



## MEMORANDUM

**DATE:** November, 8 2013

**TO:** Planning Commission

**FROM:** Eric Shields, Planning Director

**SUBJECT:** Development Capacity Analysis

Earlier this year, I sent to you a draft of development capacity in Kirkland. Since that time, revisions have been made. Attached is a chart showing the final results by neighborhood. Also attached are the instructions for determining capacity.

### Growth Targets

As previously noted, Kirkland was assigned housing and employment growth targets through the King County Countywide Planning Policies (CPP's). The Growth Management Act requires the City to plan to accommodate the targets. The assigned targets per the CPP's are for the period 2006-2031. Since a significant portion of that period has passed and since the 20 year planning period of the Comprehensive Plan extends beyond 2031 to 2035, the assigned targets have been adjusted to reflect the period 2013- 2035. The adjustment involved extending the targets for three years by an amount equal to the average growth rate represented by the targets and subtracting the growth that already occurred between 2006 and 2012. The resulting targets are:

Housing Target: 8,361 units  
Employment Target: 22,435 jobs

### Summary of Analysis

The land capacity analysis shows that the City has more than enough capacity to accommodate the growth targets:

Housing Capacity: 9,993 units  
Employment Capacity: 22,976 jobs

In addition, using the recommended alternative methodology for the Totem Lake Urban Center, the capacity is significantly greater:

Housing Capacity: 16,308  
Employment Capacity: 51,790

### Methodology

The capacity analysis was prepared as a computer program using the City's Geographic Information System and was based largely on King County Assessor's data (updated where errors were found). The attached instructions provide a detailed description of the inputs that were used in the analysis. Following is a summary of those inputs:

- Certain parcels were entirely eliminated from consideration, for example:
  - Parks and public lands;
  - Access and utility tracts;
  - Churches;
  - Condominium developments, regardless of density;
  - Parcels less than 2500 SF;
  - Parcels with a width < 25 ft.
  - Parcels completely contained in wetlands and stream buffers;
  - Developed waterfront parcels;
  
- Remaining parcels were divided into three categories:
  - Vacant – parcels with no existing development, but of sufficient size to be developable;
  
  - Redevelopable – parcels that are developed at less than the full zoned potential and which are considered likely to redevelop.
    - In mixed use zones, redevelopability is determined by the value of improvements relative to the value of the land. Parcels are categorized as redevelopable if the assessed improvement value is <50% of land value. For example, a parcel with a land value of \$1,000,000 would be considered to be redevelopable only if the improvement value is less than \$500,000. However, for the Totem Lake zones, an alternative methodology was also used. In the alternative, redevelopability is based on a comparison of existing development to development allowed under existing zoning. Specifically, a property is considered redevelopable if the intensity of existing development is less than or equal to 25% of the allowed development. As noted previously, this alternative yields a far greater capacity.
    - Single family parcels were redeveloped regardless of improvement value if the parcel is large enough to be subdivided into three or more lots. Two lot subdivisions were only redeveloped if the improvement value is <50% of land value.
    - Multi-family parcels were only redeveloped if existing density is  $\leq$  60% of the zoned density, regardless of improvement and land value;
  
  - Developed – currently developed and not likely to redevelop.
  
- For each zoning district, a likely level of development was established based on zoning regulations and recent development history. The development levels are expressed in floor area ratios (for nonresidential uses), units/ acre (for multifamily and some single family residential) and minimum lot sizes (for other single family). For redevelopable parcels, the existing development was subtracted from the total new development to determine the net new development;

- Density was reduced on all parcels with mapped environmentally sensitive areas and buffers;
- For single family zones, lands with slopes >40% were eliminated before calculating the potential for subdivision;
- Prior to calculating the capacity for each parcel, the parcel size was reduced to account for estimated average right of way dedications and land acquisition for parks or other public facilities: 5% for single family parcels, 2% for all others.
- To account for the likelihood that not all potentially redevelopable land will be made available for redevelopment, the number of vacant parcels was reduced by 5% and the number of redevelopable parcels was reduced by 10%.
- Employees were calculated as follows:
  - For office and commercial (retail) uses, employees were calculated assuming: 4 employees/ 1000 SF for office uses, and 2 employees/ 1000 SF for commercial uses. No parcels were developed with industrial uses since office uses are the typical form of new development in industrial zones.
  - For institutional uses (Evergreen Health, Lake Washington Institute of Technology and Northwest University), employees were determined based on conversations with the institutions.
  - For home based businesses, employees were calculated based on the current number of employees reported in home occupation business license applications as a ratio to existing housing units.

