CITY OF KIRKLAND
Planning and Building Department
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MEMORANDUM

To: Planning Commission

From: Allison Zike, AICP, Senior Planner
Jeremy McMahan, Deputy Planning & Building Director
Adam Weinstein, AICP, Planning & Building Director

Date: January 8, 2021

Subject: NE 85th St Station Area Plan
File No. CAM20-00153

Staff Recommendation

Review the NE 85th St Station Area Plan Draft Supplemental Environmental Impact Statement (DSEIS) and summary memo prepared by Mithūn (see Attachment 1), the City's lead consultant for the project, and provide direction for the formation of a preferred alternative for the Station Area Plan. The following discussion topics are recommended to assist the Commission in their deliberations:

- What are the top three elements you like within each alternative, and would like to see incorporated into the preferred alternative? Consider goals and policies, and land use concepts including changes to map designations and infrastructure investments.
- Which development typologies align with project goals (see Exhibits 2-8 and 2-9 Development Typology Descriptions, page 2-12 of DSEIS)? Are they applied appropriately to respond to and integrate the Stride BRT Station and provide for housing and job opportunities?
- Which options best promote the project's equity goals? Considerations include increasing the supply of affordable housing, providing opportunities for people of all walks of life to live, work and play in Kirkland, and ensuring that the benefits and burdens of proposed development are equitably distributed to all of Kirkland's residents and employees, regardless of race, age, income, or English language proficiency.
- What types of public and private investment in infrastructure and transportation solutions are necessary to support the preferred alternative?
- What open space and park investments are suited to a transit-oriented urban neighborhood?

- How can we accommodate school facilities in an urban environment?
- How can the preferred alternative create a mix of incentives and requirements to address equity and support large and small households and large and small businesses?
- Are there any development typologies you think should be eliminated from consideration anywhere within the Station Area (see Exhibits 2-8 and 2-9 Development Typology Descriptions, page 2-12 of DSEIS)?
- Are there additional key concepts for transitioning from higher intensity development to lower intensity developments that should be considered?

Background
With the 2019-2020 budget, City Council authorized $450,000 for creation of a Station Area Plan (SAP) associated with the Sound Transit Bus Rapid Transit (BRT) station planned for the I-405/NE 85th St interchange. The funding was dedicated to retain a multi-disciplinary urban design team to lead the City's development of the SAP.

In addition to the City's budget, the Department of Commerce awarded Kirkland $150,000 through the E2SHB 1923 Grant program. These additional funds allowed the project scope to be expanded to include a Planned Action Ordinance (PAO) Supplemental Environmental Impact Statement (SEIS) and Form-based Codes (FBCs) in the study area. The advantage of a Planned Action Ordinance is to streamline environmental review for future development projects in the Station Area. The creation of form-based codes for the Station Area will provide the community with graphic examples of the type of development anticipated, help create effective transitions between high and low intensity land uses, and establish standards for quality public spaces within the Station Area.

In response to questions from the community and Planning Commission about the status of the WSDOT/Sound Transit I-405 BRT project, that project is proceeding toward retaining a design/build contractor and delivery of the station is still tentatively scheduled for 2025, with confirmation anticipated after Sound Transit realignment decisions scheduled for Summer, 2021.

Project Progress
The memorandum prepared by Mithun (see Attachment 1) includes a brief summary of the progress made in the initial phases of the Station Area Plan project, including development and publication of an Opportunities and Challenges Report and a Market Analysis Report for the study area.

Staff and the consultant team have conducted ongoing public outreach to inform the community about project status and opportunities to provide feedback to the project team, and appointed and elected officials. A virtual Community Workshop was held on January 7, 2021. We will summarize comments from the workshop at the Planning

Commission meeting. A summary of public outreach to-date is included in the memorandum prepared by Mithun (see Attachment 1).

DSEIS Alternatives Summary

The DSEIS for the project was published on January 5, 2021, which began the formal DSEIS public comment period. The public comment period runs through February 5, 2021. Below is a summary of the three Station Area Plan alternatives studied in the DSEIS:

Alternative 1 – No Action

- Maintains existing zoning and aligned with Comprehensive Plan, neighborhood plans, and other plans.
- Includes WSDOT/ST I-405 and NE 85th St Interchange and Stride BRT Station project which integrates with local transit on NE 85th St and minor streetscape improvements associated with planned projects.
- Alternative 1 allows for the least housing and job growth of each alternative. It contributes to the adopted Comprehensive Plan capacity and would contain about 2,782 dwellings and 10,859 jobs, slightly higher than the 2019 estimates of 1,909 dwellings and 4,988 jobs.

Alternative 2– Guiding Mixed Use Growth

- Allows for moderate growth throughout the district, with mixed use residential and office focus up to 10 stories in existing commercial areas like Rose Hill and limited infill in established areas. Enhance existing transportation plans including additional bike lanes, sidewalks, and minor green street improvements.
- Alternative 2 would provide for 6,600 new dwellings, and 23,700 new jobs. For the year 2044, the anticipated total growth levels would be up to 8,509 households and 28,688 jobs.

Alternative 3– Transit Oriented Hub

- Allows for additional growth throughout the district, with mixed use residential and office focus up to 20 stories in select commercial areas like Rose Hill, and infill in established areas.
- More substantial multi-modal transportation improvements, coordinated district scale environmental strategies, and signature "blue street" streetscape improvements to treat stormwater.
- Alternative 3 would add capacity for 9,000 new housing units and 30,000 jobs, a substantial addition to the city's capacity. For the year 2044, the anticipated total growth levels would be up to 10,909 households and 34,988 jobs.

Mithun's memorandum also includes a description of each development typology proposed in the alternatives, and a summary of how each alternative is anticipated to guide future growth in a manner consistent with the project objectives of equity, livability, and sustainability.

Next Steps

City staff and the Mithun team will be briefing City Council on the DSEIS on January 19, 2021, where staff will relay the direction received from Planning Commission on this matter. With direction from the Planning Commission and City Council, the project team will begin forming a preferred alternative, and begin work on the Final SEIS and PAO, and the draft Form-based Codes. Staff will return to Planning Commission multiple times in Spring 2021 to present and refine the preferred alternative, as well as to discuss the Form-based Code draft. Final adoption of the Station Area Plan is anticipated in Late Spring or Early Summer 2021.

Attachments:

1. Draft Supplemental Environmental Impact Statement (DSEIS) Memorandum, prepared by Mithūn, dated January 6, 2021

cc: File Number CAM20-00153

MITHUN

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Seattle, WA 98101

San Francisco
660 Market Street #300
San Francisco, CA 94104

Los Angeles
Mithun | Hodgetts + Fung
5837 Adams Boulevard
Culver City, CA 90232

Memorandum

To: Allison Zike, Senior Planner, City of Kirkland

From: Erin Christensen Ishizaki, Mithun

Att: Attachment 1: Key Decisions Schedule; Attachment 2: Kirkland NE 85th Street Station Area Plan Alternatives; Attachment 3: Kirkland NE 85th St Station Area Plan and Planned Action: Draft Supplemental Environmental Impact Statement Chapter 1: Summary

cc:

Date: Wednesday, January 6th 2021

Project #: 193000

Project: NE 85th Street BRT Station Area Plan

Re: Draft Supplemental Environmental Impact Statement (DSEIS)

Recommendation

The attached documents and accompanying presentation provide information about the three alternatives analyzed in the NE 85th Street Station Area Plan Draft Supplemental Environmental Impact Statement (DSEIS), including the differences between alternatives that will guide growth around Sound Transit's new bus rapid transit (BRT) Stride station over the next fifteen to twenty years, the potential impacts and benefits of each, and potential mitigations. As a reminder, the focus of the project is the area in the City of Kirkland surrounding the new Sound Transit bus rapid transit station and WSDOT interchange improvements, which have their own separate planning process.

Planning Commission feedback is sought on which elements of these three Station Area alternatives you support. The project team will use this feedback along with public comments received during the DSEIS Comment period, the accompanying public meeting, and upcoming presentation to City Council, to help select which features will be incorporated into the 'preferred alternative'. Key questions for consideration include:

- What are the top three elements you like within each alternative, and would like to see incorporated into the preferred alternative? Consider goals and policies, land use concepts including changes to map designations and infrastructure investments as well as consistency edits to the Comprehensive Plan.

- Which development typologies align with project goals? Are they applied appropriately to respond to and integrate the Stride BRT Station and provide for housing and job opportunities?
- Which best promote the project's equity goals? Considerations include increasing the supply of affordable housing, providing opportunities for people of all walks of life to live, work and play in Kirkland, and ensuring that the benefits and burdens of proposed development are equitably distributed to all of Kirkland's residents and employees, regardless of race, age, income, or English language proficiency.
- What types of public and private investment in infrastructure and transportation solutions are necessary to support the preferred alternative?
- What open space and park investments are suited to a transit-oriented urban neighborhood?
- How can we accommodate school facilities in an urban environment?
- How can the preferred alternative create a mix of incentives and requirements to address equity and support large and small households and large and small businesses?
- Are there any development typologies you think should be eliminated from consideration anywhere within the Station Area? Are the areas that have been identified for specific typologies and maximum heights appropriate?
- Are there additional key concepts for transitioning from higher intensity development to lower intensity developments that should be considered?

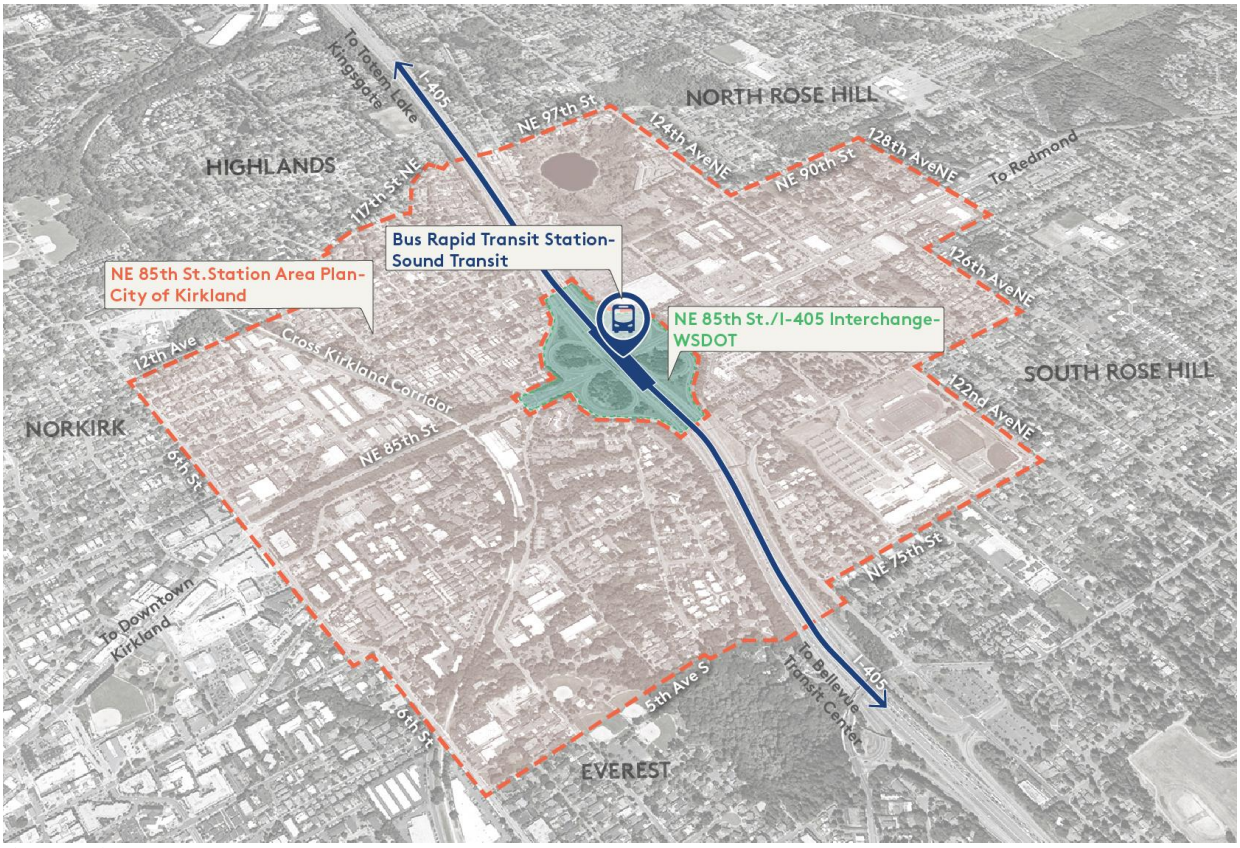


Fig 1. Station Area Plan study area

Project Status

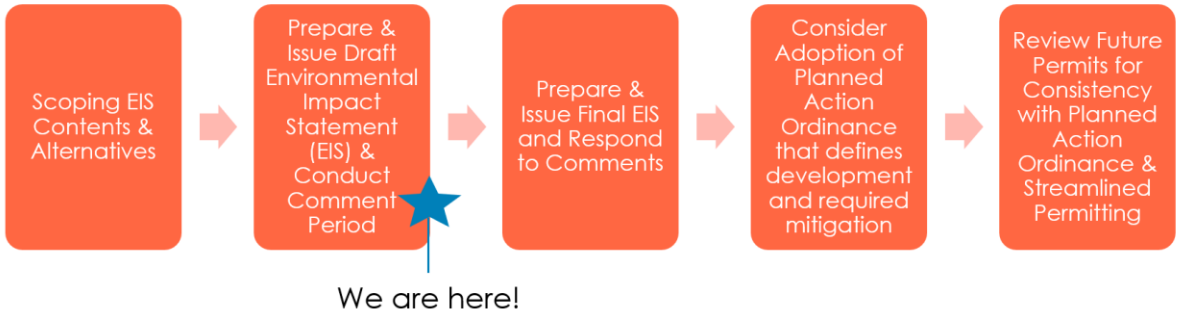
This project will result in a Station Area Plan for the study area, a supplement to the 2035 Comprehensive Plan EIS, updates to the Comprehensive Plan, as well as a Form Based Code. Completed phases include Opportunities and Challenges with the publication of the Opportunities and Challenges Report and supplemental Market Study; and Initial Concepts shared as part of the scoping period in a June 4th Online Community Workshop. Based on input from the public, Planning Commission, and City Council, the project team developed three Alternatives to analyze in the DSEIS, and a project Objective. The Project Objective is used to assess how well each alternative promotes the City of Kirkland's values and goals for the Station Area Plan area.

The DSEIS analyzing the three alternatives (a No Action Alternative and two Action Alternatives) was published on January 5, 2021, kicking off the 30-day Comment Period. Based on the input received during the ongoing DSEIS Comment Period, including Planning Commission and City Council meetings, the project team will develop the direction for a preferred alternative, which will be refined into a final preferred alternative with Planning Commission and Council in March, 2021. This final preferred alternative will set the direction for the Draft Station Area Plan.

Additional Information on schedule and key decision points is provided in Attachment 1: Key Decisions Schedule

Figure 2. Engagement Processes

Figure 3. Environmental Review Process



Summary of Outreach and Engagement to Date

As part of the engagement plan, the project team planned a review of engagement to date. The purpose is to evaluate our success in reaching the priority groups identified in the overall Public Participation Plan for this project, and re-adjust strategies as needed. This evaluation allowed the team to further the project's equity goals through seeking to recognize the diversity of perspectives held by Station Area residents and employees are represented in our engagement. The outreach strategies that have been used to inform specific groups about the Station Area Plan are described in the following table.

Group	Outreach Strategy
Station Area Residents	• Attendance at neighborhood association/KAN meetings • Postcard mailed to all residents and property owners within study area • One-time emails to Rose Hill, Market, Norkirk, Highlands neighborhood plan update listservs • Distribution of project introduction and poster with project information to multi-family/assisted living communities

Station Area Employees	• Outreach to business owners within study area (early 2020 business/employee survey) • Request for major employers (e.g. Google, Costco, etc.) to distribute prepared information to employees
Renters 28% of pop.	• Created list of building and property managers. • KCHA and ARCH were asked detailed questions about the best engagement tactics to reach their communities via email.
People with Limited English Proficiency 7% of pop.	• Outreach to Chinese Information & Services Center, Sea Mar Community Health Center, and India Association of Western WA. • Gained traction with CISC and they have helped spread the word and helped us strategize about the best way to move forward with Chinese language engagement. As a result of their input, we are offering the community the opportunity to request Chinese meetings.
People of Color 18% of pop.	• Distributed outreach information to ethnic groceries/businesses
Youth 26% of pop.	• Project assignment at Lake Washington High School (2 Economics classes)
Low income Population 6% of pop.	• Advocacy organizations were asked questions about engagement tactics via email. • Ongoing coordination with Sophia's Way, who is interested in distributing materials through their outreach coordinators.
General Public	• Several posts in "This Week in Kirkland", and City Facebook, Twitter, Youtube accounts • Community Open House #1 (June 2020- Held on zoom) • Community Open House #2 (January 7, 2020- held on zoom) • Request for transit/bike/pedestrian organizations, unions, service- and faith-based organizations, and community groups to distribute prepared information to members and networks.

Project Objective

Leverage the WSDOT/Sound Transit I-405 and NE 85th St Interchange and Inline BRT station regional transit investment to maximize transit-oriented development and create the most value for the City of Kirkland, community benefits including affordable housing, and quality of life for people who live, work, and visit Kirkland.

Underpinning that objective are three distinct **values**:

- **Livability**: includes creating a built environment that promotes health, improves quality of life, integrates community design, creates a unique civic identity, and builds social cohesion.
- **Sustainability**: supporting built and natural systems that protect and enhance habitats, create a healthy environment, address resilience to climate change and other natural and human-made crises, and promote resource efficiency.
- **Equity**: ensuring Kirkland and the station area expand access to opportunity for all residents and visitors to Kirkland, supporting just distribution of benefits and

burdens and encompassing inclusive opportunities for economic, physical, and social well-being.

Project Goals
The City of Kirkland established three major project goals for the Station Area Plan.

- **Development Near Transit**: Encourage short- and long-term development that supports high capacity transit with a mix of jobs, housing, and civic destinations located within walking distance of BRT.
- **Connected Kirkland**: Create effective last-mile connections between the BRT station and the City's neighborhoods and destinations, prioritizing safety and comfort for transit riders, pedestrians and cyclists.
- **Inclusive District**: Through an equity-centered planning process and design recommendations, cultivate a district that unlocks opportunity for all users with diverse housing choices for a range of income levels, a wide range of employment and economic diversity, and places for celebrating Kirkland's civic identity.

Summary of Alternatives

In Summer 2020, the project team collaborated with Community Members, Planning Commission, City Council and City Staff to develop a consistent Growth Concept for both of the Action Alternatives (Figure 4). Based on these discussions, it was determined that the Alternatives should be distinguished primarily by how much growth would be allowed in each alternative, as well as the physical form of this growth. The locations where major growth is allowed is the same in Alternative 2 and 3. The DSEIS analyzes the potential impacts of these alternatives and of a 'No Action' Alternative, which assumes growth is in line with the 2035 Comprehensive Plan.

