

Table 1-2
Summary of Impacts

Alternative 1	Alternative 2	Alternative 3	Alternative 4 (No Action)
Geology and Soils			
Impacts common to all alternatives			
<p>By itself, this proposal would not directly result in impacts to geology and soils. Future site-specific development proposals under any of the alternatives, however, could result in impacts to geology and soils. Potential impacts that could be associated with future site-specific development under any alternative are briefly listed below.</p>			
<ul style="list-style-type: none"> • Native soils unsuitable for construction, particularly artificial fill and soft compressible soils near the waterfront may be removed and replaced with structural fill and/or other suitable material. • Excavation near existing slopes and/or landslides could result in slope instability. • Surface water and groundwater flow will likely be impacted by new construction. • Steep slopes, landslides, and liquefaction have the potential to impact existing development and new construction. 			
<ul style="list-style-type: none"> • Excavation, grading, soil removal, placement of structural fill, and construction of new foundations could have direct impacts on soils and groundwater. 	<ul style="list-style-type: none"> • Similar to Alternative 1, however impacts would be less in areas where building height limits are less, thereby requiring shallower building foundations. 	<ul style="list-style-type: none"> • Similar to Alternative 1, however impacts would be less in areas where building height limits are less, thereby requiring shallower building foundations. 	<ul style="list-style-type: none"> • Impacts under this alternative would be much less than those discussed under Alternative 1 since building height limits would remain as they currently exist.

Alternative 1	Alternative 2	Alternative 3	Alternative 4 (No Action)
Air Quality			
Impacts common to all alternatives			
<p>By itself, this proposal would not directly result in impacts to air quality. Future site-specific development proposals under any of the alternatives, however, could result in impacts to air quality. Potential impacts that could be associated with future site-specific development under any alternative are briefly listed below.</p>			
<i>Construction</i>			
<ul style="list-style-type: none"> • Construction activities could result in temporary, localized increases in particulate concentrations due to emissions from construction-related sources. • Demolition of existing structures would require removal and disposal of building materials that could possibly contain asbestos and lead based paint. • Emissions from construction equipment, especially from diesel-fueled engines, could result in a temporary degradation of local air quality. • Construction activities, such as paving operations using tar and asphalt, could result in short-term localized odors. 			
<i>Operation</i>			
<ul style="list-style-type: none"> • Predicted PM peak hour auto trips are expected to be the highest under this alternative. Traffic sources would not cause an increase in ambient CO concentrations at receptors near two of the three intersections studied. Even with CO concentration increases at the Mercer Street/Fairview Avenue intersection, ambient concentrations would remain well below the NAAQS. Because increased traffic resulting from new development near the most congested intersections would not likely cause an impact to air quality, impacts are also unlikely at other less congested intersections. Therefore, Alternative 1 would be unlikely to affect air quality in the South Lake Union study area. 	<ul style="list-style-type: none"> • Traffic generated under this alternative is predicted to be the same as Alternative 1. Therefore, ambient concentrations with Alternative 2 would likely be the same as that under Alternative 1. No impacts to air quality are expected 	<ul style="list-style-type: none"> • Under this alternative, approx. 3,000 fewer vehicular trips would occur than under Alternatives 1 and 2, therefore it is likely that fewer trips would result in less traffic at the most congested intersections. Therefore, CO concentrations would likely be similar to or less than those predicted for Alternatives 1 or 2. No impacts to air quality are expected. 	<ul style="list-style-type: none"> • Under this alternative trips generated would be slightly fewer than under Alternative 3, therefore maximum-predicted CO concentrations in 2031 would be less than the ambient air quality standards, so no impacts to air quality are anticipated.