### **Allocating Growth to Transportation Analysis Zones**

The next step is to allocate growth to Transportation Analysis Zones (TAZs). TAZs are small geographical units that allow the traffic generation to be more localized than larger neighborhoods. Since the capacity is calculated at the parcel level, it is a simple matter to aggregate the capacity to TAZs. However, staff has assumed that the Comprehensive Plan would be updated to the level of targets rather than capacity. If there is agreement on this, then the question is how to reduce the capacity on individual parcels to add up to no more than the city-wide targets?

The first question is which of the alternative capacity figures to use – the one in which Totem Lake was calculated using the same methodology as other neighborhoods, or the one with more generous redevelopment assumptions based on Totem Lake being an urban center? Since both methods result in capacity figures that exceed the targets, staff recommends using the more conservative methodology in which the capacity for all neighborhoods is calculated in the same way.

If this is acceptable, then the question becomes how to reduce the housing capacity from 9,993 to the target of 8,361 and the employment capacity of 22,976 to the target of 22,435. Two methods were considered:

- One method is to adjust the criteria for redevelopment to make them more restrictive, so that fewer parcels are redeveloped. For example, rather than using a ratio of 50% improvement to land value, a 40% ratio would be used. This method was tested for housing and resulted in a reduction in city-wide capacity (1425 units)

nearly sufficient to meet the target. However, the reduction is uneven geographically, with the largest reduction (682 units) in the Totem Lake Neighborhood. Since redevelopment of Totem Lake is a major policy objective of the City, staff recommends against using this methodology, as it would underestimate future development in Totem Lake.

- Another method would be to reduce the capacity of development on each redevelopable parcel by an amount equal to the percentage that the citywide capacity exceeds the target. For housing this would be a reduction of 16%, while for employment it would be only 2%. Although this methodology is more simplistic than the previous one, it avoids having to make a disproportionately large adjustment to Totem Lake and, therefore, staff prefers it.

While the capacity analysis reflects current zoning it is not a "buildout" of all properties. In addition, as we go through the Comprehensive Plan update we may want to target certain areas where we want growth to occur (e.g. Totem Lake or along transit corridors). These policy choices can be considered during the discussion on land use alternatives and could influence our allocation of growth to the TAZ's.

Attachments:

1. Capacity Chart
2. Capacity Instructions

City of Kirkland Development Capacity (10/31/2013)

Neighborhoods	COMERCIAL (SqFt)	OFFICE (SqFt)	INDUSTRIAL (SqFt)	INSTITUTION (New Employee)	RESIDENTIAL SF DU	RESIDENTIAL MF DU	MRKT COMERCIAL	MRKT OFFICE	MRKT INDUSTRIAL	MRKT SF	MRKT MF	New Employee	New HH (SF)	New HH (MF)	New HH (Total)
Bridle Trails	-5,369	0	0		121	171	-4,832	0	0	109	153	7	109	153	262
Central Houghton	2,604	3,907	0	43	115	22	2,473	3,516	0	103	21	70	103	21	124
Everest	2,388	367,785	-136,038		30	213	2,150	331,743	-122,434	27	191	1,138	30	191	221
Finn Hill	1,963	31,747	0		1,177	132	1,865	29,067	0	1071	120	200	1,071	120	1,191
Highlands	0	0	0		69	20	0	0	0	61	18	5	61	18	79
Kingsgate	36,660	-6,025	0		449	568	32,994	-5,423	0	407	511	107	407	511	918
Lakeview	138,831	245,897	0		41	786	125,615	221,419	0	37	731	1,188	37	731	768
Market	310	44,285	0		34	44	279	40,035	0	29	39	164	29	39	68
Moss Bay	300,231	1,604,732	-28,532		4	1,405	300,656	1,580,272	-25,679	4	1,264	6,965	4	1,264	1,268
Norkirk	-11,026	212,029	-24,061		91	-23	-9,923	190,042	21,655	82	-21	711	82	-21	61
North Juanita	26,241	124,912	-10,628		145	547	23,616	112,421	-9,565	130	491	522	130	491	621
North Rose Hill	36,899	603,174	-48,740	110	286	385	33,209	544,029	-43,866	258	346	2,318	258	346	604
South Juanita	523	79,444	0		238	429	497	71,786	0	214	407	330	214	407	621
South Rose Hill	458	173,653	0		151	167	412	156,287	0	135	150	644	135	150	285
Totem Lake	577,578	1,709,597	-40,138		0	3,185	551,772	1,562,354	-33,479	0	2,902	8,607	0	2,902	2,902
<b>Total</b>	<b>1,108,291</b>	<b>5,195,137</b>	<b>-288,137</b>	<b>1,265</b>	<b>2,951</b>	<b>8,051</b>	<b>1,060,783</b>	<b>4,837,549</b>	<b>-213,368</b>	<b>2,667</b>	<b>7,323</b>	<b>22,976</b>	<b>2,670</b>	<b>7,323</b>	<b>9,993</b>