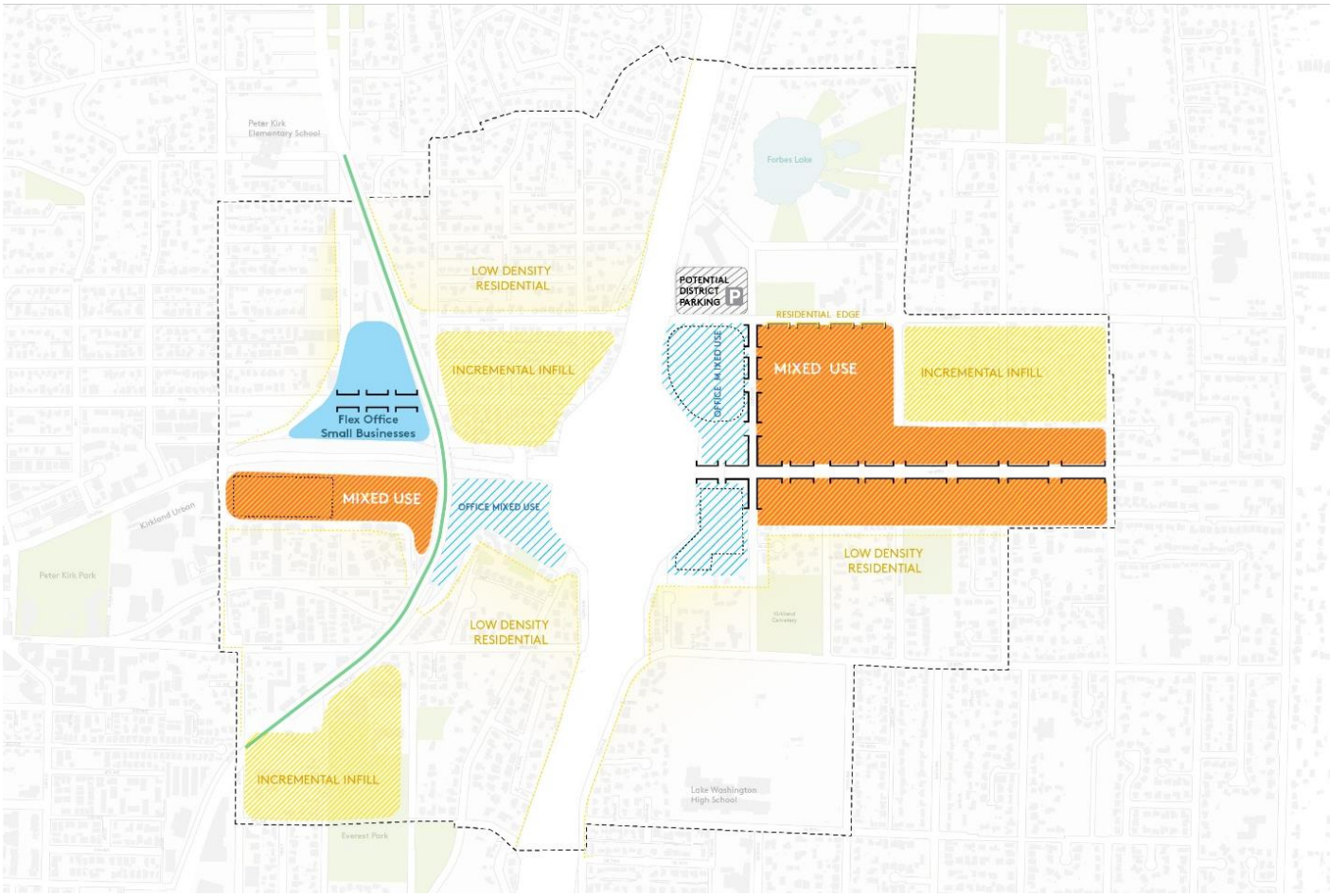
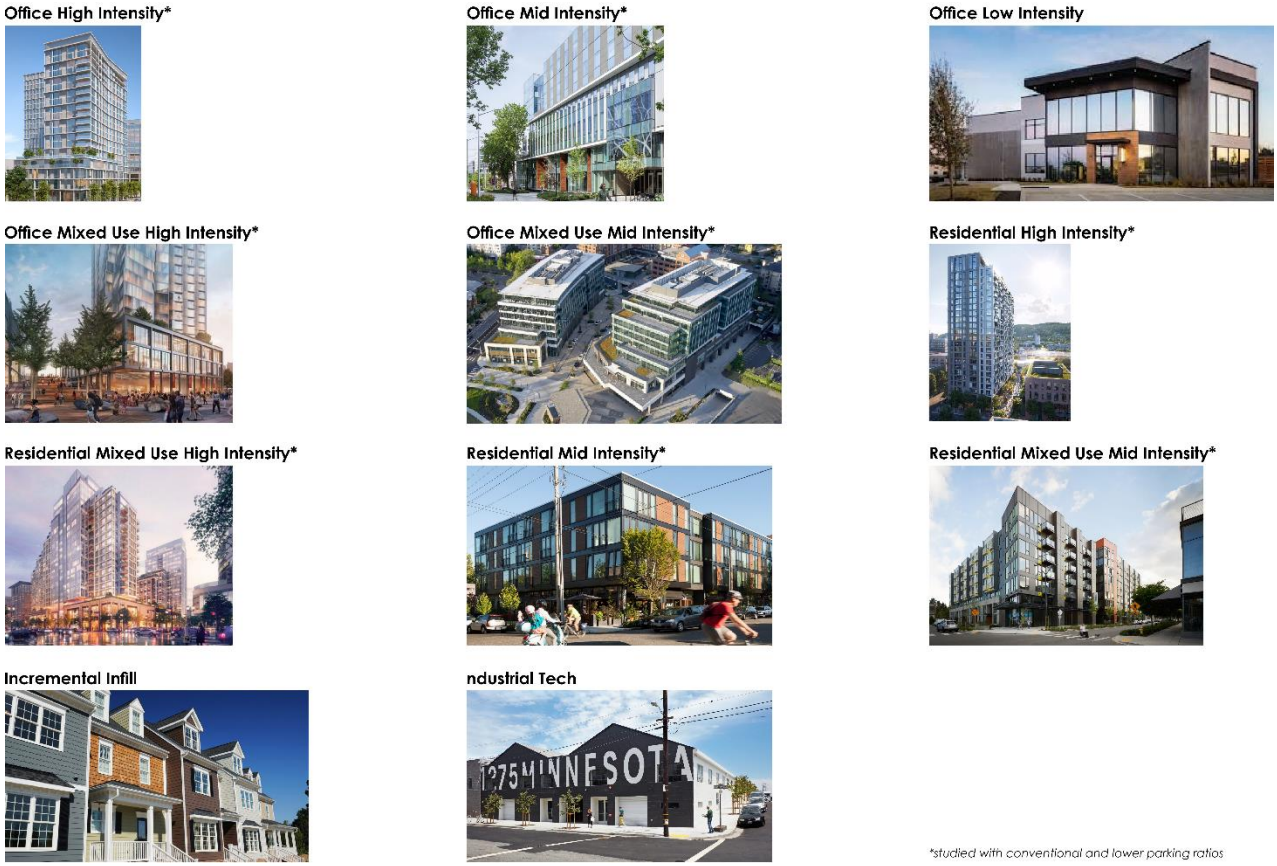


Figure 4. Growth Concept – Action Alternatives

The amount of growth in each alternative was defined using a three-part process. First, the project team built on the findings of the market study to determine what development prototypes would be "Market Feasible". Second, these development prototypes (Figures 5, 6) were applied to areas of change within the study area, to reflect the initial concepts developed with the community in Summer 2020. This gave an upper limit to the number of jobs and residential units it would be possible to realize within the Station Area based on the proposed zoning updates. Finally, the top-down growth rates developed in step two were compared against the growth rates of peer geographies to determine what a reasonable growth rate would be to assume for the Kirkland Station Area.

Figure 5. Development Typologies – Action Alternatives



Source: MIthun, 2020.

Figure 6. Development Typology Descriptions

Development Type	Description
Office High Intensity	Primarily office/commercial uses consisting of towers and mid-rise buildings.
Office Mid Intensity	Primarily office/commercial uses consisting of mid-rise buildings.
Office Low Intensity	Primarily office/commercial uses consisting of low-rise buildings.
Office Mixed Use High Intensity	Mix of office/commercial and retail uses consisting of towers and mid-rise buildings.
Office Mixed Use Mid Intensity	Mix of office/commercial and retail uses consisting of mid-rise buildings.
Residential High Intensity	Primarily residential uses consisting of towers and mid-rise buildings.
Residential Mid Intensity	Primarily residential uses consisting of mid-rise buildings.

Residential Mixed High Intensity	Mix of residential and retail uses consisting of towers mid-rise buildings.
Residential Mixed Mid Intensity	Mix of residential and retail uses consisting of towers mid-rise buildings.
Incremental Infill (Residential Infill in Alternative 3)	Primarily residential uses consisting of low-rise buildings, including duplexes, triplexes, townhouses, and small apartment buildings
Other Infill per existing zoning	Where applied in conjunction with low density residential zoning infill would be consistent zoning allowances include KZC Chapter 113, Cottage, Carriage and Two/Three-Unit Homes. Where applied with medium density residential could include a variety of detached and attached residential units depending on underlying zone. Where overlying employment zones, there could be office and retail development or light industrial development consistent with underlying zoning.
Industrial/Tech	Non-residential uses compatible with a light industrial/manufacturing district in a walkable, urban setting. Example uses would include light manufacturing, office, and storefront retail.

Note: For the purposes of these development types, low-rise includes structures up to 3 stories, mid-rise includes structures 4-12 stories and high-rise/towers includes structures above 12 stories.

Alternative 1 – No Action

- Maintains existing zoning and aligned with Comprehensive Plan, neighborhood plans, and other plans.
- Includes WSDOT/ST I-405 and NE 85th St Interchange and Stride BRT Station project which integrates with local transit on NE 85th St and minor streetscape improvements associated with planned projects.
- Alternative 1 allows for the least housing and job growth of each alternative. It contributes to the adopted Comprehensive Plan capacity and would contain about 2,782 dwellings and 10,859 jobs, slightly higher than the 2019 estimates of 1,909 dwellings and 4,988 jobs.

Alternative 2– Guiding Mixed Use Growth

- Allows for moderate growth throughout the district, with mixed use residential and office focus up to 10 stories in existing commercial areas like Rose Hill and limited infill in established areas. Enhance existing transportation plans including additional bike lanes, sidewalks, and minor green street improvements.
- Alternative 2 would provide for 6,600 new dwellings, and 23,700 new jobs. For the year 2044, the anticipated total growth levels would be up to 8,509 households and 28,688 jobs.

Alternative 3– Transit Oriented Hub

- Allows for additional growth throughout the district, with mixed use residential and office focus up to 20 stories in select commercial areas like Rose Hill, and infill in established areas.
- More substantial multi-modal transportation improvements, coordinated district scale environmental strategies, and signature "blue street" streetscape improvements to treat stormwater.
- Alternative 3 would add capacity for 9,000 new housing units and 30,000 jobs, a substantial addition to the city's capacity. For the year 2044, the anticipated total growth levels would be up to 10,909 households and 34,988 jobs.

Additional information and exhibits describing the Alternatives is provided in Chapter 1 of the DSEIS pg 1-5 to 1-14: Summary of Objectives and Alternatives (see Attachment 3). More detailed description is provided on pg 2-7 to 2-29: Proposal and Alternatives (see full DSEIS, available on the project webpage)

Summary of Impacts and Progress towards Project Objectives

Alternative 1 – No Action

Project Objective	Degree of Consistency
Equity	▪ Unlikely to produce substantial affordable housing. Projected growth of 873 total housing units, implying a maximum of 87 affordable units. (DSEIS pg. 3-42) ▪ Unlikely to improve health equity factors such as access to open space, healthy food, and air quality. ▪ Unlikely to support additional education opportunities (DSEIS pg 3-185) ▪ Unlikely to create new opportunities for community benefits through development
Livability	▪ Likely to maintain current transit, walking, and biking network. ▪ Unlikely to produce Transit Supportive Land-uses: Projected growth does not achieve the PSRC-desired activity units in proximity to the transit investments to meet the Regional Growth Center criterion of 45 activity units per acre. (DSEIS pg. 3-43) ▪ Likely preserves existing retail jobs. Contributes to the adopted Comprehensive Plan capacity and would contain about 10,859 jobs, slightly higher than the 2019 estimates of 4,988 jobs.
Sustainability	▪ Unlikely to reduce the district's carbon footprint. Analysis predicts per capita greenhouse gas emissions of 725.5 Metric tons of carbon dioxide equivalent (MTCO2e) over the lifetime of the project, compared to 726 MTCO2e in existing Conditions. (DSEIS Exhibit 1-16)

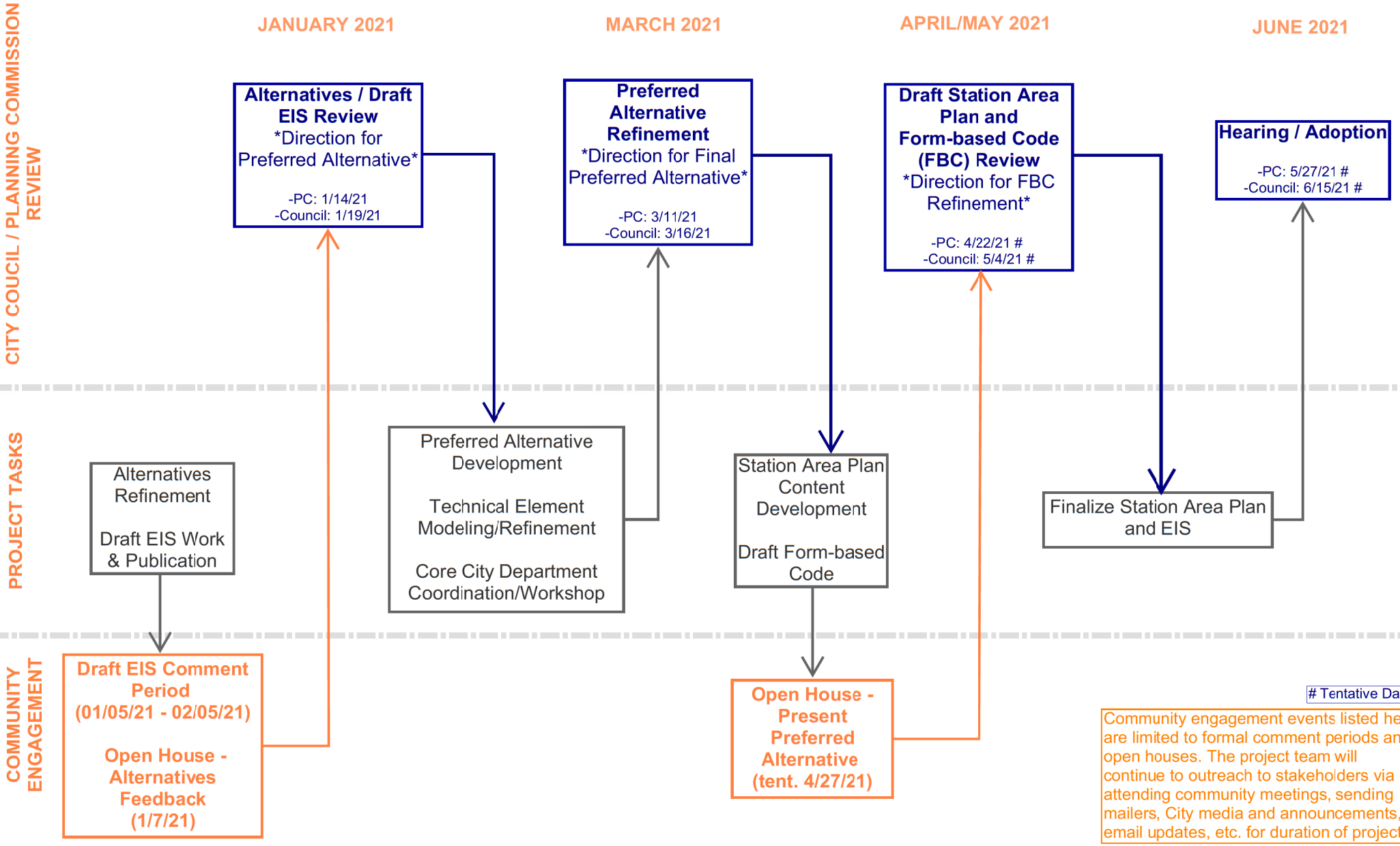
Alternative 2 – Guiding Mixed Use Growth

Project Objective	Degree of Consistency
Equity	▪ Possibly would produce some affordable housing and increase housing diversity. There is more opportunity for inclusionary housing and MFTE affordable units under Alternative 2 compared to the No Action Alternative. Together these could total over 900 under the City's existing regulations and potentially more if additional programs or incentives are implemented as described under Mitigation Measures. (DSEIS pg 3-44) ▪ Possible to improve health equity factors including: ▫ Access to open space: Onsite open spaces and community gathering spaces are proposed with each Action Alternative, and would be included in the Form-Based Code. (DSEIS pg 3-190) ▫ Healthy food: The Action Alternatives would promote policies and regulations that could add parks and open space, including public or private pea patches in new developments (DSEIS pg. 2-14) ▫ Air quality: Reduces per capita greenhouse gas emissions and proposes office uses adjacent to the I-405 interchange to buffer residential and mixed uses from the freeway, reducing the potential for localized air quality effects on vulnerable populations ▪ Possibly would support additional education opportunities. Alternative 2 includes a height increase at the Lake Washington High School, allowing a 45-foot building(s) above the 30-foot height allowed under the No Action Alternative. This could allow additions of on-site space for classrooms. As well, new schools at all grade levels could be allowed in the Office Mid Intensity and Office Mixed Use Mid Intensity designations, with opportunity to add schools in an urban multistory format. (DSEIS pg 186) ▪ Possibly would create new opportunities for community benefits through development linkages
Livability	▪ Likely to encourage walking and biking: This Alternative includes incremental green streets midblock connections policy in Rose Hill, Enhanced bike/pedestrian lane/new sidewalks) on 120th Ave NE and other key streets. (DSEIS Exhibit 1-14) ▪ Likely to produce Transit Supportive Land-uses: Exceeds the level of activity units in proximity to the transit investments and would support the Regional Growth Center criterion. (DSEIS pg 3-44) ▪ Likely to create new employment opportunities across office, retail, and other sectors. Alternative 2 would provide for 23,700 new jobs. For the year 2044, the anticipated total growth levels would be up to 28,688 jobs. (DSEIS pg 1-15)
Sustainability	▪ Likely to somewhat lower the district's carbon footprint. Analysis predicts per capita greenhouse gas emissions of 460 Metric tons of carbon dioxide equivalent (MTCO2e) over the lifetime of the project, compared to 726 MTCO2e in existing Conditions. (DSEIS Exhibit 1-16)

Alternative 3– Transit Oriented Hub

Project Objective	Degree of Consistency
Equity	▪ Likely to produce significant affordable housing and increase housing diversity. This alternative could achieve more than 1,200 affordable units and potentially more if additional programs or incentives are implemented as described under Mitigation Measures. (DSEIS pg 3-44) ▪ Likely to improve health equity factors including: ▫ Access to open space: Onsite open spaces and community gathering spaces are proposed with each Action Alternative in the Form-Based Code. The higher level of development proposed in Alternative 3 would also result in the collection of more park impact fees (DSEIS pg 3-190, 3-191) ▫ Healthy food: The Action Alternatives would promote policies and regulations that could add parks and open space, including public or private pea patches in new developments (DSEIS pg. 2-14) ▫ Air quality: Reduces per capita greenhouse gas emissions and proposes office uses adjacent to the I-405 interchange to buffer residential and mixed uses from the freeway, reducing the potential for localized air quality effects on vulnerable populations ▪ Likely to support additional education opportunities through the collection of school impact fees, raising heights at the Lake Washington High School to allow additional school capacity in the future, and exploring opportunities to incorporate space for schools into new development (DSEIS pg 3-190, 3-192) ▪ Likely to create new opportunities for community benefits through development linkages
Livability	▪ Likely to encourage walking and biking. Required green streets midblock connections policy in in Rose Hill, substantial bike/ped improvements (cycle track network, retail supportive streetscape) on 120th Ave NE and other key streets. Green streets include both non-vehicular and vehicular streets that provide public access through large sites. (DSEIS Exhibit 1-15) ▪ Extremely likely to produce Transit Supportive Land-uses: Action Alternative 3 exceeds the level of activity units in proximity to the transit investments to meet the Regional Growth Center criterion for the Study Area when only a portion of the proposed Center is considered. (DSEIS pg 3-44) ▪ Likely to create new employment opportunities across office, retail, and other sectors. Adds 30,000 jobs, a substantial addition to the city's capacity. For the year 2044, the anticipated total growth levels would be up to 34,988 jobs. (DSEIS pg 1-15)
Sustainability	▪ Likely to significantly lower the district's carbon footprint. Analysis predicts per capita greenhouse gas emissions of 410 Metric tons of carbon dioxide equivalent (MTCO2e) over the lifetime of the project, compared to 726 MTCO2e in existing Conditions. (DSEIS Exhibit 1-16) ▪ District scale environmental strategies maximize environmental performance through green infrastructure and districtwide green building standards/ incentives.

ATTACHMENT 1: STATION AREA PLAN - REMAINING SCHEDULE SUMMARY [Updated Jan. 6, 2021]



Tentative Date

Community engagement events listed here are limited to formal comment periods and open houses. The project team will continue to outreach to stakeholders via attending community meetings, sending mailers, City media and announcements, email updates, etc. for duration of project.

Attachment 2:
Kirkland NE 85th Street Station Area Plan

ALTERNATIVES

The City of Kirkland is developing a Station Area Plan that will guide development in the next 15-20 years around the new bus rapid transit station at the NE 85th Street interchange.

Station Area Plan Vision

The NE 85th Street Station Area is a regional gateway that supports transit, creates opportunity for all, and reflects Kirkland's unique identity.

Project Timeline

Three Alternatives

The City developed three alternatives for the station area based on community input and analysis. Each has been studied in a Draft Supplemental Environmental Impact Statement (Draft SEIS) that can be viewed on the project website (below). *See reverse for an overview of the alternatives.*

Thoughts or comments?

Public input is invited until February 5, 2021.

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Mail
Attn: Allison Zike
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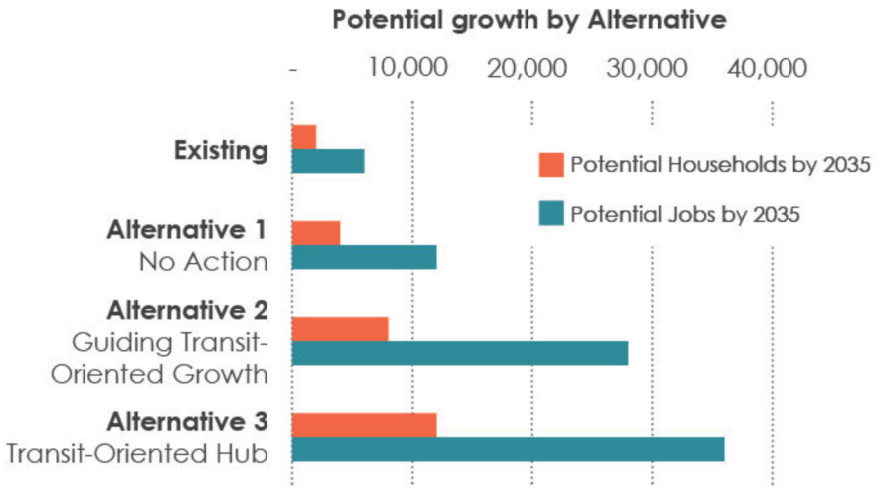
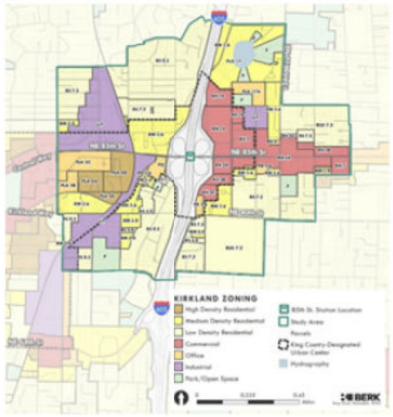
Kirkland, WA 98033

Website
https://KirklandWA.gov/StationAreaPlan



Learn more at https://KirklandWA.gov/StationAreaPlan



ALTERNATIVE 1
No Action

Makes no planning changes to accommodate projected growth.

ALTERNATIVE 2
Guiding Transit-Oriented Growth

Allows moderate growth around transit to support benefits like affordable housing and quality of life.