Alternative 1	Alternative 2	Alternative 3	Alternative 4 (No Action)
Water Quality			
Impacts common to all alternatives			
<p>Construction activities associated with new development or redevelopment under any of the alternatives would be accompanied by ground disturbing activities such as clearing and grading. These activities could result in minor erosion and sedimentation that might result in short-term turbidity increases to local receiving waters (Lake Union). In addition to sediment transport, runoff may also carry other contaminants such as fuel or oil, from construction vehicles and machinery used on-site. The risk of these effects would be of short duration (limited to the length of each project construction period) and can largely be minimized or eliminated with the proper use of construction best management practices (BMPs).</p>			
<i>Construction Stormwater Runoff</i>			
<ul style="list-style-type: none"> • Construction activities could cause minor erosion, sedimentation that might result in short-term turbidity increases to local receiving waters (Lake Union), as well as possible fuel/oil contamination from construction vehicles. • Implementation of construction best management practices, and compliance with applicable permit requirements and conditions would help to ensure that any impacts would be temporary and minor. 			
<i>Urban Stormwater Runoff</i>			
<ul style="list-style-type: none"> • It is expected that the majority of future development within South Lake Union will exceed the Pollution Generating Impervious Surfaces (PGIS) 5,000 sq. ft. threshold, which will require provision of water quality treatment. Smaller redevelopment projects may not reach this threshold, and multiple, independent small-scale developments in an area could create new PGIS areas without any individual project tripping the 5,000 sq. ft. treatment requirement. • Per city code water quality treatment facilities are designed based on surface area and not on traffic volumes. Under the current stormwater code, increases in density do not require increased stormwater treatment, although increased pollution would likely be generated as a result of increased vehicle traffic to support this level of development. 			

Alternative 1	Alternative 2	Alternative 3	Alternative 4 (No Action)
Plants and Animals			
Impacts common to all alternatives			
<p>By itself, this proposal would not directly result in impacts to plant and animal habitat. Future site-specific development proposals under any of the alternatives, however, could result in impacts to plant and animal habitat. Potential impacts that could be associated with future site-specific development under any alternative are briefly listed below.</p>			
<ul style="list-style-type: none"> • Urban wildlife may be displaced on lots that currently provide urban habitat (such as blackberry thickets, debris piles, and landscaped areas) by future construction/development. • Development of increased building height could indirectly result in increased bird strikes for migratory birds flying through the study area. However, the net effect on northward migrations of birds would likely be low since downtown buildings would still present the first obstacle to migratory birds. • Increasing vehicle use in the study area by allowing increased density may contribute to adverse effects on juvenile salmonids associated with poor water quality. • Potential increases in water quantity associated with increases in the amount of impervious surfaces are not expected to impact fish habitat in Lake Union or downstream waters. • This alternative is not expected to result in increased predation of juvenile salmonids due to changes in shade or shoreline development. 			
Environmental Health			
Impacts common to all alternatives			
<p>The proposal analyzed in this EIS considers the use of incentive zoning to increase height and density in the South Lake Union neighborhood. By itself, this proposal would not directly result in impacts to environmental health. Future site-specific development proposals under any of the alternatives, however, could result in impacts to environmental health. Development activities could include excavation associated with demolition of existing foundations and construction of new foundations. Potential indirect and cumulative impacts for all alternatives associated with property redevelopment include:</p>			
<ul style="list-style-type: none"> • Contaminated soil and/or groundwater may be encountered during excavation when properties in the study area are redeveloped. • Asbestos Containing Material (ACM) and lead-based paint may be encountered during building demolition when properties in the study area are redeveloped. • Contamination may be cleaned up as properties are redeveloped, resulting in less contamination in the study area. • Contaminated materials may be uncovered during property redevelopment, allowing more direct exposure to the public. • Contamination may be spread as a result of property redevelopment (for example, a new utility corridor could provide a new conduit for contamination to spread through; dewatering activities could pull contaminated groundwater into areas that were initially clean). 			