Kirkland Growth Targets:	Housing Units	Employment
	8,361	22,435

Totem Lake Alternative \*

Totem Lake (Alt)	830,202	9,852,833	-948,405	1,112	0	10,202	779,133	8,891,266	-850,919	0	9,217	37,421	0	9,217	9,217
<b>Total (Alt)</b>	<b>1,360,915</b>	<b>13,338,373</b>	<b>-1,196,404</b>	<b>1,265</b>	<b>2,951</b>	<b>15,068</b>	<b>1,288,144</b>	<b>12,166,461</b>	<b>-1,030,808</b>	<b>2,667</b>	<b>13,638</b>	<b>51,790</b>	<b>2,670</b>	<b>13,638</b>	<b>16,308</b>

\*In consideration of Totem Lake's designation as an Urban Center, in this alternative version, TLBD parcels are classified as redevelopable if the amount of existing development is less than 25% of the maximum permitted development.



**City of Kirkland Instructions for Estimating  
Land Supply and Development Capacity  
Updated October 22, 2013**

The Growth Management Act requires jurisdictions to prepare comprehensive plans that accommodate expected growth over a 20 year planning period. Countywide Planning Policies allocate 20 year household and employment targets to each jurisdiction. These targets are intended to be the basis for local Comprehensive Plans. To assure that Comprehensive Plans provide adequate capacity for growth, the GMA also requires that jurisdictions track development trends and analyze the zoned land supply and resulting development capacity. Every five years, King County jurisdictions collaboratively publish a "Buildable Lands Report" reporting development trends and development capacity throughout the County. The report lays out a common reporting methodology for all jurisdictions. This document describes the methodology for the Kirkland development capacity analysis, consistent with the King County Buildable Lands Report methodology.

The Kirkland capacity analysis is created from the Land Use Master File which part of the City's Geographic Information System (GIS) and is maintained in an Access database. The Land Use Master File contains land use by parcel, as well as other Assessor's file information. The multi-family data has been field verified. Using GIS, the following information has been added for each parcel: parcel area, TAZ (transportation analysis Zones), zoning, comprehensive plan designation, critical areas and neighborhood.

Each piece of the analysis is done in Access Queries that are derived from the original database. If assumptions change, then the individual queries and formulae can be modified as necessary. Although the basic formula for calculating capacity comes from the Buildable Lands Report, the assumptions about redevelopment, densities, critical area factors, market factors, ROW factors etc. are based on knowledge of circumstances unique to Kirkland.

### **Input**

Data are derived from the Land Use Master File (Landuse.mdb) with added fields from the GIS and other tables. This is the main land use database, containing the following fields for the analysis:

- Land Use Code - 3 digit
- City of Kirkland Summary of the 3 digit code (SF, MF etc.)
- Assessed Value Land
- Assessed Value Improvements
- Improvement Area
- Number of Units (from assessor or field checked)
- TAZ Number
- Zoning
- Comprehensive Plan Designation
- Neighborhood
- Parcel Size in Acres and Square Feet (Using GIS lot size)
- Units / Acre for each Residential Zone
- FAR's for Non-Residential Zones

In calculating the development potential of individual parcels, all contiguous parcels under common ownership are treated as a single parcel.