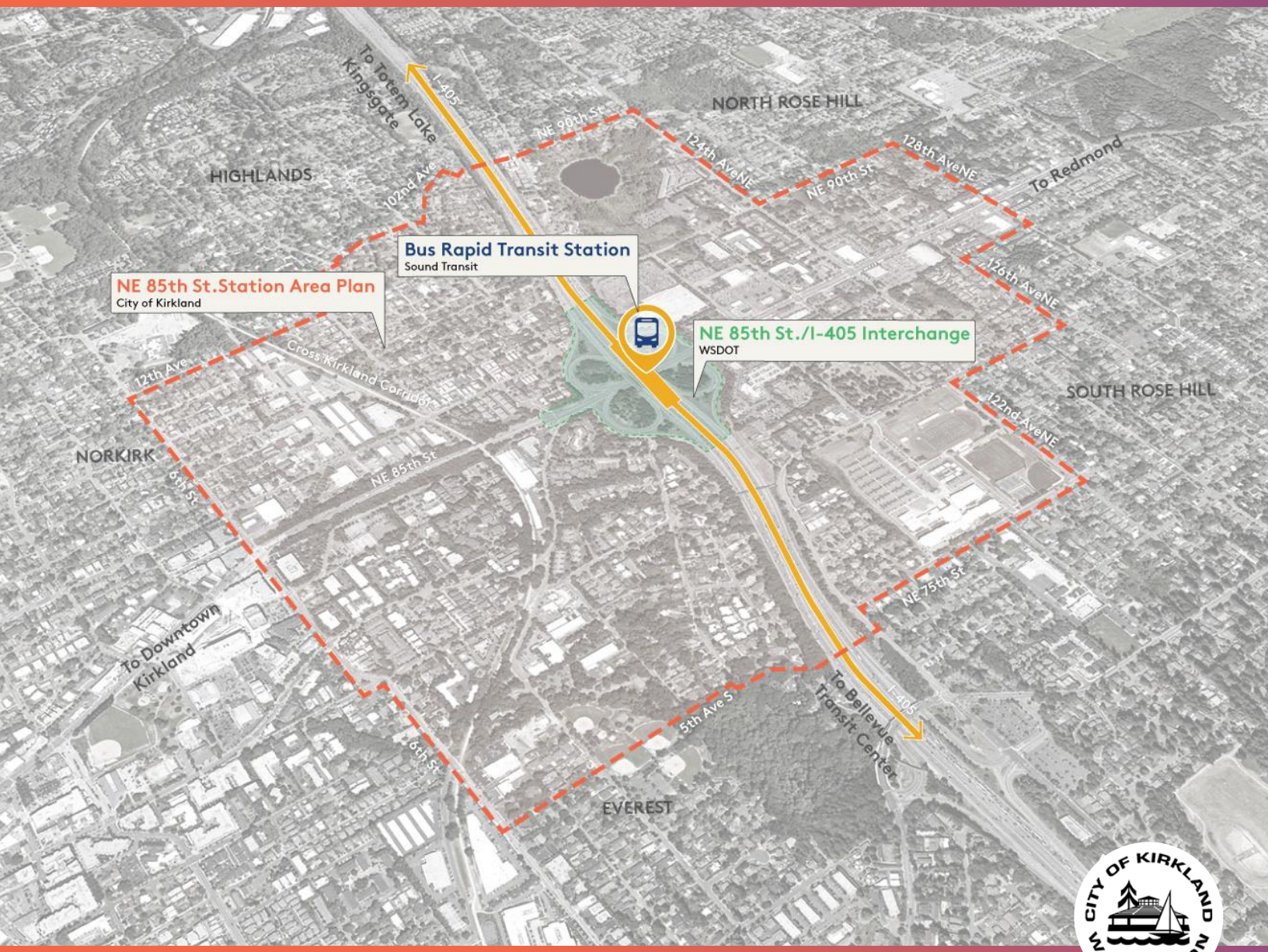
ALTERNATIVE 3
Transit-Oriented Hub

Allows the most growth to maximize transit-oriented development and affordable housing.

	Alternative 1	Alternative 2	Alternative 3
ALLOWED DEVELOPMENT	– Allows for limited residential development throughout – Modest office development up to 6 stories in Rose Hill	– Allows for moderate development throughout – Mid-rise mixed use residential and office buildings up to 10 stories (150 feet) along 85th and I-405 interchange – Limited infill	– Allows for development throughout – Mixed use buildings up to 20 stories in some commercial areas near the station – Substantial infill in established areas – Limited changes in residential areas
MOBILITY IMPROVEMENTS	– Limited – Assumes Sound Transit bus rapid transit station and WSDOT interchange project in all alternatives	– Additional bike infrastructure and sidewalks on key streets. – Encourage some pathways mid-block in Rose Hill – Reduced parking requirements for mixed-use	– New network of bike lanes—including 132nd Ave NE and Kirkland Ave—and additional sidewalks – Require pathways mid-block in Rose Hill – Reduced parking requirements for mixed-use – Shared parking structure for residents, businesses, and customers
ENVIRONMENTAL IMPROVEMENTS	– Limited to minor streetscape improvements	– Stormwater improvements – Trees and other "green infrastructure" for water quality	– Reconstruction of 120th Ave NE to improve stormwater quality – "Green infrastructure" for water quality – Incentives for new green buildings

Kirkland NE 85th St Station Area Plan and Planned Action

Draft Supplemental Environmental Impact Statement
January 2021



CITY OF KIRKLAND
Planning and Building Department
123 5th Avenue, Kirkland, WA 98033
www.kirklandwa.gov | 425.587.3600

January 5, 2021

Subject: Draft Supplemental Environmental Impact Statement (SEIS) for the Kirkland NE 85th St Station Area Plan, Form-Based Code, and Planned Action

Dear Reader:

The City of Kirkland is proposing to develop a Station Area Plan (SAP) in the area surrounding the future WSDOT/Sound Transit I-405/NE 85th Street Interchange and Inline Stride Bus Rapid Transit (BRT) Station. The BRT station, developed by Sound Transit, has been designed to connect Kirkland to the Link Light Rail at Bellevue and the Lynnwood Transit Center. The SAP will look at land use, urban design, open space, transportation, stormwater and utilities, and sustainability in the area approximately one-half mile from the BRT station. The SAP would be implemented with a form-based code (which focuses on physical form rather than separation of uses) to ensure quality design. In addition, the City intends to designate a Planned Action consistent with RCW 43.21C.440 and SEPA rules in WAC 197-11 to facilitate future growth by streamlining the environmental review process for development consistent with the SAP. See details at www.kirklandwa.gov/stationareaplan.

The Draft SEIS includes the following topics:

- Air Quality/Greenhouse Gas
- Surface Water and Stormwater
- Land Use Patterns and Socioeconomics
- Plans and Policies
- Aesthetics
- Transportation
- Public Services
- Utilities

The Draft SEIS evaluates the proposal and alternatives for each topic area. Alternatives include the SEPA-required No Action Alternative 1, a moderate intensity mixed use transit village in Action Alternative 2, and a high intensity mixed use transit hub in Action Alternative 3.

Key issues facing decision makers include the type of land use and level of growth supporting transit oriented development and the urban center; investments needed in transportation, parks, schools and other facilities; stormwater and environmental quality; affordable housing demand; socioeconomics and displacement; and demand for public services and utilities.

The NE 85th St Station Area Planned Action SEIS supplements the City of Kirkland 2015 Comprehensive Plan Update and Totem Lake Planned Action Final Environmental Impact Statement (November 2015), which is adopted per WAC 197-11-630. The City has identified and adopted this document as being appropriate for this proposal after independent review, and it will accompany the proposal to the decision makers. The SEIS builds on this document and meets the City's environmental review needs for the current proposal.

Agencies, affected tribes, and members of the public are invited to comment on the Draft SEIS. A **30-day comment period** is established for the Draft SEIS, concluding at **5:00 pm on February 5, 2021.** Written comments may be submitted to:

Allison Zike, Senior Planner
City of Kirkland Planning Department
123 5th Ave, Kirkland, WA 98033
azike@kirklandwa.gov | (425) 587-3259

Submittal of comments by email is preferred. Please include in the subject line "NE 85th St Station Area Plan Draft SEIS Comments."

Written comments submitted by email must be received by 5:00 pm on the deadline date. Comments submitted by postal mail must be postmarked before the end of the comment period.

An online public open house and workshop to review alternatives, the Station Area Plan, and Draft SEIS is scheduled for **6:00-8:00 pm on January 7, 2021. Registration is required in advance**. See the project website: https://www.kirklandwa.gov/stationareaplan.

The Draft SEIS is available at the City's website at: https://www.kirklandwa.gov/stationareaplan. This Draft Supplemental EIS is available for review, by appointment, at Kirkland City Hall: 123 5th Avenue, Kirkland, WA 98033. Contact Allison Zike, Senior Planner, for more information.

Please contact Allison Zike, Senior Planner, for questions at azike@kirklandwa.gov. Thank you for your interest in the NE 85TH Street Station Area Plan.

Sincerely,

Adam Weinstein, AICP, Planning & Building Director, SEPA Responsible Official

Fact Sheet

Project Title

Kirkland NE 85th St Station Area Plan, Form-Based Code, and Planned Action

Proposed Action and Alternatives

The City of Kirkland is proposing a Station Area Plan (SAP) in the area surrounding the future WSDOT/Sound Transit I-405/NE 85th Street Interchange and Inline Stride Bus Rapid Transit (BRT) Station. The Stride BRT station, developed by Sound Transit and Interchange developed by WSDOT, is designed to connect Kirkland to the Link Light Rail at the Bellevue and Lynnwood Transit Centers.

The purpose of the SAP is to advance the 2035 Comprehensive Plan vision and support a vibrant, equitable, and sustainable Transit-Oriented Community adjacent to this major regional transit investment and as part of the continued growth expected in Downtown Kirkland and the 85th Corridor. The SAP will:

- Address land use, urban design, open space, transportation, stormwater and utilities, and sustainability in the area approximately one-half mile from the BRT station.
- Study mobility and transportation connections within the station area as well as effective last-mile connections, making it easier to walk and bike to the station from the city's neighborhoods and destinations.
- Study various types of potential future development supportive of high capacity transit including a mix of jobs, housing, and community uses.
- Examine opportunities to maximize public benefit from potential future development, including affordable housing, open space, and desired job types.

The SAP is anticipated to include area-specific policies and will consider changes to zoning and other regulations in support of a Transit-Oriented Community, and it

will study policies and development incentives to support diverse housing choices for a range of income levels. The SAP will address a horizon year of 2044, a new planning period consistent with the City's next periodic update beyond the current Comprehensive Plan horizon year of 2035.

In addition, the City intends to designate a Planned Action consistent with RCW 43.21C.440 and SEPA rules in WAC 197-11 to facilitate future growth by streamlining the environmental review process for development consistent with the SAP and mitigation identified in the Supplemental Environmental Impact Statement (SEIS).

This Draft SEIS considers a range of alternatives that illustrate different options for how to implement the community's vision for a vibrant, equitable, and sustainable Transit-Oriented Community:

- **Alternative 1 No Action:** This alternative would reflect existing zoning and current plans. It would continue current anticipated growth to the year 2035 up to 2,782 households and 10,859 jobs.
- **Alternative 2:** This alternative would create a Station Area Plan and Form-Based Code allowing for added housing and commercial/retail activity in buildings up to 150 feet in height closest to the station and along major street corridors and 25-85 feet elsewhere. Alternative 2 would allow for moderate growth throughout the district, primarily focused on existing commercial areas such as Rose Hill. For the year 2044, the anticipated total growth levels would be up to 8,509 households and 28,688 jobs. Non-motorized improvements would be implemented, and incentives would include moderate implementation of green streets, and enhanced stormwater treatment, and development of green buildings. A Planned Action Ordinance would be prepared to facilitate growth consistent with the plan vision, regulations, and environmental mitigation measures.
- **Alternative 3:** This alternative would also create a Station Area Plan and Form-Based Code, and would allow for further intensified development close to the station offering jobs and housing in buildings up to 150-300 feet in height, transitioning to mid-rise and low rise development of 25 to 85 feet further from the station. For the year 2044, the anticipated total growth levels would be up to 10,909 households and 34,988 jobs. Alternative 3 includes investment in additional bike / pedestrian routes, more intensive green streets, and a green-blue street including stormwater infrastructure within rights of way, as well as green building design. Similar to Alternative 2, a Planned Action Ordinance would be implemented under Alternative 3 to incentivize development that meets environmental performance standards as well as the plan vision and other local regulations.

Proponent and Lead Agency

City of Kirkland

Location

The Study Area includes the area within approximately a half mile area centered on the future NE 85th Street/I-405 BRT "Stride" station location. At the maximum extents, the Study Area is bounded approximately by 12th Avenue and NE 100th Street to the north, 128th Avenue NE to the east, NE 75th and 5th Avenue S to the south, and 6th Street to the west. The Study Area includes portions of the North Rose Hill, South Rose Hill, Everest, Moss Bay, Norkirk, and Highlands neighborhoods.

Tentative Date of Implementation

Spring 2021 for SAP, Form Based Code, and Planned Action Ordinance implementation

Responsible Official

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Contact Person

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Licenses or Permits Required

The Station Area Plan and Planned Action SEIS require a 60-day review by the

State of Washington Department of Commerce and other state agencies. Locally, the SAP, Form-Based Code, and Planned Action Ordinance will be considered by the Planning Commission and their recommendations forwarded to the City Council who will deliberate and determine approval.

Authors and Principal Contributors to the SEIS

Under the direction of the Kirkland Planning and Building Department, the consultant team prepared the SEIS as follows:

- Mithun: Station Area Plan Lead, Alternatives Development Lead
- BERK Consulting: SEPA and Planned Action Lead, Alternatives Development, Land Use Patterns and Policies, Aesthetics, Public Services
- ECONorthwest: Economic Analysis and Development Strategy in support of Alternatives
- Fehr & Peers: Air Quality/Greenhouse Gas Emissions, Transportation
- Hererra: Surface Water and Stormwater, Utilities

Date of Draft SEIS Issuance

January 5, 2021

Draft SEIS Comments

Comment Period

The City of Kirkland is requesting comments from members of the public, agencies, tribes, and all interested parties on the Draft SEIS from January 5, 2021 to February 5, 2021. Comments are due by **5:00 PM,** February 5, 2021.

All written comments should be directed to:

Allison Zike, AICP
Senior Planner
City of Kirkland
123 5th Avenue
Kirkland, WA 98033
(425) 587-3259 | azike@kirklandwa.gov

Submittal of comments by email is preferred. Please include in the subject line "NE 85th St Station Area Plan Draft SEIS Comments."

Public Meeting

An online public open house and workshop to review alternatives, the Station Area Plan, and Draft SEIS is scheduled for **6:00-8:00 pm on January 7, 2021. Registration is required in advance**. See the project website: https://www.kirklandwa.gov/stationareaplan.

Date of Final Action

Spring 2021

Documents Supplemented and Adopted

The NE 85th St Station Area Planned Action SEIS supplements the City of Kirkland 2015 Comprehensive Plan Update and Totem Lake Planned Action Final Environmental Impact Statement (November 2015), which is adopted per WAC 197-11-630. The City has identified and adopted this document as being appropriate for this proposal after independent review, and it will accompany the proposal to the decision maker. The SEIS builds on this document and meets the City's environmental review needs for the current proposal.

Location of Background Data

You may review the City of Kirkland's website for more information at https://www.kirklandwa.gov/stationareaplan. If you desire clarification or have questions please contact Allison Zike at (425) 587-3259 or by azike@kirklandwa.gov.

Purchase/Availability of Draft SEIS

The Draft Supplemental EIS is posted on the City of Kirkland's website at https://www.kirklandwa.gov/stationareaplan. Compact disks or thumb drives are available for purchase at cost; see the Contact Person. This Draft Supplemental EIS is available for review, by appointment, at Kirkland City Hall: 123 5th Avenue, Kirkland, WA 98033; see the Contact Person.

Distribution List

Federal and Tribal Agencies

Muckleshoot Tribal Council - Environmental Division, Tribal Archeologist
Muckleshoot Tribal Council - Environmental Division, Fisheries Division Habitat
U.S. Army Corps of Engineers - Seattle District

State and Regional Agencies

Washington State Department of Commerce – Growth Management Division
Washington State Department of Ecology - Environmental Review
Washington State Department of Archaeology & Historic Preservation
Department of Fish and Wildlife
Washington State Department of Natural Resources – SEPA Center *(For sites with a large number of significant trees (Forest Practices Permit) or when structures extend beyond inner harbor line in Lake Washington)*
Washington State Department of Transportation – Local and Development Services Manager
Puget Sound Clean Air Agency
Puget Sound Partnership
Puget Sound Regional Council - SEPA Review
WRIA8 Lake Washington - Cedar- Sammamish Watershed
A Regional Coalition for Housing (ARCH)

Adjacent Jurisdictions

City of Bellevue
City of Redmond

Services, Utilities, and Transit

Cascade Water Alliance – Director of Planning
Evergreen Health - Director of Construction and Administrative Director, Government & Community Affairs Department
King County Dept. of Transportation - Employer Transportation Representative
King County Wastewater Treatment Division – SEPA Lead and Property Agent
Lake Washington School District No. 414: Budget Manager and Director of Support Services
Puget Sound Energy
Seattle & King County Public Health - SEPA Coordinator
Seattle City Light - Department of Finance and Administration

Community Organizations and Individuals

Eastside Audubon Society
Houghton Community Council
Interested Citizens
Parties of Record
South Rose Hill/North Rose Hill/Highlands/Everest/Moss Bay/Norkirk Neighborhood Association

Media

Kirkland Patch
Kirkland Reporter
Seattle Times

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1 Summary

1.1 Purpose

Sound Transit's ST3 Regional Transit System Plan is bringing a once-in-a-generation transit investment to Kirkland with a new Stride Bus Rapid Transit (BRT) station at 85th and I-405, currently scheduled to open by 2025.[1] The City of Kirkland is developing a Station Area Plan (SAP) to guide how development, open space, and mobility connections in neighborhoods near the station can leverage this regional investment to create the most value and quality of life for Kirkland, and provide the community with an opportunity to envision the future for this area. The City is proposing a Station Area Plan, Form-Based Code, and Planned Action Ordinance to guide the area within a half-mile of the station. This Draft Supplemental Environmental Impact Statement (SEIS) addresses Kirkland NE 85th St Station Area Plan, Form-Based Code, and Planned Action. The SEIS supplements the City of Kirkland 2015 Comprehensive Plan Update and Totem Lake Planned Action Final Environmental Impact Statement (November 2015).

The Draft SEIS is organized as follows:

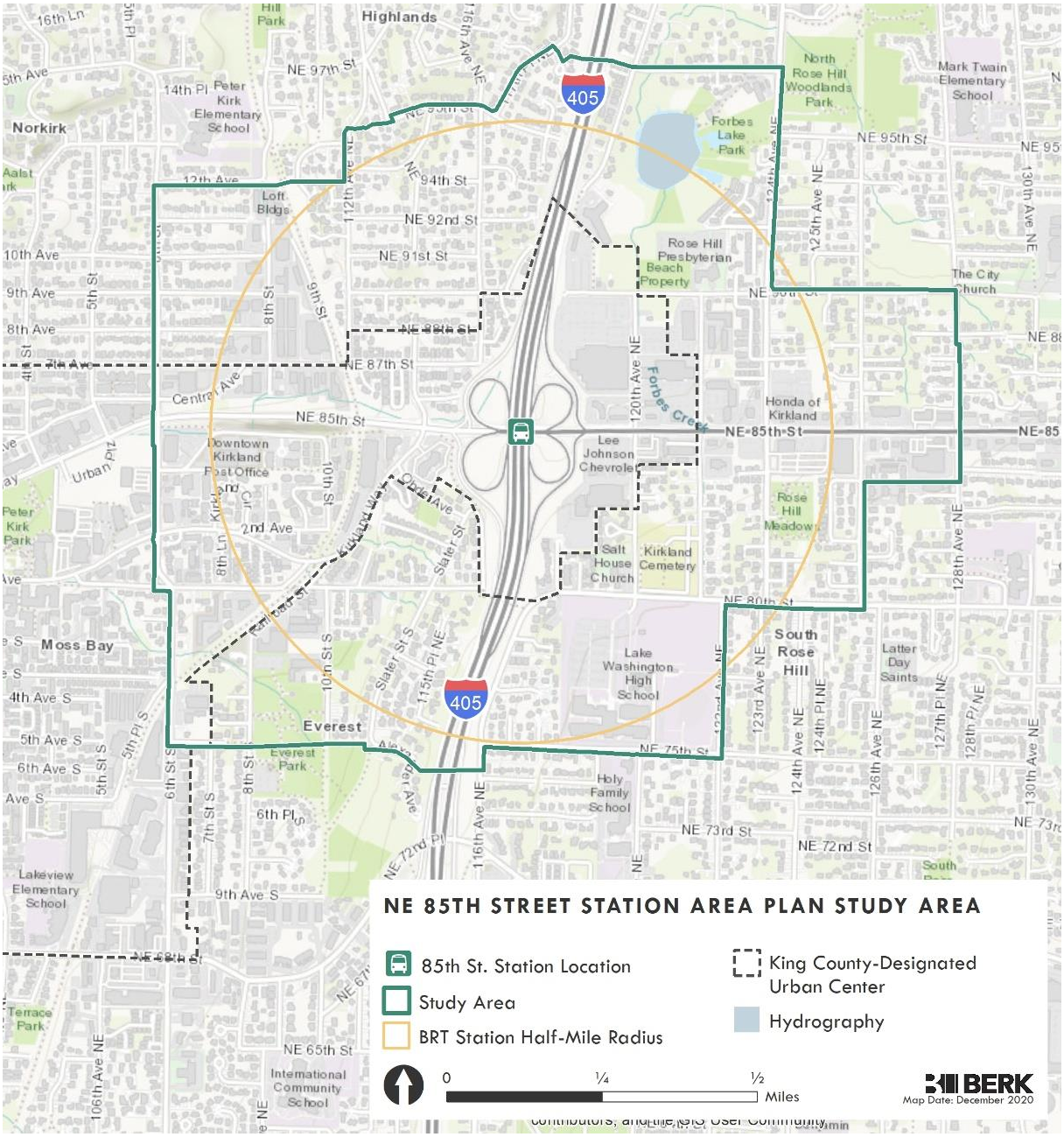
- Chapter 1 Summary
- Chapter 2 Proposal and Alternatives
- Chapter 3 Environment, Impacts, and Mitigation
- Chapter 4 Acronyms and References
- Appendices

[1] Sound Transit and WSDOT are conducting their own SEPA review of the station, and the station itself is not addressed in this SEIS.