Alternative 1	Alternative 2	Alternative 3	Alternative 4 (No Action)
Noise			
Impacts common to all alternatives			
<p>The proposal analyzed in this EIS considers the use of incentive zoning to increase height and density in the South Lake Union subarea. By itself, this proposal would not directly result in noise impacts in the subarea. Future site-specific development proposals under any of the alternatives, however, could result in impacts to noise. Depending on the nature of these site-specific actions, noise impacts could occur to existing, adjacent land uses in. Construction, parking, and mechanical equipment related to new developments have the potential to cause noise impacts to sensitive receivers (e.g., residences, schools, churches, parks, etc.). Larger residential and commercial structures could result in an increase in traffic volumes and traffic-related noise on local streets. Potential impacts that may be associated with future site-specific development under any of the alternatives are discussed below.</p>			
<p><i>Construction</i></p>			
<ul style="list-style-type: none"> Noise from demolition and construction activities has the potential to temporarily affect nearby receivers, particularly sensitive uses such as residences. 			
<p><i>Operation</i></p>			
<ul style="list-style-type: none"> Increased building heights within the flight path for the Lake Union Seaport Airport could result in increased noise impacts to residences and/or offices in upper portions of new buildings from aircraft overflights. HVAC/mechanical equipment could result in increased noise impacts to nearby residences and/or commercial buildings. Increases in population density and commercial activity could add more traffic to local streets, which would increase noise levels in South Lake Union area. 			

Alternative 1	Alternative 2	Alternative 3	Alternative 4 (No Action)
Energy (GHG)			
Impacts common to all alternatives			
<p><i>Climate Change</i></p> <ul style="list-style-type: none"> The assumed impacts of climate change would not be anticipated to have a disproportionate impact on the South Lake Union Neighborhood as compared to other sites in Seattle. 			
<p><i>Greenhouse Gas Emissions</i></p>			
<ul style="list-style-type: none"> Based upon the calculations from the King County SEPA GHG Emissions worksheet, this alternative would generate roughly 23,537,267 MTCO₂e additional GHG emissions over existing conditions during the lifespan of future development. 	<ul style="list-style-type: none"> Same as Alternative 1. 	<ul style="list-style-type: none"> Same as Alternative 1. 	<ul style="list-style-type: none"> Based upon the calculations from the King County SEPA GHG Emissions worksheet, this alternative would generate roughly 16,393,154 MTCO₂e additional GHG emissions over existing conditions during the lifespan of future development.
<ul style="list-style-type: none"> Based on the calculations from the SEPA Greenhouse Gas Emissions Inventory Worksheets and the VMT GHG Tool, this alternative would generate roughly 24,160,080 MTCO₂e additional GHG emissions during the lifespan of future development. 	<ul style="list-style-type: none"> Based on the calculations from the SEPA Greenhouse Gas Emissions Inventory Worksheets and the VMT GHG Tool, this alternative would generate roughly 24,144,150 MTCO₂e additional GHG emissions during the lifespan of future development. 	<ul style="list-style-type: none"> Based on the calculations from the SEPA Greenhouse Gas Emissions Inventory Worksheets and the VMT GHG Tool, this alternative would generate roughly 22,686,472 MTCO₂e additional GHG emissions during the lifespan of future development. 	<ul style="list-style-type: none"> Based on the calculations from the SEPA Greenhouse Gas Emissions Inventory Worksheets and the VMT GHG Tool, this alternative would generate roughly 18,063,203 MTCO₂e additional GHG emissions during the lifespan of future development.

Alternative 1	Alternative 2	Alternative 3	Alternative 4 (No Action)
Land Use			
<i>Plans, Policies, and Regulations</i>			
<ul style="list-style-type: none"> This section of the EIS contains an analysis of the consistency of each alternative with existing state, regional and local planning policies. The proposed action is generally consistent with adopted City plans, policies and regulations. 			
<i>Wind Analysis</i>			
<p>The addition of significantly taller buildings directly south of Lake Union could generally increase the potential for:</p> <ul style="list-style-type: none"> increased height of vertical and leeward wind wake zones and consequently shear layers; introduction of wake effects extending into Lake Union; increase in turbulence intensity north of the subarea; and; change in local wind speed patterns. 	<ul style="list-style-type: none"> Similar to but less than Alternative 1. 	<ul style="list-style-type: none"> Similar to but less than Alternative 2. 	<ul style="list-style-type: none"> Impacts are not anticipated under this alternative since building height limits would remain as they currently exist.
<ul style="list-style-type: none"> Under this alternative, the maximum height of buildings is higher than the anticipated elevation of float planes travelling over/through this area. Apart from the risk of physical impact, small aircraft flying through a “canyon” or “corridor” of tall structures can be significantly affected by turbulent, local winds channeling and accelerating between buildings 	<ul style="list-style-type: none"> Similar to but less than Alternative 1. 	<ul style="list-style-type: none"> Similar to but less than Alternative 2. 	<ul style="list-style-type: none"> Impacts are not anticipated under this alternative since building height limits would remain as they currently exist.