Before running the analysis, the following are extracted:

- Public rights of way and the Cross Kirkland Corridor;
- Access tracts;
- Publicly owned properties, such as parks, schools, utilities and government facilities;
- All properties in a "P" zone
- Churches (including churches on property not owned by the church)
- Residential condominium developments

- Parcels owned by homeowners associations
- Parcels < 2500 sq. ft.
- Parcels with a width < 25 ft.
- Developed parcels completely contained in wetlands and streams or their required buffers and underwater portions of properties along lakes.
- Developed waterfront parcels within RSA zones.

### Calculation of Capacity

For each parcel in each zone of the City, the analysis calculates the capacity of the parcel for additional development within the following 20 years. Capacity is calculated for each separate parcel, except when abutting parcels are under common ownership, in which case capacity is calculated for all parcels under common ownership.

Capacity is determined by the maximum development allowed by the zoning, accounting for a number of “factors” that are likely to reduce the magnitude or likelihood of development in the following 20 year planning period. Capacity for residential land use is expressed in additional dwelling units and resulting households, while capacity for nonresidential uses is expressed in additional floor area and resulting additional employees.

### Categories of Parcels.

For analysis purposes, each parcel is classified into one of the following three categories:

- **Vacant** – parcels that have no existing development and will be developed to the maximum allowed by existing zoning. These parcels are identified in the Master Land Use data base as vacant in the land use field.
- **Redevelopable** - parcels that are partially developed but have the capacity for additional development. Parcels are considered to be redevelopable as follows:
  - In single family residential zones: parcels which have the potential to be subdivided into additional lots. Parcels that are large enough to be divided into only two lots, are considered to be redevelopable only when the assessed improvement value is less than 50% of the assessed land value;
  - In multi-family zones: parcels that are developed with apartments (not condominiums) and the existing number of dwelling units is less than 60% of the maximum number of dwelling units allowed by the zoning;
  - In commercial, office and industrial zones other than the Totem lake Business District zones, parcels with an assessed value of improvements which is < 50% of the assessed land value;
  - In Totem Lake zones, parcels where the amount of development is less than or equal to 25% of the maximum development potential. The capacity of redevelopable parcels is calculated by first calculating the maximum allowed by existing zoning and then subtracting the existing development, resulting in the net additional development. Directions given in the tables below will supersede the above directions.
- **Developed** – parcels that contain development, but are not determined to be redevelopable. These parcels are eliminated from the analysis.

For parcels with existing development, the determination of whether the parcel is classified as Redevelopable or Developed is based on the calculation of additional development potential, as discussed below.

## Zoning

Development potential is calculated differently for parcels with different zoning. Four categories of zones are recognized:

- **Low Density Zones** Development potential is calculated based on two criteria:
  - There is sufficient area within a parcel to create one or more additional parcels compliant with the minimum lot area/ dwelling unit allowed by the applicable zoning (see table below) provided that all areas with slopes in excess of 40% shall be subtracted from the existing parcel size before calculating development potential; and
  - For parcels large enough to be divided into only two lots, the assessed value of existing improvements is < 50% of the assessed land value.

Formula: Existing parcel size (minus 40%+ slope areas) divided by minimum lot area/dwelling unit rounded down to the nearest whole number minus existing dwelling units = total potential new dwelling units. When a parcel is vacant and not in common ownership with an adjacent developed parcel, one new dwelling unit is assigned to that parcel, regardless of parcel size. For redevelopable parcels which are of sufficient size to be divided into no more than two lots, eliminate all parcels with improvement value > 50% of land value.