1.2 Study Area

The Study Area includes the area within approximately a half mile area centered on the future NE 85th Street/I-405 BRT "Stride" station location. At the maximum extents, the Study Area is bounded approximately by 12th Avenue and NE 100th Street to the north, 128th Avenue NE to the east, NE 75th and 5th Avenue S to the south, and 6th Street to the west. See Exhibit 1-1.

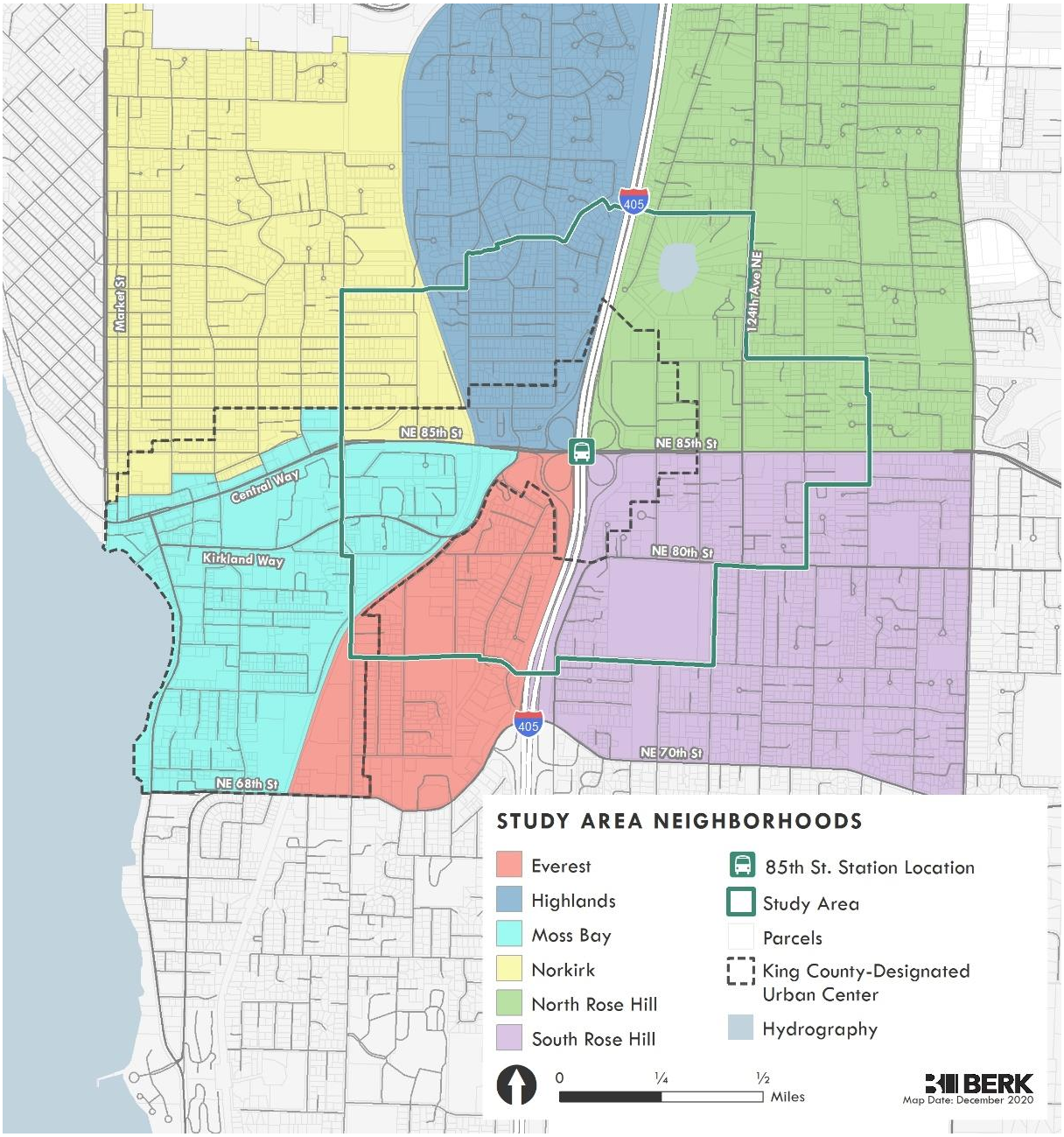
Exhibit 1-1. NE 85th Street Station Area Plan Study Area



Source: Mithun, 2020.

The Study Area includes portions of the North Rose Hill, South Rose Hill, Everest, Moss Bay, Norkirk, and Highlands neighborhoods. See Exhibit 1-2.

Exhibit 1-2. Neighborhoods



Source: City of Kirkland, BERK, 2020.

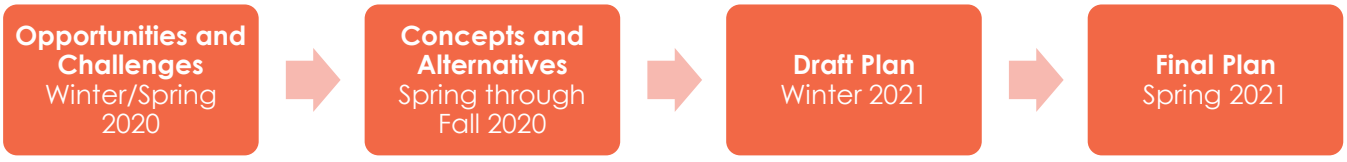
1.3 Planning Process and Public Comment Opportunities

Kirkland is engaging the community and developing plan proposals through four phases:

- **Phase 1: Opportunities and Challenges** - collect information about existing conditions, land use opportunities, and challenges to better understand project possibilities and inform Phase 2.
- **Phase 2: Concepts and Alternatives** - gather ideas to form alternatives; consider environmental, community, and equity impacts; and review draft alternatives. This phase integrates requirements under the State Environmental Policy Act (SEPA) including scoping and issuance of a Draft SEIS.
  - **Scoping**: The City established a 21-day comment period to solicit comments on the scope of the SEIS and alternatives. In addition to a standard written comment period, the City posted a story map and survey and held a community workshop. See Appendix A.
  - **Draft SEIS Comment Period**: This includes a multi-week comment period as described in the Fact Sheet.
- **Phase 3: Draft Plan** - respond to input in Phase 2 by developing a preferred alternative and preparing a draft Station Area Plan. The draft Station Area Plan will be supported by proposed amendments to the Comprehensive Plan, Kirkland Zoning Code, and a Final SEIS that responds to public comments and a proposed planned action. A planned action is an ordinance that simplifies future environmental review requirements for major projects with development consistent with the adopted Station Area Plan.
- **Phase 4: Final Plan** - Planning Commission to confirm and City Council to adopt the final plan through formal public hearings and legislative meetings.

Each phase has included public and stakeholder engagement through interviews, surveys, or public meetings. Phases are illustrated in the flow chart in Exhibit 1-3.

Exhibit 1-3. NE 85th Street Station Area Planning Phases



Source: BERK, 2020.

1.4 Objectives and Alternatives

Objectives

SEPA requires the statement of objectives describing the purpose and need for the proposals. The following objectives have been established for the Kirkland NE 85th St Station Area Plan:

Leverage the WSDOT/Sound Transit I-405 and NE 85th St Interchange and Inline Stride BRT station regional transit investment to maximize transit-oriented development and create the most:

- opportunity for an inclusive, diverse, and welcoming community,
- value for the City of Kirkland,
- community benefits including affordable housing,
- and quality of life for people who live, work, and visit Kirkland.

The objectives also serve as criteria by which the alternatives can be evaluated.

Alternatives

This Draft SEIS considers a range of alternatives that illustrate different options for how to implement the community's vision for a vibrant, equitable, and sustainable transit-oriented community:

- **Alternative 1 No Action:** This alternative would reflect existing zoning and current plans. It would continue current anticipated growth to the year 2035 up to 2,782 households and 10,859 jobs.
- **Alternative 2:** This alternative would create a Station Area Plan and Form-Based Code allowing for added housing and commercial/retail activity in buildings up to 150 feet in height closest to the station and along major street corridors and 25-85 feet elsewhere. Alternative 2 would allow for moderate growth throughout the district, primarily focused on existing commercial areas such as Rose Hill. For the year 2044, the anticipated total growth levels would be up to 8,509 households and 28,688 jobs. Non-motorized improvements would be implemented, and incentives would include moderate implementation of green streets, and enhanced stormwater treatment, and development of green buildings. A Planned Action Ordinance would be prepared to facilitate growth consistent with the plan vision, regulations, and environmental mitigation measures.
- **Alternative 3:** This alternative would also create a Station Area Plan and Form-Based Code, and would allow for further intensified development close to the station offering jobs and housing in buildings up to 150-300 feet in height,

transitioning to mid-rise and low rise development of 25 to 85 feet further from the station. For the year 2044, the anticipated total growth levels would be up to 10,909 households and 34,988 jobs. Alternative 3 includes investment in additional bike / pedestrian routes, more intensive green streets, and a green-blue street including stormwater infrastructure within rights of way, as well as green building design. Similar to Alternative 2, a Planned Action Ordinance would be implemented under Alternative 3 to incentivize development that meets environmental performance standards as well as the plan vision and other local regulations.

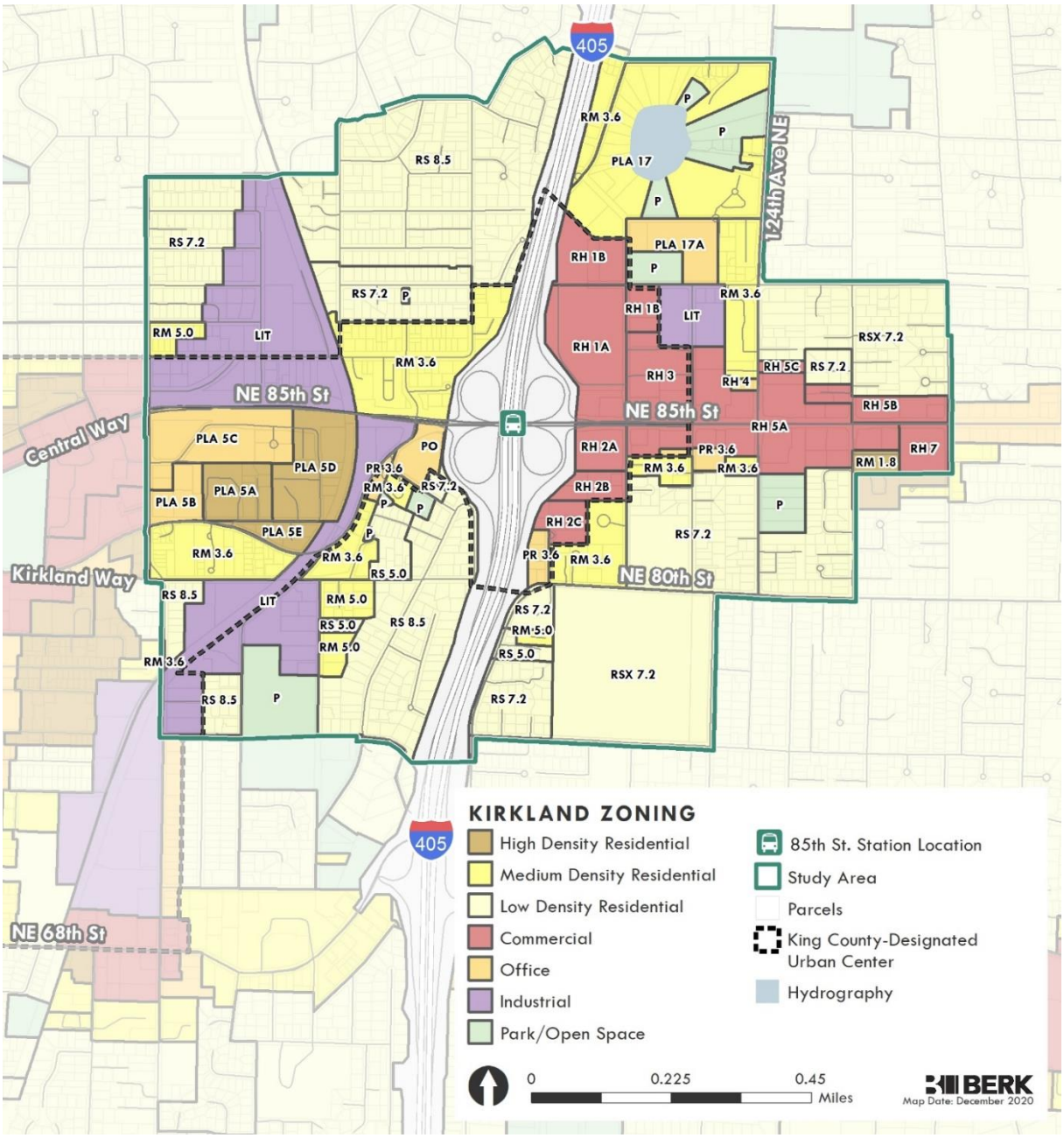
Land Use Patterns and Building Height

Alternative 1 No Action

Alternative 1 No Action is SEPA-required, and would retain the existing Comprehensive Plan policies, future land use designations and zoning districts, while aligning with goals of transit-oriented development, community benefits, and quality of life.

There is a predominance of Commercial/Mixed Use zoning east of the freeway (Rose Hill Commercial) and Medium and Low Density Residential to the west. There are additional areas of Central Business District and Industrial zoning too. See Exhibit 1-4.

Exhibit 1-4. Zoning Map, Study Area



Source: City of Kirkland, 2020; BERK, 2020.

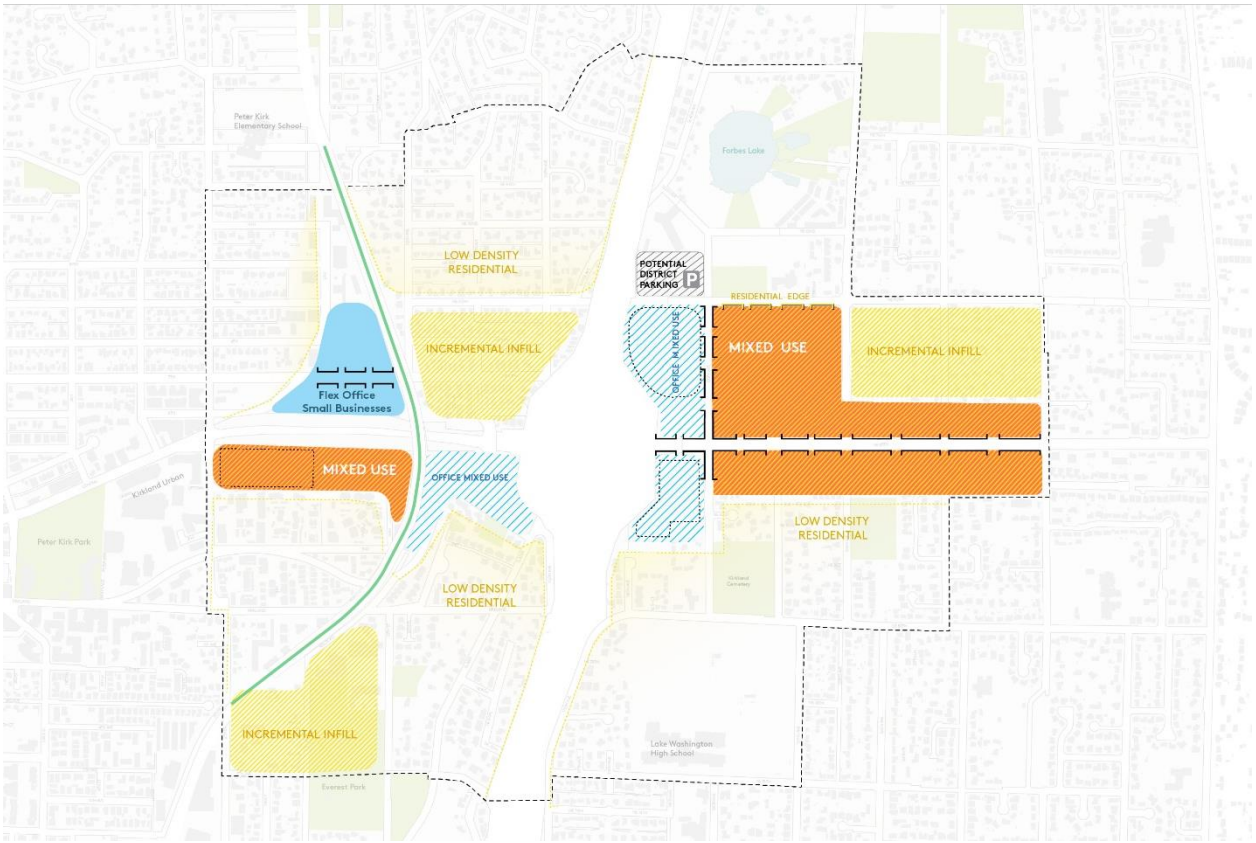
Action Alternatives 2 and 3

The Action Alternatives are both based on a concept intended to align with the SAP objectives and goals of maximizing transit-oriented development, community benefits including affordable housing, and quality of life. The concept establishes a land use pattern that would focus Office Mixed Use zoning abutting the

interchange to the northeast and southeast, and to a lesser extent to the southwest quadrant.

Flex Office and Small Business uses, including light industrial, would be located in Norkirk west of the Cross Kirkland Corridor. Mixed Use Residential uses would be located to the east of the higher intensity office uses along NE 85th Street, and to the west abutting Kirkland Urban. See Exhibit 1-5.

Exhibit 1-5. Growth Concept for Action Alternatives



Source: Mithun, 2020.

Land use concept typologies are defined in Exhibit 1-6 and apply to both Action Alternatives unless otherwise stated.

Exhibit 1-6. Development Typology Descriptions

Development Type	Description
Office High Intensity	Primarily office/commercial uses consisting of towers and mid-rise buildings.
Office Mid Intensity	Primarily office/commercial uses consisting of mid-rise buildings.
Office Low Intensity	Primarily office/commercial uses consisting of low-rise buildings.
Office Mixed Use High Intensity	Mix of office/commercial and retail uses consisting of towers and mid-rise buildings.
Office Mixed Use Mid Intensity	Mix of office/commercial and retail uses consisting of mid-rise buildings.
Residential High Intensity	Primarily residential uses consisting of towers and mid-rise buildings.
Residential Mid Intensity	Primarily residential uses consisting of mid-rise buildings.
Residential Mixed High Intensity	Mix of residential and retail uses consisting of towers mid-rise buildings.
Residential Mixed Mid Intensity	Mix of residential and retail uses consisting of towers mid-rise buildings.
Incremental Infill (Residential Infill in Alternative 3)	Primarily residential uses consisting of low-rise buildings, including duplexes, triplexes, townhouses, and small apartment buildings
Other Infill per existing zoning	Where applied in conjunction with low density residential zoning infill would be consistent zoning allowances include KZC Chapter 113, Cottage, Carriage and Two/Three-Unit Homes. Where applied with medium density residential could include a variety of detached and attached residential units depending on underlying zone. Where overlying employment zones, there could be office and retail development or light industrial development consistent with underlying zoning.
Industrial/Tech	Non-residential uses compatible with a light industrial/manufacturing district in a walkable, urban setting. Example uses would include light manufacturing, office, and storefront retail.

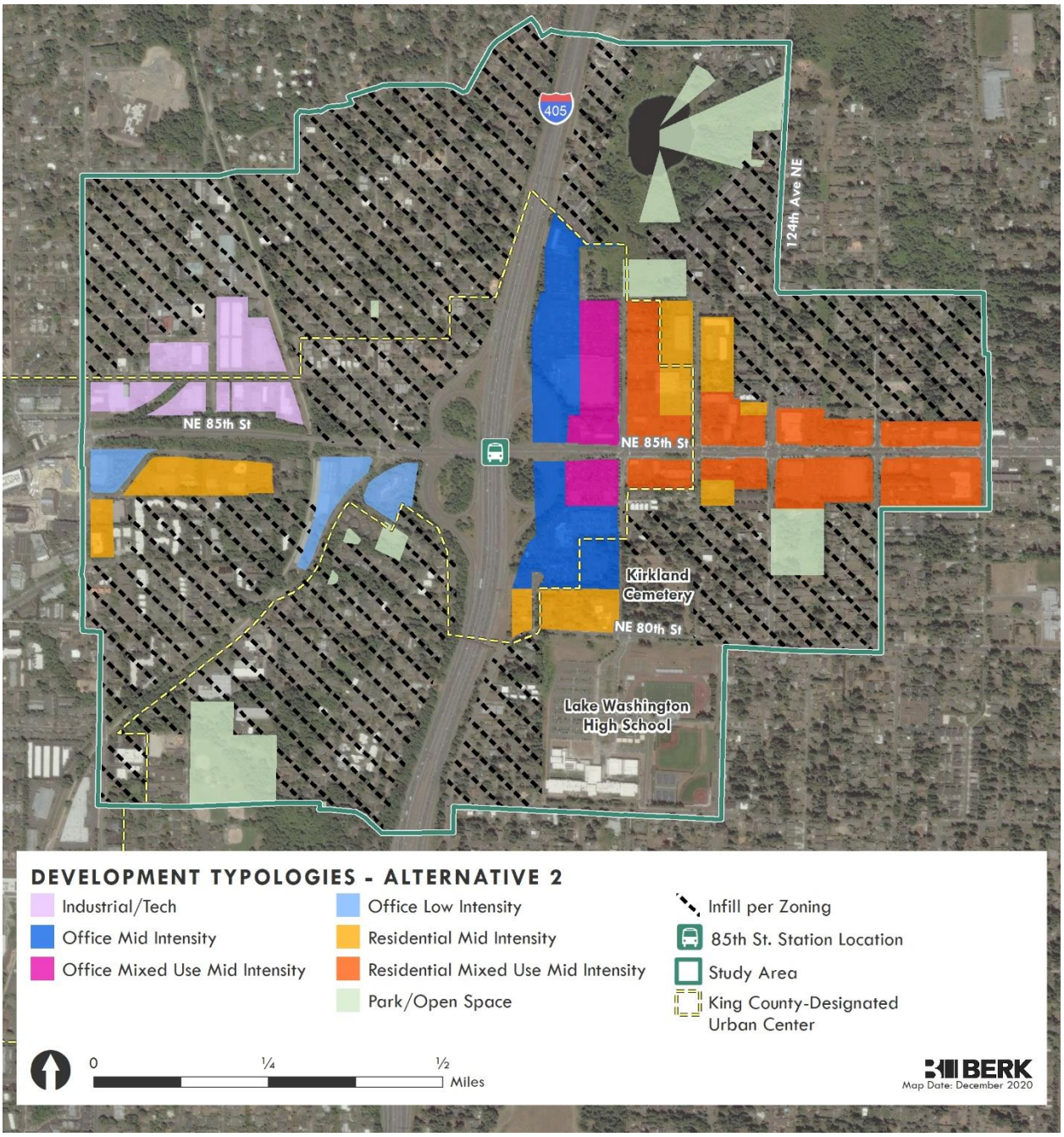
Note: For the purposes of these development types, low-rise includes structures up to 3 stories, mid-rise includes structures 4-12 stories and high-rise/towers includes structures above 12 stories.