Alternative 1	Alternative 2	Alternative 3	Alternative 4 (No Action)
Housing			
<ul style="list-style-type: none"> Increases in population and employment would result in an associated increase in demand for diverse housing opportunities, and public facilities within the subarea. With capacity for 21,000 units, Alternative 1 provides the greatest housing capacity. 	<ul style="list-style-type: none"> Similar to but less than Alternative 1. Alternative 2 would have capacity for 19,000 units, 	<ul style="list-style-type: none"> Similar to but less than Alternative 2. Alternative 3 would have capacity for 15,000 units. 	<ul style="list-style-type: none"> Similar to but less than Alternative 3. Alternative 4 would have capacity for 11,500 units.
<ul style="list-style-type: none"> Increased residential capacity due to incentive zoning under this alternative has the potential to result in an increased number of affordable housing units. 	<ul style="list-style-type: none"> Same as Alternative 1. 	<ul style="list-style-type: none"> Same as Alternative 1. 	<ul style="list-style-type: none"> This impact would not occur relative to development under this alternative; no existing area-wide incentive zoning in place.
<ul style="list-style-type: none"> This alternative has the largest development potential, therefore it would have the potential through incentive zoning programs to generate the greatest amount of developer financial contributions for affordable housing for lower wage workers. 	<ul style="list-style-type: none"> Similar to but less than Alternative 1. 	<ul style="list-style-type: none"> Similar to but less than Alternative 2. 	<ul style="list-style-type: none"> This impact would not occur relative to development under this alternative; no existing area-wide incentive zoning in place.
<ul style="list-style-type: none"> Alternative 1 may also provide market-driven opportunities for new construction of affordable housing separate from the residential towers. 	<ul style="list-style-type: none"> Similar to but less than Alternative 1. 	<ul style="list-style-type: none"> Similar to but less than Alternative 2. 	<ul style="list-style-type: none"> This impact would not occur relative to development under this alternative; no existing area-wide incentive zoning in place.
<ul style="list-style-type: none"> Redevelopment under this alternative has the potential to reduce the existing inventory of affordable housing due to displacement of existing wood frame buildings and older single family residences in the subarea. 	<ul style="list-style-type: none"> Similar to but less than Alternative 1. 	<ul style="list-style-type: none"> Similar to but less than Alternative 2. 	<ul style="list-style-type: none"> This impact would not occur relative to development under this alternative; no existing area-wide incentive zoning in place.

Alternative 1	Alternative 2	Alternative 3	Alternative 4 (No Action)
Housing (con't)			
<ul style="list-style-type: none"> Under this alternative, height and density increases in the focus areas could result in increased residential development within these corridors. 	<ul style="list-style-type: none"> Similar to but less than Alternative 1. 	<ul style="list-style-type: none"> Similar to but less than Alternative 1. 	<ul style="list-style-type: none"> This impact would not occur relative to development under this alternative; no existing area-wide incentive zoning in place.
Aesthetics			
<i>Area Context</i>			
<ul style="list-style-type: none"> As infill occurs in the South Lake Union Neighborhood, the greatest aesthetic difference resulting from the development under this alternative will be the visual expansion of the Downtown Seattle skyline north to the shores of Lake Union. 	<ul style="list-style-type: none"> Similar to but less than Alternative 1. 	<ul style="list-style-type: none"> Similar to but less than Alternative 2. 	<ul style="list-style-type: none"> This impact would not occur relative to development under this alternative.
<i>Neighborhood Character</i>			
<ul style="list-style-type: none"> As infill occurs in the South Lake Union Neighborhood, the greatest aesthetic difference resulting from the development under this alternative will be the visual expansion of the Downtown Seattle skyline north to the shores of Lake Union. 	<ul style="list-style-type: none"> Similar to but less than Alternative 1. 	<ul style="list-style-type: none"> Similar to but less than Alternative 2. 	<ul style="list-style-type: none"> This impact would not occur relative to development under this alternative.
<i>Height, Bulk and Scale</i>			
<ul style="list-style-type: none"> This alternative proposes a relatively new building typology for the neighborhood, which would feature a high-rise tower positioned atop a bulkier low-rise podium that would potentially fill the site from property line to property line. 	<ul style="list-style-type: none"> Similar to but less than Alternative 1. 	<ul style="list-style-type: none"> Similar to but less than Alternative 2. 	<ul style="list-style-type: none"> This impact would not occur relative to development under this alternative.