- **Multi-family Residential Zones** Development potential is calculated based on the number of dwelling units per acre allowed by the zoning (see table below). It is assumed that vacant parcels will develop to their maximum permitted densities. However, for parcels with existing development, it is assumed that only apartment buildings with a density of ≤60% of the maximum permitted density are redevelopable and will add units up to the maximum permitted. It is assumed that parcels with condominium units will not redevelop, regardless of density. Parcels that contain an existing single family unit and are large enough to be developed with one additional unit will not be redeveloped unless the assessed value of the single family unit is ≤ 50% of the assessed value of the parcel.

Formula: Parcel size in acres divided by maximum density/acre minus existing dwelling units = total new dwelling units.

- **Commercial, Industrial and Office Zones** For these zones, development potential is calculated based on identified maximum Floor Area Ratios (FAR) and residential densities unique to each zone (see tables below) . The FARs and densities are based on typical development intensities from recently constructed projects within the same or similar zones. All vacant parcels are fully developed.

In all zones, parcels with existing development are classified as redevelopable if the assessed value of existing improvements is < 50% of the assessed land value. Others are classified as fully developed.

In the TLBD zones, an alternative methodology will also be used in which parcels are classified as redevelopable if the amount of existing development is less than 25% of the maximum permitted development.

### Formulae:

- **Nonresidential uses:** Parcel in square feet times maximum nonresidential FAR minus existing building square feet = total new building square feet.
- **Residential Uses:** Parcel size in square feet times maximum residential FAR divided by 43,560 (square feet/acre) times maximum dwelling units per acre minus existing dwelling units = total new dwelling units

- **Institutional Zones** Some zones allow primarily institutional uses, such as hospitals, and colleges. Parcels in these zones will be. In these zones, future development will be inserted on a case by case basis based on conversations with representatives of the institutions.

### **Preapproved Development**

For some parcels, new development has already been approved and the amount of expected new development is known, in which case the expected future development is directly assigned, rather than derived from the capacity model. In such cases, the expected development is noted in the tables in the following section of this document. These parcels are removed before running the capacity model using the formulae for each zone. After running model, the assigned development potential for the parcels should then be manually added.

### **Maximum Development Potential by Zone**

Note: Some zones have a parenthetical note following the name of the zones on the zoning map. The note is not part of the name of the zone.

- Low Density Zones

<b>Zone</b>	<b>Minimum Lot Area/ DU</b>	<b>Notes</b>
RS & RSX 5.0, PLA 6C & E	5000 sq. ft.	
RS 6.3	6300 sq. ft.	
RS & RSX 7.2	7200 sq. ft.	
RS & RSX 8.5	8500 sq. ft.	
RS & RSX 12.5, WD II	12,500 sq. ft.	
RS & RSX 35	35,000 sq. ft.	
RSA 1	43,560 sq. ft.	1 unit/ acre
RSA 4	10,890 sq. ft.	4 units/ acre
RSA 6, PLA 3C	7,260 sq. ft.	6 units/ acre
RSA 8	5,445 sq. ft.	8 units/ acre
PLA 16	26,000 sq. ft.	

### Zoning

- Zoning = Low Density Residential

### Developed Parcels

- Land Use: Single Family
- Parcel size is < 2x Minimum lot area/DU.

### Vacant Parcels

- Land Use: Vacant
- Calculate development potential by dividing the Parcel size by the Maximum lot area/DU and round down to the closest whole number. In RS and RSX zones where the number of lots calculates to three or more, reduce parcel size by 5% to account for easements or rights of way dedication, and then recalculate.

### Redevelopable Parcels

- Land Use = Single Family
- Parcel size is  $\geq 2x$  Maximum lot area/DU.
- Calculate additional development potential in the same way as for vacant lots but subtract the existing dwelling units.

- **Multi-Family Residential Zones**

<b>ZONE</b>	<b>Maximum Density</b>	<b>Notes</b>
PLA 2	1 unit/acre	
PLA 15B	7 units/ acre	
RM & RMA 5.0, PLA	9 units/acre	

9, PLA 6H		
RM & RMA 3.6, WD-I & WD-III, PLA 3B, PLA 6 F, & 7C	14 units/acre	Figures include 20% affordable housing density bonus
RM & RMA 2.4, PLA 6I & K, PLA 7A	21 units/acre	
RM & RMA 1.8, PLA 5A, D & E, PLA 6A, D & J, PLA 7B	28 units/acre	
PLA 17	If site > 2 acres: 14 units/acre; If < 2 acres: 1 unit/ 7200 sq. ft.	