Action Alternative 2

The proposed Alternative 2 land use plan illustrated in Exhibit 1-7 includes:

- Rose Hill NE 85th Corridor and Station Area: Mid-rise office/residential mixed use (up to 10 stories and 150 feet)
- Rose Hill/Moss Bay/Norkirk/Everest/ Highlands: Infill development in other areas in accordance with zoning (see Exhibit 1-4)

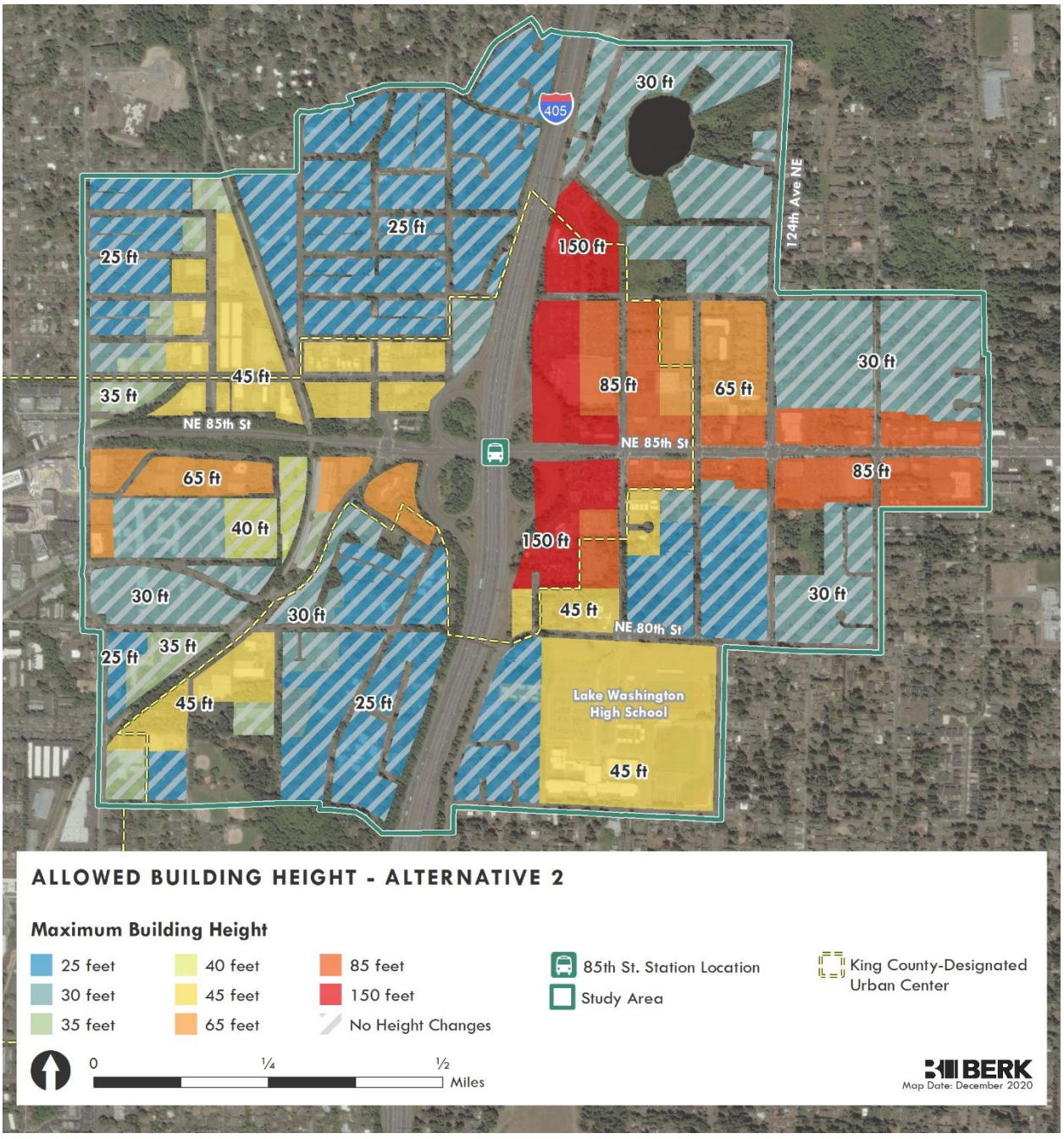
Exhibit 1-7. Alternative 2 Land Use Change Areas



Source: Mithun, 2020; BERK, 2020.

Building heights would be about 10 stories or 150 feet closest to the station east of I-405, transitioning to 85 feet, 65 feet, and 45 feet as distance increases from the freeway eastward along NE 85th Street. To allow for capacity increases and effective use of current sites, the alternative considers adding a story in height at the Lake Washington High School. See Exhibit 1-8.

Exhibit 1-8. Alternative 2 Building Heights



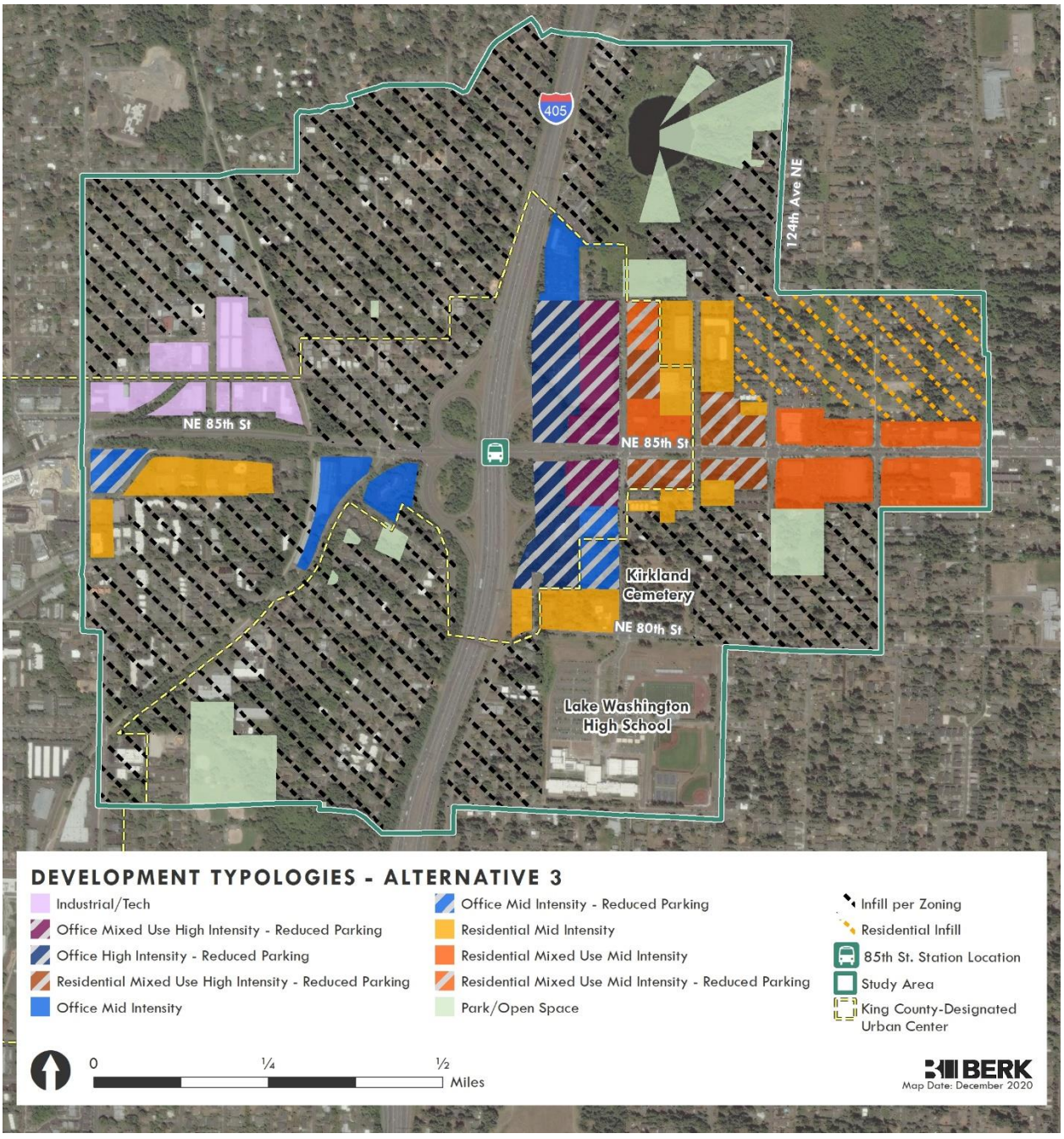
Source: Mithun, 2020.

Action Alternative 3

As illustrated in Exhibit 1-9 and Exhibit 1-10, the major elements of the Alternative 3 land use plan include:

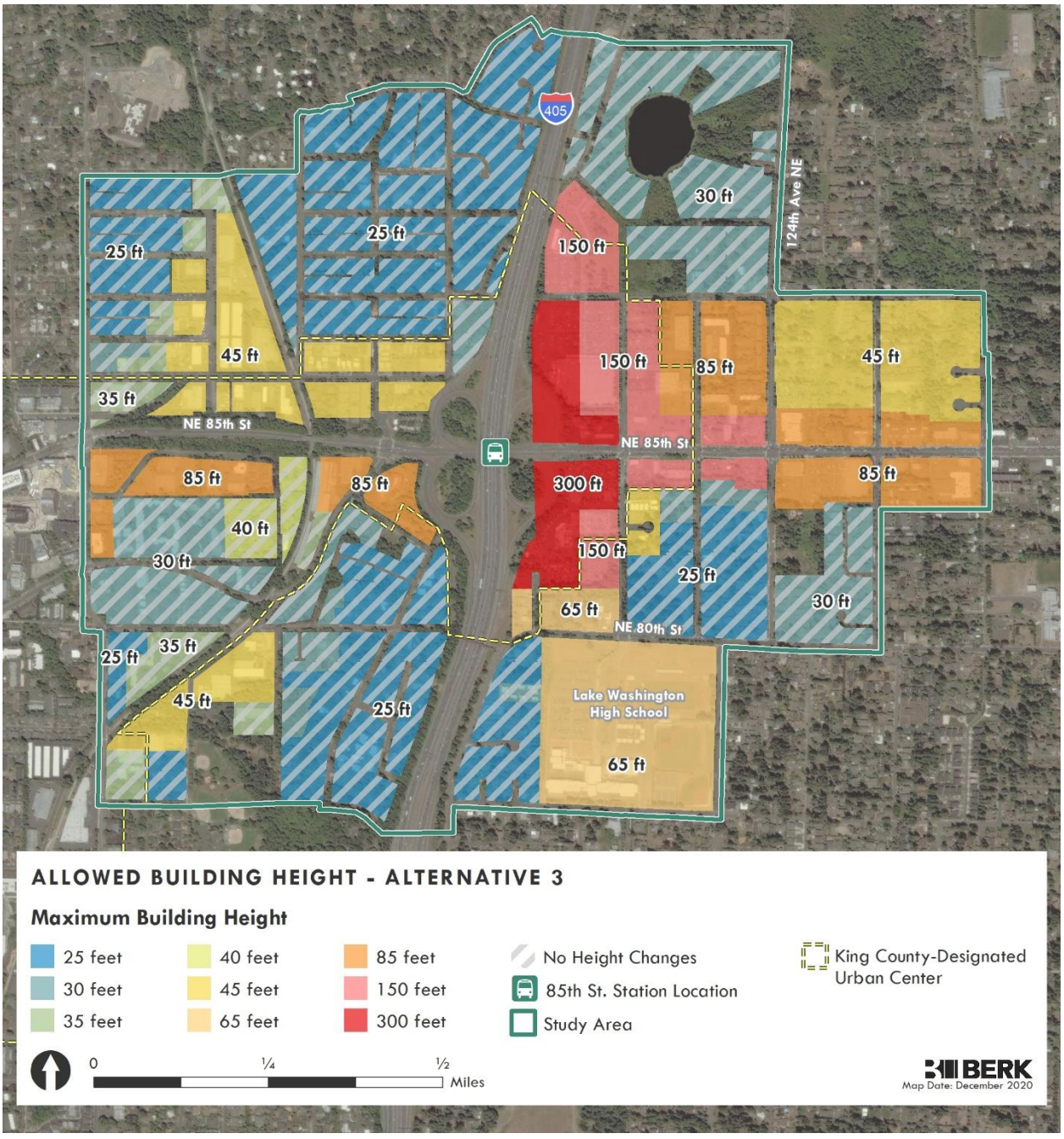
- Rose Hill NE 85th Corridor and Station Area: Taller buildings (up to 20 stories, 150-300 feet) with mid-rise office/residential mixed use (85-150 feet)
- Moss Bay/Norkirk/Everest/ Highlands: Mid-rise office residential mixed use (85-150 feet), Industrial/Tech in Norkirk
- School Capacity: To allow for capacity increases and effective use of current sites, Alternative 3 considers adding two more stories height above current zoning at the Lake Washington High School. Under this alternative, the City could also work with the Lake Washington School District and major employers on how to accommodate school capacity in urban formats or allow for specialty instruction for students.
- Other: Residential infill, including small-scale redevelopment, could result in more housing variety with low rise townhouses, small apartments, and other similar housing forms. Significant investment in open space and community gathering spaces.

Exhibit 1-9. Alternative 3 Land Use Change Areas



Source: Mithun, 2020.

Exhibit 1-10. Alternative 3 Building Heights



Source: Mithun, 2020.

Growth

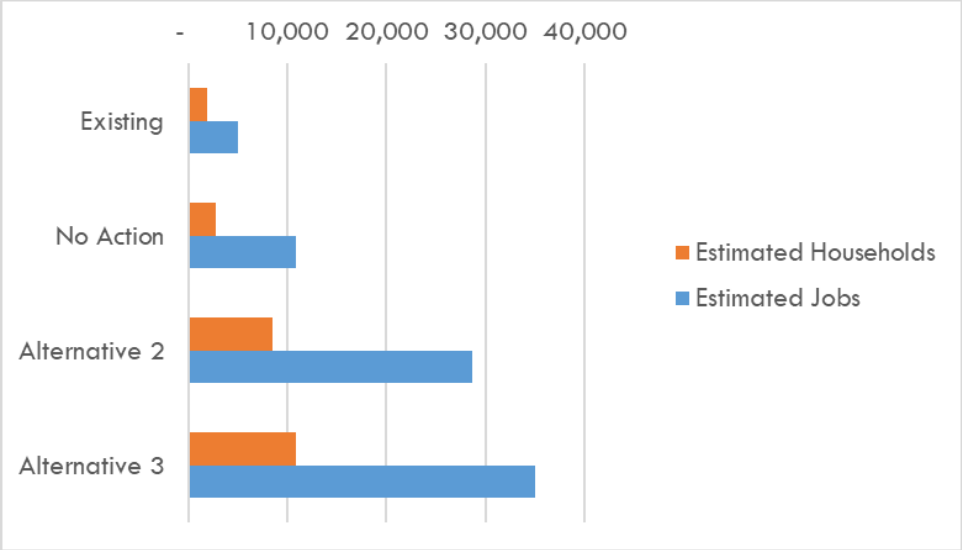
The City of Kirkland plans for growth in its Comprehensive Plan consistent with the Growth Management Act (GMA). Currently, the City plans for a 2035 horizon and takes its fair share of growth based on growth target set in the Countywide Planning Policies. Regarding housing, the City reported that in 2013, Kirkland had 36,866 housing units, capacity for an additional 13,664 to 23,817 new units, and a 2035 Growth Target of 8,361 units. In 2013, the City had about 37,981 jobs, and capacity for 22,984 to 57,155 new jobs above a growth target of 22,435 new jobs. (Table LU-3) Totem Lake Urban Center has the greatest share of growth capacity. King County designated Greater Downtown Kirkland as an Urban Center in the King County Countywide Planning Policies in 2019. The City has proposed it as a Regional Growth Center with the Puget Sound Regional Council.

Exhibit 1-11 compares housing and jobs across alternatives in the Station Area Study Area boundaries. Based on proposed land use:

- Alternative 1 allows for the least housing and job growth of each alternative. It contributes to the adopted Comprehensive Plan capacity and would contain about 2,782 dwellings and 10,859 jobs, slightly higher than the 2019 estimates of 1,909 households and 4,988 jobs.
- Alternative 3 allows for the most housing and job growth. Alternative 3 would add capacity for 9,000 new housing units and 30,000 jobs, a substantial addition to the city's capacity. For the year 2044, the anticipated total growth levels would be up to 10,909 households and 34,988 jobs.
- Alternative 2 allows for growth well above Alternative 1 but less than Alternative 3. Alternative 2 would provide for 6,600 new dwellings, and 23,700 new jobs. For the year 2044, the anticipated total growth levels would be up to 8,509 households and 28,688 jobs.

Action Alternatives would create capacity for the City to advance its Comprehensive Plan beyond the current 2035 planning horizon, looking ahead to the next 2044 planning horizon and associated regional growth projections. By 2024 the City would conduct a periodic review of its Comprehensive Plan consistent with GMA for the 2044 horizon.

Exhibit 1-11. Alternative Housing and Job Comparisons



Source: Mithun, 2020; BERK, 2020.

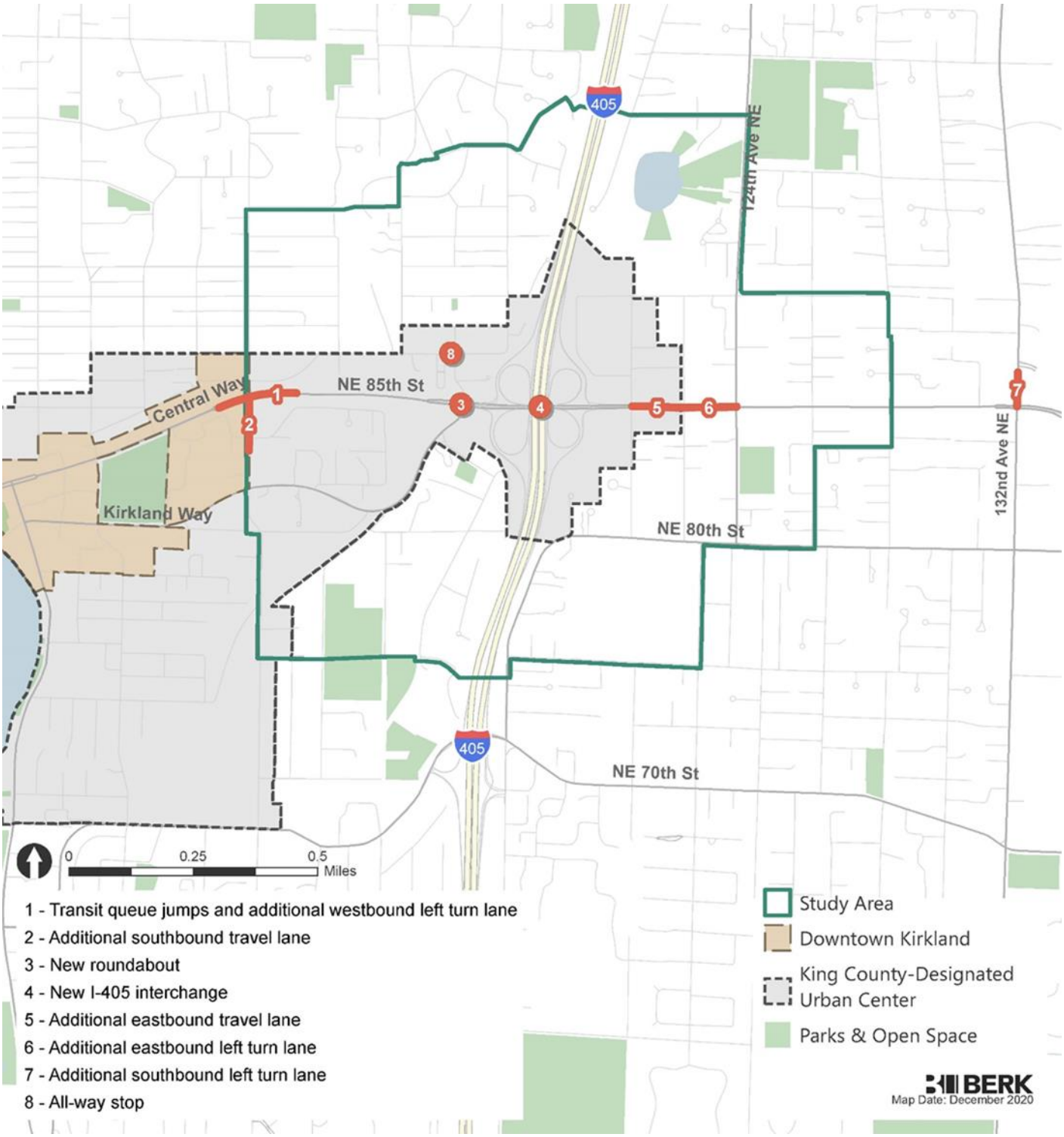
Transportation Investments

Transportation System Improvements: All alternatives reflect the same transportation network assumptions pertaining to traffic operations, as shown in Exhibit 1-12. These include:

- Transit queue jumps and an additional westbound left turn lane at NE 85th Street & 6th Street
- An additional southbound travel lane between NE 85th Street and 4th Avenue
- A roundabout at NE 85th Street & Kirkland Way/114th Avenue NE
- Redesigned I-405 interchange on NE 85th Street
- An additional eastbound travel lane on NE 85th Street between 120th Avenue NE and 122nd Avenue NE
- An additional eastbound left turn lane on NE 85th Street between 122nd Avenue NE and 124th Avenue NE (implemented in 2020)
- An additional southbound left turn lane on 132nd Avenue NE at NE 85th Street
- A four-way stop (all-way stop) at 114th Avenue NE & NE 87th Street (implemented in 2020)

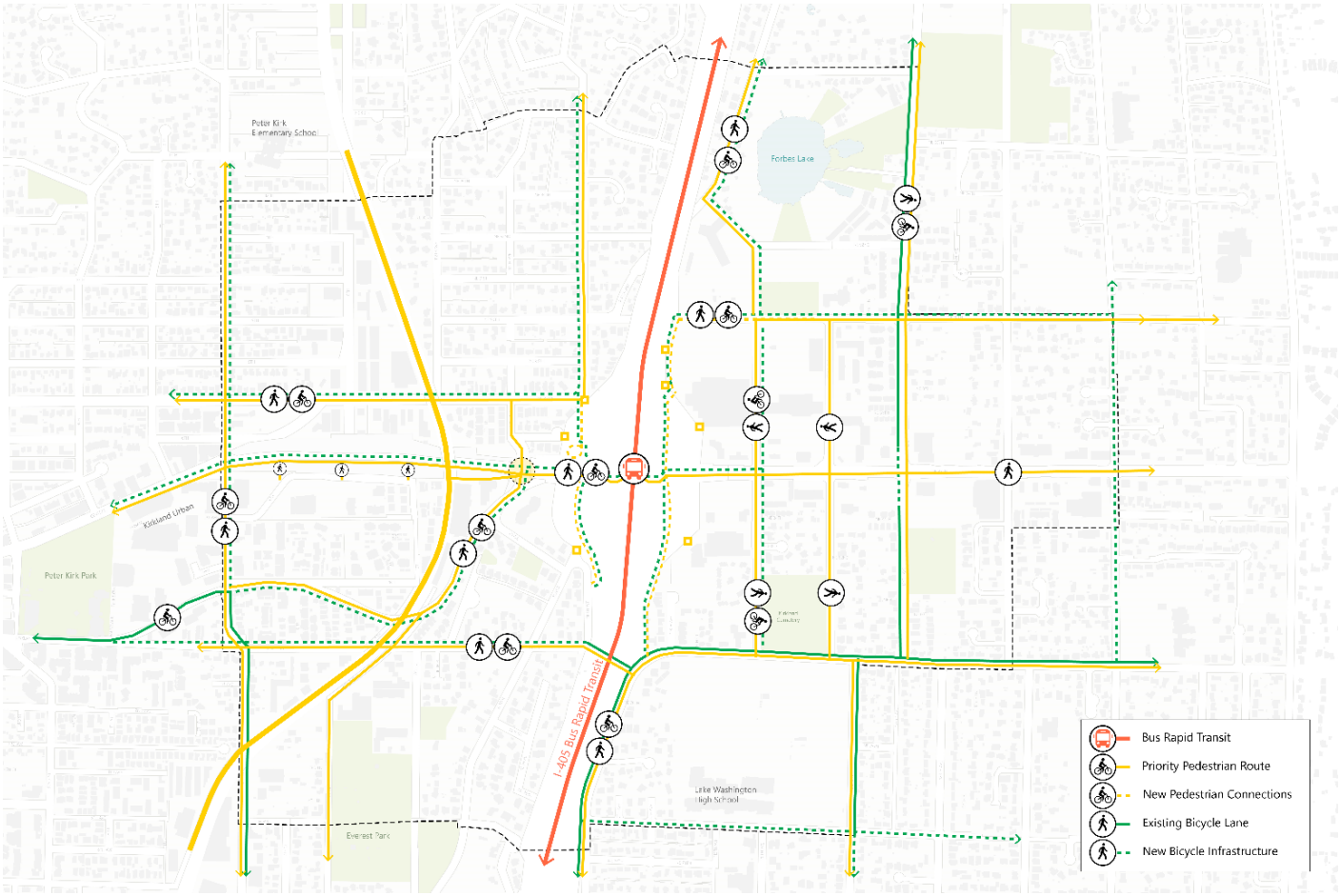
There are different transportation network assumptions for the future year alternatives related to bicycles, pedestrians, and parking, as shown in Exhibit 1-13, Exhibit 1-14, and Exhibit 1-15.

Exhibit 1-12. Traffic Operations Transportation Network Assumptions, Alternatives 1-3



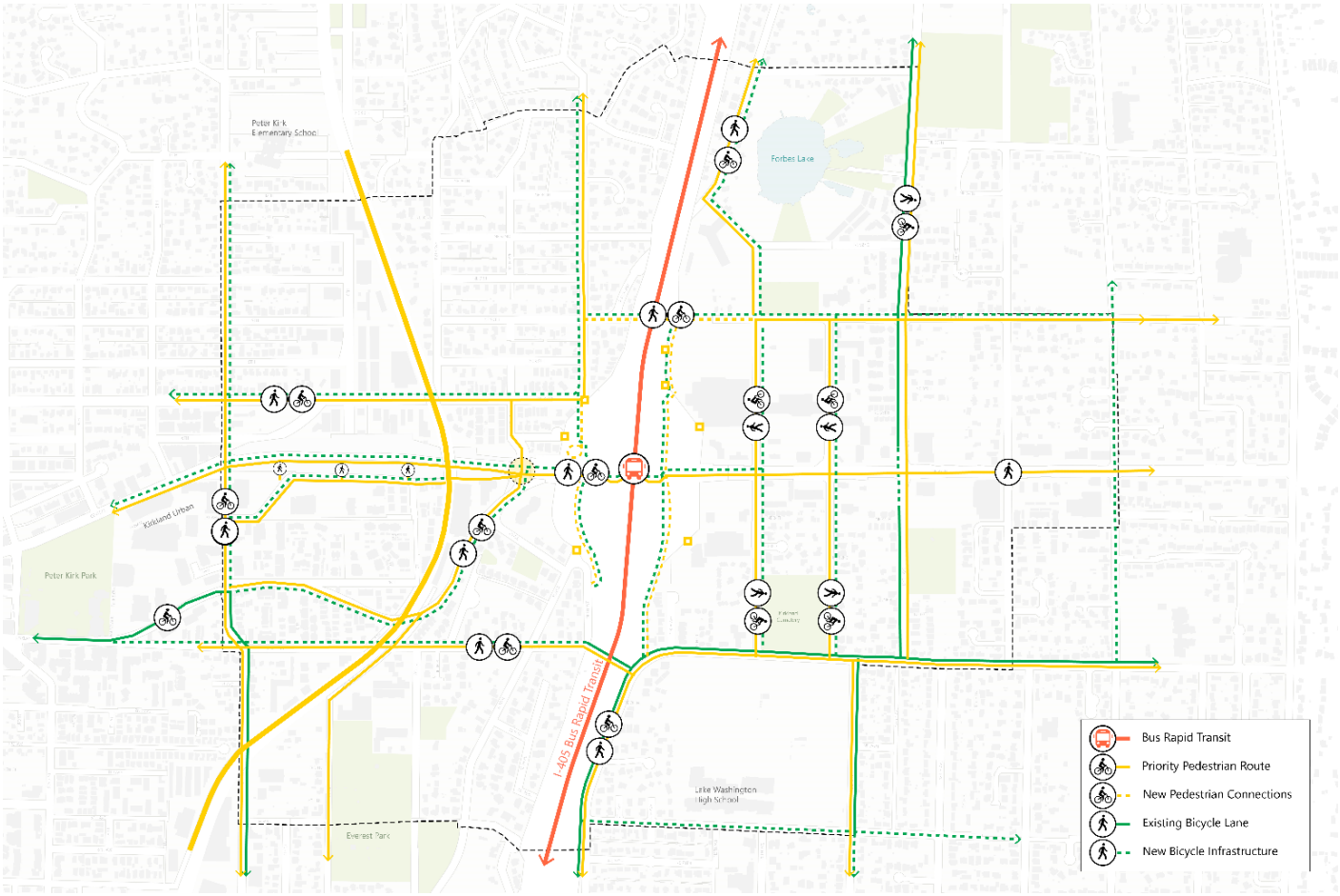
Sources: Fehr & Peers, 2020; BERK, 2020.

Exhibit 1-13. Multimodal Transportation Network Assumptions, Alternative 1 No Action



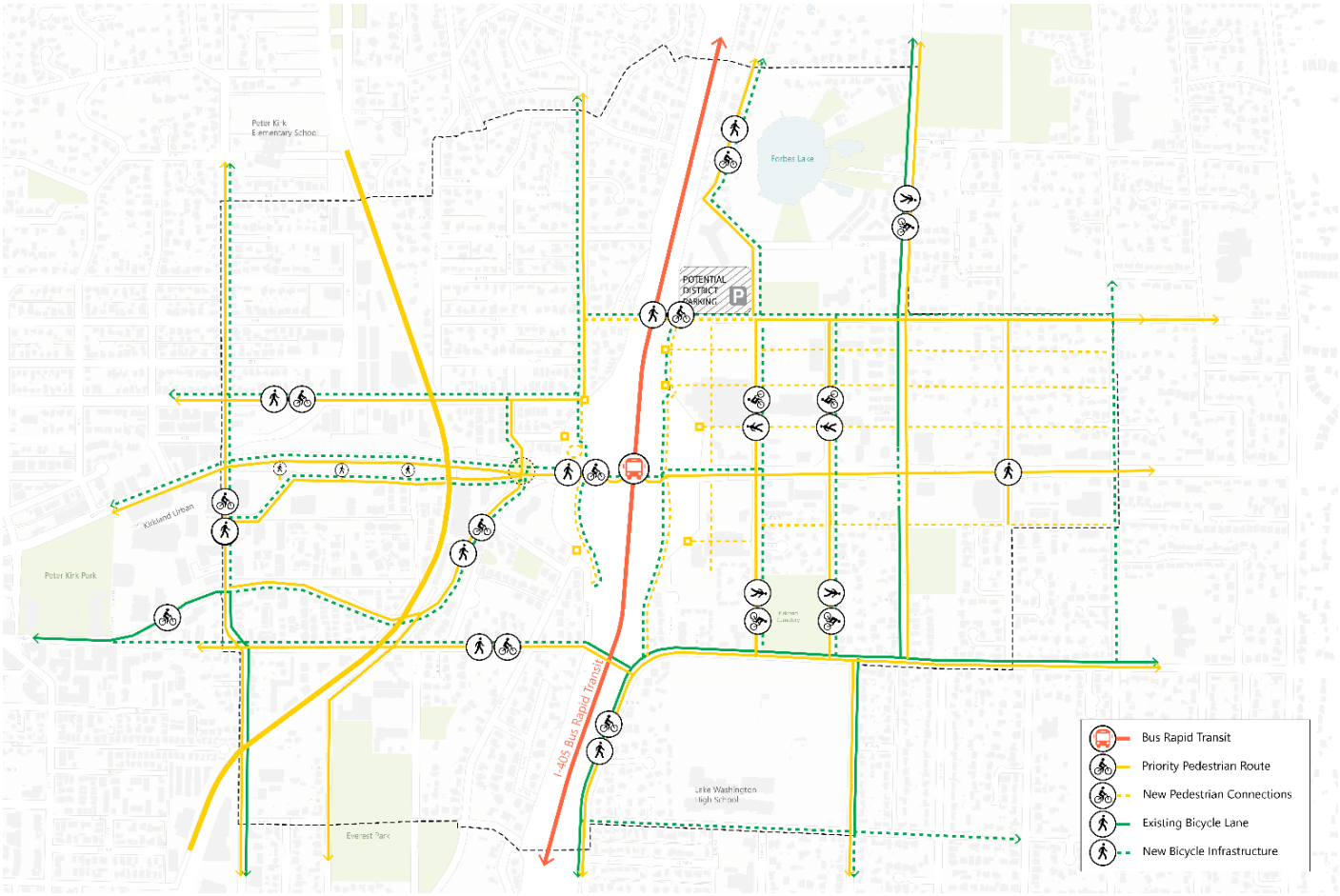
Source: Mithun, 2020; Fehr & Peers, 2020.

Exhibit 1-14. Transportation Network Assumptions, Alternative 2



Source: Mithun, 2020; Fehr & Peers, 2020.

Exhibit 1-15. Transportation Network Assumptions, Alternative 3



Source: Mithun, 2020; Fehr & Peers, 2020.

Parking: As the Study Area will benefit from proximity to planned high capacity transit and regional bike trail access, there may be a lessened need for onsite parking. The Action Alternatives manage transportation demand through parking ratios and system facilities and management:

- **Ratios:** The GMA was also amended in 2020 to limit how high parking ratios can be for housing in a quarter mile of a transit stop with frequent service, applicable to accessory dwelling units and affordable, senior/disabled, and market rate housing. (RCW 36.70A.620 and 698) Thus, the Action Alternatives test alternative parking ratios.
- **District parking facility (Alternative 3 only):** A district parking facility is conceptually located within Rose Hill commercial area that provides shared access to parking for commercial area users, visitors and residents in mixed use areas but would not be available for commuters.

Mitigation measures in Section 3.6 Transportation explore transportation demand management which could include shared parking, parking management,

unbundled parking, paid parking, or monitoring.

Parks, Open Space, and Environment

Key environmental elements under both Action Alternatives include:

- Minimize development near Forbes Lake; retain existing environmental and land use regulations.
- Stormwater improvements included as part of the WSDOT 1 -405 Interchange project and individual site/project development or redevelopment.
- Districtwide green building standards / incentives.
- Major increase of on-site tree canopy through green street midblock connections in Rose Hill and potentially within proposed open spaces.
- For Alternative 3 only, "Blue Street" reconstruction and streetscape improvements for 120th Ave NE to provide stormwater conveyance, attenuation (detention), and water quality treatment.

These green features are described further in Chapter 2.

The Action Alternatives would promote policies and regulations that could add parks and open space and support the natural environment and aesthetics, including:

- Neighborhood Parks and Pea Patches: There may be opportunities for park acquisition, or implementation of public or private pea patches in new developments (e.g. Pike Place Urban Garden).
- Neighborhood Linear Parks: As part of new streets or through block connections, linear parks and enhanced landscaping could contribute to the greenness of the area.
- Site Scale: At a site level the Form-Based Code would create standards for a pedestrian oriented public realm, and buildings could be required to meet a green factor (e.g. like Seattle or Denver). There could be requirements for public plazas and publicly accessible open space along with new mixed use and office developments.

These concepts are explored more in Section 3.7 Public Services.

Affordable Housing

With the increase in growth capacity, Action Alternatives would enhance affordable housing policies, incentives, and requirements to implement the Kirkland Housing Strategy Plan (City of Kirkland, 2018) and to address the increased demand for housing. Actions could include increased inclusionary

housing requirements, increased bonus densities, establishing commercial linkage fees, and participating in regional efforts to establish funding mechanisms to support affordable housing development including infrastructure and amenities. Under Alternative 2 the level of density bonuses, incentives, or inclusion requirements would be less than for Alternative 3 since it would be scaled to capacity or value increases. The range of policy and regulation options are reviewed in Section 3.3 Land Use Patterns and Socioeconomics and mitigation measures.

1.5 Key Issues and Options

The key issues facing decision makers include:

- Approval of a Station Area Plan including a vision, goals and policies, land use concept including changes to map designations and infrastructure investments as well as consistency edits to the Comprehensive Plan;
- Approval of a Planned Action Ordinance to help incentivize growth while mitigating impacts.
- Approval of a Form-Based Code to provide for improvements to the public realm, relationship of buildings, and quality materials, emphasizing design over use.
- Identifying the desired land use pattern and growth levels to respond to and integrate the Stride BRT Station and provide for housing and job opportunities.
- Identifying the mix of infrastructure and transportation demand management investments to ensure multimodal transportation options and levels of service.
- Consideration of alternative open space and park investments suited to a transit-oriented urban neighborhood.
- Accommodating school facilities in an urban environment.
- Creating a mix of incentives and requirements to address equity and support large and small households and large and small businesses.

1.6 Summary of Impacts and Mitigation Measures

1.6.1 Air Quality/Greenhouse Gas Emissions

How did we analyze Air Quality/Greenhouse Gas Emissions?

For this evaluation, the King County SEPA Greenhouse Gas (GHG) Emissions Worksheet was used to estimate the GHG emissions associated with embodied and energy emissions. Using the existing land use in the Study Area, the total vehicle miles traveled (VMT) was calculated using Fehr & Peers' MXD+ trip generation tool.

What impacts did we identify?

Under all studied alternatives embodied emissions associated with redevelopment and the energy emissions generated would increase compared to existing conditions due to the intensified land use. Vehicle emission rates are expected to be lower in 2035 as vehicles become more fuel efficient due to more stringent regulations; therefore, each VMT will contribute fewer GHG emissions to the environment. However, the transportation emissions are expected to increase under each studied alternative.

What is different between the alternatives?

The alternatives would be considered to result in significant GHG emission impacts under the following conditions:

- Alternative 1 No Action if it increased per capita emissions compared to existing conditions.
- Alternatives 2 and 3 if they increased per capita emissions compared to Alternative 1 No Action.

Under the analysis, Alternative 1 does not increase per capita emissions above existing conditions; it would be reduced on a per capita basis. Alternatives 2 and 3 would reduce per capita emissions compared to Alternative 1 No Action.

Exhibit 1-16. Lifetime GHG Emissions of the Study Area Studied Alternatives

Emissions ($MTCO_2e$)	Existing Conditions	Alternative 1 No Action	Alternative 2	Alternative 3
Embodied Emissions	227,100	371,800	778,300	922,900
Energy Emissions	4,032,700	7,967,300	13,687,000	15,111,400
Transportation Emissions	2,401,900	3,737,000	6,325,500	6,783,400
Total Emissions	6,661,700	12,076,100	20,790,800	22,817,700
Population + Jobs	9,175	16,640	45,010	55,710
Emissions per Capita	726	725.5	460	410

Sources: King County SEPA GHG Emissions Worksheet, 2019; Fehr & Peers, 2020.

What are some solutions or mitigation for impacts?

Based on the evaluation above and in Section 3.1 Air Quality/Greenhouse Gas no significant impacts are expected under the studied alternatives. However, given the greater growth anticipated and to be consistent with City's Comprehensive Plan, Climate Protection Action Plan, Sustainability Master Plan, and SEIS scoping input, the following are offered as mitigation measures.

- Dense landscaping along roadways can reduce air pollutants and green infrastructure is a source of potential air emission mitigation at a microscale. The Action Alternatives would include green streets with optimal implementation of landscaping.
- Alternatives 2 and 3 propose growth near I-405 that is office-focused with residential and mixed uses buffered by office uses to reduce the potential for localized air quality effects on vulnerable populations and improve land use compatibility adjacent to the freeway.
- The City's Comprehensive Plan Environment Chapter cites promotion of cleaner fuels, a reduction in vehicle miles of travel, and more reliance on renewable energy as three key transportation related actions to meet the City's GHG reduction targets.
- Kirkland's Climate Protection Action Plan (CPAP) 2013 and 2018 Gas Emission Report promote reduction in GHG.
- In the Form-Based Code, the City could include site by site green building standards or implement districtwide green building standards / incentives, credentialing programs (e.g. Living Building Challenge, LEED, Passivhaus, Built Green, etc.), and district energy.

With mitigation, what is the ultimate outcome?

Based on the evaluation above and in Section 3.1 Air Quality/Greenhouse Gas, there are no significant unavoidable adverse impacts expected under the studied alternatives.

1.6.2 Surface Water and Stormwater

How did we analyze Surface Water and Stormwater?

The 2015 Comprehensive Plan Final EIS addressed current conditions, impacts, and mitigation measures on constructed drainage facilities and natural surface water bodies. The 2015 evaluation was reviewed and synthesized to include consideration of tree canopy, which was not explicitly addressed in the prior EIS. Impacts would be considered to rise to the level of significance when:

- **Stormwater**. Projects result in at least one of the following:
  - Create impervious surfaces without stormwater management that increase the rate and volume of stormwater entering the City's separated storm sewer system, exceeding its conveyance capacity and causing local flooding or degrading habitat in downstream receiving waters due to streambank erosion or changes in wetlands hydroperiod.
  - Release untreated stormwater from pollution generating hard surfaces that leads to a decrease in water quality in local receiving waters.
  - Release stormwater contaminated with silt or other pollutants during construction.
- **Surface Waters (including streams and wetlands).** If streams would receive substantial changes in flow volumes and velocities that affect water quality and habitat and cannot be mitigated. Surface water impacts are also of significance if wetlands or wetland buffers are filled or substantially reduced in function and these losses cannot be mitigated.
- **Tree Canopy.** If the project would cause a net loss in the City's overall current 38% tree canopy coverage.

What impacts did we identify?

Stormwater

Additional growth and development would likely increase the total amount of impervious surface in some parts of the Study Area under all alternatives, creating additional stormwater runoff that would require management and treatment.

Existing development regulations would require this new development, however, to implement stormwater flow control and water quality treatment thus mitigating its impacts.

Redevelopment within the Study Area at higher densities would likely result in improved water quality and a reduction in peak run-off rates as older developments with outdated stormwater controls are replaced by new developments with modern stormwater controls. Low Impact Development (LID) practices are expected to improve water quality and the hydrologic regime of the run-off, in particular for the peak flows and durations from smaller storm events.

Wetlands and Streams

Development allowed under each alternative could result in impacts to Forbes Creek and the unnamed stream located in Moss Bay Basin, as well as wetlands along the eastern portion of the Study Area. Under all alternatives, the increase in impervious surfaces and decrease in tree canopy cover associated with development would increase the flow volume and velocity during storm events and reduce baseflow during drier periods. The required implementation of LID practices would mitigate for this impact to flow and minimize the impact to associated stream and wetland habitat. Redevelopment would improve stream and wetland habitat by implementing current stormwater controls including LID practices, requiring appropriate buffer widths, and retaining existing native vegetation.