Alternative 1	Alternative 2	Alternative 3	Alternative 4 (No Action)
Aesthetics (con't)			
<ul style="list-style-type: none"> This alternative would generally gradually transition down in height from the south boundary of the neighborhood toward Mercer Street on the north. Building heights increase slightly in the block north of Mercer Street. 	<ul style="list-style-type: none"> Same as Alternative 1, except that the transition downward in height extends north toward Lake Union, with no increase in proposed building height north of Mercer Street. 	<ul style="list-style-type: none"> Same as Alternative 1, except that the transition downward in height extends north toward Lake Union, with no increase in proposed building height north of Mercer Street. 	<ul style="list-style-type: none"> Same as Alternative 1, except that the transition downward in height extends north toward Lake Union, with no increase in proposed building height north of Mercer Street.
<ul style="list-style-type: none"> Tower bulk (length and width) and podium bulk are not expected to create significant impacts given the restrictions on floor plate size for the towers and restrictions on podium height. 	<ul style="list-style-type: none"> Same as Alternative 1. 	<ul style="list-style-type: none"> Same as Alternative 1. 	<ul style="list-style-type: none"> This impact would not occur relative to development under this alternative.
<i>Viewshed</i>			
<u>Designated Viewpoints</u>			
<ul style="list-style-type: none"> New high-rise buildings within the study area would be prominent in these views. However, the Space Needle, Elliott Bay, Seattle Downtown skyline, Bainbridge Island, the Cascade Mountains, and the Olympic Peninsula would still be visible. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to but much less than Alternative 1
<u>Scenic Routes</u>			
<ul style="list-style-type: none"> New high-rise buildings within the study area would frame route corridors and would have the potential to screen/block some existing views of the Space Needle from these routes. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to but much less than Alternative 1.

Alternative 1	Alternative 2	Alternative 3	Alternative 4 (No Action)
Aesthetics (con't)			
<i>Shadows</i>			
<ul style="list-style-type: none"> Cumulative shadow impacts would result due to the increased amount of development under this alternative. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to Alternative 1.
<ul style="list-style-type: none"> Generally, the infill development on undeveloped or under-developed sites would increase the local shadows on streets and adjacent properties 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to Alternative 1.
<ul style="list-style-type: none"> Shadows from this alternative could shade portions of the water area of Lake Union in the winter morning (southeast lake shore) and in the winter afternoon (southwest lake shore) hours. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to Alternative 1.
<ul style="list-style-type: none"> Overall, the shadow impacts are not expected to result in significant adverse environmental impacts. The impacts are typical of an urbanizing area changing from lower intensity development to that of more intensive development. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to Alternative 1.

Alternative 1	Alternative 2	Alternative 3	Alternative 4 (No Action)
Aesthetics (con't)			
<i>Light and Glare</i>			
<ul style="list-style-type: none"> The increased amount of buildings would increase the cumulative level of artificial illumination in South Lake Union. The new buildings will include towers that may potentially incorporate reflective surfaces that could on occasion create glare impacts. The exposure may extend to adjacent hillsides and the freeway because of the topographic basin location. . 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to Alternative 1, although highrise towers would not be built under this alternative.
<ul style="list-style-type: none"> Potential increases in building heights in this area and specular surfaces on buildings could, at times, generate increased light and glare impacts that may affect seaplane approaches to the south. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to Alternative 1, although highrise towers would not be built under this alternative.
<ul style="list-style-type: none"> The distant visibility from Capitol Hill and Gas Works Park of artificial illumination of the towers is high because of their currently unobstructed location. Artificial illumination from new towers will be highly visible from those portions of Capitol Hill, Queen Anne Hill and Gas Works Park that currently have unobstructed views toward the study area. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to Alternative 1, although highrise towers would not be built under this alternative.