#### Zoning

- Zoning = Medium or High Density Residential

#### Developed Parcels

- Land Use = Multi-Family
- Existing DU/acre is > .60 of the *Maximum DU/acre* or the parcel is in condominium ownership regardless of the existing DU/acre.

#### Vacant Parcels

- Land Use = Vacant
- Calculate development potential by dividing the *Parcel size* (square feet) by 43,560 (square feet in an acre) then multiplying the result by the *Maximum Density (DU/acre)*. Round up or down to the nearest whole number.

#### Redevelopable Parcels

- Land Use = Multi-Family
- Existing DU/ acre is  $\leq$  .60 of the *Maximum DU/acre* unless the parcel is in condominium ownership. If the existing land use is single family, only redevelop if the lot is > 5000 sq. ft. unless the date of house construction precedes 1980.
- Calculate additional development potential in the same way as for vacant lots but subtract the existing dwelling units.

- **Commercial, Industrial and Office Zones:** Do separately for Each Category

#### Zoning

- Zoning = Commercial, Industrial or Office

#### Developed Parcels

- Those parcels where the assessed value of improvements /assessed value of land is > .5.
- In the TL zones, also use an alternative methodology in which the existing development is > .25 of the *Maximum development potential*.

#### Vacant Parcels

- Land Use = *Vacant*
- For each parcel, calculate the maximum development potential for each of the land uses indicated for the applicable zone in the charts below.

#### Redevelopable Parcels

- Land Use is not *Vacant*.
- The assessed value of improvements /assessed value of land is  $\leq$  .5.
- In all TL zones, an alternative analysis will be prepared, consistent King County Buildable Lands methodology for urban centers, in which parcels are considered redevelopable if the existing development is  $\leq$  .25 of the *Maximum development potential*.
- Calculate development potential in the same way as for vacant parcels but subtract the existing development.

Development Assumptions:

- An assumed maximum FAR was assigned to each category of use. The assigned FAR was based on recent developments.
- In mix use zones without a density limit, a residential density of 50 units/ 1.0 FAR of residential use was assumed.
- In density limited zones, the density was calculated based on the relative FAR devoted to residential use and an additional 20% was added for affordable housing. For example, in a PR 1.8 zone, the maximum density is 24 units/ acre. However, the assumed residential FAR is .2, approximately 30% of the total FAR of .65(the remaining .45 FAR was assumed for office use). Therefore, the residential density was calculated as follows:  $24 \times .3 \times 1.2 = 9$  units/ acre.

Office Zones

Zone	Maximum Development Potential		Notes
	Land Use/ FAR	Residential Density	
PO	Office: .65 FAR	NA	
PR 8.5	Office: .45 FAR Residential: .2 FAR	2 units/ acre	Total FAR: .65  For Fairfax Hospital in PRA 1.8 zone, add 35,400 sq. ft. new addition to existing development.
PR 5.0		3units/ acre	
PR 3.6, MSC 1, PLA 6B, PLA 17A		4 units/ acre	
PR 2.4, PRA 2.4		7 units/ acre	
PR 1.8, PRA 1.8, PLA 5B, MSC 4		9 units/ acre	
PLA 5C	Office: .45 FAR Residential: 1.55 FAR	75 units/acre	Total FAR: 2.0
PLA 15A	Existing land uses		Do not redevelop.