Tree Canopy

Tree canopy will also continue to be analyzed under the current 8-year tree canopy study cycle under all alternatives.

What is different between the alternatives?

Stormwater

While all alternatives would implement LID practices, the Action Alternatives promote a multifunctional green street as a location for green infrastructure as private development occurs. Alternative 3 also promotes a blue-green street concept for 120th Avenue NE that could include a "complete street" with vegetated green stormwater infrastructure, traffic calming, bike/pedestrian mobility, and/or place making design elements. Under Alternatives 2 and 3, private green streets would be identified in the Station Area Plan and Form-Based Code regulating plan to enhance tree canopy and green infrastructure.

Wetlands and Streams

Changes to stream and wetland habitat would be minimal under the No Action Alternative and less than either Action Alternative due to reduced development activity. Development activities under the No Action Alternative would be consistent with current land-use planning and environmental regulations and would not further encroach on stream or wetland buffers – fewer legacy stormwater systems would be upgraded to current standards, however, so water quality may improve more slowly under the No Action Alternative. Similarly, with less development activity there may be fewer opportunities to enhance habitat through mitigation projects.

Under the Action Alternatives, the area west of 120th Avenue NE and north of NE 90th Street would allow mid-rise office buildings near the FORBES 17 wetland buffer and the buffer for Forbes Creek, mainly within the footprint of the existing development. Development adjacent to stream and wetland buffers has the potential to reduce buffer functions by increasing the amount of stormwater flowing into the buffer, thereby decreasing water quality functions and increasing disturbance, which can reduce habitat quality. The use of stormwater quality and flow control practices (including LID practices) during development would ameliorate some of these adverse effects to water quality. If development resulted in temporary impacts to buffers during construction, habitat would be enhanced by planting native species and removing invasive species in restored areas.

Tree Canopy

Infill and development activities under the No Action Alternative would likely result in a relatively slow rate of both tree removal and subsequent planting. Canopy loss would be limited in scope but could be relatively drawn out as small numbers of trees are occasionally removed, replanted, and gradually reach maturity.

Greater and more rapid development under the Action Alternatives would likely result in more abrupt loss of canopy. For example, tree canopy may be lost through infill development in residential areas and redevelopment of existing commercial areas and large parking lots with tree cover into mixed-use areas. Building height and proximity to potential planting areas in public rights of way (ROW) could also impact existing trees or restrict the choice of tree species for future plantings to those with a smaller or more columnar structure, potentially limiting tree canopy coverage.

The Action Alternatives estimate a maximum tree canopy loss of 67-68 acres within parcels identified for development and adjacent public ROW (the potential tree

canopy impact areas).[2] However, development would be subject to tree retention codes and street tree requirements, and replanting would occur more rapidly under the Action Alternatives. Public ROW would generally be used as a planting opportunity to offset canopy lost through development – any street trees removed because of adjacent property development would be replanted in the ROW to the full extent possible or in suitable locations in the city outside the Study Area. An estimated 25 acres of the maximum loss in tree canopy coverage under the Action Alternatives could be replanted in the Study Area, and incrementally more planting area could be added if new green streets are developed.[3]

What are some solutions or mitigation for impacts?

Existing City plans, policies, and development regulations address mitigation of impacts to stormwater, critical areas, and tree canopy:

- The City regulates surface water management in KMC Chapter 15.52 and provides standards for LID principles in KZC Chapter 114.
- The City regulates wetlands and requires buffers in accordance KZC Chapter 90.55.1, and uses the Washington State water typing system to categorize streams and other water bodies based on fish habitat and seasonal flows. Modifications to wetlands, streams, and associated buffers are prohibited except under certain circumstances (KZC Chapter 90.60 and 90.70).
- Policy E-2.1 of the Comprehensive Plan establishes an objective to achieve a healthy, resilient urban forest with citywide 40% tree canopy coverage.
- The 2013 Urban Forestry Strategic Management Plan outlines long-range management strategies towards a healthy, sustainable urban forest.
- A Tree Retention Plan for individual development projects must be developed under all alternatives, including inventory and survey of significant trees that may be impacted by the proposal (KZC Chapter 95). A forest management plan may be required for significantly wooded sites greater than 35,000 square feet. New tree canopy would be added with new street tree plantings, installation of required landscaping, and general project landscaping. The City is in the process of updating KZC 95 regulations, with adoption slated for mid-2021.

Under both Action Alternatives, the City would require projects to implement

[2] The potential impact area of Alternative 3 could affect slightly more trees and acres of canopy than the other alternatives. There are an estimated 1,032 trees and 67.36 acres of tree canopy cover in the potential impact area of Alternative 2, and an estimated 1,039 trees and 68.03 acres of canopy across all property ownership types in the potential impact area of Alternative 3.
[3] Although 25 acres are available to be planted, the trees planted in these areas will at maturity extend beyond the planting limits and result in canopy coverage greater than the planting area. Coverage area would depend upon the species planted and planting conditions.

enhanced stormwater treatment for all hard surfaces, requiring treatment within the Forbes Creek watershed above existing stormwater code requirements. All projects that drain to Forbes Lake within a designated Sensitive Lake WQ Treatment Area that trigger water quality treatment would apply area-specific water quality treatment requirements from Section 1.2.8.1 of the King County Surface Water Design Manual. Both Action Alternatives may also implement measures from the Water & Sustainability Options Matrix to provide additional mitigation (see Appendix B).

Tree loss should be minimized where possible through the development of a Tree Protection Plan that is required under existing regulations, with an emphasis to retain and protect high-value, significant trees.

Other potential mitigation measures could include:

- It may be necessary to replace some lost tree canopy coverage outside of the Study Area. Recommended locations for tree plantings outside the Study Area include residential neighborhoods, public open space, parks, and stormwater retention facilities.
- The City could use unconventional potential planting opportunities within impervious surfaces using suspended pavement systems (Silva cell) to maximize replanting within the Study Area.
- Where replanting within the Study Area is not possible, an in-lieu-fee option may provide flexibility to fund and support best management practices outlined in the City of Kirkland Urban Forestry Strategic Management Plan.

With mitigation, what is the ultimate outcome?

No significant unavoidable adverse impacts are expected to stormwater and surface water.

There may be indirect impacts to stream and wetland buffers due to increased development adjacent to buffers. No additional impacts to streams or wetlands are anticipated in any alternatives.

Based on Citywide data from historic canopy assessments, the Study Area would see near-term canopy loss under all alternatives as larger trees are removed to make way for redevelopment. The rate of near-term canopy loss likely accelerates based on the intensity of allowed development. The tree canopy would be restored over time as replacement trees reach maturity; however, all alternatives may result in significant unavoidable impact to city-wide tree canopy coverage temporarily over the next 10-20 years.

1.6.3 Land Use Patterns and Socioeconomics

How did we analyze Land Use Patterns and Socioeconomics?

The evaluation of land use includes a review of current land use and planned land use spatial data, as well as demographic data from regional, state, and federal sources.

What impacts did we identify?

Land use and socioeconomic impacts would be considered to rise to a significant level if there are:

- Differences in activity levels at boundaries of uses of different intensities likely to result in incompatibilities.
- Intensities of expected growth likely to have an impact on direct displacement of a marginalized population (low-income people, people of color).
- Inadequate physical capacity to accommodate growth and displaced residents and businesses.
- Developments at intensities that would not support transit investments.

Land Use Growth and Activity Levels: The studied alternatives allow for mixed use growth that is more intense than the largely low rise development that exists today. All alternatives allow a range of housing types in low, medium, and high density districts. All alternatives allow for commercial office, retail, and industrial development.

Capacity for Growth and Displacement: Under all alternatives most of the change in land use and growth would occur in Census Tract 53033022604, the Rose Hill area east of I-405. This Census Tract has a low opportunity index, and a quarter of the current residents are persons of color. There is a relatively low potential for displacement of small and ethnic businesses. All alternatives provide capacity for growth; to the extent there are limited displacements, there is capacity under all alternatives to contain space to accommodate households and businesses of different sizes.

What is different between the alternatives?

Growth and Change in Intensity: All alternatives allow for increased growth in the

Study Area, with No Action the least and Alternative 3 the most. All Alternatives would maintain a pattern of greater mixed use or employment intensity near NE 85th Street and I-405, though Alternatives 2 and 3 create a more distinct difference in intensity of uses in the northeast and southeast quadrants of the interchange where there are more abrupt changes in intensity from these uses to medium and lower density residential.

Employment Uses along I-405 and Air Quality Buffer: At a programmatic level, the Action Alternatives consider business oriented and residential mixed uses similar to allowances found today in the No Action Alternative along NE 85th Street. Compared to the No Action Alternative, Action Alternatives provide a transition or buffer of greater employment uses along I-405 in the northeast and southeast; residential uses would be located beyond these office-focused areas further from I-405. This would help avoid residential uses along the freeway with exposure to air quality emissions.

Support of Transit Investments: All alternatives would increase activity units in the station area with Alternatives 2 and 3 exceeding the activity unit density required, though the Station Area is only a portion of a larger proposed Regional Growth Center.

What are some solutions or mitigation for impacts?

The mitigation measures include existing and expanded policies and regulations addressing compatible land uses, affordable housing, and displacement:

- Apply zoning and design guidelines.
- Implement the Kirkland Housing Strategy to establish a TOD district with amenities and range of housing styles.
- Expand Inclusionary housing.
- Creating density bonuses that prioritize affordable housing.
- Establish Commercial Linkage Fees.
- Establishing minimum requirements for family-size units, so a range of households can live in the Study Area.
- Requirements that development provide a minimum number of activity units to achieve its desired transit oriented development, as well as establish an expected amount of affordable housing.
- Commercial space standards for both small and large businesses in new developments to retain area businesses in new urban formats. Building flexible tenant spaces that can accommodate small businesses can make the spaces more affordable.

With mitigation, what is the ultimate outcome?

Under all alternatives, additional growth would occur in the Study Area, leading to a generalized increase in building height and bulk and development intensity over time, as well as the gradual conversion of low-intensity uses to higher-intensity development patterns. This transition would be unavoidable, but it is not significant and adverse since this is an expected characteristic of a designated Urban Center in the Countywide Planning Policies.

In addition, future growth is likely to create localized land use compatibility issues as development occurs. The potential impacts related to these changes may differ in intensity and location in each of the alternatives. However, with the combination of existing and new development regulations, zoning requirements, and design guidelines, no significant unavoidable adverse impacts are anticipated.

As the area develops, there may be displacement of existing jobs as most of the areas of intensification are in commercial or mixed use areas; however, there is sufficient employment space under any alternative to relocate the businesses and thus no significant unavoidable adverse impacts are anticipated.

All alternatives could see some risk of displacement of existing residents or businesses; this risk would be higher under Alternatives 2 and 3 but so would the capacity for relocation in new housing units. Alternatives 2 and 3 would increase substantially the capacity for housing that could better meet demand. Increasing affordable housing programs and incentives for providing units affordable to diverse income groups and to investment in affordable housing development could offset affordability pressures. Measures to encourage small businesses in the Form-Based Code would also help avoid displacement and create a more vibrant urban hub. The capacity of alternatives together with mitigation measures encouraging and requiring affordable housing and a variety of employment space should avoid significant adverse impacts.

1.6.4 Plans and Policies

How did we analyze plans and policies?

This SEIS analyzes pertinent plans, policies, and regulations that guide or inform the proposal. These include the GMA, Vision 2050, the County Countywide Planning Policies (CPPs), and the City's Comprehensive Plan, including applicable neighborhood plans. The alternatives were reviewed for consistency with each of these plans and policies. A finding of inconsistency or contradiction

with plans and policies would be considered to result in a significant adverse impact.

What impacts did we identify?

All alternatives are generally consistent with plans and policies. In a few cases, policies in the Rose Hill Neighborhood Plan speak to considerations that have not been fully addressed in the Station Area Planning process. Future development of the SAP, development regulations, and design guidelines should include review of these selected policies, as noted in the mitigation measures, to determine applicability and potential need for comprehensive plan amendments.

What is different between the alternatives?

The plans and policies analysis found that the proposal considered in Alternatives 2 and 3 would be consistent with the guidance and requirements of the GMA, PSRC Vision 2050, King County CPPs, and Kirkland Comprehensive Plan. In general, the Action Alternatives would result in greater capacity, amenities, and services to support the future station area compared to the No Action Alternative.

What are some solutions or mitigation for impacts?

The following mitigation measures address potential policy inconsistencies:

Incorporated Plan Features

- All alternatives would accommodate the City's 2015-2035 growth targets for housing and employment identified in the Comprehensive Plan, as well as general guidance supporting transit-oriented development in the vicinity of the new BRT station at the I-405/NE 85th St interchange.

Regulations and Commitments

- As required by GMA, the City must submit proposed Comprehensive Plan amendments and updated regulations for review and comment by the State prior to final adoption.

Other Proposed Mitigation Measures

- The relationship of the SAP to neighborhood plans should be specifically articulated in the Comprehensive Plan.
- Rose Hill Neighborhood Plan policies RH-24, RH-27, RH-29, and RH-30 should be reviewed to determine the need for amendments to the Comprehensive Plan

or potential inclusion in future development regulations/design standards.

– The City will consider the need for design standards and other measures to ensure that residential character is retained as infill development occurs.

With mitigation, what is the ultimate outcome?

With mitigation the proposal would be consistent with state, regional, and local policy guidance, and requirements.

1.6.5 Aesthetics

How did we analyze Aesthetics?

This SEIS evaluates the scale and visual quality of development that would potentially occur under each of the alternatives, including the effects of proposed building height increases on community character, views, and shading conditions. The SEIS documents existing conditions in the Study Area, including current development typologies, allowed building heights, and overall visual and architectural character. The alternatives were reviewed for potential effects on the visual environment associated with future development.

The aesthetics analysis assess impact related to visual character, views, shading conditions, and light and glare.

What impacts did we identify?

Under all alternatives, construction of regional transit infrastructure in Kirkland would continue, including the NE 85th Street BRT Station, and additional population and employment growth would occur in the Study Area, primarily focused in the existing Rose Hill Business District. Additional growth in the Study Area would gradually increase development intensity over time, which would result in a transition to a more urban visual character with taller, more massive buildings that have the potential to affect views and shading conditions in the Study Area. Additional development and associated vehicular traffic would also increase the level of light and glare in the Study Area.

What is different between the alternatives?

The Action Alternatives would allow substantially more development and taller building heights than existing conditions or the No Action Alternative, increasing

the intensity of development and creating a more urban visual environment. These larger buildings would also potentially increase ground-level shading conditions and alter the pedestrian experience. In general, Alternative 3 would have greater potential for adverse impacts than Alternative 2 because it would allow taller buildings heights and an overall greater level of development in the Study Area.

None of the alternatives are anticipated to have significant adverse effects on protected public views.

What are some solutions or mitigation for impacts?

Adverse effects could be minimized through application of design standards included in the proposed Form-Based Code, and the Action Alternatives would also include plans for the construction of additional streetscape improvements and bicycle/pedestrian connections.

In addition to the City's existing design standards and development regulations, recommended design standards include the following:

- Additional ground-level setback, upper-story stepback, or building height transition standards for sites abutting low-density residential properties;
- Limits on the size and footprint of tower-style development including regulating the relationship of building massing to site open space;
- Limits on building site coverage;
- Transitional bulk, height, orientation, or landscaping standards at boundaries of higher and lower intensity typologies;
- Privacy standards to control window placement and require additional setbacks where mixed-use or commercial development faces lower-density residential uses; and
- Use of mid-block connections to break up building massing and improve the pedestrian environment.

With mitigation, what is the ultimate outcome?

Under all Alternatives, additional growth and infill development would occur in the station area, gradually increasing the level of development intensity and altering the existing architectural and visual character. These changes would occur under all alternatives, though the changes would be most pronounced under Alternative 3. With implementation of the mitigation measures described above and in Section 3.5, Aesthetics, including adoption of the proposed Form-Based Code, the visual character of the station may experience positive effects,

and no significant unavoidable adverse aesthetic impacts are anticipated.

1.6.6 Transportation

How did we analyze Transportation?

The Bellevue-Kirkland-Redmond (BKR) travel demand model was used to develop 2035 traffic volume forecasts for Alternative 1 No Action; they are based on the land use forecast and transportation infrastructures adopted in the 2035 Comprehensive Plan. These forecasts account for the current zoning of the Study Area and the background growth assumed for the rest of the city and region, consistent with adopted local and regional plans. MXD+, a trip generation tool that accounts for the variation in land use type and density, was applied to estimate the vehicle trips that would occur under Alternatives 2 and 3. Alternatives 2 and 3 are tested on a regional 2035 transportation network (since the travel demand model only exists out to 2035 Comprehensive Plan date) while the land use and transportation network in the Study Area reflects growth that could occur through the 2044 horizon year, making it a conservative transportation analysis for the subarea because it compresses growth trends into a shorter timeframe than anticipated.

The following conditions would be considered to result significant impacts for the two Action Alternatives:

Auto and Freight:

- Vehicle level of service (LOS) operates at LOS E or below at a study intersection that operated acceptably under Alternative 1 No Action or has a substantial increase in delay at a study intersection already expected to operate at or below LOS E under Alternative 1 No Action.[4]
- Queues from a downstream intersection expected to spill back to a study intersection that would not experience queues under Alternative 1 No Action or long queues not anticipated under Alternative 1 No Action that would require waiting at an intersection for several cycles before proceeding.

Transit:

- Projected transit ridership would result in passenger loads exceeding King

[4] Per the City's TIA Guidelines, which are intended for individual developments, intersections operating at LOS E or F may be defined as impacts depending on the project's proportional share of traffic. Because the scale of the action alternatives is much larger than an individual development, as shown in Exhibit 3-21, the action alternatives would exceed the 5% and 15% proportional share thresholds found in the TIA Guidelines. Therefore, the applicable threshold for significance for this EIS is LOS E.

County Metro/Sound Transit guidelines on a route serving the Study Area that would operate acceptably under Alternative 1 No Action or increases the passenger load by at least 5% on a route that already exceeds the guidelines.

– Action Alternatives would preclude the transit upgrades identified in the Transit Implementation Plan.

Bike/Pedestrian:

– Add bicycle or pedestrian demand to locations that lack facilities meeting City standards beyond the level anticipated under Alternative 1 No Action.

Parking:

– Result in on-street parking demand exceeding supply beyond the level anticipated under Alternative 1 No Action.

Safety:

– Increases the collision rate at a study intersection compared to Alternative 1 No Action.

What impacts did we identify? What is different between the alternatives?

Under all alternatives, PM Peak Hour trips would increase, though greatest under the Action Alternatives. See Exhibit 1-17.

Exhibit 1-17. PM Peak Hour Vehicle Trips Generated, All Alternatives

Alternative	PM Peak Hour Vehicle Trips	Net Change in Trip Generation Compared to No Action Alternative
Existing	4,559	-
No Action (2035 land use)	10,315	-
Alternative 2 (2044 land use)	17,601	7,286
Alternative 3 (2044 land use)	19,473	9,158

Source: Fehr & Peers, 2020.

A summary of modal impacts is presented in Exhibit 1-18. Based on the expected growth in trips, there would be added queues and congestion on area roadways and intersections affecting auto modes and safety with the greatest impacts under Alternative 3 and the least under Alternative 1. Alternative 2 affects nearly the same number of intersections as Alternative 3 though delay would often be

less under Alternative 2 than for Alternative 3 (see results under Mitigation Measures). There would be greater need for transit to accommodate increased passenger loads. The alternatives provide for new bicycle and pedestrian connections with the greatest improvements anticipated under Alternative 3. Because future development is expected to facilitate additional demand and meet the City design standards related to bicycle and pedestrian facility accommodations, no significant adverse impacts to pedestrian or bicycle travel are identified.

Exhibit 1-18. Summary of Impacts: All Alternatives

Type of Impact	Alternative 1 No Action	Alternative 2	Alternative 3
Auto and Freight	LOS impacts at 2 intersections and queuing impacts	LOS impacts at 7 intersections and queuing impacts	LOS impacts at 8 intersections and queuing impacts
Transit	Study Area Impact for I-405 BRT North	Study Area Impact for Route 250 and I-405 BRT North	Study Area Impact for Route 250 and I-405 BRT North
Pedestrian & Bicycle	None	None	None
Parking	None	Study Area Impact	Study Area Impact
Safety	Study Area Impact	Study Area Impact	Study Area Impact

Source: Fehr & Peers, 2020.

What are some solutions or mitigation for impacts?

Incorporated Plan Features

Managing demand for auto travel is an important part of mitigating the traffic congestion impacts identified in this SEIS. The City of Kirkland currently incorporates a number of Transportation Demand Management (TDM) programs and strategies to encourage reduced vehicle travel by carpooling, vanpooling, transit, walking, biking, and teleworking. Policy T-3.4 and Policy T-3.5 in Kirkland's Comprehensive Plan outline specifics on the City's Commute Trip Reduction program and Transportation Management Plan requirements for developers and property owners. These strategies are discussed further under "Regulations and Commitments." The City has also utilized the following TDM strategies and programs: transit subsidies requirement for developers/property owners, Orca business passport program, vehicle ownership limitations through parking agreements and management for multifamily development, and guaranteed ride home. These strategies could be utilized more holistically with transit-oriented development in the Station Area.

Also, the NE 85th Street SAP assumes a few changes that would encourage

reduced vehicle travel in the Study Area, including:

- Improvements to the bicycle and pedestrian networks through new and/or wider sidewalks, bike lanes, cycle tracks, trails, and street connections.
- Revised parking code that reduces the amount of parking new developments must provide and requires parking monitoring.

Intersection Specific Improvements

Another potential approach to reduce the auto and freight intersection impacts is to make capital improvements to increase the capacity of the intersections and roadways in the Study Area. This section describes potential improvements to the study intersections that are operating at or below LOS E under Alternatives 2 and 3:

- Add an additional eastbound through lane on NE 85th Street east of 122nd Avenue NE.
- Adjust signal settings by optimizing cycle lengths and/or splits and using protected left turns at locations with high volumes.
- Extend the length of turn pockets where feasible to help reduce spillback into the through lanes.
- At NE 90th Street & 120th Avenue NE (intersection 4), add a traffic signal and a westbound left turn lane.
- At NE 80th Street & 120th Avenue NE (intersection 6), add a southbound left turn lane.
- At NE 90th Street & 124th Avenue NE (intersection 8), add a northbound and southbound lane on 124th Avenue NE, restripe the eastbound lanes to be an eastbound through/left lane and a right turn pocket, and change the signal settings to a split phase.
- At NE 85th Street & 124th Avenue NE (intersection 9), add a southbound left turn lane.