Alternative 1	Alternative 2	Alternative 3	Alternative 4 (No Action)
Historic Resources			
<ul style="list-style-type: none"> This alternative allows for the greatest amount of development, which could also result in the greatest amount of development pressure on existing small scale structures that may be eligible for historic designation. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Maintaining the existing zoning in the study area would not change the development pressure on historic resources.
<ul style="list-style-type: none"> Differences in character, height, and bulk of new development adjacent to a designated historic structure or a structure that is potentially eligible for historic designation, could negatively impact the historic value of the existing structure. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Not anticipated under this alternative.
Cultural Resources			
Impacts common to all alternatives			
<ul style="list-style-type: none"> Because the study area is considered to have a low potential to contain intact archaeological deposits, no significant impacts to archaeological sites are anticipated. No pre-contact archaeological sites have been identified within the study area. One historic-period archaeological site has been recorded within the study area and was previously impacted by sewer line and trail construction. Further development is not anticipated to generate additional impacts to this site. 			
Transportation			
Impacts Common to the Action Alternatives			
<p>Study Corridors. Under all three action alternatives, the following study corridors experience significant impacts to traffic operations:</p> <ul style="list-style-type: none"> Westlake Avenue N from Valley Street to Harrison Street Westlake Avenue N from Harrison Street to Denny Way Mercer Street from Dexter Avenue N to Fairview Avenue N 	<p>Study Corridors. The following study corridors would operate at LOS E or F, exceeding the City's LOS standard, which constitutes a traffic operations deficiency (note that these facilities will also experience deficient</p>		

Alternative 1	Alternative 2	Alternative 3	Alternative 4 (No Action)
Transportation (cont.)			
<ul style="list-style-type: none"> Denny Way from Aurora Avenue N to Stewart Street Boren Avenue from Denny Way to Pine Street Boren Avenue from Pine Street to University Street Stewart Street from Eastlake Avenue E to Boren Avenue Harrison Street from Aurora Avenue N to Eastlake Avenue E 9th Avenue N from Roy Street to Republican Street 	<p>In addition to those previously listed, the following study corridors are significantly impacted under Alternatives 1 and 2:</p>	<ul style="list-style-type: none"> Fremont Bridge Eastlake Avenue E from Fairview Avenue to Lakeview Blvd E Dexter Avenue N from Valley Street to Denny Way E Pine Street from Boren Avenue to Broadway Howell Street/Eastlake Avenue from Stewart Street to Boren Avenue 	<p>operations under the three Action Alternatives):</p>
<p>Poor operations on the study corridors identified above can also be assumed to translate to poor intersection operations (LOS E and F) at key intersections along these corridors, such as Mercer Street/Westlake Avenue N, Mercer Street/Fairview Avenue N, Denny Way/Westlake Avenue N, and Denny Way/Boren Avenue.</p>	<p>Transit. Transit lines that would operate unacceptably under the action alternatives include:</p>	<ul style="list-style-type: none"> Route 21 (northbound AM and southbound PM) Route 28 (northbound AM and southbound PM) Route 29 in both directions (AM and PM peak hours) Route 56 (northbound AM and southbound PM) 	<ul style="list-style-type: none"> Street to Westlake Avenue N Westlake Avenue N from Valley Street to Harrison Street Westlake Avenue N from Harrison Street to Denny Way Fairview Avenue N from Eastlake Avenue to Yale Avenue N Dexter Avenue N from Fremont Bridge to Valley Street Dexter Avenue N from Valley Street to Denny Way Mercer Street from Dexter Avenue N to Fairview Avenue N Denny Way from Aurora Avenue N to Stewart Street Boren Avenue from Denny Way to Pine Street Stewart Street from Eastlake Avenue E to Boren Avenue E Pine Street from Boren Avenue to Broadway Harrison Street from Aurora Avenue N to Eastlake Avenue N 9th Avenue N from Roy Street to Republican Street Howell Street/Eastlake Avenue from Stewart Street to Boren Avenue
<p>Planned capacity increases for the Seattle Streetcar will keep pace with the future ridership estimates from the City's travel model. Transit frequency is the same as under the No Action Alternatives and would not meet the frequency goals outlined in the Urban Village Transit Network (UVTN).</p>	<p>Bicycle and Pedestrian System. No pedestrian or bicycle demand/capacity impacts are anticipated under the three action alternatives. While no bicycle or pedestrian demand/capacity impacts are anticipated, there are several adverse impacts to the pedestrian and bicycle system:</p>	<ul style="list-style-type: none"> The increased heights and densities associated with each of the alternatives will lead to additional traffic demand on area roadways, which could result in longer traffic signal cycle lengths. Longer cycle lengths are associated with increased pedestrian delay, which discourages pedestrian travel. Any increases in pedestrian delay at intersections would be an impact to pedestrian mobility. 	<p>Transit. Two transit routes serving South Lake Union will not operate with acceptable load factors – Route 29 and Route 56. Eight transit lines do</p>