Commercial ZonesNeighborhood & Community Business Zones

Zone	Maximum Development Potential		Notes
	Land Use/ FAR	Maximum Density	
BN,, BNA, MSC 2	Commercial : .25 FAR Residential: 1.0 FAR	48 units/acre	Total FAR: 1.25
BC, BCX		48 units/ acre	
BC 1, BC 2	Commercial: .25 FAR Residential: 1.0 FAR	57 units/acre	Assumes 48 units/acre plus 20% affordable housing bonus
MSC 3	Commercial: .2 FAR Residential: 1.5 FAR	75 units/acre	Total FAR: 1.7

Central Business District

Zone	Maximum Development Potential		Notes
	Land Use/ FAR	Maximum Density	
CBD 1A, 1B, 4, 6 & 8	Commercial: .2 FAR Office: .3 FAR Residential: 2.5 FAR	125 units/acre	Total FAR: 3.0
CBD 2	Commercial: .2 FAR Office: .4 FAR Residential .4 FAR	20 units/acre	Total FAR: 1.0
CBD 3, 7	Commercial: .2 Office: .2		Total FAR: 2.0

	Residential: 1.6	80 units/acre	
CBD 5A			Per Parkplace master plan: replace existing development with: 1,200,000 sq. ft. of office and 592,700 sq. ft. of commercial
CBD 5	Commercial: .2 FAR Office: 1.3 FAR		Total FAR: 1.5

**Juanita Business District**

Zone	Maximum Development Potential		Notes
	Land Use/ FAR	Maximum Density	
JBD 1 – Excludes Juanita Village	Commercial: .2 FAR Residential: 1.8 FAR	40 units/acre	Total FAR: 2.0
JBD 1 Juanita Village			Add 196 units and 7496 sq. ft. of commercial now under construction
JBD 2	Commercial: .2 FAR Office: .3 FAR Residential: 1.0 FAR	50 units/acre	Total FAR: 1.5
JBD 3	Office: .45 FAR Residential: .2 FAR	7 units/acre	Total FAR: .65
JBD 4, 5 & 6	Office: .45 FAR Residential: .2 FAR	10 units/acre	

**North Rose Hill Business District**

Zone	Maximum Development Potential		Notes
	Land Use/FAR	Maximum Density	
NRH 1A & 1B	Commercial: .2 FAR Office: .2 FAR Residential: 1.6 FAR	80 units/acre	Total FAR: 2.0
NRH 2 - 6	Office: .65 FAR		

**Rose Hill Business District**

Zone	Maximum Development Potential		Notes
	Land Use/FAR	Maximum Density	
RH 1A	Commercial: .3 FAR Office: .85 FAR Residential: .85 FAR	40 units/acre	Total FAR: 2.0 Do not redevelop Costco.
RH 1B	Office: .65 FAR		Do not redevelop Costco parking lot.
RH 2A	Commercial: .3 FAR Office: .85 FAR Residential: .85 FAR	40 units/acre	Total FAR: 2.0 Do not redevelop Lee Johnson auto.
RH 2B	Commercial: .3 FAR Office: .85 FAR Residential: .85 FAR	40 units/acre	Total FAR: 2.0 Do not redevelop Lee Johnson auto.
RH 2C	Office: .85 FAR		Do not redevelop Lee Johnson auto
RH 3 Rose Hill Center	Commercial: .3 Office: .85 Residential: .85	40 units/acre	Total FAR: 2.0
RH 4	Office: .65 FAR		

RH 5 A, B & C	Commercial: .3 FAR		
RH 7 Rose Hill Village	Commercial: .3 FAR Office: .6 FAR Residential: .6 FAR	30 units/acre	Total FAR: 1.5
RH 8	Office: .65 FAR		

**Totem Lake Business District**

Zone	Maximum Development Potential		Notes
	Land Use /FAR	Maximum Density	
TL 1A	Office: 2.0 FAR		
TL 1B	Office: 1.0 FAR Residential: 2.0 FAR	100 units/acre	
TL 2	Commercial: .3 FAR Office: .7 FAR		Per 2006 TL Mall master plan: replace existing development with 144,000 sq. ft. of office, 622,000 sq. ft. commercial & 226 dwelling units. Commercial includes cinema.
TL 4A, B & C	Commercial: .3 FAR Office: 1.5 Residential: .7	35 units/acre	Total FAR: 2.5
TL 5	Commercial: .2 FAR Office: 1.8 FAR Residential: .5 FAR	25 units/acre	Total FAR: 2.5
TL 6A & B	Commercial: .3 Residential: 2.2	120 units/acre	Total FAR: 2.5
TL 7 (E of 132 <sup>nd</sup> Ave NE)	Office: .35 FAR Industrial: .3 FAR		Total FAR: .65
TL 7 (S of Cross Kirk Corridor)	Commercial: .3 FAR Office: .35 FAR		Total FAR: .65
TL 8	Commercial: .3 FAR Residential: 2.2 FAR	120 units/acre	Total FAR: 2.5
TL 9A	Office: .35 FAR Industrial: .3 FAR		
TL 9B:	Residential	9 units/ acre	
TL 10A	Office: .75 FAR		
TL 10B & C	Office: .75 FAR Residential: .25 FAR	12 units/acre	Total FAR: 1.0
TL 10D	Office: 1.8 FAR Residential: .2 FAR	10 units/acre	Total FAR: 2.0
TL 10E	Office: 2.0 FAR		