Exhibit 1-19 shows how much these improvements help to reduce delay under Alternatives 2 and 3. However, these intersections would still have substantially more delay than Alternative 1 No Action, so other programmatic or policy measures would be required to fully mitigate the impacts. The improvements were tested from a traffic operations perspective, but additional analysis would be necessary to refine the details of these improvements, including design feasibility and necessary right-of-way.

Another measure the City could consider implementing is additional intelligent transportation systems (ITS) elements into the corridor beyond the currently interconnected signal system that functions based on a traffic responsive timing

pattern. Additional treatments could include implementing performance monitoring software and a more advanced adaptive traffic signal timing system.

Additionally, it is worth noting that the analysis in the SEIS provides a conservative estimate of the growth in traffic volumes within the Study Area. Due to the forecasted increase in delay and queuing along NE 85th Street, it is likely that drivers who are not stopping within the Study Area would choose alternate routes. This could include trips within the City of Kirkland or trips for travelers from other areas that are entering and exiting I-405 via the NE 85th Street interchange.

The lack of east-west travel routes across I-405 also causes vehicle trips to be concentrated along NE 85th Street. This means that local trips within the City of Kirkland mix with a significant amount of regional traffic that is accessing I-405. Creating additional east-west vehicle connections across the freeway (not proposed or recommended) and increasing the network density would spread out the trips and reduce the congestion along NE 85th Street.

Exhibit 1-19. Alternative 2 and 3: 2044 PM Peak Hour LOS and Delay, With and Without Mitigations

				Alternative 2 LOS/Delay in seconds^		Alternative 3 LOS/Delay in seconds^	
ID	Intersection	Traffic Control	Alternative 1 No Action	No Mitigation	With Intersection Improvements	No Mitigation	With Intersection Improvements
1	NE 85th St & 6th St	Signal	**F / 86***	**F / 119^**	n/a	**F / 138^**	n/a
2	NE 87th St & 114th Ave NE	All-way stop	C / 16^	C / 18	n/a	C / 18	n/a
3	NE 85th St & Kirkland Way / 114th Ave NE	Roundabout*	B / 12^	B / 15*	n/a	D / 38*	n/a
4	NE 90th St & 120th Ave NE	All-way stop	D / 30	**F / >150**	**F / 122**	**F / >150**	**F / >150**
5	NE 85th St & 120th Ave NE	Signal	D / 46	**F / 114**	n/a	**F / >150**	n/a
6	NE 80th St & 120th Ave NE	Signal	B / 14	C / 32	C / 21	**F / 95**	C / 33
7	NE 85th St & 122nd Ave NE	Signal	A / 6^^	**E / 61**	n/a	**F / 102**	n/a
8	NE 90th St & 124th Ave NE	Signal	**E / 58**	**F / >150**	**F / 83**	**F / >150**	**E / 73**
9	NE 85th St & 124th Ave NE	Signal	D / 42	**F / >150**	**F / >150**	**F / >150**	**F / >150**
10	NE 85th St & 132nd Ave NE	Signal	C / 31	**F / 127**	**E / 65**	**F / >150**	**F / 150**

n/a no intersection improvements
^ Delays greater than 150 seconds (two and a half minutes) are not shown, as drivers are likely to seek out alternate routes instead of waiting at an intersection with extremely long delays.
* Roundabout analysis completed in SIDRA. WSDOT does not recommend the use of LOS as a comparative tool for SIDRA roundabout analysis. Three of the four approaches exceed WSDOT volume-to-capacity ratio threshold of 0.85 and two of these are overcapacity (v/c>1).
Source: Fehr & Peers, 2020.

Regulations and Commitments

The City of Kirkland has requirements on TDM programs and strategies:

- Washington State Commute Trip Reduction (CTR) law focuses on employers with 100 or more employees whose shifts begin during the typical AM commute. This law requires employers to develop commute trip reduction plans and work toward meeting their mode share targets through internal programs and monitoring. As more businesses subject to CTR locate in the Study Area, it is expected that decreases in single-occupancy vehicle (SOV) commute rates would result.
- Transportation Management Plans (TMPs) are required for property owners of newly constructed commercial buildings at the direction of the City. TMPs are designed to encourage new developments to reduce automobile trips and their traffic impacts on city facilities. TMP programs are generally geared toward large housing and commercial development; however, they could apply to smaller developments as well. However, the TMP program is underfunded and needs an ongoing funding mechanism to be able to effectively manage future TMPs.

The TDM programs discussed here would be implemented regardless of which land use alternative is selected and can have a substantial effect on travel behavior—something which is not fully captured by the travel demand modeling process. With a robust TDM program in place, it is expected that actual trip generation in the Study Area would be lower than that analyzed in the impacts section of this SEIS.

Additional Transportation Demand Management and Parking Strategies

Research by the California Air Pollution Control Officers Association (CAPCOA), which is composed of air quality management districts in that state, has shown that implementation of TDM programs can substantially reduce vehicle trip generation, which in turn reduces congestion for transit, freight, and autos. The specific measures described below are all potential projects that the City could consider modifying or expand current strategies:

- Unbundle parking to separate parking costs from total property cost, allowing buyers or tenants to forgo buying or leasing parking spaces if they do not park a car.
- Revise parking code to reduce the amount of parking new developments must provide, or implement parking maximums to further reduce the amount of parking supply in the Study Area beyond what is assumed under Alternatives 2 and 3. This would limit the number of parking spaces which can be built with new development.

- Implement managed on-street parking strategies (e.g. designate special use zone for activities such as loading/unloading or emergencies, implement time restricted parking, and charge for parking).
- Provide shared off-street parking with new developments.
- Charge for parking off-street.
- Implement requirements for robust monitoring and management of parking and the TDM measures in the Study Area to ensure that people are not parking in the surrounding neighborhood to avoid these parking management measures.
- Provide private shuttle service as a first mile/last mile solution to make the 85th Street Station more accessible from Downtown Kirkland, the Google campus, Kirkland Urban, and other destinations, and to provide an attractive transportation alternative for locations that are less served by fixed-route transit. Two shuttle routes should be explored – one to Downtown Kirkland and Kirkland Urban using NE 87th Street/7th Avenue and 5th Street, and one that goes to the Google Campus and shopping center at 108th Avenue NE & NE 68th Street using the Cross Kirkland Corridor. This could start as a pilot program in partnership with Uber or Lyft to provide subsidized rides to gauge demand for a shuttle.
- Encourage or require transit pass subsidies from developers/property owners.
- Encourage or require transit pass provision programs for residents— King County Metro has a Passport program for multifamily housing that is similar to its employer-based Passport program. The program discounts transit passes purchased in bulk for residences of multifamily properties.
- Expand upon Kirkland's Green Trip program to utilize commute marketing programs to advertise different commuting options and encourage walking, biking, transit use, carpooling, vanpooling, or other means of travel.
- Utilize an Emergency Ride Home program to provide a taxi voucher or other way for employees to travel home if an emergency or unexpected late work makes them miss their normal transit, carpool, or bike ride home.
- Partner with Transportation Network Companies (TNCs) such as Uber or Lyft to provide pooled ridesharing options, ideally as a last-mile connection to transit or as an aspect of an Emergency Ride Home program.
- Accommodate bicyclists by providing secure, covered and convenient bicycle parking at office and residential buildings; showers and lockers at offices; and public repair stations.
- Launch a bikeshare or other micromobility system in Kirkland.
- Utilize a Ridematch Program to assist potential carpoolers in finding other individuals with similar travel routes. These may be open or closed systems, but generally a larger population will have more potential matches.

Implementing the TDM strategies described above in addition to the intersection-specific improvements would help further reduce trips, as shown in Exhibit 1-20, but a separate LOS standard for the Study Area would likely still be necessary to fully mitigate the impacts at all the study intersections.

Exhibit 1-20. Trip Reduction from Transportation Demand Management (TDM) Strategies

TDM Strategy	Office	Residential	Retail
Parking			
▪ Parking pricing	6 – 11%	6 – 11%	6 – 11%
▪ Unbundled parking	---	Up to 8%	---
▪ Reduced supply	Up to 9%	Up to 9%	Up to 9%
Transit			
▪ Transit subsidies for employees and residents	Up to 5%	Up to 5%	---
▪ Last mile private shuttles	1 – 7%	Up to 9%	Up to 1%
Commute			
▪ Marketing campaigns	2 – 16%	3 – 21%	Up to 3%
▪ Emergency Ride Home Program	Up to 1%	---	---
▪ TNC partnerships	Up to 3%	---	Up to 1%
Bike/Walk	Up to 1%	Up to 1%	Up to 1%
▪ Secure parking			
▪ Showers & lockers			
▪ Public repair stations			
▪ Bikeshare system			
Rideshare	Up to 6%	Up to 6%	Up to 6%
▪ Ridematch Program			
Total of all Measures	**14 - 21%***	**19 - 23%***	**11 - 17%***

* Total trip reduction is not a simple sum of all the strategies since many of the strategies are complementary.
Source: Fehr & Peers, 2020.

Level of Service Policy

The City could approach mitigation through revision of its LOS policy—in particular, creating a separate LOS standard that would apply at designated intersections in the Study Area (and potentially other areas of the City outside the Study Area) to be consistent with the transportation characteristics of urban areas. Multiple cities in the Puget Sound designate varying LOS standards based on neighborhood or corridor context.

Transit Improvements

Significant impacts to transit were identified in the Study Area for Route 250 and

the I-405 Stride BRT North under both Alternatives 2 and 3. These impacts are due to forecasted ridership exceeding load factors established by King County Metro and Sound Transit. To address this impact, the City of Kirkland could coordinate with King County Metro and Sound Transit to adjust their service levels through their regular service revisions as transit demand increases in the Study Area.

The City of Kirkland could also require that all new transit stops are designed to minimize delay and maximize comfort by providing convenient loading and access at all bus doors and necessary sidewalk width to accommodate future stop amenities such as benches, transit shelters and trash receptacles.

Safety Improvements

Significant impacts to safety were identified in the Study Area due to higher vehicle volumes and the resulting queueing throughout the Study Area and on the I-405 off ramps. The Intersection-Specific Improvements and TDM strategies described above will help reduce delays, which would help improve safety.

- Provide continuous pedestrian scale streetlighting along corridors within transit-oriented development areas.
- Design streets to promote slower vehicle travel speeds and awareness for the most vulnerable users of the street system, pedestrians, and cyclists, during all times of the day by implementing treatments, such as those identified in the *NACTO Urban Street Design Guide*.
- Ensure all new uncontrolled crosswalks are constructed with treatments that bring awareness to drivers regarding yielding to cross pedestrians, including applying the *USDOT FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations*.

The City should also monitor safety through its crash reporting system and Vision Zero program and consider additional improvements at the study intersections as needed.

Land Use Mix and Amount

The City could create a Preferred Alternative with a different amount and mix of the studied office, retail, and residential land uses. In combination with TDM and capital improvements, an alternative land use mix and level could help realize City transportation LOS standards. For example, the City could start with Alternative 2 but reduce office growth levels and consider its desired balance with residential and retail uses. Bringing office growth lower and closer in balance with residential uses could increase the internal capture of trips and reduce the net increase in trips on the system.

With mitigation, what is the ultimate outcome?

This section identifies significant adverse impacts for auto and freight, transit, parking, and safety under both Action Alternatives.

The auto, freight, and safety impacts are anticipated to be reduced by implementing a range of possible mitigation strategies such as those above. In addition to geometric transportation capacity improvements, the City could manage demand using policies, programs, and investments aimed at shifting travel to non-SOV modes. However, even with some combination of these potential mitigation measures, queueing would likely still be an issue throughout the Study Area and on the I-405 off ramps, which would also influence safety. Therefore, significant unavoidable adverse impacts are expected for auto, freight, and safety.

With some combination of the potential mitigation measures outlined in the previous chapter, the magnitude of the transit impacts could be mitigated to a less-than-significant level. Therefore, no significant and unavoidable adverse impacts to transit are expected.

The parking impacts are anticipated to be brought to a less-than-significant level by implementing a range of possible mitigation strategies such as those discussed above. While there may be short-term impacts as travelers initially rely predominantly on auto travel (causing on-street parking demand to exceed supply), it is expected that over the long term with these mitigation strategies and continued expansion of non-auto travel options, travel behavior would change such that the on-street parking situation would reach a new equilibrium. Therefore, no significant unavoidable adverse impacts to parking are expected.

1.6.7 Public Services

How did we analyze Public Services?

To analyze public services this SEIS compared existing conditions with projected growth to identify future needs for public services (police, fire and emergency services, schools, and parks) associated with each of the proposed alternatives.

Current effective levels of service for police as well as fire and emergency services were used to project future need for additional police officers and firefighters due to growth. The analysis also considered the proximity of police and fire protection facilities/apparatuses to the Study Area.

Demand for school services were analyzed in terms of the schools within or surrounding the Study Area that would likely receive additional school age children generated by growth in the Study Area. Demand for parks and recreation facilities were analyzed by the projected future need for additional park investment dollars due to growth based on the City's adopted parks and recreation LOS standard. The analysis also looked at the accessibility of parks in or near the Study Area.

Impacts on public services and utilities would be considered to result in significant impacts under one or more of the following conditions:

- Negatively affect the response times for police and/or fire and emergency medical services.
- Increase demand for special emergency services beyond current operational capabilities of service providers.
- Reduce access to park and open space facilities.
- Result in increases in students and lack of facilities.

What impacts did we identify?

Under all alternatives, additional population and employment growth would generate a need for additional police, fire and emergency, school, and park services.

Growth in the Study Area will generate more calls for police services as well as fire and emergency services. To maintain the City's current effective LOS under all alternatives, KPD would need to hire more police officers and KFD would need to hire more firefighters over the planning period.

Growth in the Study Area will also generate more school age children within the Study Area. Based on Lake Washington School District's adopted student generation rates, projected population growth within the Study Area will include between 215 to 1,251 students through the planning period, depending on the alternative.

As mentioned above, the City's parks and recreation LOS standard is based on an investment per capita standard ($4,094 per resident). To adequately serve future growth, the City would need to invest between approximately $6.5 million to approximately $67.4 million through the planning period, depending on the alternative.

What is different between the alternatives?

The Action Alternatives would allow for significantly more population and employment growth than existing conditions or the No Action Alternative. As the

City's current or policy-based LOS standards are based on population, demand for public services will be highest under Alternative 3 and will be lowest under the No Action Alternative.

What are some solutions or mitigation for impacts?

For all services, the SAP could promote public/private partnerships to provide facilities in the station area and address potential service needs created by new development.

Safety and Emergency Services: Planning for future growth is a way to mitigate the impacts generated by the projected population and employment growth. KPD and KFD could hire additional staff to prepare for the additional growth. KPD and KFD could also adopt formal, population-based LOS standards for police or fire and emergency services to help identify project-specific demand.

Parks: The 2015 Park PROS Plan identified a potential park acquisition area within the Study Area, which would improve access to neighborhood parkland to Study Area residents. The City collects park impact fees on new development, which are used to build or acquire new park facilities. The Station Area Plan could advance parks and open space at a neighborhood scale and at a site scale.

Schools: Future capital planning for the Lake Washington School District beyond the year 2025 is currently underway. The District's Facility Advisory Committee has proposed recommendations for future capital facility planning including additions to schools within and abutting the Study Area. The alternatives also raise heights at the Lake Washington High School to allow for additional school capacity in the future. As well the Form-Based Code could offer incentives for developments to incorporate space for schools in new developments. The City collects school impact fees on new development to partially offset impacts to schools.

It is important to note that population and employment growth will occur incrementally over the planning period. The City and School District can evaluate levels of service and funding sources to balance with expected growth; if funding falls short, there may need to be an adjustment to levels of service or growth as part of regular planning under the GMA. With implementation of mitigation measures and regular periodic review of plans, no significant unavoidable adverse impacts to public services are anticipated.

With mitigation, what is the ultimate outcome?

Under all Alternatives, additional growth and infill development would occur in the station area, gradually increasing the level of development intensity and

altering the existing architectural and visual character. These changes would occur under all alternatives, though the changes would be most pronounced under Alternative 3. With implementation of the mitigation measures described above, including adoption of the proposed Form-Based Code, the visual character of the station may experience positive effects, and no significant unavoidable adverse aesthetic impacts are anticipated.

1.6.8 Utilities

How did we analyze Utilities?

Current city utility plans for sewer and water were reviewed. Based on the City's levels of service, the demand for sewer and water per capita were identified. Water and sewer impacts would be considered to rise to the level of significance when the project's water or sewer demand exceed the capacity of the utility to supply and the LOS is decreased.

Sewer

Sewer service in the Study Area is provided by the City of Kirkland Wastewater Division. All the City's wastewater discharges to the King County Department of Natural Resources and Parks, Wastewater Treatment Division (KCWTD). The following rates from the 2018 General Sewer Plan were used to estimate increased sanitary sewer flows:

- 76 gallons per capita per day (gpcd) for each new resident.
- 20 gpcd for each new employee.

Water

Potable water in the Study Area is provided by the City of Kirkland Water Utility supplied by Seattle Public Utilities (SPU) through the Cascade Water Alliance (Cascade). The City of Kirkland Water Utility also provides the water storage and conveyance capacity to meet the needs for fire flow. The following rates were used to estimate increased water demand:

- 103 gpcd for each new resident (per the 2015 Comprehensive Plan EIS).
- 36.7 gpcd for each new employee.[5]

[5] There is no value provided for the water demand for each new employee within the City of Kirkland water utility in either the 2015 Comprehensive Plan EIS or the City's Comprehensive Water System Plan. A portion of the City is served by the Northshore Utility District, which reports an Average Daily Consumption per employee of 36.7 gpcd in its 2009 Water System Plan.

What impacts did we identify?

Sewer

Population and employment growth under all alternatives would add to sewer flows and increase demand for sewer service (Exhibit 1-21).

Exhibit 1-21. Estimated Sewer Flows and Water Demand in Gallons per Day (gpd) by Alternative

	Existing	No Action	Alternative 2	Alternative 3
Sewer Flow	423,000 gpd	662,000 gpd	1,815,000 gpd	2,274,000 gpd
Water Demand	620,800 gpd	1,001,000 gpd	2,735,000 gpd	3,418,200 gpd

Note: Assumes 1.83 persons per household in multi-family units and 2.73 per persons per household in single family units per the 2015 Comprehensive Plan EIS. Existing residential units in the Study Area are assumed to be 56% multi-family (apartment and condominium) and 44% single family homes based on parcel records and transportation model baseline information.
Sources: Comprehensive Water System Plan, 2014; General Sewer Plan, 2018; Herrera, 2020.

Sewer system improvements to meet future growth identified in the General Sewer Plan must be provided under all alternatives – the majority of proposed sanitary pipeline replacement projects listed in the Plan are located within the Kirkland basin (the basin to the west of the I-405 Interchange). The project list is based on the City's assessment of existing deficiencies, safety concerns, maintenance requirements, and capacity requirements. Under all alternatives these deficiencies will be exacerbated.

Water

Population and employment growth under all alternatives would increase demand for water service thus decreasing supply capacity (Exhibit 1-21). Water distribution improvements for system deficiencies identified in the Comprehensive Water System Plan must be provided and fire flow requirements must be met by the City under all alternatives. Within the Study Area, the 510 pressure zone experiences high water velocities due to the undersized water main and represents a vulnerability due to decreased available fire flow. Operating the system at high velocities is more likely to damage the system with high pressure surges. The City has identified replacement of the undersized main serving the 510 pressure zone as a recommended capital improvement project.

Some areas of the City's system are over 40 years old, and water mains are expected to have a life expectancy of only 50 years. Portions of the system may need to be replaced within the next ten years. Under all alternatives these deficiencies will be exacerbated.

What is different between the alternatives?

The level of population and employment growth is highest under the Action Alternatives and lowest under the No Action Alternative.[6] Demand for added wastewater treatment or water supply is accordingly variable (Exhibit 1-21).

Increased demand under the No Action Alternative is consistent with utility planning described in the City's General Sewer Plan and Comprehensive Water Plan and would be mitigated by implementation of the planned capital facility upgrades. Estimated demand under the Action Alternatives exceeds the overall 20-year planned sewer and water system capacity described in each plan. The sewer and water system plans would thus need to be updated, and capital facilities planned to mitigate the impacts and meet new demand for sewer service, domestic water, and fire flows.

What are some solutions or mitigation for impacts?

The City's adopted regulations, policies, and plans and state laws help address potential impacts to sewer service and water demand:

- RCW 19.27.097 provides that an applicant for a building permit must provide evidence of an adequate supply of potable water. The authority to make this determination is the local agency that issues building permits, (i.e., the City of Kirkland).
- Adequate connection requirements for sewer and water service installation are codified in KMC Chapter 15.12 and 15.14, respectively.
- Utilities can be extended to address area-specific needs and potentially distribute costs using local improvement districts (KMC Chapter 18.08), sewer extension charges (KMC Chapter 15.38.030), and/or latecomer agreements (RCW 35.91).

Other potential mitigation measures could include:

- Update the General Sewer Plan and Comprehensive Water Plan including the capital facilities plan.
- Finance and build necessary capital facilities to meet new demand for sewer service, domestic water, and fire flows, which may result in appropriate general facility charges for new development.
- A downstream analysis of the wastewater system and hydraulic model analysis would need to be undertaken to estimate the costs associate with proposed changes. Until such time as the study is completed, the City could

[6] New residential growth under all alternatives is assumed to be multi-family.

condition individual developments to provide analysis of their contribution to projected flows that are anticipated and require development to provide infrastructure to remedy increased demand or rectify deficiencies.

With mitigation, what is the ultimate outcome?

Under all the alternatives the population served by the utilities will increase. This will result in increased consumption of water from the regional supply and increased sewage production requiring treatment and discharge into local waters. With the mitigation identified, no significant unavoidable adverse impacts are expected for water or sewer.