Alternative 1	Alternative 2	Alternative 3	Alternative 4 (No Action)
Transportation (cont.)			
<ul style="list-style-type: none"> Additional vehicle traffic at the Mercer Street/Dexter Avenue N could increase vehicle-bicycle conflicts at this High Bicycle Accident intersection. <p>Parking. If current parking demand trends continue, short-term shortages are likely for both on-street and off-street parking, particularly around office uses. The level of impact will vary depending on the intensity of land use. The balance between parking supply, parking cost, and alternative mode use will cause some travelers to change modes. Therefore, the parking impact may not be long-term since travelers will shift to other modes in response to limited parking supply and higher parking cost.</p> <p>Although Alternatives 1 and 2 would have the most demand, they would also provide more supply based on market trends. Because of the relationship between development intensity, parking supply, and parking demand, all action alternatives are expected to have short-term parking impacts.</p> <p>Freight. The increase in traffic congestion along the Major Truck Streets is caused by both additional development in South Lake Union and regional traffic. There are also potential localized freight impacts that could occur as the neighborhood develops. Impacts to freight mobility could be caused by lack of loading areas and small curb radii that cannot be navigated by trucks.</p> <p>Traffic Safety. While it is likely that the total number of vehicle collisions will increase proportionally with the increase in traffic in the South Lake Union area, there is nothing to suggest that the volume-based rate of vehicle-to-vehicle collisions will increase with the implementation of the height and density alternatives.</p>			<p>not meet the UVTN frequency goal of peak hour -- Routes 16, 25, 28, 29, 66, 15 minute headways during the AM 308, 313, and 316. Since the Height and Density alternatives do not affect transit frequency, these routes will also fail to meet frequency goals under the Action Alternatives.</p> <p>Pedestrian and Bicycle System.</p> <ul style="list-style-type: none"> Anticipated development will result in a substantial number of pedestrian and bicycle trips within the study area. Pedestrian and bicycle demand/capacity issues not likely, but could lead to consequences such as: Additional pedestrian and vehicle travel at major intersections could lead to increased pedestrian delays if the City retimes traffic signals to facilitate vehicle flow. Additional vehicle traffic at the Mercer Street/Dexter Avenue N could increase vehicle-bicycle conflicts at this High Bicycle Accident intersection. <p>Parking. If current parking demand trends continue, there will likely be at least temporary shortages for both on-street and off-street parking, particularly around office uses. The</p>

Alternative 1	Alternative 2	Alternative 3	Alternative 4 (No Action)
Transportation (cont.)			
			<p>relationship between parking supply and cost will cause prices to climb as demand approaches or exceeds supply. In turn, this will cause some travelers to switch to modes such as transit, thereby freeing up some parking.</p> <p>Freight. Increase in traffic congestion on Mercer Street between Dexter Avenue and Fairview Avenue N will lead to increased difficulty for trucks to maneuver and increased travel times, which could delay trucking operations. This is considered a freight mobility deficiency in the area. With future development there could be localized freight deficiencies related to the lack of loading areas and small curb radii that trucks cannot navigate. The removal of Broad Street between 5th Avenue N/Thomas Street and Mercer Street will leave a gap in the City of Seattle Major Truck Street network.</p> <p>Traffic Safety. Increased traffic volumes could lead to the identification of additional High Accident Locations. While there may be more High Accident Locations there is no data available to suggest that a volume-based collision rate (e.g., collisions per million entering vehicles) will increase.</p>