**Yarrow Bay Business District**

ZONE	Maximum Development Potential		Notes
	Land Use/FAR	Maximum Density	
YBD 1			Develop proposed TOD site with 242 units and 6,672 sq. ft. of commercial.
YBD 2 & 3	Commercial: .2 FAR Office: .65 FAR Residential: .65 FAR	30 units/acre	Total FAR: 1.5

**Industrial Zones**

ZONE	Land Use/ FAR	Notes
LIT, PLA 6G (2)	Office: .65 FAR	Develop Google site in PLA 6G with 160,000 sq. ft. of office.

**Institutional Zones**

Zone	New Development	Notes
TL3A - D	200,000 sq. ft. built but unoccupied plus 78,000 sq. ft. approved for building.	Assume employment at same rate as office.
PLA 1	252 additional students	160 existing employees and 948 students = .17 employee/ student
PLA 14	465 additional students	200 existing employees for 3211 students = .06 employee/ student

**Adjustments** A number of factors typically reduce the potential for parcels to be developed or achieve maximum intensity. Consequently, the analysis should make the following adjustments:

- **Pre-development Parcel Size Reduction for Rights of Way/ Access Easements:** An adjustment is made to account for a portion of the land being set aside for rights of way or access easements. In reality, the amount of this set aside varies from property to property. However, for the purpose of this analysis, the following average reductions are assumed:
  - *Low Density Residential (Single Family) Zones:*
    - For all parcels in RSA zones and for parcels divided into only two lots in other low density zones: no deduction for rights of way or easements;
    - For all other parcels in low density zones (i.e. parcels which are large enough to be divided into three or more lots and not in RSA zones): Reduce parcel size by 5% to account for ROW dedication.
  - *All Other Zones:* Reduce parcel size by 2% to account for ROW dedication.
- **Adjustments for Critical Areas:** Using the GIS critical areas maps, the area occupied by wetlands, streams and buffers is deducted from the parcel area prior to calculating development capacity. For this analysis, the width of all buffers is assumed to be 50'.
- **Post Development Reductions for Market Factors:** Not all land that is theoretically ripe for development is likely to be developed due to general market conditions, personal decisions by property owners or land acquisition for public purposes. To account for these factors, the number of new dwelling units and nonresidential floor area is reduced as follows:
  - 5% on all vacant parcels;
  - 10% on all other redevelopable parcels; and
  - No reduction on parcels with special generators.

**Calculation of Households and Employees:**

- **New Households:** Total new households will equal the total number of dwelling units minus 5% to account for vacancies.
- **New employees :**
  1. Calculate the number of new employees by using the following number of employees/ 1000 square feet of occupied floor area minus 5% to account for vacancies:

- Office: 4 employees/ 1000 square feet;
  - Commercial: 2 employees/ 1000 square feet;
2. For the following institutional zones, use the following figures:
    - TL 3A-D (Evergreen Healthcare): 1112 new employees (based on 4 employees/ 1000 sq. ft. of floor area, including presently unoccupied area.
    - PLA 1 (Northwest University): 43 new employees (based on expected growth of 152 new students and the present ratio of .17 employee/ new student).
    - PLA 14 (Lake Washington Institute of Technology): 110 new employees (based on estimates from LWIT).
  3. Home occupations: 670 new employees (based on the present ratio of 2556 FTE home occupation employees out of 37,221 total dwelling units, or one home occupation employee / 14.56 housing units).