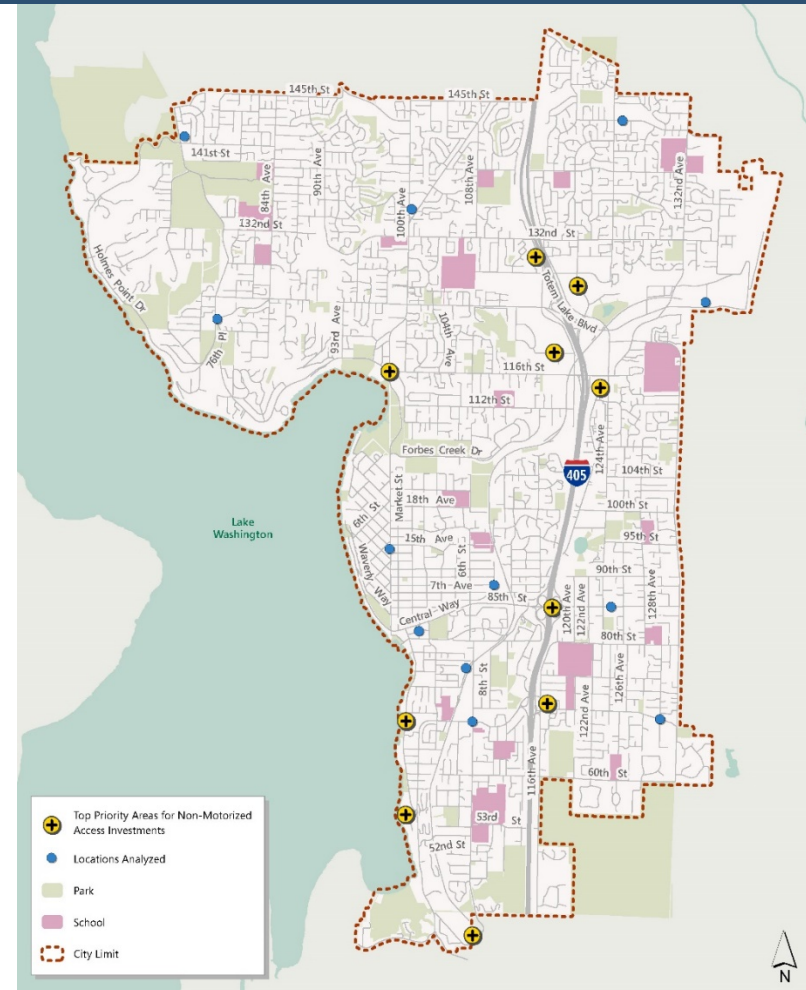
Project 10: Non-motorized Access to Transit Program

Benefits

- Potential ridership growth
- Increased pedestrian/bicyclist safety
- Overall improvements to citywide bicycling network

Considerations/Constraints

- Limited ROW for safe bike infrastructure and limited data of pedestrian factors (e.g. safety, lighting, and comfort)
- Prioritization process



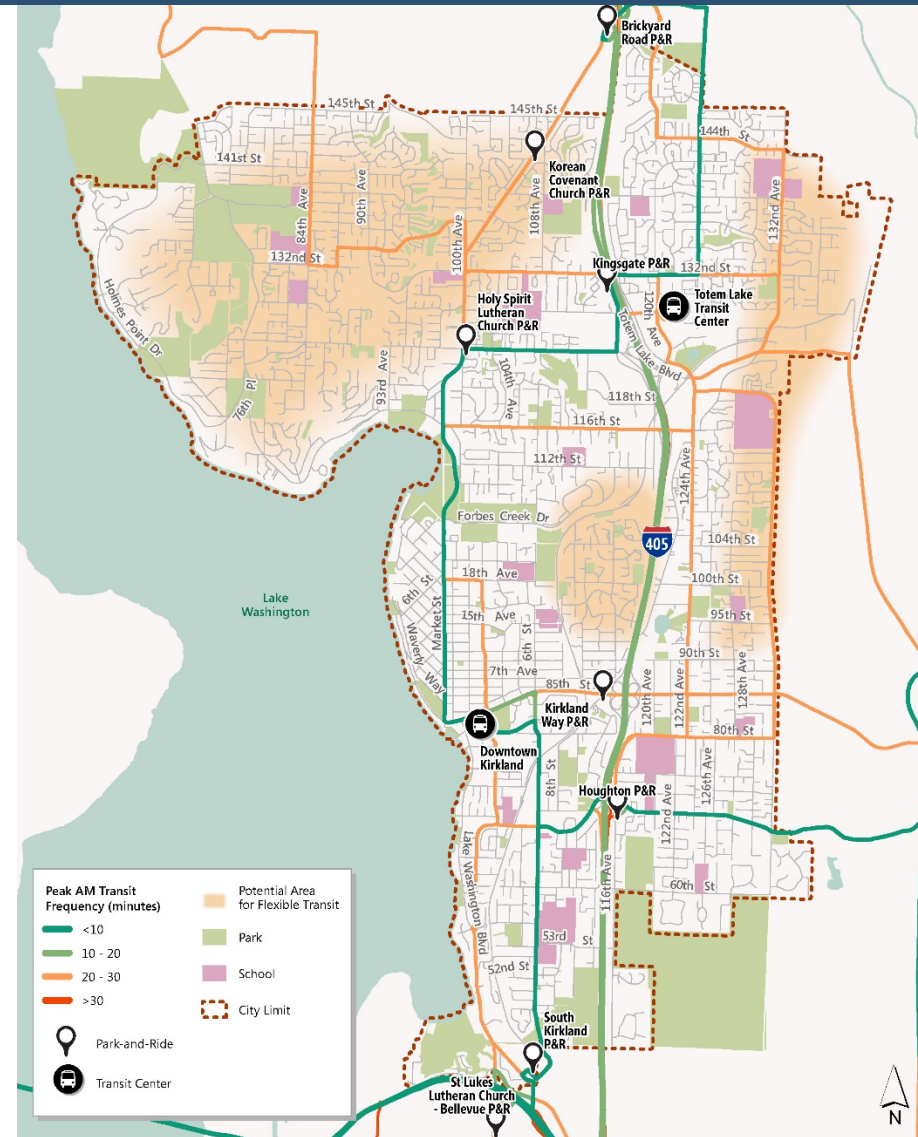
Project 11: Flexible Transit Program

Benefits

- Potential ridership growth and increased mobility and access to jobs, services, and opportunities
- More efficient use of transit resources

Considerations/Constraints

- Rider outreach
- Fare integration
- Potential inequities



Next Steps

- Outreach through mid-November
- Follow-up meeting with TC Dec 5th
 - Summary of outreach results
 - How TC comments were addressed
- January study session and action by Council

THANK YOU

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