Alternative 1	Alternative 2	Alternative 3	Alternative 4 (No Action)
Public Services			
Impacts common to all alternatives			
<i>Fire and Emergency Services</i>			
<ul style="list-style-type: none"> Construction activities associated with potential development under the proposed alternatives could result in an increase in demand for fire services. The Fire Department would attempt to maintain response times consistent with current performance levels. An additional 1-2 EMS companies could be required over the next 10 years in order to maintain performance levels. However, given that Stations 2 and 25 are two of the busiest stations in the Department, additional EMS companies could be required in SLU even without potential development under this alternative 			
<i>Police Services</i>			
<ul style="list-style-type: none"> Potential construction under this alternative could result in an increase in demand for police services. Potential increases in onsite population and employment associated with development under this alternative would be incremental and would result in associated incremental increases in demand for police services. Sufficient staffing and facilities exist to accommodate the increased demand for service under this alternative and no additional safety problems are anticipated. 			
<ul style="list-style-type: none"> Requests for fire department services could result in an increase of approximately 18 percent by 2031. 	<ul style="list-style-type: none"> Requests for fire department services could result in an increase of approximately 17 percent by 2031. 	<ul style="list-style-type: none"> Requests for fire department services could result in an increase of approximately 15 percent by 2031. 	<ul style="list-style-type: none"> Requests for fire department services could result in an increase of approximately 14 percent by 2031.

Alternative 1	Alternative 2	Alternative 3	Alternative 4 (No Action)
Utilities			
<p><i>Water System</i></p> <ul style="list-style-type: none"> The increased density and intensity of development under this alternative could result in greater demands on the water supply and distribution system. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to but much less than Alternative 1.
<p><i>Combined Sewer System</i></p> <ul style="list-style-type: none"> The increased density and intensity of development under this alternative could result in greater demands on the local sewer collection system and on the downstream conveyance and treatment facilities. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to but much less than Alternative 1.
<p><i>Storm Sewer System</i></p> <ul style="list-style-type: none"> Potential development under any of the alternatives is not expected to result in increased demand on the storm water systems of the neighborhood. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to but much less than Alternative 1.
<p><i>Electric Power</i></p> <ul style="list-style-type: none"> The increased density and intensity of development under this alternative could result in greater demands on electrical energy. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to Alternative 1. 	<ul style="list-style-type: none"> Similar to but much less than Alternative 1.

Alternative 1	Alternative 2	Alternative 3	Alternative 4 (No Action)
Open Space and Recreation			
Impacts common to all alternatives			
<ul style="list-style-type: none"> <li data-bbox="241 461 1887 516">• Potential increases in height and density associated with this alternative would subsequently result in an increase in population and employment in the SLU Neighborhood, which would result in an associated increase in demand for parks, open space and recreation facilities in the area. <li data-bbox="241 557 1887 639">• Based on current parks and recreation distribution guidelines and the estimated 2031 household and employment targets for SLU, the total estimated park and recreation demand under this alternative would be approximately 14.1 acres, which is an increase over the total 2024 estimated demand of 12.78 acres, but still less than the existing 15.7 acres of open space. <li data-bbox="241 680 1887 735">• Future residential and employment growth under this alternative would tend to increase the overall use and activity levels of existing parks and recreation facilities in the SLU Neighborhood and site vicinity. <li data-bbox="241 776 1887 859">• This alternative could include an incentive program that offers development bonuses for projects (typically an allowance for additional height or floor area). Potential public benefits that could be considered as part of a development incentive program include new park and recreation facilities such as a new center for community, arts, and culture, pocket plazas, and/or children’s play areas. 			